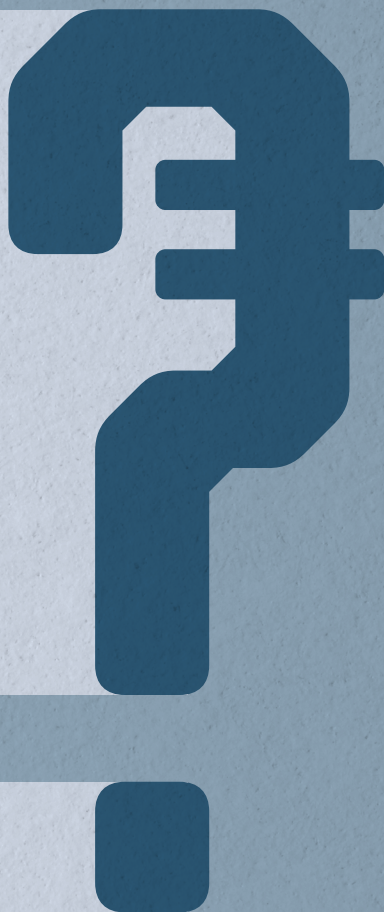


TIME FOR SWEDISH EURO MEMBERSHIP?



Swedish Free
**Enterprise
Foundation**

LARS CALMFORS (ED.)

The Swedish Free Enterprise Foundation engages in idea development and opinion formation around market economy, free enterprise, and growth. The aim is to further the development of ideas and stimulate the open public debate based on these values. The Foundation primarily conducts its activities under the name Timbro.

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Foreword

The normal situation for a European country is to be a member of NATO and to use the euro as its currency. For some countries in Eastern Europe, these two institutions are closely linked. Until recently, Sweden remained outside both, but hastily joined the military alliance after Russia launched a full-scale attack on Ukraine in February 2022. NATO now enjoys strong support in Swedish society.

The Swedish debate on the euro is tentative. The last time Sweden had a broad debate was before the referendum on euro membership in 2003. The single most important intellectual contribution to the discussion in Sweden was Lars Calmfors' Public Inquiry in 1996, published in English as the report "EMU: A Swedish Perspective" in 1997. Referring to the high unemployment and government debt problems of the 1990s crisis, the report recommended a cautious approach and waiting before joining. That was 30 years ago.

In August 2024, the Free Enterprise Foundation initiated a new report on Sweden and the euro, with Lars Calmfors as the person in charge. The idea was that the conditions would be identical to those of the previous Calmfors Inquiry. The investigator has had complete freedom to recruit experts, and the work has been conducted entirely independently. The result is this report. A number of economists and political scientists highlight various arguments and facts about the euro as a currency.

The Foundation hopes that the report will contribute to an informed debate on an issue that is central to the whole of Europe. The monetary union is the EU's most important project, giving rise to and renewing policies that affect everyone and span many areas. The banking union can be said to be one such outcome, and more will follow.

FOREWORD

The global economy in recent decades has moved towards longer and increasingly complex value chains in a process summarised by the term globalisation. Now we seem to be heading towards something more akin to regionalisation, but this is not a foregone conclusion. The dynamics between the US, the EU and China are difficult to predict, not to mention the US leadership. It is my belief that the euro will become increasingly important as a framework and basis, and that Sweden must actively engage with it. Enjoy your reading!

PM Nilsson
CEO, Free Enterprise Foundation

CHAPTER 1

Time for Swedish euro membership?

Lars Calmfors

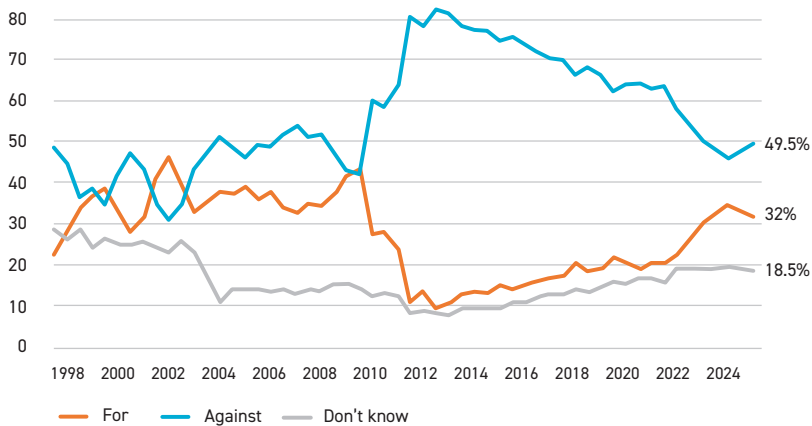
1 Introduction

In 1999, eleven EU countries formed a monetary union and replaced their national currencies with the euro. Sweden chose to remain outside the union and retain the *krona* as its currency. In a referendum in 2003, 55.9 per cent voted against joining the monetary union. This effectively ended the debate on Swedish membership of the euro. There was some discussion in 2009–10, but it died down when the euro crisis broke out in the latter year. A new discussion did not start until the end of 2022. It was triggered by the weak *krona* and, to some extent, by the fact that many people saw greater value in deeper Swedish integration into Europe in light of Russia's large-scale war of aggression against Ukraine.¹ However, the euro debate in recent years has been more of a “bubbling under the surface” issue than a central political one.

The intensity of the euro debate has been closely related to shifts in public opinion. Figure 1 shows the percentage of respondents in Statistics Sweden's party affiliation surveys who indicate different voting options in a potential referendum on introducing the euro. The proportion opposed was higher than the proportion in favour in the years following the 2003 referendum, but after the global financial crisis, the difference evened out in 2010. Support for the euro then fell sharply during the euro crisis. From 2014, the difference between those against and those in favour decreased again until 2024. In the spring 2025 survey, it increased slightly again.

1 See, for example, TT (2022), Pehrson (2023), Calmfors (2023a) and Svenskt Näringsliv (2024).

Figure 1 Swedes' attitudes towards the euro, 1998–2024, per cent



Note: The curves indicate the percentage of respondents who would vote yes to adopting the euro in a referendum, vote no, or who do not know how they would vote. The figures before 2004 are not entirely comparable with those after 2006.

Source: Statistics Sweden's party affiliation surveys.

1.1 The EMU Inquiry

Prior to the launch of the monetary union, the consequences of Sweden joining were investigated by the EMU Inquiry (1997), which I chaired. The Inquiry concluded that participation would yield continuous and secure, but small, efficiency gains, as transaction costs and exchange rate uncertainty in international payments would be reduced. At the same time, the stabilisation policy risk of joining was highlighted, as other cyclical developments in Sweden than in the rest of the euro area could no longer be counteracted by an own monetary policy. Finally, the EMU Inquiry attached great importance to the fact that Sweden's political influence in the EU could be significantly reduced if we were not to belong to the core group of countries participating in the monetary union.

The EMU Inquiry's overall assessment was that “the factors that speak against Swedish participation in the first wave in 1999 are stronger than the factors that support participation” (p. 334). This conclusion was based largely on the fact that the Swedish economy

was still suffering from the consequences of the deep crisis in the early 1990s. Unemployment was high. Any new country-specific macro-economic shocks that could no longer be offset by monetary policy therefore risked causing a dangerous further rise in unemployment. The scope for countering this through expansionary fiscal policy was limited because, following the previous large increase in public debt, it was necessary to consolidate public finances.

The EMU Inquiry's position was perceived by many as a strategy of "wait and see" how the monetary union would work. This was an incorrect interpretation. The Inquiry clearly stated that "given this, there is no reason why Sweden should close the door on membership at a later date" (pp. 335–36). The importance of an improved employment situation and consolidated public finances was particularly emphasised. A more accurate description of the Inquiry's view was "wait and do," in the sense of creating the conditions for future entry through appropriate economic policy.²

1.2 Changes since the EMU Inquiry and the referendum

It has now been almost three decades since the EMU Inquiry and more than two decades since the referendum. Much has changed since then. We now have experience of both how the monetary union has worked and how Sweden has fared outside it. Extensive new research has been conducted.

The most important changes in the euro area and the EU are as follows:

- The euro crisis of 2010–12 meant that the so-called no-bailout clause, according to which neither the union nor a member state shall be liable for or assume the commitments of central governments, regional, local or other public authorities, other bodies governed by public law or public undertakings of (another) member state, has in practice been rendered ineffective. A permanent joint rescue fund, the European Stability Mechanism (ESM), has been established,

² The phrase "wait and do" was coined by Lars Tobisson, then economic policy spokesperson for the Moderate Party, to describe the conclusions of the Inquiry (see Calmfors 2021, pp. 160–61).

while the European Central Bank (ECB) has assumed responsibility for the purchase of individual euro area countries' government bonds in crisis situations.

- The fiscal rules in the stability pact have been changed on several occasions. There have been both relaxations and tightening. At the same time, the public debt of the euro area countries has trended upwards.
- The global financial crisis and the euro crisis led to the establishment of the banking union, which all euro area countries must join. This entails common financial supervision and common rules for dealing with banks in crisis.
- During the pandemic, joint EU borrowing was carried out to finance temporary expenditure. Further joint borrowing, now to finance expenditure for defence and support to Ukraine, has been decided.

Sweden's economic situation is also very different today from that at the turn of the millennium:

- The Riksbank has been made more independent of the political system and credibility for the low inflation target has been established.
- Public finances have been consolidated and Sweden now has one of the lowest levels of public debt in the EU.
- Sweden's foreign trade today accounts for a larger share of GDP, and the economy has become more financially integrated with both the euro area and the rest of the world.
- The financial sector's assets have grown in relation to GDP in both the euro area and Sweden, but the increase has been greater in Sweden.

At the same time, the geopolitical situation has changed fundamentally. Russia's large-scale war of aggression against Ukraine and the weakening of the transatlantic axis as a result of the Trump administration's policies create a need for deeper European cooperation.

1.3 Contents of the report

The changes described above justify a new analysis of the consequences of Sweden joining the euro. This is the starting point for this report. In addition to this summary chapter, it consists of twelve contributions

that highlight various aspects of the issue. Eight chapters have been written by economists and four by political scientists.

The first chapter by *Rikard Forslid* summarises current knowledge about the euro's impact on trade and foreign direct investment, as well as on productivity and growth.

This is followed by four chapters on the stabilisation policy consequences of euro membership. *Jesper Hansson* analyses how synchronised the Swedish business cycle is with that of the euro area. *Karl Walentin* discusses the extent to which the Riksbank's monetary policy could deviate from that of the ECB if Sweden remains outside the euro area, and how well the latter's monetary policy would suit us in the event of membership if common macroeconomic disturbances arise. *Martin Flodén* focuses on how movements in the *krona* exchange rate have affected the Swedish economy. *My* own contribution deals with the possibilities of counteracting divergent cyclical developments in Sweden through fiscal policy or wage formation in the event of euro membership.

The issues described were already discussed in the EMU Inquiry in 1997 and ahead of the 2003 referendum. The following two chapters deal with issues that have only become relevant more recently. *Fredrik N G Andersson and Lars Jonung* analyse how Sweden's risk of having to bear the costs of high debt levels in euro area countries would be affected by joining the euro. *Peter Englund and Pehr Wissén* discuss the consequences for Sweden's financial integration with the euro area countries of joining the monetary union and what participation in the banking union would mean for financial supervision and crisis management.

The purely political consequences of euro membership are the subject of three contributions by political scientists. *Erik Jones* describes in broad strokes how the interaction between monetary union and political integration in the EU has developed. His overview is complemented by a more empirically oriented analysis of the same issue by *Magnus Lundgren and Jonas Tallberg*. Finally, *Magnus Lundgren* summarises the research on how political influence in the EU is affected by euro membership.

The final two chapters deal with how a possible Swedish entry into the euro could take place. Political scientist *Johannes Lindvall* dis-

cusses whether a new referendum should be held. *Stefan Ingves* analyses the various steps involved in accession following a decision to join and how the *krona*'s conversion rate to the euro could be determined.

During the course of the work, the authors exchanged views on each other's chapters. However, the contributors are solely responsible for their analyses. We have not attempted to agree on common conclusions. Given the number of participants and their diversity, this would probably have been impossible. The most important contribution of the report is the analyses themselves and that different aspects are highlighted in a fair manner.

This chapter summarises the various analyses. Based on these, I also draw my own conclusions. These are not necessarily shared by the other authors. In this chapter, I therefore act in a similar way as a one-man investigator, building on commissioned expert reports but making my own synthesis.

Section 2 provides a brief background overview of economic developments in Sweden, the euro area and other advanced economies in recent decades. Sections 3–7 then present the various contributors' analyses of different aspects in roughly the same order as the contributions are presented above, but do not follow them slavishly as there is some overlap between them. Section 8 presents *my* view of the various consequences of joining the euro, how these have changed over time and how different aspects should be weighed against each other. Section 9 presents my views on how a possible entry into the euro should proceed.

2 Previous economic developments in Sweden, the euro area and other advanced economies

This section provides a brief overview of past economic developments in Sweden, the euro area and some other advanced economies as background to the subsequent analyses. Table 1 shows GDP growth per capita and its variability both before and after the start of the monetary union in 1999.

Table 1 GDP growth per capita in Sweden, the euro area and other advanced economies

	Real annual GDP growth per capita, per cent			Absolute mean deviation, percentage points		
	1972–1998	1998–2024	Change	1972–1998	1998–2024	Change
Austria	2.5	0.8	-1.6	1.4	1.7	0.3
Belgium	2.2	1.1	-1.2	1.5	1.4	-0.1
Finland	2.6	1.0	-1.6	2.2	2.1	-0.1
France	2.1	0.9	-1.2	1.2	1.4	0.2
Germany	2.2	1.0	-1.3	1.4	1.6	0.2
Ireland	4.0	3.7	-0.3	2.4	4.2	1.7
Italy	2.5	0.4	-2.1	1.5	2.0	0.5
Netherlands	2.1	1.1	-1.0	1.2	1.7	0.5
Portugal	3.0	0.9	-2.1	2.8	2.1	-0.7
Spain	2.4	1.0	-1.4	1.7	2.3	0.6
<i>Euro area</i>	<i>2.6 (2.3)</i>	<i>1.2 (0.9)</i>	<i>-1.4 (-1.4)</i>	<i>1.7 (1.7)</i>	<i>2.0 (1.8)</i>	<i>0.3 (0.1)</i>
Sweden	1.6	1.3	-0.3	1.4	1.8	0.4
Denmark	2.0	1.0	-1.1	1.7	1.5	-0.2
Canada	1.8	0.8	-1.0	1.7	1.6	-0.1
Norway	3.2	0.8	-2.4	1.3	1.2	-0.2
Switzerland	0.9	1.0	0.1	1.6	1.4	-0.2
United Kingdom	2.3	1.0	-1.3	1.8	1.9	0.1
United States	2.2	1.4	-0.7	1.7	1.2	-0.5

Note: The figures for the euro area are the arithmetic means for the euro area countries shown in the table. The values without parentheses include all ten countries, while the values in parentheses exclude Ireland. The absolute mean deviation is a statistical measure of how much the data in a data set deviates from its mean value, regardless of whether the deviation is positive or negative.

Sources: OECD and own calculations.

During 1972–98, Sweden had comparatively low growth in GDP per capita, 1 percentage point below the arithmetic mean for the ten euro area countries in the table. GDP growth per capita in 1998–2024 was lower than in 1972–98 in all countries in the table except Switzerland. However, the decline was smaller in Sweden than in almost all the other countries. This meant that per capita GDP growth in 1998–2024 was higher in Sweden than the arithmetic mean for the euro area (especially if Ireland, which had much higher growth of GDP than of GNI as a result of large foreign direct investment, is excluded), almost on a par with the United States.

Per capita GDP growth in Sweden was slightly more variable after 1998 than before. The same applies to most euro area countries, while the trend was the opposite in all other non-euro area countries except the United Kingdom.

Table 2 shows a similar trend for inflation in different countries. It fell between 1972–98 and 1998–2024. The fall was equally large, five percentage points, in Sweden, Finland and the euro area. During the latter period, Swedish inflation was slightly lower than the euro area average. Inflation variability has also decreased everywhere. The difference between Sweden and the euro area countries was small during the period 1998–2024.

Table 2 Inflation in Sweden, the euro area and other advanced economies

	Annual inflation, per cent			Absolute mean deviation, percentage points		
	1972–1998	1998–2024	Change	1972–1998	1998–2024	Change
Austria	4.2	2.4	-1.8	2.0	1.1	-0.9
Belgium	4.9	2.3	-2.5	2.8	1.1	-1.6
Finland	6.9	1.9	-5.0	3.8	1.1	-2.7
France	6.3	1.9	-4.4	3.9	0.9	-3.0
Germany	3.4	2.0	-1.4	1.7	1.1	-0.7
Ireland	7.3	2.0	-5.3	5.4	1.8	-3.6
Italy	9.8	2.1	-7.7	5.2	1.2	-4.0
Netherlands	4.1	2.4	-1.7	2.5	1.3	-1.2
Portugal	14.5	2.2	-12.3	6.7	1.4	-5.3
Spain	10.1	2.4	-7.7	5.1	1.3	-3.7
<i>Euro area</i>	7.1	2.2	-5.0	3.9	1.3	-2.7
Sweden	6.9	1.9	-5.0	3.0	1.0	-2.0
Denmark	6.2	1.9	-4.3	3.5	1.1	-2.4
Canada	5.7	2.2	-3.5	2.9	0.8	-2.2
Norway	6.3	2.4	-3.9	3.0	1.0	-2.0
Switzerland	3.5	0.6	-2.9	2.1	0.7	-1.4
United Kingdom	8.0	2.5	-5.5	4.6	1.2	-3.4
United States	5.3	2.4	-2.9	2.5	1.3	-1.2

Note: See Table 1. For most countries, inflation refers to the harmonised index of consumer prices (HICP) from 1996 onwards. Where such data are not available, the CPI has been used. Sources: OECD and own calculations.

Table 3 shows the foreign trade share, defined as the average of exports and imports as a share of GDP, vis-à-vis all countries for goods and services in panel a and vis-à-vis euro area countries for goods in panel b.³ For the euro area countries in the table, the averages are given for all ten countries (EA10) and for seven of them (EA7), excluding Belgium, Ireland and the Netherlands. The latter three countries are special in that a large proportion of Belgium's and the Netherlands' imports are re-exported, while Ireland has extensive imports to and exports from multinational companies that have located their operations in the country as a result of favourable corporate taxation.

It is clear that Sweden has a relatively high share of trade in goods and services with the rest of the world. Between 1980 and 1998, the share increased in line with the EA10 average and faster than the EA7 average. Between 1998 and 2024, i.e., after the introduction of the euro, the increase was still greater than for the EA7 but lower than for the EA10. If we look instead at the share of trade in goods with the euro area countries, it was higher than for both the EA7 and the EA10 in both 1980 and 1998. In 2024, the Swedish share of trade in goods with the euro area countries was still higher than the average for the EA7, but lower than the average for the EA10. An interesting difference between the periods 1980–98 and 1998–2024 is that Swedish trade in goods with the euro area increased more than the average for both the EU7 and the EU10 during the former period, but less during the latter period. This may have been related to the introduction of the euro.

3 The reason why only foreign trade in goods with euro area countries is shown is that statistics for trade in services are incomplete.

Table 3 Foreign trade as a percentage of GDP

(a) Foreign trade with all countries, goods and services

	1980	1998	Change 1980–1998	2024	Change 1998–2024
Austria	11.1	22.5	11.3	53.8	31.3
Belgium	24.4	45.0	20.6	92.5	47.5
Finland	12.8	21.8	8.9	40.6	18.9
France	9.2	15.0	5.7	28.3	13.3
Germany	8.8	16.2	7.4	40.5	24.3
Ireland	16.2	41.5	25.3	111.3	69.8
Italy	5.7	11.2	5.5	26.3	15.1
Netherlands	18.8	32.4	13.6	96.9	64.6
Portugal	4.5	12.1	7.6	33.3	21.2
Spain	4.1	11.6	7.5	27.5	15.8
<i>Euro area</i>	<i>11.6 (8.0)</i>	<i>22.9 (15.7)</i>	<i>11.3 (7.7)</i>	<i>55.1 (35.7)</i>	<i>32.2 (20.0)</i>
Sweden	14.7	25.7	11.0	48.9	23.2
Denmark	12.2	23.0	10.8	61.8	38.9
Canada	9.6	20.4	10.8	34.7	14.3
Norway	17.4	21.0	3.6	48.9	27.9
Switzerland	11.9	23.1	11.1	86.5	63.5
United Kingdom	9.6	16.4	6.7	32.0	15.6
United States	3.7	7.6	3.9	15.1	7.5

(b) Foreign trade with euro area countries, goods

	1980	1998	Change 1980–1998	2024	Change 1998–2024
Austria	4.7	10.7	6.0	19.1	8.4
Belgium	12.4	22.6	10.3	29.6	6.9
Finland	2.9	6.8	3.9	9.7	2.9
France	3.3	5.9	2.6	8.5	2.7
Germany	3.3	6.0	2.7	11.0	5.0
Ireland	3.8	11.1	7.3	11.1	0.0
Italy	2.2	4.5	2.3	9.4	5.0
Netherlands	8.2	10.3	2.1	26.8	16.4
Portugal	1.4	6.3	4.9	15.1	8.7
Spain	1.1	5.2	4.1	8.7	3.5
<i>Euro area</i>	4.3 (2.7)	8.9 (6.5)	4.6 (3.8)	14.9 (11.6)	5.9 (5.2)
Sweden	5.0	9.9	4.9	13.9	3.9
Denmark	4.1	8.0	3.9	12.5	4.5
Canada	0.6	0.9	0.3	1.7	0.9
Norway	3.6	6.3	2.6	14.1	7.9
Switzerland	5.9	11.3	5.4	24.8	13.5
United Kingdom	3.3	6.2	2.9	6.0	-0.3
United States		0.9		1.8	0.9

Note: The foreign trade share is defined as the average of exports and imports as a percentage of the country's GDP. The figures without parentheses for the euro area are the arithmetic means for the ten euro countries in the table (EA10), the figures in parentheses are the arithmetic means for the same countries excluding Belgium, Ireland and the Netherlands (EA7). Data for Belgium up to and including 1998 include Luxembourg. Trade with euro area countries in panel b includes the 20 euro area countries in 2024.

Source: UN Comtrade.

The overall picture in terms of GDP growth per capita, inflation and foreign trade when comparing the years after the start of the monetary union in 1999 with the immediately preceding years is that developments have been relatively similar in Sweden and the original euro area countries. A reasonable preliminary conclusion is that euro membership has not made such a big difference that it has dominated everything else.

3 Economic efficiency

A key argument in favour of the euro from the outset has been that it would bring about social efficiency gains, primarily by stimulating trade and direct investment between the countries in the monetary union.⁴ The uncertainty surrounding the profitability of such transactions due to exchange rate movements and the transaction costs associated with converting between different currencies can be seen as barriers to trade that are eliminated by the single currency.

3.1 Previous research

The EMU Inquiry (1997) assessed that “it is not possible to substantiate that participation in the EU’s monetary union will lead to large economic gains due to reduced exchange-rate uncertainty”.⁵ This conclusion was based on the empirical research available at the time. It did not refer to situations with a single currency, but rather to situations with reduced exchange rate volatility. According to studies at the time, these fluctuations appeared to “influence foreign trade very little, if at all”.⁶ However, the report also stated that “a transition to a single currency, which will *totally* eliminate variations in exchange rates among the countries involved, can have more significant effects than reduced exchange-rate fluctuations in a system with different currencies,” even though there was (at that time) “difficult to find empirical support for this hypothesis”.⁷

A few years later, the research picture changed radically. A widely noted study by Rose (2000) confirmed that lower exchange rate volatility had little effect on trade, but found very large effects of a common currency. The magnitude was a tripling of foreign trade. However, Rose’s study was criticised on several points. One was that the countries (regions) that had a common currency constituted a very small part of the observations in the data set, another that the study had probably not succeeded in controlling for all factors other than a com-

4 See, for example, Commission of the European Communities (1990).

5 P. 308.

6 EMU Inquiry (1997), p. 50.

7 P. 308.

mon currency which may affect the volume of trade. It was pointed out in particular that many of the countries with a common currency in Rose's study could not be regarded as representative of the euro area countries: the former were poor colonies that used the currency of their mother country or tiny countries such as Monaco and the Vatican City that use the currency of their nearest large neighbour.⁸

3.2 More recent research

Since the turn of the millennium, a large number of empirical studies have been conducted. Most of them examine what has actually happened to trade between euro area countries. This research is summarised in *Chapter 2* by Rikard Forslid. According to him, the main conclusions from these studies are as follows:

- The effects on trade of currency unions other than the euro area are very large, but not as large as according to Rose (2000).
- The effects on bilateral trade are much smaller for countries using the euro than for countries using another common currency, but still substantial. Estimates vary between studies, but based on the latest research – using the best methodology – the transition to the euro may have increased trade between countries sharing the currency by 10–15 per cent.
- The introduction of the euro has also increased trade between countries with this currency and non-euro area countries. The effect is perhaps half that on trade between euro area countries.

The new research described above suggests that the EMU Inquiry (1997) underestimated the trade effects of joining the monetary union. Forslid concludes that Swedish membership of the euro would increase trade with the current euro area countries by 5–7.5 per cent – the increase in trade that third countries have experienced as a result of the introduction of the euro has then been deducted from the estimated increase in trade between euro area countries. At the same time, joining the euro can be expected to increase Sweden's trade with non-euro

⁸ See, for example, Calmfors (2003).

area countries by the same amount as a result of the third-country effect that would arise in relation to these countries.

Forslid also summarises the research on the effects of the euro on foreign direct investment (FDI) between countries in the monetary union. According to theory, it is not clear how these investments will be affected. *Horisontal* FDI means that a firm establishes production in a market that is difficult to reach through exports. Such FDI can be expected to decline if trade barriers are lowered. On the other hand, *vertical* FDI, i.e., when firms establish international value chains with different parts of production in different countries, should increase.

Research suggests that the euro has had a greater impact on FDI than on trade. This is probably because the profitability of foreign direct investment – which is a long-term commitment – is very sensitive to lasting exchange rate changes, which are hard to hedge against. Forslid's conclusion is that the euro has increased FDI between euro area countries by about 20 per cent.

Productivity and growth

What ultimately matters for the effects of euro membership on economic efficiency and welfare is how productivity and incomes are affected. In general, more trade and FDI as a result of the single currency mean that resources in the economy are used more efficiently. Both comparative advantages and economies of scale can be better exploited.

Forslid describes how research has shown that exporting firms tend to be more efficient than firms that only supply the domestic market. Lower trade costs therefore lead to higher productivity in the economy, as exporting firms benefit and gain market share both abroad and at home. In addition, these firms themselves can become more efficient through both exporting (learning by exporting) and greater opportunities to build value chains with cheaper imports of intermediate goods.

A difficult question is whether the efficiency gains from a transition to the euro can be expected to lead to a one-off increase in income *levels* or a permanent increase in income *growth*. According to the neoclassical (Solow) growth model, growth only increases for a certain period

of time – which can, however, be as long as several decades – before the effect wears off. This is because long-term growth in this model is determined by a given rate of technological progress. But in so-called endogenous growth models, growth can increase permanently, for example because more trade leads to higher profits and thus greater investment in R&D, resulting in faster technological progress.⁹ The effects on income and welfare are then much greater than under the neoclassical growth model. However, Forslid does not venture to draw any conclusions about either the nature or the size of the euro’s income effects.

3.3 Transaction costs

The major social efficiency gains from joining the euro can be expected to come from increased trade and cross-border direct investment as well as financial investments and the resulting increases in income. But even without such effects, lower transaction costs for currency exchange would yield gains in the form of reduced resource use.

Forslid calculates the Swedish costs of currency exchange related to foreign trade with euro area countries based on estimates of the banks’ spreads between buying and selling rates for the euro. The spreads constitute the banks’ income from currency exchange. Half of the cost is assumed to fall on Swedish exporters and importers. The calculations are also based on the assumption that most of the trade transactions are hedged. According to Forslid, the annual exchange costs for trade with euro area countries range from SEK 4 to 11 billion. To this must be added the costs for Swedish actors of hedging claims and loans in euros. On the asset side, this mainly concerns pension companies’ and the government pension (AP) funds’ investments in various securities and, to a certain extent, households’ fund holdings. On the liability side, both banks and non-financial firms have substantial bond loans in euros.

In Chapter 8, *Peter Englund and Pehr Wissén* estimate the costs of hedging investments and loans in euros at only around SEK 380 mil-

9 The two model types are described in macroeconomic theory textbooks, for example Blanchard et al. (2024).

lion per year. Consequently, exchange costs against the euro mainly relate to foreign trade and are as estimated by Forslid.¹⁰ They correspond to 0.1–0.2 per cent of GDP. This is roughly the same estimate as that of the EMU Inquiry (1997), based on banks' profits from currency trading. The EMU Inquiry's conclusion that the lower transaction costs resulting from entry into the monetary union are certainly a clear benefit, but at the same time too small to be of any decisive significance, therefore still applies.

4 Stabilisation policy aspects

The economic disadvantage of euro membership that is usually highlighted is the risk that the ECB's monetary policy will not suit Sweden. The accepted argument is that country-specific (asymmetric) macroeconomic shocks can cause other cyclical developments than in the rest of the euro area. It is therefore important to assess how synchronised the Swedish business cycle is with that of the current euro area countries. Another issue concerns the Riksbank's ability to pursue a monetary policy that differs from that of the ECB in the case of a country-specific shock when Sweden, as is currently the case, is outside the monetary union. A related problem concerns whether, and if so to what extent, movements in the *krona* exchange rate under the current monetary policy regime contribute to stabilising the Swedish economy. Euro membership could also create stabilisation policy problems in the event of common (symmetric) macroeconomic shocks. One reason is that the ECB's monetary policy reactions may be stronger than is appropriate for Sweden because interest rate sensitivity is probably larger in our economy than in the euro area.

Given that the Riksbank can indeed, if deemed desirable, pursue a monetary policy other than that of the ECB outside the monetary union and that fluctuations in the *krona* exchange rate have a stabilising effect,

10 The low exchange costs for investments and loans in euros are due to the fact that the transactions are carried out by banks and other financial actors that are closely integrated with the forward exchange market. In addition, the transactions are few and large. The opposite is true for trade in goods and services.

a key question is to what extent fiscal policy can replace domestic monetary policy in the event of euro membership.

All of the stabilisation policy issues described are discussed below.

4.1 How synchronised are business cycles in Sweden and the euro area?

In *Chapter 3*, *Jesper Hansson* discusses the risk of cyclical developments in Sweden differing from those in the euro area, which would justify a different monetary policy and/or exchange rate changes between Sweden and the euro area countries. He focuses on two issues:

- How similar is the sectoral structure of the economy in Sweden to that in the euro area? This is important if *sector-specific* shocks occur. If, for example, demand for certain industries' products declines or the costs of important inputs for them rise, the effects in different countries are likely similar if the industries account for roughly the same share of output and employment.
- What is the historical co-variation between business cycles in Sweden and in the euro area, and how has it developed over time?

Industry structure

Hansson examines the share of employment of different industries. He calculates a frequently used *specialisation index* for the various EU countries, which summarises the differences in employment shares for different industries between each country and the euro area as a whole (actually EA10, which accounts for almost the entire GDP of the euro area; see Section 2). He draws the following conclusions:

- For *the economy as a whole*, the industry structure in Sweden deviates from that of the euro area. Only Greece and Luxembourg deviate more. The main difference between Sweden and the euro area is that education and health, social care and social services, i.e., mainly publicly funded activities, are more important in Sweden and that other industries are consequently less important.

- The picture is different if we look only at the *business sector*. There, the difference in industry structure between Sweden and the euro area is small. Sweden actually deviates less from the euro area average than most of the euro area countries studied.
- In *the manufacturing industry*, the composition in Sweden differs more from that in the euro area as a whole than in the business sector as a whole. The cyclically sensitive motor vehicle and forestry industries account for a larger share of manufacturing employment in Sweden. However, employment in these industries is for only 3 per cent of total employment in the country.

According to Hansson, the most important factor is that the difference in industry structure between Sweden and the euro area is small in the business sector, as this is where industry-specific disturbances can be expected to arise. He therefore considers the risk of these giving rise to asymmetric macroeconomic shocks to be small.

Previous synchronisation of business cycles

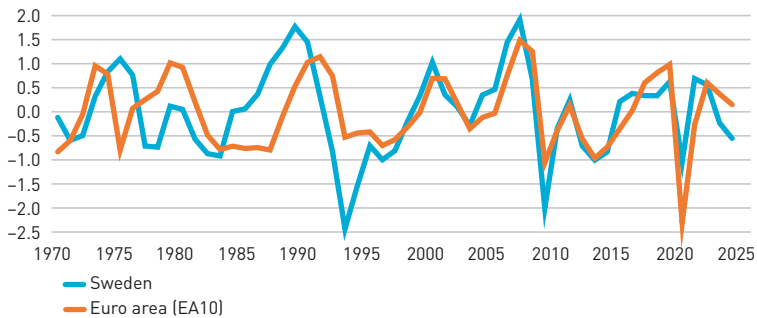
Hansson analyses in detail how business cycles in Sweden and the euro area have previously covaried. He first examines how GDP gaps (the differences between actual and potential GDP) have related to each other.¹¹ Figure 2 shows a much stronger synchronisation with the euro area countries (EA10) after the introduction of the euro than before. This is particularly true of the downturns associated with the IT crash after the turn of the millennium, the global financial crisis ten years later and the pandemic in 2020, as well as the subsequent recoveries. It is clear that recent decades have been dominated by these common macroeconomic shocks.

Hansson also calculates correlation coefficients for GDP gaps between different countries and the euro area as a whole during the equally long periods 1970–95 and 1999–2024. The results are shown in Figure 3. Sweden's correlation has increased substantially. Although it is still lower than for most euro area countries during the latter period, the difference is small.

11 Potential GDP is defined as GDP in a normal cyclical situation.

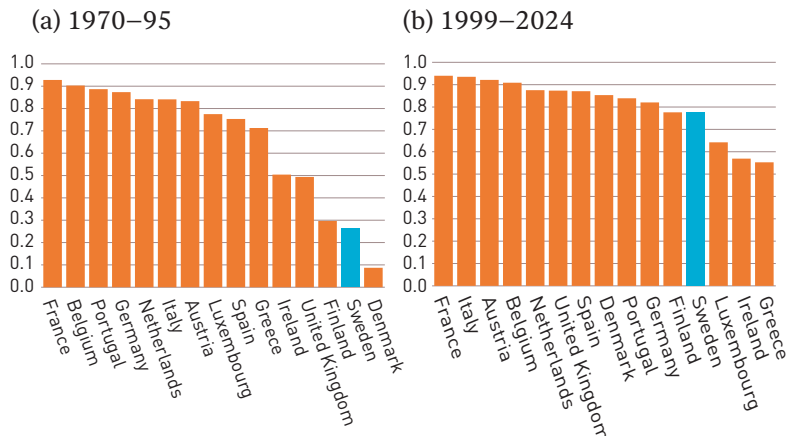
A synchronised business cycle between two areas requires both that the economic fluctuations are positively correlated and that they are of the same magnitude. To capture both of these aspects, the absolute value of the difference between the GDP gaps in individual countries and the euro area can be calculated. Hansson finds only a small difference for Sweden in 2000–19, but a larger one in the 2020s. The latter is due to a smaller downturn in Sweden during the pandemic in 2020–21, followed by a larger one when inflation was combated with high interest rates in 2023–24.

Figure 2 GDP gap in Sweden and in the euro area, 1970–2024, per cent of potential GDP



Source: Chapter 3 by Hansson.

Figure 3 Correlation with GDP gap in the euro area (EA10)



Source: Chapter 3 by Hansson.

Hansson also conducts a supplementary analysis in which the cyclical situation is measured instead by the employment gap (the difference between actual and potential employment). Using this measure, economic fluctuations were considerably greater in Sweden than in the euro area until around 2005. Since then, the differences have been much smaller. From the beginning of the financial crisis in 2007, the labour market situation in Sweden has been more similar to that in the euro area as a whole than in most euro area countries. Finally, Hansson shows that Swedish inflation since 1999 has correlated well with inflation in the euro area. He also points to a strong correlation in inflation between the euro area countries.

Hansson's conclusions

Hansson's "overall conclusions are that the business cycle in Sweden has become more synchronised with that of the euro area and that there is every reason to believe that this trend will continue in the future." He further argues that the risk of Sweden being affected by an asymmetric economic shock is no greater than the corresponding risk for the current euro area countries, but rather less.

4.2 Can the Riksbank pursue a different policy than the ECB outside the monetary union?

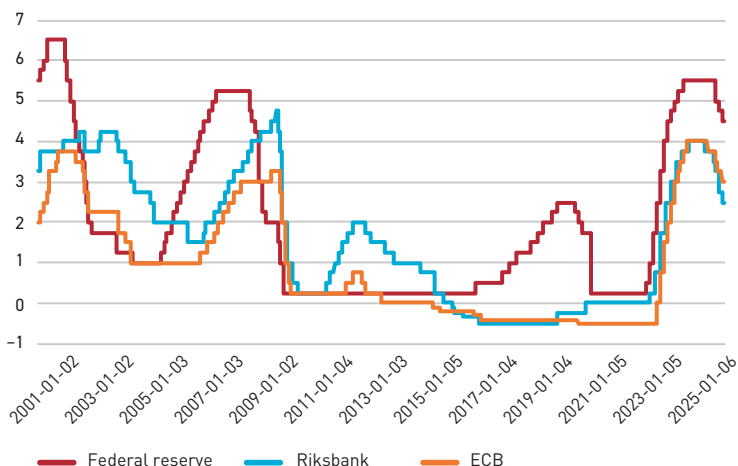
Euro membership means that monetary policy is likely to contribute to less stabilisation of the Swedish economy if the Riksbank, outside the monetary union, were to pursue a different policy than the ECB in the case of asymmetric macroeconomic shocks. It has sometimes been questioned whether this is possible.¹² This is one of the issues analysed by *Karl Walentin* in *Chapter 4*.

He notes that, according to established macroeconomic theory, it is entirely possible for a central bank to pursue an independent monetary policy without being constrained by interest rates in other countries when the exchange rate is floating. Changes in the policy rate do affect the exchange rate, all other things being equal, but normally only reinforce the effects on economic activity and inflation. For example, an interest rate cut during an economic downturn can be expected not only to raise domestic demand and prices, but also to depreciate the currency, which increases net exports and import prices. Walentin discusses the risk that interest rate changes relative to the rest of the world may give rise to counteracting capital flows, but does not consider this relevant for Sweden.

Since the start of the monetary union in 1999, the Riksbank's policy rate has mostly been close to that of the ECB (Figure 4). According to Walentin, this is because the macroeconomic shocks have been common. He also notes that monetary policy decision-makers in small economies tend not to want to deviate too much from the policy rates of the major central banks and that such considerations may have influenced the Riksbank, which, in his assessment, appears to have been “unnecessarily worried about letting its policy rate deviate from the ECB's”.

¹² See, for example, Flam and Persson (2024b).

Figure 4 Policy rates, 2000–25, per cent



Note: For the Federal Reserve, the upper limit of the federal funds rate range is shown; for the ECB, the refi rate is shown until 9 October 2008 and thereafter the deposit rate.

Source: Chapter 4 by Walentin.

4.3 How would the ECB's monetary policy suit Sweden in the event of common shocks?

Karl Walentin also discusses in *Chapter 4* that the ECB's monetary policy may, under certain circumstances, be unsuitable for Sweden even in the event of common shocks. One reason is that the interest rate sensitivity of the economies may differ, i.e., that demand and inflation could be affected to different degrees by interest rate changes. Another possibility is that fiscal policy considerations in the euro area cause the ECB to choose a policy that is less appropriate for Sweden.

Different interest rate sensitivity

It has often been pointed out that aggregate demand in Sweden is particularly sensitive to interest rate changes.¹³ Walentin analyses this hypothesis by discussing how various factors that can be assumed to

¹³ See e.g., Dagel (2023).

affect interest rate sensitivity differ between Sweden and the euro area, and by summarising studies that have directly attempted to measure interest rate sensitivity.

Household debt as a share of disposable income is much higher in Sweden than in the euro area: 158 per cent compared with 84 per cent in 2023. In addition, fixed interest periods are much shorter (two years on average compared with around ten in Belgium and Germany). This tends to make household consumption more sensitive to changes in the policy rate in Sweden.¹⁴ The interest rate sensitivity of non-financial firms can also be assumed to be greater in Sweden, as their debt as a share of GDP is among the highest in the EU. However, one factor that tends to reduce interest rate sensitivity in Sweden relative to the euro area is that the proportion of liquidity-constrained households, which are particularly sensitive to interest rate changes, is lower. The lower level of public debt in Sweden also contributes to lower interest rate sensitivity in the economy, as the budgetary scope for tax cuts and increases in government expenditure other than interest payments is less affected by interest rate changes. Walentin's overall conclusion, however, is that the factors that argue for higher interest rate sensitivity than in the euro area predominate. Nor can he see any reason why debt ratios and fixed interest periods in Sweden would converge towards the euro area average in the event of euro membership.

Another way of comparing interest rate sensitivity in Sweden and the euro area is to look at empirical estimates of it. However, it is not obvious how this should be done. An interest rate cut in the euro area means that interest rates fall not only in an individual country but also in all other euro area countries. This increases demand there too, which also spills over to the individual country. Estimates of interest rate sen-

14 Higher household debt means that consumption is more sensitive to interest rate changes. This applies to all households, regardless of whether they are liquidity-constrained or not. A non-liquidity-constrained household faces no restrictions on how much it can borrow. A higher interest rate reduces consumption through both a substitution effect (saving becomes more profitable) and an income effect (lower income remains for consumption after debt interest has been paid). The income effect is stronger, the greater the level of indebtedness. For liquidity-constrained households, whose consumption is limited by their income because they are unable to borrow more, a cash flow effect arises: consumption must be reduced by the same amount as interest expenses increase, i.e., the marginal propensity to consume is 1 (see Calmfors et al. 2023).

sitivity in the euro area therefore tend to overestimate it relative to estimates of interest rate sensitivity in Sweden (since Swedish interest rate changes only have a marginal effect on demand in today's euro area countries). Conversely, a Swedish interest rate cut can be expected to depreciate the krona, leading to an increase in net exports in addition to domestic stimulus effects. It is difficult to know which of the effects described is stronger, but Walentin's assessment is that the former dominates. Therefore, the fact that estimates of interest rate sensitivity are roughly the same for the euro area and Sweden may still be compatible with higher interest rate sensitivity in Sweden in the event of euro membership.

Unsuitable monetary policy for Sweden due to fiscal policy considerations

Another reason why the ECB's monetary policy may be less appropriate for Sweden in the event of euro membership has to do with fiscal policy. Since public debt is much higher in almost all euro area countries than in Sweden (see Section 4.5), Walentin believes that fiscal policy may be used less actively to stimulate the economy in the euro area than in Sweden during common cyclical downturns. If the priority of fiscal policy in euro area countries is to consolidate public finances, there is a risk that it will exacerbate downturns. This could cause the ECB to pursue a more expansionary monetary policy than is justified for Sweden. This is particularly problematic if interest rate sensitivity is greater in Sweden.

Walentin also discusses how the fiscal situation of euro area countries can affect the ECB's monetary policy during booms. The ECB can then be reluctant to tighten policy, as interest rate hikes can lead to sharply increased interest expenses in countries with high public debt. The result could be an insufficiently contractionary monetary policy for Sweden if it finds itself in a similar cyclical situation. However, according to Walentin, this is a lesser problem than the monetary policy described above in a recession, as an interest rate hike by the ECB, because of our higher interest rate sensitivity, can be expected to dampen demand more in Sweden than in today's euro area countries.

4.4 Are the *krona*'s exchange rate movements stabilising or destabilising?

One advantage of having a national currency that is often highlighted is that nominal exchange rate changes can help stabilise the economy in case of macroeconomic imbalances. With a floating currency where the central bank does not act to achieve any exchange rate target, the exchange rate is determined by market forces, but it is still generally assumed that it will move in a stabilising manner. At the same time, exchange rates can fluctuate sharply in ways that are often difficult to explain.¹⁵ Exchange rate movements can therefore also cause macroeconomic disturbances.

In *Chapter 5*, Martin Flodén discusses how movements in the *krona* exchange rate have affected the Riksbank's ability to achieve its targets for inflation and economic activity.

The development of the *krona* exchange rate

In public debate, it has often been claimed that the *krona* is particularly volatile. The former prime minister Carl Bildt's description of the *krona* as a "rudderless currency" has become classic in the Swedish debate on the euro.¹⁶ However, as Flodén shows, since the start of the monetary union in 1999 short-term volatility has been greater for several other floating currencies. This applies, for example, to the New Zealand dollar, the Canadian dollar, the Norwegian *kroner* and the British pound. The *krona* is also the currency among those studied by Flodén that shows the strongest positive correlation between changes in the GDP gap and in the exchange rate (measured as units of foreign currency per *krona*). A more positive (negative) GDP gap has thus normally coincided with a stronger (weaker) *krona* exchange rate. This means that exchange rate changes have mostly helped stabilise the Swedish economy.

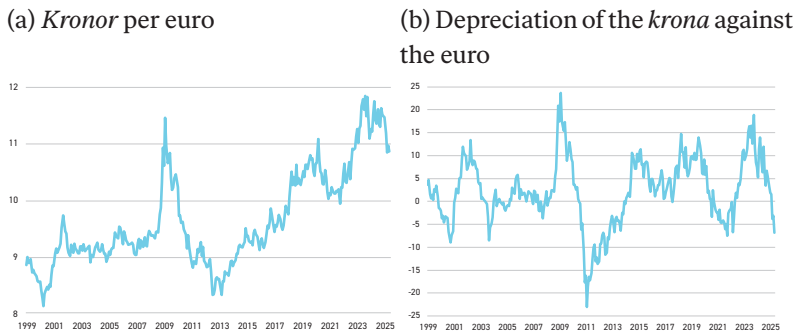
At the same time, the *krona* weakened between 2013 and 2023 in a way that has been difficult to explain (Figure 5). Factors highlighted by various analysts include a more expansionary monetary policy in

¹⁵ See Flam and Persson (2024a).

¹⁶ Eriksson (1998).

Sweden than in the euro area, the Riksbank's communication when inflation was below the inflation target that a weak *krona* was desirable, large flows of Swedish pension savings abroad and trend-following behaviour in the foreign exchange market. However, the extent of the *krona*'s decline remains a mystery.

Figure 5 The *krona*'s exchange rate against the euro, 1999–2024



Note: Monthly data, with the last observation being May 2025. The right-hand panel shows how the *krona* has depreciated (positive values) or appreciated (negative values) over a two-year period.

Source: Chapter 5 by Flodén.

The *krona* exchange rate during various economic episodes

Flodén also analyses in more detail how changes in the *krona* exchange rate have affected the conditions for stabilisation policy during various economic episodes since the start of the monetary union in 1999. In no case has there been any Sweden-specific economic shock, but rather shocks that have been common to both the euro area and other advanced economies.

The first episode relates to the *IT bubble* and the subsequent *IT crash* at the turn of the millennium. During the bubble period with a large stock market rise, from early 1999 to early spring 2000, the *krona* strengthened significantly against the euro. But when the bubble burst and the stock market crashed, the *krona* fell again. These exchange rate movements had a stabilising effect on the economy.

During *the global financial crisis* of 2008–09, there was a sharp decline in the value of the *krona*. According to Flodén, this counteracted the economic downturn in Sweden and may have contributed to a less severe recession than in Finland, which is part of the euro area. Flodén sees the greatest effect on inflation, which in Sweden remained at the inflation target of 2 per cent in 2009, while falling well below it in the euro area. However, the sharp appreciation of the *krona* in 2010–13 contributed to Swedish inflation below that in the euro area at that time.

Flodén believes that the gradual weakening of the *krona* from 2013 onwards contributed to inflation in Sweden reaching the inflation target in the years before the pandemic, or at least being closer to it than in the euro area.

During *the inflation crisis* of 2022–23, the weak *krona* helped to sustain Swedish demand. However, this, combined with increased import prices, hampered the Riksbank's attempts to curb inflation. The Riksbank therefore raised interest rates more than would otherwise have been necessary. This reinforced the decline in both private consumption and investment.

Flodén's conclusions on the *krona* exchange rate

Flodén concludes that Sweden's stabilisation policy outside the monetary union can be both helped and harmed by fluctuations in the exchange rate. Experience in recent decades shows that "exchange rates do not always move in ways that support stabilisation".

According to Flodén, Sweden has not been exposed to any (important) country-specific macroeconomic shocks since the start of the monetary union in 1999. Instead, the shocks have mainly been shared with the euro area. In most cases, these have been negative demand shocks. A falling *krona* has then helped stabilise both economic activity and inflation. However, these benefits have been achieved at the expense of the euro area countries: while a depreciating currency has contributed to higher economic activity and higher inflation (closer to the target) in Sweden, the effect has been (slightly) lower economic

activity and lower inflation (further from the target) in the euro area countries.

During the negative supply shocks, in the form of higher energy and food prices, which the Swedish economy experienced in 2022–23, it was a disadvantage for our ability to stabilise inflation – which was then the priority economic policy objective – with the *krona* falling in value. (However, the fight against inflation in the euro area countries was made somewhat easier by the euro appreciating against the *krona*).

Flodén’s conjecture is that common (global) macroeconomic shocks will continue to dominate over country-specific ones in the future, as economies have become increasingly intertwined through trade and capital movements. Thus, it is reasonable to attach great importance to the role that variations in the exchange rate can play in the case of common shocks if Sweden remains outside the monetary union. At the same time, Flodén does not rule out the possibility that chance may be behind the fact that the major disturbances in recent years have been common and not country-specific. However, his overall conclusion is that “it is far from certain that the *krona* will move in ways that facilitate Swedish stabilisation policy in future crises, regardless of whether such shocks originate domestically or abroad”.

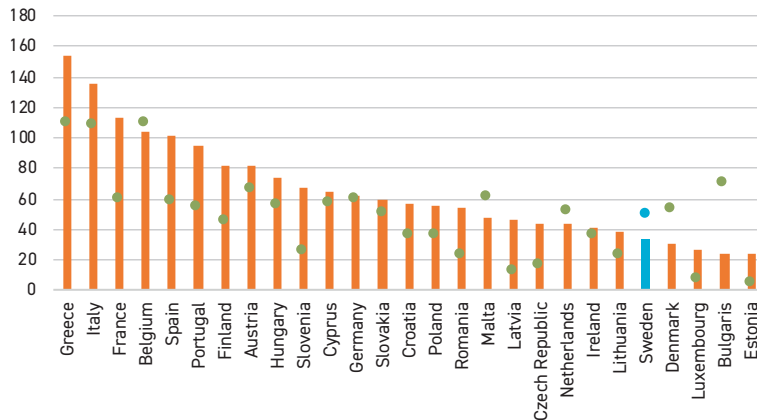
4.5 The potential of fiscal policy – and wage formation – to stabilise the economy

If, despite everything, cyclical developments in Sweden were to differ significantly from those in the rest of the euro area following euro membership, it would be important to analyse the possibilities of using other instruments than monetary policy to stabilise the economy. This is done in *Chapter 6*, authored by me. It discusses three alternative adjustment mechanisms: (i) demand management through fiscal policy; (ii) internal devaluations; and (iii) fiscal transfers from other countries.

The possibilities of fiscal policy

The EMU Inquiry (1997) placed great emphasis on the fact that the scope for fiscal stimulus during an economic downturn was severely limited at that time. Following the large increase in public debt during the crisis in the early 1990s, the overriding objective of fiscal policy was fiscal consolidation. The situation is now completely different, since public debt as a share of GDP has fallen sharply. This is not only a fall in *absolute* terms – from just over 70 per cent of GDP in the mid-1990s to approximately 35 per cent in 2025 – but also *relative* to the euro area, as the euro area countries' debt has increased while Sweden's has decreased. This development is illustrated in Figure 6. Today, there are much better opportunities to stimulate the economy through fiscal policy in a Swedish downturn than there were at the start of the monetary union.

Figure 6 Maastricht debt, 2000 and 2024, per cent of GDP



Note: Maastricht debt is the consolidated gross debt of the public sector, i.e., the debt after internal claims and liabilities have been offset against each other. The bars refer to 2024, the circles to 2000.

Source: Chapter 6 by Calmfors.

It is also unlikely that EU fiscal rules would prevent Sweden from pursuing an expansionary fiscal policy during an economic downturn if it were to join the euro. The risk of exceeding the EU debt ceiling of 60 per

cent of GDP is small. The probability is greater that the EU's deficit ceiling of 3 per cent of GDP is exceeded.¹⁷ However, in a crisis, the stability pact's national escape clause would probably be activated in Sweden's case. If this does not happen, the risk of fines is still small, as such fines have never been imposed. Furthermore, any fines would be so low that they would hardly constitute a binding restriction.

Rough estimates in my chapter indicate that greater use of fiscal policy in the event of euro membership could partially compensate for the loss of monetary policy autonomy when it comes to stabilising demand in situations of Sweden-specific macroeconomic shocks.

Use of fiscal policy

Stabilising asymmetric economic shocks in the event of euro membership not only requires that fiscal policy has the *potential* to substitute for the Riksbank's monetary policy, it must also be *used* effectively in a countercyclical manner.

The existence of *automatic stabilisers*, i.e., the fact that tax revenues and certain public expenditures (such as for unemployment benefits) change when the economy fluctuates, means that fiscal policy in the case of euro membership automatically takes over part of the stabilising role that national monetary policy currently plays if the Swedish business cycle deviates from that of the euro area. However, the balanced budget requirement for local governments means that the automatic stabilisers in an economic downturn are weaker than according to conventional calculations, as local governments may be forced to cut expenditure when their tax base decreases.

According to several studies, overall fiscal policy, including both automatic stabilisers and discretionary decisions, has dampened cyclical fluctuations in Sweden. General government net lending, i.e., the difference between revenue and expenditure, has increased during upturns and decreased during downturns. According to most stud-

17 In the coming years, the risk of this happening in the event of euro membership would be greater than before, as both increased defence expenditure and support for Ukraine are to be financed by borrowing. However, the resulting increase in debt does not pose a significant risk of the EU's debt ceiling being breached. See, for example, the Fiscal Policy Council (2025).

ies, discretionary fiscal policy has also generally been countercyclical: structural net lending, i.e., net lending in a normal cyclical situation, has mostly risen in good times and fallen in bad times. However, there are also examples of fiscal policy being poorly adjusted to cyclical swings.

The fiscal policy of the euro area countries has often been procyclical, thus amplifying economic fluctuations. Sweden, however, meets several of the criteria that, according to research, promote countercyclical fiscal policy: low public debt, a tradition of respecting fiscal rules and efficient public administration.

Overall, there is reason to believe that Sweden will pursue a more countercyclical fiscal policy than before if it joins the euro and cyclical developments diverge from those of other euro countries. At the same time, there is a need for reforms that can increase the likelihood of such policies. My chapter discusses four possibilities:

- Strengthening *automatic stabilisers*, for example through a system that varies central government grants to local governments countercyclically.
- Greater use of *semi-automatic stabilisers*, i.e., packages of prepared measures that can be quickly activated in an acute economic situation.
- Allowing a more or less explicit *rule of conduct* to guide fiscal policy by specifying how it should normally respond to various cyclical disturbances.
- Supplementing the *Fiscal Policy Council's* current mandate to review fiscal policy ex post with the task of also providing ex ante recommendations on appropriate policy.

It is easier to gain acceptance for stimulus measures during economic downturns than for austerity measures during upturns. There is therefore a risk that increased use of fiscal policy as a countercyclical tool in the case of asymmetric shocks will raise public debt. The above proposals aim to reduce this risk.

Internal devaluations

Another adjustment mechanism in the event of a negative country-specific economic shock in a euro area country could be an internal devaluation: to depreciate the real exchange rate, i.e., lower wage costs and prices relative to other euro area countries through lower wage cost increases or even wage cost reductions. The idea is that this will raise net exports and thus stimulate the domestic economy. This measure is mainly relevant when previous overheating has led to higher price and wage increases than in the rest of the monetary union, resulting in real appreciation and a current account deficit that must be reduced.

Major internal devaluations via lower wage increases or wage cuts took place in the Baltic countries and the crisis countries of the euro area during the global financial crisis and the subsequent euro crisis. The method probably requires that unemployment has risen substantially and is slow to take effect. More responsible wage formation in Sweden since the introduction of the Industry Agreement (which sets out the basic principles for collective wage bargaining) in 1997 has increased the likelihood of such internal devaluation in a crisis. However, the institutional conditions have been very different in countries that have implemented major internal devaluations: government intervention in wage formation or weak trade unions and low collective agreement coverage. Internal devaluation through wage formation could, however, make some contribution to economic stabilisation in the case of a negative asymmetric shock.

Fiscal transfers between EU countries

Fiscal transfers from other EU countries are a potentially powerful tool for counteracting a deep recession in an individual euro area country. Over the years, many proposals for a European transfer system to deal with such situations have been put forward. However, there has been little political appetite for systems for such cyclical income transfers. There is a fear that such arrangements would mean permanent transfers to certain countries.

At the same time, over the past fifteen years, a number of measures have been taken to support individual EU countries.¹⁸ During the euro crisis, several of the euro area's periphery countries received financial support through the rescue funds that were created. A permanent institutional change was the establishment of the European Stability Mechanism (ESM), which can grant loans to euro area countries in acute sovereign debt crises. However, this is crisis support linked to strict conditions on fiscal consolidation measures, not support to counteract economic fluctuations per se.

The pandemic crisis of 2020–21 led to EU support with stabilisation policy elements in the form of the SURE programme with loans to national short-time working schemes as well as both grants and loans under NGEU (*NextGenerationEU*) to bolster the recovery. Although the support covered all EU countries, it meant the most to the euro area countries that were hardest hit by the pandemic shock. These support programmes can be interpreted as part of a slow development towards more fiscal transfers to countries affected by severe recessions. This could also help Sweden somewhat to counteract strongly negative asymmetric shocks in the event of euro membership.

Conclusions in my chapter

The possibilities of partially substituting national fiscal demand management policy for national monetary policy in the event of euro membership are good – much better than around the turn of the millennium. Internal devaluation can make a certain contribution to economic stabilisation after a period of high price and wage increases. In a deep crisis, the chances of Sweden receiving help through fiscal transfers from other EU countries have increased, but the significance is probably limited. Overall, the possibilities of counteracting different cyclical fluctuations than in other euro area countries in the event of euro membership are considerably greater today than around the turn of the millennium.

¹⁸ See also section 5.1.

5 Other economic aspects

Since the EMU Inquiry in 1997 and the referendum in 2003, at least two further key economic aspects have been added. One is the risk that Sweden, if it joins the monetary union, will have to bear the costs of other members' high public debt, and the other is how Sweden would be affected by membership of the banking union, which is mandatory for euro area countries.

5.1 The risk that Sweden will have to pay for the high public debt in some euro area countries

Prior to the launch of the monetary union, there was concern, particularly in Germany, that the country would have to pay for the high public debt in countries such as Italy and Portugal if they became members of the monetary union. This was the motivation behind the fiscal rules of the Maastricht Treaty in 1992, which were then operationalised in the stability pact in 1997. However, in the EMU Inquiry (1997), the STEMU Inquiry (2002) on fiscal policy in the event of euro membership, and the discussion prior to the 2003 referendum, the focus was instead entirely on how the EU's fiscal rules could restrict Swedish fiscal policy. Considerations that Sweden, as a member of the monetary union, could incur costs for other members' government debts, on the other hand, played hardly any role.

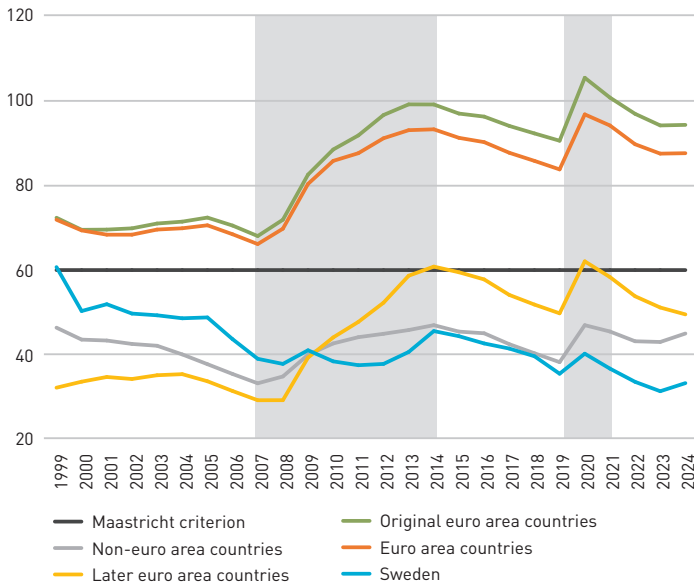
Today, a different assessment must be made. One reason is that most euro area countries' public debt has increased substantially since the turn of the millennium, while Sweden's has instead decreased. Another reason is the precedents discussed above, which were established during both the euro crisis of 2010–12 and the pandemic crisis of 2020–21, when joint support measures were taken at the euro area and EU levels, respectively. *Fredrik N G Andersson and Lars Jonung* discuss these issues in *Chapter 7*.

The risk of new sovereign debt crises in the euro area

The first question concerns the risk of new sovereign debt crises in the euro area. Figure 6 shows that Maastricht debt in 2024 amounted

to 153 per cent of GDP in Greece and 135 per cent in Italy. In France, the debt ratio was 113 per cent, while Belgium, Spain and Portugal were all close to 100 per cent. As shown in Figure 7, debt increases have occurred during two crisis periods: 2008–14 during the global financial crisis and the subsequent euro crisis, and 2020–21 during the pandemic. Debt reductions during other periods have been too small to offset the debt increases during the crises.

Figure 7 Public debt in the EU, 1999–2024, per cent of GDP



Note: The debt ratios for euro area countries and original euro area countries are weighted averages where each country's weight corresponds to its share of total GDP. For new euro area countries and non-euro area countries, unweighted averages are used instead, as official weights are not available for the entire period.

Source: Chapter 7 by Andersson and Jonung.

In addition to the crises, Andersson and Jonung identify two other reasons for the growth in public debt in the euro area: failure to comply with fiscal rules and low growth. Most euro area countries have not complied with the rules on budget deficits of no more than 3 per cent of GDP, a structural budget balance close to zero and a reduction in debt

ratios above 60 per cent of GDP. The short-term considerations that often guide fiscal policy have trumped the rules. Lower growth raises the debt-to-GDP ratio, as the denominator then grows more slowly relative to the numerator.

Andersson and Jonung point to an “inherent political conflict between the monetary union’s interest in stable public finances and the member states’ desire to pursue a more expansionary fiscal policy.” According to the analysis, the pendulum has swung back and forth between these two perspectives when fiscal rules have been reformed. The authors do not believe that the reforms of the stability pact in 2024 will lead to better compliance. The reforms aimed to strengthen the legitimacy of the rules by taking greater account of the situation in each country, but they also opened the door to more political considerations regarding the application of the rules.

Andersson and Jonung also highlight several factors that point to insufficient political will in many euro area countries to take the measures necessary to avoid new sovereign debt crises:

- *Increased voter support for both left-wing and right-wing populist parties.* These parties generally take a critical stance towards the EU, which can be assumed to weaken the willingness to comply with rules. In addition, populism traditionally entails short-term economic policies, which are likely to increase resistance to growth-promoting reforms.
- *Demands for increases in government spending to strengthen military capabilities and implement the green transition.* In July 2025, the Ecofin Council (EU finance and economy ministers) decided to activate the national escape clauses in the stability pact for those EU countries that had applied for it, so that increased unfunded defence spending of up to 1.5 per cent of GDP would be permitted for four years.
- *Ageing populations mean rising costs for pensions and healthcare, as well as slower growth in tax bases.*

The risk of Swedish costs if sovereign debt crises arise

The next question concerns the risk of Sweden having to pay for other EU countries' debts in the event of new sovereign debt crises, and how this depends on whether or not we participate in the monetary union.

An important difference from before is that the EU's no-bailout clause has been suspended in practice. According to it, neither other member states nor EU institutions may assume responsibility for the debts of an individual member state. Formally speaking, this has not happened. However, during the euro crisis, support loans were granted to crisis-hit countries. The European Stability Mechanism (ESM) may also in the future borrow on the international financial markets for on-lending to euro area countries in an acute debt crisis. ESM loans to members of the monetary union must be repaid. However, this entails costs for other euro area countries, which act as guarantors, if this does not happen or if the lending rates are lower than the borrowing rates. So Swedish membership of the euro area could mean that we incur costs for bailout loans if new sovereign debt crises arise.

Other types of costs may arise for Sweden if the common monetary policy is adjusted to deal with sovereign debt crises. Losses may arise if the Eurosystem (the ECB and the national central banks in the euro area) purchases government bonds from crisis countries in order to keep down sovereign debt interest rates there. This could either be in the form of realised capital losses on the bonds purchased or, if these are held for their entire term, interest losses if the interest rates on them are lower than the deposit rates on the banks' accounts in the Eurosystem, where the liquidity for the bond purchases ends up. If losses occur, part of these will fall on the Riksbank in the event of Swedish euro membership, either because it has carried out the purchases on behalf of the ECB or because it would be one of the ECB's owners. Ultimately, such losses will affect the Swedish government finances.

Another possible cost is that the ECB, fearing that highly indebted euro countries will be unable to service their government debt, could allow inflation in the euro area to rise. This would constitute a form of taxation on nominal assets in all member countries of the monetary union. However, such action would be contrary to the ECB's mandate to maintain price stability.

As discussed in Section 4.5, two EU-wide fiscal programmes were launched during the pandemic: SURE and NGEU (*NextGenerationEU*). The programmes were financed by loans raised by the European Commission. Under SURE, these loans (approximately EUR 100 billion) were re-lent to member states. Under NGEU, approximately half (EUR 360 billion) is used for such re-lending and half (EUR 390 billion) for grants. Under both programmes, the funds have been allocated in such a way that some of the most indebted countries (Greece, Italy, Portugal and Spain) have benefited.

As Andersson and Jonung note, attitudes towards both crisis support and common fiscal policy have become more positive within the EU. A further example is the recently decided joint borrowing for on-lending to member states with the aim of financing the reconstruction of European defence. Another example is the joint borrowing to finance aid to Ukraine.¹⁹ Hence, there is a clear risk that Sweden may in future have to contribute to paying off the debts of other EU countries. The danger is greater if we participate in the monetary union, as we will most likely have to participate in emergency rescue operations in the event of new sovereign debt crises, than if we remain outside. However, the risk of Swedish costs also exists in the latter case, as developments seem to be moving towards joint fiscal measures at EU level, rather than measures limited to the monetary union.

Andersson and Jonung's conclusions

According to Andersson and Jonung, it is “likely that new debt crises of some kind will arise within the euro area in the future.” How Sweden will be affected depends largely on whether or not we participate in the monetary union. Outside the monetary union, we have greater freedom to deal with shocks from a fiscal crisis there. At the same time, Sweden cannot isolate itself from the consequences of such a crisis, as they will spread via financial markets and foreign trade. But if Sweden

19 In May 2025, the Council of Ministers decided on joint borrowing of EUR 150 billion for on-lending to Member States for the procurement of defence equipment under the Security Action for Europe (SAFE) programme, (European Commission 2025c). In December 2025, the European Council (heads of state or government) agreed on joint borrowing of EUR 90 billion to finance budgetary and military support to Ukraine.

joins the monetary union, we will have to share the costs of a debt crisis to a greater extent. Provided that Sweden maintains its strong public finances, it is more likely that we will be net contributors than net recipients of support.

5.2 Advantages and disadvantages of joining the banking union

Membership of the banking union is now a requirement for entry into the monetary union. The banking union consists of a number of rules and decision-making mechanisms for financial supervision and crisis management. These are described by *Peter Englund and Pehr Wissén* in *Chapter 8*.

Components of the banking union

The two central parts of the banking union are the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM).

Upon membership of the banking union, the Single Supervisory Board (SSB) within the ECB would take over responsibility for the supervision of systemically important Swedish banks (at least Handelsbanken, SEB and Swedbank) from the Swedish Financial Supervisory Authority.²⁰ However, it would retain supervision of non-systemically important banks, even though the Single Supervisory Board could also take action against them.

Resolution is the process that takes place when a bank fails. It must then be restructured or wound up in a way that minimises damage to customers, financial stability and the economy. The idea is that neither depositors nor taxpayers should have to bear any costs. Instead, they should be borne by shareholders, whose equity capital may be lost in whole or in part, and unsecured creditors, whose loans may be written down or converted into shares. Sweden is already covered by EU legislation on resolution. However, membership of the banking union

20 Nordea is already covered by the Single Supervisory Mechanism because the bank has its head office in Helsinki. SEB's and Swedbank's Baltic subsidiaries are also covered.

would mean that decisions on resolution would be transferred from the Swedish National Debt Office to the Single Resolution Board (SRB).

A key third component of the banking union that has been under discussion for some time is a common deposit insurance scheme. There are currently EU rules on deposit insurance systems, but these are still national. Some economists consider a common deposit insurance scheme, or a common reinsurance system for national guarantees, to be necessary to complete the banking union, but it is highly uncertain whether, and if so when, such a mechanism can be established.²¹

Consequences of joining the banking union

Englund and Wissén analyse the advantages and disadvantages of joining the banking union. They note that “the conditions for taking *cross-border effects* (my italics) on financial stability into account” would improve. The authors also argue that financial supervision could be of *higher quality* if it were transferred to the ECB, as there could be “economies of scale for methodology development and increased opportunities to make comparisons with banks of a similar type.” Furthermore, *the risk of cronyism* (regulatory capture) as a result of overly close links between regulators and regulated entities could be reduced. On the other hand, there is a risk that *local characteristics* will not be taken sufficiently into account. Englund and Wissén also refer to research suggesting that the banking union has increased “*transparency* (my italics) regarding the financial position of individual banks” and led to lower *risk-taking* in the banks covered.

Another consequence of membership in the banking union concerns its role as *an insurance system*. Today, our own resolution fund would cover losses in the event of the resolution of a Swedish bank if equity capital and unsecured claims were insufficient. If we participate in the banking union, the Single Resolution Fund (SRF) would instead cover

21 The Five Presidents' Report (Juncker et al. 2015) argued for a European Deposit Insurance Scheme (EDIS) to provide sufficient funds in the event of a national banking crisis. The idea was to create a European reinsurance system for national deposit guarantees that would kick in if the national guarantee's resources were insufficient. See Forssbäck (2024) and Véron (2024) for recent assessments of what might happen.

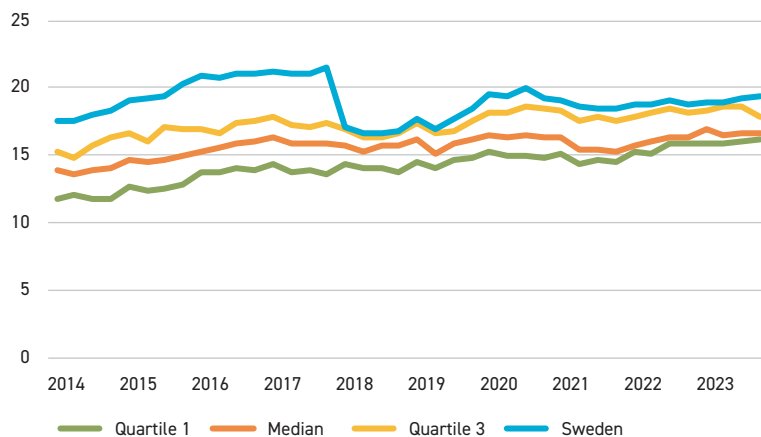
these losses.²² As it is much larger than the Swedish fund, this means better insurance protection in the event of a Swedish banking crisis. The costs of this would then be covered by the fees paid by foreign banks to the Single Resolution Fund. The other side of this, however, is that Swedish banks' fees to the fund could be used to cover losses in the event of a banking crisis in other member states of the banking union.

The capital adequacy ratio of banks in the euro area has increased and their credit losses have decreased over the past ten years.²³ However, the situation for Swedish banks is still substantially better in these respects (see Figures 8 and 9). The risk of a banking crisis is therefore lower in Sweden than in the euro area. If Sweden participates in the banking union, this should in principle be reflected in lower risk-based contributions to the common resolution fund for our banks. However, Englund and Wissén doubt that the lower risks of a Swedish banking crisis would be fully reflected in lower contributions to the resolution fund. This is mainly because banks in several euro area countries, particularly in southern Europe, hold large amounts of their own countries' government bonds, which, given the high levels of government debt, represents a significant risk that is not taken into account when determining risk-based contributions: domestic government bonds are assigned a risk weight of zero when the capital adequacy ratio is calculated, regardless of the size of the member state's public debt.

22 Upon entry into the banking union, part of the Swedish resolution fund would be transferred there.

23 The capital adequacy ratio is calculated as the ratio between equity capital and risk-weighted assets.

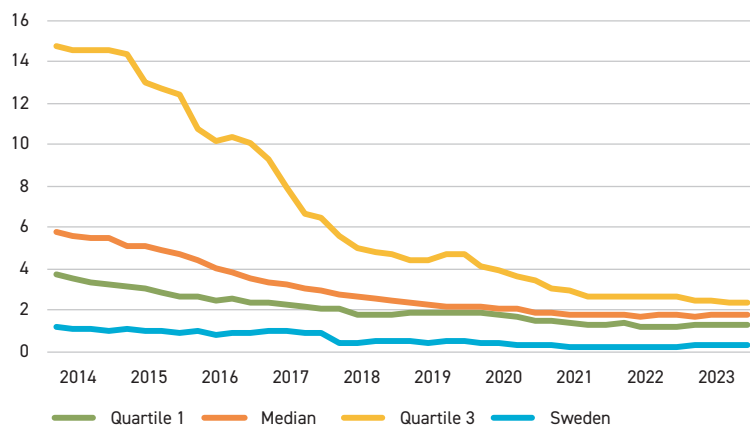
Figure 8 Capital adequacy ratio in the EU and Sweden, 2014–23, per cent



Note: The capital adequacy ratio (CET1 ratio) is the ratio between equity capital and risk-weighted assets. The aggregate figures refer to the ten largest euro area countries plus Denmark, Poland and Sweden.

Source: Chapter 8 by Englund and Wissén.

Figure 9 Proportion of non-performing loans in the EU and Sweden, 2014–23, per cent



Note: The aggregate figures refer to the ten largest euro area countries plus Denmark, Poland and Sweden.

Source: Chapter 8 by Englund and Wissén.

In the event of serious banking crises in euro area countries, there is a risk that the common resolution fund will not be sufficient. In such a case, it is likely that the European Stability Mechanism (ESM) would need to step in with support.²⁴ If Sweden were to join the euro, it would then have to share the costs of this. However, according to Englund and Wissén, it is unlikely that Sweden would be able to remain outside support programmes, for example via the IMF, in the event of a deep banking crisis in the euro area, even if we do not participate in the monetary union.

Englund and Wissén's main conclusion is that joining the banking union, even though it would probably be positive for Sweden, would have little effect: it should not be "exaggerated, as both the supervision of banks and the resolution of banks in crisis are already governed by legislation that is common to all EU countries, whether they are members of the banking union or not."

6 Political aspects

The euro is not just an economic project. From the outset, many have also viewed monetary union as a project primarily aimed at bringing EU countries closer together *politically*. Another political aspect is how Sweden's influence on decisions in various areas within the EU is affected by whether or not we participate in monetary union.

6.1 The euro and political integration in Europe

European political integration can be defined as organised cooperation between states, with joint decision-making in common institutions on certain issues, with the aim of achieving common goals, and which is anchored among citizens through a perceived common identity and common norms. The significance of the euro in this context is discussed in two chapters. *Erik Jones* provides a background description of how both EU cooperation as a whole and the monetary union have

²⁴ See Sections 4.5 and 5.1 regarding the ESM.

developed over time. *Magnus Lundgren and Jonas Tallberg* conduct a systematic empirical analysis of how various aspects of European integration have been affected by the single currency.

The development of EU cooperation and the monetary union over time

In *Chapter 9*, *Jones* highlights the unique nature of EU cooperation as a hybrid of forms of cooperation between different political entities. According to him, “the EU is not state, a federation, a confederation, an alliance or an international organisation.” He emphasises that the EU is not the product of any clear plan for comprehensive European cooperation from the outset, but rather a synthesis of a number of different European cooperation projects – concerning coal and steel production, research cooperation, trade and competition rules, exchange rates, freedom of movement, and foreign and security policy – which were launched at different times and have come together under a common umbrella.

Jones also describes the two very different starting points for the monetary union. One has been a purely economic desire to avoid exchange rate instability, the other to promote deeper political integration between EU countries through a common currency. Both of these motives were clearly stated in the Werner Report (1970), the first proposal for an economic and monetary union.²⁵

Jones describes how the monetary union has developed gradually in response to emerging crises. This occurred primarily in connection with the euro crisis of 2010–13. It led to institutional deepening, including the establishment of rescue funds for loans to crisis countries, stricter fiscal rules under the stability pact, a European semester for national economic policy plans and budgets, broader macroeco-

25 The Werner Committee (named after Luxembourg's prime minister Pierre Werner, who chaired it) was tasked by EU leaders with drawing up a plan for economic and monetary union. The committee saw it as a “catalyst” for the development of a political union. However, the proposal for an economic and monetary union should also be seen in the light of the fact that the Bretton Woods system of fixed exchange rates was collapsing in the late 1960s and early 1970s.

conomic surveillance and the establishment of the banking union.²⁶ Jones highlights how various countries and institutions have been willing to reconsider previous positions in order to ensure the survival of the euro. One example is the ECB's decision during the euro crisis to provide liquidity to the banks of crisis countries through the purchase of government bonds, and Germany's acceptance of this. Other examples include the loans to crisis countries from the EU rescue funds during the same period and the joint EU borrowing to support member states during the pandemic and the recovery from it, and most recently for on-lending to them for purchases of defence material.

According to Jones, institutional developments are explained by “a growing recognition that those countries that have adopted the euro as a common currency also share a common fate” and “they do identify with each other in important ways.” Some of the institutional changes – such as the ECB's bond-buying programme, the bailout loans via the ESM (and previously other funds) and, in practice, the banking union²⁷ – only affect euro area countries. But other changes – such as those concerning the rules of the stability pact, the European semester, broader macroeconomic surveillance, the rules for banking resolution and joint borrowing – apply to all EU countries. Since these changes have also been made primarily to address problems in the euro area, it is clear that the single currency has driven institutional integration throughout the EU.

Jones's overall conclusion is that cohesion and identification among the euro area countries has increased over time, while their decisions have become increasingly important for the development of the EU. He makes no attempt to analyse how Swedish membership of the euro would affect either general political integration in the EU or Sweden's political integration into the union. However, according to him, Sweden has the potential, if it joins the euro, to play an important role in how the monetary union is adapted to changing conditions in the future and thus in how future political integration in Europe develops.

26 See also chapters 7 and 8 by Andersson and Jonung and Englund and Wissén, respectively. Calmfors (2017) summarises the institutional developments that followed from the euro crisis.

27 The banking union is also open to non-euro area countries, but so far only euro area countries or countries that are in the process of entering the monetary union have joined.

An empirical analysis of the euro and European integration

In *Chapter 10*, Lundgren and Tallberg conduct a thorough empirical analysis of how the euro project has affected European integration. They distinguish between three types of integration. *Economic integration* – primarily trade, the single market, and labour and capital mobility – is not addressed; instead, the focus is on the other two types of integration. *Political integration* is defined as institutional deepening and joint decision-making, but also includes national political changes (the emergence of EU-critical parties) that are important for EU cooperation. *Social integration* refers to citizens' perceived identity (European versus national) and the EU's civic engagement.

The starting point for Lundgren and Tallberg's analysis is both the hopes for the euro as a driver of integration and the fears that the single currency would instead create political conflicts. The hopes that the euro would deepen European integration were clearly formulated in both the aforementioned Werner Report (1970) and the Delors Report (1989). The latter formed the basis for the Maastricht Treaty of 1992, which stipulated that a single currency would be established. The idea was that monetary union would promote the objective of the original Treaty of Rome of 1957 of "an ever closer union among the peoples of Europe." This would be achieved through the common institutions and common economic policy that monetary union would entail. It was also hoped that the euro would serve as a concrete symbol of European unity, thereby strengthening the EU's popular support and promoting a common European identity.

Fears that the single currency would instead create political divisions were based on the view that the monetary union did not constitute an optimal currency area and that asymmetric macroeconomic shocks could therefore cause economic fluctuations in individual countries that would undermine confidence in the EU. Critics warned of conflicts between members of the monetary union over what monetary policy should be pursued and how national fiscal policy should be adapted to the common fiscal rules.²⁸ The EMU Inquiry (1997) pointed to the risk

28 The American economist Martin Feldstein went furthest, arguing that the conflicts could even lead to war (Feldstein 1997).

of a division of the EU into two tiers with the members of the monetary union as a first tier and the other EU countries as a second tier.

Institutional deepening and populist mobilisation

Lundgren and Tallberg argue that both the hopes and fears associated with the euro have been partially realised. The authors share Jones' assessment that economic developments in the monetary union have driven institutional deepening not only in the euro area but also in the EU as a whole. Lundgren and Tallberg use the term "failing forward" to describe the process:²⁹ "At an initial stage, intergovernmental compromises lead to the creation of incomplete institutions, which lay the groundwork for future crises when these institutions are found to be inadequate, which in turn drives a deepening of integration through reformed institutions."

But while the euro crisis led to institutional deepening of EU cooperation, it also created conflicts between countries in the monetary union when aid to crisis-hit countries was conditioned on tough fiscal austerity measures. This led to political mobilisation by populist and EU-critical parties in these countries. Lundgren and Tallberg specifically mention the left-wing parties *Syriza* in Greece and *Podemos* in Spain. But there was also dissatisfaction with the support programmes in the countries that financed them: many people there considered them too generous. This led to the emergence of the right-wing populist *Alternative für Deutschland* (AfD) in Germany. The success of the left-wing populist parties in the crisis countries seems to have been rather temporary: their support has declined again since the euro crisis, while their criticism of the EU has softened. AfD in Germany, on the other hand, appears to have achieved more permanent voter support after broadening its political platform to include harsh criticism of immigration.

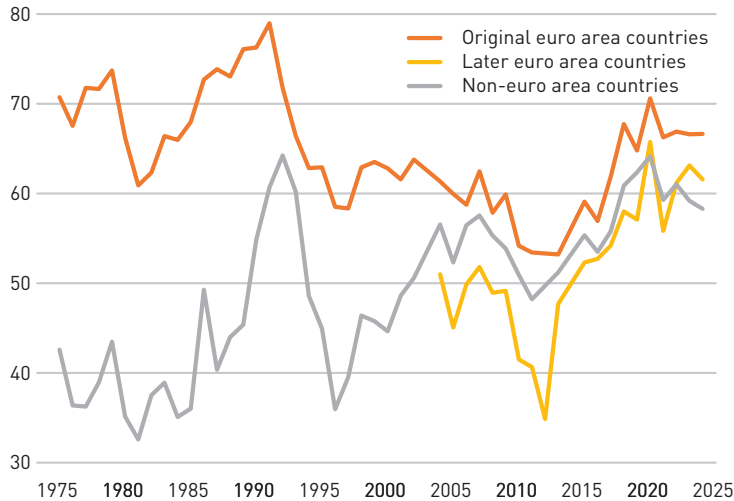
²⁹ See also Jones et al. (2016, 2021) on this concept.

The euro and social integration

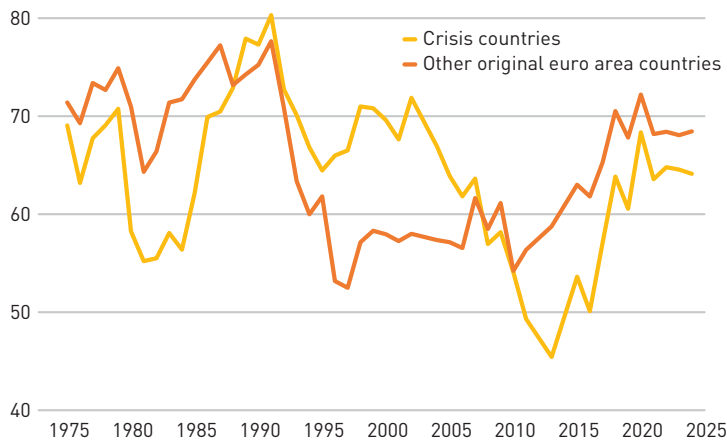
One way of measuring European social integration is to study attitudes towards the EU in opinion polls. Figure 10 shows the proportion of citizens who express support for the EU in the Eurobarometer, a recurring survey conducted by the European Commission. Panel a shows that support for the EU is greater in the original euro area countries than in non-euro area countries. However, Lundgren and Tallberg cannot find that the introduction of the euro itself has affected this difference. It is therefore not possible to conclude that the euro *caused* it; rather, it is likely that the countries with the most positive opinion of the EU chose to participate in the monetary union. According to Figure 10a, support declined during the euro crisis in all three country groups shown, but the decline was temporary. Figure 10b shows that the decline in support for the EU during the euro crisis was much greater in the crisis countries than in the other original euro area countries: from being significantly higher in the former countries at the beginning of the 2000s, support there fell considerably more than in the non-crisis countries. However, support in the crisis countries has since recovered and is now almost as high as in the other original euro area countries.

Figure 10 Percentage of the population expressing support for the EU, 1975–2024

(a) Original euro area countries, later euro area countries, non-euro area countries



(b) Crisis countries in the euro area and other original euro area countries



Note: The crisis countries are Greece, Ireland, Italy, Portugal and Spain, unweighted country averages per year. Data are missing for certain years.

Source: Chapter 10 by Lundgren and Tallberg.

Support for the euro in euro area countries has developed in a similar way to support for the EU over time. In non-euro area countries, support for the single currency declined much more sharply during the euro crisis than in euro area countries and has not recovered. An interesting observation is that joining the euro seems to be followed by an increase in support for it.

Another indicator of social integration is citizens' identification with the EU. An initial series of studies, conducted in the years immediately following the introduction of the euro, found that the single currency had contributed to a stronger European identity among citizens. However, later studies, which were methodologically more advanced, have been unable to confirm this conclusion. Identification with Europe is certainly more common in euro area countries than in non-euro area countries, but this probably reflects reverse causality, i.e., that it is countries whose citizens experience a stronger European identity that have chosen to participate in the monetary union. The euro crisis led to a temporary decline in the proportion of citizens who reported dual identity (national and European) rather than just national identity. Over time, however, there is a clear trend towards a greater sense of European identity. There is also some evidence that the euro crisis created a feeling of greater European solidarity, mainly in the countries that received financial support.

Finally, Lundgren and Tallberg discuss whether the euro has contributed to a more Europeanised political debate, i.e., whether EU issues and developments in other EU countries have come to play a greater role in the national political discussion. The research supports the view that this happened during the euro crisis, when both European issues and European actors (EU institutions and leaders from other member states) received more attention in the national news media. European issues also came to play a greater role in parliamentary debates and election campaigns. This Europeanisation was more prominent in euro area countries than in non-euro area countries.

The chapters' conclusions on the euro and political integration

The chapters by Jones and by Lundgren and Tallberg both emphasise that the monetary union has contributed to greater political integration in the EU in the form of more common institutions and more joint decision-making. At the same time, Lundgren and Tallberg highlight how the euro crisis triggered counter forces through mobilisation by populist and EU-critical parties. Support for the EU also fell at that time, especially in crisis-hit countries. This decline was, however, temporary. It has been difficult to convincingly demonstrate that the euro has strengthened European identity. On the other hand, the monetary union seems to have contributed to the Europeanisation of the political debate in the participating countries.

6.2 The euro and Sweden's political influence within the EU

A recurring question in the Swedish euro debate has been how our political influence within the EU would be affected by membership of the monetary union. As long as Sweden remains outside, we do not participate in decisions on the ECB's monetary policy, which of course we should not do since we then have our own monetary policy to decide on. The relevant question is instead whether, and if so to what extent, Sweden's influence on EU decisions on issues other than monetary policy would be affected by euro membership. The EMU Inquiry (1997) expressed concern that Sweden's non-membership would place it outside the inner core of EU countries that are driving integration. It was conjectured that this would reduce Sweden's ability to influence the political agenda in the EU and make it more difficult to achieve Swedish goals in one area by making concessions in others.

The EMU Inquiry saw a risk to Sweden's ability to exert influence in areas important to us if we remained outside the monetary union, because we could then be perceived as a "reluctant European" who wanted as little integration as possible in areas other than the single market. The danger was seen as particularly great if a large majority of EU countries – as subsequently proved to be the case – were to intro-

duce the single currency. Overall, the Inquiry concluded that the risk of losing influence by remaining outside the union constituted “a strong political argument for Swedish participation in the monetary union”.³⁰

Since the introduction of the euro in 1999, empirical political science research literature has developed on the influence of different countries within the EU, including the significance of the euro in this regard. This research is summarised by *Magnus Lundgren* in *Chapter 11*. He distinguishes between three different research approaches: (i) qualitative case studies; (ii) survey studies of so-called network capital; and (iii) studies of negotiating success.

Qualitative case studies

Qualitative case studies are usually based on interviews with officials involved. Lundgren’s conclusion from these studies is that Sweden’s – and other non-euro area countries’ – loss of influence in areas other than pure monetary policy has been much less than the EMU Inquiry feared. This is explained by the fact that the expansion of the EU with an increasing number of member countries has “led to greater tolerance for variation in institutional arrangements” and a less clear division between insiders and outsiders.

At the same time, several case studies have shown that the reforms of both fiscal rules and financial regulations that were made in 2010–15 in response to the euro crisis, and which covered both euro area and non-euro area countries, were largely driven by the former. Research has particularly highlighted how the Eurogroup – the finance or economy ministers of the euro area countries – which meets regularly immediately before the Ecofin Council, came to play a more leading role. This can be assumed to be a lasting change with repercussions on other issues as well, as it can be difficult to maintain a clear boundary between euro-specific and more general EU issues. This shift in the balance of power between euro area and non-euro area countries may have been reinforced after the United Kingdom’s withdrawal from the

30 P. 245.

EU, as this means that none of the largest EU countries are now outside the monetary union.³¹

However, Lundgren also notes that Sweden and Denmark have, at least in part, been able to counteract exclusion from important decisions through “norm-based ‘insider status’,” i.e. by building up a reputation for strict compliance with norms in areas such as fiscal policy. He also points out that the lines of conflict have sometimes not been between euro area and non-euro area countries, but between countries that, quite independently of this distinction, have had different interests. One example is how “the frugal four” – Denmark and Sweden (outside the monetary union) and Austria and the Netherlands (inside the monetary union) – formed a coalition that opposed overly generous pandemic support.

Studies of network capital

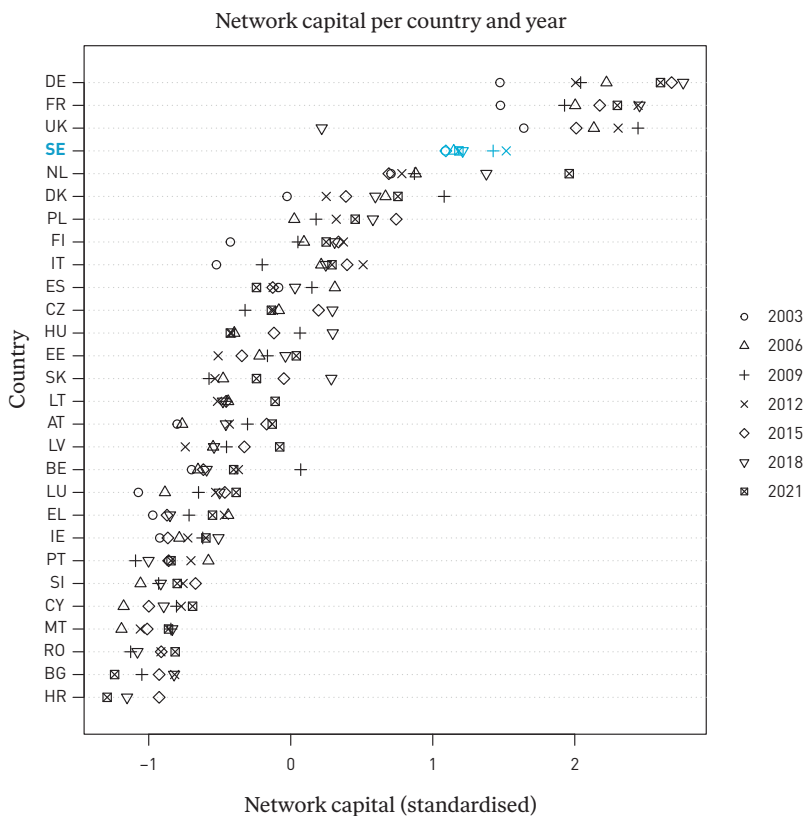
A second research focus, represented mainly by Swedish researchers, has studied the network capital of various EU countries, i.e., the extent of cooperative relationships within the EU’s institutional networks. Actors with more cooperation partners are assumed to have greater opportunities to influence EU decisions. It is therefore not a question of actual, but rather potential, influence. Network capital has been estimated through surveys in which representatives of the member states in various preparatory EU bodies answered questions about which other member states’ representatives they most often cooperated with.

The survey studies show that Sweden has been one of the countries with the highest overall network capital, even though we are not part of the euro area (Figure 11). There is no correlation between a country’s relationship to the euro and the amount of network capital. However, in his chapter, Lundgren also examines the network capital of various member states in a specific body, the Economic Policy Committee (EPC), which prepares the Ecofin Council’s decisions on growth, employment, structural reforms and public finances. He finds

31 In most cases, support from 55 per cent of member states representing at least 65 per cent of the EU population is required for a legislative proposal to be adopted. Today, the euro area countries represent around 78 per cent of member states and 79 per cent of the population.

no systematic differences in network capital between euro and non-euro countries there, but that a country's network capital has increased after joining the monetary union. This may be an indication that euro membership has an effect on potential influence in the area of economic policy.

Figure 11 Network capital per country and year



Note: Network capital is a measure of how often a country's officials are mentioned as partners in eleven of the EU's preparatory bodies. Countries are listed using the EU's two-letter abbreviations (SE = Sweden). The measure is standardised to take into account changes in the number of EU member states over time.

Source: Chapter 11 by Lundgren.

However, one should be cautious about drawing conclusions from studies of network capital. They refer to the civil servant level, not the decision-making political level. They concern the extent of cooperation, not its depth. Perhaps the influence of smaller EU countries, such as Sweden, is overestimated because they have to devote more resources to cooperative relations than countries that already have considerable influence by virtue of their size. In summary, however, studies of network capital indicate that Sweden has not generally lost (potential) influence within the EU by remaining outside the monetary union. At the same time, they provide some support for the idea that this may have happened in terms of economic policy.

Studies of negotiating success

Another quantitative approach studies negotiation success, i.e., how actual decisions relate to the starting positions of different member states in the negotiations. One advantage of this measure is that it focuses on actual, rather than just potential, outcomes. A disadvantage is that the initial negotiating positions may be strategically motivated and do not necessarily reflect genuine preferences. There is also a risk that the influence of countries that take middle positions at the start of negotiations may be overestimated, as final compromises tend to end up in the middle.

A general conclusion from such studies is that the degree of negotiating success appears to be fairly evenly distributed among the member states. This research has not specifically examined the significance of euro membership for overall negotiating success, but when Lundgren does so, he finds no statistically significant effect. Earlier research on the impact of negotiations on the economic policy reforms in the EU during the period 2010–15 also found no statistically significant difference between euro area countries and non-euro countries. One explanation may be that euro area countries had a weak negotiating position in this particular context due to their strong desire to preserve the euro cooperation. Another possibility is that larger euro area countries may have exercised their influence primarily by setting the agenda.

Lundgren's summary assessment

According to Lundgren, quantitative research does not support the view that non-participation in the monetary union entails a loss of political influence in general areas such as the single market, climate, energy and foreign policy. However, such a loss may have occurred in economic policy issues relating to growth, employment, structural reforms and public finances. Qualitative case studies also provide some support for this, mainly from the reforms 2010–15 in the wake of the euro crisis. This is particularly true at the highest political level.

In a concluding section, Lundgren discusses Sweden's influence if we continue to remain outside the monetary union. He sees the greatest risks of losing influence in a scenario where more EU countries choose to participate in the monetary union. Even if the formal decision-making power of the euro area countries is not affected – they already have a qualified majority today – it could lead to stronger informal coordination between them. This could also happen if the EU expands with more members without the monetary union growing; in such a more heterogeneous EU, the driving forces for coordination within an inner core may be strengthened.

The European capital market and Sweden's influence

It is common to see less efficient financial markets as one of the explanations for lower growth in the EU than in the US. European financial markets are more dominated by banks, which mainly operate nationally. This can be assumed to mean a less efficient allocation of capital than in the more securities-oriented US financial market. In addition, the European capital market outside the banking sector is fragmented between countries because regulations, legislation and supervision are national. It has been estimated that various barriers to trade in financial services within the EU correspond to tariffs of over 100 per cent.³²

The need in Europe for investment in climate change, energy systems, infrastructure and defence has led to increased focus on the integration of European capital markets. Back in 2015, the European

32 IMF (2024).

Commission launched an initiative to create a capital markets union, including various measures to stimulate cross-border capital transactions and thus improve the allocation of capital. However, the project has not progressed very far. The Draghi Report (2024) and a communication from the European Commission (2025a) have launched the concept of a savings and investment union with the aim of accelerating the work. One proposal is that ESMA (the European Securities and Markets Authority), which is currently tasked with coordinating the work of national supervisory authorities and increasing cooperation between them, should be transformed into a central authority for joint supervision of trading venues and other capital market institutions throughout the EU, linked to the ECB.

These issues are addressed by *Peter Englund and Pehr Wissén* in *Chapter 8*. It is difficult today to assess what steps may be taken towards a more integrated European capital market, but it is clear that the goal of achieving this has been given higher priority than before. Englund and Wissén believe that euro membership would give Sweden better opportunities to influence the development of European financial markets. Even though Sweden would then be only one of 21 euro area countries they believe that Sweden's large and well-developed financial markets – which, thanks to the Draghi report (2024), have come to be seen as a model for other EU countries – could help make our voice heard (provided that Swedish politicians really want to take advantage of the opportunities to influence).

7 How would Sweden join the euro?

A final question concerns how Sweden would join the euro. The first aspect concerns how a possible Swedish decision on euro entry should be taken. A second aspect is what the accession process would look like after such a decision.

7.1 The forms of a Swedish decision to apply for entry into the monetary union

If Sweden's adoption of the euro becomes an issue, for example because the government recommended it, the question would be how such a decision should be made. Even though the government, according to the Constitution, "is responsible for general currency policy matters," it cannot decide on its own whether to join the euro. The Constitution also states that the government cannot independently enter into binding international agreements of major importance. Furthermore, in the case of EU cooperation, only the Riksdag can transfer decision-making powers.

In addition, a transition to the euro would require several legislative changes – including to the Riksbank Act, which currently stipulates that the *krona* is Sweden's currency – which can only be decided by the Riksdag.

A key question is whether a possible Riksdag decision to apply for membership of the monetary union should be preceded by a new referendum. *Johannes Lindvall* discusses this in *Chapter 12*.

Previous referendums

There is no formal requirement that a new referendum must be held before a parliamentary decision on euro membership. The 2003 referendum was advisory, even though the political parties promised to follow the result. The same applied to the five previous national referendums held in Sweden.

Lindvall notes that in three out of five cases, without new referendums, parliamentary decisions were later made that deviated from the referendum results. This applies to the 1957 referendum on the pension system and the 1980 referendum on nuclear power. But the clearest example is the 1955 referendum on driving on the right. At that time, a majority of voters voted to retain driving on the left. Nevertheless, eight years later, in 1963, the Riksdag decided to switch to driving on the right.

In the discussion prior to the 1963 parliamentary decision, several reasons were put forward for why parliament could go against

the referendum result: (i) the referendum was not binding but merely advisory; (ii) conditions had fundamentally changed due to the rapid development of motoring; (iii) turnout in the referendum was low (53 per cent, much lower than in a general election); (iv) public opinion was believed to have shifted since the referendum; and (v) there was urgency to implement the change.

If these criteria are to be applied to determine when a parliamentary decision can go against a previous referendum result, Lindvall believes that several are not fulfilled in the euro issue.³³ Although the euro referendum in 2003 was also only advisory, the political parties declared much more clearly than in 1955 that the referendum result would be followed. Furthermore, turnout in the referendum on the euro was not low, but as high as 83 per cent, on par with parliamentary elections. Opinion since the referendum has fluctuated, with support for euro adoption currently somewhat lower than at the time of the referendum (though higher than during both the euro crisis and the years before the pandemic; see Figure 1).

The euro referendum

According to Lindvall, most evidence suggests that “the 2003 referendum on the euro was the best Swedish referendum so far.” Voters were presented with two simple options – yes or no to the euro – rather than several complex options, as in the 1957 pension referendum and the 1980 nuclear power referendum, when there were three different positions to vote on. Lindvall also believes that voters seem to have taken a position on the issue itself and did not necessarily follow their own party line. Furthermore, the media made a major effort to educate the public, giving space to both experts and politicians. Finally, voters seem to have been satisfied with the way the referendum was conducted.

33 Lindvall also questions whether all five criteria were really met in the case of right-hand traffic: the rapid development of motoring should not have come as a surprise, and the urgency cannot have been so pressing, since the traffic changeover was not implemented until 1967, four years after the parliamentary decision.

Lindvall's conclusions

Lindvall concludes that most arguments suggest that a Swedish decision on joining the euro should be preceded by a new referendum. The main argument is that it would be strange not to hold a referendum, since one has already been held and politicians were clear at the time that they would abide by the result. The experience from 2003 also shows that it is possible to “conduct an informative and objective campaign that allows voters to familiarise themselves with important political issues and participate in the decision-making process in a way that strengthens the public’s confidence in the political system.” Lindvall also refers to the hypothesis that the 2003 referendum may have strengthened the legitimacy of Swedish EU membership and that it may have contributed to the steady increase in support for the EU.³⁴ He believes that “it would be unwise to risk that balance by going against the 2003 referendum result twenty years later.”

At the same time, Lindvall does not rule out scenarios in which a new referendum would appear unnecessary. This could be due to dramatic changes in the global security or economic situation, combined with opinion polls showing a lasting change in voters’ views. Such a situation could be compared to that which prevailed in the spring of 2022 when Sweden applied for NATO membership. However, Lindvall is sceptical about this parallel, as the security policy area differs greatly from the economic policy area: in the former, there is no tradition of consulting voters in referendums; instead, decisions have been taken in the Riksdag with broad agreement between the parties. In contrast, decisions on EU issues have twice been taken after advisory referendums: both the one to join the EU after the 1994 referendum and the one to remain outside the monetary union after the 2003 referendum.

Lindvall also addresses the question of *when* a possible euro referendum should be held: before or after joining the European Exchange Rate Mechanism, ERM II (participation in which is one of several conditions for joining the euro; see Section 7.2). His view is that a referendum should be held before possible ERM entry so as not to give voters the impression that they are being presented with a *fait accompli*.

³⁴ See Lindahl and Naurin (2005).

7.2 The transition to the euro following a political decision to seek entry into the monetary union

In *Chapter 13*, Stefan Ingves analyses how accession to the monetary union would take place in practice following a possible political decision to apply for membership. One starting point is the *convergence criteria* that must be met. Everything indicates that Sweden would meet the conditions in terms of budget deficit, government debt, inflation and long-term interest rates without any extra adjustments.

However, the convergence requirement regarding the exchange rate and the exchange rate system requires new decisions. Entry into the euro requires participation in the European Exchange Rate Mechanism, ERM II, as discussed in the previous section. Its purpose is to maintain fixed exchange rates between the euro and the currencies of participating non-euro area countries (currently in January 2026 only Denmark), although the rates may formally fluctuate within a band of ± 15 per cent around a central rate.³⁵ It is required that the currency's exchange rate movements have remained within this normal fluctuation margin "without severe tensions for at least the last two years before the examination. In particular, the Member State shall not have devalued its currency's bilateral central rate against the euro on its own initiative for the same period."³⁶

ERM entry and choice of central rate

Decisions on entry into ERM II, the central rate and the exchange rate band are taken jointly by representatives of the applicant country and the Exchange Rate Mechanism. The latter consist of the finance ministers of the monetary union member countries, representatives of the ECB as well as the finance ministers and central bank governors of the non-euro area countries participating in the mechanism. The decisions

35 The band was originally ± 2.25 per cent in ERM I (which was replaced by ERM II at the launch of the euro in 1999), but was widened to ± 15 per cent in 1993 following extensive currency turmoil. Denmark has an agreement with the ECB on a band of ± 2.25 per cent, but applies an even narrower band.

36 Official Journal of the European Union (2004).

require consensus. They are preceded by consultations with the Commission and the part of the EU's Economic and Financial Committee (EFC) that comprises only euro area members.

The practice is that the central rate in ERM II becomes the conversion rate to the euro upon entry into the monetary union. This means that the central rate should be chosen based on considerations of which conversion rate best promotes macroeconomic balance after euro entry. Ingves discusses criteria for this choice. Ideally, it should be based on model calculations of what constitutes an equilibrium exchange rate. However, he is doubtful that such calculations – which can be made in many ways – provide much guidance. Instead, he recommends using the *krona*'s current market value as a starting point.

This leads him to recommend a central rate – and later a conversion rate – of SEK 11 per euro. Ingves further recommends that Sweden unilaterally apply a narrow band of ± 2.25 per cent, i.e., between SEK 10.75 and SEK 11.25 per euro, to signal the seriousness of its intention to join the euro.

According to Ingves, it can be assumed that it will take three or four years from the decision to apply for euro entry before this can take place. This is partly because ERM entry must be preceded by an internal Swedish preparation process in which the government and the Riksbank agree on the central rate and bandwidth to be pursued in the negotiation process.³⁷ This is followed by a process of informal consultations with European counterparts, which, due to the market impact that may arise, should not take place publicly.

Two typical cases

Ingves discusses two typical cases of how ERM membership and a subsequent transition to the euro can take place. One is Finland. Like Sweden, the country went through a severe economic crisis in the early 1990s. The currency was then floated and an inflation target was introduced. After deciding to apply for membership of the monetary union

37 It is the government that decides on “the system to be used to determine the value of the *krona* in relation to foreign currencies (exchange rate system). If necessary, the government shall also decide on the central rate and the band width (SFS 2022:1576).” Prior to such decisions, the Riksbank shall have been given the opportunity to express its views.

when it was launched in 1999, Finland joined ERM I at the end of 1996. The exchange rate then quickly stabilised around the selected central rate. However, as appreciation pressure arose, currency interventions by the Bank of Finland were required for a period.

Ingves' second example is Slovakia, which joined ERM II in 2005 and adopted the euro in 2009. Here, the appreciation pressure on the currency became so strong that it approached the band limit on two occasions. On both of them, the central rate was revalued.

Swedish ERM strategy

If, as Ingves recommends, the *krona* is to be kept within a narrow exchange rate band around the central rate during the ERM period preceding euro entry, currency interventions by the Riksbank may be necessary. According to him, this would require a much larger foreign exchange reserve than today. It would also need to be rebalanced so that the majority consists of euros instead of dollars, as is the case today.

Ingves emphasises that the Riksbank's *modus operandi* during an ERM period will be completely different from today's regime with an inflation target and a floating exchange rate. It may require "organisational preparedness to intervene immediately in the foreign exchange market if necessary" and therefore "new internal decision-making procedures and a revival of old 'fixed exchange rate expertise' at the Riksbank."

Other adjustment requirements prior to euro adoption

Euro adoption also requires legal convergence. The ECB has noted that the new Riksbank Act, which has applied from 2023, does not meet the EU's requirements for central bank independence. This is mainly because the Act restricts the Riksbank's ability to use purchases and sales of securities as a monetary policy tool.

Finally, a number of technical measures are needed for euro adoption, not least to adapt various transaction systems. This applies to payment transactions between banks, securities transactions and various front-end payment systems such as Mastercard, Visa, Apple Pay, Swish and others. Ingves points out that adjustments to use the euro

instead of the *krona* in such systems are facilitated by a development that, for reasons of efficiency, is already underway to replace the previous national Swedish payment systems with integration into the ECB's system (although so far only for *krona* payments). A major difference compared with the turn of the millennium is that banknotes and coins now play a much smaller role in payments and that the necessary technical transition will therefore focus more on digital systems.

8 My summary assessments

Sections 3–7 have dealt with various aspects of Swedish membership of the euro as reflected in the chapters contributed by the various authors to this book. This chapter presents my own summary assessments. They are based on the chapters referred to, but differ on certain points. In addition, some aspects that are not discussed in the other chapters are addressed: labour mobility, risk sharing via financial markets and geopolitics. I alone am responsible for the conclusions in this section. Other authors may share them, but need not do so.

Table 4 is an attempt to summarise my view of the various consequences of euro membership and how these have changed over time in relation to the assessments in the EMU Inquiry (1997) and those that could be made in connection with the 2003 referendum. I distinguish between four categories of effects, roughly corresponding to those in Sections 3–6: on (i) social efficiency; (ii) stabilisation of the business cycle; (iii) other economic aspects; and (iv) political aspects. The table can serve as an overview for the more detailed discussion below.

Table 4 Overview of the consequences of Swedish membership of the euro and comparisons with the EMU Inquiry (1997) and the assessments made in connection with the 2003 referendum

	Advantage	Neither advantage nor disadvantage	Disadvantage	More positive/less negative	No change	More negative/less positive
<i>Social efficiency</i>	Yes.			Greater advantage		
<i>Foreign trade</i>	5-7,5 per cent more trade with both euro area and other countries.			Greater effects.		
<i>Foreign direct investments</i>	Greater effects than on trade.			Greater effects.		
<i>Transaction costs</i>	Savings of 0.1-0.2 per cent of GDP.				Similar assessment as the EMU Inquiry.	
<i>GDP level/growth</i>	Yes, but it is difficult to assess the size and the extent to which it is a level or growth effect.			Greater effects.		

Stabilisation of the business cycle	Advantage	Neither advantage nor disadvantage	Disadvantage	More positive/less negative		More negative/less positive
				Yes.	Significantly less disadvantage.	
Monetary policy in the event of a country-specific shock			The common monetary policy will not be adjusted.		Significantly smaller disadvantage: more synchronised business cycles and much greater opportunities to use national fiscal policy.	
					Slightly greater opportunities for support from other EU countries. Slightly greater labour mobility and slightly more risk sharing with euro area countries via capital and credit markets.	
Monetary policy in the event of a common shock			The common monetary policy may not suit Sweden: greater interest rate sensitivity in Sweden or overly expansionary ECB policy as a result of high public debt in the euro area.			Greater disadvantage due to greater difference in interest rate sensitivity and public debt. But can be offset by greater opportunities to use fiscal policy.
Exchange rate in the event of a country-specific shock	(No <i>krona</i> whose exchange rate movements could hamper the stabilisation of inflation in the event of a supply shock.)		No <i>krona</i> whose exchange rate movements can contribute to stabilising the business cycle and inflation in the event of a demand shock.		Slightly greater opportunity to replace <i>krona</i> depreciation with internal devaluation via wage formation.	
	(No <i>krona</i> whose exchange rate movements could hamper the stabilisation of inflation in the event of a supply shock.)		No <i>krona</i> whose exchange rate movements can contribute to stabilising the business cycle and inflation in the event of a demand shock.		(Greater advantage in the event of a supply shock, as the <i>krona</i> appears to depreciate during international supply crises.)	Greater disadvantage in the event of a demand shock, as the <i>krona</i> appears to depreciate during international demand crises.

Neither advantage nor disadvantage		Disadvantage	More positive/less negative	No change	More negative/less positive
Advantage		Yes. Yes.			Greater risks Greater risk of sovereign debt crises due to higher debt levels, ageing populations, higher defence spending and stronger populist parties.
Other economic aspects					
<i>Risk that Sweden incurs costs for other euro area countries' high public debts.</i>					
Financial supervision					
	More professional supervision and less risk of cro- nyism. But also less knowledge of national charac- teristics.				
Swedish banking crisis			Greater possibilities of support from other countries.		
	Greater resource pool to handle such a crisis. (However, less consideration may be given to Swedish interests.)				
Banking crises in other euro area countries.		Risk that Swedish banks will have to contribute through bank fees and possibly also costs for the government via ESM. (However, greater consideration may be given to Swedish interests.)			Greater risk of costs for Sweden.

	Advantage	Neither advantage nor disadvantage	Disadvantage	More positive/less negative	No change	More negative/less positive
Political aspects	Advantage	Neither advantage nor disadvantage	Disadvantage	More positive/less negative	No change	More negative/less positive
<i>General influence in the EU</i>	Yes. Under certain circumstances, this may be an advantage.			Yes.		
<i>Influence regarding economic policy governance frameworks, their application and crisis management</i>	Greater opportunities to participate in setting the agenda, as it appears to be largely determined by euro area countries.				Similar assessment as previously.	
<i>Capital markets</i>	Likely greater influence, as institutions may become linked to the ECB and the monetary union.			More positive assessment because the issue was not relevant previously.		
<i>Political integration</i>	Greater participation in and responsibility for joint decisions and institutional development. More European political debate in Sweden contributes to the EU's democratic anchoring. Signal of stronger Swedish commitment to EU cooperation.		[Greater risk of more EU-critical opinion if Sweden incurs costs for sovereign debt crises in other EU countries or if the ECB's monetary policy is not suitable for Sweden. However, the experiences of the euro area countries suggest that such changes in opinion are often temporary.]	More important with greater contributions to European political integration in a geopolitically more unstable world.		
<i>Sweden's opportunities to assert its interests in a geopolitically more unstable world</i>	Possibly an advantage not to have to negotiate alone if, for example, the US were to link exchange rate policy and restructuring of government debt to security policy, but very uncertain assessment.			Issues that have not been relevant previously, but very uncertain assessment.		

8.1 Social efficiency

Euro membership would mean lower transaction costs for trade and financial transactions with current euro area countries in the form of savings on exchange costs between the *krona* and the euro. The EMU Inquiry (1997) estimated these cost savings at 0.1–0.2 per cent of GDP. One might think that digitalisation would have reduced these gains, but according to Forslid's analysis in Chapter 2, they are still of the same magnitude. The cost savings are a clearly positive effect of joining the euro, but they are so small that they cannot be considered significant in themselves.

The greatest efficiency gains from joining the euro will instead arise from more foreign trade and foreign direct investment. These effects are due in part to reduced transaction costs, but primarily to reduced exchange rate uncertainty. Forslid's estimate that Sweden's trade with both euro area countries and non-euro area countries could increase by 5–7.5 per cent if Sweden joins the monetary union seems reasonable. It is also reasonable to believe that the effect on direct investment – both Swedish abroad and foreign in Sweden – is greater than the effects on trade. One should hence make a much more positive assessment of how both foreign trade and foreign direct investment would be affected by Swedish membership of the euro today than the EMU Inquiry (1997) did.

The consequence of increased trade and FDI resulting from a common currency is a more efficient utilisation of available resources. This raises incomes and welfare. However, it is difficult to form an opinion about the magnitude of these effects. Studies of, for example, the relationship between foreign trade and income levels are associated with major methodological problems. The reason is that the causal relationship is bidirectional: it is likely that not only does the volume of trade affect the income level, but also that the income level affects the volume

of trade.³⁸ The latter may be due to the fact that a higher income level leads to higher demand for goods and services that must be imported, and that a country with a higher income level can afford better foreign trade infrastructure (Frankel and Rose 1999).

Another problem, discussed in Section 3.2, is that it is theoretically unclear whether more trade leads to a *one-off increase* in GDP from one level to another or a *permanent increase* in GDP growth. The different theoretical approaches are difficult to distinguish empirically because, according to theory, a “one-off increase” in GDP occurs over many years, with higher growth, before the process is complete.

Around the turn of the millennium and during the decade prior to that, a large empirical research literature developed on the factors that can explain income differences between countries. A robust finding was that more foreign trade means higher GDP per capita (see, for example, Svedberg 1999). Later studies have come to the same conclusion.³⁹ An appendix to this chapter shows the estimated long-term effects on Swedish GDP per capita of a five percentage point increase in the sum of exports and imports as a share of GDP (which could be conjectured to correspond to the change resulting from entry into the euro) based on estimates in a few selected empirical studies: a couple of well-known early analyses (Frankel and Romer 1999, Frankel and Rose 2000) and a couple of more recent ones (Busse and Königer 2015, Wacker et al. 2024).⁴⁰ The effect is an increase in GDP per capita of a few per cent. Another study (Karras 2003) finds a permanent increase in the growth rate of 0.1–0.2 percentage points. These estimates can be compared

38 For example, Bajo-Rubio and Ramos-Herrera (2024) find support for such two-way causality. If the effect of income on trade cannot be eliminated, the effect of trade on the income levels is overestimated. Another problem is that estimated effects on income from changes in the volume of trade due to reduced trade barriers may also capture other economic reforms that have covaried with trade liberalisation. This too can lead to an overestimation of the effects of trade on income. Conversely, it may be that only certain types of trade increase income and that data for total trade therefore may not accurately reflect how these types of trade have developed. Such measurement errors tend to underestimate the effects of trade on income (Frankel and Rose 1999).

39 See, for example, Busse and Königer (2015), Bajo-Rubio and Ramos-Herrera (2024) and Wacker et al. (2024).

40 In 2024, Sweden's exports and imports as a share of GDP amounted to 98.6 per cent. An increase of five percentage points can be assumed to correspond to Forslid's assessment in Chapter 2 of a 5–7.5 per cent increase in Swedish trade in the event of euro membership.

with those in a study by Felbermayr and Steininger (2021). According to that, the introduction of the euro has led to an 8 per cent increase in bilateral trade in goods between euro area countries (but no effect on trade in services). Using a general equilibrium model, the authors convert this effect into a corresponding reduction in transaction costs and a resulting increase in GDP per capita – assuming everything else remains unchanged. The average increase between 1999 and 2014 for the ten original euro area countries (all except Luxembourg) was then 0.7 per cent, a fairly low figure.⁴¹

The evidence described is actually too scant to venture any quantitative conclusions. However, one possible – albeit bold – interpretation is that we are talking about long-term effects via foreign trade on GDP per capita of euro membership amounting to a few per cent of GDP. Long term should then be interpreted as several decades.

It is also relevant to recall that, as shown in Table 1 in this chapter and in Chapter 5 by Flodén, almost all of the original euro area countries have had lower GDP per capita growth than Sweden since the start of the monetary union. This can be attributed to a variety of factors, but it is clear that euro membership has not yet had such a substantial positive impact on growth that it has dominated other determining factors.⁴² Nor am I aware of any growth studies that highlight a common currency as one of the most important factors promoting growth.

A final reflection on the social efficiency effects relates to the increasingly protectionist trade policy of the United States, which tends to reduce the volume of Swedish foreign trade (primarily with this coun-

41 This estimated figure disregards third-country effects (effects on non-euro area countries) of the euro.

42 This is consistent with studies using the synthetic control method, which have not found that Sweden would have had higher growth if we had participated in the monetary union. According to several of the studies, Swedish growth would instead have been lower. The method involves creating a synthetic control group to compare Sweden with by weighting different euro area countries in such a way that the group's growth before the start of the euro was as close as possible to Sweden's. However, such studies are unlikely to provide relevant information about the long-term growth consequences of Sweden joining the euro. This is because the differences between Sweden's and the euro area's growth since the introduction of the euro have been influenced by factors such as rapid Swedish productivity growth up to and including 2006, mainly related to a strong ICT sector, and low growth in the euro area's peripheral countries in association with the euro crisis (see Eriksson and Ljungkvist 2021 for a more detailed discussion).

try) and thus the benefits it generates for us. This means that measures aimed at eliminating trade barriers with other countries are becoming more urgent. Joining the euro is one such measure – and one that is within our own control.

8.2 Stabilisation of the business cycle

The accepted stabilisation policy argument against participation in the monetary union is the loss of monetary policy autonomy. If Sweden, as a member of the euro, is exposed to economic disturbances other than those affecting the rest of the euro area, we will no longer have our own monetary policy that can be used to counteract them. Here I share Walentin's assessment in Chapter 4 that it is entirely possible for the Riksbank to pursue a monetary policy outside the monetary union that differs from that of the ECB if the Swedish economic situation warrants it.

The relevant considerations regarding diverging cyclical conditions in Sweden in relation to the euro area relate to the likelihood of this occurring and the possibilities of using other economic policy instruments to counteract it in such a case.

Greater synchronisation between the business cycle in Sweden and in the euro area than previously

One problem in assessing the risk of country-specific macroeconomic shocks in the event of future euro membership based on previous economic patterns is that these may have been influenced by Sweden's ability to pursue its own monetary policy. Differences in relation to the ECB's monetary policy may in principle have contributed to both more and less synchronised cyclical developments. If country-specific shocks have been counteracted by the Riksbank's monetary policy, the cyclical covariation may have increased. However, it may also have decreased because monetary policy itself can cause shocks. But since the Riksbank's and the ECB's monetary policies have mostly been similar, these interpretation problems should be limited. It is therefore reasonable to draw conclusions about the probability of different Swed-

ish cyclical developments in the event of participation in the currency union based on previous experience.

Hansson's analysis in Chapter 3 shows that the Swedish business cycle has been more synchronised with that of the current euro area since the turn of the millennium than before. Both increased trade with euro area countries and deeper financial integration with them have probably increased the transmission of macroeconomic shocks from the euro area to Sweden.

Since euro membership can be expected to lead to more trade with euro area countries, the likely result is even more synchronised business cycles through increased propagation of economic shocks in this way. Theoretically, this effect could be counteracted by increased trade leading to greater specialisation and Sweden therefore becoming more exposed to industry-specific shocks.⁴³ However, Hansson's analysis does not indicate that this would be of any great importance. The industry structure in the euro area countries seems rather to have become more homogeneous since the launch of the euro in 1999. Some research has also found that more trade, in addition to the direct transmission of shocks via it, can lead to diffusion through a "confidence channel" (animal spirits), which can be particularly important in a monetary union (de Grauwe and Ji 2017).

The probability of future Swedish country-specific shocks in the event of membership of the monetary union should be seen as considerably lower than was the case according to the EMU Inquiry in 1997 and assessments at the time of the referendum in 2003.

Greater opportunities to use fiscal policy in the event of an economic downturn than previously

A major difference compared with when the EMU Inquiry (1997) was published is that public debt in Sweden is now much lower, at around 35 per cent at the end of 2025 compared with around 70 per cent at that time. This reduction has occurred at the same time as debt has increased sharply in most other advanced economies both within and

43 Such a hypothesis was formulated by Krugman (1993) but has not been empirically supported.

outside the EU. This means that Swedish government securities also appear to be *relatively* much safer than before. Sweden therefore has much greater opportunities today than before to pursue an expansionary fiscal policy to counteract a country-specific economic downturn without suffering negative market reactions in the form of higher government debt interest rates. This conclusion is not affected by the additional borrowing of a few per cent of GDP to finance the military build-up that can be anticipated over the coming decade. The likelihood that an expansionary fiscal policy in an isolated Swedish recession will be limited by EU fiscal rules is also small.

My analysis in Chapter 5 also gives reason to believe that, in the event of euro membership, fiscal policy would indeed be used to a greater extent than earlier to stabilise the business cycle when it deviates from that in other euro area countries. This would be achieved to some extent through automatic stabilisers, i.e., changes in tax revenues and certain public expenditures that occur without any new decisions when the economy fluctuates. Past experience also shows that Sweden's discretionary fiscal policy has mostly been countercyclical in recent decades. However, it could be a challenge to make sure that fiscal policy is used to the same extent to counteract country-specific booms as country-specific slumps.

There appears to have been a shift within the EU towards providing greater support to member states experiencing economic problems. Consequently, the probability that Sweden will also receive assistance in the event of a severe country-specific recession is somewhat greater now than previously.

The *krona* exchange rate in the event of country-specific shocks

A starting point for the analysis in the EMU Inquiry (1997) was that the exchange rate normally moves in such a way as to counteract country-specific economic disturbances, even when the currency floats freely. However, since the start of the monetary union in 1999, Sweden has not been exposed to any significant such macroeconomic shocks, so there is no empirical experience from recent decades to draw on.

Nevertheless, it is still a reasonable hypothesis that, under the current monetary policy regime, changes in the Swedish *krona*'s exchange rate against the euro would mostly contribute to stabilising demand in the event of major country-specific shock and that we would lose this benefit if we joined the euro. At the same time, exchange rates often move in ways that are difficult to explain, so it is possible to imagine situations outside the monetary union where movements in the *krona*'s exchange rate against the euro could hamper stabilisation policy.

With euro membership, the *real* exchange rate against other euro area countries can be depreciated, i.e., relative prices and relative wage costs can be lowered, through a process known as *internal devaluation*. This can be achieved either through fiscal policy (lower employer contributions combined with other tax increases or lower public expenditure) or wage formation (lower wage increases than in the rest of the euro area or wage cuts). Fiscal internal devaluations have hardly been used by euro area countries, probably because it is problematic to make permanent changes to the tax structure in response to temporary economic shocks.

However, major internal devaluations were carried out via wage formation in the Baltic states during the global financial crisis of 2008–09 and in Greece and Portugal during the euro crisis of 2010–12. These internal devaluations helped to start recoveries. However, they are a very imperfect substitute for external exchange rate changes, as they seem to require high unemployment in order to be feasible on a large scale. But the more responsible wage formation in Sweden since the conclusion of the Industry Agreement in 1997 may indicate that an internal devaluation through wage policy could be possible in a deep crisis. But it would in all likelihood change the real exchange rate much less than an external currency depreciation if we were outside the monetary union. The only advantage of having to rely on internal devaluation via wage formation in the event of euro membership is that the social partners have more control over it than the Riksbank has over the nominal exchange rate against the euro when Sweden is outside the monetary union.

Labour mobility as an adjustment mechanism in the event of asymmetric shocks

Another adjustment mechanism that could counteract asymmetric shocks to the Swedish labour market in the event of Swedish membership of the euro, but which is not discussed in any of the other chapters, is *labour mobility*. This mechanism is therefore analysed in greater depth in this section than the mechanisms discussed in the other chapters.

Emigration of labour from Sweden to other euro area countries during an isolated Swedish economic downturn would keep our unemployment rate down. Similarly, overheating in Sweden alone could be counteracted by labour immigration from other euro area countries. According to Mundell's (1961) original analysis of optimal currency areas, high labour mobility between members was an important criterion.

Studies of the United States, a monetary union of 50 states, have shown that labour mobility is an important mechanism for evening out unemployment between them in the event of an asymmetric economic shock in a state.⁴⁴ Labour mobility between EU countries is much lower. Therefore, a common argument prior to the launch of the euro in 1999 was that the European monetary union was much further from being an optimal currency area than the US monetary union.⁴⁵

Although migration between EU countries has increased over time, it is still small compared to migration between US states. Approximately 30 per cent of the population in a state comes from another state. In the EU as a whole, citizens from other EU countries accounted for only 4 per cent of the working-age population (20–64 years) in 2023. The corresponding figure for citizens from non-EU countries was 7 per cent. The same figures apply to Sweden, so in this respect we are a normal EU country.⁴⁶

At the same time, Figure 12 shows that there have been substantial variations in (total) net migration in several of the EU countries that were hit by sharply rising unemployment during the global financial

44 This was first noted in an influential study by Blanchard and Katz (1992).

45 See, for example, Decressin and Fatás (1995).

46 European Commission (2025b).

crisis and the euro crisis. Both Ireland and Spain had significant net immigration until 2007–08. After that, it turned into net emigration. Developments in Latvia and Lithuania are even more striking. Both countries had net emigration before the global financial crisis (due to lower per capita income than in the rest of the EU), but this increased sharply in 2008–11. However, the variations in net immigration in all four countries were small in relation to the rises in unemployment. Nevertheless, population declines were as high as 10–15 per cent in the two Baltic countries (Blanchard et al. 2013, ECB 2017).

More recent studies also confirm that migration plays a much greater role as an adjustment mechanism in the event of state-specific macro-economic shocks in the United States than it does in the event of country-specific shocks in the EU (e.g., Beyer and Smets 2015 and Basso et al. 2019). However, several studies find that migration has become a more important adjustment mechanism over time in the event of country-specific shocks in the EU (Beyer and Smets 2015, Arpaia et al. 2017). According to Arpaia et al. (2016), differences in unemployment between two countries (in a large sample also including many non-EU countries) have a greater effect on bilateral gross migration if both are members of the monetary union than is otherwise the case.

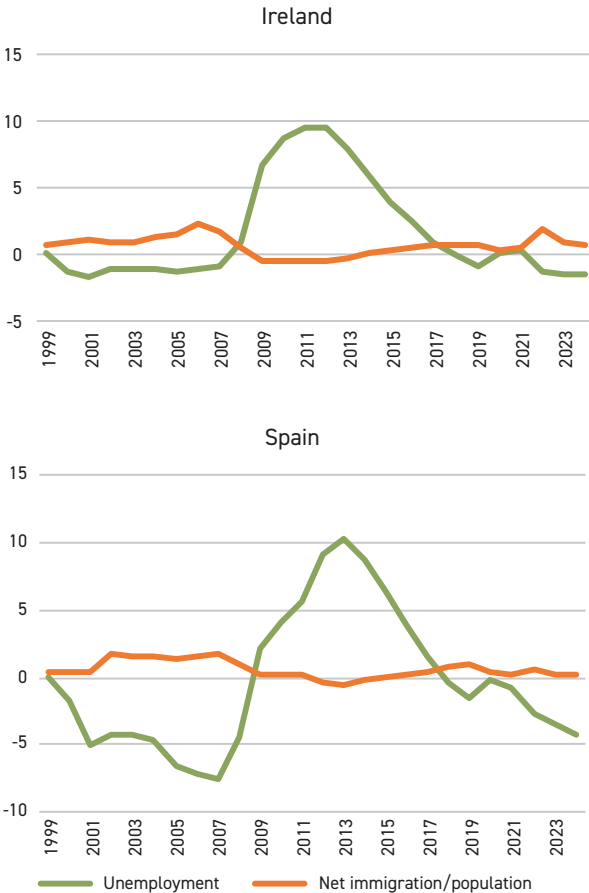
Labour migration cannot be expected to be a major adjustment mechanism with Swedish membership of the euro area in the event of asymmetric shocks. However, there is reason to believe that labour mobility may in future make a somewhat greater contribution to evening out the labour market situation between Sweden and other euro area countries than was judged by the EMU Inquiry (1997). Its importance is likely to increase slowly over time in line with a gradual increase in the proportion of people born in other EU countries, as their mobility is greater than that of people born in the country (Basso et al. 2019).

Risk sharing via financial markets

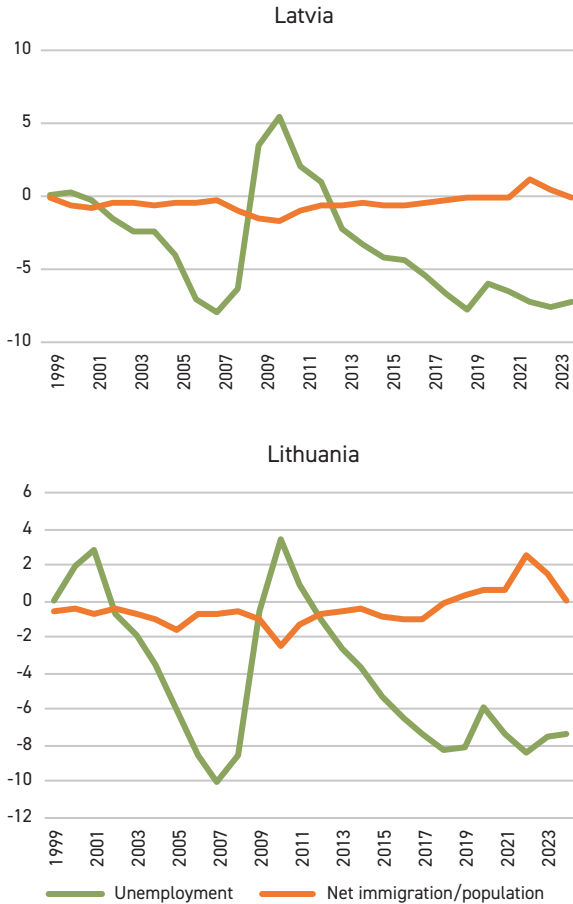
Research has also pointed to *risk sharing* via *capital and credit markets* as an adjustment mechanism in the event of asymmetric economic shocks. The focus is then not on how variations in the level of activity (output and employment) can be dampened, but on how the impact on income and consumption can be reduced by sharing the risks with

other jurisdictions, as in an insurance arrangement, so that they bear part of the burden. The idea is that the main problem with economic fluctuations is the variations in consumption (consumption growth) that they cause. Since this adjustment channel is not discussed in other chapters either, it is also dealt with in more detail here.

Figure 12 Unemployment and net immigration in four EU countries, 1999–2024, per cent



TIME FOR SWEDISH EURO MEMBERSHIP?



Note: Unemployment is measured as the change compared with 1999 in the number of unemployed as a percentage of the labour force, and net immigration as the difference between immigration and emigration as a percentage of the population.

Sources: World Bank and AMECO.

The pioneering work in this field of research is that of Asdrubali et al. (1996), who found that variations in *output growth* in US states had only a minor impact on *consumption growth*. The effects on consumption growth were mainly offset by fluctuations in *income growth* being counteracted by flows of capital income between states as a result of cross-holdings of financial assets (shares and other financial claims).

Consumption smoothing via the credit market, i.e., through variations in net lending between states, also proved to be important.

Since the late 1990s, many similar studies have been conducted for both the United States and the euro area. A consistent finding is that variations in output growth between US states cause much smaller variations in consumption growth than variations in output growth between euro area countries. According to one survey, the average outcome for the United States is that only 30 per cent of variations in output growth are reflected in consumption growth, while the corresponding figure for the euro area is 60 per cent (Cimadomo et al. 2022). The difference is mainly due to the capital market channel (income equalisation channel) being weaker in the euro area. The explanation is much less cross-shareholding. As a result, consumption growth has been much more synchronised between the states in the United States than output growth, while the differences have been small in the euro area (Figure 13).

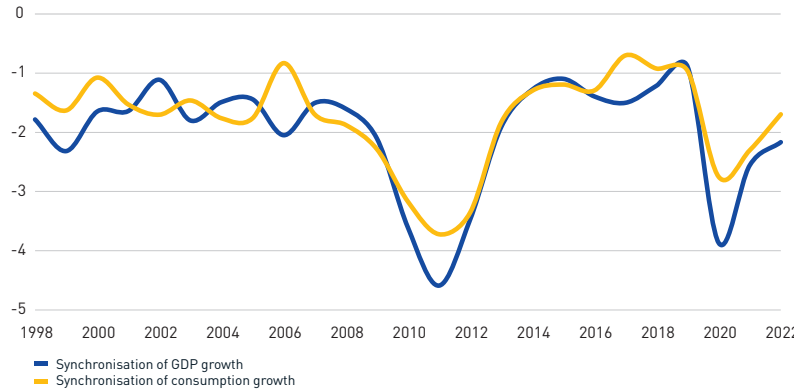
The credit market channel for consumption smoothing between euro area countries appears to have strengthened from the start of the euro until the global financial crisis.⁴⁷ However, smoothing broke down when the cross-border interbank market froze. Since then, this channel appears to have started functioning again.⁴⁸

47 Hoffmann et al. (2018) and Cimadomo et al. (2022).

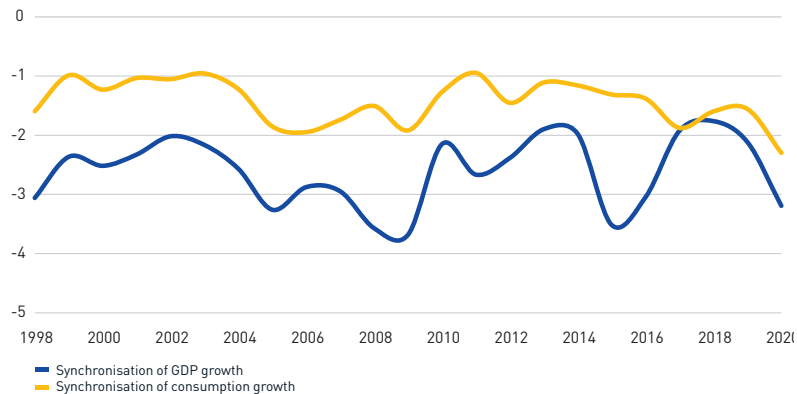
48 Cimadomo et al. (2022).

Figure 13 Synchronisation of GDP and consumption growth in the euro area and the United States, 1998–2022

(a) Euro area countries



(b) US states



Note: Synchronisation is measured as minus the average of all pairwise absolute differences in growth rates between countries (states) for each year.

Source: Cimadomo et al. (2022).

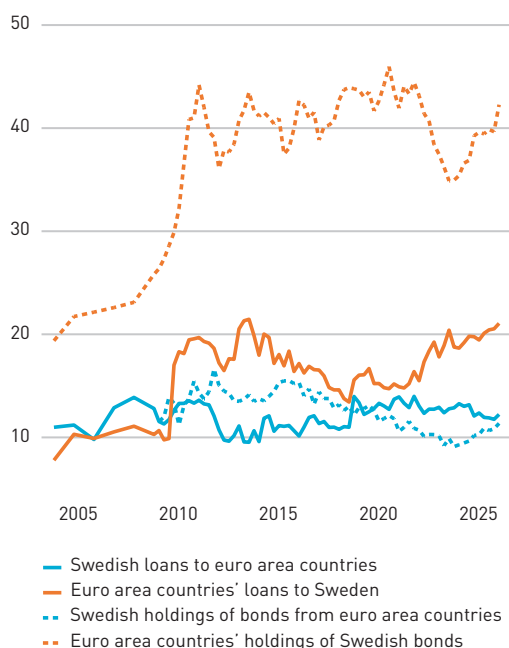
Several studies have confirmed that the degree of risk sharing of shocks is linked to the extent of cross-border asset holdings (particularly shares) and loans.⁴⁹ Thus, there is reason to look at how these

49 See, for example, Sørensen et al. (2007) and Hoffmann et al. (2018).

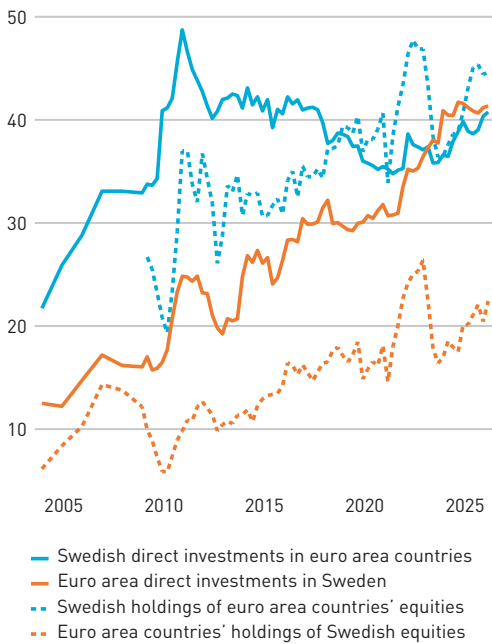
have developed in Sweden since the introduction of the euro. Figure 14 shows that cross-border asset holdings between Sweden and the euro area countries have increased substantially since the beginning of the 2000s. The items that have grown the most are euro area countries' direct investments in Sweden, their holdings of Swedish shares and bonds, Swedish direct investments in the euro area and Swedish holdings of shares from euro area countries. It is difficult to quantify the significance of risk sharing with euro area countries, but it seems clear that it has increased.

Figure 14 Cross-border financial investments between Sweden and the euro area, 2003–25, per cent of Swedish GDP

(a) Loans and bonds



(b) Equities and direct investments



Note: Equities include fund units. Loans refer to loans for direct investment.
Source: Calculations by Martin Flodén based on Balance of Payments and International Investment Positions, ECB, for asset values and Eurostat for GDP.

For the same reason that euro membership appears to increase trade and direct investment with other euro area countries, it should lead to more cross-border investments in shares and other financial assets. This can be assumed to mean more risk sharing. The same applies if financial markets become more integrated through a capital markets union and the continued development of the banking union within the EU.⁵⁰

Monetary policy in the event of common shocks

Previous discussions of Swedish membership of the monetary union, such as in the EMU Inquiry (1997), the STEMU Inquiry (2002), Eriks-son and Ljungkvist (2021) and the Confederation of Swedish Enter-

50 Demyanuk et al. (2007) and Hoffmann and Shcherbakova-Stewen (2011) show how deregulation and integration of banking markets between US states led to greater risk sharing.

prise (2024), have generally assumed that the ECB's common monetary policy is unproblematic for euro area countries in the event of common shocks. But it is not that simple. The ECB's monetary policy has different effects if the interest rate sensitivity of the economies differs. Empirical studies have also found substantial differences between euro area countries.⁵¹

In Chapter 4, Walentin shows that estimates of GDP interest rate sensitivity between euro area countries and Sweden cannot be directly compared (see Section 4.3). However, since households now have higher levels of debt and a larger proportion of loans with short fixed-interest periods in Sweden than in most euro area countries, the Swedish economy's interest rate sensitivity is probably higher. I therefore share Walentin's assessment that both monetary policy stimulus and tightening by the ECB in the event of common economic shocks can be expected to be greater than is appropriate for Sweden. This is a stabilisation policy problem with euro membership that has arisen since the turn of the millennium. Sweden's high interest rate sensitivity therefore places great demands on our fiscal policy in the event of common shocks in order to achieve an appropriate overall effect on demand. In economic downturns, fiscal policy in Sweden should probably be less expansionary than in the euro area as a whole, and less contractionary in economic upturns.

The *krona* exchange rate in the event of common economic shocks

Something that the EMU Inquiry (1997) did not foresee was the large exchange rate movements for the *krona* that have occurred in connection with major global macroeconomic disturbances. A pattern has been established whereby the *krona* has weakened sharply in international crises. During the IT crash after the turn of the millennium, the global financial crisis of 2008–09 and the inflation crisis of 2022–23, large *krona* falls helped stabilise economic activity. This was desirable in the first two cases, which were negative demand shocks. However, during the negative supply shock of 2022–23, stabilisation policy was

51 See Almgren et al. (2022) and Datsenko and Fleck (2024).

instead hampered: higher import price increases and larger net exports as a result of the *krona*'s depreciation counteracted the fight against inflation, which was the priority of economic policy at the time.

My assessment is similar to Flodén's in Chapter 4. Movements in the *krona*'s exchange rate against the euro are likely mostly to contribute to stabilising economic activity in the event of common demand shocks if Sweden remains outside the monetary union, although this may not always be the case. A current example is the strengthening of the *krona* in 2025 in a situation where Trump's tariff measures delayed the economic recovery. In the event of supply shocks, there is a high risk that the *krona* exchange rate will move in a way that makes it more difficult to achieve the inflation target. Increased geopolitical instability probably implies that global supply shocks will become more common in the future. The probability of destabilising *krona* movements against the euro if we remain outside the monetary union may therefore increase in the future.

My assessment of the stabilisation policy consequences of euro membership

Euro membership still entails a stabilisation policy disadvantage. There are three reasons for this: (i) the loss of monetary policy autonomy in the event of asymmetric shocks; (ii) the risk that the ECB's monetary policy will not be appropriate for Sweden in the event of common macroeconomic shocks; and (iii) no exchange rate changes against the euro, which would otherwise mostly facilitate Swedish stabilisation policy.

At the same time, the stabilisation policy cost of euro membership must be considered much smaller than previously. The Swedish business cycle has become more synchronised with that of the euro area. The reduction in public debt in Sweden means that there are much greater opportunities to partially replace monetary policy stimuli in country-specific Swedish downturns with fiscal policy stimuli. The probability that *krona* exchange rate movements outside the currency union will facilitate economic policy-making can be assumed to be lower than previously. The possibility of improving competitiveness through internal devaluation in the event of euro membership may

have increased somewhat since the end of the 1990s. Labour migration may contribute somewhat more than previously to reducing differences in unemployment between Sweden and other countries. The possibilities for evening out incomes and consumption (risk sharing with the euro area) via the credit and capital markets have probably increased somewhat as a result of more cross-border financial investments. Contrary to the changes mentioned above, the probability that the ECB's monetary policy will not suit Sweden in the event of common macroeconomic disturbances appears to be higher than before, but in my assessment this is of less significance than the changes that have reduced the stabilisation policy cost of euro membership.⁵²

8.3 Other economic aspects

Two further economic aspects that must be taken into account in an analysis of euro membership are the risk that Sweden will incur costs for the high levels of government debt in many of today's euro area countries and the consequences of membership of the banking union, which is mandatory for euro area countries.

The risk of Swedish costs for high public debt in today's euro area countries

There is research evidence to suggest that the EU's fiscal rules have led to better fiscal performance than would otherwise have been the case.⁵³ At the same time, the rules have often been violated and have not been able to prevent large increases in public debt in most euro area countries.⁵⁴ Like Andersson and Jonung in Chapter 7, I find it difficult to believe that the reforms of the stability pact in 2024 will increase budgetary discipline – the changes towards greater flexibility, with greater opportunities for discretionary considerations, can instead be

52 The Confederation of Swedish Enterprise (2024) makes a similar assessment. The report focuses on more synchronised business cycles, greater opportunities for crisis support from other EU countries and higher labour mobility. However, the report fails to mention that the large improvement in public finances has increased the scope for fiscal policy.

53 See the overview in Appendix A.2 in Calmfors (2023b).

54 In addition to Chapter 7 by Andersson and Jonung, see, for example, Calmfors (2005, 2017).

expected to weaken it. As Andersson and Jonung point out, this is particularly true in a situation where populist parties are enjoying political success, there are major expenditure requirements for military rearmament and investments in climate change, and expenditure is increasing due to demographic factors.

I also share Andersson and Jonung's assessment that new sovereign debt crises are likely to arise in the euro area.⁵⁵ This will probably involve new bailout loans from the European Stability Mechanism (ESM), in which Sweden would have to participate if it joined the euro. The extent of the risk that Sweden will incur costs for other euro area countries' sovereign debt depends on the adjustment requirements that will be imposed on crisis countries receiving support. Experience from the euro crisis suggests that these countries may be forced to implement strict adjustment programmes that reduce the risk of other euro area countries incurring large costs.

The flip side of Sweden, as a euro area member, potentially having to pay for crisis support to others is that we ourselves would have greater opportunities to receive help in the event of a domestic sovereign debt crisis. Such a crisis cannot be ruled out for all time, but today it appears less likely than new debt crises in today's euro area countries.

Joint EU borrowing for on-lending to member states, such as that which took place in connection with the 2020–21 pandemic and which has now been decided for joint defence initiatives, may also incur costs for us. However, like Andersson and Jonung, I do not believe that this risk is affected by joining the euro, as the borrowing is joint for the entire EU.

Even if Sweden remains outside the monetary union, we may have to pay for the public debts of other euro area countries, for example in the event of rescue operations via the IMF. However, these costs are likely to be lower than if we join the euro. The risk of costs associated with euro membership can be considered greater today than it was when the EMU Inquiry was published in 1997 and the euro referendum was

55 The most likely crisis candidate at present is France, with a budget deficit of 5.4 per cent of GDP and a debt ratio of 118 per cent of GDP in 2025 as well as substantial political opposition to budget consolidation.

held in 2003. At the same time, costs may be kept down through strict adjustment requirements on euro area countries in crisis.

The consequences of joining the banking union

Issues relating to financial crisis management in the event of participation in the monetary union were not discussed at all by the EMU Inquiry (1997). Nor did they feature in the STEMU report (2002), which analysed how Swedish fiscal policy should be designed in the event of euro membership. This was a consequence of the weak interest that economists at the time devoted to financial stability, something that the global financial crisis of 2008–09 changed.⁵⁶ Today, considerations regarding the regulation of financial markets are central.

Participation in the banking union means that responsibility for supervising the largest Swedish banks would be transferred from the Swedish Financial Supervisory Authority to the ECB. I share Englund and Wissén's assessment in Chapter 8 that it is difficult to have a definite opinion on whether the advantages outweigh the disadvantages or vice versa.⁵⁷

The analysis of how the costs of banking crises would be affected by Sweden joining the monetary union – and thus the banking union – is similar to the above analysis of the costs of sovereign debt crises. In the event of a banking crisis in Sweden, membership of the banking union is an advantage because large crisis costs can then be covered by the union's joint resolution fund – and, if its resources are insufficient, possibly also by the European Stability Mechanism (ESM), if it functions as planned as a backstop for the fund.⁵⁸ A related advantage is that euro membership is likely to reduce the risk that Swedish banks in a crisis cannot access sufficient foreign exchange liquidity at a reasonable price (exchange rate). Outside the monetary union it is the Riksbank's task to provide such (dollar and euro) liquidity in a crisis. With euro membership it will be the ECB's responsibility to provide dollar liquidity in such a situation (the euro is then no longer a foreign currency). As argued

⁵⁶ See, for example, the Swedish Economic Association (2010).

⁵⁷ See also the Banking Union Inquiry (2019) and Ekholm (2020) for similar conclusions.

⁵⁸ This arrangement has not yet entered into force because Italy has not ratified it.

by Englund and Wissén, the probability that all banks in the euro area need provision of dollar liquidity is lower than that all Swedish banks do so. At the same time, however, banks (and thus also their customers) may be forced to contribute to the costs of banking crises in other euro area countries through contributions to the common resolution fund – and perhaps also taxpayers via the ESM. One advantage of membership of the banking union in the event of banking crises in today's euro area countries, however, may be that greater consideration is given to Swedish interests in dealing with them than if we remain outside.

Although the risks of banking crises in today's euro area countries have decreased in recent years, joining the banking union at this point in time would probably be a net disadvantage for Sweden. The probability of a serious banking crisis in the foreseeable future still appears to be lower in Sweden than in most of today's euro area countries. However, experience suggests that one should be cautious about drawing conclusions about the long-term health of banks based on the current situation; banking crises arise unexpectedly. If this were not the case, they would usually not occur.

8.4 Broader political considerations

Any position on Swedish membership of the euro must also be based on an analysis of broader political consequences. As pointed out in Section 6, the entire EU cooperation is fundamentally a *political* project. Jones puts it in Chapter 9 as follows: “The overarching goal of the European project is for Europeans to live together peacefully.” One stated purpose behind the treaties that laid the foundations for today's EU at the end of the 1950s – on the Coal and Steel Union, the European Economic Community (EEC) and Euratom – was to overcome national conflicts of interest that could, in the worst case, lead to new wars. This was to be achieved by economic integration in certain areas creating incentives for economic cooperation in other areas and, in the long run, for closer political cooperation.⁵⁹

59 See, for example, Chapter 9 of the EMU Inquiry (1997).

Like other forms of cooperation between countries, EU cooperation is a way of shifting decisions from the national to the supranational level in order to take into account how policies in one country affect other countries. The aim is to achieve outcomes that are better for everyone through coordination and joint decisions. Obvious examples are competition rules, product standards, asylum immigration, climate policy and research funding.

Another key aspect of European cooperation concerns the ability to assert Europe's interests vis-à-vis other centres of power – with an authoritarian and anti-democratic orientation, primarily Russia and China, but now also the United States, which under President Trump has developed in this direction. Recent trends have clearly illustrated the need for European cooperation in foreign, security and trade policy. It has thus become increasingly important for Europe to achieve sufficient “economies of scale” in these areas.

A key theme in the Draghi report (2024) is the need for radical reforms and massive investment initiatives if EU countries are to achieve the competitiveness and technological capabilities required not only for growth and prosperity, but also to secure a strong geopolitical position. According to the report, the EU needs to play a greater role in mobilising and coordinating major investments in innovation, energy transition and defence. Economic sovereignty should be strengthened by securing access to critical raw materials, components, technologies and supply chains as a safeguard against external threats. At the same time, rules need to be simplified and harmonised between member states to facilitate innovation and entrepreneurship.

I broadly agree with the Draghi report's assessment that the EU needs to become more active in contributing to European growth and security. At the same time, this must not lead to centralised solutions that inhibit national experimentation with different economic models. There must also be room for institutional competition in order to find growth-generating solutions.⁶⁰

60 The importance of this has been emphasised in Swedish debate primarily by economist Nils Lundgren (see, for example, Lundgren 1996 and Lundgren and Nisser 2021). The argument ties in with historical explanations of why Europe emerged as the economically and militarily dominant continent from the early 16th century to the late 19th century (Kennedy 1987).

The political objectives of EU cooperation described above should be taken into account in an analysis of the consequences of Swedish membership of the euro. This section presents my view of the effects on (i) Swedish influence in the EU in various areas; (ii) Sweden's political integration into the EU; and (iii) the possibilities for asserting Swedish and European interests in a geopolitically more uncertain world.

Sweden's influence in the EU

Based on Lundgren's research review in Chapter 11, it seems clear that the EMU Inquiry's (1997) fears of large *general* losses of political influence for Sweden as a result of remaining outside the monetary union have not been realised. Swedish influence has been maintained through access to informal networks, coalition building and a good public reputation. It has probably also played a role that the EU has expanded with twelve new member states since the launch of the euro, which has increased heterogeneity and thus also tolerance for different institutional solutions and degrees of cooperation with other member states. Sweden's decision not to participate in the monetary union no longer stands out in the same way as when the euro was introduced in 1999. Other EU members are likely to perceive, for example, Hungary's and Poland's deviations from the union's principles of the rule of law and Hungary's and Slovakia's opposition to strong support for Ukraine as much more problematic than Sweden's decision to remain outside the euro.

However, Sweden's influence in economic policy issues has probably been reduced by our standing outside the monetary union. Many of the reforms made to the system of economic policy governance in the EU – the introduction of a European semester for the review of member states' budget proposals, new surveillance of macroeconomic imbalances, various reforms of the stability pact (such as the provisions on medium-term fiscal-structural plans and the focus on net expenditure paths), the requirements on independent fiscal institutions in member states and the rules on resolution in the event of banking crises – have been designed primarily by the euro area countries to address their

problems.⁶¹ The same applies to the pandemic support, which covered all EU countries but was primarily introduced to address the fiscal problems of Italy and Spain.

There is reason to believe that membership of the euro could increase Sweden's opportunities to influence changes in both the EU's economic policy governance system and the handling of economic crises. This would mainly involve greater influence on the political agenda rather than success in negotiations once various issues have been brought up for decision. The risk of losing economic policy influence as a non-member of the euro area is probably greatest if new debt crises arise there, leading to new changes in the fiscal rules and financial regulations that affect all EU countries.

I also share the views of Englund-Wissén and Ingves in Chapters 8 and 13, respectively, that euro membership would probably imply greater Swedish influence on the development of a more integrated European capital market, which can be assumed to take place in interaction with institutions that are linked, or will be linked, to the single currency. Given Sweden's well-developed capital market, this could be valuable, not only from a purely Swedish perspective, but could also contribute to a better functioning economy in the EU as a whole.

One uncertain factor is what the UK's exit from the EU may mean for the influence of non-participants in the monetary union in the future. It clearly weakens their influence both in formal votes and in the informal preparatory work leading up to them. I agree with Lundgren's assessment that the greatest risk of a general loss of influence if Sweden remains outside the monetary union would arise if the euro area were to include an even larger proportion of EU member states and if these countries were also to deepen their cooperation. This could make it harder for Sweden to compensate for not being in the euro by building coalitions and making contacts in informal networks.

61 The system of economic policy governance is described in Chapter 7 by Andersson and Jonung. See also, for example, Calmfors (2017, 2023b) and Eriksson and Ljungkvist (2021).

European political integration

Political integration can be defined as organised cooperation between states across national borders, with decision-making in joint institutions on certain issues, with the aim of achieving common goals, and which is anchored among citizens through a perceived common identity and common norms (see Section 6.1).

Jones in Chapter 9 and Lundgren and Tallberg in Chapter 10 describe how the euro has contributed to institutional deepening with more joint decision-making. Lundgren and Tallberg contrast this with the fact that the euro crisis also contributed to political conflicts between the countries in the monetary union, the emergence of EU-critical parties and reduced public support for the EU, but also show that these effects have to a large extent been temporary. The two authors also emphasise that the euro has contributed to a Europeanisation of the political debate. However, Jones as well as Lundgren and Tallberg are reluctant to draw more specific conclusions about how political integration aspects can be weighed in when taking a position on Swedish euro membership.

Swedish participation in the monetary union would mean that Sweden would also *formally* participate in decisions that only apply to euro area countries: on the common monetary policy, the ESM rescue fund, and joint financial supervision and crisis management. In *reality*, we would probably also be involved at an earlier stage when decisions that applies to the entire EU are being prepared in areas such as the design and application of fiscal rules, joint borrowing and capital market development, where the euro area countries have largely set the agenda. As pointed out above, it is likely that Sweden would also gain greater influence in these latter areas if it joined the euro. This would give us greater opportunities to promote our strictly national interests. But beyond that, there would also in my view be an *intrinsic value* in greater Swedish involvement in decision-making at the European level. This could be based on the view that Sweden should, to the best of its ability, contribute in a spirit of solidarity to ensuring that the best possible decisions are taken at this level from a pan-European perspective. This could be expected to bring Sweden closer politically to the other EU countries and make it more natural to cooperate in other areas as well.

Swedish participation in the monetary union would probably mean that economic policy discussions in Sweden would become more European. The focus would shift to a greater extent to considerations that should be made in joint European decisions. This would obviously apply to monetary policy, which would no longer be determined by the Riksbank but by the ECB. It would probably also apply to other economic policy issues where the agenda is set by the euro area countries. Such a greater focus on European issues in the domestic debate could hopefully be of value to the quality of the economic policy debate throughout the EU and, by extension, to the quality of decision-making. It would imply a greater Swedish contribution to the emergence of what political scientists sometimes refer to as a European *demos*, based on both solidarity across national borders and a common public discussion (see, for example, Risse 2014). Such developments could strengthen the democratic legitimacy in Sweden of decisions taken at EU level.

However, Swedish membership of the euro could also increase the risk that new crises in the euro area – which might impose costs on Sweden – could lead to more EU-critical public opinion and thus counteract our political integration with the rest of Europe. The same applies if the common monetary policy is perceived as disadvantageous for Sweden because of different cyclical developments than in the rest of the euro area or because the effects of the policy are stronger in Sweden (see section 8.2). But, as pointed out above, the experience of the euro area countries suggests that such reactions are temporary.

Swedish membership of the euro can be seen as a stronger commitment to EU cooperation and remaining a member of the EU. The reason for this is that membership of the monetary union entails a higher cost of leaving the EU, as it would most likely mean the reintroduction of a national currency with all the transition problems that this entails. Euro membership can therefore be seen as *insurance* against temporary

political opinion taking Sweden out of the EU.⁶² Such a stronger commitment to continuing EU cooperation should not only be assessed from a Swedish perspective, but also from a pan-European perspective. The stronger the ties between different countries and the EU, the greater the network benefits for other member states of continuing EU cooperation.

Euro membership in a new geopolitical reality

The geopolitical situation has become increasingly unstable in recent years (see, for example, Applebaum 2024 and Kragh 2025 for in-depth analyses). Russia's large-scale invasion of Ukraine has shaken the entire European security order, as it is an attempt to change borders and subjugate an independent state by force. In the long run, there is also a serious threat to other countries in Europe, as there is a clear Russian desire to establish a sphere of influence that it can dominate. Russia is also largely supported by an increasingly aggressive and economically powerful China. At the same time, under Donald Trump, the United States has gone from being the guarantor of a rules-based international order to posing a threat to it. This has weakened the transatlantic axis. The United States' commitment to NATO can no longer be taken for granted. It is also clear that the current Republican administration does not embrace fundamental European principles of liberal democracy.

Against this background, there are reasons to strengthen cooperation and political integration in the EU. Swedish membership of the euro could contribute to this. It could be seen as a signal that Sweden wants stronger and more irreversible EU cooperation. Considerations of this kind would be somewhat similar to those made in Finland prior to the country's entry into the euro in 1999.⁶³

There are also narrower geopolitical aspects of an economic nature that are related to the changes in American policy. Posen (2025) puts it

62 The risk of Sweden leaving the EU appears to be very small at present. However, in a study that attempted to assess the likelihood of different countries leaving the EU based on various social, economic and political factors, Sweden ranked third in 2015 after the United Kingdom and Austria (Gastinger 2021). In the exit probability index that was constructed, Sweden's probability was increased by, among other things, its non-membership of the euro and a negative net contribution from the EU budget.

63 See, for example, Calmfors (2021), Chapter 7.

this way: the US previously acted as an international insurer, offering other countries the opportunity to make safe dollar investments and providing a security policy umbrella, but now it is demanding increasingly higher payments for this and for not harming its allies.

The Trump administration has begun to link its international relations to security policy and other issues. Examples include how tariff policy has been used to influence other countries' efforts to combat illegal immigration to the United States (Mexico), drug smuggling (Canada, China, Mexico), court proceedings against former political leaders (Brazil) and oil imports from Russia (India). Tariffs have also been highlighted as a way for the US to tax its allies for the defence umbrella it has provided.

These issues are not addressed in any other chapter. It is, of course, impossible to predict whether the Trump administration's changed approach to international economic relations will continue under future administrations. However, given the public support for the current America First policy, it is entirely possible that this is a lasting change.

US tariff policy has no specific link to the monetary union. The Commission negotiates trade policy issues on behalf of the entire EU. However, it cannot be ruled out that the US might at some point link exchange rate policy to security policy and other issues. This was explicitly discussed in a widely read essay by Stephen Miran, economic policy advisor to Trump.⁶⁴

Miran (2024) sees the global demand for the dollar as an international reserve currency as an explanation of constant overvaluation. According to him, this has led to a decline in internationally competitive sectors, including manufacturing, in the United States and to large trade deficits. He therefore outlines an international exchange rate policy agreement that would permanently lower the value of the dol-

⁶⁴ Miran (2024). The essay was written before Trump took office. Miran was subsequently appointed chair of the Council of Economic Advisers and then, in September 2025, (acting) member of the Board of Governors of the Federal Reserve.

lar. The term used is a *Mar-a-Lago Accord*.⁶⁵ Other countries would be persuaded to accept such a change through threats of high American tariffs or no longer being covered by the American defence umbrella. The exchange rate adjustments are to be achieved by central banks and various sovereign funds around the world reducing their holdings of US government securities, i.e., selling such dollar assets. This would push down the dollar exchange rate. At the same time, interest costs on US government debt should be kept down by restructuring it towards longer maturities. Miran argues that other countries' central banks and various government entities should be forced to exchange their remaining holdings of US government securities for 100-year or even perpetual government bonds.⁶⁶

The ideas referred to may seem fanciful. However, US policy has become unpredictable in an increasing number of areas. It is therefore impossible to rule out the elements of policy discussed above. Relevant to the question of Sweden joining the euro is the focus on differentiating the treatment of countries – something that Miran explicitly recommends (and which has characterised tariff policy).

There may be situations where it is advantageous to be part of the monetary union and act jointly against the United States in matters concerning exchange rate policy and the management of central banks' and other actors' holdings of US government securities. The euro area can then be assumed to have a much stronger negotiating position than a small individual country such as Sweden, which could be treated more arbitrarily.⁶⁷

A restructuring of the US national debt may not only happen as a result of a pre-planned policy. There is a substantial risk that the large budget deficits and rapidly growing government debt in the US could

65 The outlined agreement is seen as a successor to previous exchange rate policy agreements named after where they were concluded, such as the Plaza Accord, which was negotiated in 1985 at the Plaza Hotel in New York. This agreement between France, Japan, the United Kingdom, the United States and West Germany aimed to weaken the dollar.

66 He also mentions the possibility that the US could unilaterally impose a special withholding tax on foreign bondholders if a multilateral agreement cannot be reached. The possibility of introducing such a tax – on investors from countries considered to have discriminatory taxation of US companies – was included in Trump's budget proposal for 2025/26 (the Big Beautiful Bill), but was not included in the budget that was ultimately adopted.

67 One possible parallel is the difference between the general tariffs originally imposed by the Trump administration on Switzerland (39 per cent) and EU countries (15 per cent).

at some point plunge the country into an acute sovereign debt crisis (see, for example, Rogoff 2025). The risk cannot be ignored that this could lead to both direct write-downs of the value of other countries' holdings of US government securities and "financial repression" in the form of demands on other countries to hold low-yielding US government securities whose value is being eroded by inflation.

The unpredictability of American politics makes it impossible to know whether considerations of the kind outlined above are relevant. My discussion is highly speculative. It should only be seen as a reminder that the changed geopolitical situation may make other aspects of Swedish euro membership than previously relevant.

My summary conclusions on the political aspects of euro membership

Sweden's influence within the EU on most issues outside the economic policy area has probably not been particularly affected by Sweden's non-membership of the monetary union. At the same time, membership would mean that the Governor of the Swedish Riksbank would participate in decisions on the ECB's monetary policy, which affects the Swedish economy regardless of whether we are members or not. There is much to suggest that Sweden's influence would also increase in other economic policy issues if it joined the euro. There are scenarios in which it could be advantageous for Sweden to be involved in decisions on how the monetary union handles crises in euro area countries, which in any case have an impact on us. Even though Sweden appears so far to have been able to maintain its influence in general policy matters within the EU, there is a risk that this will become more difficult if the euro area expands with more members and cooperation between euro area countries deepens.

Joining the euro would signal Sweden's stronger involvement in joint EU decisions on both policy and institutional development in the economic sphere. Sweden's greater contribution to ensuring that the best possible decisions are taken at EU level from a pan-European perspective can be seen as having intrinsic value. This could be expected to bring Sweden closer politically to other EU countries and make coop-

eration in more areas more natural. Euro membership could also be seen as a strengthened commitment to remain in the EU, as the costs of withdrawal would increase if it also meant a return to an own Swedish currency.

In an increasingly unstable geopolitical world, Sweden's entry into the euro could be seen as a signal that we want to deepen EU co-operation. Nor can it be ruled out that a greater US inclination to link international economic relations with security and other policies may have an impact on the question of Swedish euro membership. Both exchange rate policy and the treatment of central banks' and other actors' holdings of US government securities could be affected. In that case, it might be advantageous for Sweden to be able to negotiate with the US together with other euro area countries.

8.5 Should Sweden join the euro?

Both my summary of the various chapters in Sections 2–6 and my own analysis of various aspects in Sections 8.1–8.4 show that joining the euro has a number of consequences. There are both advantages and disadvantages. At the same time, it is difficult to assess the quantitative magnitude of the various effects. Nor is there any obvious way of weighing up the effects to reach a conclusion as to whether euro membership would be a net advantage or a net disadvantage, as they have different dimensions and weights must be based on value judgements, which differ between individuals depending on what they consider to be more or less important. Below is *my personal assessment*, which may – but does not have to – be shared by the authors of other chapters. I also try to assess whether the arguments for joining the monetary union have strengthened or weakened over time.

As above, I distinguish between consequences for: (i) social efficiency; (ii) stabilisation of the business cycle; (iii) other economic aspects; and (iv) political aspects. To help readers I will repeat my main conclusions from Sections 8.1–8.4 in condensed form.

Social efficiency

A transition to the euro reduces transaction costs for international payments. However, the magnitude is small: a cost saving of 0.1–0.2 per cent of GDP. On the other hand, joining the euro can be expected to lead to a substantial increase in foreign trade, perhaps in the order of 5–7.5 per cent, and an even greater increase in both foreign direct investment in Sweden and Swedish direct investment abroad. This means a more efficient use of our resources, which raises the level of income. The exact amount is uncertain, but the increase could be a couple of per cent higher GDP per capita in the long term.

The social efficiency gains of joining the euro must now be considered considerably greater than those estimated by the EMU Inquiry (1997). One additional factor is the protectionist measures taken by the United States, which tend to reduce Swedish foreign trade and thus the social gains it generates. This means that other measures to eliminate trade barriers, such as joining the euro, become more important.

Stabilisation policy

Euro membership entails a disadvantage in terms of stabilisation policy. This is mainly because Sweden would then not have access to its own monetary policy in the event of country-specific macroeconomic shocks, and because there would no longer be an exchange rate against the euro that could change in a stabilising direction.

At the same time, the stabilisation policy disadvantage should be considered substantially less today than previously. One main reason is that the Swedish business cycle has become more synchronised with that of the euro area. Another important reason is that lower public debt makes it easier to partially substitute fiscal policy measures for monetary policy ones in a Swedish economic downturn that is not shared with other euro area countries. To *some* extent, greater opportunities for internal devaluation through wage restraint, greater international labour mobility and more risk sharing with the euro area via capital flows in more integrated credit and capital markets may also have reduced the stabilisation policy risks in the event of country-specific shocks.

During international demand-driven economic downturns, the *krona* has repeatedly depreciated in a way that has helped to stabilise the Swedish economy at the expense of the euro area countries. However, there is no guarantee that this will continue to be the case. During the supply shocks of 2022–23, inflation in Sweden was exacerbated by the fall of the *krona*. The likelihood of the *krona* exchange rate moving in a direction that facilitates economic policy during various economic disturbances has probably decreased.

Greater interest rate sensitivity in the Swedish economy relative to the euro area tends to increase the stabilisation policy cost of euro membership. My assessment is, however, that this is of less significance than the increased synchronisation of economic cycles and the greater opportunities for fiscal policy to counteract economic downturns.

Other economic aspects

One consideration that was not made in either the EMU Inquiry (1997) or the debate prior to the 2003 referendum concerns the risk that Sweden, as a member of the monetary union, could incur costs for other euro area countries' high public debts. Today, a different assessment must be made. Public debt in many euro area countries is now higher than before the euro crisis. It is likely that new sovereign debt crises will arise, which are likely to mean new bailout loans from the euro area countries' rescue fund, the ESM, and support purchases of bonds from the ECB. This poses a risk of costs for Sweden in the event of euro membership. At the same time, it is uncertain whether such costs will actually materialise in the end, as experience shows that crisis countries that receive bailout loans are also forced to implement tough austerity programmes in order to get their public finances in order and be able to repay the loans.

In the future, more joint borrowing for various investment initiatives seems likely, which could also entail costs for Sweden if countries with sovereign debt problems are unable to meet their payment obligations. However, such borrowing has so far taken place at EU level. The risks of Swedish costs in this regard are therefore unlikely to be affected by whether or not we participate in the monetary union.

Another change since the start of the monetary union is the establishment of the banking union, where membership is mandatory for euro area countries. It is difficult to assess whether it is an advantage or a disadvantage that the financial supervision of the largest Swedish banks is moved to the European level. Membership in the banking union entails a risk that Sweden will have to contribute to the cost of banking crises in other member countries.

The other side of the risk that Sweden would incur costs for sovereign debt or banking crises in other euro area countries if we joined the euro is that the probability of us receiving support in similar domestic crises would be greater. At present, such crises are more likely to occur in other countries than Sweden, but this may not necessarily be the case in the long term. The conclusion is nevertheless that the possibility of support for euro area countries in crisis should be weighed on the negative side when assessing the consequences of Swedish participation in the monetary union.

Political considerations

The EMU Inquiry (1997) concluded that political considerations clearly favoured Sweden's entry into the monetary union. This conclusion was based on the assessment that Sweden's general political influence in the EU would be reduced if it remained outside the union. The argument should be qualified. Euro membership would probably increase Sweden's influence on both economic policy rule changes and rule applications affecting all EU countries. On the other hand, previous experience does not indicate that there would be any loss of influence in more general political issues if Sweden were to remain outside the monetary union. However, the risk of this rises if additional EU countries switch to the euro and if the euro area countries deepen their cooperation.

One aspect that was not given much importance in the EMU Inquiry (1997) was the contribution that Swedish membership of the euro would make to the political integration in Europe. In an increasingly unstable geopolitical world, there is reason to highlight this as a key aspect. Participation in the monetary union would mean stronger

Swedish involvement in joint EU decisions on economic policy and institutional development in this area. Sweden would contribute to a greater extent to ensuring that, from a pan-European perspective, the best possible decisions are taken at EU level. Joining the euro can be expected to promote this both through greater formal participation in joint decisions and through a domestic economic policy debate that focuses more on European issues. Joining the euro would also mean a stronger commitment to EU cooperation and a signal that we want to contribute to deepening this cooperation. A commitment to participate in EU cooperation in more areas than today can be expected to bring Sweden closer politically to the other EU countries and make it more natural to cooperate in other areas as well. This should be assessed not only from a Swedish perspective but also from a pan-European perspective. The stronger the ties between different countries and the EU, the greater the network benefits for other member states to develop EU cooperation.

My conclusion is that political considerations clearly favour Swedish membership of the euro. Compared with the situation at the turn of the millennium, I believe that the arguments about political influence in the EU have weakened somewhat, but at the same time geopolitical developments mean that the arguments for political integration have become much stronger.

Sweden should join the euro

My assessment of how the pros and cons of joining the euro have changed since the turn of the millennium is as follows:

- The social efficiency gains appear to be greater.
- The stabilisation policy cost appears to be much smaller.
- The risks of Sweden incurring costs for sovereign debt or banking crises are greater.
- The purely political consequences are more positive.

As pointed out above, there is no clear-cut way of weighing these changes against each other. Any assessment will be subjective. My personal assessment is that the arguments in favour of euro membership have strengthened. This is because I attach greater importance to how

social efficiency effects, stabilisation policy considerations and broader political consequences have changed than to the increased risks of Sweden incurring costs for sovereign debt or banking crises in the euro area. Overall, I believe that the advantages of Sweden joining the euro today outweigh the disadvantages.

9 How could a transition to the euro take place?

If Swedish membership of the euro were to become politically relevant again, the question is how it would be implemented. In Chapter 12, Lindvall discusses the forms a Swedish decision to apply for membership could take, and in Chapter 13, Ingves discusses how a transition following such a decision would occur. This section presents my view on these issues.

9.1 The Swedish decision-making process

I agree with Lindvall's conclusion that a new referendum would be natural if euro entry becomes a political issue again. It is a strong argument that the issue has already been put to a referendum and that politicians then committed themselves to following the outcome. Legitimacy therefore argues in favour of a new referendum. It should also be taken into account that the 2003 euro referendum worked well in the sense that voter turnout was high, voters' positions appear to have been based on considerations of the issue itself, and not political preferences in general, and the media provided relevant information.

Another argument in favour of a new referendum is that the political polarisation on the euro issue appears to have diminished. As Lindvall shows, sympathies within the various parties are more evenly distributed today than in 2003: Liberal and Moderate voters are less positive, while Green Party, Sweden Democrat and Left Party voters are more positive. This may both provide better conditions for an objective debate and mean that a parliamentary decision along party lines may poorly reflect voters' preferences. Unlike in many other economic pol-

icy issues, different decisions regarding the euro do not change the conditions for other economic policies on which the parties have different views, such as taxation, benefit systems and labour market policy.

At the same time, I see greater possibilities than Lindvall that, just as in the NATO issue, a situation could arise in which public opinion changes completely as a result of economic or security policy upheavals in the world around us. If this were to happen, it should not be ruled out that the Riksdag could take a decision on its own without a new referendum. The more time that passes since the 2003 vote, the less binding it should be considered. Today, it is 22 years since the 2003 euro referendum, while there were only eight years between the 1955 referendum result to retain left-hand traffic and the Riksdag's decision on right-hand traffic in 1963.

One issue that may require more consideration than in Lindvall's analysis is the timing of a referendum in relation to ERM entry. He advocates a vote *before* such accession, as voters may otherwise perceive that a decision on euro membership has already been taken. One complication is that it cannot be ruled out that a future government might want to choose a Danish solution, i.e., abandon the current floating exchange rate and instead peg the *krona* permanently to the euro at a fixed exchange rate. A decision on such an exchange rate arrangement is hardly suitable for a referendum. However, the likelihood of this monetary policy solution is probably small. It would also require Sweden, like Denmark before it, to negotiate a formal derogation from the EU Treaty rules on adopting the euro.

The most likely scenario is that an ERM arrangement will only be considered as a step towards joining the euro. In that case, however, it could be argued that voters would be better informed about the implications of joining the euro if a referendum were held *after* ERM entry. The reason is that, upon ERM entry, a central rate between the *krona* and the euro is set, which then usually becomes the conversion rate to the euro (see Section 7.2). I therefore do not want to rule out the option that Sweden, if there is a parliamentary majority in favour of euro membership, first joins the ERM and that a referendum is held only afterwards. The fact that ERM membership signals the current government's intention to join the euro need not be a decisive counter-

argument: voters are still free to reject the proposal. On the other hand, there may be a risk that the discussion prior to the referendum will be too short-sighted if it focuses more on the choice of exchange rate than on the fundamental question of whether Sweden should adopt the common European currency or retain its own.

9.2 The choice of conversion rate for joining the euro

The *krona*'s central rate in the ERM and its subsequent conversion rate to the euro are not determined unilaterally by Sweden, but in negotiations with our European counterparts. Ingves argues in Chapter 13 that these exchange rates should be determined on the basis of the *krona*'s current market rate. I share the assessment that the central rate chosen is likely to be close to the current market rate. However, I would like to emphasise the interaction between them to a greater extent than Ingves does. On the one hand, decision-makers have reason to use the current market rate as a realistic assessment of an appropriate central and conversion rate. On the other hand, the market rate is influenced by the expected central and conversion rate.

A Swedish political decision to seek entry into the monetary union – and even expectations of this – will immediately cause exchange rate movements for the *krona* if market participants believe that the conversion rate will deviate from the prevailing market rate. Since, according to almost all calculations, the *krona* is undervalued against the euro in relation to an estimated equilibrium exchange rate (which is consistent with the significant weakening of the *krona* since 2013 and the large current account surplus – 5.5 per cent of GDP in 2025 according to the National Institute of Economic Research's forecast)⁶⁸, the *krona*'s exchange rate against the euro would probably rise as soon as the currency market sees a greater likelihood of euro entry. Therefore, the argument sometimes put forward that it would be inappropriate to join the euro while the *krona* is weak is not relevant.

68 National Institute of Economic Research (2025).

As Ingves writes, the government and the Riksbank can influence the market rate of the *krona* – and thus the central rate in the event of ERM membership and the conversion rate in the event of euro adoption – by “thinking aloud” about these in advance. Such thinking may raise the question of whether a stronger *krona* exchange rate against the euro would be desirable, and thus a smaller current account surplus. This would be consistent with Sweden as a country accumulating real assets to a greater extent instead of financial assets.⁶⁹

I am inclined to conclude that an appropriate central rate upon ERM entry – and conversion rate upon euro adoption – should be stronger than the SEK 11 per euro recommended by Ingves based on the recent market valuation of the *krona*. However, I share his view that a narrow exchange rate band during the ERM period – which may need to be maintained unilaterally by Sweden – may be appropriate in order to accustom the economy to the conditions that will prevail after euro adoption.

What happens if the central and conversion rates are set incorrectly?

An important question is what happens if the central and conversion rates are set incorrectly. This could happen, for example, if Sweden were to experience an unexpected, severe country-specific macroeconomic shock during the period in the ERM or after joining the euro.

As long as Sweden has not entered the monetary union, it is always possible to change the central rate. Ingves describes in Chapter 13 how this happened in the case of Slovakia. The central rate for the *koruna*, which was subject to appreciation pressure, was then revalued on two occasions.

Suppose that, after joining the euro, the conversion rate proves to be too weak and thus contributes to such high net exports that the

69 By definition, the current account balance is equal to the difference between saving and investment. A current account surplus means that Sweden accumulates net financial claims on the rest of the world. An increase in investment corresponding to an equal decrease in the current account surplus means that the total accumulation of assets remains unchanged, since the decreased accumulation of financial assets is then offset by an equal increase in the accumulation of real capital.

economy overheats. The consequence will then be higher inflation than in the rest of the euro area. This will gradually appreciate the real exchange rate, i.e., increase the price level in Sweden relative to that in the rest of the euro area, thereby reducing net exports and counteracting overheating. There is a certain risk of inflation overshooting, i.e., becoming higher than justified by the weak *krona* exchange rate, which would push the economy into a recession. However, since euro adoption would in all likelihood be considered irreversible, there is no danger of uncontrolled inflation in the long run: in such a situation, long-term inflation expectations are governed by the credibility of the ECB's inflation target.

An excessively strong conversion rate, leading to reduced net exports and an economic downturn (recession), would be a greater problem than a too weak rate. The reason is that nominal wages (wage increases) tend to be rigid downwards. It may therefore take time before the wage and price adjustments that restore the real exchange rate to a level compatible with macroeconomic balance take place. The likely consequence is a prolonged period of unnecessarily high unemployment. Hence, it is more important for Sweden to avoid a too strong conversion rate than an excessively weak one when joining the euro. At the same time, it is difficult to see how a conversion rate close to SEK 11 per euro is compatible with a desirable external balance and thus a desirable balance between saving and investment.

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Appendix

Table A.1 Estimated long-term effects on Sweden’s GDP per capita of a 5 percentage point increase in the ratio between exports + imports and GDP according to estimates in some studies

Study	Data	Method	Level effect	Growth effect
Frankel and Romer (1999)	Cross-section of countries, 1985	OLS and IV	4.5–10	
Frankel and Rose (2000)	Cross-section of countries, 1990	OLS and IV	5.5–6	
Karras (2003)	Panel of countries, 1951 (1960) –1968 (1997)	OLS		0.1–0.2
Busse and Königer (2012)	Panel of countries, 1971–2005	GMM	5.3	
Wacker and others (2024)	Panel of countries, 1970–2019	OLS	2–3.1	

Note: OLS stands for Ordinary Least Squares, IV for instrumental variable estimation and GMM for General Method of Moments.

Source: Own calculations.

CHAPTER 2

Trade, productivity and the euro

Rikard Forslid

1 Introduction

For a long time, economic research assumed that it made little difference to trade whether a currency's exchange rate was floating or fixed. The bid-ask spread in the foreign exchange market is very small also for floating currencies, only a few basis points (hundredths of a per cent). Variations in the exchange rate should not be a major problem for firms either, as it is easy and inexpensive to hedge against changes in the exchange rate. If a Swedish firm signs a contract today to sell a product for ten million euros to a buyer in Germany with a payment date in three months, it is easy to now make a forward transaction in the foreign exchange market: the euro income is then sold for Swedish *kronor* in three months at a predetermined exchange rate. Therefore, a floating exchange rate ought not to pose any major obstacles to trade.

This view was reflected in the EMU Inquiry (1997), which concluded that "... fluctuations seem to influence foreign trade very little, if at all."¹ It therefore came as a great surprise when Rose (2000), in a highly cited study, found that a common currency can increase trade between two countries by over 200 per cent. Later studies have found considerably smaller, but still substantial, effects on trade.

1 P. 50.

In this chapter, I review the research literature on monetary unions, trade and foreign direct investment since the formation of the euro area. Recent research findings will be contrasted with the conclusions of the EMU Inquiry (1997).

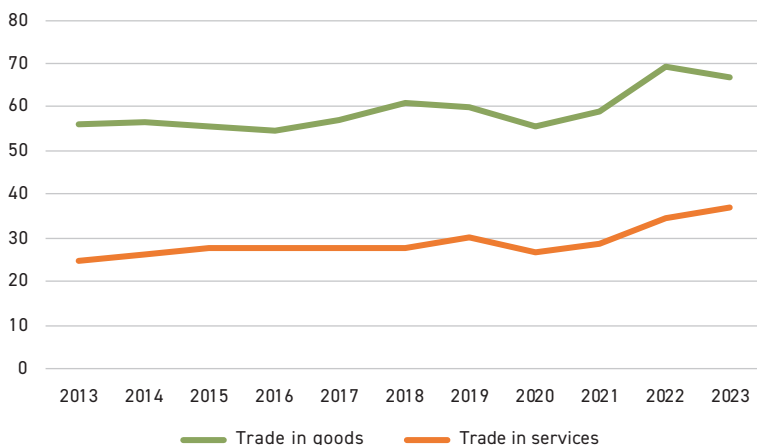
The chapter is structured as follows. After a brief overview of Sweden's trade, the transaction costs generated by Sweden's trade with the euro area countries are discussed. The effects of the euro on trade and foreign direct investment are then examined. The concluding section discusses the relationship between trade, productivity and economic growth based on the current research literature.

2 Sweden's international trade and the *krona*

2.1 Trade with euro area countries

Sweden is a very open economy. The sum of imports and exports now amounts to over 100 per cent of GDP. Trade in goods is still greater than trade in services, but the latter has grown in importance in recent years. Figure 1 shows the development of trade over the past decade.

Figure 1 Sweden's foreign trade, per cent of GDP



Note: The diagram shows the sum of exports and imports.

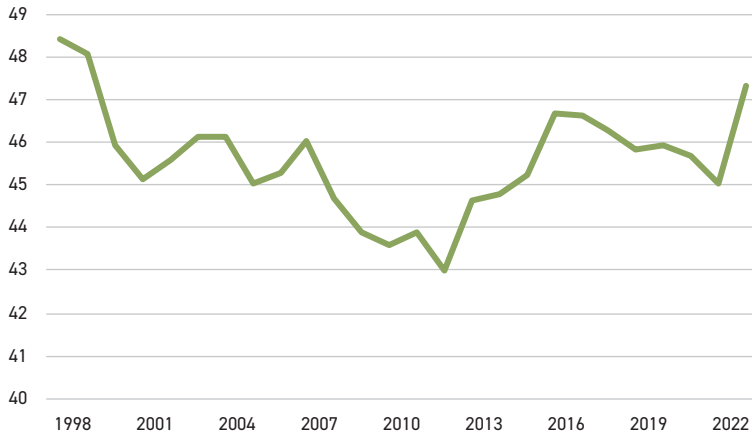
Sources: Statistics Sweden and author's calculations.

Almost half of Sweden's trade in goods and services is with the 20 countries that now use the euro as their currency.² Figure 2a shows how the share of Sweden's trade in goods with euro area countries as counterparties has developed over time. Today, the share is approximately 47 per cent. As information on trade in services is lacking for certain countries, Figure 2b shows all EU countries (EU27) as counterparties. Around 45 per cent of trade in services currently takes place with the EU27. Taken together, the two diagrams show that the euro area countries have been very important trading partners for a long time and that their importance has increased somewhat in recent years.

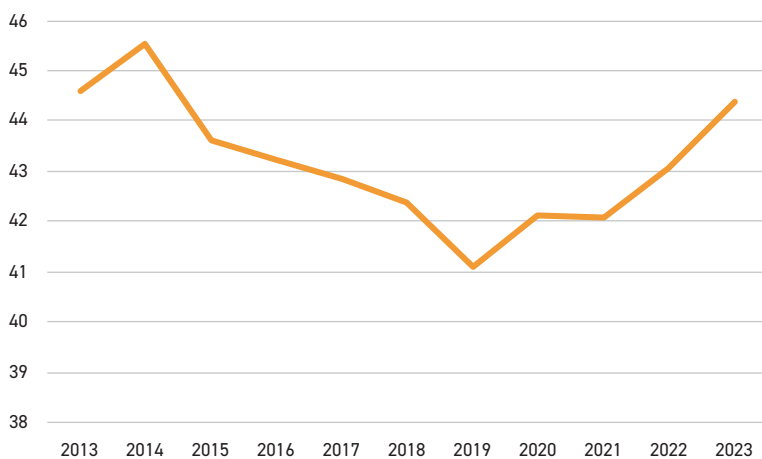
² These countries are Austria, Belgium, Croatia, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

Figure 2 Sweden's trade with the euro area and the EU27

(a) Trade in goods with the euro area, per cent of Sweden's total trade in goods



(b) Trade in services with EU27, per cent of Sweden's total trade in services



Note: The charts show the sum of exports and imports.

Sources: Statistics Sweden and author's calculations.

2.2 The *krona* exchange rate

Figure 3 shows the real effective exchange rate, i.e., the trade-weighted average of bilateral real exchange rates against our trading partners since 1980.³ Two things stand out. Firstly, fluctuations in the real exchange rate have been very large during certain periods. Secondly, the *krona* has been trending downwards for a long time. Over the past 12 years, the real effective exchange rate has weakened by around 20 per cent. There are various hypotheses as to why this has happened, but the development is difficult to explain using most economic models (see, for example, Flam and Persson 2024). It should be noted that the development of the real exchange rate depends to a large extent on which price index is used in the calculation.⁴

Figure 3 Real effective exchange rate for the *krona*, index = 100 in 2020



Note: The real effective exchange rate in the chart is the trade-weighted average of bilateral real exchange rates against 27 trading partners.

Source: BIS.

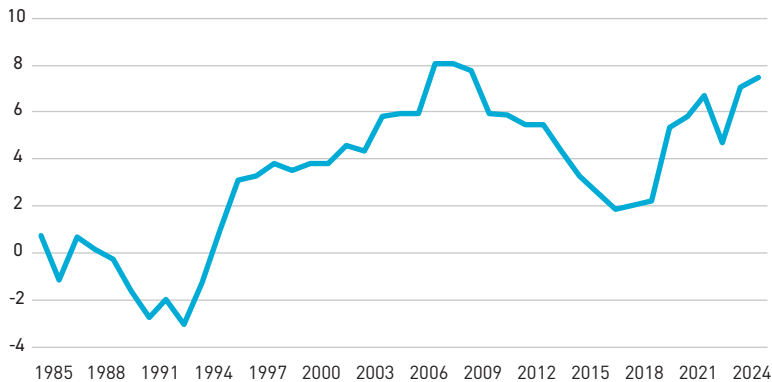
3 The real exchange rate is defined by the following formula:

$$\text{real exchange rate} = (\text{nominal exchange rate} \times \text{foreign price level}) / (\text{domestic price level})$$

4 This is discussed in Chapter 5 by Flodén.

The weak currency has gone hand in hand with a large current account surplus since 1994. This is shown in Figure 4. Contrary to popular beliefs, a permanent current account surplus is nothing to strive for. A surplus means that we send more valuable goods and services abroad than we receive in return.

Figure 4 Current account balance, per cent of GDP



Sources: Statistics Sweden and author's calculations.

3 The theoretical impact of the euro on trade flows

There are several reasons why international trade flows should be affected by a country joining the euro. The most obvious one is that exchange rate volatility against euro area countries disappears, which reduces the risk in trade transactions with them. It is possible to hedge against this risk, but this implies costs, which are discussed in the next section. Long-term exchange rate movements are also difficult to hedge against. However, it should be noted that, while exchange rate volatility disappears vis-à-vis euro area countries, it may increase vis-à-vis other countries.

Different currencies also entail exchange costs. These disappear if the trading countries have a common currency. This also increases transparency and facilitates price comparisons between countries.

Finally, a transition to the euro means that small countries, such as Sweden, will have a more liquid currency than before. Higher liquidity means lower costs for hedging against exchange rate risk in currency transactions with countries outside the euro area. It is therefore possible that the euro will not only increase trade between euro area countries but also with other trading partners.

4 How high are Sweden's transaction costs for trade in goods and services with euro area countries?

Trade in goods and services between countries involves transaction costs for currency exchange if the countries have different currencies. A direct exchange of two currencies on the foreign exchange market is called a spot transaction. A Swedish firm that imports goods from Germany must exchange Swedish *kronor* (SEK) for euros (EUR), as firms in Germany charge in euros. Similarly, a German firm that buys from Sweden must buy Swedish *kronor* to pay the Swedish firm. Hence, there are transaction costs for both imports and exports. How the transaction cost is divided between the seller and the buyer depends on their price sensitivity. A reasonable starting point is that the cost is shared equally. This means that half of the exchange cost for Sweden's trade can be assumed to be borne by Swedish importers and exporters, while the other half is born by the foreign counterpart.

A bank charges for currency exchange by applying different buying and selling rates for currencies. The difference between these rates is called the bid-ask spread. It is assumed here that half of the spread is borne by Swedish firms and half by foreign ones. How big is the spread? First there is a spread in the interbank market, i.e., the market where banks trade currency among themselves. When a firm trades currency from a bank, the bank adds a mark-up to the interbank price, which means that the spread for the firm is greater than the interbank spread. As in all other financial markets, the spread depends on the market situation. In a calm market, it is low, but in a highly volatile market, it

increases. The spread that firms encounter also depends on their size. The largest firms are better able to push down prices and end up very close to the interbank spread. At the other end of the spectrum are the spreads at currency exchange offices for tourists, which are enormous in comparison.

Exchange rates fluctuate over time. This volatility causes problems for firms because the timing of a business agreement is rarely the same as that for delivery and payment. A Swedish importer who signs an agreement to purchase goods from a euro area country at a price in euros with delivery and payment in three months risks the Swedish *krona* weakening during those months, which would make the goods more expensive in Swedish *kronor*. To manage the currency risk, the Swedish importer can buy euros now and put them in a euro account at a bank until payment date. In practice, however, a forward transaction is made instead, whereby the importer signs an agreement to purchase euros in three months at a fixed price. This price is determined by today's spot rate (the exchange rate between the currencies in an immediate transaction) and the difference between the 3-month euro interest rate and the 3-month *krona* interest rate.⁵ Similarly, a Swedish exporter can secure future income in euros by entering into forward transactions to secure the value of this payment in Swedish *kronor*.

The forward rate is determined by the spot rate and the interest rate differential between the currencies. A forward transaction therefore consists of both a spot transaction and a transaction to compensate for the interest rate differential. Since these transactions are very common, there is an instrument in the foreign exchange market for managing interest rate differences between currencies, which simply involves exchanging interest rates from one currency to another for a period of time. These interest rate exchanges are called interest rate swaps. Since there are two transactions behind a forward transaction, a spot exchange and an interest rate swap, the spread for a forward transac-

5 The forward rate F is determined so that the return should be the same regardless of whether you exchange currencies today at the spot rate S and receive foreign interest, or whether you keep your Swedish kronor, receive Swedish interest and then exchange currencies at the forward rate. This means that $F(1 + r) = S(1 + r^*)$, where F and S indicate how much foreign currency you receive per Swedish krona, r^* is the foreign interest rate and r is the Swedish interest rate.

tion is the sum of the spot and swap spreads. For shorter terms, the spread can be 20 pips⁶ (0.0020 SEK), but for long-term forward contracts, it can be ten times higher. Table 1 shows approximate spreads for different types of transactions.

Table 1 Costs for different types of foreign exchange transactions

Type of exchange transaction	Spread in pips (SEK/EUR)	
Spot, calm market	3	(0.0003)
Spot, volatile market	6	(0.0006)
3-month forward, calm market	21	(0.0021)
3-month forward, volatile market	40	(0.004)
6-month forward, calm market	38	(0.0038)
12-month forward, calm market	86	(0.0086)
24-month forward, calm market	257	(0.0257)

Note: One pip equals SEK 0.0001.

Source: Interview with a large Swedish manufacturing firm.

If Sweden joins the monetary union, the current transaction costs with euro area countries will disappear. A theoretical floor for how large these costs are can be obtained by assuming that all currency exchanges are spot transactions in a calm market when spreads are low. The bid-ask spread for spot transactions in the interbank market for Swedish *kronor* against the euro (SEK/EUR) is around 0.0003, or 3 pips, in this case (see also Lund 2011). In a turbulent market, the spread is up to twice as large (6 pips). Assuming that half of the spread is the part of the transaction cost that falls on Swedish importers and exporters, the annual cost is half the spread multiplied by the trade volume, i.e., the sum of imports and exports of goods and services to and from euro area countries, which amounts to approximately SEK 3,000 billion.⁷ This gives 0.0003/2 multiplied by 3,000 billion, which is SEK 450 million. Since a transition to the euro would lead to one-off conversion costs, it may be interesting to compare these with the present value of

6 A pip is the smallest price movement that a currency can normally make. For Swedish *kronor*, a pip is one per cent of one *öre*, i.e., 0.0001 *kronor*.

7 Statistics Sweden and my own calculations.

the lower transaction costs each year. If we use the Swedish Transport Administration's discount rate for social cost-benefit analyses from the ASEK report (Swedish Transport Administration 2024) of 3.5 per cent, the present value of these transaction costs is SEK 12.86 billion.

While SEK 450 million per year, or approximately SEK 13 billion in present value, can be considered a theoretical minimum value for transaction costs related to Sweden's trade with euro area countries, there are several reasons why they can be assumed to be substantially higher in practice. Firstly, the spread that many firms encounter is higher than the interbank spread. Secondly, not all currency exchanges are made in a calm market. Thirdly, many of the firms' currency transactions are not spot market but forward ones, in which case the spread is significantly higher (see Table 1). What stands out in Table 1 is that transaction costs increase sharply for long maturities, which means that it becomes very expensive to hedge really long-term currency flows.

The length of firms' foreign exchange hedges is highly industry-specific. In certain areas, such as infrastructure and defence, the maturities are often long, perhaps up to 5–7 years. Many other industries hedge between three and six months. During the pandemic, several firms experienced large orders being cancelled. At the same time, some of these orders were hedged with long forward contracts. When the orders were cancelled, the firms were left with their long forward contracts, which now entailed a considerable currency risk. Since then, some firms have switched to hedging with rolling short forward contracts instead of entering into really long forward transactions.

It is difficult to obtain reliable data on how much firms hedge their trade, or on the length of forward contracts, but contracts of three to six months are common according to market participants. BIS (2022) states that of all foreign exchange transactions in Swedish *kronor* in 2022, just under 16 per cent were spot transactions. Assuming that 16 per cent of trade with the euro area are spot transactions and that the remainder is hedged for six months on average (in a calm market), the annual transaction cost is $0.16 \times 3,000 \times 0.0003/2 + 0.84 \times 3,000 \times 0.0038/2$. The total is SEK 4.86 billion. The present value of an annual transaction cost of SEK 4.86 billion is SEK 139 billion. If, instead, 16 per cent of the trade flow is exchanged spot and 84 per cent is hedged

for twelve months, the transaction cost is $0.16 \times 3,000 \times 0.0003/2 + 0.84 \times 3,000 \times 0.0086/2 = \text{SEK } 11 \text{ billion per year}$, or a present value of SEK 311 billion. It could therefore be estimated that the transaction costs for trade with euro area countries could be in the region of SEK 4–11 billion per year, which corresponds to a present value of SEK 100–300 billion. However, the cost varies greatly between different industries depending on the length of the contracts. In relation to GDP (for 2023), these figures are still small: 0.07–0.18 per cent of (annual) GDP or, discounted to present value, a one-off cost of 1.6–4.8 per cent of (annual) GDP.

In addition to trade in goods and services, currency exchanges between Swedish *kronor* and euros are made in connection with Swedish investments in euro-based assets. For example, parts of the pension system's assets are invested in shares and interest-bearing securities denominated in euros. In this case, the exchange costs mean a lower return on pension savings. Similarly, many private individuals own shares in funds that invest within the euro area. In Chapter 8, Englund and Wissén estimate the transaction costs for financial flows at SEK 380 million per year, which is a low number in relation to the transaction costs for imports and exports.

The EMU Inquiry (1997) estimated that transaction costs in the foreign exchange market would fall by around 0.2 per cent of GDP annually if Sweden joined the euro. This figure was based on banks' profits from currency trading and an assumption that the share of these profits attributable to the euro area countries was the same as these countries' share of the total trading volume. The figure includes both transaction costs for trade and financial flows.

In this chapter, the costs have instead been estimated based on spreads in the foreign exchange market and trade with euro area countries. Although transaction costs have been calculated in a different way, the results are fairly similar. The transaction costs if Sweden remains outside the euro are a few tenths of a per cent of GDP annually, which discounted to present value amounts to a couple of per cent of one year's GDP.

5 Trade and monetary unions

The fact that exchange rates are constantly fluctuating creates friction in all international transactions. Price comparisons become more difficult and currency risks arise when there is a time lag between payment and the conclusion of a business agreement. The greater the exchange rate fluctuations, the greater this problem. In addition to these short-term fluctuations in exchange rates, there are also movements that cause persistent deviations of exchange rates.

For a long time, it was thought that short-term exchange rate fluctuations did not have much of an effect on trade, partly because it is easy for firms to hedge their deals.

The EMU Inquiry (1997) writes, for example:

Many empirical studies have been done on the effects of exchange-rate fluctuations on the volume of foreign trade. The somewhat surprising, but fairly unanimous, conclusion is that these fluctuations seem to influence foreign trade very little, if at all. This conclusion must be regarded as fairly robust,... (p. 50)

This view was challenged by Rose's (2000) highly cited empirical study, which found that currency unions tended to substantially increase bilateral trade – by approximately 200 per cent according to some of his estimates. His empirical estimates were based on the so-called gravity model of international trade. The model is so named because of its similarity to Newton's law of gravity in physics, where the attraction between two objects depends on their mass and the distance between them. In economic application, a simple version looks like this:

$$\text{Trade flow}_{i,j} = G \times \frac{GDP_i \times GDP_j}{\text{distance}},$$

where G is a constant. Trade between countries i and j is thus proportional to the product of the two countries' GDP and inversely proportional to the geographical distance between them. The model can be derived from the theory of trade under imperfect competition.

Subsequent studies based on the gravity model found much smaller effects. One problem was that Rose's analysis was to a large extent based on data from currency unions between countries/regions that

were poor and economically very small, or between colonies and their mother countries. This meant that the results could not be considered applicable to the euro area. In subsequent work, Rose himself has adjusted his estimates downwards,⁸ while the overall conclusion of a positive monetary union effect remains.

The surprising results of Rose's study led to intensive research into the effects of currency unions. Table 2 shows a summary of studies of such unions other than the euro area (adapted from the review article by Havránek 2010). The table provides a broad overview and also includes unpublished papers. What stands out in this overview is that, even though the effects are smaller than in Rose's original study, they are still very substantial.

As noted above, it is unlikely that these results from other currency unions are transferable to the euro area countries. Table 3 instead provides a broad overview of studies that have focused on the euro area. Compared with the results in Table 2, the effects are much smaller. In addition, there is a tendency for the estimated effects to be smaller the later the studies were conducted. Although Tables 2 and 3 provide a valuable overview of the studies up to 2008, it should be noted that there are relatively large differences in quality between the included studies.

The methodology for estimating gravity equations has developed over the decades since Rose's study. This applies, for example, to how to find a suitable comparison group of countries and how to statistically handle the fact that trade in certain industries or between certain countries have sometimes ceased for a period of time.

8 See, for example, Glick and Rose (2002, 2016).

Table 2 Studies of the effects of currency unions other than the euro area on trade

Authors	Increase in trade, per cent	T-value	Significance level
Rose (2000)	121	8.6	***
Pakko and Wall (2001)	-38	-0.7	
Rose and van Wincoop (2001)	91	5.1	***
Rose (2001)	74	14.8	***
Persson (2001)	51	2.0	**
Honohan (2001)	92	2.3	**
Méltitz (2001)	70	3.0	***
Tenreyro (2001)	47	1.5	
Nitsch (2002b)	82	3.0	***
Frankel and Rose (2002)	136	7.6	***
Glick and Rose (2002)	65	13.0	***
Rose and Engel (2002)	121	3.3	***
Nitsch (2002a)	62	3.7	***
Smith (2002)	38	3.8	***
Bomberger (2002)	8	1.6	
Saiki (2002)	56	3.5	***
Kenen (2002)	122	4.0	***
Levi Yeyati (2003)	50	2.0	**
Estevadeordal and others (2003)	29	2.0	**
López-Córdova and Meissner (2003)	72	3.9	***
Alesina and others (2003)	156	3.6	***
de Sousa and Lochard (2003)	121	10.1	***
Rose (2004)	112	9.3	***
Flandreau and Maurel (2005)	116	16.6	***
Klein (2005)	50	1.9	*
Yamarik and Ghosh (2005)	183	6.0	***
Tsangarides and others (2006)	54	13.4	***
Baxter and Kouparitsas (2006)	47	2.1	**
Barro and Tenreyro (2007)	190	5.4	***
Subramanian and Wei (2007)	64	7.9	***
Adam and Cobham (2007)	88	16.0	***
Shirono (2008)	91	5.1	***
Melitz (2008)	138	8.6	***

Note: *** 1 per cent significance level, ** 5 per cent significance level,

* 10 per cent significance level.

Source: Havránek (2010).

Table 3 Studies of the effects of the euro on trade

Authors	Increase in trade, per cent	T-value	Significance level
Thom and Walsh (2002)	10	0.5	
Bun and Klaassen (2002)	33	3.3	***
de Souza (2002)	17	0.7	
Barr and others (2003)	25	76	***
Micco and others (2003)	9	3.6	***
de Nardis and Vicarelli (2003b)	6	2.3	**
Cabasson (2003)	63	2.6	***
de Nardis and Vicarelli (2003a)	9	2.4	**
Sadikov and others (2004)	22	0.6	
Faruqee (2004)	8	4.6	***
Taglioni (2004)	53	8.4	***
Baldwin and Taglioni (2004)	3	2.2	**
Aristotelous (2006)	6	6.9	***
Flam and Nordström (2006a)	23	9.7	***
Baldwin and Taglioni (2006)	-2	-0.7	
Baldwin and de Nino (2006)	4	3.5	***
Flam and Nordström (2006b)	14	7.0	***
Gomes and others (2006)	7	6.3	***
Shin and Serlenga (2007)	0	-0.1	
Bun and Klaassen (2007)	3	23	**
de Sousa and Lochard (2007)	15	3.8	***
Berger and Nitsch (2008)	0	-0.0	
Brouwer and others (2008)	1	0.5	
Baldwin and others (2008)	2	2.6	***
Cafiso (2008)	16	10.9	***
de Nardis and others (2008)	4	3.1	***
Frankel (2008a)	10	6.9	***
Chintrakarn (2008)	10	5.0	***

Note: *** 1 per cent significance level, ** 5 per cent significance level,

* 10 per cent significance level.

Source: Havránek (2010).

A kind of *best practice* for estimating gravity equations was established by Yotov et al. (2016), but despite methodological advances later research shows a relatively wide range of results. With regard to monetary unions in general, Chen and Novy (2018) continue to find large effects. They estimate a gravity model for 199 countries from 1949 to 2013 and find effects of around 40 per cent.

A couple of meta-studies have also been conducted on the effects of the euro on trade. This involves attempting to weigh up the results of a large number of existing studies. One difficulty with this is that the studies included are of varying quality and often use different methods. Rose (2016) conducted a meta-study of 45 other studies and found effects of between 8 and 15 per cent, depending on which studies were included. Another more recent meta-study has been conducted by Polak (2019) and is based on 57 studies. Unlike Rose, who uses the estimate preferred by each author, Polak uses all 3,323 estimates in the included studies. The result of Polak's meta-study is that the effect is between two and six per cent.

There are also a few studies published in recent years. Esteve-Pérez et al. (2023) base their findings on a sample of 69 countries during the period 1986–2016. They use an updated methodology for gravity estimates and find trade effects of around 20 per cent between euro area countries. Like some of the earlier studies, they also find significant positive effects for trade between euro area countries and countries outside the monetary union. However, Campbell and Chentsov (2023), who use a range of different methods (including matching), find that previous high estimates of the effects are not robust and are likely to be much smaller.⁹

There are also a number of unpublished *working papers* from various central banks produced in recent years. They find trade increases of 10–20 per cent.

The conclusion is that there is broad support for the view that the euro has had a positive effect on trade between the countries that have adopted it, but that the size of the effect is relatively uncertain. Based on recent studies, the increase in trade may be around 10–15 per cent.

9 Matching involves using statistical methods to find the best possible comparison group.

Many studies also analyse trade between euro area countries and third countries. These trade flows are also positively affected by the euro, but the effect is weaker: perhaps half as large as the increase in trade within the euro area.

Sweden has already benefited from the third-country effects vis-à-vis the euro area. When trade between euro area countries and non-euro area countries increased, trade with Sweden also rose. This increase in trade must be deducted from the figure for trade increases between euro area countries when assessing how much Swedish trade with them could increase in the event of euro membership. Sweden's trade with the euro area could therefore rise by 5–7.5 per cent. At the same time, our trade with other countries (the third-country effect) could rise by about the same amount.

6 The euro and FDI

Foreign direct investment (FDI) occurs when a firm from one country invests in a firm in another country with the aim of gaining long-term influence over its operations. Such investments between countries can be influenced by the countries having a common currency. Free movement of capital is also one of the four fundamental freedoms of the EU single market (the other three are free movement of goods, services and persons). Free movement of capital is central to the effective functioning of the single market. For firms, this means easier access to financing, greater opportunities for investment in other member states and increased competition in the capital market, which in turn implies more efficient allocation of resources.

With regard to direct investment, the EMU Inquiry (1997) concluded:

The conclusion is that foreign direct investment – like foreign trade – do not seem to be particularly influenced by short-term exchange-rate fluctuations. But it should be emphasised that this conclusion probably does not apply when it comes to *long-term changes* in real exchange rates. (p. 52)

FDI gives rise to long-term currency flows in the form of payments for inputs or repatriation of future profits, and the value of these flows is affected by long-term fluctuations in the exchange rate.

For Sweden, the fluctuations have been very large (see Figure 3), this means that there is considerable uncertainty when a firm assesses the profitability of a direct investment. The returns from FDI are also very difficult to hedge against exchange rate fluctuations. The most difficult situation is probably when a firm builds a production facility in another country, a so-called greenfield investment. The returns from the investment will only come in the future, and of course it is impossible to know in advance how much will be sold from the new facility. In addition, the future revenues in foreign currency will materialise over many years to come. In order to hedge this investment, very long forward contracts with uncertain volumes must be entered into. Alternatively, long contracts with currency options can be used. In practice, both of these strategies tend to be too expensive. Thus, it is reasonable to expect FDI to increase between countries in the monetary union, as exchange rate fluctuations disappear when countries have the same currency.

There are two types of FDI. *Horisontal* investment involves a firm establishing production in a market that is difficult to reach through exports. In principle, the same goods are then produced in several markets, as high trade costs make it difficult to produce in one country and sell in another. *Vertical* FDI, on the other hand, involves establishing an international value chain, where a firm, for example, produces an input good in another country where the conditions for such production are better. Unlike horizontal FDI, vertical FDI benefits from low trade costs. The single market within the EU has meant very low costs for inter-country trade and has therefore stimulated vertical FDI. The value chains between component manufacturers and car factories in Europe are an example of this. The single currency, which has further reduced trade costs between countries in the monetary union, can thus be assumed to have increased vertical FDI even more.

Several empirical studies have examined how the euro has affected foreign direct investment between member states in the monetary union and vis-à-vis the rest of the world. A recurring conclusion is that

the euro has had a positive effect on FDI flows, particularly between euro area countries. In addition, FDI flows to non-euro area countries appear to have increased rather than decreased.

Petroulas (2007) shows in a panel data analysis of 22 OECD countries that the transition to the euro increased FDI between EU countries by approximately 16 per cent. The effect was particularly clear between countries that were both members of the euro area. Similar results are found by De Sousa and Lochard (2011), who estimate a gravity model and conclude that the euro has increased the FDI stocks within the monetary union by an average of around 30 per cent. Brouwer et al. (2008) have in turn shown that the expansion of the monetary union, particularly with Eastern European countries, has had a major positive impact on FDI. The conclusion is that FDI flows have risen by around 20–30 per cent for many countries. This study also finds positive trade effects, which means that trade and FDI are complementary. Flam and Nordström (2007) find no general effects of the euro on FDI, but instead that the single market has had a large and positive effect on it.

Camarero et al. (2024) use updated empirical methods in a study of American FDI in Europe. They find that although the single market is more important for FDI than the euro, the latter has nevertheless raised American direct investment by between 15 and 64 per cent. The results are consistent with Camarero et al. (2023), even though these studies use different econometric approaches.

Other relevant studies include Sondermann and Vansteenkiste (2019), who find increased flows of FDI between euro countries of between 11 and 21 per cent, and Carril-Caccia and Pavlova (2018), whose findings show that, in addition to the effect of the single market, euro membership led to an increase in FDI between euro area countries of around 20 per cent.

Current research thus points to quite large positive effects on foreign direct investment from membership of the monetary union. The increase may be in the order of 20 per cent, which is substantially greater than the trade effects.

7 International trade and productivity

It is well established in both theoretical and empirical research that trade raises production efficiency through specialisation, but there is also a link between international trade, productivity and, ultimately, economic growth. If the euro increases trade, it will therefore also have a positive effect on productivity and growth.

In the 1990s and 2000s, researchers gained access to detailed micro-data at the firm level, which led to new insights into the effects of trade. For example, studies by Roberts and Tybout (1997), Bernard and Jensen (1995) and Bernard et al. (2007) show that firms that participate in international trade differ systematically from firms that only operate in the domestic market. A key finding is that only a relatively small proportion of firms within an industry export. One reason for this is the fixed costs associated with exporting. Exporting firms are usually larger, more productive, pay higher wages, have higher capital intensity and are more technologically advanced than their non-exporting counterparts. These differences suggest that it is the most competitive firms that have the capacity to enter foreign markets, rather than exporting itself making firms more competitive.

At the same time as empirical research was being conducted, new theoretical models were developed for trade in which firms are heterogeneous. In a highly acclaimed paper, Melitz (2003) shows how international trade affects different firms in different ways. Fixed costs for establishing a presence in a foreign market mean that only the most productive firms export. Trade liberalisation implies more competition in the domestic market and causes the least productive domestic firms to be forced out. At the same time, lower trade costs mean that it becomes more profitable to export, and exporters therefore increase their output. In addition, trade liberalisation lowers the threshold for exporting, so that firms with slightly lower productivity than before can now cover their export costs and enter foreign markets.

Lower trade costs, for example due to a common currency, thus cause a redistribution of market shares to the most productive firms, which both export and sell on the domestic market, from the low-productivity firms that only sell in the latter market. This reallocation leads to an

increase in average productivity, as the least efficient firms disappear and resources are transferred to more productive activities.

At the aggregate level, lower trade costs thus lead to higher aggregate productivity through the selection mechanisms described above. But can trade also make existing firms more productive? Several empirical studies find that this is the case.

Clerides et al. (1998) use data from Colombia, Mexico and Morocco. Their analysis shows, as does that of Bernard and Jensen (1995), that it is mainly productive firms that start exporting, rather than exports causing increases in productivity. At the same time, they find some evidence that exports can have learning effects for certain firms by enabling them to adopt new technology in the markets where they sell.

Aw et al. (2000), who study manufacturing in South Korea and Taiwan, show that exporters are not only more productive, but also more inclined to invest in research and development (R&D). This suggests that the link between exports and productivity may be strengthened by innovation rather than by exports themselves. These researchers also find that firms' R&D activities often precede the start of exports, which reinforces the argument that a certain capacity and capability is required to become internationally competitive.

De Loecker (2007) analyses Slovenian companies and attempts to separate the effect of exports on individual firms' productivity from the selection effect. Using sophisticated econometric methods, he is able to show that exports in some cases actually lead to an increase in productivity – a result that supports the idea of learning by exporting – but that this effect varies between firms and industries. In addition to the selection effects, the ability to import inputs is an important link between international trade and productivity. A number of empirical studies have shown that this effect of international trade is important. Fernandes (2007) examines a period of significant variation in tariff levels between manufacturing industries in Colombia (1977–91) to see whether increased exposure to foreign competition caused productivity gains. She finds a strong positive effect of tariff reductions on productivity. Productivity improvements during trade liberalisation are linked to increased import volumes of intermediate goods, higher skill levels, investments in machinery and a redistribution of produc-

tion from smaller to more productive plants. The effect was stronger for firms in industries that initially faced lower competition.

Amiti and Konings (2007) use firm level data from Indonesia for the period 1991–2001. They find that the largest productivity gains arise from lower tariffs on intermediate goods. A 10 percentage point reduction in import tariffs caused a 12 per cent increase in productivity for importing companies; the productivity gain associated with a 10 per cent reduction in export tariffs was only 1–6 per cent. Kasahara and Rodrigue (2008) use firm level data from Chile. Their conclusion is that a firm can increase its productivity by switching from not importing to importing foreign intermediate goods. Although the magnitude of the effects varies between different estimates, even the most conservative estimate shows a positive productivity effect of 2.6 per cent when a firm starts importing. The study also points to long-term productivity gains linked to the use of imported inputs.

In summary, empirical literature based on firm level data shows how international trade generates productivity gains. These effects are consistently observed in country after country. This is due to both selection effects, in that trade favours the most productive companies, and the value of gaining access to inputs from other countries without incurring high transaction costs. Hence, there are strong theoretical arguments and empirical evidence that foreign trade has a positive impact on productivity.

8 Trade and economic growth

The potentially greatest effects of increased international trade due to the euro arise if growth increases. This can be influenced by trade both in the medium and long term. The process leading to medium-term growth is described in the Solow model.¹⁰ Lower transaction costs resulting from euro membership mean higher productivity in firms. This in turn implies higher GDP at the aggregate level. Such a one-off increase in GDP leads to growth in the medium term. The reason is that

¹⁰ The model was originally developed by the American economist Robert Solow in the 1950s and is still the basic analytical model for economic growth.

savings increase when incomes rise. Higher savings mean higher investments, which lead to a larger capital stock. This in turn means higher GDP, which again causes higher savings, and so on. The economy thus enters a growth spiral in which capital and savings increase, but as long as capital has diminishing marginal returns, the process ends when the economy reaches a new equilibrium for the capital stock. Baldwin (1992) estimates that the gains from increased trade can be doubled when this growth effect is taken into account.

Long-term growth can also be positively affected by international trade (Rivera-Batiz and Romer 1991, Grossman and Helpman 1993). There are several mechanisms that enable international trade to cause sustained higher growth in so-called endogenous growth models. These models are based on the idea that long-term growth is driven by technological advances that lead to new and better products. If society uses a larger share of its total resources for research and development, long-term growth increases. Free trade makes it easier for firms to export new products, which raises their profits. It therefore becomes more profitable to develop new products, which implies that more resources are invested in research and development. This in turn causes higher long-term growth. Another mechanism is that the ability to import inputs and specialised components makes research and development laboratories more productive. This also increases long-term growth. The mechanisms are described in detail by Baldwin and Forslid (2000).

Hence, there are compelling reasons to believe that international trade contributes to higher growth. Similarly, there is clear empirical evidence that trade affects firm level productivity. Unfortunately, it is difficult to measure exactly how strong the effects are.

The fundamental problem is that the volume of trade depends (among other things) on demand in different countries, which in turn is influenced by variables that can also affect growth. In other words, the volume of trade is endogenous. Research has therefore focused instead on measuring the effects of changes in countries' trade policies. However, there are statistical problems with this too. Recent research has used various methods to address them. Regression analysis has shifted its focus from comparing different countries to studying growth within a country following specific trade reforms. In addition, synthetic con-

trol methods have begun to be used to better investigate whether correlations are causal, as well as model-based structural methods that take advantage of the fact that changes in trade barriers differ between industries.¹¹ Irwin (2025), who reviews the literature, concludes that the studies almost universally find robust effects of trade liberalisation for developing countries. Growth in developing countries that liberalise their trade is often 1–1.5 percentage points higher, which is a very high figure. OECD countries already have relatively free trade, and therefore the potential for growth increases is smaller in these countries.

9 Conclusions

The EMU Inquiry (1997) described the advantages and disadvantages of potential Swedish membership of the euro. At that time, there were no empirical studies of monetary unions, and with regard to trade and direct investment, the report concluded that “it is not possible to substantiate that participation in the EU’s monetary union will lead to large economic gains due to reduced exchange-rate uncertainty”.¹²

This chapter summarises recent research on the effects of euro membership on trade and direct investment. An attempt is also made to estimate the transaction costs associated with Sweden’s trade with euro area countries. Finally, recent research on the effects of trade on productivity and economic growth is discussed.

The first conclusion of the chapter is that the annual transaction costs associated with currency exchange and hedging against the euro risk amount to around one tenth of a per cent of GDP. This estimate of transaction costs is close to that made in the EMU Inquiry (1997). However, there are significant differences between industries. The construction and defence industries, with very long contracts, have much higher currency hedging costs than industries with short contracts.

11 Synthetic control is a statistical method that involves creating a comparison group (control group) by combining several other countries into a “weighted average”.

12 P. 308.

The chapter's second conclusion is that the trade effects are substantially greater than those concluded by the EMU Inquiry (1997). More recent empirical research has instead found quite large trade effects from a common currency. The results vary considerably between studies, but more recent ones find that the euro has increased trade between euro area countries by around 10–15 per cent. Trade between euro area countries and third countries (including Sweden) has also been positively affected by the euro, but the effect is weaker: perhaps half as large as the increase in trade within the euro area. This effect may be due to the fact that smaller countries that join the euro gain a more liquid currency than before. Higher liquidity means lower costs for hedging against exchange rate risk in trade transactions with countries outside the euro area. This reduces trade costs with these countries, which in turn increases trade.

The third conclusion is that euro membership is positive for foreign direct investment. It is very difficult to manage the currency risks associated with long-term exchange rate fluctuations in the case of FDI. It is therefore likely that these are affected more by a common currency than trade. Empirical studies also generally find greater effects on FDI than on trade. Recent studies have found that euro membership has had positive effects on FDI between euro area countries of around 20 per cent.

If euro membership increases trade, it also has an impact on productivity growth, as emphasised in research over the past two decades. Increased trade volumes lead to selection effects where the least productive firms are eliminated, while the most productive firms increase their output. This process leads to higher aggregate productivity in the economy. In addition, research has shown substantial productivity effects when firms are able to establish international production networks and transaction costs for importing components are low. Higher productivity is closely linked to higher growth, and there are convincing reasons in the research literature that freer trade also causes higher economic growth in the long term.

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CHAPTER 3

How synchronised is the business cycle in Sweden with that in the euro area?

Jesper Hansson

1 Introduction

After a period of relatively stable global economic development lasting 10–15 years from the early 1990s, a number of major shocks have occurred in the world economy. First, there was the global financial crisis of 2008–09, which originated in the US mortgage market, then the European sovereign debt crisis of 2011–14, followed by the coronavirus pandemic in 2020 and, in its wake, the inflation crisis of 2022–24. An important part of managing these disturbances has been the adjustment of central banks' monetary policy, primarily the policy rate. If the business cycle develops in a similar way in different countries, a similar monetary policy may be desirable. If, on the other hand, there are major differences in cyclical developments, an independent monetary policy is an important instrument for stabilising the economy. Mundell (1961) introduced the concept of an optimal currency area, i.e., an area where a common currency – and thus a common monetary policy – is advantageous. Perhaps the most important prerequisite for an optimal currency area is that economic shocks are synchronised. If this is the case, a common monetary policy can help to dampen economic fluctuations, and the exchange rate between countries and regions does not need to be adjusted.

The real exchange rate between countries, i.e., the relative price level, may need to change if demand in one country develops differently than in other countries. If demand for the goods and services produced by a country decreases, its relative price level needs to be lowered, i.e., the real exchange rate to depreciate. A floating nominal exchange rate speeds up this adjustment because prices, and especially wages, are slow to change. Slower adjustment of the real exchange rate in the event of asymmetric (country-specific) macroeconomic shocks is probably the biggest disadvantage of a common currency. Another important disadvantage is that domestic interest rates cannot be adjusted to changes in inflation and the activity level, as the policy rate is set by the common central bank. The extent of these disadvantages depends, among other things, on the frequency and magnitude of asymmetric shocks.¹

The probability of being affected by an (external) asymmetric shock depends on how economically similar countries are. Two countries with a similar industry structure – similar composition of production and employment – should normally be exposed to similar external shocks in both demand and production technology. It is therefore of interest to study how similar the European economies are. However, even with a similar aggregate industry structure, there may be large differences in production in the same industry between different countries. For example, there was a big difference between Ericsson and Nokia, even though according to the national accounts they operated in the same industry. The need for an adjusted real exchange rate is ultimately determined by the combined effect of a variety of shocks.

The most common way to study differences between countries is to measure the similarity in economic development over the business cycle. If the correlation of GDP and employment is high between countries, it can be assumed that the economic disturbances have been common. However, economies may also have adapted to changing conditions, so that cyclical developments have been similar despite different shocks. In principle, it is therefore necessary to distinguish between exogenous disturbances and the adjustment to these, which

1 There are, of course, also advantages to a common currency, as highlighted in several other chapters of this book. These include reduced transaction costs in trade, less impact from sometimes undesirable exchange rate movements, and benefits that may arise from a more deeply integrated capital market.

may include changes in the real exchange rate. In practice, however, the correlation in GDP growth is usually analysed. It is then understood that differences are explained by macroeconomic disturbances that have not been fully counteracted by economic policy and real exchange rate adjustments.

It is often assumed that differences in cyclical developments are due to exogenous factors beyond a country's control. This is probably the most common reason, but there are important exceptions where domestic policy has caused the divergent developments. For example, the overheating of the Swedish economy in the late 1980s was (primarily) due to deregulation of credit markets and the subsequent credit expansion – not to any external economic event.² Nevertheless, a floating exchange rate would have been advantageous at that time, as it could have helped to dampen the economic boom and thus hopefully also mitigate the ensuing crisis. Something similar happened in several southern European euro area countries in the early 2000s. The transition to the euro led to sharply falling interest rates in these countries, which stimulated demand. This was not counteracted by sufficiently tight fiscal policy. Regardless of the reason for a divergent cyclical development, a flexible nominal exchange rate and a policy rate that can be adjusted to national needs are advantageous in such a situation. However, the disadvantages of relinquishing these adjustment mechanisms are smaller if this also reduces the risk of destabilising domestic fiscal policy.

The degree of synchronisation of business cycles is probably not independent of the exchange rate regime. A common currency most likely contributes to increased economic integration within the currency area, which normally strengthens the correlation in business cycles. Although increased trade and the resulting specialisation in production may make individual countries more sensitive to sector-specific shocks, the spread of macroeconomic impulses via greater trade and increased financial integration normally contributes to stronger economic covariation. The economy's adjustment mechanisms, including fiscal policy, are also affected by the absence of an exchange rate that can help counteract shocks. An example of studies showing how the

2 See, for example, Jonung (2000).

covariation develops during periods of common currency is Bergman and Jonung (2011), who find that business cycles in Sweden, Norway and Denmark became more synchronised during the Scandinavian Monetary Union of 1873–1913.³

The EMU Inquiry (1997), including the appendices by Hassler (1996) and Jansson (1996), studied how GDP had covaried in Sweden and a number of core EU countries, countries that were fairly certain to adopt the single currency and whose business cycles appeared to be reasonably synchronised. In this chapter, I update the analyses to cover the first 26 years of the single currency. The aim is to highlight how similar cyclical developments in Sweden and the euro area countries are and how this has changed since the late 1990s.

I focus my analysis on the 15 countries that were EU members in the mid-1990s (EU15), that is Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom. These countries have long been market economies with relatively small differences in living standards and are therefore reasonably comparable in economic terms. It is therefore most interesting to study how the business cycle in Sweden correlates with those in the other 14 countries in this group, even though it would be possible to compare with more countries outside the EU. Of the EU15 countries, twelve have adopted the euro, while Denmark, Sweden and the United Kingdom have retained their own currencies.⁴ Comparisons of individual countries' economic structure (industry composition) and economic fluctuations are made using a weighted average for the euro area. The definition of the euro area depends on data availability: either ten countries consisting of the eleven original euro area countries minus Luxembourg (EA10) or the entire euro area in 2025 with 20 countries (EA20). Luxembourg and the nine countries that joined after 1999 are comparatively small and

3 During this period, all three Scandinavian countries had a gold standard with the same gold value, 2,480 Swedish, Danish and Norwegian *kronor* per kilogram of gold. Banknotes and coins issued in any of the three countries were accepted as legal tender in all of them.

4 The United Kingdom left the EU on 1 February 2020. Denmark has retained its currency, but with a fixed exchange rate against the euro. The country therefore has no independent monetary policy, and in terms of stabilisation policy, the difference is small compared to being part of the monetary union.

do not affect the aggregate to any significant extent. The EA10's share of the total euro area (EA20) GDP in 2023 was just over 95 per cent.

2 The development of the economic structure over time

From a global perspective, the current EU countries have a fairly similar industrial structure, but there are relevant differences and developments over time are moving in different directions. This section first examines developments in the ten countries that were members when the euro was introduced as a currency in 1999.⁵ The aggregate of these ten countries (EA10) is then compared with individual euro area countries and Denmark, Sweden and the United Kingdom, which have their own currencies.

The industry structure can be measured in several ways. As in several other studies, this section focuses on employment shares calculated based on the number of people employed in each industry. (The overall results for Sweden are similar if value added shares or the proportion of hours worked in each industry are used.) The data source is EUK-LEMS, version 2024, a research project funded by the European Commission. The latest version contains data 1995–2021. Employment shares in the various industries in the euro area as a whole (EA10) and Sweden in 1995 and 2021 are shown in Table 1.

5 Greece, which adopted the euro in 2001, also has a significantly different sector structure.

Table 1 Employment shares in Sweden and the euro area (EA10), per cent

(a) Total economy

Industry (NACE code)		1995		2021	
		Sweden	EA10	Sweden	EA10
A	Agriculture, forestry and fishing	4.0	4.8	2.7	2.7
B	Mining and quarrying	0.3	0.3	0.2	0.1
C	Manufacturing	16.8	18.7	10.5	13.0
D	Electricity, gas, steam and air conditioning supply	0.6	0.6	0.6	0.4
E	Water supply; sewerage; waste management and remediation activities	0.4	0.5	0.6	0.7
F	Construction	5.2	7.6	7.4	6.3
G	Wholesale and retail trade; repair of motor vehicles and motorcycles	12.7	14.7	11.9	13.9
H	Transporting and storage	4.7	5.0	4.4	4.9
I	Accommodation and food service activities	2.5	3.9	3.2	4.8
J	Information and communication	3.0	2.3	4.5	3.2
K	Financial and insurance activities	1.9	3.0	2.0	2.4
L	<i>Real estate activities</i>	1.6	0.9	1.8	1.1
M	Professional, scientific and technical activities	4.2	4.2	6.3	6.8
N	Administrative and support service activities	3.1	4.0	5.4	7.5
O	<i>Public administration and defence; compulsory social security</i>	5.8	8.3	4.8	6.7
P	<i>Education</i>	10.4	6.2	11.0	6.6
Q	<i>Human health and social work activities</i>	18.1	8.9	17.9	12.1
R	Arts, entertainment and recreation	2.1	1.2	2.4	1.7
S	Other services activities	2.7	2.8	2.5	3.0
T	<i>Activities of households as employers; undifferentiated goods - and services - producing activities of households for own use</i>	0.0	2.1	0.1	2.1
Market sector (A-K, M-N, R-S)		64.1	73.7	64.5	71.4

(b) Manufacturing

Industry (NACE code)		1995		2021	
		Sweden	EA10	Sweden	EA10
C10-12	Food, beverages and tobacco	10.6	12.7	10.4	15.9
C13-15	Textiles, clothing and leather goods	2.5	11.1	1.3	5.5
C16-18	Wood and paper products; graphic production	16.5	9.1	12.8	6.5
C19	Manufacture of coke and refined petroleum products	0.3	0.4	0.6	0.4
C20-21	Chemicals and pharmaceuticals	3.3	5.9	3.4	6.6
C22-23	Rubber and plastics; other non-metals	6.5	9.6	7.1	8.9
C24-25	Steel and metal; metal goods	15.8	14.1	17.9	15.4
C26	Manufacture of computer, electronic and optical products	7.3	4.0	3.7	3.7
C27	Manufacture of electrical equipment	4.4	5.0	4.3	4.8
C28	Manufacture of machinery and equipment n.e.c.	12.2	9.2	13.6	11.3
C29-30	Motor vehicles and trailers; other means of transport	13.1	8.7	16.9	9.8
C31-33	Furniture and other manufacturing; repair of machinery	7.5	10.3	8.0	11.3

Sources: EUKLEMS, version 2024, and own calculations.

Sweden differs most from the euro area in terms of education (NACE sector P) and health, social care and social services (NACE sector Q). These sectors have significantly higher employment shares in Sweden than in the EA10, which means that most other sectors have lower shares. This is mainly a consequence of a larger publicly funded welfare sector in Sweden. Sectors whose output is mainly paid for by the public sector, such as health and education, and real estate activities (NACE sector L), which to a large extent consist of the estimated value in use of owner-occupied dwellings, are not particularly sensitive to business cycles.⁶ They are not affected in the same way by exogenous asymmetric shocks, the effects of which could be mitigated by a floating exchange rate. It is therefore interesting to also study similarities

6 The same applies to households' production of various goods and services for their own use (NACE sector T), which is, however, small in Sweden.

within the market sector, i.e., those industries whose production is mainly sold on private markets. This sector accounts for approximately 65 per cent of employment in Sweden and just over 70 per cent in the euro area. Several previous studies have also specifically examined the composition of the manufacturing industry, which sells a comparatively large proportion of its output for export and may therefore be more affected by a floating nominal exchange rate.

2.1 Differences in the development of the industry structure since the mid-1990s

Grodzicki (2014) studied how employment shares of different industries developed between 1970 and 2006 in the EU15 and between 1995 and 2006 in the EU as a whole (EU25).⁷ He calculated Krugman's specialisation index, which is defined as the absolute value of the differences between the employment shares in country i and the employment shares in a comparison country (a comparison region) j , summed across the n industries of the economy:

$$KSI_{i,j,t} = \sum_{k=1}^n \left| \frac{y_{i,t}^k}{Y_{i,t}} - \frac{y_{j,t}^k}{Y_{j,t}} \right|$$

$Y_{i,t}$ indicates total employment in country i in year t . The index can take values between 0 (identical industry structure) and 2 (completely different industry structure). The overall conclusion of the article was that the EU15 economies had become more similar over time, particularly in the manufacturing industry, but that differences in knowledge intensity in the service industries had increased. In the larger EU25 group, no trend in the degree of homogeneity could be seen during the period 1995–2006, despite the transition of the former Eastern European countries from planned to market economies.

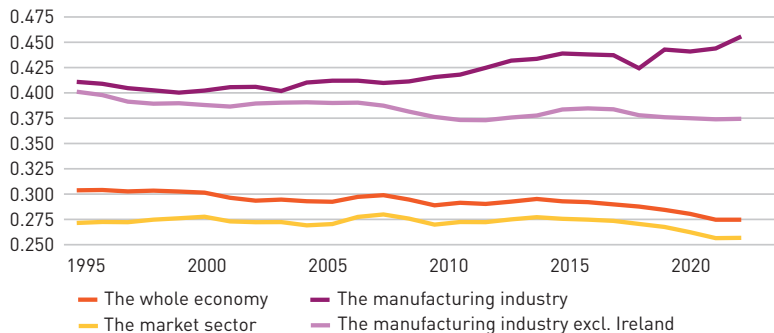
Hansson and Sjöholm (1996) compared Sweden's industry structure in the manufacturing sector with 13 other OECD countries, including both those that could potentially join the European monetary union

7 Employment is measured as the number of hours worked. EU25 refers to the 25 countries that were members in the mid-2000s.

and other countries such as the United States and Japan. They calculated specialisation indices in the same way as Grodzicki (2014) but used value added shares instead of employment shares. The conclusion was that in 1993, the Swedish manufacturing industry was most similar to that of the United States and Finland. The study did not find greater similarities between Sweden and potential members of the monetary union than between Sweden and OECD countries for which membership was not an option.

The overall development in the euro area (EA10) according to my calculation can be illustrated by the mean value of the specialisation index for all $10 \times 9/2 = 45$ pairwise comparisons between the ten countries. The differences in employment shares across the entire economy between the ten euro area countries show a slight downward trend between 1995 and 2021 (see Figure 1). The differences are slightly smaller in the market sector, but the trend over time is similar. The larger differences for the economy as a whole are mainly due to differences in the size of the public sector, which affects the size of the education and health and social care sectors.

Figure 1 Average specialisation index for the original euro area countries (EA10), 1995–2021



Note: The index can take values between 0 (complete similarity) and 2 (complete dissimilarity).
Sources: EUKLEMS version 2024 and own calculations.

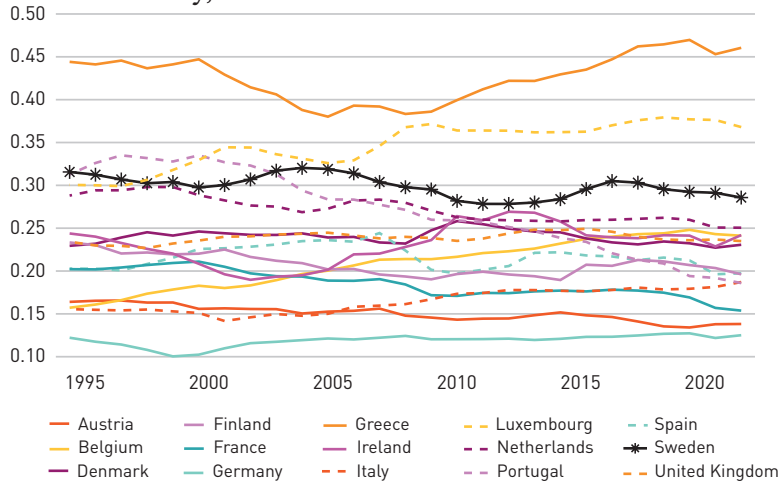
The differences within manufacturing are substantially greater and have increased over time throughout the euro area (EA10). However, this is due exclusively to developments in Ireland, where, among other things, the share of employment in the chemicals and pharmaceuticals industry (NACE sectors C20–21) has risen much more than the euro area average. Excluding Ireland, differences within industry have also narrowed somewhat over time.

The average value of the specialisation index is unweighted, so the trend may be driven by small countries becoming more similar to their neighbouring countries, which have not necessarily become more similar to each other. In order to study how the industry structure has developed in individual countries – including Sweden – compared with other EU countries, the specialisation index for all individual EU15 countries in relation to the aggregate of the ten euro countries EA10 is presented below.

2.2 Development of the industry structure in individual countries

The specialisation index for the whole economy in the 15 old EU countries is shown in Figure 2. By definition, the difference is smaller in the large countries, as these have a greater impact on the aggregate industry structure for the entire EA10 than a small country. Germany, which accounted for around 30 per cent of total employment in the ten euro countries during the period, has the lowest specialisation index. However, Austria has the second lowest index value, substantially lower than several larger countries. The countries whose industry structure most closely resembles that of the euro area as a whole are Germany, Austria, France and Italy. Greece stands out, with a consistently greater difference than the other countries. This is mainly due to a much higher proportion of employment in agriculture, forestry and fishing (NACE sector A). Sweden is the country with the largest difference in employment shares compared with the euro area after Greece and Luxembourg. As noted earlier, this is largely due to the larger public sector in Sweden.

Figure 2 Specialisation index compared with the euro area, whole economy, 1995–2021

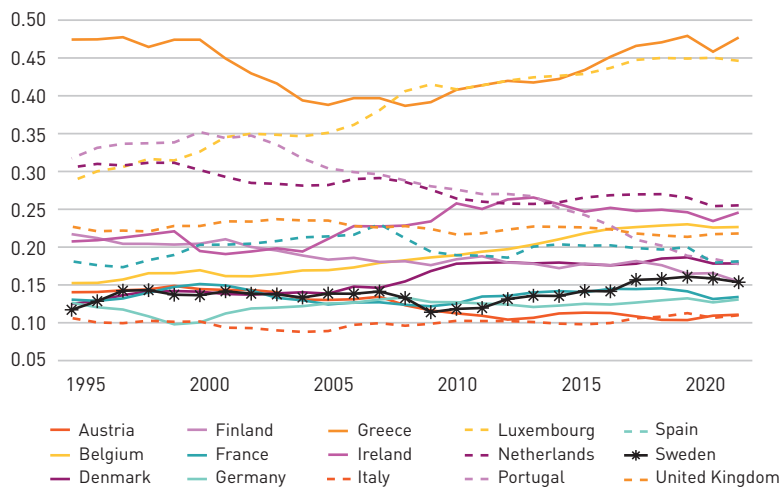


Note: The index can take values between 0 (complete similarity) and 2 (complete dissimilarity).
Sources: EUKLEMS version 2024 and own calculations.

It is difficult to discern general trends in developments over time in the various countries. Portugal is the country that has shown the greatest convergence in industry structure during the period. Sweden, Finland, Denmark, the Netherlands and France have also become more similar to the euro area. The specialisation index for the economy as a whole shows a slight downward trend in most countries, which can be explained in part by reduced differences in the size of the public sector. Only Luxembourg has seen a significant increase in differences in industry structure, but this is of little relevance as the country is so small and a significant proportion of its workforce resides in neighbouring countries.

If we focus on the industry structure in the market sector, a somewhat different picture emerges (Figure 3). Greece and Luxembourg are still the most different from the euro area, but for the other countries the differences are generally much smaller, with lower index values in Figure 3 than in Figure 2. For Sweden, the decline in the index value is particularly large, and in the market sector, the industry structure in Sweden is very similar to that in the euro area.

Figure 3 Specialisation index compared with the euro area, market sector, 1995–2021



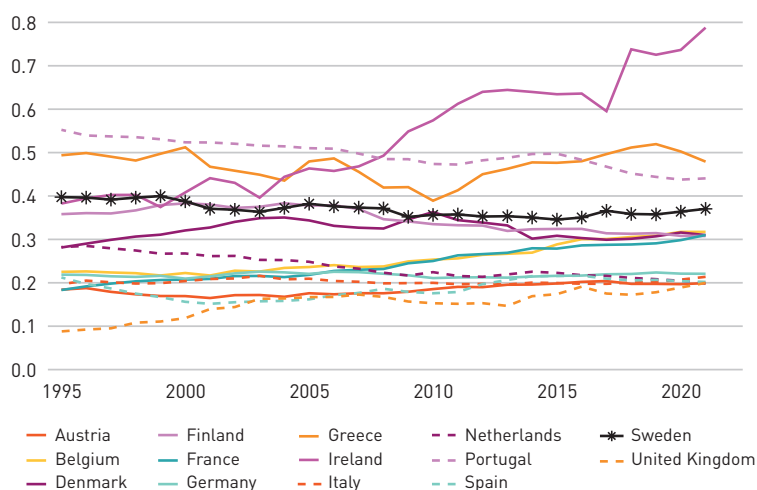
Note: The index can take values between 0 (complete similarity) and 2 (complete dissimilarity).
Sources: EUKLEMS version 2024 and own calculations.

The specialisation index in the market sector for Sweden has remained relatively unchanged over time and ranks between second and fifth in the group of 15 countries. In other words, only one to four countries have had more similar employment shares compared with the euro area. Sweden has had roughly the same index value as France and Germany for most of the period. The Netherlands has become more similar to the euro area, while Luxembourg, Ireland and Belgium have become more different. For the other nine countries, the differences measured by the specialisation index are roughly the same in 2021 as they were in 1995.

Since the manufacturing industry is probably the most exposed to exogenous asymmetric cyclical disturbances, it may be interesting to study the differences within this industry. The specialisation index for all 15 countries, calculated for 12 sub-sectors within manufacturing, is shown in Figure 4. Here, Sweden deviates more from the euro area than for the market sector (Figure 3). Only Ireland, Greece and Portugal have a more deviant industry structure. Sweden stands out with a higher

share of employment in the motor vehicle and wood products industries, and a smaller proportion of employment in the food and textile industries (Table 1). However, in 2021, manufacturing accounted for only 10.5 per cent of total employment in Sweden, down from 16.8 per cent in 1995, so the importance of these differences should perhaps not be exaggerated. There is also a slight tendency for the differences to decrease over time.

Figure 4 Specialisation index compared with the euro area, manufacturing, 1995–2021



Note: The index can take values between 0 (complete similarity) and 2 (complete dissimilarity).
Sources: EUKLEMS version 2024 and own calculations.

2.3 Conclusions about differences in industry structure

It would be going too far to describe in detail the developments in individual countries, including Sweden, which would be necessary in order to understand and possibly predict future developments. The overall conclusion is that the differences in industry structure within the market sector between Sweden and the euro area are small. Most of the

current euro area countries in the EU15 have greater differences than Sweden, and this has been the case throughout the period 1995–2021.

Looking at the economy as a whole, i.e., including sectors whose production is mainly financed by the public sector (education and health and social care), Sweden's industry structure differs substantially from that of most euro area countries, although the differences have narrowed somewhat over time. However, the risk of being exposed to an asymmetric economic shock is not likely to be higher because Sweden has a larger, mainly publicly funded, workforce in the education and health and social care sectors. The benefits of having an independent monetary policy and an own currency to counteract any disturbances in demand for education and healthcare are likely to be limited. It is therefore more reasonable to base the conclusions on differences within the market sector.

The differences within manufacturing are more relevant to consider. Sweden has a different composition of manufacturing, with a larger share of employment in the cyclically sensitive motor vehicle and wood products industries, among others. This means that Sweden would probably be hit somewhat harder than the average euro area country by a global economic downturn in these industries. Overall, however, employment there (NACE industries C16–18 and C29–30) in 2021 accounted for only 3 per cent of total employment in Sweden, so even if there were an economic downturn in these industries, it is unlikely that the economy as a whole would suffer a significant decline in employment.

3 Synchronisation of business cycles between EU15 countries

Although the overall industry structure is fairly similar in the EU15 countries, cyclical developments have often differed. Bayoumi and Eichengreen (1993) were the first to make what would become a flood of empirical studies on the covariation of European business cycles prior to the introduction of the euro. Among other things, they compared correlations between EU countries and between eight US

regions. One conclusion was that EU countries were exposed to greater asymmetric shocks than the American regions. At the same time, the differences between Germany and some core countries in the EU were smaller. However, the differences between the core countries and other countries (the periphery) were greater. Campos and Macchiarelli (2016) replicated Bayoumi and Eichengreen's study, using 25 years of new data. They found that the differences between the core and the periphery have decreased over time.

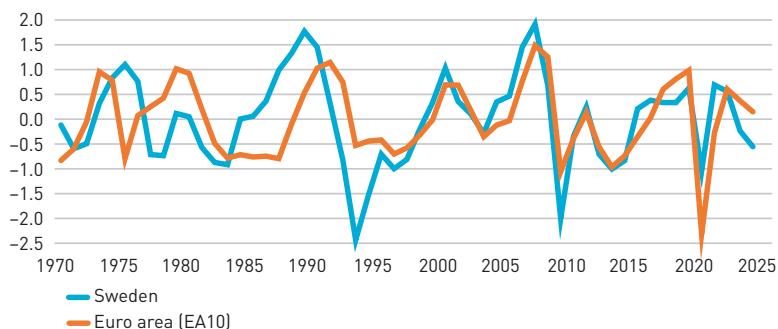
Two appendices to the EMU Inquiry (1997), Hassler (1996) and Jansson (1996), analysed the covariation of the Swedish economy with that of other OECD countries, both potential participants in the monetary union and other countries, during the period up to the mid-1990s. The results of the two studies differ somewhat due to different data and methodological choices, but both found a fairly high degree of co-variation in cyclical developments in a core group of countries consisting of Germany, Austria, France and the Netherlands. The covariation between the Swedish economy and these core countries and other EU countries was much lower. However, the EMU Inquiry (1997) considered these results difficult to interpret. The difference in cyclical developments between Sweden and other EU countries could be due to the fact that we had pursued a different stabilisation policy, including several devaluations of the Swedish *krona* during the 1970s and 1980s.

Since the mid-1990s, literature in this area has grown exponentially, with the use of new methods and data sources. The results vary considerably, but the meta-study by Campos et al. (2019) finds that correlations within the EU are generally higher after the introduction of the euro in 1999 than before. This applies to both countries within and outside the euro area. Estimates based on quarterly data or econometric estimates of supply and demand shocks generally show a lower degree of synchronisation than estimates based on annual data. The choice of method for calculating the cyclical position also plays a role in the results.

3.1 Cyclical developments in the EU15 countries

In this section, the cyclical position is measured using the GDP gap, i.e., the percentage deviation of GDP from its trend. Figure 5 illustrates the GDP gaps in Sweden and the euro area, using annual data for the period 1970–2024.⁸ The trend is calculated using the most common method, known as the HP filter.⁹ This gives GDP gaps that are fairly similar to those regularly reported by the European Commission and the OECD in their economic reports. Other methods of calculating the trend produce estimates of the GDP gap that may look quite different. This affects the correlations between GDP gaps, but the ranking between countries and time periods is less sensitive. This means that if the GDP gap in France is substantially more strongly correlated with that of the euro area than Finland's GDP gap, this is almost always the case, regardless of which reasonable method is used to calculate the trend.

Figure 5 GDP gap in Sweden and in the euro area, 1970–2024, per cent of potential GDP



Sources: Eurostat, OECD and own calculations.

8 As before, the euro area is represented by the ten original euro area countries (EA10), which account for approximately 96 per cent of the GDP of the entire euro area (EA20). For Ireland, GNI is used instead of GDP for 1995–2024 to avoid the extreme variations in GDP caused by the way profits of multinational companies are reported, as Ireland is home to a disproportionately high number of such companies.

9 The HP filter is a statistical method for calculating a trend in data. The smoothness of the trend is determined by the smoothing parameter, which in this case has been set to the standard value of 100.

The GDP gaps in Sweden and the euro area are strongly correlated and have had a similar amplitude since the mid-1990s. Volatility in a smaller economy such as Sweden's is usually higher than in a larger economy such as the euro area. If one looks closely at the figure, one can see that this was the case until 2015. The greater volatility in the euro area thereafter is a consequence of the larger decline in GDP during the coronavirus pandemic in 2020. It is also clear to the naked eye that the correlation between GDP gaps has increased after the turn of the millennium. The cyclical differences were thus greater before the introduction of the single currency in 1999 and the referendum on the euro in Sweden in 2003 than in recent years.

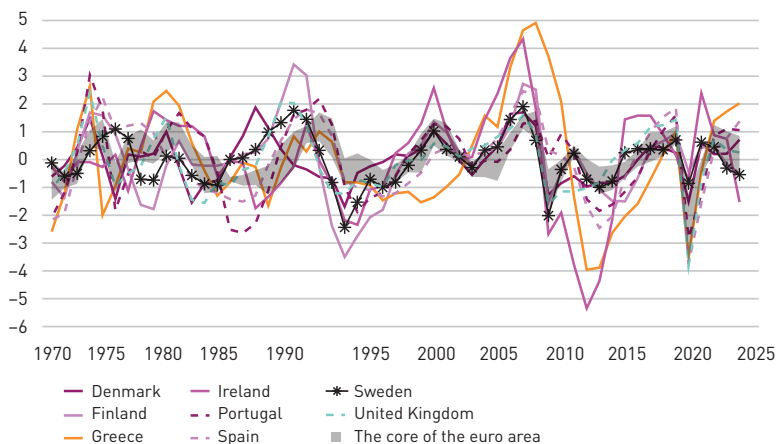
During the 2000s, Sweden's GDP gap rarely deviated by more than half a percentage point from that of the euro area. Apart from the pandemic year of 2020, the largest deviations were in 2009 and 2024, when Sweden had a much more negative GDP gap than the euro area. In both of these years, the *krona's* exchange rate against the euro was weak – the GDP gap would probably have been even more negative in Sweden without the stimulus from a weak *krona*. However, it is mainly the tourism industry and cross-border shopping that are affected quickly by a weaker exchange rate. Exchange rate fluctuations have little effect on output in manufacturing in the short term. Profitability is obviously affected, which in turn can affect investments in production capacity, but these take a long time to get started.¹⁰

Figure 6 illustrates GDP gaps in a number of individual EU15 countries. The GDP gaps in the core euro area, represented here by Austria, Belgium, France, Germany, Italy and the Netherlands, are shown as a shaded area indicating the highest and lowest GDP gaps within this group of six countries. The difference between GDP gaps within the core group has been relatively small throughout the period 1970–2024, rarely exceeding one percentage point. Economic activity has thus been synchronised within this group of countries. The business cycle in the other EU15 countries, apart from Ireland and Greece, has become more synchronised with that of the core countries since the

¹⁰ See Chapter 5 by Flodén for more on how the weakening of the *krona* against the euro in 2008–09 contributed to a different macroeconomic development in Sweden than in Finland.

mid-1990s.¹¹ The GDP gap in Sweden has been almost within the range of the GDP gaps of the core countries in every single year since 1995.

Figure 6 GDP gap in individual EU15 countries, 1970–2024, per cent



Note: Shaded areas indicate the highest and lowest GDP gaps among the six core euro area countries, i.e., Austria, Belgium, France, Germany, Italy and the Netherlands.

Sources: Eurostat, OECD and own calculations.

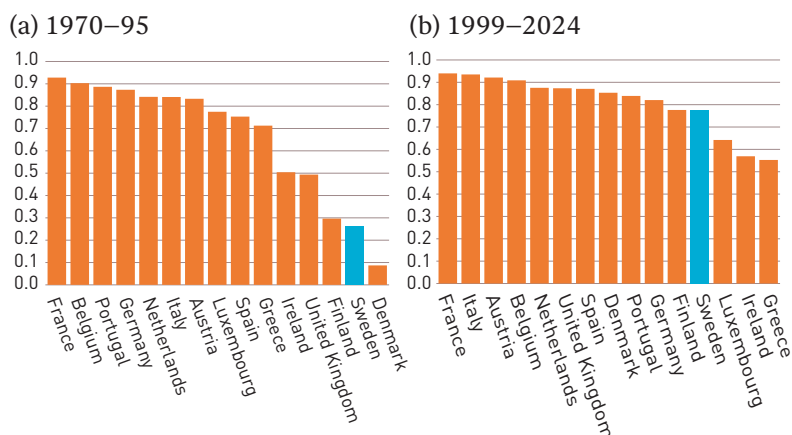
3.2 Synchronisation of business cycles before and after the introduction of the euro

The fact that business cycles, measured by the GDP gap, have become more synchronised between the EU15 countries can be illustrated more formally by calculating correlations between each country's GDP gap and the GDP gap in the euro area as a whole for different time periods. Figure 7 shows correlation coefficients calculated for two periods of equal length, 1970–95 and 1999–2024. The earlier period mainly covers the years analysed in the EMU Inquiry (1997), while the latter period covers the 26 years since the introduction of the euro. The correlation is generally higher during the latter period. Only in Portugal,

11 The GDP gap in Luxembourg deviates quite substantially from that of the core countries and has been excluded from Figure 6.

Luxembourg and Germany has the correlation decreased slightly. The largest increase in correlation has occurred in the three Nordic countries and the United Kingdom. The GDP gaps in the Nordic countries were very weakly correlated with the euro area gap during the earlier period. After 1999, the correlation increased sharply in Sweden and even more so in Denmark and Finland. In these three countries, the GDP gap is still less strongly correlated with the GDP gap in the euro area than in most other EU15 countries, but the difference is fairly small. In the latter period, only Greece, Ireland and Luxembourg stand out with a substantially weaker correlation.

Figure 7 Correlation with GDP gap in the euro area (EA10)

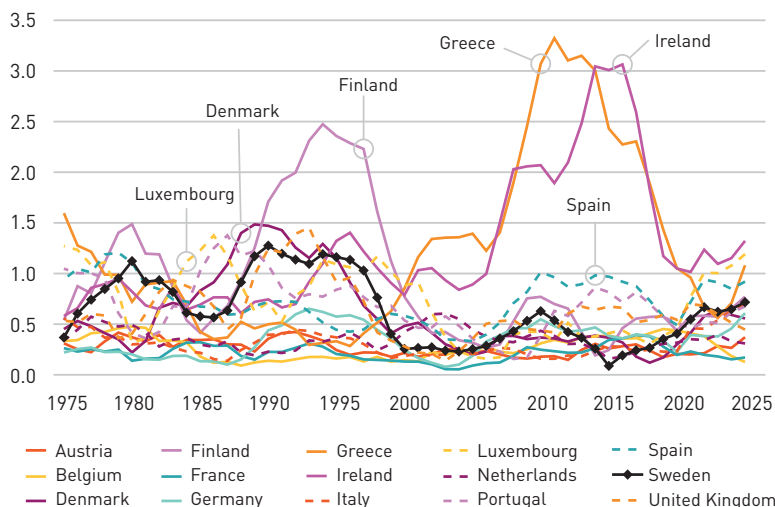


Sources: Eurostat, OECD and own calculations.

For the business cycle to be considered synchronised, it needs to be both strongly (positively) correlated and have a similar amplitude. If, for example, the GDP gap in Sweden is perfectly correlated with that in the euro area, but is always twice as large in absolute terms, it would be advantageous to have a separate monetary policy that could stabilise GDP more than the ECB's common monetary policy does. To remedy the problem of different amplitudes in the gaps and also to study developments over time, I have calculated the absolute value of the difference between the GDP gaps in individual countries and in the euro

area. The measure varies greatly between individual years, and in order to analyse developments between business cycles, five-year moving averages are reported in Figure 8.¹²

Figure 8 Degree of synchronisation of GDP gaps, 1975–2024, percentage points



Note: Absolute value of difference to the euro area, five-year moving average, percentage points. Sources: Eurostat, OECD and own calculations.

In the early 1990s, Denmark, Finland, Sweden and the United Kingdom had the greatest deviation from the business cycle in the euro area. However, since the introduction of the euro, the deviation for all four countries has been considerably smaller. During this period, Greece and Ireland have instead had the largest deviations, which also explains the low correlation for these countries in Figure 7. Sweden had a low deviation in 2000–2019, at times lower than the average even for the core countries of the euro area, but the difference has increased in the 2020s. This is due both to stronger GDP growth in Sweden during the

¹² A business cycle can be assumed to last at least five years. Including more years in the calculation of the average value gives a more even development, but at the cost of poorer opportunities to analyse shorter periods.

pandemic in 2020–21 and to a greater slowdown when inflation and interest rates rose in 2023–24. Throughout the period 1999–2024, the average absolute deviation was less than in Sweden in seven of the 15 comparison countries, but the differences are fairly small, as the correlation analysis also shows.

Overall, business cycles in Denmark, Finland and Sweden have thus become more synchronised with those in the euro area during the recent decades. Admittedly, this is probably largely due to the fact that these countries were affected by both the 2008 financial crisis and the 2020 pandemic in a similar way to the euro area as a whole. Although smaller, more normal economic fluctuations may not be as synchronised, it is precisely the larger economic downturns that are most important for the choice of exchange rate regime. With the support of fiscal policy, the economy can more easily adapt to a small asymmetric shocks without the need to change the nominal exchange rate. It is really only in the event of major and prolonged economic disturbances that an independent monetary policy and exchange rate variation significantly facilitate adjustment.

4 The degree of synchronisation of the labour market situation

The difficulties involved in estimating a relevant measure of potential GDP are well known in both statistical literature and practical policy. The purpose of using the GDP gap is to reflect resource utilisation, i.e., the amount of spare production capacity in the economy. However, GDP can sometimes be temporarily high without resource utilisation being unusually high, as a result of a temporary rapid increase in productivity. In such a situation, the deviation of employment from the trend may be a better measure of resource utilisation, even though it does not take into account the capacity utilisation of the real capital stock. Furthermore, one may wonder whether stabilising employment is not, in practice, an overriding objective of economic policy. Employ-

ment gaps are probably more relevant to citizens than GDP gaps.¹³ This does not preclude stabilisation policy in practice focusing on the GDP gap, as it usually changes before the employment gap and it takes time to implement economic policy measures, and even longer for them to take full effect. However, when studying cyclical developments retrospectively, it is perhaps more relevant to study the employment gap, as it is more closely linked to resource utilisation and welfare.

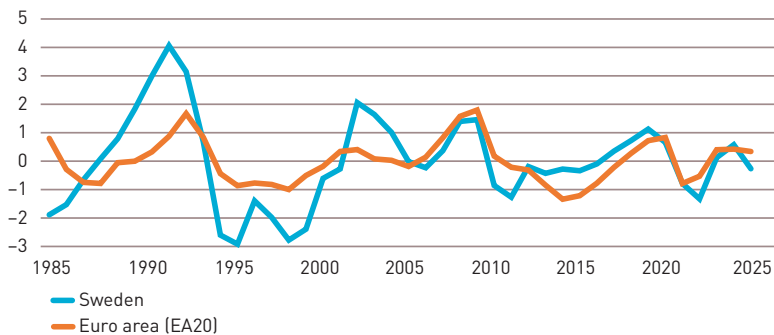
The employment gap is calculated as the difference between the actual and the potential employment rate. The employment rate is defined here as employment in relation to the population aged 20–64. The potential employment rate is reasonably stable. It is determined by structural and demographic factors that change slowly. A high proportion of young people aged 20–24, many of whom are studying, leads to a lower average employment rate for the entire 20–64 age group. Stronger economic incentives to participate in the labour force and to be employed, for example in the form of earned income tax credits, raise the employment rate. However, these changes affect the (potential) employment rate slowly and quite independently of the business cycle. The potential employment rate can therefore be estimated using a statistically calculated trend, such as the HP filter. In the rest of this section, I repeat the calculations from the previous section, but with the employment gap as a measure of the business cycle.

13 An alternative measure would be unemployment, which strongly correlates with employment because the supply of labour is relatively stable. I prefer the employment gap because it is a broader measure that is more closely linked to resource utilisation in the labour market, but the results of the empirical analysis should be fairly similar.

4.1 Synchronisation of the employment gap in the EU15 countries

Figure 9 shows the employment gap in Sweden and the euro area calculated using annual data for the period 1983–2024.¹⁴ The biggest difference between the employment gaps is that the fluctuations in Sweden were significantly greater than in the euro area until around 2005. After that, the differences are considerably smaller, at most around one percentage point, even though developments in individual years vary somewhat. For example, the employment gap was more negative in Sweden than in the euro area in 2009–10, but less negative in 2013–14. In order to assess whether the deviations are problematic, they need to be compared with the situation in other countries.

Figure 9 Employment gap in Sweden and the euro area, 1983–2024, per cent of potential employment

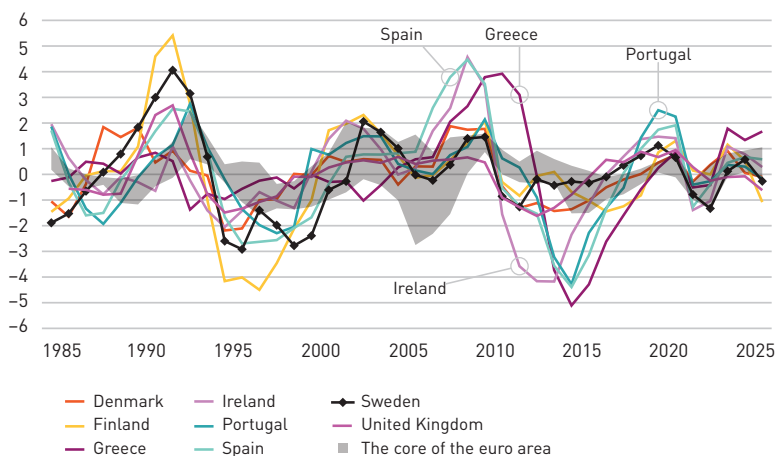


Sources: Eurostat, OECD and my own calculations.

¹⁴ As in the previous section, the trend is calculated using an HP filter with a smoothing parameter 100. OECD data on employment rates for the EU15 countries start in 1983, except for the United Kingdom, where the first observation is in 1984, and Austria, where the series starts in 1994. Eurostat, which compiles official data from national statistical offices and calculates the aggregate for the euro area, unfortunately does not publish any data on employment rates prior to 1995. I have used OECD data for 1983–94 and Eurostat data for 1995–2024. The euro area refers to 19 countries in OECD data and 20 countries in Eurostat data; the additional country is Croatia, which, however, does not significantly affect the average. The original euro area countries account for over 90 per cent of employment in the current euro area.

Figure 10 shows the employment gaps in a number of individual EU15 countries. As with the GDP gaps in Figure 6, the gaps in the core euro area are shown as a shaded area indicating the highest and lowest gaps within this group of six countries. Until 2007, the differences between the employment gaps in the core countries were greater than between the GDP gaps (see Figure 6), but since then they have rarely exceeded one percentage point. The other nine countries have periodically had greater deviations in their employment gaps. Since 2005, Ireland, Greece, Portugal and Spain in particular have had larger differences in the gap. During this period, the employment gap has only shown marginally larger differences in Sweden than in the core countries of the euro area.

Figure 10 Employment gap in individual EU15 countries, 1983–2024, per cent of potential employment



Note: The shaded area shows the highest and lowest GDP gaps among the six core euro area countries, i.e., Austria, Belgium, France, Germany, Italy and the Netherlands.

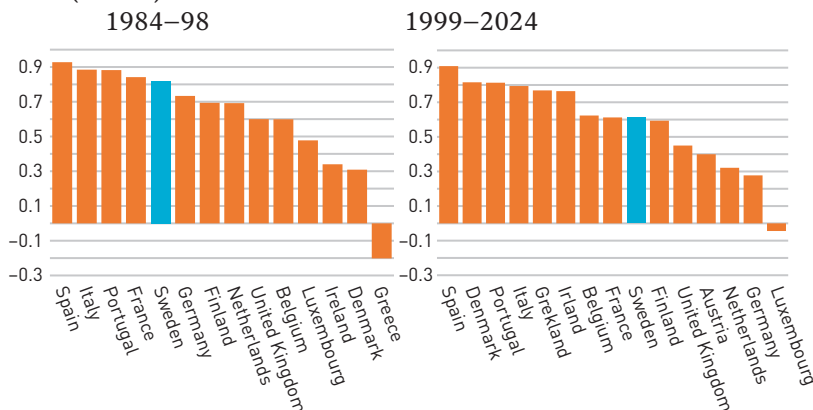
Sources: Eurostat, OECD and own calculations.

4.2 Correlation of employment gaps before and after the introduction of the euro

The correlation between individual countries' employment gaps and the corresponding gap in the euro area during the periods before and after the introduction of the euro is shown in Figure 11. The correlation has not changed much (less than 0.1 points) for Belgium, Finland, Italy, Portugal and Spain, where it is high in both periods. In France, the Netherlands, Sweden and the United Kingdom, the correlation has decreased slightly (more than 0.1 points), but in Luxembourg and Germany it has decreased substantially (more than 0.4 points). In Denmark, Greece and Ireland, the correlation has increased. There appears to be a slight tendency for the correlation to have increased in the more peripheral euro area countries.

Somewhat surprisingly, Austria, the Netherlands, Germany and Luxembourg are the countries with the lowest correlation with the euro area employment gap during the period since the introduction of the euro, 1999–2024. This is partly due to divergent developments in the years prior to the financial crisis, but also to the fact that the amplitude of the gaps in some southern European countries has been greater and has thus had a greater impact on the euro area gap. It is therefore difficult to draw conclusions based on the size of the correlations. A high correlation does not necessarily mean that the size of the gaps is the same. Nevertheless, it is clear that Sweden does not stand out as a country where the employment gap deviates more from the euro area than in many other countries.

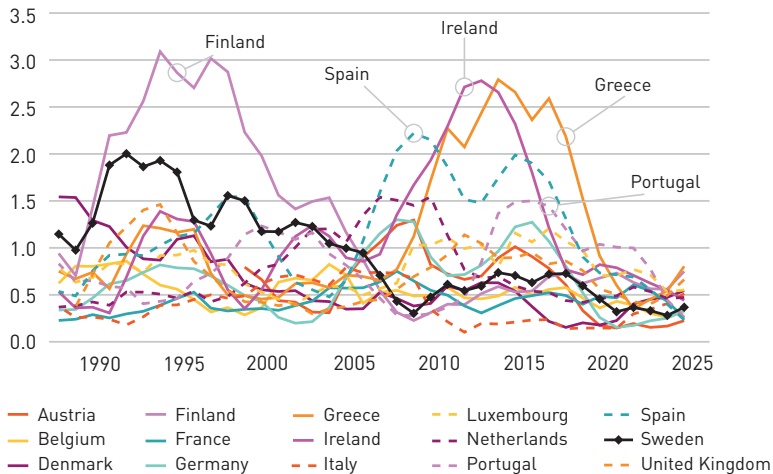
Figure 11 Correlation with the employment gap in the euro area (EA20)



Sources: Eurostat, OECD and own calculations.

In order to study developments over shorter periods and also take into account differences in the amplitude of the employment gaps, I have, as for the GDP gap, calculated the absolute value of the difference between the employment gaps in the individual countries and in the euro area (see Figure 12). From having the largest average deviation together with Finland in the early 1990s, Sweden has in recent years been one of the countries with the smallest deviation. Only Germany and Austria have consistently had a smaller average absolute deviation in the employment gap compared with the euro area over the past eight years. In the last year, 2024 (which refers to the average absolute deviation 2020–24), Belgium, France, Portugal and Spain also have a slightly lower deviation than Sweden. Measured in this way, the labour market situation in Sweden since the beginning of the 2007 financial crisis showed greater similarities with that of the euro area as a whole than was the case in most other EU15 countries.

Figure 12 Degree of synchronisation of employment gaps, 1987–2024, percentage points



Note: Absolute value of difference to the euro area, five-year moving average, percentage points.
Sources: Eurostat, OECD and own calculations.

5 Inflation since the introduction of the euro

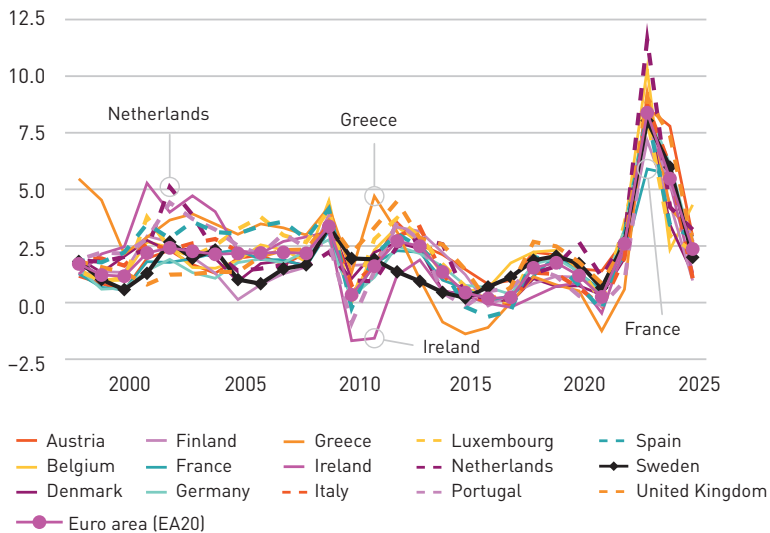
The business cycle is mainly a real concept that refers to variations in economic activity, such as GDP and employment. However, monetary policy is primarily aimed at stabilising inflation, and it may therefore be interesting to also describe how synchronised inflation developments have been in order to shed light on the question of whether Swedish membership of the monetary union, and thus the absence of an own monetary policy, would lead to more volatile inflation.

Eurostat's official statistics for the harmonised index of consumer prices (HICP) are available for all countries from 1997 onwards. In earlier periods, inflation was higher, more volatile and less synchronised between countries, as monetary policy objectives differed. From 1999, when the euro was introduced as a currency, the euro area coun-

tries has had an inflation target of 2 per cent. Sweden and the United Kingdom had already had explicit inflation targets of 2 per cent since the early 1990s, while Denmark and Greece had fixed exchange rates against the euro and thus had an implicit inflation target – the same as in the euro area. Figure 13 shows inflation in the EU15 countries since 1997. It is striking how high the correlation is, even before the sharp rise in inflation in 2022–23. It is really only in Greece and Ireland that inflation, like the business cycle as measured by GDP and employment gaps, has at times deviated substantially from inflation in the euro area as a whole. When inflation rose sharply in 2022, the spread between individual countries increased considerably, which can largely be explained by differences in energy price developments. In France, inflation rose less than in other countries, as it was less dependent on fossil gas and has regulations on household electricity prices. In Sweden, households largely have variable electricity prices, and inflation is therefore affected strongly and quickly by rising electricity prices at the producer level. These differences would not be affected if Sweden were to adopt the euro as its currency. Neither the Riksbank nor the ECB adjusts monetary policy in response to temporary variations in energy prices.

Although inflation in Sweden in individual years has not deviated more from that in the euro area than for most other countries, the correlation with euro area inflation is slightly lower until the rise in inflation in 2022. In Sweden, inflation fell below the inflation target of 2 per cent in 2004–07, while it remained at just over 2 per cent in the euro area. During the financial crisis year of 2009, inflation fell significantly less in Sweden and was closer to the inflation target as a result of the weakening of the krona exchange rate. In 2011, inflation fell below the inflation target in Sweden again, while it rose above it in the euro area. On this occasion too, the development of the krona exchange rate helped to explain the difference. Inflation in Sweden would probably have been somewhat more synchronised with inflation in the euro area if we had not had a floating exchange rate, but that does not necessarily mean that inflation would have been more stable.

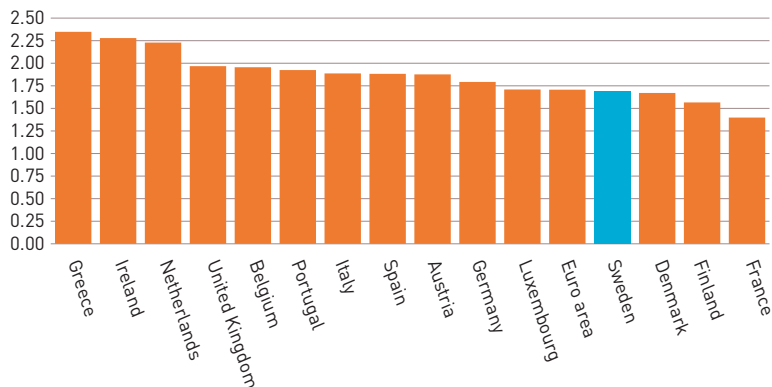
Figure 13 Inflation (HICP) in the EU15 countries and the euro area, 1997–2024, per cent



Sources: Eurostat and own calculations.

Figure 14 shows the average variation in inflation in individual countries during the period 1999–2024. Inflation has been relatively stable in Sweden, but the differences between countries are not particularly large. Variations in the *krona* exchange rate have probably contributed to reducing fluctuations in Swedish inflation somewhat, at least until 2021. However, during the sharp rise in inflation in 2022–23, the weakening of the *krona* contributed to higher inflation in Sweden, which nevertheless did not rise more than in the euro area. Inflation has been slightly more stable on average in both Denmark and Finland than in Sweden, despite, or perhaps because of, their fixed exchange rates against the euro.

Figure 14 Variation in inflation, standard deviation, 1999–2024, percentage points



Sources: Eurostat and own calculations.

In summary, inflation in Sweden has been roughly as stable as in comparable EU15 countries. The floating exchange rate and independent monetary policy, with a target of stable inflation around 2 per cent, have thus not led to significantly more stable inflation in Sweden. However, a more in-depth analysis is needed to assess whether the fluctuations would have been greater or smaller if Sweden had adopted the euro as its currency.

6 Summary and discussion of the results

After a brief summary of the empirical results, in this section I discuss some factors that may influence the degree of cyclical synchronisation and how they are likely to develop in the future.

6.1 Industry structure

Sweden's industry structure is somewhat more similar to that of the euro area as a whole than most euro area countries', at least in the mar-

ket sector. Taking the economy as a whole, Sweden differs more than most other countries, as we have a larger public sector. However, the differences have decreased somewhat over time. The composition of manufacturing is also more diverse in Sweden than in most other EU15 countries. There is no clear trend in how Sweden's relative industry structure in the market sector has developed during the period 1995–2021. Based on this information, the probability of Sweden being affected by an asymmetric shock, and thus experiencing other cyclical developments than the euro area, is roughly the same as in most major euro area countries. Nor has there been any clear change since the mid-1990s.

6.2 Business cycle measured by GDP gap

The business cycle, measured by the GDP gap, in Sweden and other Nordic EU countries was fairly weakly correlated with the cycle in the euro area until the mid-1990s. In general, business cycles in EU countries were only marginally more synchronised during the period 1999–2024 than during the equally long period 1970–1995. In Sweden, as in Denmark and Finland, however, the cycle has become substantially more synchronised with that of the euro area. During the latter period, the correlation is almost as high as for the core countries of the euro area. This development can be partly explained by two major common shocks, the financial crisis of 2008 and the coronavirus pandemic of 2020, but increased economic integration through trade in goods and services, increased labour mobility and deeper financial integration have probably also contributed.

6.3 Business cycle measured by employment gap

The employment gap, which is an alternative measure of economic activity, differed considerably between Sweden and the euro area until around 2005. Nevertheless, the correlation between the Swedish employment gap and that of the euro area was comparatively high during the period 1984–98, and then declined during the period 1999–2024. The fact that the employment gap in Sweden neverthe-

less became more similar to that in the euro area can be explained by the fact that the fluctuations (amplitude) in Sweden's employment gap have decreased. Since 2005, the difference between the Swedish employment gap and that in the euro area has been smaller than the corresponding difference for most other EU15 countries.

6.4 Inflation

Inflation in almost all EU15 countries has been very strongly synchronised with inflation in the euro area as a whole since the introduction of the euro in 1999. Inflation in Sweden has been somewhat more stable than in most euro area countries, which may be explained by the floating exchange rate. For example, the weakening of the Swedish *krona* during the financial crisis of 2008–09 contributed to inflation closer to the inflation target in 2009. However, inflation has been even more stable in both Denmark and Finland, and the stable inflation in Sweden is probably mainly attributable to other factors.

6.5 Interpretation of the results

Compared with the situation in the mid-1990s, most indicators suggest that economic fluctuations in Sweden and the euro area have become more synchronised than before. This is probably a result of several factors, including increased economic integration through more trade, greater cross-border labour mobility, more multinational companies and a higher degree of financial integration. Although this development has enabled greater specialisation of production, which increases sensitivity to sector-specific shocks, the net result has been more synchronised cycles. In these turbulent times, with escalating trade conflicts between the US and the rest of the world, economic integration within the EU will likely increase. This may not happen as quickly as during the first ten years of the euro, but the direction is clear.

Other mechanisms also help explain the co-variation of business cycles. De Grauwe and Ji (2017) construct a theoretical model in which a confidence channel (animal spirits) among households and businesses is an important explanation for why economic fluctuations

spread rapidly between countries that have extensive trade with each other. They find empirical support for such a confidence channel being particularly important in monetary unions. The major events of recent years, such as the pandemic, terrorist attacks and the war between Russia and Ukraine, are examples of events that, in addition to their direct economic impact via trade and financial prices, have affected aggregate demand in a similar direction within the EU. It is likely that the confidence channel will grow even stronger, at least in the western parts of the EU.

In recent years, economic fluctuations have been increasingly due to supply shocks. In such cases, it is not obvious that a flexible exchange rate contributes to stabilising inflation and economic activity. On the contrary, it is conceivable that inflation would have been somewhat lower in 2022–23 if Sweden had not had its own currency, which weakened against the euro. We would have had roughly the same interest rates as the euro area, since the Riksbank and the ECB raised their policy rates to the same level, but with lower inflation we could have pursued a less restrictive fiscal policy, which would have contributed to a higher level of economic activity.

The European Commission's efforts to get member states to comply with the common fiscal rules may also have contributed to increasing the synchronisation of business cycles within the EU. However, several countries, including Sweden, have had higher ambitions for their public finances than the EU's minimum requirements and have thus been able to pursue a sometimes divergent fiscal policy. In addition, compliance with EU fiscal rules has been weak in many countries. According to Lyhagen and Shahnazarian (2023) and the Fiscal Policy Council (2023), among others, fiscal policy has contributed successfully to stabilising the economy in Sweden. Analyses indicate that fiscal policy has been countercyclical on average during the 2000s, which has not been the case everywhere in the euro area. This has tended to reduce the correlation with the euro area economy (see further Chapters 5 and 6 by Flodén and Calmfors, respectively).

The positive experiences and strong support for the fiscal policy framework, combined with the current low level of public debt in Sweden, mean that the prospects for fiscal policy continuing to contribute

to stabilising the economy are good. However, the fact that fiscal policy has worked well in Sweden over the past 30 years is no guarantee that it will be used to stabilise the economy in the future. As recently as 2007, Finland had public finances that were just as strong as Sweden's, but after a prolonged economic downturn after the financial crisis, public debt has risen sharply as a share of GDP. In recent years, Finland has struggled unsuccessfully to reduce its public debt again. Denmark is an example of the opposite. Since the early 1980s, it has had a fixed exchange rate, first against the Deutschmark and then against the euro, and has successfully used fiscal policy to mitigate economic fluctuations.

7 Conclusions

My overall conclusions are that the business cycle in Sweden has become more synchronised with that of the euro area and that there is every reason to believe that this trend will continue in the future. The risk that Sweden could be hit by an asymmetric economic shock, where having its own currency could mitigate the effects, is no greater than in most other euro area countries. If anything, the risk is slightly lower.

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CHAPTER 4

How much better is the Riksbank's monetary policy for Sweden than the ECB's?

Karl Walentin

1 Introduction

The theory regarding which countries should have a common currency and a common monetary policy dates back to Mundell (1961). An important theoretical distinction in this regard is the extent to which economic fluctuations in a country are due to country-specific shocks versus shocks that are common to the entire currency area. In the case of country-specific shocks and a common currency, it is important that the economy can be stabilised by means other than monetary policy.¹

This chapter addresses the question of the extent to which a future independent Swedish monetary policy can be argued to be more suitable for Sweden than the monetary policy of the European Central Bank (ECB). To analyse this, I pose three sub-questions, each of which is addressed in a separate section:

1. What opportunities does the Riksbank have to pursue an independent monetary policy, i.e., to deviate from the ECB's monetary policy, in case Sweden remains outside the monetary union?

1 See Chapter 6 by Calmfors for a detailed analysis of the potential of fiscal policy to stabilise an economy in a monetary union in the event of country-specific shocks.

2. Does the Swedish economy exhibit higher interest rate sensitivity than the euro area, and if so, is this a problem?
3. To what extent do fiscal policy considerations influence the ECB's monetary policy in a way that is inappropriate for Sweden?

The latter two questions are asked to understand how well the ECB's monetary policy would suit the Swedish economy in the event of common shocks (and similar business cycle dynamics).

2 The possibilities to deviate from the ECB's monetary policy

This section analyses the extent to which Sveriges Riksbank can deviate from the monetary policy pursued by the ECB in a scenario where Sweden remains outside the monetary union. First, I review the relevant economic theory. Then I study the issue more in practice, based on the differences in past monetary policy between the Riksbank, the ECB, and the Federal Reserve. Finally, I reflect on Canada's experience of pursuing a monetary policy that deviated from that of the Federal Reserve.

2.1 The main theoretical perspective

According to the mainstream theory, originally the Mundell-Fleming model (Fleming 1962, Mundell 1963), a country with a floating exchange rate can have both free international capital flows and pursue an independent monetary policy. Even according to the more modern New Keynesian theory, for example, in textbooks such as Galí (2015), countries with floating exchange rates have good opportunities to conduct their monetary policy without being constrained by how interest rates are set in other countries. Monetary policy can stabilise demand in the economy by setting the policy rate. A higher policy rate makes it more attractive for households to reduce their consumption and instead save. In addition, a higher policy rate redistributes income from borrowers to lenders, and the latter are assumed to consume a smaller

share of their income. In these models, the policy rate in the domestic economy can be chosen independently of the policy rate abroad. In practice, monetary policy independence is limited to some extent by various frictions and complications. These are discussed below.

The most important constraint on independence of national monetary policy is potential problems related to the exchange rate effects of a different policy rate, i.e., an interest rate differential. Theoretically, it is usually assumed that the expected return is the same on investments in different countries. It is also assumed that the expected future exchange rate is not affected by today's policy rate. This implies uncovered interest rate parity, i.e., that a change in interest rates in one country (currency) should lead to an exchange rate change such that the expected return in that country, adjusted for expected exchange rate changes, remains unchanged compared to investments in another currency. An interest rate cut should therefore lead to the currency being expected to appreciate (increase in value) in the future. This is achieved by the domestic currency initially depreciating (decreasing in value). However, uncovered interest rate parity has weak empirical support. Many factors other than interest rate differentials appear to be important for the exchange rate, presumably because they affect the expected future exchange rate. At the same time, however, it is clear both theoretically and empirically that policy rates affect exchange rates.² The problems associated with exchange rate movements in the context of independent monetary policy (and interest rate differentials) that are most often mentioned in the research literature refer to:

1. Loans denominated in foreign currency/the balance sheet channel.
2. Problems in the domestic stock and property markets in the event of strong capital inflows.
3. Imported inflation.

For many developing countries, problem item 1 is perhaps the most important challenge. This is because in these countries it is common for the government, banks, firms, and sometimes even households to borrow in a foreign currency, such as US dollars. This means that

2 See Bouakez and Normandin (2010) for empirical estimates of this, which also show deviations from open interest rate parity.

the value of the foreign debt in terms of the country's own currency increases when the currency depreciates. The increased value of the debt has a contractive effect on the economy, i.e., working in the opposite direction to the increase in consumption that an interest rate cut creates through other channels. The contractionary effect through the increase in the value of debt is called the balance sheet channel and entails severe restrictions on the independence of monetary policy if a country is substantially exposed to currency fluctuations due to borrowing in foreign currency. This problem received a lot of attention in the 1990s.³ The balance sheet channel was claimed to be an important factor in the peso crisis in Mexico in the early 1990s and in several countries in Southeast Asia during the 1997 Asian financial crisis. It is important to note that, historically, major problems via the balance sheet channel have generally arisen when a fixed exchange rate has been abandoned, not in connection with fluctuations in a floating exchange rate. The reason for this is that borrowers in countries with floating exchange rates are accustomed to the exchange rate, and thus the value of any foreign currency loans, fluctuating continuously.

For Sweden, loans in foreign currency are generally considered to pose only limited macroeconomic challenges. The country has had a floating exchange rate with considerable volatility for several decades. In Sweden, it is also almost exclusively firms and banks that finance themselves in dollars or euros, not households. However, the Riksbank regularly emphasises potential problems linked to Swedish banks' exposure to foreign currencies.⁴

Problem 2, capital inflows that create inflated or volatile asset prices, is also primarily a problem for countries other than Sweden. Admittedly, one challenge for Swedish monetary policy has been that low interest rates have driven up property prices, but property investors have primarily been domestic, and changes in international capital flows have played a limited role. Problem 3, i.e., the changes in inflation that exchange rate movements can cause, is the most relevant problem for Sweden. However, this is not a real limitation, but merely a reinforcement of the effect that the policy rate has on inflation. If the Riks-

3 See, for example, Eichengreen and Hausman (1999) and Jeanne and Zettelmeyer (2002).

4 See, for example, Sveriges Riksbank (2017), p. 29.

bank aims to reduce inflation by raising interest rates, this will dampen domestic demand, and thus domestic prices, and reduce import prices by causing the *krona* to appreciate.

2.2 Theory that emphasises limits to independent monetary policy

In an influential article, Hélène Rey (2013) argues that countries can not have both free international capital flows and an independent monetary policy. Rey argues that an individual country cannot deviate from the global financial cycle (in terms of interest rates and risk appetite), which is dominated by the United States, while allowing free capital movements. Under certain conditions, an interest rate hike in a small open economy can lead to capital inflows that counteract its tightening effect by increasing consumption or investment. This can limit the scope for independent monetary policy. It is considered a “dilemma” that it is then not possible to have both an independent monetary policy and free capital flows. Rey therefore argues for creating scope for independent monetary policy by introducing restrictions on international capital flows and using macroprudential measures (limiting the ability of households and firms to borrow) to counteract the problematic effects of global capital flows. Later research (Aizenman et al. 2016) has shown that good institutions and sound fiscal policy reduce the problems with capital flows in the event of large interest rate differentials, as emphasised by Rey. A reasonable view is therefore that Rey's hypothesis of a policy dilemma is primarily applicable to economies that are fundamentally different from the Swedish one, perhaps primarily emerging economies.

2.3 Practical application: What can we learn from international comparisons?

Monetary policy is multifaceted, and any comparison of it between central banks therefore tends to be incomplete. This section mainly describes differences in policy rates between the Riksbank, the ECB and the Federal Reserve. It also provides a brief overview of differ-

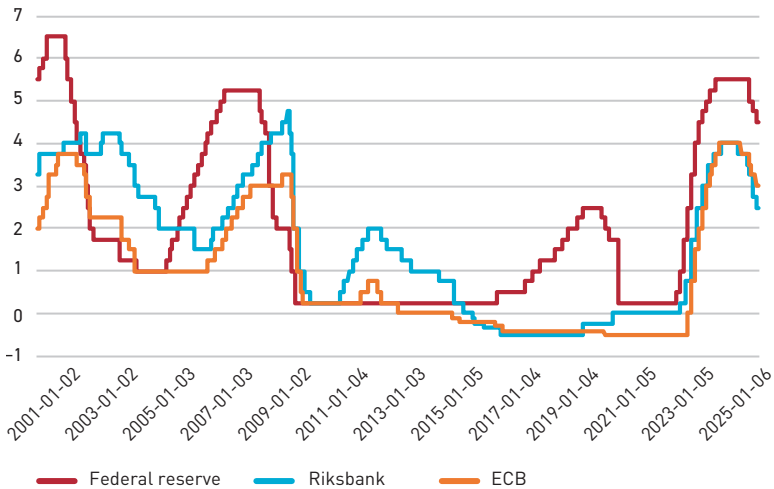
ences in asset purchases, monetary policy objectives, and systematic responses to changes in the economy.

An important starting point when comparing the monetary policies of central banks is that business cycles in advanced economies have been quite synchronized for several decades. According to Lindé and Reslow (2017), the correlation between GDP growth in Sweden and the euro area is 0.89 for the period 1994–2016. Hansson in Chapter 3 of this volume also documents a strong correlation in business cycles between Sweden and the euro area. Hansson also shows that the industry structure of the Swedish market sector is similar to that of the euro area, which reduces the likelihood that industry-specific shocks will lead to differences in the business cycle.

The high correlation between business cycles in Sweden and the euro area makes it natural for policy rates to correlate as well. The relevant question then becomes how Swedish monetary policy has deviated from the ECB's monetary policy at times when the two economies, perhaps primarily in terms of inflation, have differed.

Let us begin by analysing the possibilities of pursuing an independent monetary policy by studying how the policy rate in Sweden has related to corresponding policy rates among our most important trading partners during the 2000s. This is documented in Figure 1. The policy rate of the Riksbank has clearly covaried with that of the ECB but also, to a lesser extent, with that of the Federal Reserve. It is interesting to note that, despite the United States' dominant position in the global financial market, the policy rate has often differed by several percentage points between the United States and Sweden.

Figure 1 Policy rates, 2000–25, percentage points



Source: Ekonomifakta.

The difference between the ECB's and the Riksbank's policy rates has generally been small. It was greatest during the euro crisis in the early 2010s, when the ECB kept its policy rate close to zero. During this period, the Riksbank opted for a substantially higher policy rate, out of concern that household indebtedness was problematically high. From December 2010 to December 2013, the Riksbank's policy rate exceeded the ECB's by at least one percentage point. Despite this, the Swedish economy was not overwhelmed by large capital inflows.

Also in 2007–08, when the Riksbank opted for a higher interest rate, the difference was substantial. In connection with the inflation wave that began in 2022, the Riksbank acted more quickly than the ECB in both the raising and lowering phases, but the interest rate differences remained small. However, the Swedish *krona* weakened significantly during this period.

Another form of monetary policy is asset purchases, i.e., central bank purchases of various interest-bearing securities. These purchases are mainly made when the policy rate is constrained by a (real or perceived) lower bound just below zero, as was the case during the period

2013–19 for both the Riksbank and the ECB. From 2015 onwards, both of these central banks used asset purchases as a complementary monetary policy instrument to the policy rate. Later, both institutions provided loans to banks at longer-term fixed interest rates. The Federal Reserve has also employed several forms of unconventional monetary policy; asset purchases began as early as 2009 in response to the global financial crisis. However, it is much more challenging to compare unconventional monetary policy instruments across different central banks than to compare changes in policy rates. An international overview of asset purchases is provided by Anderson et al. (2022). It shows that in 2015–17, the Riksbank purchased less than half as much assets as the ECB, calculated as a percentage of GDP. An important explanation for this is that the amount of outstanding Swedish government debt was (and remains) low, which limited the amount of government bonds that could be purchased. Viewed as a share of outstanding government bonds, the Riksbank's and the ECB's purchases were more similar. The Federal Reserve did not make any active asset purchases during this time period.

Perhaps the most important aspect of monetary policy differences between countries is the monetary policy objectives and how monetary policy systematically responds to various macroeconomic developments. The overarching formal monetary policy objective for both the ECB and the Riksbank is to stabilise inflation. Consideration of the real economy, i.e., unemployment and the GDP gap, has lower priority. The Federal Reserve, on the other hand, has a dual mandate: inflation stabilisation and maximisation of employment. Decision-makers in central banks, in the case of the Riksbank, mainly the executive board, aim to achieve monetary policy objectives both through decisions regarding various policy instruments, such as the policy rate, and by influencing expectations through various forms of communication. It takes place through monetary policy reports and minutes from monetary policy meetings, among other things. Despite its central role, communication about the respective central banks' objectives and strategies as well as their systematic monetary policy, is so complex that it is almost impossible to make quantitative comparisons.

An important example of the relevance of central banks' communication and systematic behaviour patterns is how they influence exchange rates. The reason for this is that exchange rates are largely determined by expectations about the future. A plausible interpretation of why the *krona* tends to fall in value during international economic downturns is that the Riksbank is perceived as pursuing a systematically more active monetary policy than most other central banks. A less likely alternative is that the *krona* is considered particularly risky during economic downturns or in periods of financial turmoil for some other reason (in technical terms, this is called a countercyclical country premium).

Monetary policy decision-makers generally perceive it as problematic if the policy rate deviates too much from that of the major central banks, primarily the ECB in Sweden's case.⁵ In line with this, the Riksbank's decisions on asset purchases during the period 2015–19 were also strongly influenced by a desire to keep up with the asset purchases of the ECB.⁶ It appears, however, that central bank policymakers feel freer to deviate from each other when it comes to communication about future policy rates and monetary policy considerations more generally.

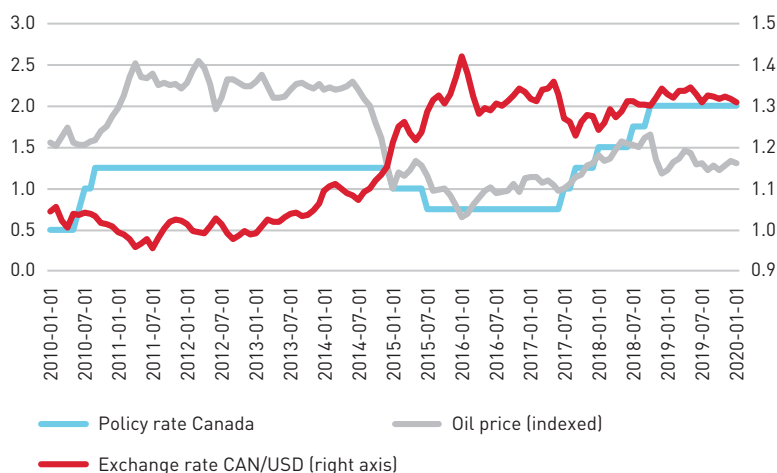
There are certainly episodes when large economic shocks occur, resulting in large interest rate differentials and exchange rate fluctuations. Perhaps this is the main advantage of an independent monetary policy – being able to counter an economic crisis by adapting monetary policy to the needs of the individual country. However, it is unusual that monetary policy is the root cause of such exchange rate movements. Monetary policy is rather a symptom, a reaction to the economic shock. In such situations, it is problematic to avoid exchange rate movements by choosing a policy rate that deviates less from large trading partners. Canada is a typical case, as illustrated in Figure 2. Since oil and oil products account for a large share of Canada's exports, the sharp decline in oil prices in 2014–16 caused a major negative economic shock. As the value of Canadian exports fell the exchange rate had to adjust. This occurred in a situation where the policy rate in the United States began to rise gradually at the end of 2015 (see Figure 1). The Bank of Canada initially refrained from lowering its policy rate, but this caused an eco-

5 Sveriges Riksbank (2024), p. 43.

6 See, for example, Sveriges Riksbank (2016), p. 5.

conomic downturn and an increased need for, and expectations of, future interest rate cuts. The latter accelerated the weakening of the Canadian currency, which depreciated sharply in 2014–16, as shown by the increase in the number of Canadian dollars per US dollar in Figure 2. This is an example of a recurring monetary policy trade-off in open economies: the central bank may choose not to deviate from the interest rates of its trading partners (maintaining interest rate parity) today; however, it then risks greater macroeconomic imbalances tomorrow.

Figure 2 Canada: interest rate and exchange rate following a fall in oil prices, 2010–20



Note: The oil price has been indexed to 1 for January 2015.

Source: Federal Reserve Economic Data (FRED), Federal Reserve Bank of St. Louis.

2.4 Summary of the possibilities to pursue an independent monetary policy

According to the dominant theory, there are ample opportunities to pursue an independent monetary policy for a country with a floating exchange rate. A more negative view is presented by Rey (2013), who emphasises problems linked to capital flows. In this section, I have

argued that the challenges to independent national monetary policy emphasized by Rey are not relevant for Sweden.

At times, the Swedish policy rate has deviated substantially from both the ECB's and the Federal Reserve's interest rates. There have also been marked differences in terms of asset purchases and communication regarding future monetary policy. In this sense, the historical record does not indicate any clear limits to Swedish monetary independence.

Having a national currency and national monetary policy sometimes results in large interest rate differentials and exchange rate fluctuations. However, it is highly unusual that monetary policy is the root cause of such exchange rate movements. Monetary policy is rather a symptom, a reaction to some economic disturbances.

Central bank policymakers often find it problematic to pursue monetary policy that deviates from that in the rest of the world, primarily in terms of the policy rate, but it is difficult to see any major problems with this for the Swedish economy. In other words, the Riksbank appears to have been unnecessarily worried about letting its policy rate deviate from the ECB's.

3 Higher Swedish interest rate sensitivity?

In order to understand how well the ECB's monetary policy would suit Sweden in the event of common economic shocks, we need to know whether the interest rate sensitivity in Sweden is the same as in the euro area. If the interest rate sensitivity is different, another monetary policy than in the euro area is needed, even if the shocks are common. Specifically, if the interest rate sensitivity is higher in Sweden, the policy rate should optimally react less in Sweden than in the euro area in the event of such shocks. In this section, I therefore analyse whether there is reason to believe that the Swedish economy exhibits higher interest rate sensitivity than the euro area, focusing specifically on

whether Swedish GDP responds more to a given change in the policy rate.⁷ This is an interesting question, both empirically and theoretically.

3.1 Determinants of interest rate sensitivity

In recent years, it has been argued that Sweden’s economy exhibits higher interest rate sensitivity than that of the euro area, i.e., that GDP and other aggregate variables react more strongly to changes in policy rates (or, to be more precise, monetary policy shocks) in Sweden.⁸ Below, I list important determinants of how interest rate sensitive an economy is. I then show how the determinants in Sweden relate to those in the euro area.

Table 1 Determinants of the interest rate sensitivity of GDP

Factor		Sweden compared with the euro area
1a	Household gross debt relative to GDP (+)	Higher
1b	Household fixed interest rate period (–)	Lower
2a	Corporate gross debt relative to GDP (+)	Higher
2b	Corporate fixed interest rate period (–)	Lower
3	Public sector gross debt to GDP ratio (+)	Lower
4	Manufacturing industry’s share of GDP (+)	Same
5	Liquidity constraints for households (+)	Lower

Note: The plus and minus signs indicate the direction in which the factors affect the economy’s interest rate sensitivity. The last column indicates whether the respective factor (variable) has a higher or lower value in Sweden than in the euro area.

Factors 1 and 2 indicate that the economy is more sensitive to interest rates in Sweden than in the euro area. This is mainly because households have a higher debt ratio (debt/disposable income) and shorter

7 It is also necessary for the neutral (long-term) interest rate and interest rate spreads (the difference between the policy rate and the interest rate faced by firms and households) to be equal for the same policy rate to be suitable for different countries. I am disregarding any such differences here. It can be argued that there should be no differences in the neutral interest rate in the long run with capital mobility (see Armelius et al. 2018). However, it is difficult to argue that interest rate spreads are the same in all EU countries. For example, they tend to be higher in southern European countries with weak public finances.

8 One example is Annika Winsth (SVT 2023), but there are many others, including the Riksbank.

fixed-rate periods for their mortgages in Sweden than in the euro area countries. According to Eurostat (2025a), the debt ratio of Swedish households (158 per cent in 2023) has been approximately twice as high as the average for euro area countries (84 per cent in 2023) in recent years. The average interest rate fixation period for mortgages in Sweden is around two years, while Belgium and Germany, for example, have an a corresponding period of around ten years (Sveriges Riksbank 2022, Badarinza et al. 2018). There is therefore a substantial difference between the interest rate fixation period in Sweden and in key euro area countries. Spain is the only euro area country with a shorter average fixed-rate period than Sweden. The debt of Swedish firms as a fraction of GDP, over 100 per cent, is among the highest in the EU (European Commission 2024) and has a short fixed-rate period from an international perspective. However, the latter is probably of limited importance. Holm-Hadulla and Thürwächter (2021) find no effect of firms' interest rate fixation periods on the interest rate sensitivity of GDP when comparing different euro area countries.

Regarding factor 3, public sector debt as a fraction of GDP, it can be argued that Sweden is less sensitive to interest rate changes than the euro area countries because its public debt is so low. This raises the question of how different types of debt should be weighted to quantify interest rate sensitivity. Can we simply use total gross debt, i.e., the sum of household, corporate, and public sector debt? The answer is no. The reason is that interest rate sensitivity is primarily determined by how demand in the country is affected. This, in turn, is mainly governed by how much income an interest rate change redistributes across different agents in the economy (depending on indebtedness and interest rate fixation periods) and the differences between these agents' propensity to spend their income. For households, the marginal propensity to consume, i.e., the proportion of a change in income that is spent, appears to be 0.5 on average on an annual basis (Fagereng et al. 2021 for Norway). Kaplan and Violante (2022) report that the international literature finds that the marginal propensity to consume is 0.15–0.25 in the first quarter after a change in income. However, the propensity to consume varies greatly between different types of households. It is higher for young and credit-constrained ones (Fagereng et al. 2021).

For the public sector, the corresponding figure is substantially lower, which implies that public debt is less important for interest rate sensitivity than household debt. For example, Bouscasse and Hong (2023) find no response at all from interest rate changes to government spending and tax rates in the United States. Instead, government debt grows when interest rates rise. However, it is conceivable that governments that are close to the limit of how much debt they can handle (think Greece or Italy) respond substantially more to changes in interest rates. A similar situation prevails for local governments in Sweden (and other Nordic countries) because they are required to have balanced budgets and therefore must adjust expenditure or taxes to offset increased interest expenditures, even in the short term.⁹ However, the overall conclusion is that there is no reason to believe that public debt and household debt have the same effect on aggregate demand when the interest rate changes. Therefore, we cannot use a country's total gross debt to assess interest rate sensitivity. Household debt levels are more important in this context than public debt.

Some research argues that an important determinant of interest rate sensitivity is the size of the manufacturing sector as a share of the economy (factor 4). The reason is that demand for goods from the manufacturing industry tends to be more sensitive to interest rates than demand for services. Datsenko and Fleck (2024) demonstrate precisely this relationship for euro area countries. In a separate exercise, they also show how the manufacturing sector in the euro area reacts several times more strongly than the service sector to interest rate changes. For Sweden, the share of manufacturing (20 per cent measured as a share of value added in 2022 according to Eurostat) is close to the median among euro area countries and lower than the median in terms of employment. Accordingly, this factor does not suggest that the Swedish economy is more sensitive to interest rates than the euro area countries.

Theoretically, the significance of factor 5 is well established: the more liquidity- or credit-constrained a household is, the more strongly its consumption reacts to income shocks, such as interest rate changes.

9 See Chapter 6 by Calmfors on fiscal policy in this volume.

Almgren et al. (2022) show empirically that there is a clear positive relationship between the proportion of liquidity-constrained households and the extent to which interest rate changes affect GDP in euro area countries. In their article, the proportion of liquidity-constrained households is measured using various survey measures. The measure that is available for Sweden comes from the EU's Survey on Income and Living Conditions (SILC). According to it, the proportion of Swedish households with liquidity constraints (roughly 20 per cent) is substantially lower than for the euro area (roughly 30 per cent). The study by Almgren et al. (2022) thus indicates that monetary policy has a weaker impact on GDP in Sweden than in the euro area.

Summary of how various factors affect Sweden's interest rate sensitivity

In summary, both the high level of household and corporate debt and the short fixed-interest periods indicate that Sweden's economy is more sensitive to interest rate changes than the euro area on average. However, the remaining factors do not: public debt is low, manufacturing's share is close to the median for the euro area countries, and the proportion of liquidity-constrained households is low. However, I have argued that the level of household debt is much more important for interest rate sensitivity than the level of public debt. The shorter fixed-rate period for Swedish households is also a key factor. A reasonable assessment based on structural factors is thus that GDP is more interest rate sensitive in Sweden than in the euro area.

A separate indication of the importance of household debt ratios for the interest rate sensitivity of consumption is provided by Stockhammar et al. (2022). They find that the effect of the policy rate on Swedish consumption doubled over the past 15 years as household debt increased from roughly 150 to approximately 200 per cent of disposable income. Laséen (2022) also finds that the household debt ratio is crucial for interest rate sensitivity. He shows that wage income and unemployment are affected more by interest rate changes in the Swedish municipalities where households have the highest debt ratios.

Convergence of determining factors?

If interest rate sensitivity is higher in Sweden than in the euro area, is there any reason to believe that it will converge towards the area's average over time if Sweden joins the monetary union? Specifically, will the factors that have influenced interest rate sensitivity converge to the average level in the monetary union? For example, is there any reason to believe that Swedish households will choose the same interest rate fixation period and debt ratio as the average household in the euro area? The wide variation in these factors between the countries in the euro area indicates that any such tendencies are very weak. Furthermore, it is hard to see any mechanisms that would lead to this. I see no such mechanism for the debt ratio. Why would an individual household adjust the size of its mortgage to what is customary in other countries? On the other hand, it is conceivable that if the ECB's policy rate changes more frequently than the Riksbank's, interest rate fixation periods in Sweden might increase after a transition to the euro. However, as shown in Figure 1, the ECB's policy rate has historically fluctuated less than the Riksbank's. Another factor that could lead to longer fixed-rate periods in Sweden is if joining the monetary union contributes to lowering the Swedish term premium (the premium borrowers pay for fixing the interest rate), so that it becomes cheaper to borrow at long interest rate fixation periods. An additional possible reason for fixed-rate periods to converge between euro area countries is if regulations linked to mortgages become more similar. For the remaining determining factors, no obvious forces are causing them to converge towards an average for the euro area countries.

3.2 Direct (but incomplete) measures

How sensitive to interest rates would the Swedish economy be compared to the average in the euro area if Sweden adopted the euro? As long as Sweden remains outside the monetary union, there is no direct measure of how the Swedish economy would react to changes in the ECB's policy rate in the event of membership. Being exposed to a change in the Swedish policy rate is not the same as being exposed to a change in the policy rate that affects the entire euro area. When it

comes to inflation, economic theory suggests that the effects of interest rate changes are greater when Sweden has a floating exchange rate. The reason is that, upon joining the euro, there would no longer be any exchange rate effect via imported goods from the euro area that affects Swedish inflation. The sensitivity of inflation to interest rates would thus decrease if Sweden joined the monetary union. For GDP, on the other hand, there are two counteracting mechanisms:

1. Demand for Swedish goods would be affected more by a change in ECB interest rates following euro adoption than by previous interest rate changes by the Riksbank. This is because changes in the ECB policy rate also affect demand in other (euro area) countries.
2. On the other hand, the change in demand for Swedish exports would be weaker if Sweden were to join the monetary union, as there would no longer be an exchange rate against the euro area that could change.

One indication that the first mechanism dominates is that Swedish industrial production increases by approximately the same amount as industrial production in the euro area when the ECB lowers its policy rate (Potjagailo 2016).

We can still learn something about this issue by comparing how GDP has responded to changes in policy rates in Sweden and in the euro area countries. A good overview of what we know empirically about the effects of changes in the Swedish policy rate is provided in Berggren et al. (2024). They summarise the results of a large number of studies. According to the overview, the median peak effect on GDP (after slightly more than one year) of a temporary interest rate increase of 1 percentage point, according to estimated models for Sweden, is 0.4–0.5 per cent, depending on the exact method used. Their own estimate is that GDP falls by a maximum of 0.8 per cent. The authors assess that their own estimate is higher than other studies because the effects have increased over time and they use more recent data. They show that the effect on Swedish GDP of the Riksbank's policy rate changes has doubled between 2005 and 2015 and interpret this as being due to the increased indebtedness of Swedish households. The study also shows that the median value in a large number of models for the United

States and the euro area is that GDP falls by 0.5 percentage points, i.e., the same amount as in Sweden.

The results in Berggren et al. (2024) thus do not support the hypothesis that Swedish GDP is more sensitive to policy rates than euro area GDP. However, a literal comparison should not be made if one wants to understand how sensitive Sweden would be to interest rates as a member of the monetary union. As pointed out above, when the ECB changes interest rates, this affects not only demand in Sweden but also demand in other euro area countries, with indirect effects on the Swedish economy via our exports. The latter effect does not occur when the Riksbank changes its policy rate. Furthermore, it is likely that the increase in GDP interest rate sensitivity documented by Berggren et al. is greater in Sweden than in the euro area. The reason for this is that household indebtedness has increased more in Sweden (see Stockhammar et al. 2022).

3.3 Consequences of higher interest rate sensitivity

Overall, I conclude that GDP is more interest rate sensitive in Sweden than the euro area average. This conclusion is mainly based on my analysis of the determinants of interest rate sensitivity.

How problematic is it for a country with a more interest rate sensitive economy to be part of a monetary union? A difference in interest rate sensitivity between an individual country and the monetary union as a whole means that the common policy rate is ill-suited for the country both when monetary policy is contractionary and when it is expansionary, i.e., almost all the time. The extent of this problem depends on how large the difference in interest rate sensitivity is. The fact that Sweden appears to exhibit higher interest rate sensitivity makes Swedish membership of the monetary union less attractive, as the ECB's monetary policy would not be guided by the economic situation in Sweden (or any other small euro area country).

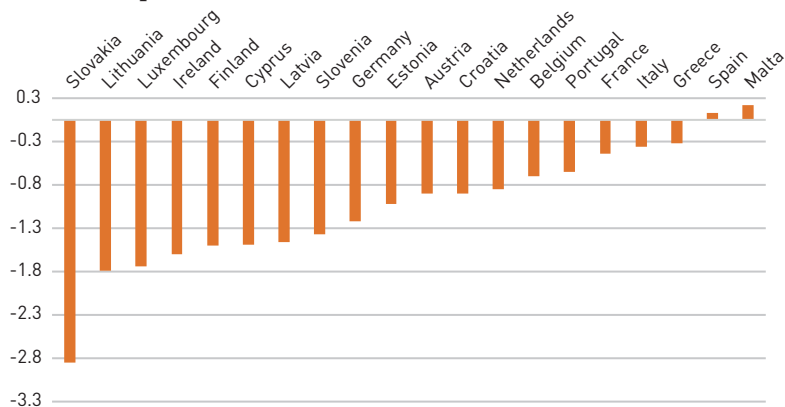
An interesting factor in understanding the extent to which differences in interest rate sensitivity create tensions within the euro area is to study the countries that are already members of it. For these coun-

tries, the direct measure of how GDP reacts to interest rate changes is not hypothetical, and the comparison is therefore straightforward. Two studies that have estimated the effects of the ECB's interest rate changes at the country level are Almgren et al. (2022) and Datsenko and Fleck (2024). Unfortunately, both studies use a different method (high-frequency identification)¹⁰ than the studies surveyed by Berggren et al. (2024), so the estimates are not comparable. The relevant message from Almgren et al. (2022) and Datsenko and Fleck (2024) is that interest rate sensitivity varies greatly between euro area countries. This can be seen in Figure 3, which shows Datsenko and Fleck's estimates of GDP interest rate sensitivity for all euro area countries from 1999 to 2019.¹¹ For Italy and France, Datsenko and Fleck (2024) find that the interest rate sensitivity (the percentage decline in GDP when the policy rate is temporarily raised by 1 percentage point) is low: 0.3–0.4. For Germany, it is substantially higher: 1.2. The highest interest rate sensitivity is reported for Slovakia, 2.8. Almgren et al. (2022) report similar results: large differences in interest rate sensitivity among euro area countries and roughly the same ranking between countries as in Datsenko and Fleck (2024). The large spread in interest rate sensitivity among euro area countries indicates that it is impossible for the ECB to pursue a monetary policy that suits all countries in the monetary union, even when economic fluctuations are common. A positive interpretation is that the ECB is already dealing with this challenge and that Sweden's higher interest rate sensitivity in the event of joining the monetary union is therefore not a new phenomenon.

10 High-frequency identification of monetary policy shocks involves measuring how relevant interest rates move during the day (or hour) when a monetary policy decision is published. The method was introduced by Kuttner (2001). It differs significantly from older, more established methods/assumptions, such as those used by Berggren et al. (2024). These methods are based on the assumption that it takes time for monetary policy shocks to affect inflation and GDP.

11 A shorter period is used for countries that introduced the euro later.

Figure 3 Interest rate sensitivity of GDP in euro area countries, per cent



Note: The chart shows the average response of GDP (in per cent) over ten quarters to a temporary interest rate increase of 1 percentage point.

Source: Datsenko and Fleck (2024).

4 How does fiscal policy considerations affect ECB policy?

To understand how the monetary policy of the ECB would suit Sweden in the event of euro membership, we must first note that monetary and fiscal policy are closely linked. They are interdependent for several reasons. One reason is that both affect aggregate demand. For example, the economy can be stabilised during a recession through either monetary or fiscal policy. The policy rate can be lowered or public sector spending can be increased. The ECB's monetary policy therefore depends on how fiscal policy is conducted in the euro area countries.

Secondly, monetary and fiscal policy are linked because the policy rate affects the cost of public debt. Unlike Sweden, most EU countries have a large public debt, which means that the public finances of these countries may deteriorate substantially as a result of increased interest expenditures when the policy rate is raised.

Thirdly, for countries with weak public finances, fiscal policy can have an effect on inflation and thus on government bond yields. When fiscal policy creates doubts regarding a government's ability to repay its loans, inflation expectations rise and with them government bond yields, which affects the conditions for monetary policy. A clear example in recent times is how UK government bond yields rose in response to then prime minister Liz Truss's expansionary budget proposal in September 2022.

The main question analysed in this section is whether ECB's monetary policy could be influenced by fiscal policy considerations in a way that would be unfortunate for Sweden in the event of euro membership. The answer is that there is a significant risk that the ECB will pursue an asymmetric stabilisation policy – more expansionary in economic downturns and insufficiently contractionary in periods of overheating – which would be problematic for Sweden. There are two reasons for this.

Firstly, several large euro area countries will find it difficult to pursue expansionary fiscal policies during recessions because their debt burdens make increased budget deficits problematic. Given that government debt levels in many euro countries are so high, both the reaction of the financial markets and the EU's Stability and Growth Pact will limit the extent to which fiscal policy can be used to stimulate the economy during recessions. At the end of 2024, average public (gross) debt in the euro area was 87.4 per cent. of GDP.¹² This is well above the debt limit of 60 per cent of GDP stipulated by the Stability and Growth Pact.¹³ According to Eurostat, Sweden's gross debt was 33.5 per cent at the same time.

There is considerable empirical support for the view that discretionary fiscal policy in the euro area countries has been procyclical, i.e., that active policy decisions have amplified economic fluctuations (see, for example, Cronin and McQuin 2021 and other references in Chapter 6 by Calmfors in this volume). However, there is some disagreement in the literature regarding this. For example, the message in Afonso and

¹² Eurostat (2025b).

¹³ See Chapter 7 by Andersson and Jonung for an analysis of public debt and EU rules regarding it.

Carvalho (2022) is somewhat more positive. They find that only 6 of the 19 euro area countries studied pursued procyclical fiscal policy. Furthermore, they emphasise that cyclical policy has varied greatly over time and that policy was most procyclical in 2010–13, i.e., during the euro crisis. Overall, there are good reasons to believe that the ECB's monetary policy may need to compensate for insufficiently expansionary fiscal policy during economic downturns by being more forceful than would otherwise be necessary. Combined with the higher interest rate sensitivity in Sweden, this means that the ECB's monetary policy will be least suitable for Sweden during recessions, as the two factors then interact and make monetary policy more expansionary than Swedish conditions would require.

Secondly, the ECB's interest rate hikes in the event of overheating or high inflation may be limited by the strain on public finances that increased interest rates imply for the most indebted euro area countries. This limitation is particularly problematic in the event of major negative supply shocks (e.g., higher oil prices), as under such conditions, inflation, and thus the policy rate, is elevated while GDP growth is lower than normal, which means that public finances are also under greater strain. There are many indications that supply shocks will become increasingly important in the future due to a high level of geopolitical conflict. This makes it likely that the monetary policy of the ECB will regularly be insufficiently tight in economic situations with high inflation. However, this is less of a problem for Sweden as long as its economy continues to be more sensitive to interest rates than the euro area, as these two factors counteract each other.

5 Summary and conclusions

This chapter has analysed to what extent the monetary policy of the Riksbank is expected to be better suited to Sweden than the monetary policy of the ECB, in terms of stabilising Swedish business cycle fluctuations. Arguments have been presented indicating that the possibilities to conduct an independent national monetary policy are good. Despite this, the difference in policy rates between the Riksbank and

the ECB can generally be expected to be limited. It is mainly in the event of economic shocks specific to Sweden, or extreme common shocks, that an independent monetary policy becomes truly valuable. National monetary policy then acts as insurance against a lasting imbalance in demand.

The Swedish economy appears to exhibit a higher interest rate sensitivity than the euro area economy, mainly due to higher indebtedness and shorter interest rate fixation periods for Swedish households. This makes Swedish membership in the monetary union less advantageous.

Finally, higher government debt in the euro area means that the ECB can be expected to pursue an asymmetric monetary policy that is more expansionary in recessions than would be appropriate for Sweden, but less contractionary in booms. Combined with the higher interest rate sensitivity in Sweden, this means that ECB's monetary policy will tend to be least appropriate for Sweden during recessions, as two factors then interact to make the common monetary policy more expansionary than Swedish conditions warrant. On the other hand, the higher interest rate sensitivity in Sweden and the European fiscal policy constraints will counteract each other during booms, which means that the ECB's monetary policy may then be more appropriate for Sweden.

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CHAPTER 5

Has the floating exchange rate contributed to macroeconomic stability?

Martin Flodén

1 Introduction

The conclusions of the EMU Inquiry (1997) played an important role for Sweden's decision not to join the euro at its introduction in 1999. The Inquiry concluded that membership would likely enhance economic efficiency and strengthen Sweden's political influence within the European Union, but that the risks associated with macroeconomic stabilisation policy would increase. Given that the Swedish economy was still recovering from the deep crisis of the early 1990s, the Inquiry therefore recommended that Sweden should wait before joining the monetary union.

The Inquiry identified two main channels through which euro membership would weaken stabilisation policy. First, monetary policy would be delegated to the European Central Bank (ECB) and thus calibrated to conditions in the monetary union as a whole, rather than to developments specific to the Swedish economy. Second, euro membership would eliminate the nominal exchange rate as an adjustment mechanism. Under a floating exchange rate regime, movements in the exchange rate can help dampen the effects of country-specific disturbances, thereby mitigating fluctuations in output and employment.

Three decades after the EMU Inquiry, Sweden remains outside the monetary union. This chapter examines the implications of that choice for macroeconomic stability, with a particular focus on output and inflation volatility. On the one hand, the concerns raised by the Inquiry find some support in the data. In particular, I show that macroeconomic fluctuations have on average been somewhat larger in the euro area than in most other comparable economies, although there is substantial heterogeneity across member states.

On the other hand, several important qualifications are warranted, even abstracting from potential credibility gains and expectations-based mechanisms sometimes emphasised in the theoretical literature.¹ Over the past three decades, the disturbances affecting the Swedish economy have largely been global rather than country-specific. As a result, there has often been limited scope – and limited need – for Swedish monetary policy to deviate systematically from that of the ECB. Indeed, Swedish monetary policy has in practice followed a path broadly similar to that of the euro area, both in terms of policy rates and the use of unconventional measures.

Moreover, the stabilising role of a floating exchange rate is less clear-cut than is sometimes assumed. While the Swedish *krona* has tended to depreciate in economic downturns, thereby stimulating demand through the export sector, such depreciations are not unambiguously beneficial. They may also generate risks to financial stability by making access to safe and liquid assets denominated in major foreign currencies – most notably US dollars – more difficult and costly. More generally, exchange rates are volatile and respond to a wide range of factors unrelated to the business cycle. This volatility may itself contribute to macroeconomic instability.

These issues become particularly salient in response to global shocks. During the global financial crisis of 2008–09, the depreciation

1 Giavazzi and Pagano (1988) discuss potential credibility gains from delegating monetary policy to a common central bank. Such arguments played an important role in the Swedish debate during the 1980s and 1990s, but are less relevant today given the strengthened credibility of the Riksbank's inflation-targeting framework. Cook and Devereux (2016) and Born et al. (2024) show that monetary policy may in some circumstances stabilise inflation more effectively in a monetary union, primarily because expectations of the long-run price level are less affected by country-specific developments.

of the *krona* appears to have provided some support to the Swedish economy, but the effects were limited and came at the expense of other countries. By contrast, during the global inflation episode of 2022–23, *krona* depreciation complicated monetary policy by amplifying inflationary pressures at a time when inflation was already high. Such episodes illustrate that exchange rate movements may support stabilisation policy in some circumstances, but hinder it in others.

Finally, it is important to recognise that to the extent that exchange rate movements in response to global disturbances benefit one country, these benefits typically arise through changes in relative competitiveness and therefore come at the expense of others. In an increasingly integrated global and European economy, this raises broader questions about the desirability of relying on exchange rate adjustment as a stabilisation mechanism.

The remainder of the chapter develops these arguments in more detail. I first compare macroeconomic developments inside and outside the euro area, before analysing Swedish monetary policy, fiscal policy, and exchange rate dynamics during major global shocks. I then assess to what extent Sweden's experience supports – or qualifies – the stabilisation arguments that motivated the decision to remain outside the monetary union.

2 Overall economic developments inside and outside the euro area

Despite more than a quarter of a century of experience with the single currency, aggregate data can at best provide suggestive evidence on how euro membership has affected macroeconomic stability.² Countries differ in many respects, and economic outcomes reflect a wide range of factors beyond the currency regime. Nevertheless, a compar-

2 There are studies that nevertheless attempt to estimate such effects. Enders et al. (2013), for example, find no clear evidence that the magnitude of economic fluctuations has been affected by the euro. On the other hand, as expected, they find that the real exchange rate between countries in the monetary union has become more stable.

ative overview of growth, volatility and business cycle comovement is useful as a starting point for the analysis.

Table 1 shows various measures of growth from 1998 to 2024, and Table 2 gives indicators of economic volatility and comovement over the business cycle. The countries included are divided into two groups. The first group includes nine of the eleven countries that adopted the euro in 1999.³ The second group includes Denmark and Sweden – two EU countries that still have their own currencies – as well as a number of countries that are not EU members but may be of interest to include in a comparison.

2.1 Growth has been relatively strong in Sweden

Based on Table 1, it is difficult to find evidence that the single currency has contributed to a general improvement in efficiency in the member states. All of the euro area countries included have had weaker GDP growth per capita than Sweden. The same applies to GDP per person of working age, consumption per capita and labour productivity.

3 I consistently exclude Ireland and Luxembourg from the tables: Ireland because its national accounts are strongly influenced by intra-firm transactions by American multinational firms, and Luxembourg because it is a small country with a highly specialised economy.

Table 1 Growth, 1998–2024

	GDP			Consumption per capita		Productivity		Employ- ment rate
	Total	Per capita	15-74	Private	Total	(employ- ment)	(hours)	15-74
Euro area countries								
Austria	47	28	28	18	19	14	32	8
Belgium	55	34	37	24	27	21	19	7
Finland	43	32	34	37	35	15	25	9
France	44	26	28	29	30	14	20	7
Germany	35	29	34	21	29	12	27	12
Italy	15	11	16	6	7	-3	6	10
Netherlands	56	36	36	18	29	19	23	10
Portugal	34	27	29	30	28	23	33	3
Spain	60	32	35	21	30	11	18	10
	43	28	31	23	26	14	22	8
Other countries								
Sweden	71	42	42	44	28	30	35	6
Canada	71	26	23	44	39	17	28	3
Denmark	52	35	37	25	25	28	31	5
New Zealand	106	49	44	63	61	21	25	12
Norway	52	20	17	54	47	16	20	1
Switzerland	62	29	29	18	18	20	32	6
United Kingdom	53	30	30	33	36	24	27	3
United States	80	47	42	58	49	47	50	-2

Note: Change in per cent from 1998 to 2024, except for the employment rate, which refers to change in percentage points. GDP and consumption refer to volume. “GDP 15–74” refers to GDP per person aged 15–74. The employment rate refers to the same age group. Productivity refers to GDP per person employed and per hour worked, respectively.

Sources: OECD Economic Outlook 2024:2 (forecast for 2024) except for productivity per hour worked, which is from the OECD productivity database and refers to the change from 1998 to 2023, and population data for Switzerland which are from the IMF WEO.

The weak European growth relative to the US has been widely discussed. The discussion has gained momentum after the European Commission tasked Mario Draghi, former head of the European Central Bank, with proposing measures to strengthen the Union’s competitiveness (see Draghi 2024).

Table 1 confirms that most European countries have fallen behind the United States in recent decades. But the table also shows that weak growth has mainly affected the euro area rather than Europe as a

whole, and that the United States stands out with very high productivity growth, even compared with countries outside Europe.

2.2 Global shocks have characterised economic developments

The focus of this chapter is, however, not on overall growth, but on how the monetary union has affected the conditions for stabilisation policy and, by extension, cyclical developments. As mentioned in the introduction, the Swedish economy was in a difficult situation after the crisis of the 1990s. There were fears that the Swedish business cycle would deviate from the rest of Europe and that a different monetary policy would therefore be needed.

But this was not a specifically Swedish issue. During the 1990s, economists debated vigorously how the conditions for European stabilisation policy would be affected by the single currency. Early contributions pointed out that Europe was far from an optimal currency area (Bayoumi and Eichengreen 1993) and that deeper market integration and increased trade could encourage greater specialisation and thereby increase exposure to country-specific disturbances (Krugman 1993). Subsequent empirical work, however, suggested the opposite mechanism: increased trade and integrated value chains tend to synchronise business cycles (Frankel and Rose 1998). As shown in Chapter 3 by Hansson, this conclusion has been reinforced since the introduction of the euro.⁴

Increasingly interconnected global value chains may have contributed to the strong correlation, but it is also clear that countries have been affected by major common shocks in recent decades. Figure 1 shows how the period is dominated by the global financial crisis of 2008, when all economies were hit by a deep and prolonged downturn, and by the fluctuations surrounding the pandemic in 2020.⁵ Even disregarding these episodes there are strong correlations between countries.

4 Table 2 confirms that comovements over the business cycle are strong among euro area economies. This, however, applies to all countries in the table (except New Zealand).

5 The decline in the second quarter of 2020 was very deep in some countries. In order to maintain a meaningful vertical scale in Figure 1, this quarter has been excluded.

For example, the economy began to weaken rapidly around the turn of the millennium following the slowdown in the IT sector and the terrorist attacks in the United States. There is therefore much to suggest that the major disturbances that have affected the Swedish economy over the past 25 years have been global. These disturbances have also been similar to those affecting other countries. This observation – that global shocks dominate country-specific ones – will play an important role in the analysis that follows.

In principle the strong correlations between economies may be a result of economic policy successfully counteracting the country-specific disturbances that have affected the countries.⁶ Another, but similar, explanation could be that exchange rates have moved in such a way that country-specific business cycles have become more synchronised. I will return below to the questions of how Swedish economic policy has deviated from that of the rest of Europe and how the *krona* has developed during the period.

Before doing so, however, it is worth noting that concerns about the constraints on macroeconomic stabilisation associated with membership of a monetary union cannot be dismissed on the basis of European experience. The first columns of Table 2 show that, on average, the economies of the euro area have been slightly more volatile than other economies. This largely reflects developments in a subset of countries – most notably Italy, Portugal and Spain, which were hit hard during the European debt crisis – while several euro area economies display volatility comparable to, or lower than, that observed in Sweden. To assess the significance of Sweden's decision to remain outside the monetary union, a more detailed examination of how the economies have evolved and which shocks they have been exposed to is therefore required.

6 To take this into account, one can, as Calmfors does in Chapter 6, estimate how the GDP gaps would have developed without active fiscal policy. In order to isolate country-specific shocks, one would then need to take into account monetary policy and automatic stabilisers, as well as how all this has affected economies over time.

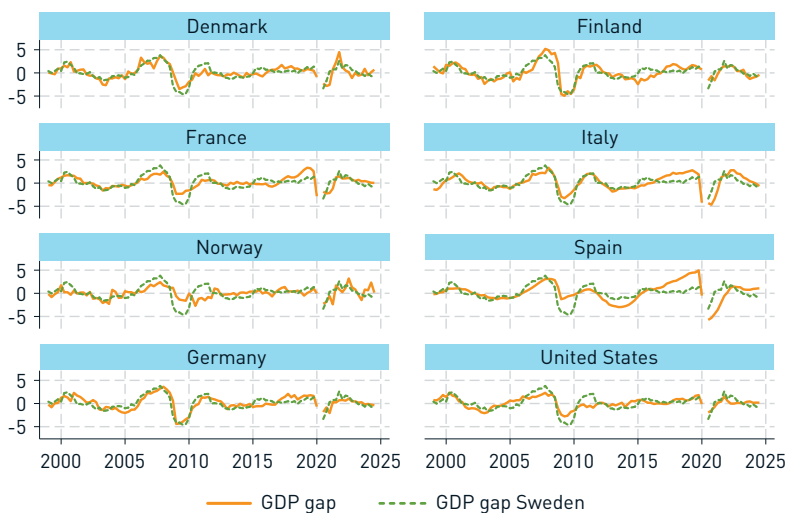
Table 2 Volatility and comovement over the business cycle, 1999:Q1–2024:Q3

	Volatility				Comovement		
	GDP gap	GDP	Consumption	Employment	Sweden	Germany	US
Euro area countries							
Austria	2.1	2.4	2.1	1.3	0.68	0.78	0.64
Belgium	1.7	1.9	2.0	0.7	0.79	0.78	0.76
Finland	1.9	2.7	1.9	1.6	0.79	0.89	0.68
France	2.0	2.2	1.9	1.0	0.69	0.84	0.73
Germany	1.8	2.1	2.0	1.2	0.80	1.00	0.66
Italy	2.4	2.9	2.8	1.5	0.71	0.80	0.58
Netherlands	1.8	2.2	2.4	1.3	0.69	0.80	0.58
Portugal	2.5	3.0	2.9	2.3	0.47	0.59	0.43
Spain	2.8	3.4	3.6	3.4	0.52	0.63	0.51
	<i>2.1</i>	<i>2.5</i>	<i>2.4</i>	<i>1.6</i>	<i>0.68</i>	<i>0.79</i>	<i>0.62</i>
Other countries							
Sweden	1.8	2.2	2.1	1.4	1.00	0.80	0.76
Canada	1.7	2.0	2.0	2.3	0.66	0.73	0.77
Denmark	1.6	2.1	2.2	1.5	0.76	0.76	0.77
New Zealand	1.6	1.8	2.1	1.6	0.27	0.24	0.29
Norway	1.3	1.3	2.6	1.3	0.48	0.52	0.58
Switzerland	1.5	1.7	1.2	1.1	0.71	0.80	0.68
United Kingdom	2.8	3.2	3.8	0.9	0.66	0.71	0.72
United States	1.4	1.7	1.9	2.5	0.76	0.66	1.00

Note: The first columns of the table show standard deviations for GDP gaps (percentage deviation from trend), GDP and private consumption (four-quarter rolling percentage annual growth) and number of people employed (percentage change compared with the corresponding quarter of the previous year). The last three columns show the correlation between GDP gaps in the respective countries. These gaps are calculated as percentage deviation from the HP-filtered trend for 1990Q1–2024Q4 (2020Q2 was excluded from the calculation of the correlation).

Source: Own calculations based on OECD EO 2024:2.

Figure 1 GDP gap, per cent of potential GDP



Note: GDP gap in each country and in Sweden, estimated using an HP filter on quarterly data for the period 1990Q1–2024Q4.

Source: Own calculations based on OECD EO 2024:2.

2.3 Swedish monetary policy has been similar to that of the euro area

Figure 2a shows that the Riksbank's policy rate has developed in roughly the same way as the ECB's during the period 1999–2025. The correlation between the two rates is 0.96, and the average rate was 1.7 per cent in Sweden compared with 1.5 per cent in the euro area. The most noticeable difference can be seen immediately after the global financial crisis, when the Riksbank raised its policy rate earlier and faster than the ECB.

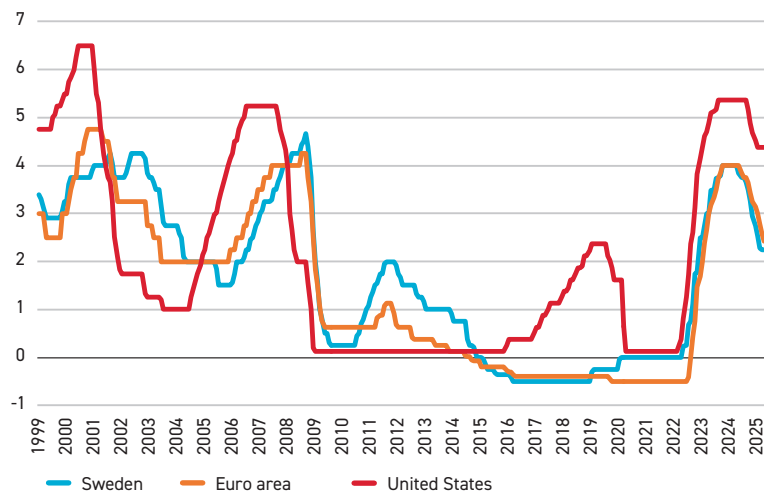
Several central banks have used asset purchases as a complement to the policy rate during and after the financial crisis. The Riksbank's use of such monetary policy has been similar to that of the ECB (see Figure 2b). Both central banks launched asset purchase programmes in the first half of 2015, when their respective policy rates had been cut to

negative levels. And both central banks expanded their asset purchases during the pandemic in 2020.

However, asset purchases in the euro area have been approximately twice as extensive (relative to the size of the economies) as those made by the Riksbank. As a member of the monetary union, the Riksbank would therefore have needed to make more extensive asset purchases. But several factors suggest that larger asset purchases would not have led to a significantly different economic development in Sweden. First, there are many indications that asset purchases in normal times do not have particularly large macroeconomic effects in Sweden.⁷

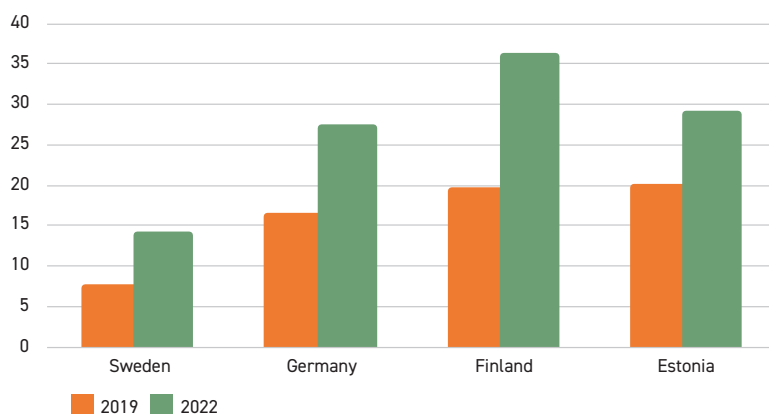
Figure 2 Monetary policy in Sweden and abroad

(a) Policy rates, per cent



⁷ See Flodén (2022).

(b) Asset holdings, per cent of GDP



Note: The euro area policy rate refers to the ECB's refinancing rate until 2008, the deposit rate from 2015, and an average of the two rates for 2009–2014. The US policy rate refers to the midpoint of the central bank's target range from December 2008. Monetary policy-motivated asset holdings at book value.

Sources: The Riksbank, BIS, FRED and own calculations (panel a). Own calculations based on the respective central banks' annual reports and Eurostat (panel b).

Second, the more limited asset purchases carried out by the Riksbank at the start of the pandemic – when financial markets were functioning poorly – were sufficient to stabilise the markets.

Third, the supply of Swedish government bonds is small due to the relatively low level of government debt. The Riksbank's purchases of government bonds could therefore not have been much larger than the purchases made until the outbreak of the pandemic. The situation could therefore have been similar to that faced by the Estonian central bank. Their asset purchases were, at least at times, dominated by bonds issued by supranational institutions, as the supply of Estonian sovereign bonds is very limited. Such purchases probably have a negligible effect on the economic situation in the home country.

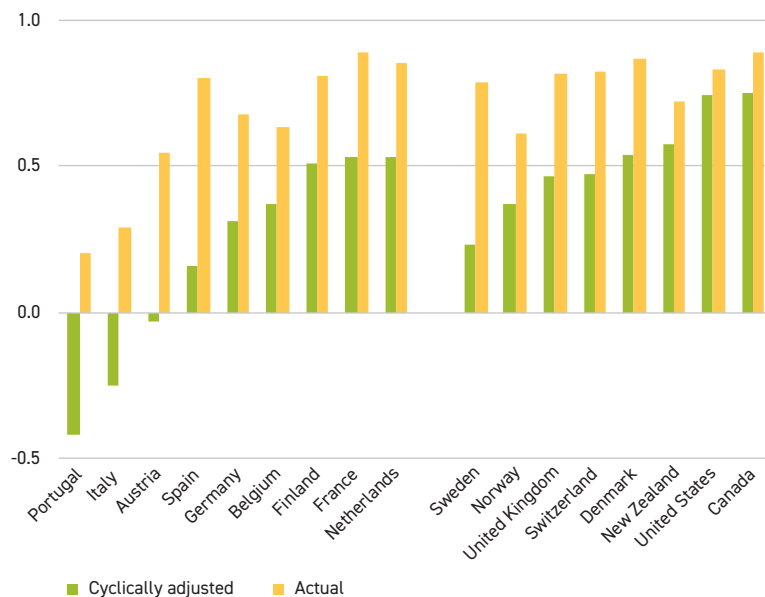
2.4 Clearer differences in fiscal policy

In a monetary union, fiscal policy is expected to play a greater role in stabilising the economy. A prerequisite for stabilisation policy to be

successful is, however, that public finances are sufficiently strong to allow fiscal policy to be made more expansionary during a downturn without the stimulus being offset by rising bond yields. As I pointed out at the outset, the EMU Inquiry (1997) highlighted this as an argument against Sweden joining the euro at its start, as the Swedish economy was then still affected by the economic crisis of the 1990s. The conditions for pursuing a more active countercyclical fiscal policy are better today, as public finances are now strong. On this point, the conditions for Sweden joining the euro have improved (see Chapter 6 by Calmfors for a more detailed discussion).

Figure 3 indicates that the concerns raised in the EMU Inquiry (1997) may have practical relevance. Public sector financial balances have certainly been more volatile (fiscal policy has been more “active”) in the euro area countries than in Sweden. But the figure shows that cyclically adjusted fiscal balances have been negatively correlated with the GDP gap in several of the euro area countries where volatility has been high. This indicates that fiscal policy in these countries has been procyclical, i.e., that these countries have needed to tighten fiscal policy during economic downturns. In that case, fiscal policy has contributed to greater economic fluctuations rather than counteracting country-specific shocks that are not addressed by the common monetary policy.

Figure 3 Correlation between general government primary net lending and the GDP gap



Note: A positive correlation means that fiscal policy is tightened during economic upturns and so on. The cyclically adjusted balance consists of the actual balance adjusted for automatic stabilisers. The correlations are based on annual data 1999–2024.

Source: OECD EO 2024:2.

3 Development of the *krona*

When the exchange rate is floating, it can respond to disturbances and help mitigate economic fluctuations or emerging external imbalances.⁸ Experience has shown, however, that exchange rates are highly volatile and fluctuate for many reasons. It is therefore not obvious that movements in the exchange rate contribute to stabilising the economy.

⁸ These arguments date back at least to Milton Friedman's (1953) classic contribution. See Tavlas (2024) for a contemporary summary.

3.1 Like other currencies, the *krona* has been volatile

Figure 4 shows that the nominal value of the *krona* has been volatile and that it has depreciated gradually over the past 15 years. Still, as demonstrated in Table 3, the volatility of the *krona* is not remarkable compared with other freely floating currencies.⁹ In fact, the Swedish currency has been less volatile than, for example, the Canadian dollar and the British pound. The *krona* has however depreciated more (in real terms) than any of the other currencies. I return to the trend depreciation of the *krona* in Section 3.2 below.¹⁰

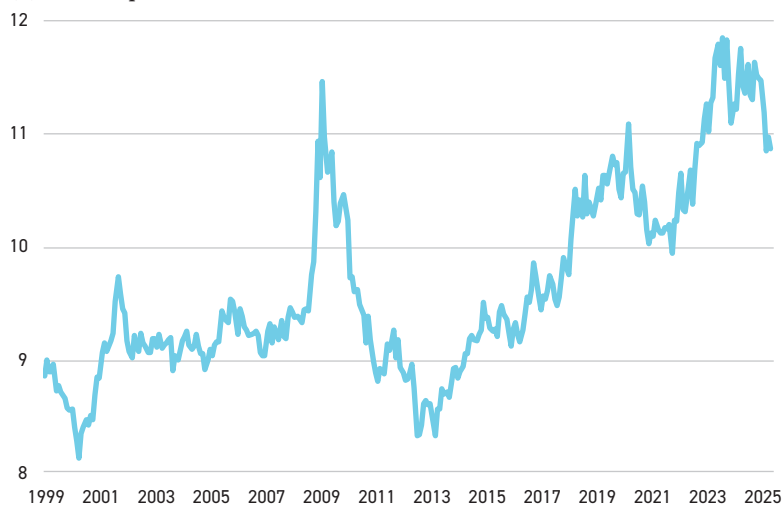
Some periods stand out with particularly large movements in the *krona*, often coinciding with major shifts in global conditions. During the fastest growth phase of the IT bubble, from the beginning of 1999 to its peak in April 2000, the *krona* strengthened against the euro by just over 10 per cent, while the Stockholm Stock Exchange rose by 90 per cent. When the stock market then lost more than half its value, the *krona* fell against the euro and in September 2001 was weaker than at the outset (see Figure 5a). Since the IT sector was large in Sweden, the subsequent decline in that sector can be interpreted as a relatively severe shock to the Swedish economy. Stock markets, however, fell sharply in many countries. A useful comparison is Finland, which had adopted the euro. Both the boom and the bust were more pronounced in Finland, where Nokia dominated the stock market index. Despite the absence of an exchange rate that could act as a shock absorber, economic developments in Finland were no worse than in Sweden (see Figure 5b).

9 It is, of course, not surprising that real exchange rates for Denmark and countries in the euro area show relatively low volatility. These countries have the same currency (or fixed exchange rate) and also trade extensively with each other. The trade-weighted exchange rates are therefore very stable.

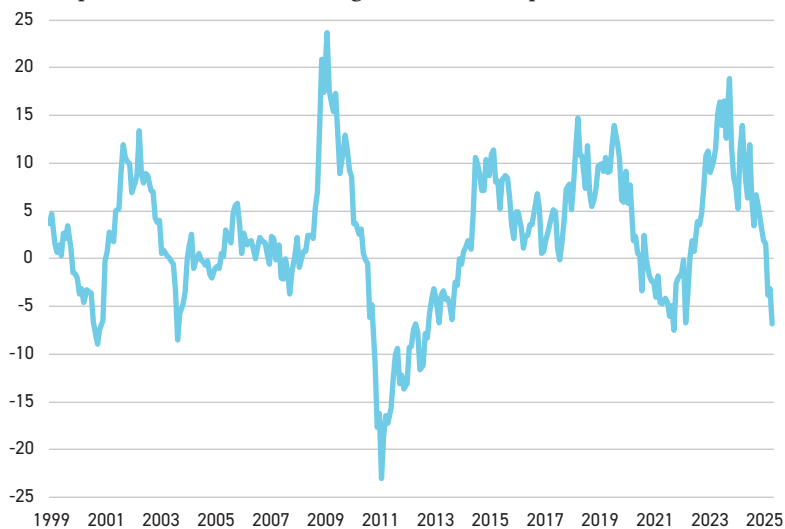
10 In that section, however, I raise questions about whether the measure of the real exchange rate is accurate.

Figure 4 The *krona*'s exchange rate against the euro, 1999–2025

(a) *Kronor* per euro



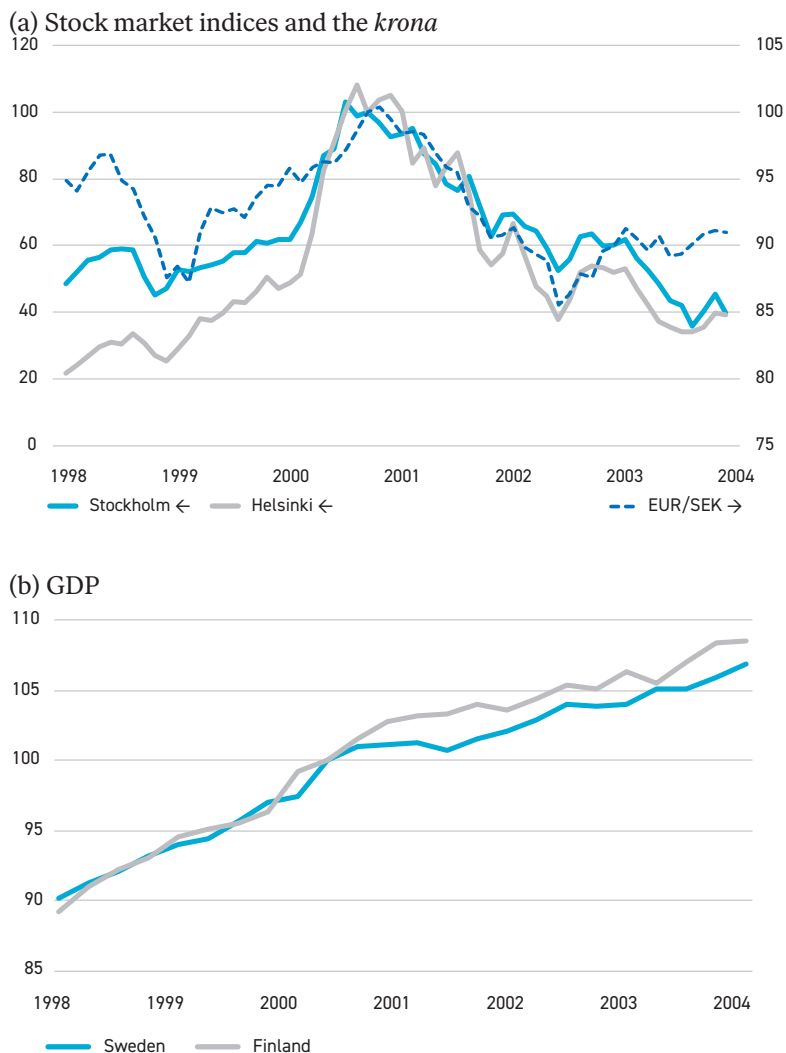
(b) Depreciation of the *krona* against the euro, per cent



Note: Monthly data, last observation is May 2025. The lower panel shows how the *krona* has depreciated (positive values) or appreciated (negative values) over a two-year period.

Source: The Riksbank.

Figure 5 Finland and Sweden during the IT bubble and subsequent IT crash, 1998–2004



Note: Stock market indices (left axis) for Stockholm ("All share") and Helsinki ("OMX"), index April 2000 = 100. The exchange rate (right axis) is displayed as an index for euros per *krona* (higher value means stronger *krona*), index April 2000 = 100. GDP volume, index 2000 Q2 = 100. Sources: Ekonomifakta, Bank of Finland, The Riksbank and OECD EO 2024:2.

During the global financial crisis, movements of the *krona* became even more pronounced. From August 2008 to February 2009, it weakened by more than 20 per cent against the euro. This depreciation was followed by a rapid recovery: by mid-2010 the *krona* had recovered its pre-crisis level, and it continued to strengthen until mid-2012, when it was just over 10 per cent stronger than before crisis.

Several explanations have been put forward for these large exchange rate movements. First, the Riksbank lowered its policy rate somewhat more than the ECB during the acute phase of the crisis, which may have contributed to the initial depreciation of the *krona*.

Second, like many other small currencies, the *krona* tends to weaken when global uncertainty increases. This explanation is supported by comparisons with other currencies. During the financial crisis, the *krona* depreciated much more against safe-haven currencies such as the US dollar, the Swiss franc and the Japanese yen – by almost 60 per cent – while remaining relatively stable against other small currencies, such as the Norwegian *krone* and the New Zealand dollar.

Table 3 confirms this broader pattern. Most freely floating currencies display a positive correlation between the value of the currency and the country's GDP gap. These exchange rates thus tend to depreciate when economic activity declines. The main exceptions are the United States, the euro area and Switzerland. Notably, the Swedish *krona* exhibits the strongest positive correlation of all currencies in the table. In this sense, the *krona* can be viewed as the opposite of a safe-haven currency.

Table 3 Exchange rates, 1999–2025

	Nominal exchange rate			Trend	
	Volatility 1 month	Volatility 12 months	Correlation with GDP gap	Real exchange rate	Terms of Trade
Euro area countries					
Austria	0.4	1.8	−0.18	−0.2	−0.2
Belgium	0.6	2.4	−0.06	−0.2	−0.2
Finland	0.7	3.0	−0.32	−0.3	−0.5
France	0.6	2.6	−0.02	−0.5	+0.0
Germany	0.7	3.1	−0.16	−0.4	+0.1
Italy	0.6	2.6	−0.07	−0.2	−0.1
Netherlands	0.7	2.9	−0.12	−0.1	−0.1
Portugal	0.3	1.3	−0.13	−0.1	+0.4
Spain	0.5	2.2	−0.09	−0.1	−0.1
	0.6	2.4	−0.13	−0.1	−0.1
Euro area	1.3	5.4	−0.10	−0.2	
Other countries					
Sweden	1.3	5.2	+0.30	−1.2	−0.1
Canada	1.5	6.2	+0.15	−0.0	+0.6
Denmark	0.6	2.7	−0.23	−0.2	+0.4
New Zealand	2.0	7.8	+0.14	−0.9	+1.2
Norway	1.6	5.7	+0.03	−1.0	+1.6
Switzerland	1.3	4.4	−0.25	−0.1	−0.3
United Kingdom	1.4	5.6	+0.09	−1.0	+0.5
United States	1.2	5.5	−0.35	−0.2	+0.4

Note: All exchange rates refer to trade-weighted indices, where a higher value indicates appreciation. Exchange rate volatility is based on monthly data for the nominal exchange rate index (from the BIS) and is calculated as the standard deviation for percentage change per month and per 12-month period. The correlation with the GDP gap is based on quarterly data (from the OECD, 1999 Q1–2024 Q3) and is calculated as the correlation between the percentage change in the exchange rate and the percentage point change in the GDP gap. GDP gap according to the HP filter. Trend refers to the time trend, percentage annual change. Real (inflation-adjusted) exchange rate according to BIS data, terms of trade (ratio between the country's export and import prices) according to OECD data.

Sources: Own calculations based on Bank for International Settlements (BIS) and OECD EO 2024:2.

Third, Swedish banks were hit particularly hard during the financial crisis because of their exposure to the Baltic countries, which investors perceived as an additional source of uncertainty for the Swedish

economy. As uncertainty surrounding the Baltic countries' accession to the euro diminished, pressure on the Swedish *krona* eased, contributing to its rapid appreciation in 2009 and 2010. At the same time, the crisis increasingly spread to the euro area through the sovereign debt problems of Greece, followed by Italy, Spain, Ireland and Portugal. In this environment, the Riksbank began to raise its policy rate earlier and more than other central banks (see Figure 2).

3.2 Gradual weakening of the *krona*

After the large fluctuations between 2008 and 2012, the *krona* began to depreciate gradually in 2013, a process that continued until 2023. The forces behind this prolonged depreciation are difficult to pin down. Bacchetta and Chikhani (2021) argue that it can be partly explained by the Riksbank's monetary policy decisions, in combination with its communication regarding the desired development of the *krona*. They conclude, however, that a substantial share of the depreciation cannot be accounted for by standard explanatory factors, and that the *krona* appeared undervalued at the time of their study.

Sveriges Riksbank (2023) likewise point to differences in monetary policy as a contributing factor, but argues that these are insufficient to explain either the magnitude of the depreciation or its persistent trend. The Riksbank instead highlights a range of additional mechanisms, including large outwards flows of Swedish pension savings and trend-following behaviour in financial markets.

Moreover, questions have been raised as to how much of the nominal depreciation of the *krona* has also been a real depreciation. According to Eurostat's HICP measure, the price level in Sweden rose by 67 per cent from December 1998 to January 2025. Over the same period, prices rose by 68 per cent in Germany according to the same measure, and by a very similar amount in the euro area as a whole (see Table 4). These figures therefore suggest that nominal prices have developed in a broadly similar way in Sweden and the euro area, implying that the real exchange rate of the *krona* has weakened by roughly the same amount as the nominal exchange rate.

Table 4 Accumulated price increase according to different price measures, per cent

	HICP		PPP	
	1998–2025	2012–2023	1998–2025	2012–2023
Denmark	62	18	76	24
Finland	64	21	77	26
France	62	23	69	20
Germany	68	29	68	29
Norway	85	41	138	42
Sweden	67	29	107	44
United States	89	29	127	45
Euro area	72	25	75	23

Note: PPP data refer to prices for private consumption and are given in relative terms, but are presented here as a mark-up on German HICP prices. '1998–2025' refers to December 1998 to January 2025. '2012–2023' refers to December to December. The price index for the United States has been supplemented with CPI data for 1998:12–2001:12 and 2024:12–2025:1. The euro area consists of the actual euro area countries in 2025 in the HICP columns but the original 11 countries in the PPP column.

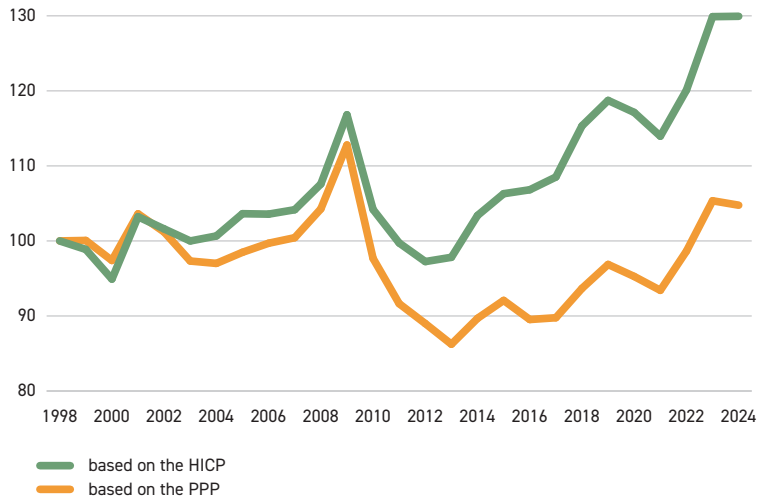
Source: Own calculations based on Eurostat HICP and PPP data. CPI for the United States from St. Louis FRED.

Tysklind (2020), however, shows that inflation statistics based on the CPI and HICP adjust for quality improvements to a greater extent in Sweden than in the rest of Europe. The assessment changes markedly if the real exchange rate is instead calculated using Eurostat's and the OECD's PPP statistics.¹¹ According to those data, consumer prices rose 23 per cent more in Sweden than in Germany between 1998 and 2023.¹² On this basis, the real exchange rate of the *krona* would have depreciated by only a few per cent against the euro over the period, despite a nominal depreciation of 29 per cent (see Figure 6).

11 The CPI and HICP measures track the price of a representative basket of consumer goods in each country over time. PPP statistics, on the other hand, compare the prices of similar goods and services in different countries at a given point in time. Deaton and Heston (2010) describe how PPP statistics are produced and how they can be used. The final columns in Table 4 show that the picture of inflation developments relative to Germany becomes very different not only for Sweden but also for Norway and the United States if it is based on PPP statistics.

12 Hansson (2023) argues that other data, in particular for wages, also indicate that inflation has been higher in Sweden than in the euro area.

Figure 6 Real exchange rate against Germany, 1998–2023, index



Note: Annual data, index 1998 = 100. The real exchange rate is calculated as the nominal exchange rate (*kronor* per euro) $\times$ German price level/Swedish price level. A higher value thus indicates a real *krona* depreciation.

Sources: Own calculations based on Eurostat.

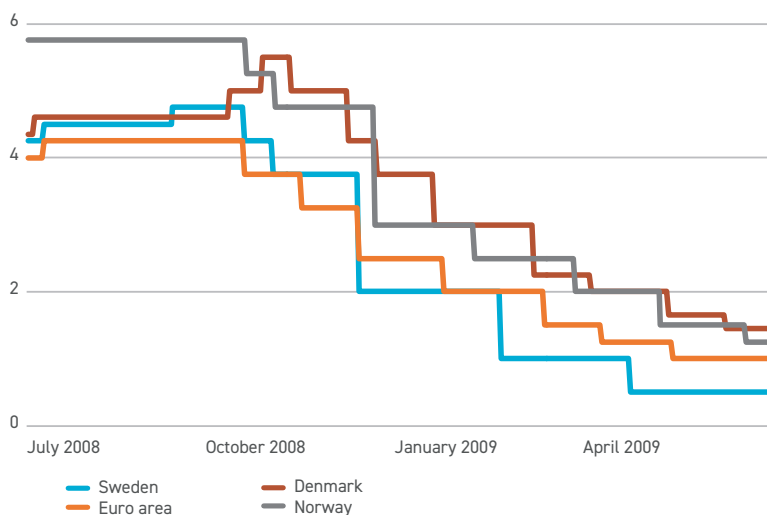
If the PPP statistics are taken at face value, the interpretation of several other statistics would also need to be revised. This applies, for example, to the growth figures reported earlier in this chapter. Understanding the reasons for the large differences between standard consumer price indices and PPP-based measures is therefore important. Analysing these differences in detail, however, is beyond the scope of this chapter. I therefore do not take a position on which measures should be given greater weight.

Short-term fluctuations in the real exchange are dominated by movements in the nominal exchange rate and are therefore not materially affected by the choice of inflation measure. As noted earlier, the *krona* depreciated rapidly at the end of 2008 and the beginning of 2009, before appreciating just as rapidly – and to even stronger levels – until 2012. This episode therefore warrants closer examination. How would the Swedish economy have developed if Sweden had been a member of the euro area when the global financial crisis broke out?

4 The global financial crisis of 2008–09

At the onset of the financial crisis, the Swedish *krona* fell rapidly in value against the euro. The same applies to the Norwegian *krone*. In addition, the Swedish and Norwegian central banks lowered their policy rates more and faster than the ECB, which may partly explain the depreciation (see Figure 7). Both factors likely contributed to mitigating the negative effects of the global financial crisis in Sweden and Norway compared with the euro area countries and Denmark.

Figure 7 Policy rates during the global financial crisis, per cent



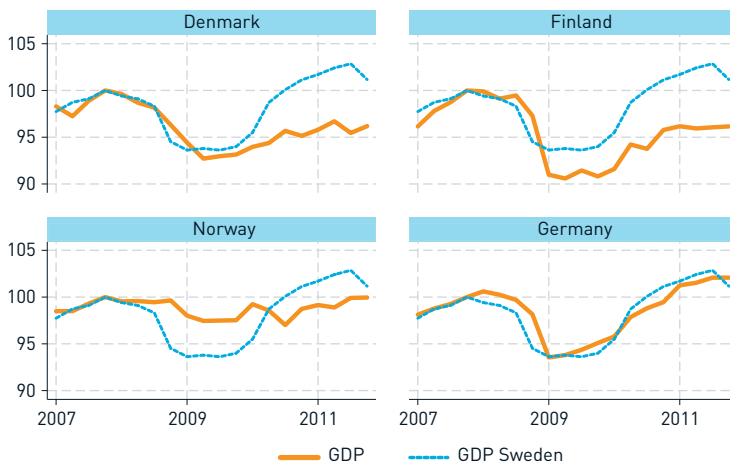
Note: The euro area policy rate refers to the refinancing rate. The Danish policy rate refers to the certificate rate.

Source: BIS.

Figure 8 confirms that the economic downturn was milder, and above all shorter, in Sweden and Norway than in the other Nordic countries. But developments in Sweden were also similar to those in Germany, which suggests that conclusions about the significance of *krona* depre-

ciation and an independent monetary policy should not be drawn too far. Comparisons with Germany may in any case be misleading since euro area monetary policy was probably adjusted more closely to conditions in Germany than to those in smaller member states. To assess how the Swedish economy would have developed during the financial crisis as a member of the euro area, a more informative comparison is therefore provided by Denmark, with a fixed exchange rate against the euro, and Finland, as a euro area member.

Figure 8 GDP during the global financial crisis, index



Note: GDP, volume, index 2007Q4 = 100.

Source: OECD EO 2024:2.

4.1 Problems in Danish banks

The economic downturn in Denmark was probably exacerbated by the fact that the country's financial system came under considerable stress in 2008. Several small and medium-sized banks became insolvent, partly as a result of sharply falling property prices. Although confidence in the Danish exchange rate regime was initially very strong, this led to capital outflows. To defend the Danish *krone's* fixed exchange rate against the euro, Denmark's Nationalbank therefore tightened

monetary policy by raising interest rates in September and October 2008.¹³ Both the problems in the banking sector and the relatively tight monetary policy likely contributed to the Danish downturn being more protracted than the Swedish one.

Swedish financial markets were also hit hard in 2008, partly because several major banks had substantial exposures to the Baltic countries. It is likely that the Swedish *krona* would also have come under pressure if Sweden, like Denmark, had maintained a fixed exchange rate against the euro. In that case, the Riksbank would have been forced to raise its policy rate in the middle of the crisis in order to defend the peg. Given Sweden's history of devaluations and depreciations, such interest-rate increases would probably have had to be larger than those implemented in Denmark. Rather than benefitting from a weakening exchange rate, the Swedish economy would then have faced tighter monetary conditions. It is therefore reasonable to assume that economic activity, and possibly even the banking system, would have been more adversely affected.

4.2 Large decline in manufacturing in both Finland and Sweden

The Finnish and Swedish economies share many characteristics, both in terms of labour market institutions and industry structure. In particular, both economies have a large manufacturing sector producing investment goods for export. The sharp fall in global demand during the financial crisis therefore initially hit both economies hard, even though the crisis originated outside these countries.

At the same time, Finland and Sweden operate under different exchange rate regimes. Using data and forecasts available in 2009, Gylfason et al. (2010) examined whether Sweden benefited, at Finland's expense, from the weakening of the *krona* at the onset of the crisis. They concluded that the benefits of the Swedish depreciation appeared to be limited. With the benefit of hindsight, however, the subsequent development of the Swedish economy looks more favourable. The

¹³ See Danmarks Nationalbank (2008).

GDP decline in Finland in 2009 turned out to be substantially larger than real-time forecasts suggested, while the downturn in Sweden was slightly milder than expected.¹⁴ In addition, the recovery in Sweden in 2010 was much stronger than in Finland.

Even so, it is difficult to attribute these differences directly to the depreciation of the *krona*. For example, the decline in both export and import volumes in 2009 was marginally smaller than real-time forecasts had predicted in both countries. Nor does a sectoral breakdown reveal a clear link to exchange rate developments. Manufacturing is often viewed as particularly exposed to international competition and therefore sensitive to exchange rate movements. This sector accounted for a substantial share of the GDP decline in both countries, and for a larger share in Sweden than in Finland. In Finland, however, construction and domestic trade also contributed significantly to the decline.

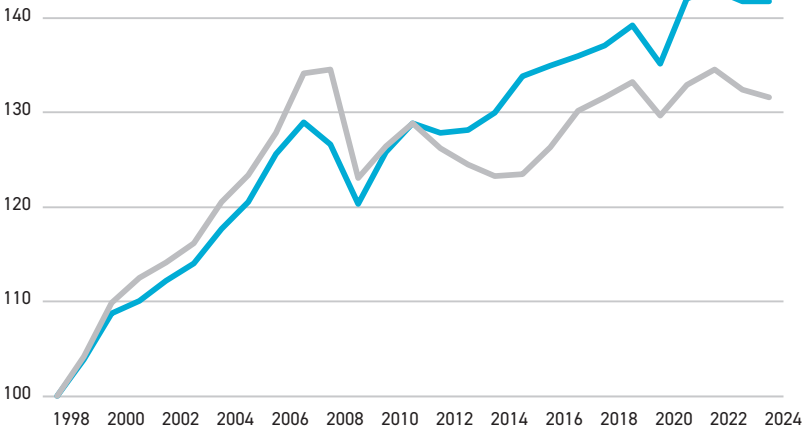
Some signs of a role for exchange rate movements can nevertheless be identified, most notably in the pulp and paper industry. In this sector, the contraction was considerably larger in Finland than in Sweden. Value added in the Finnish pulp and paper industry fell by more than 40 per cent between 2007 and 2009. Although the industry accounted for only around 3 per cent of Finnish GDP, it explains 1.1 percentage points of the total decline in GDP during the financial crisis. Given that similar pulp and paper products are exported from Sweden and Finland, it is plausible that the weak *krona* contributed to this development.

Finland's economy continued to perform poorly in the years following the global financial crisis (see Figure 9a). This weak performance is typically attributed to factors largely unrelated to the cyclical disruptions of the crisis itself, including the downturn in the telecoms industry, reduced demand for printing paper due to digitalisation, declining exports to Russia, an ageing population and structural problems in the labour market. Figure 9b further shows that Finland's terms of trade (the ratio between the country's export and import prices) had also deteriorated markedly during the decade leading up to the financial crisis.

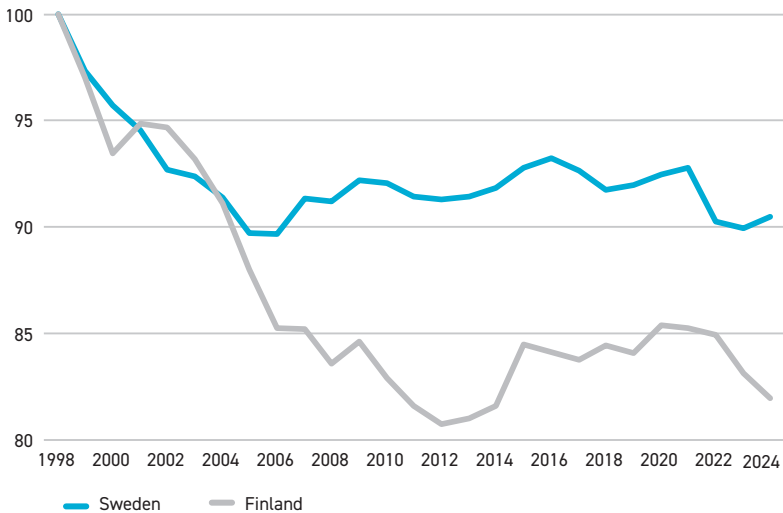
14 In the summer of 2009, the OECD forecast that GDP would fall by 4.7 per cent in Finland and 5.5 per cent in Sweden in 2009. The actual fall was 8.1 per cent in Finland and 4.2 per cent in Sweden.

Figure 9 Finland and Sweden during the global financial crisis, index

(a) GDP per capita



(b) Terms of trade



Note: GDP per capita, volume, index 1998 = 100. Terms of trade (ratio between export and import prices), index 1998 = 100.

Source: OECD EO 2024:2.

This episode is sometimes cited in Finland as an example of a country-specific shock that would have been easier to manage under a floating exchange rate regime.¹⁵ This may be well be the case, but it is difficult to quantify how much difference an alternative exchange rate regime would have made. Monetary policy would not necessarily have been substantially more expansionary, as the ECB was already pursuing a highly accommodative stance. While a weaker currency could have provided some support, the Finnish economy would still have faced a challenging adjustment away from dependence on both Nokia and exports to Russia.

4.3 Sweden benefited from the *krona*'s fall in 2008–09

One variable that clearly benefited from the depreciation of the *krona* during the global financial crisis was inflation. In many countries, the sharp decline in economic activity in 2008–09 was followed by a much smaller fall in inflation than standard models would have predicted.¹⁶ Even so, inflation dropped below target in most countries. Sweden was a notable exception: inflation remained close to the target in 2009 (see Figure 10). The relatively high inflation rate in Sweden can plausibly be attributed to the weak *krona* keeping inflation up through rising import prices.

From a conventional perspective, it was not obvious that the *krona* would depreciate in response to a crisis that originated outside Sweden. In practice, however, the the Swedish currency tends to depreciate when global risk aversion increases and investors seek liquid assets denominated in major currencies. In such circumstances, exchange rate depreciation can act as a stabilising mechanism. As argued above, the depreciation of the *krona* probably contributed to the decline in Swedish GDP being slightly smaller than it would otherwise have been during the financial crisis.

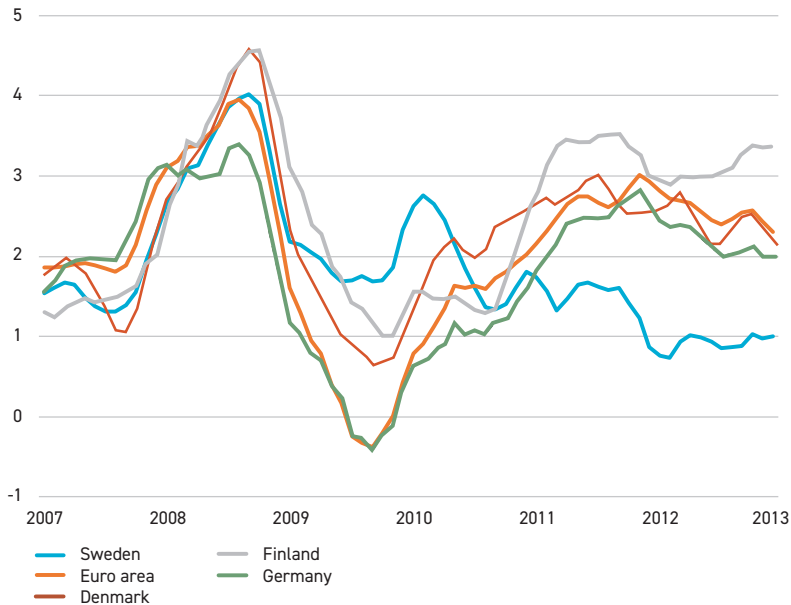
15 It could also be argued that the depreciation of the Swedish *krona* was part of the shock that affected the Finnish economy, and that Finland could have handled the episode better if Sweden had adopted the euro as its currency.

16 See International Monetary Fund (2013) and Coibon and Gorodnichenko (2015).

That said, a weakening exchange rate during a financial crisis can also be a symptom of deeper vulnerabilities, and the depreciation can in itself add to these. Periods of acute stress are characterised by heightened demand for safe and liquid assets, most notably US dollars, but also other reserve currencies. During the global financial crisis, the Riksbank, supported by swap arrangements with other central banks, was able to provide dollar liquidity to Swedish banks. It is far from certain, however, that such cooperation would be available in future crises. Banks within the monetary union benefit both from the euro's role as a more useful currency in times of stress and from the ECB's institutionalised access to dollar liquidity through cooperation with the US Federal Reserve.

In sum, the Swedish economy did benefit from the depreciation of the *krona* during the global financial crisis. The economic downturn was mitigated, and inflation remained closer to the target than in comparable countries. At the same time, these benefits appear to have been limited in magnitude. Moreover, they did not come without costs. The positive effects on economic activity reflected an improvement in Sweden's competitiveness relative to neighbouring countries, such as Finland, which were themselves severely affected by the crisis. Similarly, the inflationary support from a weak *krona* operated through lower import prices in other countries at a time when inflation there was already below target. While Sweden is a small economy, and the impact on others was correspondingly limited, the underlying mechanism nevertheless illustrates that exchange-rate based stabilisation in response to common disturbances tends to redistribute economic conditions across countries rather than generate aggregate gains.

Figure 10 Inflation during the global financial crisis, per cent



Note: Three-month moving average of twelve-month rate of change in HICP.

Source: Eurostat.

5 The *krona* and monetary policy 2009–2024

The limited macroeconomic effects of the weak *krona* during the global financial crisis can largely be attributed to its rapid recovery in 2009 and 2010. It appreciated from around 11.50 *kronor* per euro in February 2009 to 9.50 when the Riksbank began raising its policy rate at the end of June 2010, and then further to 9.00 at the end of the year. The *krona* was then stronger than at the onset of the crisis.

Despite the appreciation of the *krona* and the tightening of monetary policy, economic growth in Sweden remained relatively strong in 2010 and 2011 (see Figure 8). However, the exchange rate once again had an impact on inflation developments. While inflation elsewhere began to rise towards the 2 per cent targets, inflation in Sweden instead fell below target.

5.1 The *krona* gradually took on an increasingly prominent role

The Riksbank's decision to raise its policy rate earlier and more aggressively than other central banks during this period was controversial.¹⁷ The main reasons behind the interest rate hikes were the relatively rapid recovery of economic activity. The aim was to “normalise” monetary policy as resource utilisation recovered after the deep downturn in 2008 and 2009. The *krona* appears to have played a very minor role in the Riksbank's assessments in 2010; the forward-looking inflation forecast closely followed the forecast for inflation in the euro area.¹⁸ It is easy to imagine that the favourable inflation outcomes in 2009 contributed to insufficient attention being paid to the role played by the Swedish currency in sustaining inflation.

As inflation fell below target, the exchange rate gradually assumed greater importance in the monetary policy analysis. Several Monetary Policy Reports in 2011 and 2012 analysed alternative scenarios in which a stronger *krona* resulted in problematically low inflation. An in-depth analysis in the July 2012 Monetary Policy Report concluded that movements in the exchange rate were an important reason why inflation had been lower in Sweden than in the euro area (Sveriges Riksbank 2012).

The exchange rate became even more central to policy discussions when monetary policy shifted in 2014 and 2015 towards bringing inflation back up to target.¹⁹ The risk of *krona* appreciation was repeatedly highlighted as a key challenge for monetary policy, and the Riksbank frequently emphasised the close link between Swedish and European monetary policy.

Despite these concerns, the currency continued to depreciate, contributing to a gradual increase in inflation, which then stayed close to

17 The interest rate increases were also consistently met with reservations from some members of the Riksbank's Executive Board.

18 See, for example, the Monetary Policy Report and the minutes from the Monetary Policy Meeting on 30 June 2010 (Sveriges Riksbank 2010a, 2010b). The report contains the clearest exchange rate analysis in an alternative scenario in which the debt crisis in Europe worsens. In this scenario, however, the *krona* depreciates due to increased international uncertainty. The depreciation then helps to stabilise inflation in Sweden.

19 This is most clearly illustrated by the Riksbank's communication, beginning in January 2016, that it stood ready to intervene in the foreign exchange market (see Sveriges Riksbank 2016).

the target from 2017 until the outbreak of the pandemic.²⁰ In several euro area countries, which did not benefit from a weaker currency, inflation remained low during this period despite highly expansionary monetary policy (see Figures 11a and 2a).

Did the Swedish economy benefit from having a floating exchange rate during this period? Inflation in Sweden would probably have been lower if Sweden had adopted the euro, but this would not necessarily have been problematic. The Riksbank's concern about low inflation in the mid-2010s stemmed largely from the risk that it could undermine the credibility of the inflation target. In a monetary union, however, there is no commitment to achieving the inflation target at the level of individual member countries. The questions that should be asked about this episode are instead (i) whether the Swedish economy would have suffered from a weaker nominal anchor as a member of the monetary union and (ii) whether the Swedish economy needed support from a weak exchange rate. The answers to these questions are, in my view, far from obvious.

5.2 Problematic *krona* depreciation in 2022–23 when inflation rose

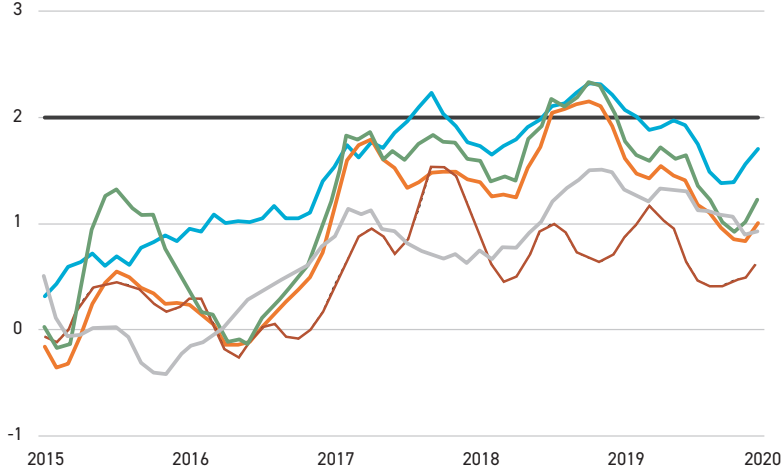
The *krona* has attracted considerable attention in recent years, partly because of its persistent weakness and partly because of the sharp depreciation during 2022 and 2023. The prolonged weakness of the currency has increasingly been portrayed as a broader economic problem. It has been argued, for example, that Swedish households have suffered a loss of purchasing power, that importing firms have been disadvantaged and that exporters have benefited to such an extent that necessary structural adjustments have been delayed.

These concerns intensified during the inflation surge of 2022–23. The *krona* depreciated by 15 per cent against the euro from the end of 2021 to mid-2023, precisely when inflation rose to historically high levels and monetary policy was tightened rapidly in both Sweden and internationally.

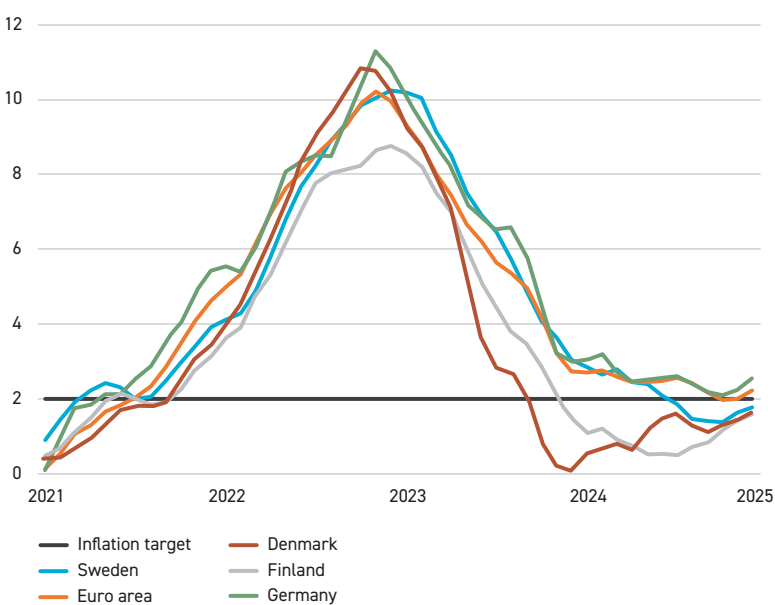
20 Corbo and Di Casola (2022) find that exogenous shocks to the *krona* exchange rate have a substantial effect on inflation. Nevertheless, they conclude that the rise in Swedish inflation during this period was primarily driven by domestic monetary policy. Their analysis, however, only covers data up to the second quarter of 2017.

Figure 11 Episodes of low and high inflation

(a) Low inflation, per cent



(b) High inflation, per cent



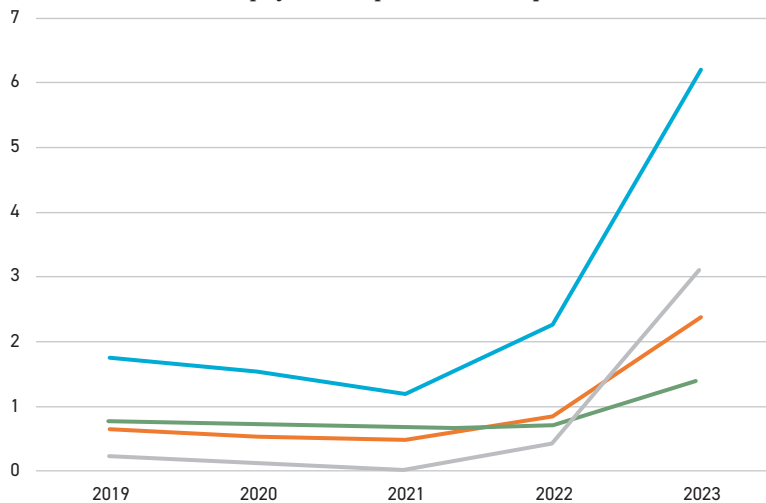
Note: Three-month moving average of twelve-month change in HICP, per cent.
Source: Eurostat.

The rise in inflation during this episode was a global phenomenon (see Figure 11b). Central banks raised policy rates at roughly the same time in 2022, and subsequent interest rate paths have also been similar (see Figure 2). A closer inspection nevertheless reveals important differences. Policy rates were raised more in the United States than in Europe, and somewhat less in Sweden than in the euro area. These differences partly reflect cross-country variation in the intensity of inflationary pressures, but also differences in how a given policy rate change affects the real economy.

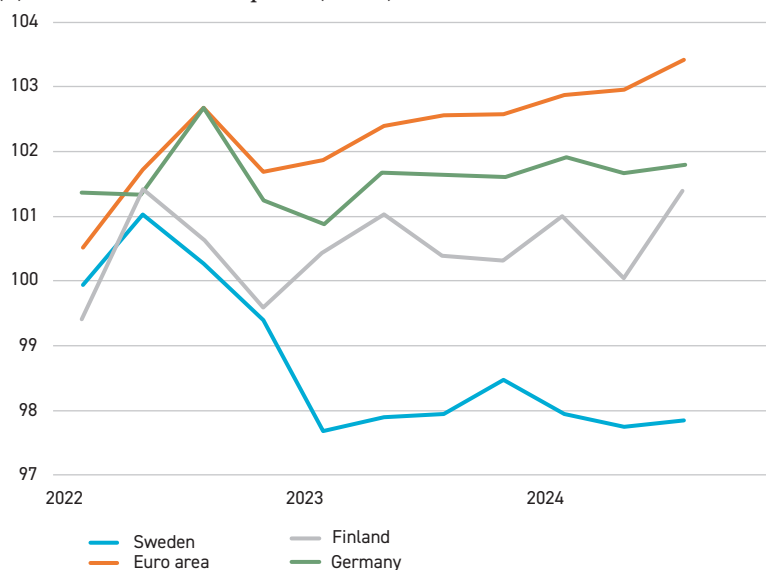
In the United States, both household and corporate borrowing are dominated by long-term fixed-rate contracts. Changes in the policy rate therefore have relatively limited immediate impact on cash flows, while monetary policy instead operates mainly through expectations of future interest rates and long-term yields. The euro area represents an intermediate case. Variable interest rates are common in some countries, such as Finland, while long maturities dominate in others, such as Germany. Swedish households combine variable interest rates with high levels of indebtedness. As shown in Figure 12, this means that the sharp rise in interest rates had a particularly strong and immediate impact on household cash flows. This also appears to have contributed to the pronounced weakness in household consumption in recent years.

Figure 12 Impact of monetary policy, 2019–23

(a) Household interest payments (per cent of disposable income)



(b) Household consumption (index)



Note: Household consumption refers to volume, index 2021Q4 = 100.

Sources: Eurostat (panel a) and OECD EO 2024:2 (panel b).

Interest rate changes thus have a rapid and powerful impact on the Swedish economy. Against this background, it is not surprising that the Riksbank raised its policy rate by less than the ECB and the Federal Reserve. The smaller increase in the Swedish policy rate likely contributed to the depreciation of the *krona* during this period. The exchange rate thus complicated monetary policy by amplifying the trade-off between stabilising inflation and supporting economic activity. Despite the economy's high interest-rate sensitivity, the Riksbank nevertheless had to raise its policy rate almost as much as other central banks, partly out of concern that further currency depreciation would otherwise add to inflationary pressures.

This episode illustrates a well-known macroeconomic challenge: supply shocks – shocks that simultaneously dampen economic activity and push up inflation – are difficult for monetary policy to manage. In such situations, central banks cannot both stimulate the economic activity and stabilise inflation. The rise in inflation following the pandemic highlights that these difficulties are exacerbated when a country is more interest-rate-sensitive than its trading partners.

This episode would have been challenging even if Sweden had been a member of the monetary union. Monetary policy was tightened slightly more in the euro area than in Sweden. The increase in inflation would therefore likely have been somewhat smaller in Sweden under euro membership, owing both to a smaller exchange rate effect and to tighter monetary policy. This would, however, have come at the cost of weaker economic activity.

The broader lesson is that large differences in interest rate sensitivity across countries can generate substantial macroeconomic challenges. As we have seen, these challenges arise even when the exchange rate is floating. In a monetary union, where monetary policy is uniform, they may be even more problematic. If Sweden were to adopt the euro, reducing Swedish households' interest rate sensitivity would therefore be particularly desirable.

6 Concluding reflections

6.1 Euro area cooperation has improved but still has significant shortcomings

Ahead of the introduction of the euro in 1999, many economists expressed concern about the constraints that a monetary union would impose on countries' ability to respond to country-specific shocks, in the absence of an independent monetary policy and an exchange rate that could help smooth their effects.

The first decade following the introduction of the euro was characterised by a period of what, in retrospect, appears to have been a deceptive calm. Economic growth was relatively strong and macroeconomic volatility limited. Even at the onset of the global financial crisis, the euro initially seemed to contribute to stability. From 2010 onwards, however, severe tensions emerged within the monetary union as financial markets began to demand ever higher risk premia on government bonds, first in Greece and then in several other euro area countries.

The underlying causes of the European debt crisis were largely consistent with the risks that economists had warned about in the 1990s.²¹ In an environment of growing optimism and hopes of convergence with the richer core euro area countries, the common monetary policy proved too expansionary for several member states as well as for candidate countries operating under fixed exchange rates. This resulted, among other things, in widening trade and current account deficits vis-à-vis the core countries. In several cases, wages and production costs increased faster than could be justified by productivity developments, leading to a gradual erosion of competitiveness. Countries with high public debt, such as Greece and Italy, initially benefited from the sharp decline in borrowing costs following euro membership, but necessary structural reforms were postponed when fiscal space expanded. In other countries, low interest rates fuelled rapid increases in property prices and private indebtedness rather than productive investments.

21 See Calmfors (2017) and Buti and Corsetti (2024) for more detailed reviews of the crisis and its causes.

Buti and Corsetti (2024) nevertheless argue that the crisis differed in important respects from the scenarios emphasised by early critics. In their interpretation, self-fulfilling expectations played a central role when risk premia surged, and weaknesses in the institutional framework for European economic governance prevented an effective containment of the crisis.

The crisis was ultimately managed without any country having to leave the monetary union.²² Candidate countries, such as the Baltic states, succeeded in maintaining their fixed exchange rates and subsequently adopting the euro. Over time, the crisis also led to deeper cooperation among euro area countries and to the creation of new institutions, regulations and policy instruments. Nevertheless, important shortcomings remain that could complicate the management of future disturbances. The absence of substantial common fiscal resources means that the ECB has been assigned an unnecessarily prominent role in areas that would be better handled by political institutions, while the scope for addressing country-specific shocks remains limited. The lack of a common nominal risk-free asset, such as Eurobonds, and of a common deposit insurance scheme continues to impede financial integration. As a result, financial markets remain largely segmented along national lines, leading to inefficient capital allocation and excessive home bias in the portfolios of households and banks. Finally, public finances in many euro area countries remain weak, and in several cases weaker than at the onset of the debt crisis (see Chapter 7 by Andersson and Jonung).

6.2 The major shocks have been global

Krugman (1993) argued that deeper cooperation between countries in a monetary union would lead countries to become more specialised in different industries, thereby raising the likelihood of asymmetric shocks. In the absence of a common fiscal policy or other insurance

²² This is not to say that the process was either easy or painless. Crisis management involved substantial fiscal tightening in an already weak economic environment, contributing to high unemployment and to economic activity remaining depressed for many years.

mechanisms, such developments could, in his view, cause the monetary union to function less effectively over time.

Experience to date does not support Krugman's concerns. It is difficult to identify major country-specific disturbances in Europe beyond the debt crisis. Instead, the most significant shocks have been common and predominantly global: first the global financial crisis, followed by the pandemic in 2020, and more recently the sharp increase in energy prices and inflation, especially after Russia's invasion of Ukraine in 2022.

The euro area countries have navigated the recent episodes without obvious country-specific problems emerging. One can only speculate how the European Union would have managed these episodes in a setting with 27 currencies and 27 independent central banks, but it is difficult to see how the outcome would have been any better. Monetary policy in the euro area has not been used in attempts to gain national advantages at the expense of others, and uncertainty on foreign-exchange markets has not added to macroeconomic instability. Instead, the common monetary policy has helped keep risk premia on government bonds low and has encouraged cooperation in policy areas beyond monetary policy.

Compared to an alternative scenario where each country maintains its own currency, whether freely floating or linked through some exchange-rate arrangement, I believe that the euro has contributed to macroeconomic stability. Sweden's policy choice, however, is not between these two alternatives, but between retaining its own currency and joining the currency already adopted by 21 countries. On the basis of the evidence presented in this chapter, it remains unclear which alternative would bring the most macroeconomic stability to Sweden.

6.3 Stabilisation policy can be both helped and complicated by a floating exchange rate

Concerns about constraints on macroeconomic stabilisation are among the arguments most frequently raised by economists against monetary unions. Experience from recent decades, however, suggests that exchange rates do not always move in ways that support stabili-

sation. Depending on the nature of the shocks affecting the economy, exchange rate movements may dampen fluctuations in some circumstances but amplify volatility in others.

As noted repeatedly above, disturbances that are specific to the home country are particularly challenging to navigate for members of a monetary union. But countries in a monetary union are also affected by shocks originating in other member countries, to the extent that the common monetary policy responds to these shocks. From a Swedish perspective, one potential risk concerns the strained public finances in several euro area countries. These conditions could constrain future monetary policy and limit its ability to keep inflation low and stable (see Walentin's Chapter 4).

It may be coincidental that the major disturbances of the past decade have been common rather than country-specific. More likely, however, this reflects that economies have become increasingly interconnected over time. Although globalisation now has stalled, and even reversed, everything indicates that economic cooperation within Europe will continue to deepen and that European financial markets will become more integrated. Such developments may in itself enhance the effectiveness of common monetary policy, and may also imply that even disturbances with an initially national character increasingly require international responses.

From a broader perspective, a prerequisite for macroeconomic stability in Europe is arguably that financial markets continue to integrate, which in turn makes it even more likely that shocks will be best managed jointly. These forces together mean that economic policy cooperation in Europe needs to continue to deepen, for example through the development of common fiscal instruments such as jointly issued bonds at the EU or euro area level as well as expanded common revenue sources.

Recent geopolitical developments have strengthened the case for such cooperation. Following the 2024 US presidential election, uncertainty surrounding the role of the United States in the global economy has increased, amid shifting positions on trade policy and fiscal sustainability. The US dollar could lose some of its safe-haven status if confidence in US financial institutions or public finances were to erode.

These concerns have already been reflected in a marked depreciation of the dollar in 2025. If this process continues, it is conceivable that the euro could assume a more prominent role as a safe-haven currency.

7 Summary and conclusions

This chapter has examined the implications of Sweden's exchange rate regime for macroeconomic stability. Based on established economic theory and the debates preceding the introduction of the euro, there were concerns that stabilisation policies in the euro area would be impaired by a common monetary policy and the absence of a floating exchange rate that could respond to country-specific shocks. The European debt crisis that began around 2010 demonstrates that such concerns were relevant. At the same time, it is difficult to assess how the economies most affected by the crisis would have developed in the absence of the single currency.

In Sweden, there were particular reasons during the 1990s to preserve an independent monetary policy for some time to come, given weak public finances and an economy still recovering from the crisis earlier in the decade. With the benefit of hindsight, there is little evidence that this room for manoeuvre has been important. In fact, the Riksbank's monetary policy has largely mirrored that of the ECB throughout the period. This does not imply that the decision to remain outside the monetary union has been irrelevant for macroeconomic stability. The Swedish *krona* has been volatile and has depreciated substantially against the euro, at least nominally, despite similar monetary policy and despite the difficulty of identifying clear country-specific shocks affecting the Swedish economy. It remains difficult to assess how the economy would have evolved under euro membership. What can be said is that exchange rate movements have contributed to macroeconomic stabilisation in some episodes, while complicating it in others.

The arguments that motivated Sweden to postpone euro adoption have become less relevant over time. Most notably, public finances are now strong, giving fiscal policy ample capacity to dampen economic

fluctuations if needed. Within the euro area, challenges related to high public debt and structural weaknesses persist in several countries. These issues may generate difficult trade-offs for the common monetary policy in the future. The euro area's capacity to manage crisis is, however, stronger today than it was during the debt crisis. Important lessons have been learned, and European economic cooperation has deepened through the development of new institutions and policy instruments.

In addition, European economies are becoming increasingly integrated, for example through financial markets. Swedish banks and other financial institutions are active in euro area countries, and banks from the euro area operate in Sweden. Future crises are therefore unlikely to be confined within national borders, and effective crisis management will almost certainly require international cooperation. Against this background, it is far from certain that the *krona* will move in ways that facilitate Swedish stabilisation policy in future crises, regardless of whether such shocks originate domestically or abroad.

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CHAPTER 6

Fiscal policy, internal devaluations and fiscal transfers as substitutes for own monetary policy in the event of euro membership

Lars Calmfors

1 Introduction

The main stabilisation policy argument against Swedish euro membership is that we would no longer have our own monetary policy that can be adapted to the domestic economic situation. There would then also be no exchange rate that could move against the euro. If Sweden were to experience economic shocks different from those experienced by the euro area as a whole, there would be a risk that economic fluctuations would be greater than if we remained outside the monetary union.

The discussion has mostly focused on the risk of country-specific (asymmetric) macroeconomic shocks. Examples of such disturbances include the economic crises in Sweden and Finland in the early 1990s and Finland's crisis in the early 2010s, when key industries faced falling demand. Similar problems arise in the event of common (symmetric) disturbances if these hit one country particularly hard. A further complication is that a common monetary policy may be assumed to affect demand and inflation more in Sweden than elsewhere because interest

rate sensitivity is greater due to higher private-sector borrowing and a larger proportion of variable-rate loans.¹

Access to an independent monetary policy can be seen as insurance that reduces the risk of major economic fluctuations in the event of other economic disturbances than in the euro area. A key question is to what extent other adjustment mechanisms can replace national monetary policy in this role in the case of membership of the monetary union. I will discuss three such mechanisms: (i) national fiscal demand management policy; (ii) internal devaluations; and (iii) fiscal transfers from other EU member states. An implicit assumption in my analysis is that the euro area's common monetary policy handles symmetric macroeconomic shocks in a manner consistent with Swedish preferences. This assumption is not self-evident, but can be justified by the fact that in recent years the ECB and the Riksbank appear to have made fairly similar trade-offs between stabilisation of output and of inflation.²

1.1 Previous extent of country-specific economic shocks in the euro area

The past extent of country-specific cyclical shocks within the euro area may be a suitable starting point. One way to define such a shock in a euro area country is as a situation where the estimated GDP gap (the difference between actual and potential GDP) there differs from the corresponding GDP gap in the euro area as a whole. Figure 1a illustrates the extent of such asymmetries for the current euro area countries over the period 2010–24. The chart shows the frequency (proportion) of different annual differences between national GDP gaps and the GDP gap for the euro area.

One problem in assessing the need to replace national monetary policy with other instruments for stabilising the domestic economy is that the ex-post estimated GDP gaps have been affected by how these instruments have been used.

1 See also Hansson, Walentin and Flodén's chapters (3, 4 and 5) for analyses of various types of shocks.

2 These issues are discussed in more detail in Chapter 3 by Walentin and Chapter 5 by Flodén.

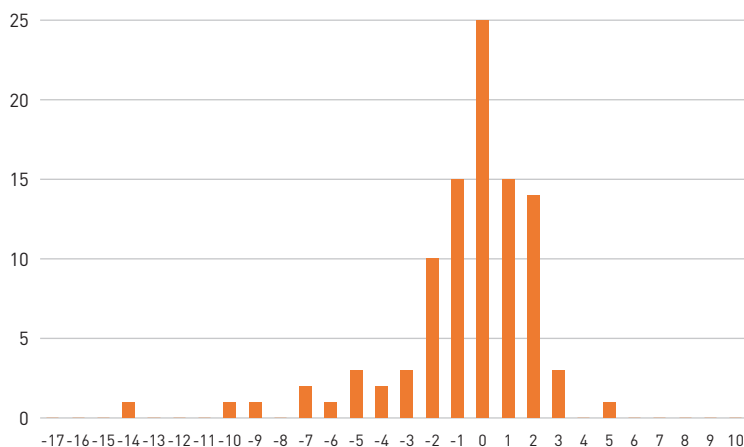
Therefore, the GDP gaps should be adjusted for this. Such a comprehensive analysis is difficult to perform. However, one step in the right direction is to correct for the demand effects of the fiscal policy pursued, which is reasonably the instrument that has the greatest impact. Figure 1b adjusts the ex-post estimated GDP gaps in Figure 1a for the active fiscal policy that has been pursued. The chart thus shows an estimate of the differences between the national GDP gaps and the GDP gap in the euro area as a whole if fiscal policy had been neutral, i.e. neither stimulating nor tightening demand. This can be assumed to give a better picture of how the genuine cyclical disturbances in different countries deviate from those in the euro area than the differences in unadjusted GDP gaps.³

The charts show that the differences in GDP gaps are greater for the adjusted than for the unadjusted measures. 65 per cent of the differences in the countries' annual unadjusted GDP gaps (the ex-post gaps) compared with the euro area as a whole are in the range -2 to +2 per cent of potential GDP (i.e., small differences in gaps). The corresponding figure for the adjusted gaps (the ex-ante gaps, i.e., the gaps if no active fiscal policy had been pursued) is 55 per cent. The implication is that active fiscal policy has tended to even out the differences between national and European cyclical positions. Another observation (from Figure 1b) is that the cyclical differences have in some cases been very large, especially in the case of recessions: in 10 per cent of cases, a euro area country has had a GDP gap that was more than 4 percentage points more negative than in the euro area as a whole, while a gap that was more than 4 percentage points more positive has only occurred in 6 per cent of cases.

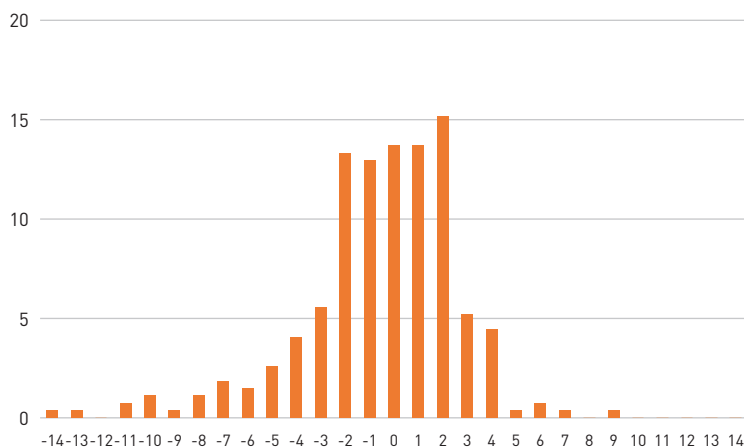
3 A more comprehensive analysis should also correct for, e.g., differences between euro area countries in the strength of automatic stabilisers (see Section 2.2), the size of fiscal multipliers (see Section 2.3) and the (possibly different) demand effects of the common monetary policy.

Figure 1 Frequency distribution of differences in annual GDP gaps between individual euro area countries and the euro area as a whole, 2010–24, per cent

(a) Unadjusted (ex-post) GDP gaps



(b) Adjusted (ex-ante) GDP gaps



Note: The horizontal axis shows different intervals for the difference in annual GDP gaps between individual euro area countries (excluding Malta and Luxembourg) and the euro area as a whole. The number of observations is 270. The vertical axis shows the percentages for the different intervals. In panel b, the GDP gaps have been adjusted for fiscal policy by assuming that the gaps would have been affected if the general government structural net lending differed

from -0.5 per cent of (potential) GDP and that the fiscal multiplier is 0.75. -0.5 per cent of GDP was chosen as the norm for a neutral fiscal policy because the stability pact's previous medium-term budgetary targets (for structural net lending) for most euro area countries were set at this figure (see also Swedish Fiscal Policy Council 2023 regarding the methodology).

Source: Own calculations based on AMECO.

An alternative method of assessing whether economic cyclical developments in an individual euro area country deviate from those in the euro area as a whole in a way that justifies the use of other national economic policy instruments is to look at the difference in inflation. However, the arguments for using national instruments if inflation deviates from that in the rest of the monetary union are weaker than if there is a deviation in terms of resource utilisation. Inflation that differs from that in other euro area countries can be problematic in certain situations, as it creates imbalances that must later be corrected, but in other cases – for example, when imbalances have already arisen – it can be a desirable adjustment mechanism (see Section 3). In a country with its own currency, there is a risk that inflation that deviates from the inflation target will create monetary policy credibility problems, causing inflation expectations to become unanchored from the target. The same danger does not exist for an individual (small) euro area country, as long-term inflation expectations there can be assumed to be anchored to the ECB's inflation target.

2 National fiscal policy

This section analyses the extent to which greater use of national demand-side fiscal policy could serve as a substitute for independent monetary policy in stabilising the economy in the event of euro membership. Variations in demand that are greater than in the rest of the euro area would then need to be counteracted by fiscal policy to a greater extent than is currently the case. Section 2.1 discusses the scope for fiscal policy action in economic downturns, while Section 2.2 describes the role of automatic stabilisers. Section 2.3 presents what we know about the demand effects of active fiscal policy and how these relate to the monetary policy effects they would replace. Section 2.4 discusses the probability that fiscal policy really be used countercy-

clically. My assessment of the possibilities for fiscal policy to replace monetary policy is summarised in Section 2.5.

2.1 Fiscal policy's room of manoeuvre in economic downturns

If fiscal policy is to be used more than at present to counteract economic downturns in the event of euro membership, sufficient room for manoeuvre is a binding constraint. Public debt must be low enough that the additional debt increases that would result from fiscal policy stimulus measures are not perceived by the financial markets as causing such fiscal sustainability problems that government bond yields rise sharply. In that case, the stimulus measures may not be implemented. If they are, they may be ineffective because a general rise in long-term interest rates tends to reduce demand.⁴

When the monetary union was launched in 1999, there would have been little scope for fiscal stimulus measures if Sweden had been hit by a country-specific recession after joining (EMU Inquiry 1997). Sweden was still struggling with high public debt after the crisis of the early 1990s. The overriding goal of fiscal policy was therefore to consolidate public finances. Fiscal policy was not available as a stabilisation policy tool to counteract a severe recession.

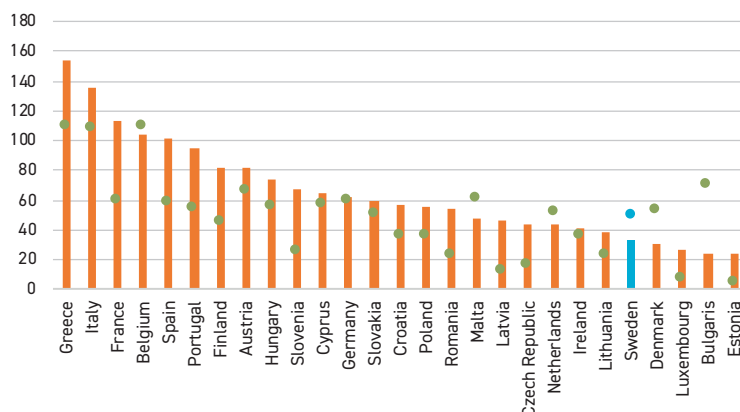
Today, Sweden's fiscal situation is very different. The Maastricht debt, public sector consolidated gross debt, was around 35 per cent of GDP in 2025. This compares with 66.1 per cent in 1998. This means that there are completely different opportunities today to use fiscal policy stimulus in a deep recession than there were at the start of the monetary union.

Sweden now not only has a lower public debt ratio in absolute terms than before, but it is also lower in relative terms, as our debt ratio has decreased while the debt of others has increased (Figure 2). The financial markets' tolerance of a given level of Swedish debt has therefore probably become much greater. The debt ratio of more than 70 per cent that Sweden reached during the 1990s crisis – which was then consid-

4 According to Ilzetsky et al. (2013), increased public consumption reduces GDP if public sector debt exceeds 60 per cent of GDP.

ered dangerously high – now appears almost moderate in an international comparison. In 2000, the ratio between Maastricht debt in Sweden and that in the euro area (measured as a percentage of GDP) was 0.73; by 2024, it had fallen to 0.38.

Figure 2 Maastricht debt in EU countries, per cent of GDP



Note: Maastricht debt is the consolidated gross public sector debt, i.e., the sector's debt after internal claims and liabilities have been netted out. The bars refer to 2024, the circles to 2000. Source: Eurostat.

Table 1 Maastricht debt in Sweden, the EU and the euro area

	Sweden (per cent of GDP)	EU (per cent of GDP)	Euro area (per cent of GDP)	Sweden/EU	Sweden/ Euro area
2000	50.4	66.6	69.2	0.76	0.73
2024	33.5	81.0	87.4	0.41	0.38

Source: Eurostat and own calculations.

The stability pact

Fiscal space is also affected by the rules of the EU stability pact.⁵ Under the new rules from 2024, each member state is required to formulate a medium-term fiscal-structural plan setting out a path for structural net primary expenditure, i.e., cyclically adjusted expenditure excluding one-off items and interest payments, after taking into account discretionary tax changes. An excessive deficit procedure may be initiated against a country that deviates from its net expenditure path if its debt ratio exceeds the EU debt ceiling of 60 per cent of GDP or the deficit ceiling of 3 per cent of GDP. In such cases, the country in question may be required to take corrective measures.

The adjustment requirements are most stringent when the debt ceiling is exceeded. If the debt ratio exceeds 90 per cent of GDP, the net expenditure path must be revised so that the debt ratio is reduced by an average of at least 1 per cent of GDP per year. If the debt ratio is between 60 and 90 per cent of GDP, it is to be reduced by at least half a percentage point on average per year. If the structural balance shows a deficit of more than 1.5 per cent of GDP, the net expenditure path must be adjusted so that the primary structural balance, i.e., the structural balance excluding interest payments, improves by 0.4 per cent of GDP annually. However, Sweden's current low debt ratio means that it would take a very deep economic crisis for the provisions regarding debt to affect the room of manoeuvre for fiscal policy.

The rules on actual deficits are more relevant for Sweden. Even with a balance target for general government net lending over the business cycle (the current long-term objective according to the Swedish fiscal framework – in practice a target for structural net lending), there is a risk that the EU deficit ceiling will be exceeded in a deep recession. In that case, Sweden may be required to pursue a tight fiscal policy. A benchmark is that structural net lending should improve by 0.4 per cent of GDP annually. It is difficult to assess the likelihood of such a requirement. There is a national escape clause in the stability pact that can be activated by the Ecofin Council (the EU Council of Ministers consisting of finance and economy ministers) if a member state so requests and

5 Chapter 7 by Andersson and Jonung describes the rules in more detail.

the Commission recommends this. It requires that exceptional circumstances beyond a member state's control have a significant impact on its public finances. Such activation could occur if Sweden is hit by a severe economic downturn.

In July 2025, the Ecofin Council activated the national escape clauses for the period 2025–28 for 15 EU countries (ten of which are euro area countries) that had applied for them.⁶ The decision allows for deviations of up to 1.5 per cent of GDP from the agreed net expenditure paths for increased defence spending.

As a member of the monetary union, Sweden may be subject to financial sanctions if it fails to comply with the Council's fiscal recommendations. Fines may amount to a maximum of 0.05 per cent of GDP and are accumulated every six months until the member state is deemed to have taken effective action. However, no fines have ever been imposed to date.

In summary, it is unlikely that EU fiscal rules would prevent Sweden from using fiscal policy to stabilise the economy in the event of a severe country-specific recession in the foreseeable future. The current low debt ratio means that there is little risk of exceeding the EU debt ceiling. However, exceeding the deficit ceiling of 3 per cent of GDP cannot be ruled out. But it is unlikely that EU rules would then limit fiscal policy freedom. In the event of a severe negative asymmetric shock in Sweden, the national escape clause may be activated. If this does not happen, the risk of fines is still small. Any such fines are also so low that they hardly constitute a binding policy constraint.

2.2 Automatic stabilisers

The first line of fiscal defence against economic fluctuations consists of the automatic stabilisers, i.e., changes in tax revenues and government expenditure that occur without any active (discretionary) decisions being taken. When income in the economy falls (rises), tax revenues automatically decrease (increase). Payments of unemployment benefits and social assistance also change automatically when unemploy-

6 Council of the EU (2025). Germany's application to activate the national escape clause was approved by the Ecofin Council in October 2025.

ment varies. According to empirical research, stronger automatic stabilisers are associated with less cyclical variability of economic activity.⁷

The strength of automatic stabilisers is usually measured using what is known as the *budget elasticity*. This indicates the percentage of GDP by which general government net lending increases (decreases) if GDP rises (falls) by 1 per cent. The budget elasticity is often approximated by public expenditure as a percentage of GDP.⁸ As this share is high in Sweden, 51 per cent of GDP in 2024, the budget elasticity should be close to this value. This is also what more exact calculations find. According to Sigonius (2024), the elasticity in 2022 was 0.46. However, according to the study, it has fallen over time: in 1998, it was 0.55. This is explained by the fact that both taxes (mainly income taxes) and unemployment benefits as a share of GDP have fallen.

However, conventional calculations likely overestimate the automatic stabilisers in Sweden, as the balanced budget requirement for local governments is not taken into account: a municipality (region) is not allowed to budget for a negative economic result, and if such a result occurs, it must be compensated for within a three-year period. Hence, local government expenditure cannot be assumed to be unaffected by an economic downturn in which tax revenues fall but may need to be cut. If the cuts correspond to the reductions in tax revenues, the budget elasticity falls from 0.48 to 0.29, according to a rough estimate by Calmfors et al. (2023). However, the calculation probably overestimates the effect of the balanced budget requirement. Most local governments achieve a positive economic result in normal times, and this can therefore fall to a point without any need to cut expenditure (or raise the local government tax rate). Many local governments have also built up rainy-day funds that can be used to even out the result.⁹ However, the more severe the recession, the greater the risk that any surpluses and reserves will not be sufficient to avoid a negative economic result.

7 See, for example, Karras and Yang (2022) and references there.

8 This holds exactly if tax revenues are proportional to GDP and all government expenditure is independent of GDP (see Karras and Yang 2022 and Calmfors et al. 2023).

9 During 2013–23, local governments were able to build up so-called result equalisation reserves (*resultatutjämningsreserver*). From 2024 onwards, allocations can instead be made to surplus funds (*resultatreserver*), which can be used more flexibly.

The existence of automatic stabilisers means that, under euro membership, fiscal policy would automatically take over part of the stabilising role that national monetary policy would currently play in the event of shocks specific to Sweden. However, it would also be desirable to strengthen the automatic stabilisers if Sweden joins the monetary union. One possibility is to introduce a system that makes central government grants to the local government sector vary countercyclically. Unemployment insurance could also be made cyclically dependent so that benefits automatically become more generous in bad than in good times.¹⁰

A major advantage of automatic stabilisers is that they act symmetrically during economic downturns and upturns. This reduces the risk that a greater role for fiscal policy in stabilising the economy will lead to higher public debt, as it is politically easier to decide on stimulus measures during downturns than on austerity measures during upturns.

2.3 Active fiscal policy

An extensive international literature shows that active (discretionary) fiscal policy has a substantial impact on economic activity. This research attempts to estimate the size of fiscal multipliers, i.e., the effect on GDP of a unit change in various government expenditures and taxes.

Almerud and Laun (2021) is a recent study for Sweden, where calculations have been made in the National Institute of Economic Research's general equilibrium model SELMA. According to this analysis, the multiplier, defined as the cumulative percentage increase in GDP of a fiscal stimulus of 1 per cent of GDP, is 1.3 for government investment, 1.1 for government consumption and 0.3 for transfers to households and (lower) income tax after eight quarters. Earlier time series estimates by Hjelm and Stockhammar (2016) found a similar pattern but larger multipliers. Foreign studies generally report slightly lower multipliers than the Swedish ones (Almerud and Laun 2022, Calmfors et al. 2023).

The results for Sweden refer to the current monetary policy regime with a floating exchange rate and inflation targeting, where a more

¹⁰ See, for example, Calmfors et al. (2023), Calmfors (2023) and Långtidsutredningen (2023).

expansionary fiscal policy can be expected to trigger tighter monetary policy. This would not be the case with euro membership, as changes in activity and inflation in Sweden would then only have a marginal impact on corresponding variables for the whole euro area, and thus on the ECB's interest rate policy. Higher multipliers can therefore be expected if Sweden joins the monetary union. Fiscal policy would thus become more effective than it is today. The relevant multipliers then correspond to Almerud and Laun's case with passive monetary policy (no interest rate reaction from the Riksbank to fiscal stimulus). According to their calculations, the multipliers for government investment, government consumption and transfers would then increase to 1.5, 1.8 and 0.4 respectively, while the multiplier for (lower) income tax would decrease to 0.2.¹¹ Batini et al. (2014) generally expect 30 per cent higher multipliers when the interest rate remains unchanged.

The demand effects of reduced taxes and increased transfers become greater the more such measures are targeted at liquidity-constrained households – in practice mainly, but not exclusively, low-income households – which, if they could, would have borrowed more for consumption today. Almerud and Laun (2022) report that a high, rather than low, proportion of liquidity-constrained households would double the multiplier for income taxes.

An established research finding is that joining the euro would increase trade with euro area countries. Larger foreign trade can be expected to reduce the effects of fiscal policy, as more of a change in demand then leaks abroad. According to Karras (2012), a 10-percentage-point increase in the share of foreign trade (the sum of exports and imports as a share of GDP) reduces the long-term fiscal multiplier by 5–6 per cent. In Chapter 2, Forslid concludes that joining the euro would raise Sweden's foreign trade by approximately 5–7.5 per cent. In that case, the effect on fiscal policy multipliers would be only marginal.¹²

11 The reason why the income tax multiplier is greater outside the monetary union than inside is that a tax cut is assumed to increase the supply of labour more than employment, causing unemployment to rise, which then prompts the Riksbank to lower the policy rate.

12 The sum of Sweden's exports and imports was approximately 104 per cent of GDP in 2024. An increase of 5–7.5 per cent means that this figure rises by 5–8 percentage points. According to Karras' estimates, the fiscal policy multiplier would then decrease by only 2.5–5 per cent.

Fiscal policy instead of monetary policy in the event of a cyclical downturn

The possibilities of compensating for the loss of independent monetary policy in the monetary union with fiscal policy also depend on the size of the monetary policy stabilisation effects that are to be replaced. There is extensive international research on how interest rate changes affect the economy, as well as a number of studies for Sweden.

Laséen et al. (2022) report average annual GDP declines over three years in Sweden of 0.5 and 0.8 per cent if the policy rate is raised by 1 percentage point over one year (and subsequently returns to its usual pattern) according to the National Institute of Economic Research's SELMA model and the Riksbank's MAJA model, respectively. According to a compilation by Berggren et al. (2024), the median maximum effect on GDP (usually after slightly more than one year) in nine empirical models for Sweden is 0.4 per cent. Their own estimate is 0.8 per cent.¹³ Laséen et al. (2022) report a median effect in 57 models for different countries of 0.5 per cent.

It is not clear how estimated monetary and fiscal policy effects should be compared, as the time profile for both measures and effects differs between studies. However, reasonable estimates may be that a change in the policy rate of 1 percentage point outside the monetary union will result in a GDP change in the opposite direction of 0.5 per cent and that the fiscal multiplier in the event of euro membership is 1 for government consumption and government investment and 0.5 if the focus is instead on households. Based on these assumptions, a couple of very rough calculations can be made.

Calculation 1. The largest cumulative changes in the policy interest rate in Sweden since 2001 have been 4.5 percentage points: a reduction of this magnitude in 2008–09 and an increase of this magnitude in 2019–23 (of which 4 percentage points were in 2022–23). Assume that, after joining the euro, Sweden is exposed to an asymmetric shock that outside the monetary union would have been met with a change in the policy rate of this size but which will now be counteracted by fiscal policy. Assume that half of the measures relate to government

13 However, a new study using a different methodology by Andersson and Lundvall (2024) finds a maximum effect of as much as 1.8 per cent.

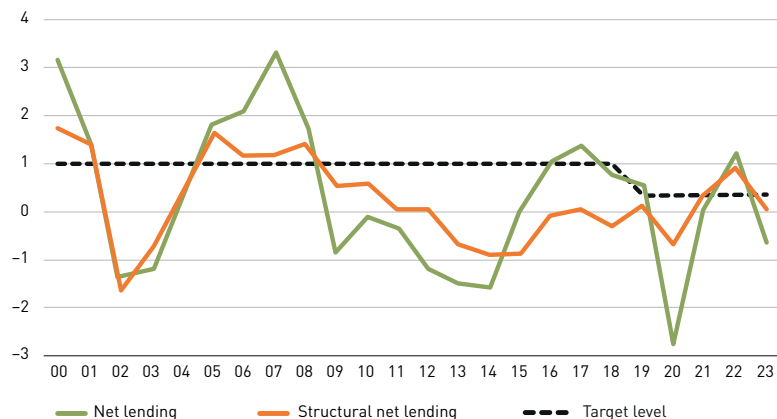
consumption and government investment, and half to households, so that the multiplier is 0.75. This would require a change in structural net lending of 3 per cent of GDP to achieve the same demand effect as if the policy rate changed by 4.5 percentage points.¹⁴

As shown in Figure 3, the largest cumulative changes in structural net lending (from a maximum to a minimum or vice versa) since the turn of the millennium have been approximately 3 per cent of GDP, according to the Ministry of Finance.¹⁵ According to the National Institute of Economic Research, they have been approximately 3 per cent (decrease) and 4 per cent of GDP (increase) respectively. The conclusion is that over a few years it may be possible to change fiscal policy to such an extent that a demand impulse equal to that achieved by previous changes in the Riksbank policy rate can be achieved. However, the latter can probably be implemented much more quickly – the policy rate changes described above (a reduction of 4.5 percentage points in 2008–09 and an increase of 4 percentage points in 2022–23) were implemented in seven months.

14 A change in the policy rate of 4.5 percentage points affects GDP by $0.5 \times 4.5 = 2.25$ per cent. The same effect is achieved by a change in structural net lending of 3 per cent of GDP, since $0.75 \times 3 = 2.25$.

15 During the same period, according to calculations by the National Institute of Economic Research, the largest annual decrease in structural net lending is 2.9 per cent of GDP in 2020 and the largest annual increase is 1.4 per cent of GDP in 2005. The largest cumulative decrease is also 2.9 per cent of GDP (2020) and the largest cumulative increase is 4.2 per cent of GDP (2003–05).

Figure 3 General government net lending and structural net lending, 2000–23, per cent of GDP and of potential GDP



Source: Saldomålskommittén (2024).

Calculation 2. Another way of assessing the requirements for active fiscal policy in a euro member country is to look at how business cycles have varied in the current euro area countries. Figure 1b showed the frequency distribution for the difference in adjusted (ex-ante) annual GDP gaps between individual euro area countries and the euro area as a whole in 2010–24. The difference is a measure of how large an effect on GDP national fiscal policy would have needed to achieve in order for the cyclical situation in a country to be the same as in the euro area as a whole (i.e., to give the same GDP gap). Table 2 shows some percentiles for the difference in GDP gaps according to Figure 1.

Table 2 Percentile values for the difference in the adjusted (ex-ante) annual GDP gap between individual euro area countries and the euro area as a whole, 2010–24, per cent of potential GDP

10th percentile	–4.1
20th percentile	–2.0
80th percentile	2.4
90th percentile	3.2

Note: See Figure 1.

Source: See Figure 1.

The table should be read as follows: Without active fiscal policy, the probability of a GDP gap that was at least 4.1 percentage points more negative than in the euro area as a whole and of a GDP gap that was at least 3.2 percentage points more positive was 10 per cent in each case. The probability of a negative gap that was at least 2 percentage points larger, as well as a positive gap that was at least 2.4 percentage points larger, was 20 per cent in each case. Assume that these probabilities also apply to Sweden under euro membership and that the fiscal multiplier is 0.75. Further assume that there is no active fiscal policy in the euro area and that fiscal policy in Sweden affects demand when structural net lending deviates from zero (the balance target). Theoretically, a country-specific recession could then be avoided 80 per cent of the time with a structural deficit of no more than $2/0.75 = 2.7$ per cent of GDP.¹⁶ A country-specific boom would under the same conditions, also be avoided 80 per cent of the time with a maximum structural surplus of $2.4/0.75 = 3.2$ per cent of GDP.¹⁷ With higher requirements to avoid country-specific cycles (than 80 per cent of the time), greater variations in structural net lending would be needed than those indicated above.

16 For the 18 euro area countries on which the frequency distribution in Figure 1 is based, the excess of the adjusted (ex-ante) negative GDP gap relative to the euro area as a whole was less than 2 per cent of GDP (20th percentile) in all years from 2010 to 2024 in Austria, Belgium, France, Germany, the Netherlands, and Slovakia. The difference was less than 4.1 per cent of GDP (10th percentile) during these years in Estonia, Finland and Portugal as well.

17 The excess of the adjusted (ex-ante) positive GDP gap relative to the euro area as a whole was less than 2.4 percentage points (80th percentile) in Belgium, France, Italy and Spain in all years from 2010 to 2024. It was less than 3.2 percentage points (90th percentile) in all years in Austria, Finland, Latvia, Slovakia, and Slovenia as well.

Such variations are perhaps less likely. It can therefore be assumed that situations may arise where fiscal policy under euro membership only partially compensates for the loss of an independent monetary policy.

2.4 Use of fiscal policy

For euro membership, it is not enough for fiscal policy to have the potential to be effective in stabilising economic fluctuations; it must also be used effectively in a countercyclical manner. It must be both well-timed and well-dosed. There is extensive international discussion on this issue, highlighting both time lags in fiscal policy decision-making and the risk that this is dominated by considerations other than stabilisation policy.¹⁸ The difficulties of achieving sufficiently tight fiscal policy during economic booms are often emphasised.

Fiscal policy adjustment to the business cycle in Sweden

Table 3 summarises the conclusions from three analyses of how Swedish fiscal policy has related to the business cycle. The studies have examined how both total government net lending (including automatic stabilisers) and structural net lending have been adjusted. One measure is how the deviation between the surplus target and structural net lending (the fiscal stance) has covaried with the GDP gap, another is how the change in structural net lending (the fiscal impulse) has covaried with the change in the GDP gap. All the studies examine the relationships ex post, and one also ex ante, i.e., the fiscal political intentions (the planned policy based on a GDP forecast).

18 See Calmfors et al. (2023), Calmfors (2023) and Långtidsutredningen (2023).

Table 3 Cyclical adjustment of fiscal policy in Sweden

	Year	Net lending deviation from the surplus target	Structural net lending deviation from the surplus target	Change in net lending	Change in structural net lending
Calmfors et al. (2022)	1996–2018	Strongly countercyclical	Acyclical		
Lyhagen and Shahnazarian (2023)	2001–2021	Strongly coun- tercyclical	Weakly coun- tercyclical	Strongly coun- tercyclical	Weakly coun- tercyclical
Swedish Fiscal Policy Council (2023) ex post	2002–2022	Strongly coun- tercyclical	Counter- cyclical	Strongly coun- tercyclical	Counter- cyclical
Swedish Fiscal Policy Council (2023) ex ante	2002–2022	Strongly coun- tercyclical	Slightly coun- tercyclical	Strongly coun- tercyclical	Counter- cyclical

The studies unanimously show that total net lending has varied strongly countercyclically. However, conclusions regarding active fiscal policy vary. Calmfors et al. (2023) find that structural net lending has been acyclical, while Lyhagen and Shahnazarian (2023) argue that it has been weakly countercyclical and the Swedish Fiscal Policy Council (2023) that it has been countercyclical (approximately 0.25 percentage points higher structural net lending when the GDP gap is 1 percentage point larger). The Fiscal Policy Council's study is the only one that takes into account that the causal relationship between the GDP gap and government net lending is bidirectional: the GDP gap can trigger countercyclical fiscal policy, but this also affects the GDP gap. Therefore, there may be reason to attach the greatest importance to the Council's study.

However, even according to the Fiscal Policy Council, the active fiscal policy has sometimes been inappropriately designed. The clearest case is during the global financial crisis in 2009, when structural net lending only marginally fell short of the surplus target at the time, despite a negative GDP gap of around 5 per cent of GDP.¹⁹ During the economic boom of 2007, the structural budget balance was only about 0.5 percentage points above the surplus target, despite a positive GDP gap of almost 4 per cent.

19 According to Calmfors et al. (2023), fiscal policy was actually procyclical that year.

One should be cautious when drawing conclusions about the likely fiscal policy in the event of participation in the monetary union from observations of policy outside the union. However, since monetary policy under the current monetary regime has been adjusted to specific Swedish conditions, the incentives for countercyclical fiscal policy should be strengthened with euro membership.

Cyclical adjustment of fiscal policy in the EU and the euro area

Much of the international research on how fiscal policy has been adapted to the business cycle concerns the countries in the euro area or the EU as a whole. Studies show that active fiscal policy has often been procyclical, so that economic fluctuations have been reinforced rather than counteracted.²⁰ This has been explained by political incentives to use potential budget surpluses during upturns for spending increases and tax cuts, and by fiscal rules and market reactions forcing austerity measures during downturns.

The picture of often procyclical fiscal policy is confirmed in some recent studies. They distinguish between fiscal intentions and outcomes. Cronin and McQuinn (2021) found that both the plans and the outcomes for government consumption in EU countries in 2011–18 were procyclical on average, but the former more so than the latter. Larch et al. (2021) and Gootjes and de Haan (2022) instead examined the cyclical pattern of cyclically adjusted primary net lending in EU countries (2001–19 and 2001–15, respectively).²¹ According to the former study, there was a procyclical pattern: a 1 percentage point change in the GDP gap meant, on average, a change in the opposite direction in the cyclically adjusted fiscal balance of between 0.2 and 0.4 per cent of potential GDP. The procyclical pattern was stronger in boom than in bust, if government debt was high and if the fiscal rules of the stability pact had been disregarded. The procyclical bias did not seem to be due to difficulties in assessing the GDP gap – the pattern was the same when fiscal policy was instead related to more observ-

²⁰ See, for example, Larch et al. (2021) for a survey.

²¹ Primary net lending excludes capital income and interest expenditure.

able economic indicators such as changes in industrial production or unemployment.

Gootjes and de Haan (2022) found a weaker procyclical pattern than Larch et al. (2021): a decrease (increase) in realised cyclically adjusted primary net lending of approximately 0.2 per cent of GDP when the GDP gap increases (decreases) by 1 percentage point. In contrast to Cronin and McQuinn (2021), Gootjes and de Haan's results indicate that the procyclical pattern applies to the ex-post outcomes but not to the ex-ante plans. Another result – in line with Larch et al. (2021) – is that fiscal policy was less procyclical in downturns than in upturns, with more binding fiscal rules and more effective public administration.

It is not clear what conclusions can be drawn for Sweden from analyses of fiscal policy patterns in the EU (euro area). However, Sweden meets several of the criteria that, according to the studies, counteract procyclical behaviour: low public debt, a tradition of respecting fiscal rules and efficient public administration. It should also be noted that during the deep recessions of 2009 (the global financial crisis) and 2020 (the pandemic crisis), active fiscal policy in most EU countries was countercyclical.

The experiences of Denmark may be of interest, as the country's Maastricht debt has fallen in a similar way to Sweden's. Denmark does not participate in the monetary union but has a fixed exchange rate against the euro. The policy interest rate must therefore follow that of the ECB. This means that only fiscal policy can be used to stabilise the business cycle if it is developing differently from the euro area. According to Andersen (2024), active fiscal policy has mostly been countercyclical. One exception, however, was the period 2004–07, when an expansionary policy was pursued at the same time as the economy was overheating. This contributed to the property price bubble that then burst in connection with the global financial crisis of 2008–09, leading to a deep economic downturn in the following years.

2.5 **Summary assessment of the potential for fiscal policy to replace national monetary policy**

Sweden's low public debt gives fiscal policy much greater opportunities to counteract negative asymmetric shocks in the event of euro membership today than at the start of the monetary union in 1999. Nor is it likely that the rules of the stability pact would pose any obstacles.

The automatic stabilisers in Sweden are generally considered to be strong, even though they have weakened somewhat over time. However, standard calculations do not take into account that the balanced budget requirement for local governments, at least in severe economic downturns, requires expenditure cuts (or tax increases) in municipalities and regions unless their finances are maintained through active decisions to increase central government grants. Membership of the monetary union strengthens the arguments put forward for strengthening the automatic stabilisers – through rules on cyclically adjusted central government grants and cyclically dependent unemployment insurance.

There is reason to believe that active fiscal policy measures can, at least in part, be a substitute for an independent monetary policy in the event of asymmetric economic shocks. Since active fiscal policy in Sweden has mostly been conducted countercyclically in recent decades, it seems likely that this would also be the case with euro membership. The Swedish economy is characterised by features that, in international comparisons, have been found to promote countercyclical fiscal policy.

Possibilities to strengthen the role of active fiscal policy in economic stabilisation

There are well-known problems with active fiscal policy.²² The decision-making process is normally slower than for a central bank's monetary policy – although the pandemic showed that fiscal policy decisions can be made quickly in a deep crisis. There is also a risk of miscalibration, not least because the design of fiscal policy is also influenced

²² See, for example, Calmfors et al. (2023).

by many considerations other than stabilisation policy. In the case of membership of a monetary union, there are therefore strong reasons to make changes that increase the likelihood of active fiscal policy being used effectively in cyclical stabilisation.

One option is to make greater use of semi-automatic stabilisers. These are pre-prepared packages of measures that can be activated quickly through discretionary decisions. Labour market programmes are a traditional example of such measures. Another semi-automatic stabiliser is the system of support for short-time working that was introduced in 2014 but has never been used. To be activated, a government decision is required, based on an assessment by the National Institute of Economic Research that there is a particularly severe economic downturn. Calmfors et al. (2023) and Calmfors (2023) proposed that packages of income tax rebates or transfer payments for use in downturns should be prepared. The measures could primarily be targeted at low-income households, which have a higher marginal propensity to consume than high-income households. Semi-automatic stabilisers to tighten the economy during economic booms are also desirable. In a sense, such stabilisers already exist, as Swedish fiscal policy tends to be contractionary in the absence of active decisions. This is because tax revenues automatically grow roughly in proportion to GDP (wages), while government expenditure does not: some expenditure is fixed in *kronor* until decisions on changes are made (such as central government grants to local governments), others are indexed to the price level (many social benefits) and still others to wage developments with an adjustment for expected productivity gains (appropriations to government agencies).

A second possibility is to allow active fiscal policy to be guided by a rule similar to the Taylor rule followed by many central banks (according to which the deviation of the policy rate from the neutral interest rate – the rate that neither stimulates nor restricts demand – is determined by the GDP gap and the deviation of inflation from the inflation target). The recent Long-Term Survey (Långtidsutredningen 2023) proposed this. In Denmark, the Economic Council (2007) advocated a principle whereby government consumption and investment should be reduced (increased) by 1 per cent for each percentage point increase

(decrease) in the GDP gap. According to the Council, this would mean that approximately $\frac{1}{4}$ of a demand shock would be counteracted. Such partial stabilisation is justified by the risk that the GDP gap will be misjudged and that economic fluctuations may be due to supply as well as demand shocks.

A third possible change concerns the Fiscal Policy Council. Its current role is to assess retrospectively whether fiscal policy is compatible with sustainable public finances and fiscal objectives, and how it relates to cyclical developments. This remit differs from the original proposal in the STEMU Inquiry (2002), which was that, in the event of Sweden joining the euro, a fiscal council should be established to make recommendations on appropriate fiscal policy in order to strengthen the stabilising role of fiscal policy. The proposal was mainly motivated by concerns that fiscal policy would not be sufficiently restrictive during economic booms.

New EU rules on independent fiscal institutions from 2024 mean that the role of the Fiscal Policy Council must be expanded – even though Sweden remains outside the monetary union. A new task of “producing, assessing or endorsing annual and multiannual macroeconomic forecasts” has been added. (Council Directive 2024/85). In accordance with this, the Fiscal Policy Council, with assistance from the National Institute of Economic Research, will continue to assess the macroeconomic forecasts in the Budget Bill (from now on in February each year; Regeringen 2026). A new feature of the EU rules is that the government must either comply with the independent fiscal institution’s assessment of the forecasts or explain why this is not done.²³ In addition, the rules stipulate that the institution must have the capacity to communicate publicly about their assessments and opinions in a timely manner. The changes described are steps towards the STEMU Inquiry’s original proposal but should be supplemented with a mandate to also provide forward-looking recommendations (Calmfors et al. 2023, Calmfors 2023).

23 An additional task for independent fiscal policy institutions under the new EU rules is to comment on the forecasts and assumptions underlying the net expenditure path in the medium-term fiscal-structural plans (see Section 2.1). The Fiscal Policy Council is assigned such a task in the 2026 Budget Bill (Regeringen 2026).

3 Internal devaluations

Another possible adjustment mechanism in the event of weaker cyclical development in a euro area country than in the rest of the monetary union is internal devaluation: depreciating the real exchange rate, i.e., lowering relative wage costs and prices vis-à-vis other euro area countries through lower wage cost increases or even wage cost reductions. The idea is that this will increase net exports and kick-start the domestic economy again.

Internal devaluation is mainly relevant when previous overheating has led to higher price and wage cost increases than in the rest of the monetary union, resulting in real appreciation and a current account deficit that must be reduced – for example, because capital inflows are threatened with a sudden stop. This happened in the Baltic states (which had committed themselves to fixed exchange rates against the euro, partly because this was a convergence condition for euro accession) during the global financial crisis of 2008–09, and in Greece, Italy, Portugal and Spain during the euro crisis of 2010–12.

A distinction can be made between two types of internal devaluation. One is carried out through fiscal policy, the other by adjusting wages and other contractual benefits without direct involvement from fiscal policy.

3.1 Fiscal internal devaluation

Lower wage costs (wage cost increases) can be achieved by reducing statutory social security contributions (employer contributions). However, if this is done in isolation, it weakens public finances. This is generally undesirable in a situation where internal devaluation is on the agenda, i.e., when large price and wage increases have weakened international competitiveness and led to large current account deficits as described above. In such cases, large budget deficits have usually also arisen. Lower employer contributions must therefore be combined with increases in other taxes or cuts in government expenditure.

In a New Keynesian model, under certain assumptions, a combination of decreased employer contributions and increased VAT can

exactly replicate an external devaluation (Fahri et al. 2013). In older Keynesian models, an external devaluation is also replicated by a combination of reduced employer contributions and increased income taxes or reduced transfers to households (Calmfors 1993).

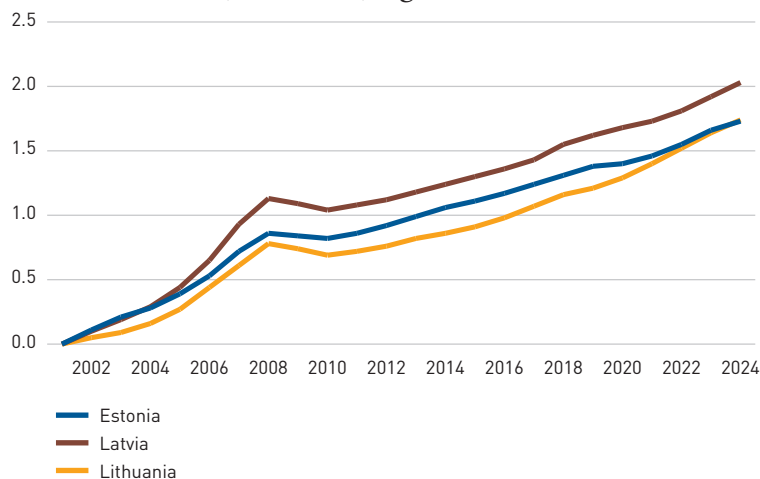
Fiscal internal devaluations have hardly been used in the euro area, perhaps because it is difficult to implement sufficiently large tax and expenditure changes. One problem may also be that a sharp increase in VAT relative to neighbouring countries creates incentives for increased cross-border trade.

During the Swedish economic crisis of the 1990s, a minor fiscal internal devaluation was carried out with the aim of improving international competitiveness without abandoning the fixed exchange rate. Following a crisis agreement between the liberal-conservative government and the social democratic opposition in autumn 1992, employer contributions were reduced by 4.3 percentage points in 1993. This was financed through various tax increases: in VAT, income tax as well as petrol and tobacco taxes (Lewin 2009). Immediately before the *krona* was floated on 19 November 1992, the government also announced a larger, similarly financed reduction in employer contributions (Calmfors 1996). However, the proposal came too late to influence exchange rate expectations and currency outflows. It is impossible to know whether this internal devaluation would actually have been implemented if the fixed exchange rate had not been abandoned.

3.2 Internal devaluation through wage formation

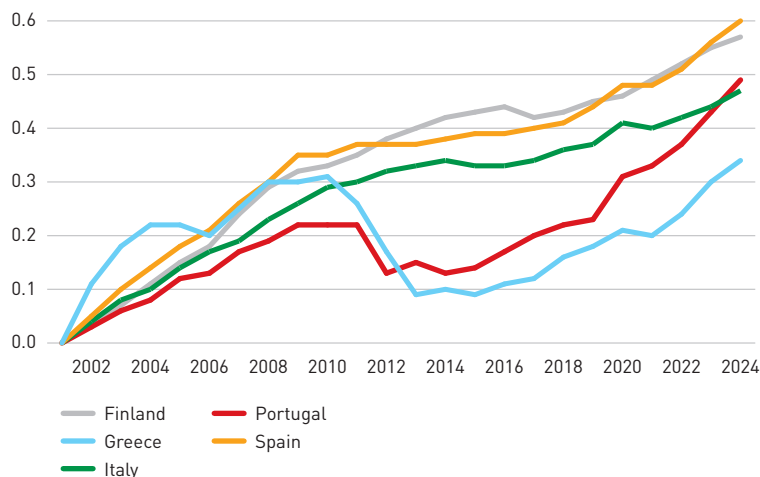
The second type of internal devaluation is through lower wage increases or wage cuts. This adjustment mechanism was used in both the Baltic states during the global financial crisis and in several of the peripheral countries during the euro crisis. In some cases, wage cuts were very large. Between 2008 and 2010, nominal wage costs in the economy fell by around 9 per cent in Latvia and Lithuania and by around 4 per cent in Estonia (Figure 4). Nominal wage costs fell by as much as 20 per cent in Greece between 2010 and 2013 and by 9 per cent in Portugal between 2010 and 2012 (Figure 5).

Figure 4 Nominal hourly wage costs in the economy in the Baltic economies, 2002–24, logarithmic index



Note: The index has been set to 1 in 2001. The chart shows the logarithmic index (0 in 2001).
Source: Eurostat.

Figure 5 Nominal hourly labour costs in the economy in some euro area countries, 2002–24, logarithmic index



Note: See Figure 4.
Source: See Figure 4.

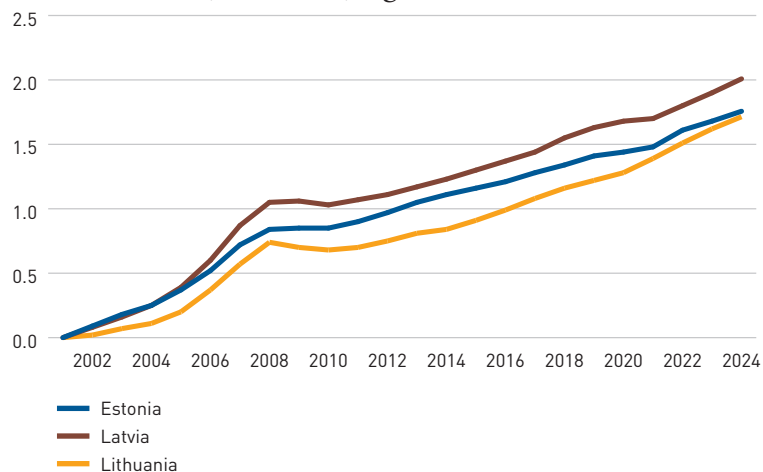
Internal devaluation of this kind is an imperfect substitute for external devaluation. Wage adjustments take longer to implement and appear to require a larger initial increase in unemployment (Calmfors 2013). In addition, there is an initial counteracting effect on demand because the real interest rate rises when wage adjustments lead to lower (expected) inflation (or deflation).²⁴ This has a temporary negative impact on consumption and investment. Eventually, however, the depreciated real exchange rate will pull the economy upwards as net exports increase, while the real interest rate falls as wage and price increases return to higher levels.

There has been extensive discussion about the extent to which internal devaluations via wage formation contributed to the recovery in the Baltic states and the peripheral countries of the euro area. The consensus seems to be that internal devaluations were of limited importance. Wage cuts affected the public sector more than the private sector. This is illustrated by Figures 6 and 7, which show the nominal wage cost developments in manufacturing. A comparison with Figures 4 and 5 indicates that wage cuts were smaller in manufacturing than in the economy as a whole.²⁵ Wage cuts therefore had a greater impact on public finances than on net exports. According to several analysts, the increase in exports seems to have been more related to increased export efforts when the domestic market was weak, the depreciation of the euro against other currencies and a general recovery in the global economy (Kattel and Raudia 2013, IMF 2018, Baudino et al. 2022).

24 Such an effect also occurs in the case of fiscal internal devaluations that do not involve VAT increases.

25 In Latvia and Lithuania, wage cost reductions in 2008–10 were 9 per cent in the whole economy and 2 and 6 per cent, respectively, in manufacturing. In Estonia, wage costs fell by 4 per cent in the economy as a whole but not at all in manufacturing. In Greece, nominal wage costs fell by 20 per cent in the economy as a whole and 17 per cent in manufacturing in 2010–13.

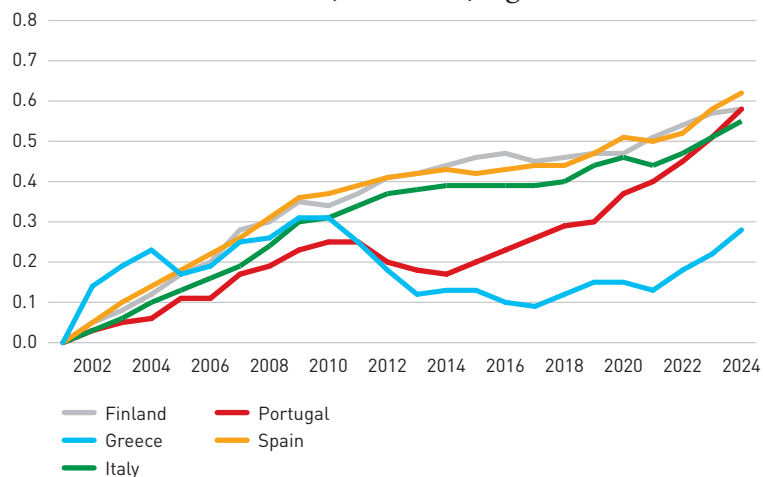
Figure 6 Nominal hourly wage costs in manufacturing in the Baltic countries, 2002–24, logarithmic index



Note: See Figure 4.

Source: Eurostat.

Figure 7 Nominal hourly labour costs in manufacturing in some euro area countries, 2002–24, logarithmic index



Note: See Figure 4.

Source: Eurostat.

According to Blanchard et al. (2013), the sharp decline in Latvia's relative unit labour costs in manufacturing in 2008–09 was mainly due to large productivity gains (as a result of labour shedding and a return to the previous trend), not wage cuts. It has also been argued that wage cuts were widely accepted in the Baltic states because they were preceded by a period of very large wage increases. In addition, wage adjustments could be sold on the basis that they were a prerequisite for maintaining a fixed exchange rate and thus for rapid entry into the euro (Blanchard et al. 2013, Kattel and Raudia 2013).

The Baltic wage cuts were also facilitated by the low levels of trade union membership and collective agreement coverage.²⁶ In the crisis-hit euro area countries, government intervention in wage formation appears to have been a prerequisite for major wage adjustments according to Afonso (2019). In Greece, the state took over the setting of minimum wages from the social partners, new legislation allowed firm-level collective agreements with lower wages than those in industry-level agreements, the possibility of collective agreements with employee associations other than trade unions was introduced, and the statutory extension of industry-level collective agreements (so that firms without collective agreements were also covered) was abolished. In Portugal, wage adjustment was facilitated by the fact that minimum wages were already legislated before the euro crisis. During the crisis, more restrictive conditions for the extension of collective agreements were introduced. In Italy and Spain, the government did not intervene directly in wage formation in the same way as in Greece and Portugal.

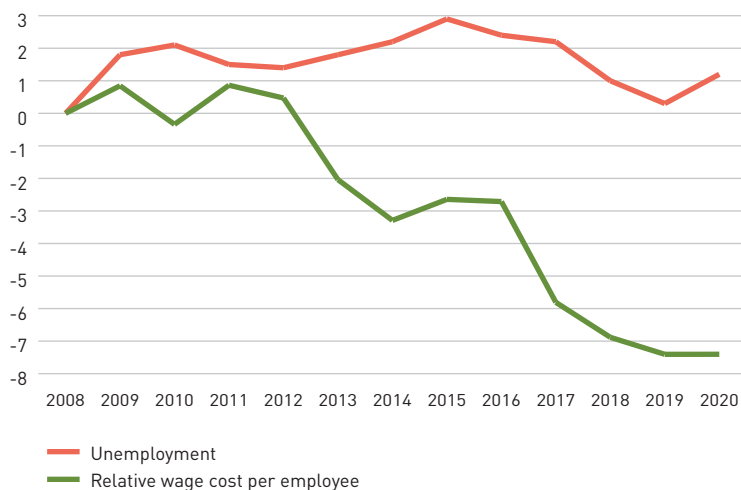
26 In 2009, union membership was 8 per cent in Estonia, 15 per cent in Latvia and 10 per cent in Lithuania.

Figure 8 Change in relative wage costs in common currency (per cent) and in unemployment (percentage points) in Finland

(a) 1991–98



(b) 2008–20



Source: European Commission.

Finland is a Nordic example of internal devaluation through wage formation. Following the global financial crisis, the country suffered further macroeconomic problems in the first half of the 2010s as a result of Nokia's mobile phone technology no longer being competitive, declining demand for forestry and steel products, and a loss of exports to Russia. In order to strengthen international competitiveness, a series of centralised tripartite agreements on wage restraint were concluded between 2010 and 2016. The most far-reaching was the 2016 competitiveness pact. It froze wages in the private sector in 2017, reduced them in the public sector, transferred social security contributions from employers to employees, and extended the annual working time (Savolainen 2016). The result was a reduction in wage costs of approximately 2 per cent between 2016 and 2017 in both the economy as a whole and in manufacturing (see Figures 5 and 7). This internal devaluation also demonstrates the importance of government intervention. The competitiveness pact came about after the government threatened further spending cuts and tax increases if a "voluntary" agreement could not be reached.

In Finland's case, it is also interesting to compare the relative cost reduction achieved through internal devaluation after 2008 with the relative cost reduction achieved through currency depreciation in the 1990s. Figure 8 shows how much greater and faster the relative cost adjustment was in the 1990s. It was implemented in two years, while it took seven years after 2008.

3.3 Summary assessment of internal devaluations

Like currency depreciation, internal devaluation lowers relative wage costs and thus stimulates net exports. There are virtually no examples of fiscal internal devaluation as a substitute for exchange rate changes in euro area countries and countries with fixed exchange rates. This is probably because such internal devaluations require large changes in the tax structure and/or public expenditure in order to have a significant effect. It is therefore unlikely that fiscal internal devaluations would become an important adjustment instrument in Sweden.

In both the Baltic countries in 2008–09 and some of the crisis-hit euro area countries in 2009–13, however, major internal devaluations were carried out via wage formation. These took place in situations of high unemployment. But wage formation systems in these countries differ greatly from those in Sweden: weaker trade unions and lower coverage of collective agreements in the Baltic countries, and more government involvement in wage formation in Greece and Portugal. Finland, which has also used internal wage devaluations, has a different tradition of government intervention in wage formation than Sweden.

The institutional conditions, with strong trade unions, high coverage of collective agreements and no government interference in collective bargaining, argue against internal devaluations through wage formation as an important adjustment mechanism in Sweden. However, conditions may still be better than when the EMU Inquiry was conducted, as wage agreements have been more responsible since the 1997 Industry Agreement. Examples include the crisis agreement on short-time working in manufacturing in 2009–10 during the global financial crisis, the extension of existing wage agreements for six months during the pandemic crisis in 2020, and lower wage increases than in most competitor countries during the inflation period of 2022–23.

4 Fiscal transfers between EU countries

Ever since discussions about a monetary union within the EU began in the 1970s, the issue of fiscal transfers between member states for the purpose of managing cyclical divergences has been highlighted. A long series of proposals for a European transfer system have been put forward (see Poghosyan 2014 or Burriel et al. 2020 for overviews). It has been argued that such fiscal transfers are more effective than national fiscal stimulus measures in the event of a negative asymmetric demand shock, as their effect is not likely to be counteracted by Ricardian equivalence effects, i.e., households realising that budget deficits now may need to be paid for by budget surpluses in the future.

One starting point is studies of how fiscal transfers within states counteract macroeconomic disturbances in individual regions. Many analyses refer to states in federal countries such as Canada, Germany and the US. The usual methodology is to examine the extent to which the effect of fluctuations in regional output on regional disposable income is mitigated by the national tax and benefit system. Estimates vary between studies of different countries and depending on the statistical method used, but in recent analyses, disposable income varies around ten per cent less than regional output (Poghosyan 2014, Buriell et al. 2020). It is mainly household tax payments to the federal budget and transfers from it to households that are affected, while direct transfers to regional (state) authorities play a minor role.

In the countries studied, the federal budget has accounted for at least 15–30 per cent of GDP. The EU's common budget, on the other hand, accounts for no more than around 1 per cent of GDP. It therefore has little significance in counteracting country-specific economic shocks. Much of the EU budget expenditure (agricultural subsidies, regional aid, etc.) is also unsuitable as income transfers between member states for the purpose of stabilising the economy (EMU Inquiry 1997). This explains why many proposals have been put forward for special transfer systems based, for example, on differences in unemployment developments or even including a common European unemployment insurance scheme.²⁷

4.1 Developments within the EU

However, there has been little political appetite for institutional systems for cyclical income transfers between euro area countries. There is a fear that such systems would mean permanent transfers to certain member states. Income transfers between regions (states) within countries also seem to involve more permanent redistribution than risk sharing in the event of asymmetric shocks (Poghosyan 2014). One risk with permanent transfer systems for managing cyclical differences

27 Dullien (2014), Arnold et al. (2018) and Buti and Messori (2021) are examples.

is that they weaken national incentives for responsible fiscal policy designed to create room for manoeuvre in crises.

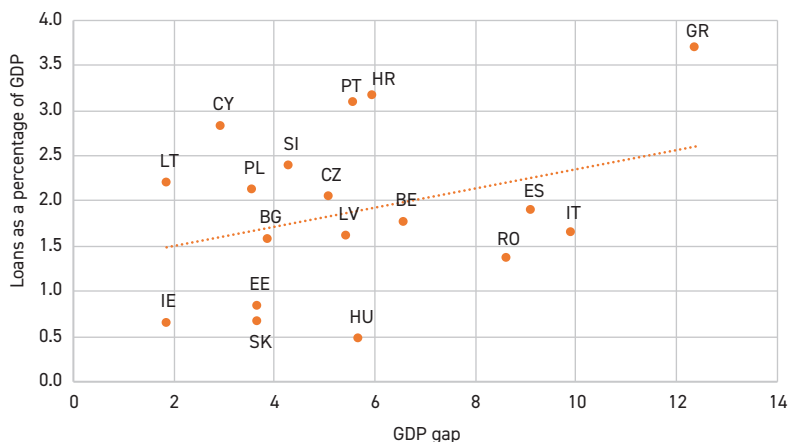
At the same time, over the past fifteen years, the EU has launched several initiatives to support individual member states. These measures are discussed in Chapter 7 by Andersson and Jonung. Their focus is on the risk that support for euro area countries in crisis will entail costs for Swedish taxpayers in the event of Swedish euro membership. On the other hand, a greater willingness to support individual euro area countries in crisis situations reduces the stabilisation policy risks associated with Swedish participation in the monetary union.

During the euro crisis, several of the euro area's peripheral countries received financial support through the rescue funds established at that time. A permanent institutional change was the creation of the European Stability Mechanism (ESM). It can grant loans to euro area countries in acute sovereign debt crises. These loans also have a stabilisation policy dimension, as they can prevent the large budget cuts that would otherwise be required if deficits could no longer be financed through borrowing. However, ESM loans are subject to strict conditions requiring countries receiving support to implement strong fiscal consolidation measures, which can also deepen an economic downturn. ESM loans should therefore not be seen as a powerful tool for counteracting asymmetric economic shocks.

The pandemic crisis of 2020–21 triggered EU measures of a more direct stabilisation policy nature. In 2020, the SURE programme, the European instrument for temporary support to mitigate unemployment risks in crisis situations, was introduced. The European Commission raised EUR 100 billion in loans for on-lending to member states in 2020–22, mainly to finance national short-time work support schemes. Loan disbursements amounted to 1.5–2.5 per cent of the average GDP in 2020–21 for most countries that used the support and, for some – Cyprus, Portugal, Croatia and Greece – as much as 2.5–3.5 per cent (Figure 9). According to the assessment by the European Court of Auditors (2022), the member states' interest costs were reduced as a result of the joint borrowing. This, combined with a long repayment period, may have increased the size of national short-time work support programmes, but it is difficult to know by how much. According

to the chart, there is only a weak correlation between the magnitude of the economic disturbance (measured as adjusted GDP gaps) in 2020–21 and the size of the loans.

Figure 9 SURE loans to various EU countries in 2020–22 (per cent of average GDP in 2020–21) and adjusted GDP gaps (average 2020–21)



Note: See Figure 1 for the adjusted GDP gap. This refers here to the difference between potential and actual GDP, and not the other way around as in previous charts.

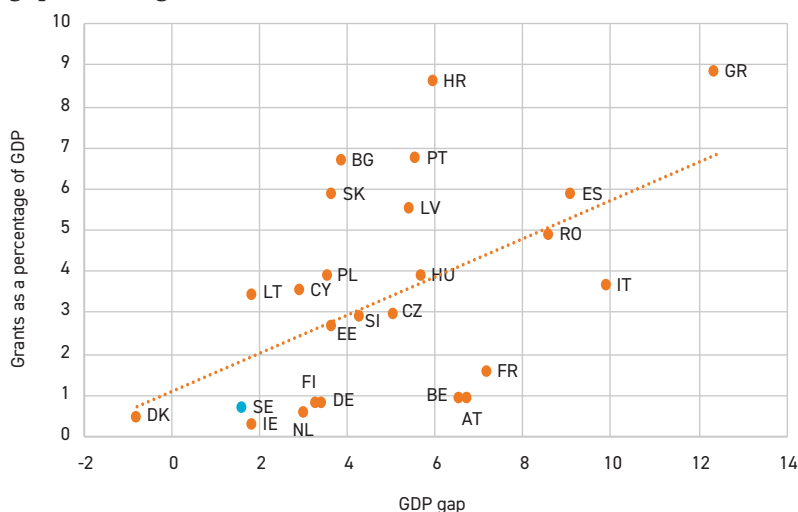
Source: Own calculations based on AMECO and Eurostat.

In connection with the pandemic, the EU also established the Recovery and Resilience Facility, which includes both grants (approximately €338 billion) and loans (approximately €386 billion) to member states. Payments began in 2021 and will end in 2026. The fund – and other smaller initiatives within NextGenerationEU – would support recovery from the pandemic, counteract its negative socio-economic consequences and at the same time contribute to “a greener, more digital and more resilient Europe”.

The initiatives were financed by the European Commission raising loans on the international capital market. There has been a stabilisation policy objective behind the grants, as countries whose economies were hit harder during the pandemic have been allocated larger grants.

Countries with higher levels of debt have had greater possibilities to borrow from the recovery fund. This may also have had countercyclical policy motives, as debt-burdened countries are more limited in their fiscal policy than countries with low debt.²⁸ Figures 10 and 11 also show that countries with larger (negative) GDP gaps have received more support on average. This applies in particular to grants. However, the stabilisation policy effects are difficult to assess, as both loan and grant payments are spread over several years. The effects on economic activity in 2020–21 can mainly be assumed to have arisen to the extent that individual member states dared to increase their budget deficits more in anticipation of future contributions from the recovery fund.

Figure 10 Allocations of grants from the Recovery and Resilience Facility (per cent of 2022 GDP) and adjusted GDP gaps (average 2020–21)

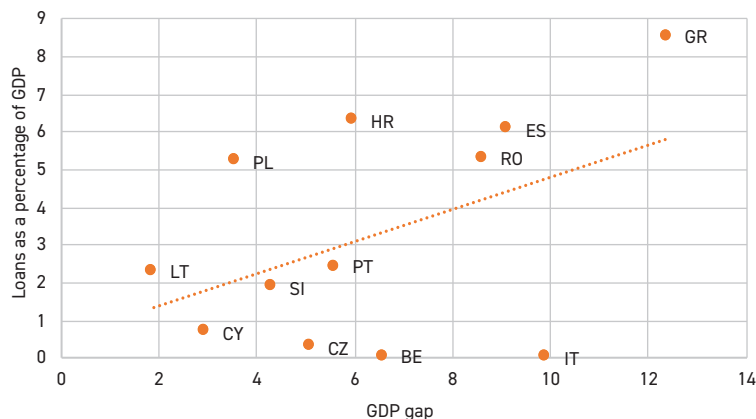


Note: See Figure 9.

Sources: See Figure 9.

²⁸ The grants have also had an income-equalising effect, as lower GDP per capita has been a criterion for more generous support.

Figure 11 Allocations of loans from the Recovery and Resilience Facility (per cent of 2022 GDP) and adjusted GDP gaps (average 2020–21)



Note: See Figure 9.

Source: See Figure 9.

4.2 Conclusions on fiscal transfers

The EMU Inquiry (1997) assessed that “political conditions favour only a very slow expansion of systems of transfer payments among member countries.” This conclusion still applies. The Inquiry also stated that there would be “a tendency towards more income transfers among the member states of the monetary union”.²⁹ This has also proved to be true. The trend has been towards more transfers motivated in part by stabilisation policy concerns. However, these transfers have been decided in acute situations without any permanent systems for cyclical transfers being established. Income transfers have not been limited to the euro area countries but have covered all EU countries. Over time, the tendency towards fiscal transfers to countries affected by severe economic downturns may be reinforced, although no dramatic changes are to be expected.

The probability has thus increased that Sweden will receive some fiscal policy support from other EU countries in the event of a severe

²⁹ The conclusions can be found on p. 151.

country-specific economic downturn. Although the support is not limited to euro area countries, it is more important for them than for EU countries outside the monetary union, as the latter have access to their own monetary policy. There is thus reason to believe that a more positive view of fiscal transfers within the EU could, to some extent – albeit limited – reduce the stabilisation policy risks associated with Sweden joining the euro.

5 Overall conclusions

This chapter has discussed three adjustment mechanisms that could replace national monetary policy if, upon membership of the monetary union, the business cycle in Sweden develops differently from that in the other participating countries: (i) national demand-side fiscal policy; (ii) internal devaluation; and (iii) fiscal transfers from other EU countries.

Low public debt today gives Sweden much greater room of manoeuvre than it had at the turn of the millennium to stabilise a country-specific downturn through fiscal policy stimuli. The EU's fiscal rules are unlikely to stand in the way. The budget deficit does risk exceeding the deficit ceiling of 3 per cent of GDP in a recession, but in that case a national escape clause might be activated. Even if this does not happen, EU financial sanctions that restrict fiscal policy freedom are unlikely. Fiscal policy multipliers are probably so large that increased use of fiscal policy in the event of euro membership to counteract asymmetric macroeconomic shocks could partially compensate for the loss of independent monetary policy.

Fiscal policy in Sweden has previously been conducted in a mainly countercyclical manner. The incentives for this would be reinforced by euro membership. Sweden meets several of the criteria that, according to empirical research, promote a countercyclical fiscal policy. At the same time, there are well-known problems with active fiscal policy in the form of time lags and miscalibration as a result of the decision-making process being political. There is therefore reason to strengthen the mechanisms for countercyclical policy in the event of participation in

the monetary union. This can be done through stronger automatic and semi-automatic stabilisers, clearer rules of conduct for active fiscal policy and a clear mandate for the Fiscal Policy Council to provide fiscal policy recommendations. One challenge will be to ensure that fiscal policy is used to the same extent to counteract country-specific booms as country-specific downturns.

Internal devaluations can be used to stimulate net exports by lowering wage costs relative to other countries in the monetary union. This measure may be particularly relevant after a period of higher cost increases than in competitor countries.

A fiscal internal devaluation combines reduced employer contributions with increased other taxes or reduced government expenditure. A minor fiscal internal devaluation is possible in Sweden's case but would probably have limited significance. Major internal devaluations via lower wage increases or wage cuts took place in the Baltic countries during the global financial crisis and the periphery countries of the euro area during the euro crisis. This method probably requires high unemployment and is slow to take effect. More responsible wage formation in Sweden since the conclusion of the Industry Agreement in 1997 has increased the likelihood of such internal devaluation in a crisis. At the same time, however, the institutional conditions have been very different in countries that have implemented internal wage policy devaluations: government intervention in wage formation or weak trade unions and low collective agreement coverage. Internal devaluation through wage formation could, however, make some contribution to economic stabilisation in a deep Swedish recession.

Fiscal transfers from other EU countries are a potentially powerful tool for counteracting a deep recession in an individual euro area country. However, a permanent transfer system still seems unlikely. On the other hand, certain income transfers to severely affected countries in acute crisis situations are likely. This could, to some extent, improve Sweden's ability to manage a country-specific deep recession in the event of euro membership.

My overall conclusion is that the possibilities of partially replacing national monetary policy with demand-side national fiscal policy in the event of euro membership are good – much better than earlier. Internal

devaluation can make a certain contribution to economic stabilisation after a period of high price and wage increases. In a deep crisis the likelihood that Sweden will receive assistance through fiscal transfers from other EU countries has increased, but the significance of this is probably limited. Overall, the possibilities of counteracting cyclical developments that deviate from those in other euro area countries are much greater today than they were at the turn of the millennium.

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Will Sweden have to pay for the high public debt of the euro area countries if it joins the euro?

Fredrik N G Andersson and Lars Jonung

1 Introduction

Weak public finances have been a persistent problem in the euro area since its start in 1999. Already in the first year, the combined public debt exceeded the 60 per cent of GDP upper limit set by the Maastricht Treaty. Since then, the public finances have deteriorated further and the debt ratio has risen by 20 percentage points to just under 90 per cent in 2024.¹ As a comparison, the debt ratio in Sweden was 34 per cent in that year. Of the present euro area countries, more than half have a debt ratio exceeding the upper limit of 60 per cent. In five countries, the debt ratio is over 100 per cent.

High public debt is associated with significant economic and political risks. The euro area experienced a major debt crisis in 2010–15 when the monetary union was on the verge of collapse. This was not a unique event.

¹ The figure applies to the original twelve euro area countries. Of these, eleven countries introduced the euro in digital form in 1999. Greece joined as a member in 2001 and participated in the introduction of the common banknotes and coins in 2002.

Historically there are many examples where a lack of fiscal discipline has led to deep economic and political crises.² On the other hand, there are also examples of countries that have had much higher debt levels than the euro area and still have managed to maintain a well-functioning economy. Furthermore, since the debt crisis, new tools to counteract future debt crises have been developed (Andersson and Jonung 2023).

Large budget deficits and already high public debt in many euro area countries, combined with the urgent need to increase spending on defence (European Commission 2025) and on measures to counteract climate change (European Commission 2024), raise the question: Will Sweden have to pay for the high public debt of the euro area members if it adopts the euro? Or are the reforms of the fiscal policy framework implemented since the euro crisis effective enough to counteract future crises and ensure that countries with well-managed public finances do not have to pay for countries with high debt levels?

The purpose of this chapter is to answer these questions. We begin with a review of the development of public finances in the euro area since the common currency was established in 1999. We then examine the fiscal framework in the monetary union, the trend towards a common fiscal policy, and the crisis measures used by the ECB. With this background, we turn our attention to the future to discuss whether there is sufficient political will to avoid a new debt crisis. Here, we examine how factors such as growing populism, strong investment needs in defence and climate, and the ageing population in Europe will affect fiscal discipline. Finally, we give our answer to the question of the risks posed by public debt and how a future euro crisis, perhaps combined with bailouts of highly indebted countries (either directly through financial support or indirectly through capital losses for the ECB) could affect Sweden. Here we distinguish between two scenarios: Sweden as a member of the euro area and Sweden as a country with its own national currency and exchange rate.

2 See Bordo and Jonung (2003) and Jonung (2011).

2 Public finances in the euro area 1999–2023

2.1 The Maastricht Treaty and the Stability and Growth Pact

Within the euro area, responsibility for fiscal and monetary policy lies at two separate political levels. Fiscal policy is a national competence, with each member state designing its policy within the common fiscal framework. Monetary policy, on the other hand, is managed at the EU level by the politically independent European Central Bank (ECB). The ECB should not take national considerations into account but must act in the best interest of the monetary union. In practice, this means that large economies have a greater influence on the common monetary policy than small economies since they make up a larger part of the euro area economy. Germany, for example, accounts for approximately a quarter of the euro area economy while Finland only makes up two per cent.

This separation of the responsibility of fiscal and monetary policy creates an incentive structure that tends to drive up public debt levels. In a country with a national currency, fiscal policy is disciplined by the financial markets. An expansionary fiscal policy leads to rising interest rates, higher inflation and eventually the depreciation or devaluation of the national currency.

When a country joins a monetary union, such as the euro area, this signalling system is undermined. There is no longer a national exchange rate that judges domestic fiscal policy. However, financial markets can still assess policy through the determination of interest rates on government bonds. During the first years of the euro, however, this signal was weakened and the interest rates of government bonds of different euro area countries converged to more or less the same level regardless of the size of domestic public debt. After the debt crisis, interest rates have diverged again.

Since weak public finances in one member state can create economic problems for the entire monetary union, there is an expectation that highly indebted countries will receive support in one way or another

from the common central bank or from other member states if necessary. Fiscal discipline is thus undermined when a single member state can more easily pursue an overly expansionary fiscal policy without being directly and immediately punished by the financial markets with a depreciating exchange rate. In other words, a monetary union makes it possible for an individual member to be a fiscal free rider, which drives up debt levels.

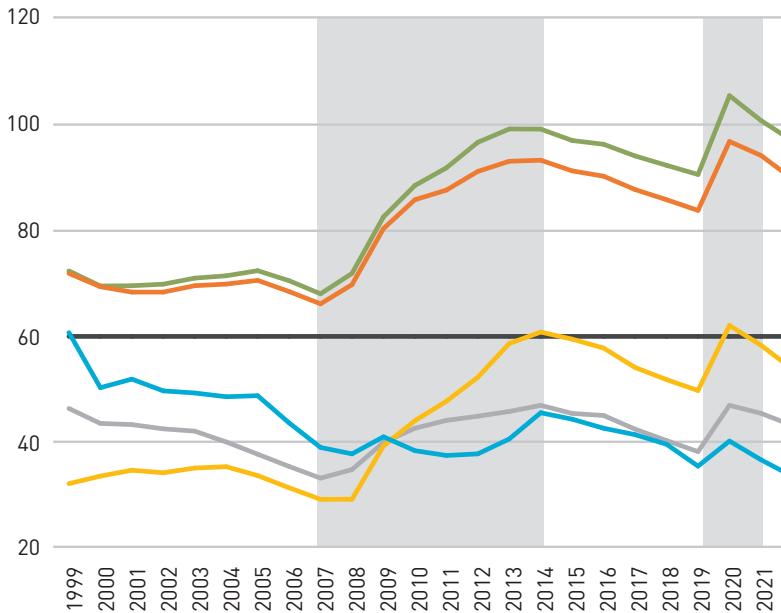
This risk was a major factor behind the German government's push to establish clear and binding limits on the size of the public debt and budget deficits of the member states when the monetary union was designed in the 1990s. This resulted in the Maastricht Treaty setting limits of 60 per cent for public debt and 3 per cent for budget deficits in relation to GDP. The Stability and Growth Pact (SGP) of 1997 went a step further by stipulating that these were not guidelines but upper limits that member states must remain below. When the economy is in balance, public finances should also be in balance or even show a small surplus.

The SGP also stipulated that countries that broke the rules could be fined. However, under exceptional circumstances countries may deviate from the Maastricht rules, such as in the event of a major economic crisis. Fiscal policy must, however, be tightened as soon as the crisis is over.

2.2 The development of public finances 1999–2024

Despite clearly defined limits, the combined debt ratio in the euro area exceeded 60 per cent already at the start in 1999 (see Figure 1). In Belgium and Italy, debt exceeded 100 per cent of GDP. Nevertheless, these countries were allowed to join the monetary union already from the start. Greece, which also had an excessive debt ratio, was excluded until 2001, just in time for the introduction of physical banknotes and coins on 1 January 2002.

Figure 1 Public debt in the EU, 1999–2024, per cent of GDP

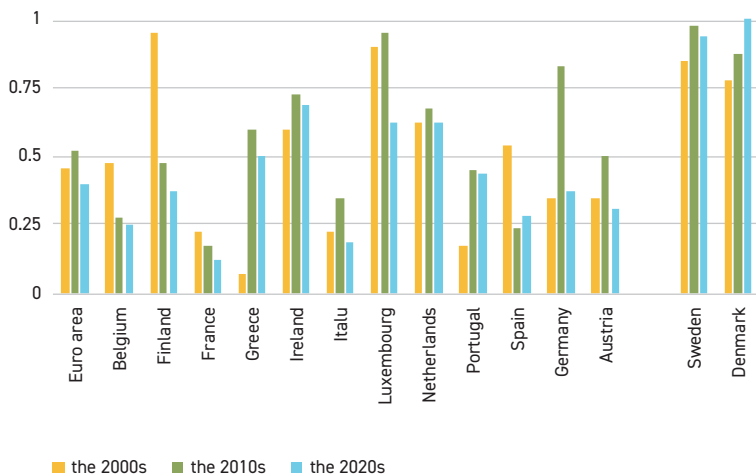


Note: The debt ratios for euro area countries and original euro area countries are weighted averages where each country's weight corresponds to its share of total GDP. For new euro area countries and non-euro area countries, unweighted averages are used instead, as official weights are not available for the entire period.

Source: Eurostat.

There are three main explanations for the increase in the debt ratio following the introduction of the euro. The first reason is that member states have simply not followed the rules. This is evident from Figure 2, which illustrates compliance among the original euro area members during three periods: the 2000s, the 2010s and 2020–2023. Figure 2 shows an index where a value of 1 means full compliance and a value of 0 means that the country is breaching all common fiscal rules. As seen from the figure, there are significant differences between countries. Belgium, France and Italy show particularly low compliance.

Figure 2 Actual compliance with the rules of the Stability and Growth Pact for the original euro area countries and Denmark and Sweden, 2000–23



Note: 1 = full compliance, 0 = violates all fiscal rules.

Sources: European Fiscal Board and Larch et al. (2023).

For comparison, Figure 2 also includes Denmark and Sweden, which are outside the euro area. They record higher compliance with the SGP. This should be compared with another Nordic country, the euro area member Finland, where compliance has gone from high in the 2000s to low thereafter. In fact, EU countries that do not participate in the euro area generally display lower public debt ratios than euro area countries and no tendency of increasing debt levels over time (see Figure 1). This observed pattern is in line with our previous discussion of how joining a monetary union creates incentives for weaker public finances and for fiscal free-riding.

The second explanation for the rising debt ratio is the severe economic disruptions that have occurred: the global financial crisis of 2008–09 and the subsequent debt crisis of 2010–15, as well as the pandemic of 2020–22, marked as grey fields in Figure 1. The development of the debt ratio illustrates a ratchet effect. Each crisis has contributed to an increase in debt. After the crisis, the debt ratio has

been pushed down slightly, but not to pre-crisis levels and far from the 60 per cent limit. However, the crises are an incomplete explanation for the rising debt levels. Both the financial crisis and the pandemic were global crises that affected both euro area and non-euro area countries. In most countries outside the monetary union, the debt ratio has remained stable in terms of trends, with only temporary fluctuations in connection with the crises. In these countries, fiscal policy has functioned as intended, i.e., as a short-term stabiliser of economic activity.

The third explanation for rising debt ratios is structural weaknesses which reduce the average growth rate. Countries with high debt levels have experienced sustained periods of poor economic growth. According to data from the OECD (2024), GDP per capita in the euro area grew by 23 per cent between 1999 and 2023. In Italy, growth was almost non-existent, at a low level of 9 per cent. This figure should be compared with a growth rate of 36 per cent in Sweden and 38 per cent in the United States during the same period.

Low growth affects debt in several ways: It decreases tax revenues and increases expenditures on unemployment and on other social benefits. Weak growth also means that it is not possible to “grow” out of a high debt ratio. For example, since 1999, Sweden’s debt has halved in relation to GDP, while the volume of nominal debt has increased. Without economic growth, Sweden would have had a much higher debt ratio than it does today.

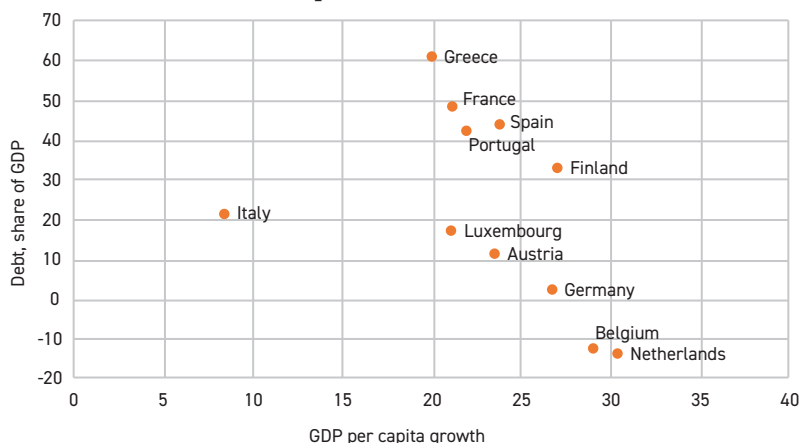
Figure 3 illustrates how growth has affected the debt ratio for the original euro area countries. As seen from the diagram, countries with higher growth have had lower debt accumulation and vice versa. Italy deviates from the pattern with a slightly lower debt increase than expected based on its low growth. The already high level of public debt at the time of the introduction of the euro in 1999 has in practice limited Italy’s scope for further borrowing.

Figure 3 shows two groups of euro area countries: one where debt accumulation has been particularly high and one where debt accumulation has been more limited or where debt has even decreased. The former group includes countries that were hit relatively hard by the economic crises of the 2000s, including Greece, Portugal and Spain. It also includes Finland, which has undergone a profound structural

transformation since the financial crisis of 2008–09. A key reason for this was the decline of Nokia, whose crisis had widespread negative effects on productivity and growth in the Finnish economy through spillover effects in the supply chain (OECD 2023). The second group includes countries where the impact of the crises has been more limited, such as Belgium, the Netherlands, Germany and Austria.

Together, these two groups highlight the importance of fiscal policy during deeper crises, particularly when national monetary policy is no longer available to stabilise the economy. In such a situation, it is valuable to have a fiscal policy option that enables active fiscal policy. In practice, this means that public debt before the crisis must be well below the Maastricht Treaty limit of 60 per cent. If the debt level is close to 60 per cent before the crisis, there is a high probability that the debt after the crisis will clearly exceed the limit. This forces the country to quickly switch to a tight fiscal policy in order to stabilise public finances, which can hamper economic recovery. Countries can be affected differently by global crises as well. A country may need a more expansionary stabilisation policy than the monetary union as a whole requires.

Figure 3 Growth and public debt in the original euro area countries, 1999–2023, per cent



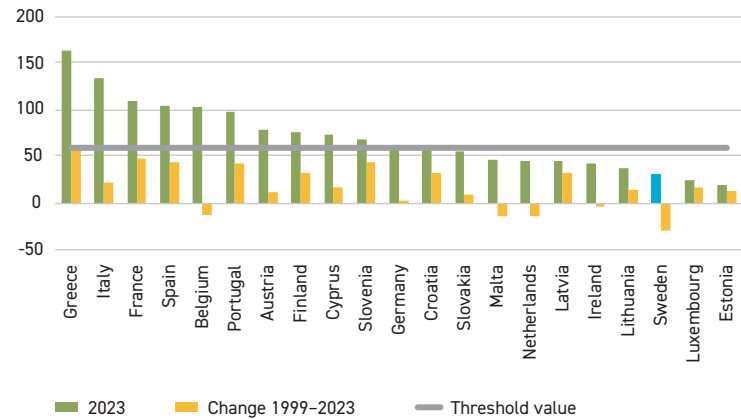
Sources: Eurostat (debt) and OECD (growth).

So far, we have focused on general trends. Let us now examine the public debt of individual euro area countries as shown in Figure 4, together with the public debt in Sweden for comparison. There are major differences within the monetary union. Euro area countries in Western and Southern Europe have found it particularly difficult to stabilise their debt levels. Only four countries have seen their debt ratios decline since 1999: Belgium, Ireland, Malta and the Netherlands. Although the new euro area countries in Central and Eastern Europe tend to have lower debt ratios, they too have seen a relatively large increase in debt since 1999, mainly in connection with the global financial crisis of 2008–09.

In highly indebted countries, interest costs are substantial. In Italy and Greece, the countries with the highest debt ratios, this type of expenditure exceeded 3 per cent of GDP in 2023, compared with Sweden's interest costs of 0.7 per cent of GDP. Expenditures on interest fell during the years when the ECB purchased government bonds (see Section 5) but have since risen again. The public sector must therefore have relatively large primary budget surpluses to finance interest costs, which is a political challenge.³ In many countries debt levels are already so high that it is difficult to increase borrowing further. This has contributed to a development where the European Commission takes out joint loans, which are then offered to highly indebted member states to facilitate continued borrowing at lower interest rates. Other EU countries function as underwriters for the loans, which creates economic risks for these countries. We will return to this issue in Section 6.

3 The primary deficit is defined as the difference between government revenues and expenditures and excluding both capital incomes and interest payments.

Figure 4 Public debt in 2023 and change 1999–2023, per cent of GDP



Source: Eurostat.

3 The fiscal framework in the euro area – a framework in transition

The Maastricht Treaty and the threat of sanctions against countries that violate fiscal rules have not been sufficient to counteract sustained debt accumulation. Various measures have been implemented to strengthen the framework and improve compliance but with little success. Table 1 summarises the most important reforms from the Maastricht Treaty in 1993 to the latest reforms in 2024.

One way of describing the changes in the fiscal framework is by comparing the process to a pendulum that swings between stricter and softer rules, driven by an inherent political conflict between the monetary union's interest in stable public finances and the member states' desire to pursue more expansionary fiscal policy. Sometimes the pendulum has swung in favour of stronger union discipline, sometimes in favour of more national room for manoeuvre. A stable balance between these conflicting interests has not yet been achieved.

Table 1 Development of fiscal rules in the EU, 1993–2024

Reform	Summary
1993 Maastricht Treaty – convergence criteria are introduced.	The Treaty sets limits for public debt as a percentage of GDP (60 per cent) and the public budget deficit as a percentage of GDP (3 per cent). These limits are still in place.
1997 Stability and Growth Pact (SGP) – clarifications and monitoring.	Clarification that the criteria are upper limits with the aim of achieving balanced or surplus public finances in the medium term. New rules for coordination, monitoring and sanctions in the event of non-compliance. National stability programmes are introduced to facilitate the monitoring of fiscal policy and strengthen coordination between euro area countries.
2005 Easing of budgetary rules and medium-term budgetary plans.	An active countercyclical policy is facilitated by replacing the requirement for balance with country-specific medium-term budgetary objectives that take structural factors into account. New rules on how quickly countries with excessive deficits must consolidate their finances.
2011 the Six-Pack – enhanced monitoring.	Improved coordination and monitoring of fiscal policy through the European Semester. Easier to impose sanctions on countries that violate the rules. Clearer rules on how quickly public finances must be consolidated. New benchmark limiting net public expenditure growth to potential GDP growth.
2012 Treaty on Stability, Coordination and Governance (European Fiscal Compact) – strengthened legal basis for reforms of fiscal policy rules.	A new intergovernmental agreement strengthens the legal basis for the SGP reform, with all member states except the United Kingdom and the Czech Republic participating. Sweden, which is outside the euro area, is not obliged to comply with all parts, including incorporating the rules into its constitution. Euro area countries must have a statutory mechanism in place to correct fiscal policy in the event of a breach of medium-term budgetary objectives.
2013 the Two-Pack – strengthened surveillance and improved coordination.	The role of the European Commission is strengthened. Each country must submit a budget plan for review and approval in October each year to ensure compliance with SGP rules.
2024 Reformed SGP – national medium-term fiscal-structural policy plans.	Medium-term fiscal-structural plans are launched. The plans are intended to facilitate structural reforms while consolidating public finances. A new target for nominal net public expenditure is introduced. Stochastic debt analysis is given a central role in determining how quickly public finances must be consolidated.

Over the years, criticism has been levelled at the fiscal rules. It can be summarised as follows:

- (i) The fiscal framework has not achieved its goal of limiting public debt to 60 per cent of GDP. Critics of the rules emphasise, among other things, that they have led to a procyclical rather than to a countercyclical fiscal policy, thereby contributing to macroeconomic instability.⁴
- (ii) The rules have been too rigid and have prevented fiscal policy from supporting the economy during periods of structural growth reforms and/or major economic crises.
- (iii) The rules have been based on variables that are difficult to measure, such as potential GDP and structural budget deficits,⁵ which has made it difficult to design and monitor fiscal policy in real time.
- (iv) In practice, it is difficult, not to say impossible, to impose efficient economic sanctions against countries that break the rules.
- (v) The framework does not sufficiently consider national political and economic conditions, which reduces the political support for it.
- (vi) The framework has not been based on adequate real-time statistics on the fiscal policy of individual member states.

The 2024 reforms to the fiscal framework are partly a response to this criticism, increasing its flexibility so that member states can more easily use fiscal policy during economic downturns, while at the same time making it easier to monitor and evaluate fiscal policy and impose sanctions on countries that systematically violate the rules. The most important changes are as follows:

- (i) Objectives for the structural budget deficit were abolished because it was difficult to measure potential GDP in real time.
- (ii) A new budget target for nominal net public expenditures to facilitate improved budgeting and supervision was introduced.⁶ Net ex-

4 See, for example, Fischer et al. (2008), Larch et al. (2010), Wyplosz (2022), Blanchard et al. (2021), Calmfors (2023) and Menguy (2024).

5 Potential GDP refers to the long-term level of output in the economy at full resource utilisation without inflationary pressure. The structural budget deficit is the public deficit adjusted for cyclical effects and one-off items.

6 Net expenditure consists of public expenditure (excluding interest payments, EU-financed expenditure and cyclical unemployment-related expenditure) minus discretionary revenue.

- penditures do not include expenditures on interest on public debt, natural disasters, pandemics, etc.
- (iii) The previous stability programmes are replaced by medium-term fiscal-structural plans. The net expenditure path is set out in the plan so that both central structural reforms and investments can be implemented and public debt can be reduced if it exceeds 60 per cent of GDP. The plans run for 4–7 years. Countries with greater reform needs may be granted a longer adjustment period.
 - (iv) The net expenditure path is calculated using stochastic debt analysis (DSA), whereby the expenditure path has a 70 per cent probability of causing the debt to move towards the limit of 60 per cent of GDP if the debt is too high.
 - (v) The purpose of the DSA is to anchor expenditure paths in the economic context of each country rather than relying on very strict rules, as was the case with previous reforms. Countries with excessive public budget deficits or high public debt must still reduce these in accordance with certain minimum requirements. Countries with debt above 90 per cent must reduce it by at least 1 percentage point per year, and countries between 60 and 90 per cent by at least 0.5 percentage points per year. Countries with a structural deficit of more than 1.5 per cent must reduce the deficit by at least 0.4 percentage points per year over a four-year period or by 0.2 percentage points over a seven-year period.
 - (vi) Countries can initiate a process whereby fiscal-structural plans are renegotiated if necessary.
 - (vii) The size of the financial sanctions that the Commission can propose for countries that break the rules is reduced to increase the probability that the sanctions will not be blocked.

The goal is that the DSA will anchor fiscal policy to national reforms and investments, thereby increasing the likelihood that individual euro area countries will comply with the rules. The shift from a focus on the structural budget deficit to nominal net expenditure paths should make it easier to plan and monitor the annual framing of fiscal policy in real time. Potential GDP, a variable that is difficult to measure and has therefore often been the subject of political discussion and negotiation, plays a less vital role both in the national budget process and in the

Commission's monitoring of public finances. At the same time, expenditure paths do not cover all expenditures, which can make budget consolidation more difficult.

It is too early to judge how the 2024 reforms will affect the future direction of fiscal policy. However, there is reason to be sceptical. For the most indebted countries, the proposed net expenditure paths entail real economic austerity that will be difficult to implement. For example, countries such as France and Italy must limit the growth in net nominal expenditure to around 1.5 per cent per year until 2031. This implies a policy of austerity. By comparison, net expenditure in Denmark and Sweden, which have lower debt ratios, is allowed to grow by 4 per cent per year. It seems hardly realistic in the current political situation that it would be possible to implement substantial austerity measures over a seven-year period, as we discuss in more detail in Section 6. Fiscal rules must be enforceable in order to be effective.

The 2024 reforms can be seen as more technical in nature than previous reforms. Criticism of the reforms points, among other things, to the fact that the DSA is based on unreliable economic assumptions that could lead to either overly expansionary or contractionary fiscal policy (Wyplosz 2022, Pench 2024, Darvas et al. 2024). The minimum rules in point (v) on how quickly debt and/or budget deficits must be reduced mean that several countries will be forced to tighten their public finances substantially in the coming years, as their public debt is well above the permitted limit of 60 per cent. This can be expected to counteract the focus on growth reforms and necessary public investment (Menguy 2024). The likelihood of countries complying with the new rules when it involves severe austerity measures is relatively low.⁷ At the same time, austerity measures are necessary to safeguard the long-term stability of public finances in several countries.

One interpretation of fiscal developments in the euro area is that fiscal rules have been ineffective. Some researchers, such as Hughes Hallet and Hougaard Jensen (2012) and Beyala and Owoundi (2025), find support for this interpretation. Other researchers suggest that fiscal rules have contributed to better fiscal outcomes, though still not

7 In both France and Germany, attempts at fiscal tightening have contributed to government crises.

in line with the rules (Jonung and Larch 2006, Bergman et al. 2016, Caselli and Wingender 2021, Calmfors 2023, Brändle and Elsener 2024, Potrafke 2025). No clear and unambiguous conclusion has yet been reached in the lively research in this area. Rather, it appears that the economic and political situation determines whether governments choose to follow the rules of the framework or not.

A reasonable conclusion is that the EU's fiscal rules have contributed to pressure on countries with weak public finances to at least not increase borrowing further. The rules have played, and continue to play, a key role in counteracting an even faster deterioration of public finances. At the same time, the SGP has not lived up to its original goals. It is doubtful whether the 2024 reforms will change this pattern.

4 Crisis tools and steps towards a common fiscal policy

The risk that Sweden will need to pay for other countries' debts is not based solely on the state of national public finances. It is also linked to the commitments Sweden makes – both as an EU member and, in a hypothetical scenario, as a member of the euro area – regarding support for indebted countries if they were to find themselves in an acute crisis. This issue has become relevant as the EU's crisis management has changed and steps have been taken towards a common fiscal policy.

Following the debt crisis of 2010–15, a number of fiscal and monetary crisis measures have been introduced, whereby euro area countries provide various types of financial support to crisis-hit countries in order to prevent a future crisis from spreading to other countries, as was the case during the debt crisis of 2010–15. These instruments are linked to the euro area and do not directly cover countries outside the monetary union, such as Sweden. As a complement to these direct crisis tools, an embryo of a common fiscal policy with fiscal transfers between European countries has also emerged. These cover all EU countries and are not directly linked to euro area membership.

In order to assess the risk that Sweden may in the future be forced to contribute to covering the costs of over-indebted countries, we must

therefore examine both the crisis tools and the trend towards a more integrated fiscal policy.

In fact, the issue of bailouts should be a non-issue. The EU Treaty contains a so-called no-bailout clause, which stipulates that neither the EU as a whole nor individual member states may assume responsibility for another country's debts.⁸ This provision provides a legal basis for Sweden to refrain from participating in fiscal support measures. In practice, however, the design of the euro area's crisis tools and the EU's nascent fiscal policy have made it possible to circumvent this rule (see below).⁹

4.1 Fiscal crisis tools in the euro area

As a result of the euro debt crisis, the European Financial Stability Facility (EFSF) and the European Financial Stabilisation Mechanism (EFSM) were established with the aim of providing temporary financial support to countries that were no longer able to finance themselves on the capital market. These crisis tools were only intended as temporary instruments to counteract the crisis at that time. A permanent fund was set up in 2012 through the European Stability Mechanism (ESM), based in Luxembourg. It is important to note that the ESM is an intergovernmental agreement between euro area countries and falls outside the scope of EU cooperation.

In the event of a fiscal crisis where a euro area country is no longer able to finance itself on the capital markets at sustainable interest rates, the ESM can grant loans to the crisis-hit country. Since the fund provides loans, rather than direct grants, it is not considered to be in breach of the no-bailout clause – the loans must be repaid. However, ESM loans pose a risk to other member states. Since they assume the role of creditors, they may be forced to cover losses if the crisis-hit country is unable or refuses to repay its debts.

Loans are only granted under strict conditions. In order to access loans, the country must sign a macroeconomic adjustment programme, which is designed in cooperation with the European Commission, the

8 <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:12008E125>.

9 https://www.europarl.europa.eu/doceo/document/ECON-QZ-569462_EN.pdf?redirect=.

European Central Bank (ECB) and, in some cases, the International Monetary Fund (IMF). The programme states that the country undertakes to implement structural reforms and budget consolidation in order to restore economic stability and long-term sustainable public finances.

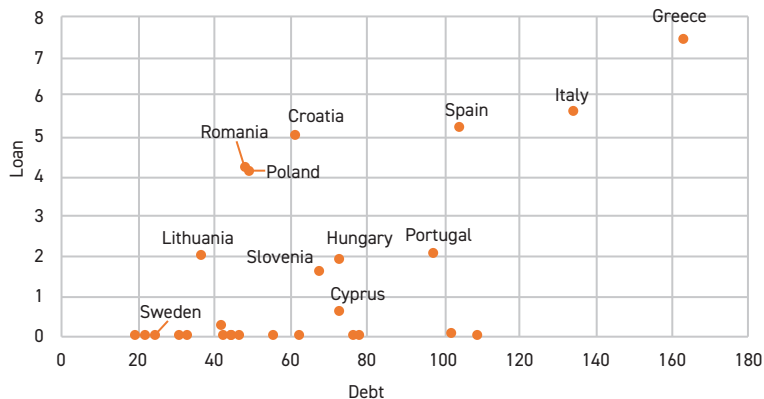
The ESM has a lending capacity of up to €500 billion, which is guaranteed by a combined system of paid-in capital and capital that can be called on from member countries if needed. Funding is mainly provided through the issuance of bonds and other debt instruments on the international financial markets, where the ESM uses its high credit rating to borrow on favourable terms. How much each member state contributes to the fund depends on the size of its population and its economy. Countries such as Belgium and Austria, which are similar in size to Sweden, account for between 2.5 and 3 per cent of the capital. Here it is important to note that the ESM does not have €500 billion in funds directly available. During a crisis the member states will have to provide the funding to the ESM.

This model of on-lending to member states has served as a template for subsequent fiscal instruments in the EU. During the pandemic, the EU took up joint loans through Support to Mitigate Unemployment Risks in an Emergency (SURE) and the recovery programme NextGeneration EU (NGEU) (see Section 4.2). SURE, which was established in May 2020, was a temporary loan facility with a total volume of up to €100 billion, designed to support member states' expenditures on short-time working, wage subsidies and support for the self-employed. The European Commission issued bonds and passed on the loans to member states. The financing was backed by guarantees from the member states totalling €25 billion, which enabled the EU to borrow on favourable terms and lend these funds to countries with strained public finances. Unlike support loans from, for example, the ESM, SURE loans were not linked to any requirements for structural reforms.

Not all countries have taken advantage of these loans. Primarily highly indebted Southern, Central and Eastern European countries have borrowed from SURE and NGEU (see Figure 5). These are countries for which the capital markets demand relatively high interest rates. Countries that can borrow at favourable interest rates on their

own, such as Sweden, have not taken advantage of this loan facility. In relation to the size of the national economy, Greece has borrowed the most, around 7 per cent of GDP, followed by Italy, Croatia and Spain at around 5 per cent of GDP.

Figure 5 Loans from SURE and NGEU and public debt, 2023, per cent of GDP



Source: Eurostat and European Commission.

The use of on-lending has gained increasing support within the EU. The Commission's proposed model for financing the reconstruction of European defence is to some extent based on the same approach. It involves on-lending to member states of up to €150 billion.¹⁰ The model of joint borrowing, whereby countries with sound public finances effectively function as guarantors for countries with high debt have become more common in the EU.

4.2 Towards a common fiscal policy

Parallel to the development of the ESM and the system of on-lending, steps have been taken towards a common fiscal policy. This process has its roots in the 2015 Five Presidents' Report, which discussed the

¹⁰ https://ec.europa.eu/commission/presscorner/detail/sv/statement_25_673.

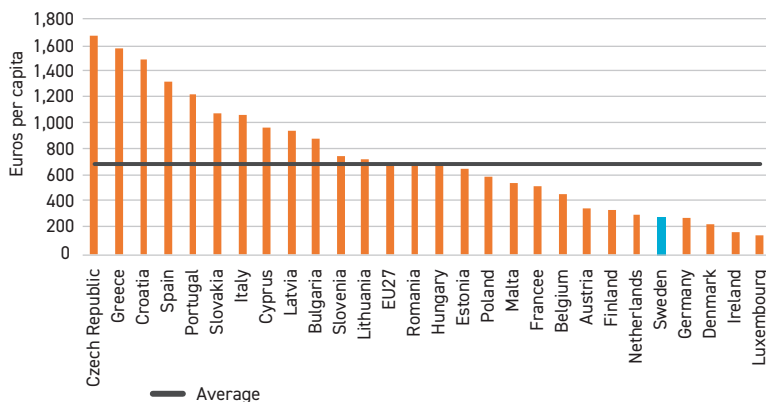
lessons learned from the crises hitting the EU. The report was written by the then President of the European Commission, Jean-Claude Juncker, the President of the European Council, Donald Tusk, the President of the Eurogroup, Jeroen Dijsselbloem, the President of the ECB, Mario Draghi, and the President of the European Parliament, Martin Schulz. Their conclusion was that a crisis mechanism such as the ESM alone is insufficient to deal with major crises. In the event of substantial economic shocks, a common fiscal policy is needed to support the member states that are the hardest hit and thus prevent a debt crisis from arising or worsening.

The Five Presidents' Report contributed to the system of on-lending and limited fiscal transfers between EU countries during the pandemic through the NGEU. These fiscal transfers were initially financed by EU joint loans, which will eventually be repaid through the EU's own revenue sources, probably some form of joint taxation. Exactly how this will finally be designed is still unclear. Several proposals have been discussed, including increased taxation of carbon dioxide emissions through the EU's emissions trading system, a carbon adjustment mechanism on imports¹¹ and a reform of the taxation of multinational companies. If these revenues will not be sufficient, member states may need to cover the repayment through increased contributions to the EU budget. It is therefore difficult to assess exactly which countries will be net contributors and net recipients at this stage. However, it is possible to get an idea of this from the size of the contribution each individual EU country has received through the NGEU.

The contributions are calculated on the basis of economic strength and the impact of the pandemic crisis, with countries with lower GDP per capita and greater economic decline during the pandemic receiving a larger share of the contributions. Some member states, particularly in Southern and Eastern Europe, will receive significant contributions, while economically stronger countries in the north will receive lower contributions (see Figure 6). It is therefore reasonable to assume that the relatively wealthy and well-managed economies of Northern Europe will account for the largest share of the financing.

11 The EU's Carbon Border Adjustment Mechanism (CBAM) aims to prevent carbon leakage by imposing a charge on imported goods equivalent to the cost of EU emissions trading.

Figure 6 Per capita contributions to EU members from NextGenerationEU



Source: European Commission.

5 Monetary policy crisis measures

In legal terms, the framing of fiscal and monetary policy is separated in the euro area. The ECB is not allowed to directly finance fiscal policy by purchasing government bonds or treasury bills from an individual member state. However, this separation has proven difficult to maintain strictly. Weak public finances and a weak fiscal framework that has failed to stabilise debt accumulation have forced the ECB to take measures that have effectively eroded the intended firewall between fiscal and monetary policy within the euro area.

Monetary policy in the euro area has been subject to what is known as fiscal dominance. This occurs when the central bank is forced to adapt monetary policy to the design of fiscal policy, thereby risking neglecting its own objectives, such as price stability. In other words, the central bank may be forced to “print money” to finance budget deficits rather than combat inflation.

Fiscal dominance is common during wartime but can also occur in peacetime. Such dominance arises when the central bank refrains from tightening monetary policy when inflation rises for fear that a highly

indebted government will be unable to finance the interest on its public debt, or when the financial markets, for some other reason, lose confidence in fiscal policy and drive up interest rates on government bonds to such a level that there is a risk of national bankruptcy. The central bank is compelled to purchase government securities in order to stabilise the financial markets, safeguard macroeconomic stability and ensure that the monetary policy transmission mechanism functions normally. Such monetisation of debt has several negative effects. The risk of inflation increases. Financial imbalances grow. The process easily becomes cumulative. A highly indebted country may be reluctant to consolidate its public finances. This creates a vicious circle in which the central bank continues to finance the public sector, which in turn threatens the central bank's independence (Borio and Zabai 2018).

Within the euro area, the element of fiscal dominance has gradually emerged. The absence of national central banks that could counteract rapidly rising interest rates on government bonds was one of the triggers behind the European debt crisis (De Grauwe 2011, 2012). It was only after ECB President Mario Draghi promised to do “whatever it takes” in 2012 that the situation was stabilised.¹² High public debt has thus influenced the ECB's actions. This step increased the risk that this will also be the case in the future.

The ECB's actions are not without controversy. They have been challenged on several occasions in both the European Court of Justice and the German Constitutional Court. The outcome has so far been in the ECB's favour (Feld and Wieland 2021). The main argument has been that the ECB's actions were necessary to safeguard the monetary policy transmission mechanism. Although this falls within the ECB's legal mandate, the measures violate the idea of a firewall between fiscal and monetary policy. Similar to the development towards a common fiscal policy, crises have changed the view of how monetary policy should be conducted.

What are the consequences of fiscal dominance for monetary policy and the economy? In order to clarify the potential effects, it is important to distinguish between two types of measures taken by the ECB:

12 For the exact wording of Draghi's speech, see <http://ecb.europa.eu/press/key/date/2012/html>.

firstly, promises to purchase securities and, secondly, actual purchases. Since the financial crisis, the ECB has launched several programmes for purchasing government bonds on the secondary market. The Outright Monetary Transactions (OMT) in 2012, the Transmission Protection Instrument (TPI) in 2022 and the quantitative easing programme (QE) in 2015 are of particular importance here. The OMT and TPI would enable the ECB to purchase securities in countries where market developments threatened the effectiveness of monetary policy. The OMT is aimed at countries that receive support from the ESM and are undergoing an adjustment programme. The TPI applies to all member states and was introduced in connection with the ECB phasing out its quantitative easing programme (see below).

Neither the OMT nor the TPI has been activated to date. The mere promise of support has been sufficient to stabilise the markets (Saka et al. 2015, Falagiarda and Reitz 2015, Ehrmann and Fratzscher 2017). During the debt crisis, OMT also dampened capital flight from neighbouring countries outside the euro area (Acharya et al. 2019).

Since the OMT was never implemented, there were no direct negative side effects. However, both the OMT and the TPI would enable extensive monetisation of public debt, which may challenge the ECB's legal mandate in the future. QE, which survived legal scrutiny, suggests that the OMT and the TPI may also be compatible with EU law.

QE was introduced in response to weak growth, low inflation and growing debt – not as a reaction to turmoil in the bond markets. The programme covered government bonds from all euro area countries, in proportion to the ECB's capital allocation. It contributed to lower long-term interest rates and slightly higher inflation (Hohberger et al. 2019), although the magnitude of the effects is disputed (Papadamou et al. 2020, Fabo et al. 2021). Studies indicate that the positive effects of the above monetary crisis measures were greatest in highly indebted countries that experienced a severe crisis following the financial and debt crises (Jäger and Grigoriadis 2017, Dell'Ariccia et al. 2018).

However, QE comes with costs as well. Indirect costs include rising asset prices, increased debt and financial imbalances (Farinha and Vidrago 2021, Hudepohl et al. 2021, Papadamou et al. 2020). Direct costs include the large losses incurred by the ECB on its bond hold-

ings when interest rates rose. These losses are borne by the member states. It is difficult to calculate the net costs and benefits of the QE programme. However, it is clear that it is the crisis-hit countries, which in many cases have mismanaged their economies prior to the financial and debt crises, that have benefited most, while the relatively well-managed economies have seen few positive effects from QE but have borne a larger share of the costs.

QE also affected countries outside the euro area. The weakened euro implied appreciation of the currencies of countries bordering the euro area, which gave rise to different monetary policy responses. Switzerland introduced negative interest rates and conducted foreign exchange interventions. The Czech Republic lowered its policy interest rate but kept it positive. Poland allowed interest rates to fall without intervening in the foreign exchange market. The Swedish Riksbank introduced both negative interest rates and its own QE programme. As the countries chose different paths, the end results were also different. Sweden experienced a weakening of its currency, while the other countries managed to stabilise their exchange rates against the euro.

Regardless of whether Sweden adopts the euro or not, future monetisation of public debt will affect the Swedish economy in one way or another. However, as a non-euro area country, Sweden has greater freedom to counteract adverse developments and to mitigate negative effects stemming from the outside.

6 Is there sufficient political will to prevent another debt crisis?

High public debt is not necessarily a problem. Throughout history, several countries have had significantly higher debt ratios than the euro area without this causing a debt crisis and inflation or hampering growth.

However, this has mainly been the case for countries with a national currency, relatively high economic growth, and a relatively young population. Within monetary unions, high debt has often been associated

with economic problems.¹³ There are divided opinions as to when, if and how high public debt affects the economy. Some studies find a negative correlation, with high public debt hampering growth even at relatively low levels – below 100 per cent (Reinhart and Rogoff 2009, Woo and Kumar 2015). Other researchers question such causality and argue that the correlation is not clear-cut (Herndon et al. 2014, Eberhardt 2019). Difficult-to-define threshold levels mean that a debt crisis can arise quickly and without much warning. Debt levels that appear manageable one day can quickly lead to a crisis the next day.

Although the current body of research does not provide a clear answer as to when high public debt becomes a problem, there are three factors that contribute to the risk of new debt problems in the euro area: the political situation, the need for investment in defence and for climate change, and an ageing population.

6.1 Political developments

The changing political landscape in Europe over the past twenty years increases the risk associated with high public debt in the euro area. Left-wing and right-wing populist parties have enjoyed considerable electoral success in recent years. They have more than doubled their voter support since the 1990s, from 11 per cent before the financial crisis to 28 per cent today in the original euro area countries (Johansson Heinö 2024). Parties that are clearly critical of the euro, such as the *Rassemblement National* (RN) in France and *Alternative für Deutschland* (AfD) in Germany, are now the largest or second largest parties. The populist movement undermines support for the EU's fiscal framework, as this is perceived as an attempt by the “elite” to rule over national interests. Furthermore, political populism tends to lead to short-term economic policies. Budget consolidation is not high on the list of priorities in countries with populist governments. The stronger populism is in individual member states, the greater the risk of a future public debt crisis.

13 See Bordo and Jonung (2003) and Jonung (2011).

The picture also includes a generational effect that should not be underestimated. European cooperation as reflected in the present EU and the euro emerged as a reaction to the Second World War. The experiences of that war paved the way for cooperation and compromise, which were necessary for monetary cooperation between independent nation states. Many of the decision-makers who laid the foundations for the single currency, such as Helmut Kohl and François Mitterrand, had personally experienced the war. The generations with direct war memories have now disappeared from the political scene. The politicians of our time do not seem to share the same positive view of European cooperation. They perceive contradictions and potential threats where earlier decision-makers discerned expressions of peace and cooperation.¹⁴

Political divisions in Europe are also creating problems for policies to improve the single market and thereby stimulate growth. Only by maintaining high economic growth can the stability of public finances be guaranteed in the long run. Here, the weak growth discussed in Section 2.2 poses a severe problem. As Mario Draghi (2024) showed in his much-discussed report, low growth is linked to insufficient investment in modern technology and to growth-inhibiting regulations. This applies at both EU and national level. Although a key objective of the EU is to create a single market where goods, services and capital can, in theory, move freely, there are still many market-inhibiting regulations that block the achievement of this objective. According to a study by the IMF (2024), trade barriers within the EU correspond to tariffs of 45–110 per cent – a level that is higher than the tariffs that currently apply between the US and the EU in general. In practice, the EU is waging an internal trade war against itself, which weakens growth and public finances.

As long as the willingness to dismantle competition-restricting regulations remains limited within the EU, stagnation is likely to persist, and with it weak public finances. This means that the risk of new public

14 The fundamental glue that holds a monetary union together is the political will for monetary policy cooperation (see Bordo and Jonung 2003). If this weakens, the prospects for a lasting monetary union weaken. If future generations in Europe are attracted to nationalist and populist movements, this will pose a threat to the euro.

debt crises, where some euro countries are no longer able to finance their debts on their own, will likely increase in the future.

6.2 Expanding investment needs in defence and climate

The risk of future debt crises is increasing as new fiscal policy targets have emerged concerning ambitious sustainability goals in the green transition (European Commission 2024) and in military rearmament (European Commission 2025). Extensive public investment is required to achieve these goals. With already elevated levels of debt, several countries risk facing fiscal problems in the coming years. Sweden is in a more favourable position because of its large fiscal space to manage temporary expenditures through increased borrowing. Within the euro area, the fiscal framework has failed to create similar space.

6.3 Demographic trends

The third factor contributing to a higher risk of a debt crisis is demographic trends. Forecasts indicate that the proportion of people aged over 65 in the EU will increase from 20 to 30 per cent of the population between 2025 and 2050.¹⁵ This trend will be accompanied by rising costs for pensions and healthcare, while the working-age population declines (Larch and Busse 2024).

Unlike in Sweden, the public pension systems in most euro area countries are underfunded. In practice, this means that these countries have taken on debt even though it is not directly visible in the reported debt ratio. Hence, the implicit debt of several euro area countries is much higher than the official figures if the member states' full pension commitments are included. The expected revenues are not sufficient to finance the promised pensions (Deboeck and Eckefeldt 2020). In addition, there are rising costs for healthcare. The picture is compounded by falling fertility rates in Europe, which exacerbates the demographic challenge in the long term.¹⁶

15 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Ageing_Europe_.

16 https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics.

Let us summarise: with increased political resistance to labour immigration, growing populism, rising demands for defence spending and investments in climate improvement, and an increasing proportion of pensioners, the risk of excessive public borrowing within the EU in the future is obvious. These developments signal significant future challenges for fiscal policy in the EU.

7 How would Sweden be affected by a future debt crisis in the euro area?

The future is difficult to predict. It is impossible to say today whether or not there will be a new debt crisis in the euro area. It is not even possible to rule out a debt crisis in Sweden, even though the public debt at the present is relatively low. The financial crisis of 2008–09 demonstrated that debt ratios may increase rapidly also in countries that have maintained fiscal discipline prior to the crisis. One example is Ireland where the public debt ratio increased from 24 to 119 per cent of GDP in a few years.

How would a new debt crisis in the euro area affect Sweden – either as a member or as a non-member of the monetary union? The answer depends on the type of crisis and how the policy response is designed. Table 2 summarises the risk that Sweden will have to contribute directly in one way or another to paying for a future debt crisis in the euro area. The table is divided into fiscal and monetary policy rescue packages and whether Sweden is a member of the euro area or outside it.

Table 2 Estimated risk that Sweden will have to contribute directly to fiscal or monetary policy rescue packages for highly indebted euro area countries in the event of a future debt crisis

Type of rescue package	Sweden as a member of the euro area	Sweden as a non-member of the euro area
<i>Fiscal policy rescue packages</i>		
ESM	High	Low
Common fiscal policy (NextGenerationEU)	High	High
<i>Monetary policy rescue packages</i>		
OMT/TPI	High	Low/medium
Unconventional monetary policy (balance sheet measures, QE)	High	Low/medium
Conventional monetary policy (key interest rate)	High	Low/medium

For Sweden, the risk of having to contribute directly to rescue packages is substantially higher if Sweden is a member of the monetary union than if it remains outside. This applies in particular to fiscal rescue mechanisms such as the European Stability Mechanism (ESM), where euro area countries have direct commitments to provide financial support to countries in crisis.

If Sweden joins the euro area, it must participate in the financing of support programmes within the ESM. This could entail a significant economic burden, especially if debt levels in the euro area continue to grow and fiscal consolidation measures prove insufficient. On the other hand, the risk is low if Sweden remains outside the euro area, as non-euro area countries are not subject to the ESM's financing requirements.

However, the move towards a common fiscal policy within the EU means that Sweden, even as a non-member of the monetary union, may need to contribute to future rescue packages. The NGEU, which was established during the pandemic, has already implied that Sweden, as a likely net contributor, has financed transfers to more indebted member states. If similar initiatives are developed, for example to deal with

future economic disturbances, Sweden may also have to bear part of the costs even though being outside the euro. The crucial difference is that, as a member of the euro, Sweden would have a direct obligation to participate in such support measures, while as a non-member it would only be affected to the extent that it chooses to contribute through the EU's common budget.

Monetary policy risks also differ depending on whether Sweden is a member of the euro area or not. If the ECB were to activate its crisis tools, such as the OMT or the TPI, in a future debt crisis, there is a substantial risk that Sweden as a euro member would be directly affected by the central bank's measures. If the ECB is forced to monetise debt in order to stabilise the euro area, this could lead to higher inflation and capital losses for the ECB and thus indirectly hitting the euro area countries. Since these programmes are aimed at keeping interest rates down in highly indebted countries, they will mainly benefit these economies. More fiscally stable euro area countries – among which we include Sweden – are likely to bear the associated risks.

For Sweden as a non-member of the euro area, the risk of direct impact from the ECB's crisis measures is lower, but not non-existent. Experience from previous monetary policy interventions, such as the ECB's quantitative easing, shows that even countries outside the euro area are affected via capital flows and exchange rate changes. If the ECB conducts extensive securities purchases to support highly indebted countries, this could weaken the euro, which in turn would appreciate the Swedish *krona* and in this way negatively affect Swedish exports. However, having its own currency gives Sweden greater opportunity to adapt its monetary policy to national priorities through interest rate changes or currency interventions to counteract negative effects. However, it is unlikely that it will be possible to counteract all negative effects from the outside.

An alternative to OMP/TPI and QE is for the ECB to keep the short-term policy rate lower than is compatible with its current inflation target in order to inflate away government debt. The EU Treaty stipulates that the ECB shall strive to maintain price stability. It is up to the ECB to define the inflation target that is compatible with price stability. By redefining the target, the ECB could create an unexpected inflation

shock that would at least temporarily contribute to reduced real debt levels. However, such a measure would require a majority in the ECB Governing Council. If Sweden were to join the euro, this would have a direct impact, regardless of whether it was compatible with the Swedish macroeconomic situation or not. If Sweden remains outside the euro, however, there is greater freedom to adapt its monetary policy to domestic conditions.

Overall, Table 2 shows that Swedish membership of the euro area would significantly increase the risk of Sweden having to contribute to rescue packages in the event of a future debt crisis in the euro area. The largest commitments would be in the area of fiscal policy through the ESM and likely future joint budget mechanisms. The monetary policy risks are more difficult to quantify but would entail substantially greater exposure to the ECB's crisis interventions and the effects these may have on inflation, public interest costs and capital flows. For a country outside the euro area, there are still risks, particularly linked to the development of the EU's common fiscal policy, but the ability to manage monetary policy more independently represents a crucial difference.

We have discussed the potential costs for Sweden in the event of a future debt crisis in the euro area, based on two different assumptions: Sweden as a member of the euro area and Sweden retaining its national currency. We have not attempted to estimate the costs of different crisis scenarios in terms of Swedish *kronor* or euros. This would require more or less bold assumptions about the severity of a future debt crisis and which countries would be involved. During the debt crisis of 2010–15, it was mainly rather small economies that received direct support. A future debt crisis involving larger countries such as France, which has one of the highest debt ratios in the EU, would entail a much greater economic burden. As there is too much uncertainty surrounding what a future crisis might look like, we refrain from putting a number on the costs. However, history suggests that the direct and indirect costs are likely to be remarkably high.

A key conclusion is that a debt crisis in the euro area would have economic consequences for Sweden, regardless of whether Sweden is

a member of the euro or not. However, membership of the euro would entail much more direct economic responsibility.

8 Summary

The existing fiscal framework in the euro area has not effectively fulfilled its stated goals. Public debt levels have grown, and the monetary union has already undergone one serious debt crisis. Admittedly, this has been a period of several major global economic shocks, which may explain the accumulation of debt to some extent. At the same time, EU countries outside the euro area have managed to stabilise their debt ratios below the Maastricht Treaty limit of 60 per cent. Looking ahead, we see several factors that point to continued mounting debt, including growing political populism, the need for major investments in defence and climate change, and an ageing population. The public finances are further weakened by poor economic growth. The normalisation of interest rates following the record lows during the 2010s further complicates the picture.¹⁷

These developments pave the way for fiscal crises in the future. At the same time, new common tools to manage debt crises have been put in place since the 2010–15 crisis. The EU has gradually moved towards a more federal structure, where centralised fiscal policy has become possible despite the formal limitations given by the treaties. Countries with strong economies have been forced to contribute to support packages, often with limited influence over the conditions for support. The boundary between national fiscal policy and supranational monetary policy has gradually been blurred. Differences in indebtedness remain and the political will to reform is often weak.

How will Sweden be affected by a future public debt crisis in the EU? The answer depends largely on whether or not Sweden is a member of the euro area.

If Sweden remains outside the euro, it will have greater freedom to deal with disruptions from a fiscal crisis within the euro area by having

17 See the analysis in OECD (2025) of the future public debt burden.

a floating exchange rate and a central bank that can adjust interest rates to mitigate negative effects. In addition, Sweden has strong national fiscal policy preparedness with low public debt. However, as a small and open economy with extensive trade with the EU, Sweden cannot isolate itself from the consequences of any crisis in the EU. The effects will spread via the financial markets and through foreign trade.

If Sweden were to become a member of the euro area, it would have to share the costs of a debt crisis to a greater extent. In that case, it is likely that Sweden will become a net contributor to future rescue packages. The exact cost is difficult to calculate, as it depends on the design of the support in question.

In theory, support systems can be designed so that borrower countries are obliged to repay any aid. Such a structure keeps costs down for lender countries. It is therefore in Sweden's interest to promote crisis mechanisms where responsibility for expansionary fiscal policy is distributed fairly even *after* a crisis. Such an arrangement mitigates the risk that individual euro area countries persist on unsustainable debt trajectories under the assumption that others will provide support in the event of a crisis.

Sustainable fiscal policy is a prerequisite for maintaining confidence in the euro and for the ECB to be able to pursue an independent monetary policy. Given how previous crises have been managed, it is doubtful whether sufficient incentives have been created for sustainable fiscal policy within the euro area. It is therefore likely that new debt crises of some kind will arise within the euro area in the future.

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CHAPTER 8

The euro, the financial system and the banking union¹

Peter Englund and Pehr Wissén

1 Introduction

This chapter highlights how the financial sector would be affected by a change of currency from the *krona* to the euro: both the immediate and the possible long-term effects.

Section 2 compares the Swedish financial market with that of the rest of the EU. Compared with many other countries, Sweden has a large and active financial sector. The Draghi report, which compares the financial markets in the EU and the US, points to features of the EU markets that make them less competitive. However, Sweden is highlighted as a role model in certain respects.²

A switch to the euro would have direct effects on the financial markets: no currency exchange between *kronor* and euros, no uncertainty about the value of assets and liabilities in euros, and no forward transactions between *kronor* and euros. These positive effects are obvious, but the question is how important they are. In today's efficient currency

1 We would like to thank Anna Banda, Henrik Braconier, Fredrik Bystedt, Jesper Dahlqvist, Niklas Ekvall, Nicklas Grip, Staffan Hansén, Stefan Ingves, Oskar Johansson, Anders Kvist, Louis Landeman, Mats Persson, Johan Rydin, Ouisem Samoud, Olof Sandstedt and Jonny Sylvén for fruitful discussions and insightful comments.

2 European Commission (2024).

markets, the costs of exchange and of eliminating uncertainty are normally small. Overall, however, the amounts involved are large. In Section 3, we make a rough calculation of the savings that a transition to the euro would entail.

Banks and other financial institutions are strictly regulated, in Sweden as well as in the EU and the rest of the world. Section 4 discusses how the regulation of the financial sector would be affected if we joined the monetary union. Within the EU, basically the same rules apply to all countries. Through the so-called banking union, parts of the supervision and management of banks in crisis in the participating countries are centralised to the European Central Bank (ECB). Membership of the monetary union requires Sweden to first join the banking union. Certain decisions on the supervision and management of banks in crisis would then be transferred from Swedish authorities to the ECB. The banking union aims to ensure that the costs of managing insolvent banks are borne by the banks' financiers (bail-in) and not by the state (bailout). However, the union is still incomplete, and it is therefore uncertain how insolvent banks will be managed in the future, especially in the event of a major financial crisis. The conditions for Swedish membership were investigated a few years ago (Bankunion-sutredningen 2019), but on the condition that Sweden would remain outside the monetary union. The inquiry did not result in any clear recommendation but emphasised the importance of membership for "Sweden's opportunities to influence important decisions even in a systemic crisis" (our translation).

Membership of the banking union may reduce our direct influence over certain decisions, which will be transferred to the ECB. At the same time, Sweden's influence may increase as we become full members of all decision-making bodies and thus have greater opportunities to influence future developments, not only in the banking union but also regarding the EU's capital markets in general.³

A capital markets union initiative was launched in 2015 with the aim of promoting the integration of financial markets. It is celebrating its

3 How membership of the monetary union would affect Sweden's formal and real influence in the EU is discussed in more detail in Lundgren's and Ingves' contributions (Chapters 9 and 13, respectively).

tenth anniversary this year but has not yet made much of an impact.⁴ At the beginning of 2025, the idea of a savings and investment union was also launched with the aim of facilitating investment in climate, environment and defence.⁵ At the same time as these political initiatives have been taken, the banking and capital markets in Europe are being affected by the UK's departure from the EU whereby the world's second most important financial centre, London, has ended up outside the Union. It is therefore likely that the EU's financial markets are facing major changes. In Section 5, we discuss Sweden's prospects for contributing positively to the development of the financial markets and how membership of the monetary union could affect our influence in this regard.

In a concluding Section 6, we attempt to tie up loose ends and compare the advantages and disadvantages of participating in the monetary union from a financial market perspective. The differences that can be quantified are relatively small, perhaps a sign that we are already well integrated into the financial sector in the EU. A more important aspect is how membership will affect our opportunities for influence. It is also most likely an advantage to be part of a large world currency with a resourceful central bank in case of a major financial crisis.

2 The financial sector in Sweden and Europe

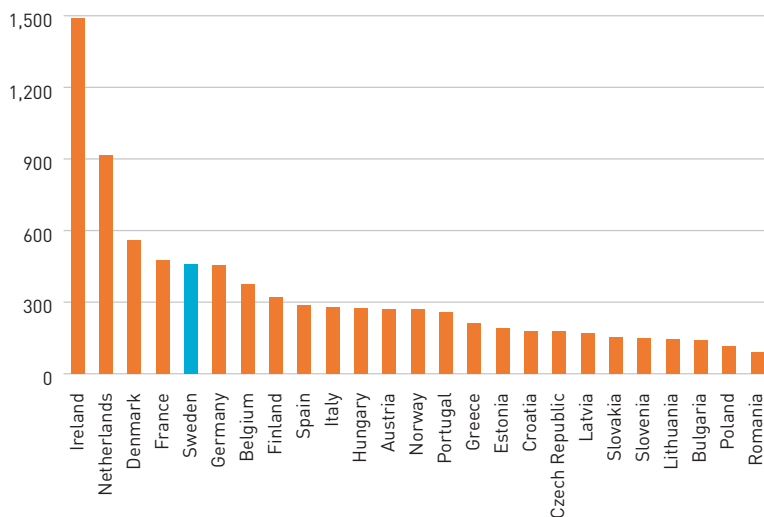
Despite ten years of attempts to integrate the financial markets within the EU into a single market, there are still many differences between countries. This is particularly true of the banking systems, where the EU consists of 27 separate markets rather than a single, integrated market. Overall, the financial sector is larger in the countries of north-western Europe than in the rest of the EU, also in relation to GDP (see Figure 1).⁶ Of the countries that are not members of the euro area, the sector is relatively large in Sweden and Denmark.

4 See Gotti et al. (2024).

5 See European Commission (2025).

6 The figure does not include a few small countries where the financial sector is extremely large in relation to GDP: Luxembourg 14,642, Malta 3,248 and Cyprus 1,701 per cent of GDP.

Figure 1 Financial sector assets, 2023, per cent of GDP



Source: Eurostat.

The financial sector consists mainly of banks, pension and insurance companies, and other asset management companies. The sector fulfils several important functions. The traditional main task of banks is to receive deposits and manage household transaction accounts, as well as to finance investments for small and medium-sized enterprises. Some countries, such as Germany, have many small, local savings banks. Others, such as Sweden, are dominated by a few large universal banks that offer many types of financial services and operate throughout the country and sometimes also in other countries. For many universal banks, wealth management is also a key task. In this area, they compete with large specialised firms such as BlackRock and Vanguard. There has long been a debate about the relative efficiency of a system of universal banks versus one with specialised ones, niche banks. The EU is dominated by universal banks, while niche banks are more common in the United States.

Housing finance also differ across countries. In Sweden, banks play a central role, while independent housing finance companies are common in other countries. Financing is provided not only from deposits

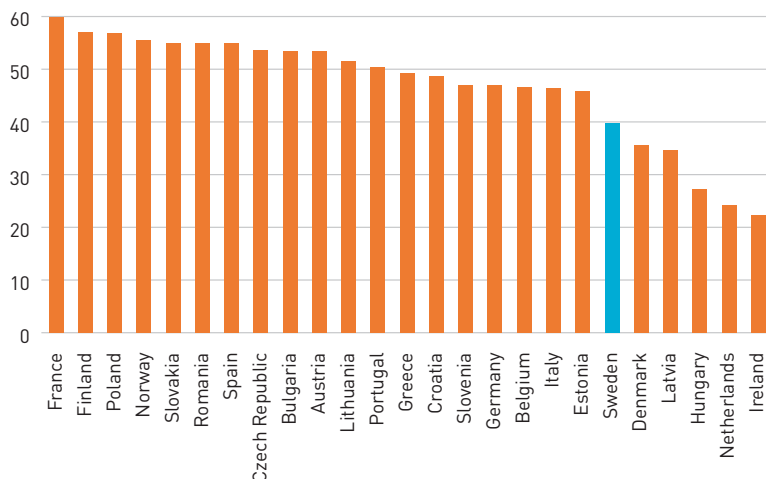
but also by the issuance of housing bonds on both domestic and international markets.

Apart from housing finance, banks play a less central role in Sweden than in many other European countries. Monetary financial institutions account for only 40 per cent of financial sector assets in Sweden, compared with a median of 50–60 per cent in the EU (see Figure 2).⁷ The largest Swedish banks are relatively small from a European perspective. Only three (Handelsbanken, SEB and Swedbank) are large enough to qualify among the 114 banks that the ECB classifies as systemically important. Swedish banks are currently comparatively profitable, well capitalised and have very low credit losses. Their capital adequacy ratio (the ratio of equity capital to risk-weighted assets) was 19.4 per cent in the third quarter of 2024, compared with an EU average of 16.0 per cent, and credit losses were 0.4 per cent, compared with an EU average of 1.9 per cent.⁸

7 This includes banks, housing credit institutions, finance companies, municipal and corporate financing institutions, monetary securities companies and money market funds. See Sveriges Riksbank (2025).

8 The figures refer to systemically important banks. See Figures 9 and 10.

Figure 2 Monetary financial institutions' share of financial sector assets, 2023, per cent

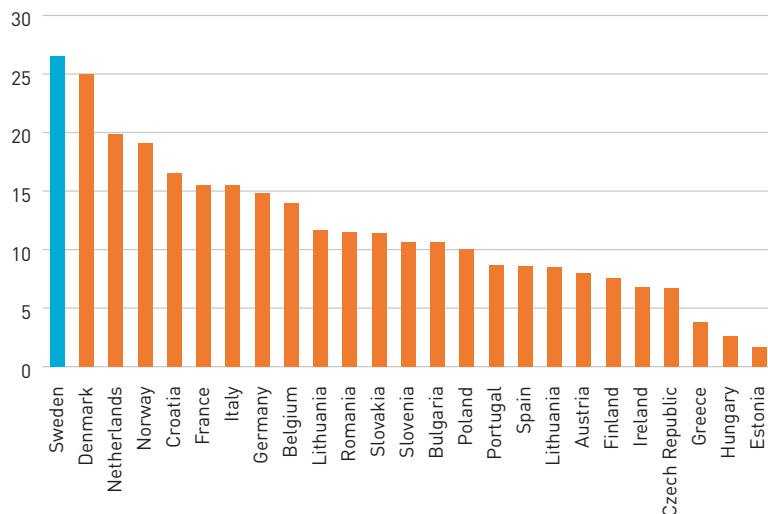


Source: Eurostat.

Financing pensions is a key task for the financial system. In Sweden and certain other countries, mandatory pension savings are managed by special pension companies, which invest in shares, bonds and other assets such as infrastructure and venture capital for start-ups (private equity). In Sweden, assets held by pension funds and insurance companies account for just over a quarter of the financial sector's assets, compared with around a tenth in most EU countries (see Figure 3). The difference is largely due to the fact that the Swedish state pension system, through the AP funds, is funded to a greater extent than the corresponding systems in many other countries.⁹ Since pension savings are largely invested in international assets, returns are dependent on exchange rate developments.

⁹ See Scharfstein (2018) for an analysis of the relationship between pension and financial systems.

Figure 3 Insurance companies' and pension funds' share of financial assets, 2023, per cent



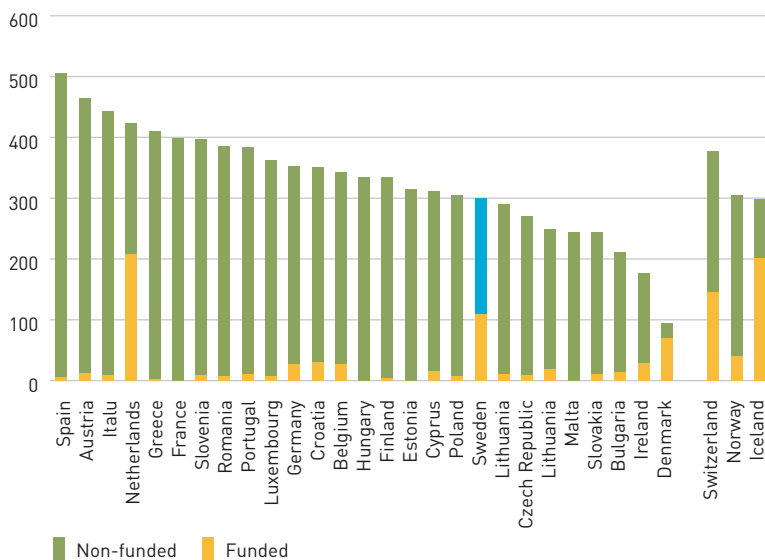
Note: The Swedish figure includes the AP funds.

Source: Eurostat.

Sweden thus has a relatively large financial sector outside the banks, with a large proportion of insurance companies and pension funds. This reflects the fact that Swedish pension rights, particularly in the collectively agreed systems, are largely linked to funded savings and invested in the financial markets. In other countries, a larger proportion of pension contributions are paid to the state, which then pays out pensions from the national budget (known as a pay-as-you-go system).

However, the Swedish pension system does not appear to be more generous than the systems in many other countries. As a percentage of lifetime earnings, Swedish pensions are below the European average. Pension commitments divided into funded and unfunded pension rights are shown in Figure 4. The Netherlands, Sweden and Denmark have the largest funded pension savings, while many of the large countries, such as France, Spain, Italy and Germany, have low proportions. This is a crucial difference, as funded pension savings largely consist of shares and other instruments that finance business investments.

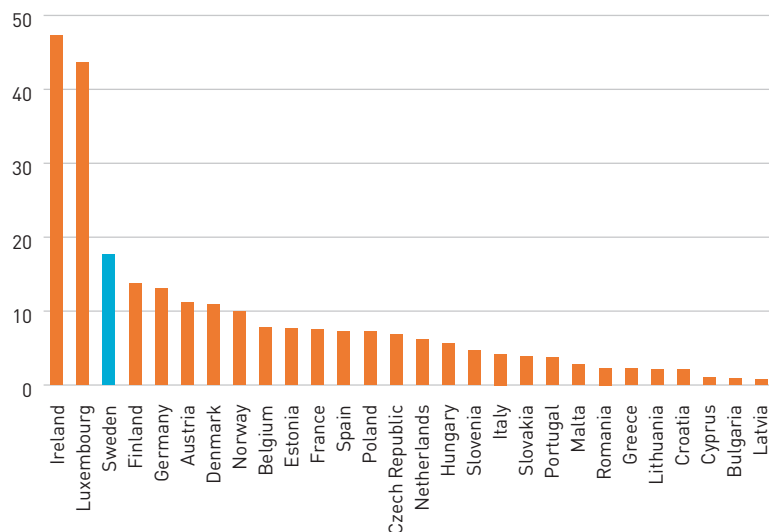
Figure 4 Funded and unfunded pension liabilities in the EU, 2021, per cent of GDP



Source: Eurostat.

Long-term savings in shares and funds outside pension companies also play a major role in the pension savings. In Sweden, tax policy has in various ways favoured household fund savings, from the publicly sponsored mutual funds of the 1980s to today's low-tax investment savings accounts. In Sweden, a larger proportion of financial assets are held by investment funds than in all other EU countries except Ireland and Luxembourg (see Figure 5). In many cases the funds are linked to banks.

Figure 5 Investment fund assets as a percentage of financial assets, 2023, per cent



Source: Eurostat.

Equity financing plays an important role for growing companies. The stock market is more active and liquid in Sweden than in many other countries. During the period 2010–22, the number of listed companies in Sweden increased by approximately 400, net after delistings. This is more than in any other EU country. In most countries, the number of listed companies decreased, most notably in France and Germany.¹⁰

Financing start-ups is often less suitable for ordinary banks as it is associated with greater risks. Investments in risk capital is often raised through special companies and funds. Although venture capital firms account for only a small portion of all corporate financing, they are particularly important because start-ups often find it difficult to obtain financing from banks or through public share issues. As noted in the Draghi report's discussion of the financing of growth industries, the venture capital sector is larger in Sweden than in most other European countries. Between 2018 and 2022, venture capital investments accounted for approximately 1 per cent of GDP in the Nether-

¹⁰ Swedish Corporate Governance Institute (2023).

lands, Sweden and the United Kingdom, compared with 0.6 per cent for Europe as a whole.

Venture capital funds are closely integrated with international capital markets. Just over half of the capital of Swedish funds comes from investors outside Europe and slightly more than a tenth from domestic investors.¹¹ Swedish venture capital firms invest in companies worldwide, but to a greater extent in Scandinavian companies considering the economic size of the Scandinavian countries.¹²

Another important task for the financial system is to handle payments, both real-time payments between individuals and firms and the clearing and settlement of payments within the financial sector. In both areas, there are large integrated systems within the EU, to which Sweden is connected or will be connected, regardless of currency. The transaction systems are discussed by Ingves in Chapter 13.

3 Currency exposure, currency risk and exchange costs

3.1 Currency risk

Swedish firms and households have assets and liabilities denominated in euros. Upon joining the monetary union, uncertainty about the future nominal value of these would disappear.¹³ In addition, uncertainty about contracts in other currencies would now depend on their exchange rates against the euro. The significance of this is illustrated in Figure 6, which shows the development of the effective exchange rate for the *krona* against a trade-weighted currency basket and the corresponding hypothetical effective exchange rate with the euro as the domestic currency since 1993. The short and medium term fluctuations would have been substantially smaller with the euro as the

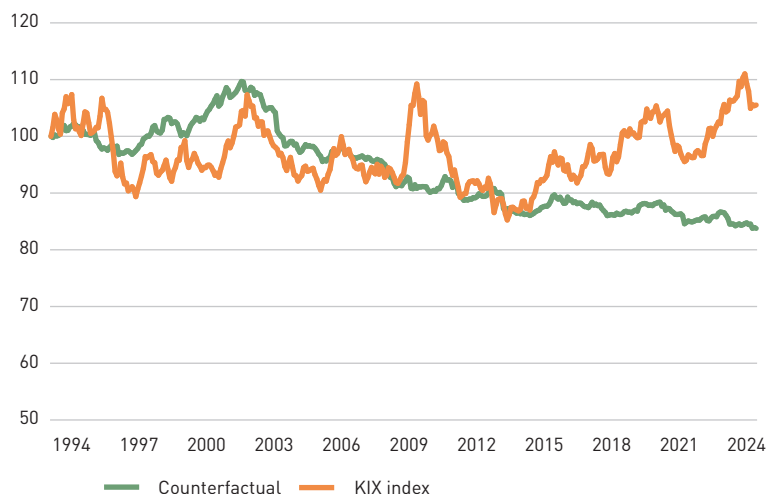
11 Bergström and Engлёn (2024).

12 See Sveriges Riksbank (2024), p. 67.

13 Our discussion is mainly limited to the nominal value. For uncertainty about the real value, the correlation between exchange rates and inflation plays a key role.

currency. In that sense, the short-term currency risk would have been lower with the euro as the domestic currency.

Figure 6 Counterfactual (green) and actual (orange) nominal effective exchange rate, 1993–2024, monthly data, index: January 1993 = 100



Source: Flam and Persson (2024).

3.2 Currency exchange and risk management

With the euro as the domestic currency, there is no longer any need to exchange *kronor* for euros or to deal with the uncertainty surrounding the value of assets and liabilities in euros. Currency exchange is carried out by banks, card companies and special foreign exchange companies in connection with exports and imports and cross-border financial transactions. In Chapter 2 by Forslid, the exchange costs for trade in goods and services are estimated at between SEK 5 and 11 billion per year.

Uncertainty about future exchange rate movements can either be borne as an open risk or eliminated through financial contracts. It can be illustrated by a firm that has taken out a loan in euros and wants to

convert it into a loan in Swedish *kronor*. This can be done through a currency swap, which is a combination of two transactions: an immediate exchange from euros to *kronor* (a spot transaction) and a contract for the future sale of *kronor* to euros when the loan matures (a forward transaction). In practice, firms sometimes also want to hedge interest payments during the term of the loan. This can be done through a cross-currency swap, which can be seen as a package of currency swaps, one for each interest payment.¹⁴

In a well-functioning market, the cost of a currency swap basically reflects the interest rate difference between the two currencies.¹⁵ Added to this is a small transaction cost, corresponding to the difference between the bid and ask prices for shares and other assets. In Section 3.4, we return to an assessment of the total cost to the Swedish economy of eliminating the exchange rate risk on financial contracts in euros, a cost that would disappear if Sweden joined the euro area.

3.3 Exposure to exchange rate risks in different sectors

Banks

Banks are the hub of futures trading. The spread between the bid and ask prices, which is a transaction cost for participants in the futures market, is also a source of income for banks, covering their costs and risks as well as generating a certain surplus. The total nominal value of all contracts on the entire derivatives market amounted to approximately SEK 80,000 billion in 2020. Of this, the value of contracts in Swedish *kronor* accounted for just over half, while contracts in euros accounted for approximately a quarter.¹⁶

The banks are also customers in the foreign exchange market themselves, as they issue bonds in foreign currency to finance their lending in Swedish *kronor*, primarily mortgages. The key items in the banks' bal-

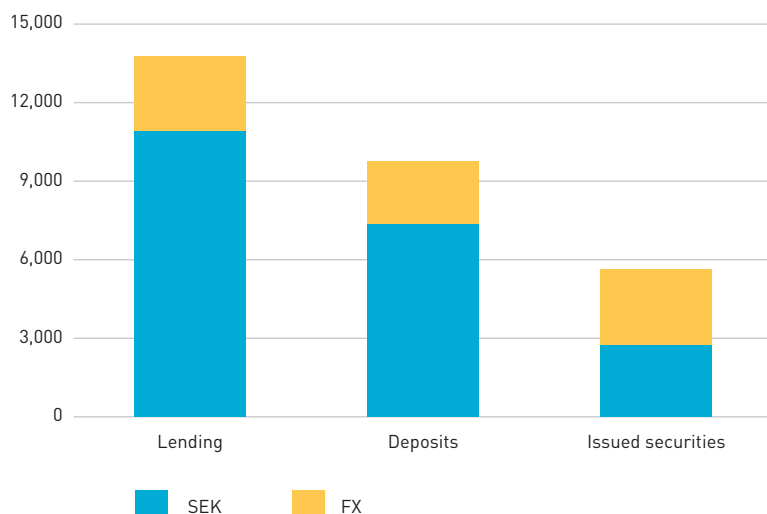
14 See, for example, Sveriges Riksbank (2024), Facts – derivatives, for further details.

15 If this were not the case, it would be possible to earn money risk-free by borrowing in Swedish *kronor* and investing in a foreign bond, while selling the bond at maturity at the prevailing forward rate. See, for example, Avdjiev et al. (2020) for measures of deviations from so-called exchange rate-hedged interest rate parity between the major currencies.

16 See Levander et al. (2021).

ance sheets broken down by domestic and foreign currency are shown in Figure 7. Both lending and deposits are predominantly in Swedish *kronor*, and deposits and lending in foreign currency roughly match each other, at least for all banks combined (although there are substantial differences between banks, according to Eklund et al. 2012). Of bonds and other securities, just over half, approximately SEK 2,900 billion, are issued in foreign currency, of which approximately SEK 1,300 billion is in euros and the remainder mainly in dollars.¹⁷ Issues in euros mainly finance the banks' mortgage loans. Net, the banking system is therefore exposed to currency risk, which creates a need for hedging. Most contracts have a maturity of more than one year.¹⁸

Figure 7 Banks' balance sheet items broken down by currency, 31 December 2023, SEK billion



Note: Refers to the position of monetary financial institutions operating in Sweden, including branches abroad.

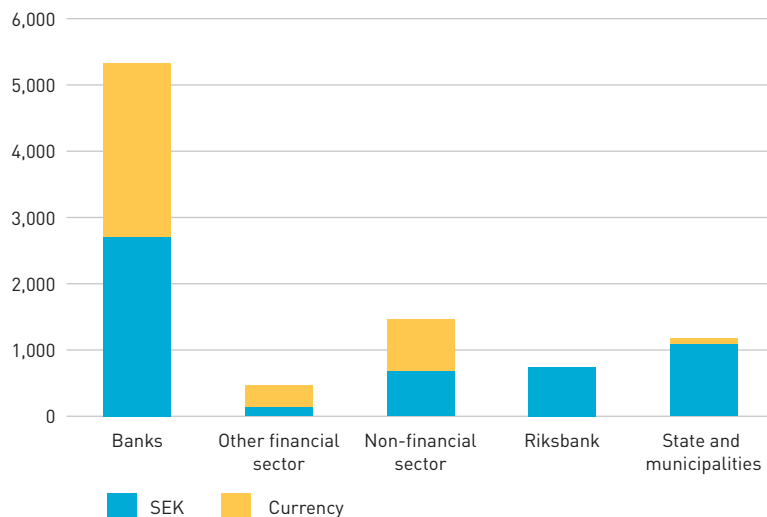
Source: Sveriges Riksbank (2024).

¹⁷ Sveriges Riksbank (2024).

¹⁸ Ibid.

As shown in Figure 8, banks account for well over half of the outstanding volume of bonds and certificates. Approximately half are issued in foreign currency.

Figure 8 Market value of outstanding securities in the fixed income market by issuing sector, 31 December 2023, SEK billion



Source: Sveriges Riksbank (2024).

Pension companies and AP funds

Pension and life insurance companies are long-term investors with total assets of SEK 10,300 billion in shares and other securities. 25 per cent of these assets are invested in international currencies, of which approximately SEK 700 billion is in euros.¹⁹ A significant, and over time varying, portion of the currency risk is eliminated through various derivative transactions. The AP funds, which account for just under 10 per cent of the financial sector, are limited by their regulations to a maximum currency exposure of 40 per cent. The value of pension

¹⁹ Ibid.

companies' total foreign currency assets, just over SEK 2,000 billion, is of the same order of magnitude as that of the banks interest-bearing liabilities in foreign currency. There are thus natural and roughly equal numbers of buyers and sellers of currency hedging.

Non-financial corporations

Non-financial corporations are largely internationally financed. 63 per cent of their interest-bearing liabilities is owned by foreign investors, and 43 per cent of listed shares are foreign-owned.²⁰ Approximately half, SEK 786 billion, of the outstanding debt is issued in foreign currency, of which approximately SEK 700 billion is in euros.²¹

At the same time, firms have large assets in euros and other foreign currencies. Receivables in foreign currencies may, for example, have arisen in connection with the establishment of foreign subsidiaries. In addition, firms are exposed to short-term currency risks linked to invoicing in foreign currencies.

According to a survey by Business Sweden (2023) among Swedish export companies, 69 per cent of purchases and 46 per cent of sales were invoiced in euros. Of the companies surveyed, 28 per cent considered currency risk to be a challenge and 24 per cent stated that they used the forward market to hedge against currency risk.

Households

Households are also exposed to exchange rate fluctuations, mainly through their fund savings. In December 2024, the assets in Swedish-based investment funds amounted to SEK 8,355 billion, of which just over two-thirds were in pure equity funds. Of these, Swedish equity funds accounted for approximately 20 per cent and the remaining SEK 4,529 billion was essentially foreign equities.²² However, investments in pure European funds are small, amounting to SEK 136 billion, to which may be added some exposure to the euro in various mixed funds.

²⁰ Ibid.

²¹ OECD (2022).

²² Fondbolagens förening (2024). The figure includes a small amount (SEK 428 billion) in Swedish and global mixed funds.

In total, this may amount to SEK 150 billion. Households thus bear a substantial currency risk in their fund holdings, but a very small part of this risk is linked to the euro.

3.4 Total currency hedging costs in the financial sector

We will make a rough estimate of the transaction costs of managing exchange rate risks in euros. The total cost is given by the transaction cost per *krona* multiplied by the amount that need to be hedged. We have identified four such items in the financial sector: banks' euro bonds, pension companies' euro assets, non-financial companies' euro liabilities and fund companies' euro assets. The sum of these items is SEK 2,850 billion (Table 1). This should be seen as an upper bound associated with considerable uncertainty. Non-financial companies may have issued bonds in euros in part to match assets in euros. In that case, the loans reduce the currency risk and do not need to be hedged. Furthermore, banks' euro loans are not only used for the Swedish mortgage portfolio but also finance euro assets in their foreign operations. However, we have no figures on what part of the liabilities that matches euro assets.

Table 1 Estimated borrowing and investment volumes in euros for different sectors, 31 December 2023, SEK billion

Banks, bond loans	1,300
Pension companies, assets	700
Non-financial corporations, bond loans	700
Households, fund holdings	150
Total exposure	2,850

Trading in the futures market takes place over the counter (OTC), directly between two counterparties. There are no publicly available statistics on such transactions. Prices may also vary depending on the counterparty. A recent study (Bräuer and Hau 2024) uses transaction data on all trades between banks and investment funds/insurance companies from 2019 to the present, collected for the EU's market

regulation EMIR (European Market Infrastructure Regulation). Transaction cost can then be calculated as the difference between the rate customers receive and the rate banks selling the hedge pay to reinsure themselves in the interbank market. For a one-month currency hedge of Swedish *kronor* against the euro, the average cost was 0.5 basis points (0.005 per cent). If customers roll one-month contracts twelve times, the annual cost would thus be 6 points (12×0.5). Unfortunately, the study does not cover long contracts, but the annual cost of forward hedging with longer contracts is likely to be slightly lower. Our discussions with Swedish market participants indicate that the annual cost over a longer period of time has been as low as 2 basis points.²³

Bräuer and Hau (2024) also show that only 68 per cent of the funds that had exposure in foreign currency, used currency swaps at least sporadically during the period. If the corresponding proportion is valid for Swedish operators exposed to the euro according to Table 1, the total volume of exchange rate hedging would amount to just over SEK 1,900 billion. With a transaction cost of 2 basis points, this would mean a total cost of just over SEK 380 million, a modest amount in this context. This refers to costs within the financial sector, where most actors can trade directly on the interbank market, where margins are normally very small. Our estimated cost is less than one-tenth of Forslid's estimate for trade in goods and services.

3.5 Currency hedging and systemic risk

When firms hedge against exchange rate risks, the positions end up in so-called swap portfolios at the major banks. These portfolios can be compared to insurance companies' portfolios of issued insurance policies. Although the maturities of the liabilities and assets that are hedged (mortgage bonds and foreign equities) are relatively long, the maturities of swap contracts are generally much shorter. One third of all currency derivatives have a maturity of less than 30 days and another third have a maturity between 30 and 90 days. Less than one tenth have a maturity of more than one year.²⁴

²³ This is consistent with a transaction cost of 0.5 points for a three-month currency hedge.

²⁴ See Levander et al. (2021).

The total volume of outstanding contracts is very large, close to SEK 100,000 billion.²⁵ In the event of market disruptions, it may be difficult for market participants to trade swap contracts. In such cases, there is a risk of being left with unwanted exchange rate exposure, which can be costly in a volatile market.

The large swap portfolios may cause liquidity problems even for a solvent bank. A default would hurt the bank's reputation in the market and likely start a process of deteriorating access to funding similar to a bank run. Continuous access to foreign currency through the central bank is essential to prevent this from happening. This is crucial for a country like Sweden with a small currency and a large financial sector.

A scenario where the Swedish banks cannot buy foreign currency against Swedish *kronor* is a low probability event with very high costs to society. The Swedish crisis in 1992 is an example where solvency problems among Swedish banks combined with disturbances in international currency markets triggered liquidity problems among Swedish banks. The global financial crisis in 2007–09 was a crisis originating in the US that spread to Sweden. In both cases Swedish banks found it difficult to buy sufficient amounts of foreign currency, and the Riksbank had to help them out with swap lines. Today, a global crisis seems more probable than a domestic Swedish crisis.

The risks of a currency market crisis leading to a banking crisis can be mitigated ex ante in at least three ways:

- Netting procedures can be used to reduce the gross exposures.
- Individual banks can hold foreign exchange reserves to use in emergency situations.
- The central bank can hold foreign exchange reserves for emergency situations.

It is very difficult to know in advance how big reserves are needed in a major foreign exchange market crisis. Reserves may be insufficient to prevent defaults on foreign exchange contracts.

If Sweden would enter the monetary union, the costs for holding reserves would disappear in the case of the euro and decrease in the case of the US dollar. The ECB is the liquidity provider to all banks

²⁵ Ibid, Chart 1.

in the euro area. The likelihood that they all need emergency liquidity simultaneously is lower than the likelihood that all Swedish banks need it at the same time. In this sense there are economies of scale in the provision of liquidity to a banking system just like there are economies of scale in having reserves for banking resolution (see Section 4.6).

A foreign exchange market crisis, like the ones in 1992 or 2008 or the covid crisis, can of course occur again. Membership in the euro area will reduce the risk that such a crisis will spread to the entire financial system.

4 The euro and the banking union

The banking union was established in 2014 in the wake of the global financial crisis, when a number of European banks had to be rescued by government support. The aim was to strengthen the stability of the banking system and reduce the risk of a future crisis, while at the same time preventing any crisis from creating new holes in public finances. Membership of the euro area requires that Sweden first is a member of the European Exchange Rate Mechanism (ERM) and the banking union.²⁶ This will affect the conditions for Swedish banks. Although they are today regulated by common legislation that applies regardless of whether a country is part of the monetary union or not, the application of the rules is largely a national matter for countries outside the euro area.

Today, the supervision and monitoring of Swedish banks, as well as the management of banks in crisis, is carried out by Swedish authorities – the Swedish Financial Supervisory Authority, the Swedish National Debt Office and the Riksbank – within the framework set out in EU legislation. With the euro, Sweden would participate in the Single Supervisory Mechanism (SSM) and the Single Resolution Mechanism (SRM). These mechanisms are commonly referred to as the banking union. However, this is not a separate organisation or jurisdiction, but rather a set of rules and decision-making procedures applied by the

²⁶ See Chapter 13 by Ingves for a more detailed discussion of the accession process.

Single Supervisory Board of the European Central Bank (SSB) and the Single Resolution Board (SRB) together with the corresponding national authorities. A common deposit guarantee scheme may also be included in the banking union. However, after more than a decade of discussions and negotiations, this is still at the conceptual stage.

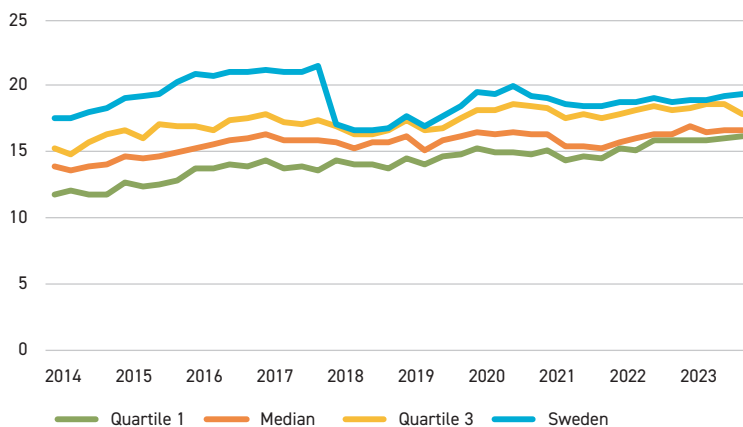
The basic idea is to strengthen the supervision of banks, particularly those that are systemically important, in order to reduce the risk that instability in the banking system would threaten the macroeconomy or that disruptions there would threaten the stability of the financial sector. If a systemically important bank nevertheless fails, the resolution framework shall ensure that losses and recapitalisation are covered by the bank's shareholders and lenders by depriving owners of their shares and writing down unsecured claims and converting them into new equity capital (bail-in). If this requires additional funds, particularly during a transition phase, these can be taken from the banking union's resolution fund built up with contributions from the banks (Single Resolution Fund, SRF). This reduces the risk of the need for support placing a burden on member states' public finances (bailout). The banking union can thus be seen as an insurance system where risks are spread by pooling resources from banks in several countries.

4.1 Europe's banking system has stabilised

Through the European Stability Mechanism (ESM), established in 2012, emergency loans, jointly financed by the countries of the monetary union, were granted to a number of states in financial difficulties – Cyprus, Greece, Ireland, Portugal and Spain – funds that were used, among other things, to strengthen banks in crisis. At the same time, many banks remained undercapitalised, with an average capital adequacy ratio among EU banks of only 11.5 per cent in December 2014, and credit losses remained high, averaging 6.5 per cent of the loan portfolio. Ten years later, the European banking system has been significantly strengthened. By September 2024, the average capital adequacy ratio had risen to 16.0 per cent and credit losses had fallen to 1.9 per cent (see Figures 9 and 10). These averages still mask considerable dispersion. Today capital adequacy varies between 13 per cent in Spain

and 23 per cent in Cyprus, and credit losses between 0.3 per cent in Sweden and 3.9 per cent in Poland.²⁷

Figure 9 Capital adequacy ratio, 2014-23, per cent

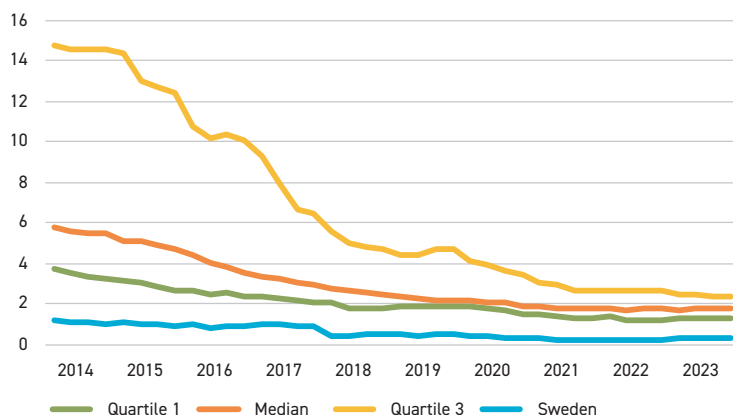


Note: The capital adequacy ratio (CET1 ratio) is defined as the ratio between equity capital and risk-weighted assets. The figures refer to the ten largest euro area countries, Denmark, Poland and Sweden.

Sources: European Banking Authority and Swedish National Debt Office.

²⁷ As discussed below, the standard method for risk adjustment allows government securities to be given a risk weight of zero regardless of their rating. The figures may therefore give an overly positive picture of the financial strength of certain banks. The decline for Sweden in 2018 is due to the increase in the risk-weight floor for mortgages (Sveriges Riksbank 2018).

Figure 10 Proportion of non-performing loans, 2014–23, per cent



Note: The figures refer to the ten largest euro area countries, Denmark, Poland and Sweden.
Sources: European Banking Authority, Risk Dashboard Q3 2024 and the Swedish National Debt Office.

The increased stability of banks in the EU has also contributed to reducing credit risk and improving the ratings of government bonds from many countries. This can be attributed to some extent to the banking union, whose purpose is to streamline supervision and pool risks between banks and countries within the union. Chiarella et al. (2025) compare how credit ratings developed from 2011 to 2018 for the 19 euro area countries and 12 European countries outside the euro area (including three countries that are not members of the EU: Iceland, Norway and Switzerland). Until 2013, euro area countries had a significantly lower average rating than other countries. The gap was halved by 2014 and then gradually closed by 2018. This may, of course, be due to other factors as the euro crisis subsided. However, empirical analysis using several control variables suggests that membership of the banking union was a contributing factor.

4.2 Swedish banks in a European perspective

With a capital adequacy ratio of 19 per cent and small credit losses, Swedish banks currently appear to be more stable than the European average. Against this background, one may wonder what benefits Sweden and the Swedish financial system can derive from participating in the banking union. What are the disadvantages? Does it increase the risk that Sweden may in some way be forced to participate in support measures for banks in countries with weak banking systems and weak public finances? Today, that risk seems very small, but since the banking union is under development and the global situation is uncertain, the question cannot be easily answered based on the current situation.

The banking union is still incomplete, and although it may have successfully contributed to cleaning up after the old crisis, it has not been tested in a new crisis. It remains unclear how the rules, particularly those relating to resolution and a possible future common deposit guarantee, will develop and how they may be applied in a future crisis. At the same time, membership of the banking union would reasonably increase Sweden's influence and ability to affect its future development, at least marginally. Sweden already has the right to participate in Eurogroup meetings on banking union issues and has full voting rights when decisions are made by the Council, but in practice the votes of the euro area countries probably carry more weight.

4.3 Uniform supervision

Since Swedish banking supervision is already based on EU regulations, the practical impact of Swedish membership of the banking union on supervision is likely to be minor. Decision-making powers regarding certain requirements for banks' capital buffers will be transferred from the Swedish Financial Supervisory Authority to the ECB.²⁸ However, the ECB's decision-making power is limited to raising a buffer above what has been decided nationally. Since Sweden already has higher buffers than most other countries, this will therefore have little practi-

²⁸ This applies to the countercyclical buffer, the systemic risk buffer and the buffer for global systemically important institutions.

cal importance. Other macroprudential measures, such as loan ceilings and amortisation requirements, will continue to be decided at national level.

The potential effects of transferring supervisory responsibility to the ECB are discussed below.

Spillover effects

Banks in EU countries are closely linked to each other. Even though lending and deposits are concentrated nationally, banks largely operate in a common funding market. Difficulties within a bank in one country therefore risk spreading to the entire financial system. The single supervisory mechanism is based on a division of supervised banks into systemically important and other banks, with responsibility for the supervision of systemically important institutions (in Sweden's case, this would concern at least Handelsbanken, SEB and Swedbank) lying with the ECB, while national supervisory authorities are responsible for the supervision of other banks.

One effect of Swedish participation in the banking union is therefore that supervision of the three largest Swedish banking groups would be transferred to the ECB, while the Swedish Financial Supervisory Authority would retain supervision of non-systemically important banks, even though the ECB would also have the possibility to take action against these banks.²⁹ The ECB would carry out on-site inspections with the assistance of the Swedish Financial Supervisory Authority. The person leading an investigation should not come from the bank's home country or be involved in the regular supervision of the bank. For banking groups with cross-border operations, the ECB would replace the Swedish Financial Supervisory Authority as the coordinating supervisory authority and lead the work for groups with headquarters in Sweden. Overall, these changes should improve the conditions for taking cross-border effects on financial stability into account.

²⁹ The ECB already supervises SEB's and Swedbank's Baltic subsidiaries, as well as Nordea, which has its head office in Helsinki, Finland.

Quality

Participation in the banking union could provide some added value in the form of economies of scale for methodology development and increased opportunities to make comparisons with banks of a similar type (size, business model, risk profile, etc.) in other countries. The ECB may have broader and deeper expertise than is possible for a national authority with smaller resources. Normally, an on-site inspection takes several weeks and involves 10–15 ECB officials. In this respect, the ECB's supervision is at least as thorough as that currently carried out by the Swedish Financial Supervisory Authority. This would probably require somewhat more resources, not only from the ECB but also from the Swedish Financial Supervisory Authority and the banks involved. Opportunities for learning and disseminating best practice would also be improved. This could also benefit the supervision of banks that would still be supervised nationally.

Consistency and coherence

Joint supervision could lead to a slightly more uniform application of rules. The same requirements for information and transparency would be imposed on Swedish banks as on all other banks within the banking union. This would reduce the scope for regulatory arbitrage by banks locating their operations in countries with less strict rules. Also, personal connections between the parties would be reduced, thereby reducing the risk of regulatory capture. This could limit the scope for supporting weak banks and maintaining an inefficient banking system.

On the other hand, uniform supervision may fail to take account of local conditions and differences in banks' business models. If ongoing contact with the Swedish banking market deteriorates, it may take longer for new phenomena and risks to be observed. Excessively uniform supervision may also contribute to all banks being moulded into the same shape. This could make the effects of disturbances more synchronised and systemic risks might increase rather than decrease.

Transparency and risk-taking

When it was taken, the decision on the banking union appears to have been perceived as positive news by the stock market.³⁰ The question is whether any effects can be seen today after a decade of joint supervision. The introduction of the Single Supervisory Mechanism in 2014 can be interpreted as a ‘natural experiment’. Since systemically important banks were affected differently from other banks, certain conclusions can be drawn from the differences in developments between the two categories of banks before and after 2014. Researchers have studied two types of effects: transparency and risk-taking.

Altunbas et al. (2022) find that the banking union consistently led to increased transparency regarding the financial position of individual banks. The effect was strongest for less profitable banks and for banks in the countries hardest hit by the financial crisis. One interpretation is that the effect was greatest in the countries that previously had the poorest quality of supervision. Somewhat surprisingly, the effect was strongest for nationally supervised banks. The authors interpret this as due to principal-agent problems linked to the fact that information on centrally supervised banks is largely collected nationally and communicated to the ECB, which has the decision-making power.³¹ The effect may also reflect the fact that systemically important banks were already relatively transparent.

The aim of supervision is to keep the risk in individual banks low. Avignoni et al. (2021) study the development of credit losses and non-performing loans. For a sample of banks within the EU during the period 2011–18, they compare the development between the 95 banks that were subject to joint supervision from 2014 and the 651 that were not. They find that centralised supervision led to slightly lower credit

30 Loipersberger (2018) finds that both the initial announcement of the banking union on 29 June 2012 and the more detailed plan on 12 September 2012 had a certain positive effect on the share prices of banks in the euro area compared with banks outside it.

31 Carletti et al. (2021) develop a model for a so-called hub-and-spokes structure for supervision.

losses, even accounting for a number of control variables. The difference is statistically significant, but quantitatively quite small.³²

4.4 Uniform resolution

Resolution is a way of dealing with a crisis bank without immediately closing its operations. Instead, an orderly restructuring or winding down of the bank takes place with the aim of limiting the damage to the bank's customers, financial stability and the economy as a whole. While resolution is ongoing, the bank remains open so that customers have access to their accounts and other services as usual. Resolution can be implemented in various ways. For example, the crisis-stricken bank can be sold to another bank or recapitalised by letting certain creditors have their debts written down or converted into equity. The aim is to let the bank's shareholders and lenders carry the cost of the crisis. In principle, all EU members must handle resolutions in the same way, as specified in a special EU directive (Bank Recovery and Resolution Directive, BRRD), implemented in Sweden in the Resolution Act (2015:1016). With Swedish membership of the banking union, decisions and overall management of the resolution of systemically important banks would be transferred from the Swedish National Debt Office to the SRB, but the principles would remain essentially the same.³³

As discussed above, resolution is supported by a special fund (Single Resolution Fund, SRF), which is financed through bank fees. The fund can be used to support a resolution process if the bank's capital and loss-absorbing liabilities are insufficient. In Sweden, a resolution reserve has been built up for the same purpose. Upon joining the banking union, funds from the Swedish reserve would be transferred to the Single Resolution Fund.

A key question is how the financial consequences of resolution decisions will be distributed. The aim is that the cost should be borne by shareholders in the first place and by holders of loss-absorbing liabili-

32 The effect on provisions for credit losses as a percentage of the loan portfolio was between 0.6 and 0.9 percentage points, depending on the model specification. This should be compared with an average credit loss level of around 5 per cent.

33 See Ekholm (2020) for a critical discussion of the decision-making processes surrounding resolution within the banking union.

ties in the second place. Neither depositors nor taxpayers should suffer. The question is whether it will be possible to adhere to this idealised picture of the process in all situations, particularly in the context of a more general financial crisis when many banks are experiencing problems at the same time.

How great is the risk that the taxpayers will nevertheless be burdened in one form or another, and how will the costs be distributed among the member states in that case? The resolution fund can be seen as a guarantee that the process is credible and that bailouts can be avoided. An important question is how contributions to the fund are distributed between different banks and member states and how this relates to the probability that fund assets will benefit banks in different countries. We will return to this question in Section 4.6.

The Single Resolution Authority has now been in operation for ten years and has established a regulatory framework for banks' capital base and loss-absorbing liabilities that can be used in resolution. Centralised resolution has been applied in two cases. In 2017, Banco Popular Español was taken over by Santander, and in 2022, a crisis within the Sberbank Group led to liquidation of the parent company in Austria and takeover of subsidiaries in Croatia and Slovenia by other banks. In both cases, the resolution rules were followed. The ECB first declared the banks failing or likely to fail, after which the process was led by the SRB together with national authorities. No public funds were provided.

However, there may be doubts as to whether the process will work equally well in other circumstances. This is partly because, according to the Resolution Directive, the SRB must first determine whether joint resolution is in the "public interest" before a resolution process can begin. If this is not deemed to be the case, a bank in crisis must instead be dealt with nationally in accordance with each country's own insolvency legislation. This may also apply to large systemically important banks. In 2017, the two Italian banks Banca Popolare di Vicenza and Veneto Banca were deemed unviable, but the SRB found that resolution was not in the "public interest." Instead, Italian law was applied, and the two banks were restructured with injection of public funds. In other cases (Monte dei Paschi di Siena in Italy and HSH Nordbank in

Germany), banks have been rescued with public funds before the SRB has taken a position on whether they were viable.

There are thus at least three uncertainties regarding how the joint resolution may function. The first is that the SRB's interpretation of "the public interest" would enable individual countries to support their own banks, which could be a problem both for the efficiency of the banking system and for financial stability. The second is the extent to which the jointly financed resolution reserve will in practice be used to support certain banks. The third is how bank support will be financed if a future crisis becomes so extensive that the resolution reserve is insufficient. In 2020, it was decided that the ESM should act as a common backstop to guarantee financing if the resolution fund proves insufficient. However, this decision has not yet been ratified by the Italian Parliament.

4.5 Joint deposit guarantee

Banks are largely financed by deposits from the public in accounts that are fully liquid and used daily for payments. The system is only stable as long as these assets are perceived as secure. For this reason, and to prevent panic withdrawals (known as bank runs) from banks in difficulty, most countries have some form of state-administered guarantee of deposited funds. Within the EU, the deposit guarantee is governed by a directive that regulates, among other things, the guaranteed amount (EUR 100,000) and stipulates that the guarantee shall be financed through a fund built up through risk-adjusted contributions from insured banks. The target level for the funds is set at 0.8 per cent of the value of all guaranteed deposits. The degree of target achievement varies between countries. In Sweden, the National Debt Office administers a fund that amounted to SEK 49 billion at the end of 2023, which corresponds to 2.3 per cent of guaranteed deposits and is thus close to three times the target level.³⁴ However, approximately half of

³⁴ Source: Swedish National Debt Office website. By comparison, the resolution reserve amounted to SEK 61 billion at the same time. There is also a stability fund that was built up with bank fees in connection with the global financial crisis. It amounts to SEK 42 billion.

EU countries are below the target.³⁵ Some countries, such as Germany, have separate systems for different groups of banks.

A common deposit guarantee was one of the three pillars when the banking union was launched, but it has not yet been realised.³⁶ Without a common guarantee backed by a common fund, there is a risk that a larger proportion of the burden associated with a bank failure will fall on other actors and ultimately on taxpayers from other member states.

4.6 The banking union as an insurance system

Banking crises are costly. Historically, taxpayers have largely borne the costs when crisis-stricken banks have been bailed out. A key idea behind the banking union is to replace this arrangement with a system where the banks' funders bear the losses. The system is backed by the resolution fund, built up through fees imposed on banks. In the long term, the intention is that the proposed common deposit guarantee scheme will be financed in a similar way. The banking union can thus be seen as a funded insurance system, designed to ensure that any bail-outs of banks in crisis do not affect the taxpayers of individual countries.

The banks' contributions to the resolution fund amount to 1 per cent of the deposits covered by the deposit guarantee scheme.³⁷ In Sweden, allocations to the resolution reserve are part of the state budget. The target is for it to correspond to 3 per cent of guaranteed deposits. In December 2023, it had reached 2.7 per cent. In the event of Swedish membership, funds corresponding to 1 per cent of guaranteed deposits will be transferred to the Single Resolution Fund. The remaining 2 per cent could remain as a Swedish extra reserve, be repaid to the banks or be consolidated with the government budget.

Swedish membership of the banking union would spread the risks from Sweden to the union as a whole. Today, the three major banks account for 87 per cent of Swedish banks' total assets, and problems

35 This refers to the end of 2022. Source: Forssbäck (2024).

36 See Forssbäck (2024) and Véron (2024a) for a historical overview.

37 The contributions are proportional to total liabilities and the deposits covered by the deposit guarantee and are risk-adjusted depending on capital adequacy ratios and other factors.

in one or more of these banks could leave deep holes in the resolution reserve.³⁸ In the banking union, however, Swedish banks would only account for around 4 per cent of the balance sheet total. The safety cushion for Swedish banks would thus be multiplied several times over. The fact that the Swedish resolution reserve is three times larger in relation to guaranteed deposits than the European resolution fund could be seen as an expression of the fact that diversification is much less in a single country than in a large union. The difference then provides a measure of the value of the risk diversification that would result from membership of the banking union.

At the same time, Swedish membership would mean that Swedish banks, through their contributions to the joint resolution fund and a possible future deposit guarantee fund, would contribute to a safety net for banks in crisis in other countries. The differences in risk between banks in different countries should in principle be reflected in the risk-adjusted contributions paid by the banks. As noted, Swedish banks are currently better capitalised and have lower credit losses than the average within the banking union and should therefore pay a lower resolution fee. Another difference compared with banks within the union is that the risk of weak public finances spreading to the banks in a crisis is lower. Swedish government debt is well below the European average, and Swedish banks have a small proportion of government securities among their assets, unlike banks in several southern European countries.

The probability that the resolution of a Swedish bank would require financing from the resolution fund is thus lower than the average within the banking union, at least at present. It is difficult to assess whether the risk adjustment of the contributions to the resolution fund fully compensates for this difference. The contributions are set according to a complex formula that takes into account several risk dimensions, including the capital adequacy ratio.³⁹

A big difference between banks in different EU countries is how much government bonds they hold. We learned from the crisis in the

³⁸ The figure refers to the ten largest banks and excludes Nordea and Danske Bank, which have their head offices outside Sweden. Source: Sveriges Riksbank (2024).

³⁹ See Article 7 of Delegated Regulation- 63/2015 -EN- EUR-Lex.

early 2010s that there is a risk of contagion between banks and governments, especially if banks hold a lot of government bonds and a financial crisis may end up hurting the government's finances. Signs of problems in the banking sector then may increase the risk premium on government bonds, which feeds back into banks' financing costs and further drives up the risk premium on government bonds in a self-reinforcing spiral (doom loop).⁴⁰ Particularly in countries with low credit ratings, a large proportion of government debt is still held by domestic banks. In 2021, Italian bank holdings of domestic government bonds amounted to more than 100 per cent of equity. In other countries (including Greece, Spain and Portugal) corresponding ratios were above 50 per cent (Forssbäck 2024).

It is doubtful whether these differences across countries are reflected in the risk measure that forms the basis for the banks' contributions to the resolution fund. In this measure, the banks' capital adequacy ratio, which is a function of their risk-weighted assets, plays an important role, but domestic government securities have zero weight regardless of rating.

Nor does it appear that insufficient diversification within the portfolio is taken into account. Overall, this means that capital adequacy tends to be overestimated for banks in countries where banks own a large amount of government securities, and that the Swedish price tag for membership in the banking union will be high in relation to the insurance protection it would provide.

There are therefore both advantages and disadvantages to membership of the Single Resolution Mechanism from a narrow insurance perspective. On the one hand, Swedish banking risks would be diversified in a larger common pool. On the other hand, Swedish banks would probably have to pay a higher price for this than corresponds to their contribution to the common risks. A more serious problem than the price tag in the form of contributions to the resolution fund is the risk that Sweden, in a crisis where the fund was exhausted, would have to pay to rescue banks in other countries participating in the banking union. The risk of such a deep crisis is linked to the risk of a self-rein-

40 See Calmfors (2017) for a more detailed discussion of this issue.

forcing spiral between the financial position of banks and governments in certain countries, a risk that, by all accounts, remains. However, in a deep crisis, where contributions to an IMF support programme may also be relevant, it is unlikely that Sweden would be able to remain outside, regardless of whether we are in the euro area or not.

5 Sweden and the development of European capital markets

Sweden joined the EU in 1995. Since then, the Swedish financial market has become one of the most well-developed in the Union. This is particularly true of the venture capital market. At the same time, it is commonly believed that the fragmented financial markets in the EU are generally inferior to their American counterparts. Today, when Europe has a great need for investment in climate change, infrastructure and defence, the future development of the financial markets has become particularly relevant. For Sweden, this raises several questions: Can the Swedish markets continue to develop successfully outside the monetary union? Does Sweden, by virtue of its well-developed financial market, have a special role to play in the future development within the EU? How would membership of the monetary union affect that role?

5.1 Needs for reform

Part of the explanation for the faster growth in the US than in the EU in recent years is often attributed to the claim that the American financial markets are more efficient than the European ones, which are more bank oriented. Within the EU, bank assets account for nearly 400 per cent of GDP, compared with just over 100 per cent in the USA.⁴¹ At the same time, European banks are still largely national – even the largest ones are small from a global perspective. The largest global bank, JP Morgan, is bigger than the ten largest European banks combined.⁴² The

⁴¹ European Commission (2024).

⁴² Ibid.

dominance of banks within the EU results in a much larger proportion of savings ending up in bank accounts. If Europe had the same proportion of securities among its savings as the US, four-fifths of today's bank savings would be invested in the capital market.⁴³

The banking union is primarily aimed at safeguarding financial stability. The hope is that this should also stimulate cross-border banking activities and thus contribute to the integration and streamlining of banking markets in Europe. So far, these hopes have been dashed. In fact, there have been no cross-border bank mergers since France's BNP Paribas acquired the Dutch bank Fortis in 2008.⁴⁴ This may partly reflect the fact that traditional banking (retail banking) is based on close customer contact and that cross-border synergies are therefore limited. However, it may also be due to barriers created by different regulations and institutional differences.

The development and integration of European capital markets is constrained by national regulations, legislation and supervision. The IMF has estimated that internal barriers to trade in financial services within the EU are equivalent to tariffs of over 100 per cent.⁴⁵ Fragmentation makes it difficult to channel savings into investments in an efficient manner. Today's large investment needs accentuate the importance of efficient pan-European financial markets. Work on this was initiated by the European Commission in 2015 under the heading of capital markets union. In practice, however, not much progress has been made. Recently, as the need to assert Europe's position in global competition has become increasingly apparent, the concept of a savings and investment union has been launched through the Draghi report and a document from the European Commission.⁴⁶

A step towards a capital markets union would be to introduce an organisational structure similar to that for banking supervision. Since 2011, capital markets have been supervised by ESMA (European Securities and Markets Authority). ESMA's mandate is currently limited to coordinating and stimulating cooperation between national and

43 European Central Bank (2024).

44 Gotti et al. (2024).

45 IMF (2024).

46 European Commission (2024) and European Commission (2025).

regional supervisory authorities. The Draghi report and other commentators advocate that ESMA be transformed into a central supervisory authority for the entire euro area, governed in a similar way to the ECB without direct involvement from national authorities.⁴⁷ If this were to happen, the supervision of financial markets would thus be linked to membership of the euro area. In a similar way to how the banking union is based on joint supervision of banks, a reorganised ESMA would be responsible for joint supervision of trading platforms and other institutions in the capital markets. This could promote development that benefits the whole rather than different national interests.

5.2 Reforms in different areas

An important reform that would increase integration of securities markets is to create a Central Counter Parties (CCP) and Central Securities Depositories (CSD) for all securities trading. Today, there are 14 different nationally based platforms (Nasdaq OMX in Sweden) and 25 securities depositories (Euroclear in Sweden), which are supervised by special boards within ESMA. One area where Europe lags behind the United States is securitisation, where the value of new issues corresponds to 0.3 per cent of GDP in the EU compared with 4 per cent in the United States.⁴⁸ The development of such a market would make it possible to remove certain risks from bank portfolios, thereby making their financing more flexible.

Some of the factors limiting the integration of financial markets are fundamentally national issues for each individual country within the EU. This applies in particular to the design of pension systems, tax rules and insolvency law. Funded pension savings, on an individual or collective basis, are fundamental to generating demand for financial assets and, if the savings are actively managed, also contribute to increased liquidity in financial markets. Within the EU, funded pension savings amount to only 32 per cent of GDP, compared with 142 per cent in the United States. In Europe, it is mainly in Sweden and a few

47 See, for example, Beck et al. (2024) and Véron (2024a, b).

48 European Commission (2024).

other smaller countries that pension savings are primarily funded and channelled directly into the capital market.

Different tax rules also create barriers within the EU. The incentive to invest in different jurisdictions is limited by differences in the taxation of capital income, combined with often complex rules for the refund of withholding tax. An EU directive from 2023 aims to speed up the refund process, but as long as tax rates differ, problems will remain. Furthermore, the treatment of household savings in funds and other financial assets varies. The favourable tax treatment of such savings in Sweden – publicly sponsored mutual funds in the 1980s and investment savings accounts today – has contributed to households holding more foreign shares in Sweden than in many other countries.

Significant differences in insolvency laws within the EU also create uncertainty and have led to protracted legal proceedings and the increased use of American legislation by European companies.⁴⁹ Changing pension systems, tax rules and insolvency legislation are difficult and time-consuming processes. Work in these areas is ongoing within the EU, but there is little reason to expect harmonisation to be achieved in the near future.⁵⁰

5.3 Sweden's role

Europe's financial markets are thus facing major challenges. The question is what role Sweden wants and can play in this process and to what extent this is affected by membership of the monetary union. Certainly, our formal influence will increase as we become full members of various governing bodies, as described in more detail by Ingves in Chapter 13 of this volume. Whether this will also lead to increased real influence is an open question, which is discussed in detail by Lundgren in Chapter 11.

Even well-integrated financial markets tend to be geographically concentrated. London has long been the leading financial centre in

49 See Becker and Oehmke (2025) for an analysis and a proposal for an EU-wide insolvency law alongside national laws, with the option for companies to comply with either legislation (opt-in).

50 See European Commission (2024), Box 1, for a concise summary of the progress made.

Europe. Since the UK left the EU, the question of London's future role has become more pressing. London is still ranked as the world's second most important financial centre after New York, but there has been an outflow of jobs from London to the EU. Since Brexit the City has lost 40,000 jobs in the financial sector to various centres in Europe according to London's Lord Mayor.⁵¹ In the long term, it is possible that the financial sector within the EU may become concentrated to cities such as Amsterdam (equities), Ireland (fund management), Paris (corporate finance), Frankfurt (banking) and Luxembourg (asset management).⁵² Stockholm could develop into a regional centre in northern Europe. Exactly how this will develop depends, of course, on how successful the EU is in its ambitions to develop an internal capital market and how London manages to defend its position.

We began this section with three questions: Can the Swedish financial markets continue to develop successfully outside the monetary union? Does Sweden have a special role to play in the development of the European financial markets? How would Sweden's role be affected by membership of the monetary union? Our assessment is (i) that the Swedish markets can certainly continue to develop successfully outside the monetary union, but being inside would provide better conditions in terms of increased risk diversification and a more favourable investment climate; (ii) that Sweden may have a special role to play by virtue of its well-functioning and securitised markets, but that Sweden needs to act and formulate goals in order to gain influence; and (iii) that Sweden could certainly play a role even outside the monetary union, but that it would be strengthened by membership.

51 [https:// www.. reuters.com/ world/ /city- london- chief-says-bre- dis- cost-40000- finance- jobs-2024-10-16/](https://www.reuters.com/world/city-london-chief-says-bre-dis-cost-40000-finance-jobs-2024-10-16/).

52 See, for example, Véron (2021).

6 Pros and cons from a financial markets perspective

The financial markets are large, liquid and more efficient in Sweden than in many other countries. For this reason, the choice between the euro and the *krona* is particularly important. Let us summarise the costs and benefits of switching to the euro.

Firstly, the uncertainty surrounding exchange rate movements between the *krona* and the euro disappears, and with it the need for insurance against exchange rate fluctuations. We have attempted to calculate the magnitude of this effect and found that it is likely to be small for the financial sector, at least in normal times. However, the effect is clearly positive.

Secondly, there are advantages to belonging to a larger currency area with deeper and more liquid financial markets. When the sun is shining and everything is working well, the size of the currency area is less important, but in a global crisis Sweden would benefit from being part of a larger currency area with better liquidity. The large swap portfolios that have been built up to reduce exchange rate risk pose a potential stability risk, which is particularly critical given the size of the Swedish financial sector. In a financial crisis, the ECB will be in a better position to provide the Swedish banks with euros and US dollars and at lower cost. The risk of a crisis starting in the foreign exchange market and spreading to the entire economy will be lower.

Thirdly, with the euro, Sweden will also become a member of the EU banking union. This may have both advantages and disadvantages. But these should not be exaggerated, as both the supervision of banks and the resolution of them in crisis are already governed by legislation that is common to all EU countries, whether they are members of the banking union or not. The banking union can be seen as an insurance system where resources are pooled at EU level. This diversification is in itself a clear advantage of membership in the banking union. On the other hand, contributions to the joint resolution reserve do not fully compensate for differences in risk between banks in different countries.

Through the banking union, decision-making power will be transferred from Swedish authorities – the Swedish Financial Supervisory

Authority and the Swedish National Debt Office – to the ECB. This could lead to a professionalisation of supervision and resolution decisions, which is positive. On the other hand, there are concerns that decisions will be influenced by national considerations, which could be to Sweden's disadvantage. This applies in particular to decisions on resolution if the resolution fund is exhausted. Sweden would then risk being involved in rescuing banks in other countries. In our opinion, this risk should not be exaggerated, and it is not clear whether it will increase as a result of membership of the banking union.

Fourthly, there is an ongoing discussion about ways of integrating and streamlining capital markets outside the banking system, a need that is becoming particularly apparent considering the large investment needs that are likely to arise in the future. The organisational framework for this is still unclear, but there are indications that decisions will be made by a body linked to the ECB. In that case, Sweden's influence would be limited if we were outside the monetary union.

In summary, the direct and immediate effects on the financial sector of membership of the euro area are small, but likely to be predominantly positive. The costs of insurance against currency risk would decrease, banking supervision would perhaps become more efficient, and risks associated with provision of liquidity and resolution of banks in a crisis would be diversified.

The long-term effects are more important, but harder to assess. The banking union is still incomplete, and the capital markets union has barely started. Joining the monetary union would probably give us a better chance to influence these processes. Sweden would, of course, only be one of 22 euro countries so the potential for influence should not be exaggerated. However, Sweden's large and well-developed financial markets can help to make our voice heard – provided that Swedish politicians are genuinely willing to use their opportunities to exert influence.

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CHAPTER 9

European political integration and the politics of monetary union

Erik Jones

1 Introduction

The euro is the common currency of the European Union. As a currency, the euro has an economic function as a store of value, a medium of exchange, and a unit of account. It has a European Central Bank (ECB) that brings together the central banks of those countries that have adopted the euro in a European System of Central Banks. And it has a complex infrastructure for ensuring that those central banks can manage payments across the vast web of financial institutions, firms, and households, that use the euro as part of their daily lives.

But Europe's monetary union is political as well as economic. The euro sign € is the most recognizable symbol of the European Union. The ECB ranks among the world's most powerful economic institutions. Adopting the euro as a common currency is a political choice, and that choice has important political implications.

The purpose of this chapter is to focus on that political dimension of the euro. This focus on politics is necessary to explain the relationship between European political integration and European monetary integration. It is also useful to shed light on other questions, like whether having Sweden adopt the euro would strengthen Europe in political terms and how it might affect Sweden's political standing within the

European Union. These questions are not easy to answer in any definitive way. Like most political issues, the choice for adopting the euro is a matter of individual judgement. Nevertheless, it should be possible to suggest where to look when making those judgements.

The chapter has four sections. Section 2 explores the concept of political integration as it relates to the European Union. Section 3 examines the political implications of forming a single currency. Section 4 reviews the experience of Europe's monetary union. Section 5 concludes by suggesting how Sweden joining the euro might change political dynamics in Europe and in Sweden and so sets out some basic principles for debating Swedish euro membership.

2 Political integration in Europe

The European Union (EU) is an experiment in political integration. That political integration brings different national governments into a common framework of institutions for decision-making on matters of policy, for the implementation of those decisions, their enforcement of any obligations and the protection of any rights those decisions create, and the adjudication of any conflicts that arise from differing interpretations of what has been agreed or potential conflicts or contradictions between one set of decisions and the rest. These four functions are necessary for any integrated political arrangement (Rothstein 1996).

The people who live within that arrangement do not need to be the same or even to share important characteristics. Political integration in this institutional sense does not necessarily involve fostering a high level of cohesion, a shared identity, or even the acceptance of common norms. Indeed, the formation of the modern state system following the Thirty Years War (1618–48) took place on the assumption that different peoples – speaking different languages, following different traditions, belonging to different religions, and possessing different endowments – would have to share the same geographic space, and hence live within the same state. Political integration came long before social integration, not the other way around. The norms we have for tolerance and respect for human rights grew up along the way.

The political integration of the European Union is unique insofar as it involves existing nation states (Fabbrini 2015). No other group of countries in the world have come together in similar fashion and to the same degree. Comparable regional organizations in Asia, Africa, or the Americas are much less encompassing and more loosely tied together (Börzel and Risse 2016). Moreover, the goal of the European Union is to go beyond political integration in strict institutional terms. The larger European political project is to promote greater equality of opportunity across member states, foster cohesion among them, and lay the foundations for a common identity that complements, rather than substitutes for, the national, regional, and local identities that Europeans already possess (McNamara 2015). This larger project should make it easier for Europeans to share the same institutions for decision-making and hence also the same geographic space. The overarching goal of the European project is for Europeans to live together peacefully. So far, it has succeeded.

2.1 Multilevel governance and overlapping institutions

This more ambitious goal ensures that the European Union does more than just add an additional layer of governance for Europeans to contend with, but that the ‘European’ layer interacts with all the other layers right down to the individual level (Marks et al. 1996). This interaction – or ‘Europeanisation’ – is an important part of what it means to talk about the political integration of the European Union today (Cowles et al. 2001). So is the normalisation and identification of Europeans with this complex arrangement (McNamara 2015).

The point to underscore, however, is that the EU is not the product of a coherent vision for ‘Europe’ as a political construct; if anything, it is the result of many different political projects that came together in unexpected ways under the umbrella of the strategically ambiguous notion of ‘integration’ (Segers 2024). So long as no single group could offer a definitive account of European ‘political integration’ as a kind of *finalité politique*, the other groups could not coalesce in opposition to it. As a result, the EU is not state, a federation, a confederation, an alli-

ance, or an international organisation (Tsoukalis 2005). None of those constructs ever found sufficient support to constitute a stable arrangement. The EU exists because it is different.

The EU is different, but European political integration shares many characteristics with political integration at other levels of aggregation. From the beginning, the European project involved planning and coordination in the form of the Organization for European Economic Cooperation (OEEC) (Segers 2024). It involved pooling resources – material and financial, including common borrowing – and setting common labour standards in the European Coal and Steel Community (ECSC) (Milward 1992). It organised rearmament and collective defence in the Western European Union (WEU). It engaged in large-scale joint research activities in the European Atomic Energy Community (Euratom). It created the rules for trade and competition for a common market and a common commercial policy in the European Economic Community (EEC) (Willis 1967). It provided a forum for the coordination of foreign policies in a European Political Community (EPC) (Allen et al. 1982). It developed a European Monetary System (EMS) with an exchange rate mechanism to stabilise intra-European exchange rates after the breakdown of the Bretton Woods System (Ludlow 1982). And it created a Schengen area for borderless travel and information sharing about cross-border migration (Stanley-Becker 2025).

Not all these forerunners exist within the EU today. The OEEC evolved into a different entity with a more global focus called the Organization for Economic Cooperation and Development (OECD). But the different forms of political integration they represent can all be found in the European Union. The ECSC provided the basic design for European institutions as well as the principle of supranational authority. The WEU laid the foundations for Europe's security and defence identity. Euratom endowed Europe with a Joint Research Council that is now the largest directorate general within the European Commission. The EEC built on the planning traditions of the OEEC while adding important new dimensions in terms of market regulation, competition policy, and external commercial relations. EPC not only provided the framework for Europe's common foreign and security policy but also gave the impetus for the development of the European Council as the

EU's leading institution. The EMS provided the framework for European monetary integration. And the Schengen Area was a first major step in the expansion of European competence to include justice and home affairs (Stanley-Becker 2025). The European Union that exists today is a synthesis of these earlier initiatives. As a result, Enrico Letta's report on the European single market, Mario Draghi's report on European competitiveness, and Sauli Niinistö's report on European security and resilience touch on each of these elements in their analysis and recommendations (Letta 2024, Draghi 2024, Niinistö 2024).

The institutions for managing and legitimating these different forms of political integration – the European Commission, the Council of the European Union, the European Court of Justice, the European Council, and the host of agencies that focus on specific policy domains or activities – developed alongside the progressive fusion of these different European projects. So did the different patterns of decision-making used within those institutions, the principles for dispute resolution, and the strategies for representation. The EU is functional, intergovernmental, supranational, technocratic, and democratic all at once. It has an overarching theory called 'subsidiarity' for the allocation of responsibilities between the Member States and European institutions that is borrowed from Catholic theology and yet focuses attention on technical capacity and representative scope (Peterson 1997). And it has an identity strong enough that most analysts and commentators conflate the European Union with 'Europe' (Risse 2010).

2.2 Three waves of scholarship

Scholarship on European political integration has evolved in three waves as this process developed. Early scholars explored why national governments would come together in these different projects to understand whether 'Europe' would somehow replace the nation state as the principal form for European political and economic organization (Calleo 1967). They tended to view European political integration as an isolated subject (*sui generis*), as a political experiment operating at the interface between technocratic legitimation and community building or identity formation, or as a sub-field of international relations (Hoff-

mann 1966). As it became clear that European nation states would continue to exist within an increasingly integrated European Union, the focus for scholarly attention gradually shifted to understand how the EU operates as a political system within a framework for multi-level governance (Hix and Høyland 2022). For these scholars, European political integration was a fact of life and so the EU should be studied like other entities in comparative politics. Shortly thereafter, a third wave of scholars began to explore how the EU achieved success as a standard setter (Mattli and Büthe 2003), trade negotiator (Meunier 2005), and normative power (Manners 2002). These scholars cast the EU as an actor and not just as a system or framework, and in doing so brought together both the aspirational project from the first wave and the practical implications of the second.

Much of the impetus for that third wave of scholarship came from the realization that the European project is capable of deepening and widening at the same time (Schimmelfennig and Sedelmeier 2002). The language here is important because it suggests two different forms of political integration. Deepening involves extending the reach of European institutions into new areas of activity, including core state competences like justice and home affairs, monetary policy, or financial market regulation (Genschel and Jachtenfuchs 2018). Widening refers to an expansion of the European project to new member states (Preston 1997). The fourth enlargement to Austria, Finland, and Sweden in 1995 is a good illustration. Widening can even reach beyond the European Union through patterns of external differentiated integration like the European Economic Area that includes Iceland, Liechtenstein, and Norway. These countries participate in the EU's internal market and also in the Schengen area, but they do not participate in EU institutions or have a say over how the internal market or the Schengen area is regulated.

The results of enlargement were not always successful. The British obstructed decision-making after the first enlargement, the Greeks after the second, the Austrians after the fourth, and the Hungarians after the fifth, for example. But the institutions have managed to adapt. More important, the combination of deepening and widening gave European institutions greater ability to project European interests abroad either

to restructure global markets or to stabilize the EU's immediate neighbours (Vachudova 2005). In this sense, enlargement to the countries of Central and Eastern Europe after the fall of communism became the EU's most powerful foreign policy instrument for the stabilisation of its eastern frontier and the strengthening of the European economy. Once that project began to lose momentum, the EU developed a 'neighbourhood policy' – another form of external differentiated integration – to stabilise countries further to the East and across the Mediterranean (Smith 2005).

2.3 Differentiated integration

The combination of deepening and widening was not always successful either. Not all member states agreed to join every European project, and not every European project could admit the participation of all member states. The United Kingdom and Ireland refused to join the Schengen area; Bulgaria and Romania wanted to join but were refused entry for almost two decades. More important, not all countries that joined the European Union remained committed to the project of political integration – think of the United Kingdom and, to a lesser degree, Hungary or Poland – and not all instruments for externally differentiated integration were as effective as enlargement in promoting European interests. Such discrepancies raised important questions about whether differentiated political integration is a feature of the European Union or an exception (Leuffen et al. 2015). If it is a feature – and governments can pick or choose which European project to accept – then the EU may not have the coherence to project European interests as an actor in global politics and may even lack resilience. If it is an exception, then the EU should create strong incentives for Member States to participate in all its major undertakings. The EU should also create strong borders to insulate itself from political developments it cannot effectively influence.

This debate about the politics of differentiated integration was most intense with reference to the single currency, Denmark, and the United Kingdom (Adler-Nissen 2014). Although the project of European monetary integration long existed as an effort to broaden the zone of

monetary stability in Europe by coordinating across bilateral exchange rates, the French and German governments embraced the goal of creating a single European currency as an expression of political integration (Dyson 1994). In turn, that goal featured prominently in the intergovernmental conference that negotiated agreement on Europe's monetary union. The British government opted out of the single currency and the Danish negotiated a conditional exception that became permanent after a 1992 popular referendum rejected the ratification of the Maastricht Treaty (Lidegaard 2009). This Danish veto triggered a referendum in France that preceded a crisis in the exchange rate mechanism at the heart of the European monetary system and so threatened to upend the single currency. Even before it existed, the euro became as much a symbol of European divisions as an example of European ambition.

2.4 Three characteristics

Here it is useful to crystallize three characteristics of European political integration:

- First, the EU is both an additional layer of governance in a multilayer system and a set of relationships between that European layer and the other arrangements that exist at the national, regional, local, and individual levels.
- Second, no single political aspiration motivates this construct, and it has no singular objective either in terms of form or function. Instead, European political integration reflects a combination or synthesis of different projects and aspirations that come together in founding principles that often sound timeless (like democracy or subsidiarity) but implicitly point to characteristics like capacity and representation or competitiveness and resilience that tend to change depending on the circumstances.
- Third, European political integration is differentiated both internally and externally in the sense that not all governments sign up to all European projects and not all governments are given equal access or membership.

These characteristics explain why it is important to think of Swedish participation in the euro as more than just a choice of exchange rate regime. By joining the euro, the Swedish government will gain access to institutions and decision-making procedures at the European level that are responsible for making, implementing, and enforcing decisions related to the single currency. The Swedish political system will also be affected by those institutions. More important, that influence will reach deeply into the Swedish political system to have an impact on domestic monetary conditions, banking supervision, fiscal policy, and market structural reform.

Choosing not to join the euro will also have implications. The Swedish government will lack access to or influence over important institutions or decisions. Nevertheless, it will continue to be influenced by how those institutions function and what decisions they make. And that influence will penetrate deeply into Swedish political life and across different levels of government. Remaining outside the euro will shape Swedish monetary policy, banking supervision, fiscal policy, and market structural reform. In essence, whether or not the Swedish people decide to join the euro, that decision will change how the European Union functions as a political entity and it will change Sweden's role within the European Union.

3 The politics of monetary union

The overview of European political integration provided in Section 2 largely ignores efforts at monetary integration apart from a passing reference to the creation of the European monetary system at the end of the 1970s and the proposal to form an economic and monetary union at the end of the 1980s. The section ends with a reference to the 1992 Danish veto of the Maastricht Treaty and the exchange rate crisis that followed to suggest that monetary union had potential to divide Europe as well as unite it. The purpose of this section is to explain those competing influences by digging deeper into European efforts at monetary integration starting in the 1960s and extending through the creation of the euro in the early 2000s. That narrative is important insofar as it

sheds light both on the complexity of monetary union from an institutional perspective, and on the political requirements to make monetary integration a success.

3.1 Irrevocably fixed exchange rates

The original debates about monetary union focused on the choice of exchange rate regimes. These debates took place within the context of the Bretton Woods System, which was a fixed-but-adjustable exchange rate regime centred on the role of the United States dollar and on the relationship between the dollar and gold. All governments that participated in the European Communities also participated in the Bretton Woods System and so pegged their currencies to the dollar, allowing some margin for fluctuation around that peg and also for the possibility to change the peg when necessary. The question they asked was whether they should also try to restrain the movements between different European currencies. That question was important both because any change in a currency's peg against the dollar meant a movement in that currency relative to all the rest, and because the normal fluctuations of European currencies around the dollar meant even wider potential fluctuations from one European currency to the next.

This volatility among European currencies became important at the end of the 1960s both because of developments in the United States, that created speculation against the dollar, and because of the divergence between France and Germany. In October 1969, the French had to reduce the value of the franc against the dollar while the Germans increased the value of the Deutschmark. These movements disrupted trade across the common market in a way that hurt Germany; they also disrupted the functioning of the common agricultural policy in a way that hurt France. Moreover, both the French and the Germans could anticipate that political developments in the United States would only bring more volatility within the Bretton Woods System. Therefore, they negotiated a plan – called the Werner Plan, after Luxembourg Prime Minister Pierre Werner – to narrow the fluctuations between European currencies to the point where they could become irrevocably (or permanently) fixed to one-another to move jointly against the dollar.

Their concern about the United States proved well founded. In August 1971, the U.S. government refused to exchange dollars for gold and so effectively brought the Bretton Woods System to an end. European leaders brought forward their efforts to narrow the fluctuations in intra-European exchange rates in order to dampen market volatility (Tsoukalis 1977). Nevertheless, that plan failed because European policymakers did not anticipate the extent to which they would need to coordinate in the setting of national fiscal policies if they were to fix their bilateral exchange rates (Marjolin 1975). European leaders negotiated a new European Monetary System in the late 1970s in the hopes that they could build a more resilient exchange rate mechanism in the face of unprecedented market turmoil that was disrupting trade between European countries, and yet they could not engineer away the need for greater macroeconomic policy coordination (Ludlow 1982). Between the late 1970s and early 1980s, the exchange rate mechanism of the EMS went through several realignments.

3.2 Macroeconomic policy coordination

The period of intra-European exchange rate volatility only came to an end in 1983 when European governments accepted the need to coordinate in the setting of other macroeconomic policies, including fiscal policy. In practice, this meant accepting German economic performance as the benchmark. That was easier for the smaller countries bordering on Germany – Belgium, Denmark, and the Netherlands – although each went through a painful period of adjustment (Jones 2008). It was harder for France and Italy, and yet the governments of both countries accepted that it would be better to coordinate with Germany than to accept the alternative of continuing market and macroeconomic volatility (McCarthy 1990, Della Sala 1997).

The need for macroeconomic policy coordination created a deep political division within the European Communities and an even deeper rift within British politics. The British Government under Margaret Thatcher refused. Although some members of her government were interested in shadowing the Deutschmark and modelling their macroeconomic performance on Germany's, Thatcher viewed such

efforts as a violation of national sovereignty. That perspective left little room for compromise in the debate within Britain on pursuing monetary integration with the rest of Europe (Jenkins 2007). It also worked against the credibility of British commitment to the exchange rate mechanism and the EMS. When Thatcher's successor, John Major, opted out of macroeconomic policy coordination and monetary union during the Maastricht Treaty negotiations in 1991, he set the stage for market participants to test Britain's commitment to the EMS in 1992.

Meanwhile, the need for market credibility was increasing from the decision within the European Communities to liberalize the movement of capital flows across national borders within Europe's single market. The original debate about irrevocably fixing European exchange rates took place during a period when capital controls were widespread. Those controls were not always effective, which is why there was still speculation on exchange rates, but they did have an influence. By removing such capital controls at the end of the 1980s, European policymakers knew that the potential for market speculation would increase dramatically. They also recognized that such speculation could quickly overwhelm the exchange rate mechanism within the EMS. That is why they began pushing again to create a plan to move from fixed but adjustable exchange rates within the EMS to monetary union (Padoa-Schioppa 1987). In doing so, they recognized that this would raise the stakes for macroeconomic policy coordination, but they argued that there was no viable alternative to fend off market speculation. The exchange rate crises in 1992, 1993, and 1995 suggested they had a point.

3.3 Convergence requirements

This emphasis on macroeconomic policy coordination created incentives for the Maastricht Treaty negotiators to try and lock down macroeconomic policy preferences within the design of the monetary union. They did so most obviously in the decision to mandate the ECB to focus its instruments on the maintenance of price stability. But they also did so through the inclusion of convergence requirements to reflect the ability of governments to operate credibly within a low-inflation envi-

ronment, while avoiding excessive deficits and insisting on the political independence of monetary policymakers. The original debate about irrevocably fixing exchange rates did not include these features and neither did the subsequent debate about the need for macroeconomic policy coordination. There is an economic argument to support a politically independent central bank with a focus on price stability, but the rest of the convergence criteria did not arise from the economic theory related to monetary integration or 'optimum currency areas'. They were political insofar as they reflected political choices about what kind of macroeconomic outcomes policymakers should pursue. And they were negotiated as criteria for membership. Only those policymakers that demonstrated their commitment to these macroeconomic outcomes would be allowed to participate in the monetary union.

The convergence criteria divided member states into those who were worthy to participate and those who were not. This division was also new. The Werner Plan was open to all governments willing to try. And the criteria became more elaborate in the aftermath of the exchange rate crises. The 1997 Stability and Growth Pact established a medium-term fiscal target, an early warning procedure for governments who fail to comply, and a precise time frame for corrective action. Paradoxically, the end results were more rather than less inclusive. By tightening the rules, European policymakers put every government in an awkward situation. Only Ireland and Luxembourg met the criteria unambiguously. Other governments needed to justify their participation. As they approached the deadline to select those countries that would be among the original participants, only one government was left out that actively wanted to join; Greece could participate, but with a delay.

The sense of awkwardness was particularly acute within Germany. Between the time the first set of participating countries was announced in March 1998 and the monetary union started in 1999, Germany held elections that resulted in a change of coalition from centre-right to centre-left. The new centre-left coalition was not eager to see the ECB focus its instruments on price stability in the face of slow economic growth and high unemployment. It did not believe that the central bank should be politically independent. And it was eager to put the emphasis on growth over stability, even if that meant running 'excessive' deficits.

Observers who believed that Germany had negotiated the constitution of the monetary union in their own national self-image did not imagine there could be another Germany with a different set of macroeconomic preferences. Even other governments, like the French and the Dutch, found themselves confused at different points in time by the change in German political preferences.

The newly created ECB found this change in German politics disorienting. Having a German finance minister openly challenge the new ECB President over the conduct of monetary policy was unexpected. So was having a French finance minister stand up for the principle of central bank independence. What this revealed from the outset was the political nature of monetary union as an institutional arrangement. That should not have been surprising given the pattern of European political integration, but there was a sense coming from the economics profession – and the widespread professional consensus on the virtues of central bank independence – that somehow monetary union would be different. Europeans could unite around a single currency unambiguously. And in some senses, they did. But the monetary union also created divisions.

3.4 Three characteristics

The politics of monetary union also has three characteristics:

- First, monetary union is more intrusive than the functional requirements for money would suggest. Governments that want to fix their exchange rates irrevocably have to coordinate in many other policy domains to make that arrangement work in practice.
- Second, policy coordination is an inherently political process insofar as policymakers need to agree upon common benchmarks for performance. Such agreements always imply a distribution of adjustment costs as some policymakers move further than others to the common objectives.
- Third, efforts to embed those benchmarks as values in institutions create political dynamics of a different sort insofar as they create problems both for existing governments and for any new government that may arise from one election to the next.

These characteristics mirror the three features of European political integration. The intrusiveness of monetary integration reinforces the way the European level of policymaking connects to all the rest. The need for coordination reflects the inevitability that policymakers will have to respond to changing circumstances and those responses may play out differently across participating countries and across levels of governance. And not every government will necessarily want to sign up to the same set of objectives or requirements – either from one country to another, or from one government to the next within countries.

The interaction between these characteristics drew (and continues to draw) significant criticism from members of the economics profession, particularly – but not exclusively – based on the other side of the Atlantic (Eichengreen 2012, Krugman 2012, Stiglitz 2016). One prominent economist even suggested that the rigidity implied by this arrangement could lead to violent conflict between European countries (Feldstein 1997). Governments that refused to agree on policy and yet found themselves bound to a macroeconomic framework that left them exposed to popular protest might tear apart the single currency and bring down the rest of the European Union along with it.

This suggestion that monetary integration would lead to violent conflict contrasted sharply with the political aspirations of those who saw the euro as a tool to bring Europeans together in the late 1990s. The distinction between the euro as a political project and the politics of monetary union remained important, even if most observers in the late 1990s regarded the threat of violent conflict as hyperbolic. By the early 2010s, however, the euro faced a profound political test that cleaved the European Union into creditors and debtors, core and periphery, North and South (Matthijs and McNamara 2015). That it passed the test – and a series of other challenges over the years that followed – says a lot about how political integration in Europe and the politics of monetary union interact.

4 The experience of the single currency

The adaptation of Europe's monetary union reveals both the success of euro and the progress of European political integration. More important, political commitment to the euro has increased rather than diminished – and so has formal participation in Europe's monetary union, most recently with the admission of Croatia and Bulgaria. The success of the euro as a common currency derives from the willingness of Europeans to work together despite differences in interests, institutions, and even basic ideas about how economics works (McNamara 2015). The purpose of this section is to illustrate that evolution at work.

4.1 Conflicts and crises

This narrative starts after the formal creation of the monetary union in 1999, and the introduction of euro notes and coins in 2002. Those initial years were important in terms of getting through the teething pains of creating a new institution, but they did not fundamentally challenge the underlying project. Once the basic framework was in place, the key moments in the evolution of the single currency tended to coincide with conflicts or crisis.

The events that ran from the Governing Council's August 2007 response to the collapse in U.S. subprime lending markets to ECB President Mario Draghi's famous 'whatever-it-takes' speech in July 2012 represent a fundamental phase in this evolution. Three dimensions of change stand out. First, the ECB's Governing Council needed to adapt the use of its monetary instruments to focus on the requirements for financial stability, even if that meant intervening directly in specific asset markets to ensure the functioning of the monetary transmission mechanism. Second, the Eurogroup and the ECOFIN Council needed to strengthen the framework for macroeconomic policy coordination by tightening the requirements for fiscal stability, expanding the reach to include macroeconomic imbalances, and synchronising the calendar – called the 'European Semester' – for all participants. That synchronisation explains why the European Semester eclipsed the Stability and

Growth Pact as the point of reference for policymaking (Verdun and Zeitlin 2018).

Not every move in this process was sure-footed. The Governing Council raised interest rates (in July 2008 and again in July 2011) and prepared to tighten collateral rules (in 2008) at inopportune moments and, in hindsight, the Eurogroup and the ECOFIN Council placed too much emphasis on fiscal austerity (after 2009). But the speed and scope of innovation revealed a degree of flexibility in the constitution and functioning of Europe's monetary union that is greater than expected (Fabbrini 2015).

The third dimension of change was even more surprising and concerns the political character of the Governing Council and the political agency of the ECB President. It also reflects the complex relationship between the ECB and national governments, including Germany. The story starts in March 2008, when the European Commission revealed that Greek fiscal accounts failed accurately to reflect the government deficit and hence the underlying sustainability of Greek government finances. The Greek government laboured through the summer of 2008 to correct the problem, but the small revision that it announced the following October failed to satisfy either the Commission or participants in the bond markets. Pressure on Greek bond prices increased in the tumultuous period that followed the collapse of Lehman Brothers in the United States and ratings downgrades on Greek government debt at the start of 2009 threatened to trigger a rout. The pressure only abated in February 2009 when the Social Democratic German finance minister, Peer Steinbrück, stepped in to reassure bond markets that no government in the euro area would be allowed to default (Jones 2015).

The Greek government doubled down on its efforts to correct its fiscal accounts in the summer months of 2009 and announced a series of larger adjustments the following October both before and after parliamentary elections (Papaconstantinou 2016). By that time, however, Germany had a new government with a Christian Democrat, Wolfgang Schäuble, as finance minister. The new German government's policy was that the Greek government should address its fiscal problems without an implicit backstop.

This change in the German position crystallized in March 2010 when German chancellor Angela Merkel made it clear that any bailout would only take place once the Greek government lost access to private capital markets (Jacoby 2014). Greek bond markets collapsed after that announcement, forcing the ECOFIN Council to improvise a bailout arrangement first for Greece and, because of the threat of contagion, for other governments that might lose access to private capital markets. This sudden change in circumstances affected the ECB as well because the collapse in Greek government bonds threatened to deprive the Greek banks of collateral – without which, they would also collapse. Hence, the ECB had to waive its collateral rules for Greek sovereign debt even before the Greek government could receive a bailout (Sandbu 2017).

4.2 Necessary adaptation

The details of this narrative about the start of the Greek sovereign debt crisis underscore how the politics of Europe's monetary union can force the institutions to adapt. They also explain how those adaptations politicize the institutions involved. The ECB's Governing Council moved to stabilize asset markets by initiating a programme to make outright purchases in distressed markets. This 'securities markets programme' began in the context of the Greek government bailout, and the German participants on the Governing Council – Bundesbank President Axel Weber and Executive Board Member Jürgen Stark – objected. They did not prevent the new policy, but they did ultimately resign from their positions as Bundesbank President and ECB Executive Board Member. These resignations sent a strong message to other Governing Council members and to the ECB President, Jean-Claude Trichet, of the limits of German support for a policy that could be interpreted as exceeding the ECB's mandate. In turn, Trichet – working in cooperation with the Spanish and Italian central bank governors – put pressure on the national governments of Spain and Italy to reform their fiscal policies if they wished to receive support from the ECB's securities markets programme (Conceição-Heldt and Müller 2022).

This direct interference of European monetary authorities in the conduct of national fiscal policy was unprecedented. It was also not something that the architects of Europe's monetary union planned. Nevertheless, it was and remains politically important both within the Governing Council and in relations between the ECB and the member states. As the temporary bailout facilities evolved into the European Stability Mechanism (ESM), the enforcement of conditionality shifted from the ECB to that bailout mechanism, but the requirement for conditional support remained intact. That conditionality became clear when ECB President Mario Draghi warned market participants in July 2012 not to bet against the political determination to safeguard the euro as a common currency and to preserve the functioning of the ECB's monetary transmission mechanism. When the Governing Council revealed its new instrument to stabilise sovereign debt markets, the criteria for access were explicit: a government would have to retain access to private capital markets, request support, and agree to go into a conditional assistance programme; in turn, the Governing Council would have to decide whether to intervene.

Draghi's speech and the Governing Council's new instrument were not enough in themselves to convince the markets. The German government had to accept the new arrangement. Although Weber's successor as Bundesbank President, Jens Weidman, lodged his dissent and even filed a legal brief with the German constitutional court challenging the legitimacy of the new instrument, German chancellor Angela Merkel and Stark's successor on the ECB Executive Board, Jörg Asmussen, supported Draghi's initiative. In turn, that commitment to act – which never happened or even came about in legal form – brought the acute phase of the European sovereign debt crisis to an end. Neither the Spanish nor the Italian government requested support or showed any willingness to enter a conditional assistance programme, but market participants heeded Draghi's warning not to challenge their political commitment to participate in the single currency (Jones 2015).

4.3 New foundations

In the thirteen years that followed these events, the ECB continued to balance the requirements for price stability with the need to underpin the stability of the financial system. This balance was made easier by the decision of the member states to create a European banking union that gave leadership of the single supervisory mechanism to the ECB, while creating a separate single resolution framework and looking for ways to Europeanise national deposit insurance mechanisms (Howarth and Quaglia 2016).

The combination of roles as financial supervisor and monetary policymaker was not always easy. At times the imperative to stabilize the banking system required the ECB to extend liquidity and accept collateral in ways that could lead to future inflation or risk undermining the ECB's own balance sheets; alternatively, the requirements to underpin price stability and avoid accepting excessive risks on the ECB's balance sheet could push banks and government closer to insolvency. Political tensions mounted both between member states and around the ECB at specific crisis moments like the resolution of banks in Cyprus and Slovenia in 2013, and Italy in 2014 and 2015, or the third bailout of Greece in 2015. But the ECB has become inextricably bound to the task of preserving financial stability in a way that the original architects of the single currency did not envisage (Moses 2017).

The ECB also continued to deploy new instruments or new instrument settings on existing facilities in its efforts to stabilize the monetary transmission mechanism and so continued to draw criticism both within the Governing Council and from national governments. But the Governing Council's fundamental need to engage in 'unconventional' monetary policy was broadly accepted both politically and in the markets.

Consider three examples. When Draghi's successor, Christine Lagarde, accidentally suggested that the ECB did not have a role in stabilising sovereign debt markets in March 2020, she had to walk that back quickly to avoid a full-blown financial crisis (Jones 2020). When the German Constitutional Court suggested that the Governing Council may be exceeding its mandate by acting without consideration of 'proportionality', former German finance minister Wolfgang Schäuble

– then nearing retirement as head of the Bundestag – effectively waived away the complaint. And when the Governing Council realised that the normalization of monetary policy would bring an end to the outright purchase of government securities on a scale necessary to stabilize sovereign debt markets, it set up a new ‘transmission protection instrument’ to allow it to intervene in those markets before the onset of a financial crisis.

At the same time, the European Council, the ECOFIN Council, and the Eurogroup continued to strengthen their framework for macroeconomic policy coordination – which was the second dimension of change that started during the crisis. That strengthening built on lessons learned from the early crisis period and so focused more attention on macroeconomic imbalances and on the importance of ‘national ownership’ over efforts at fiscal consolidation. It also built on the impetus for action that arose during the pandemic (Buti and Fabbrini 2023). The European Commission triggered the ‘general escape clause’ that loosened the fiscal requirements for macroeconomic policy coordination once the scale of the economic consequences of the pandemic became evident. It also began experimenting with new instruments to support member states as they struggled to meet their fiscal obligations – starting with lending facilities for member state governments where European institutions would issue bonds attached to specific projects and progressing through loans backed by the European Union’s budget as part of a more diversified funding strategy (Spielberger et al. 2024).

4.4 Political commitment

These experiments gained political support from the French and German governments, who proposed an ambitious new joint borrowing facility in May 2020, and they evolved into the NextGenerationEU recovery and resilience facility that was agreed the following July. That facility applied to all member states and not just those in the euro area, but the major recipients were Italy and Spain (Jones 2020). The new facility shifted the focus for conditionality away from emergency stabilisation programmes managed by the ESM to new investment initiatives to be financed by grants as well as loans under the supervision

of the European Commission. The availability of these resources made it easier for the European Commission to encourage national governments to fulfil their country-specific obligations; it also removed the stigma from a request for assistance. The remaining task was to reform the macroeconomic governance framework for reintroduction once the pandemic came to an end and the 'general escape clause' would be deactivated. That new framework involved significantly greater flexibility to underpin national fiscal consolidation efforts.

The third dimension of change related to the German decision to join with France in supporting NextGenerationEU. That decision was an important milestone (Buti and Fabbrini 2023). The same German government had worked with other member states to block any attempt at joint borrowing during the financial crisis and to prevent significant reform of the framework for macroeconomic policy coordination in the years leading up to the pandemic. Once it became apparent that the ECB could not handle the economic consequences of the pandemic on its own, however, that German position changed. Merkel and Schäuble did not abandon German macroeconomic preferences, but they did recognize that their country's national interest hinged on the survival of the euro. Indeed, that realization was apparent already in the summer of 2015 when both Merkel and Schäuble accepted that the risks to the single currency of expelling Greece were greater than the risks of allowing Greece to remain inside the monetary union.

The ECB President continued to show important agency as well. Draghi played a leading role in the crisis that surrounded Greece in 2015, both in pulling the waiver for the use of Greece sovereign debt as collateral after the formation of a Syriza-led coalition in February and then threatening access of the Greek banking system to emergency liquidity assistance in the months that followed. Draghi and the Governing Council characterised these actions as necessary for the prudential management of the ECB's balance sheet, but Syriza finance minister Yannis Varoufakis regarded them as overtly political (Moses 2017).

4.5 Changing characteristics

This experience suggests that the three characteristics of the politics of monetary union need revision:

- Europe's monetary union is bounded by policy disagreements among the member states but not in any permanent sense. Where the need becomes manifest, both the ECB and the framework for macroeconomic policy coordination can change significantly even in the absence of treaty revision. Moreover, those changes can extend to elements connected with identity politics or perceptions of legitimacy.
- The division of labour between monetary and fiscal authorities or between European and national institutions can change as well. Again, this can happen even without treaty revision. And the changes can be dramatic not just for the ECB but also for the most powerful member states, like Germany.
- These two forms of transformation – in the boundaries around the monetary union and the division of labour within it – can have a powerful impact on the structure of European political integration and the success of the European project. The focus for concern that triggered agreement on NextGenerationEU was inside the single currency and yet the impact of that agreement has been transformative for the European Union.

Such revision of the politics of monetary union should not be read in a teleological (or fatalistic) sense. The experience of monetary union was not successful because it was meant to be. On the contrary, the whole arrangement could have collapsed in the face of the global economic and financial crisis, during the sovereign debt crisis, over disagreement between France and Germany, during the pandemic, or when faced with an unfavourable ruling by the German constitutional court. Critics of this arrangement in the 1990s were right to be suspicious insofar as no-one could have anticipated the scale and magnitude of subsequent events, or the powerful threats they would represent for European financial stability (Obstfeld 2013).

The point to underscore is the one Draghi made in the darkest moment of the crisis. The strength of Europe's monetary union reflects

the strength of European political commitment. In turn, that political commitment gives considerable agency to individual member state governments to influence the development of the single currency and the European Union. Even smaller member states can punch above their weight (Panke 2016).

5 The impact of Swedish euro membership on European political integration and Sweden's role

The purpose of this section is to suggest what are the possible implications – advantages and disadvantages – of Sweden adopting the euro as a common currency. The answers to these questions reflect more general considerations about the European Union as a form of political integration and about the implications of having a political union and a monetary union that do not completely overlap. These are the areas where people should look in forming judgements about the political implications of joining the euro:

- Where and how should different types of decisions be made within the system?
- How much equality of opportunity, cohesion, and shared identity does the system require to be resilient?
- What will happen if the interests of the political union and the monetary union come into conflict?

5.1 Location of decision-making

The negotiation of the Maastricht Treaty took place in an intergovernmental conference that involved all member states of the European Union. The negotiation of subsequent treaties was similarly inclusive; so was the negotiation of the Stability and Growth Pact. Since the start of the single currency, however, decision-making has moved to other, less inclusive arenas. Some of these, like the Eurogroup, are informal.

Others, like the Governing Council of the ECB or the European Stability Mechanism, are formal but restricted to those governments that participate in the single currency. The decisions made in these arenas directly affect the design of the framework for macroeconomic coordination, the conduct of monetary policy, the strengthening of financial market infrastructures, the preservation of the monetary transmission mechanism, and the stabilization of financial markets.

Other decisions are made by powerful actors like the governments of Germany or France but with a specific focus on the performance of the euro as a common currency. These decisions include whether the European Union should engage in common borrowing and what kind of conditions should be attached to funds lent by the EU to member state governments. Other member state governments can influence these broader decisions, including the governments of smaller member states or those outside the single currency, but that influence tends to be more limited once the Germans and the French are agreed on the broad outlines of policy (Jones 2022).

5.2 Cohesion, identity, and resilience

The single currency has proven to be more resilient than early critics imagined. That resilience reflects a much higher degree of cohesion among the participating countries than was evident in the negotiation over the design of Europe's monetary union. The German government has shown particular flexibility and capacity for change. Although it staked out important principles related to the pursuit of price stability and the maintenance of central bank independence, the German government was also the more prominent in challenging the conduct of monetary policy at the start of the single currency and the ability of the ECB to take decisions it regarded as necessary to preserve the monetary transmission mechanism.

The cohesiveness of the euro area was learned and not automatic. There were significant disagreements among participating member states over the relationship between monetary policy and the macroeconomic policy mix at the European level, and over the necessary balance between the pursuit of price stability and financial stability within

the euro area. Successful policymaking required important compromises from all parties. It also required a growing recognition that those countries that have adopted the euro as a common currency also share a common fate. They may not identify themselves as ‘European’ in the sense originally imagined at the start of the Maastricht project, but they do identify with each other in important ways (McNamara 2015). This self-identification is important to the cohesiveness of the Eurogroup, and it explains how the German and French governments have been able to agree on common initiatives – like collective borrowing – that were not accepted in the original design of the project.

5.3 Which interests predominate?

The change in the location of important decisions from common institutions to other informal and formal arrangements has tended to concentrate attention in decision making on the needs of Europe’s monetary union. At the same time, the adaptation of participating countries and their increased identification with one-another as part of the same monetary union has given greater coherence to the single currency as a political project. The project has evolved significantly from the vague goal of strengthening European unification to include more strongly institutionalized expressions of solidarity across participating countries (Schelkle 2017).

The development of the European banking union and capital markets union represent a further articulation of that sense of political community within the European Union that is in many ways restricted to those countries that have adopted the euro as a common currency. These projects are not restricted to euro area member states, but they do privilege those countries. Moreover, these projects play a central role in the vision being articulated within and around the European institutions for how the EU should develop in the face of a rapidly changing geopolitical environment (Letta 2024, Draghi 2024, Niinistö 2024). By implication, the interests of those countries that have adopted the euro as a common currency are likely to be even more predominant in the EU of the future than they are today.

5.4 Implications for Sweden

The question the Swedish people must face is whether it makes more sense for the Swedish government to be represented in those arenas where important decisions are being made than to try to influence those decisions from the outside. They should also consider whether Sweden's voice in collective decision making will carry more weight if Sweden is recognized as a full member of the political community and if it is socialised through the experience of continuous engagement in the various different forums and processes of decision making. Finally, they should consider whether Sweden has an important role to play in shaping the pattern and content of collective decisions that are being made about the future of Europe's monetary union.

As mentioned at the outset, the answers to these questions are not obvious. What matters is that those answers are different now from the last time the Swedish people voted on the adoption of the euro as a common currency. The concentration of decision-making power in more restrictive settings is greater. So is the self-identification and cohesiveness of existing euro area member states. And so is the importance of the decisions that they are making. Sweden has the potential to play an important role in that evolutionary process, and so in shaping the future for European integration. Moreover, that future cannot be taken for granted. Europe's monetary union could have failed at many points in time and in many different ways if the politics that surrounded it did not evolve in a supportive fashion and if participating political leaders did not have the courage to compromise at key moments along the way. The Swedish people must consider how they can best play a constructive role in ensuring that adaptation continues.

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The euro as a driver of integration

Magnus Lundgren and Jonas Tallberg

1 Introduction

From the very beginning, the euro has had a political dimension. Proponents saw monetary union as a means of deepening European integration, transferring powers to the EU level and strengthening a common European identity, while critics warned of asymmetries, losses of sovereignty and increased fragmentation. Two and a half decades later, a track record of crises, reforms and everyday use makes it possible to test these hopes and fears against outcomes. In this chapter, we examine whether the euro has served as an engine of integration and, if so, in what ways.

In research, European integration has been understood in different ways. A general definition is that European integration refers to the process through which European states develop increasingly organised cooperation across national borders, with a gradual transfer of powers to common institutions and the emergence of common norms, identities and social structures (Haas 1958, Dinan 2014, Leuffen et al. 2012). Research often distinguishes between three dimensions: *economic integration*, which concerns trade, markets, investment and financial stability (Balassa 1961); *political integration*, which refers to both institutional deepening and joint decision-making at EU level, and the political mobilisation that these processes give rise to (Moravcsik 1998, Stone Sweet and Sandholtz 1998, Wiener et al. 2018); and *social*

integration, which concerns identity, civic engagement and interpersonal bonds (Fligstein 2008, Hooghe and Marks 2009, Risse 2011).

Against this background, the chapter seeks to answer two questions. First, how has the euro affected political integration within the EU in terms of institutional development and political mobilisation? Second, to what extent has the monetary union enjoyed popular support and strengthened European identity and public debate? We therefore focus on the political and social dimensions of integration, while economic aspects are mainly dealt with in other chapters in this volume. The analysis is based on empirical political science research, supplemented by our own analyses of opinion data from Eurobarometer and other public statistics.

The chapter consists of four sections. We begin by outlining the hopes and fears surrounding deeper integration that accompanied the introduction of the euro and how these were reflected in the Swedish debate. We then analyse the significance of the euro for political integration in the EU, focusing on how the euro has driven institutional development and political mobilisation. The following section deals with the impact of the euro on social integration, where we emphasise public opinion on the EU and monetary cooperation, European identity and the degree of Europeanisation of the public debate. The chapter concludes with a summary of what the discussed research indicates about the consequences of possible Swedish membership of the euro.

2 The euro: hopes and fears about deeper integration

The question of the euro's significance for integration was a recurring theme in connection with the launch of the single currency. Some researchers, politicians and commentators saw it as likely that the euro would act as an engine for economic, political and social integration. For many, this integration impulse was in fact an important motive for introducing the euro. Others, however, had concerns about the euro's impact on European integration – either because they saw risks for division in the wake of the euro or for opposition to deeper integration.

These hopes and fears were also reflected in the Swedish debate during the 1990s and early 2000s.

2.1 Hopes

The hopes for economic integration associated with the euro are well known and were analysed in depth in the EMU Inquiry (1997) (see also Chapter 2 by Forslid). The euro would help to strengthen the single market by eliminating exchange rate risks and transaction costs between member states. This would in turn facilitate trade and investment within the EU, resulting in increased growth. The euro would also help to increase competition and efficiency by making it easier to compare prices of goods and services between countries, which was expected to lead to more efficient resource allocation and, in the long term, lower prices for consumers. Furthermore, a single currency would be positive for financial stability by reducing the risk of destabilising currency crises of the kind that had previously affected member states. The euro was also seen as a way of creating a larger and more liquid capital market in Europe, which could provide European firms with a more stable environment for long-term investment. It was also envisaged that the Maastricht criteria, with limits on budget deficits and public debt, would lead to greater fiscal discipline and economic convergence between member countries. If these hopes for economic integration were realised, there was also the possibility that the euro could emerge as an important international reserve currency – perhaps even a challenger to the dollar.

However, alongside these economic motives, there were also strong political expectations associated with the euro. For many of the leading advocates, political motives were in fact the overriding factor (Dyson 1994, Buti and Corsetti 2024, Huguenot-Noël 2025; see also Chapter 9 by Jones in this book). The Werner Report (1970), which under the leadership of Luxembourg's then Prime Minister Pierre Werner presented the first coherent plan for an economic and monetary union, already argued that a common currency was an economic means to achieve a political goal – deeper European integration.

The currency would entail a transfer of powers to the European level, the creation of new common institutions and a move towards a common economic policy. Taken together, this would promote the possibility of achieving the objectives of the Treaty of Rome for an “ever closer union among the peoples of Europe”.

The follow-up to the Werner Report – the Delors Report (1989) – produced under the leadership of the then President of the European Commission, Jacques Delors, shared the hope that the euro would be a driver of political integration and set out a detailed plan for how this could be achieved. Ten years later, in 1999, Germany’s then Foreign Minister Joschka Fischer summed up these political hopes in a speech on the introduction of the euro: “The introduction of a common currency is not primarily an economic, but rather a sovereign and thus eminently political act [...] political union must be our lodestar from now on: it is the logical follow-on from Economic and Monetary Union” (quoted in Buscha et al. 2017).

Closely linked to the political motives were hopes that the euro would contribute to greater social integration in Europe, in the sense of strengthening popular support and a common European identity (Risse 2003, 2011; Buscha et al. 2017; Negri et al. 2021). This expectation was based on the idea of the euro as a concrete symbol of community in Europe. The currency is something that all residents of euro area countries use in their everyday lives and can therefore feel a sense of belonging to. This distinguishes it from other political symbols, such as the EU flag, but also from other EU policies, whose significance is often more diffuse. As Wim Duisenberg, President of the European Central Bank (ECB), put it at the time of the euro’s creation at the turn of 1998/1999: “A currency is far more than just a medium of exchange, a unit of account and a store of value – important though these properties already are. A currency is also part of the identity of a people” (ECB 1998). Romano Prodi, then President of the European Commission, expressed similar thoughts in a speech to the European Parliament in 2002: “To millions of European citizens, the euro notes and coins in their pockets are a concrete sign of the great political undertaking of building a united Europe. So the euro is becoming a key element in people’s sense of shared European identity and common destiny” (Buscha

et al. 2017). With the euro as a driving force, Europeans would develop a greater sense of community and a stronger common identity.

2.2 Concerns

However, the creation of the euro was also met with considerable economic concerns. These concerns were the subject of extensive debate among economists, politicians and central bank representatives during the 1980s and 1990s, and were analysed in depth in the EMU Inquiry (1997). Many economists pointed out that Europe did not meet the criteria for an optimal currency area due to unsynchronised business cycles, inflexible wages and insufficient labour mobility. The implication was that asymmetric macroeconomic shocks, i.e., shocks that affect some countries but not others, could be difficult to manage in the absence of an independent monetary policy. In the event of a recession, affected countries would no longer be able to lower interest rates or allow their currency to fall in value in order to restore their international competitiveness.¹

Critics also warned that countries with high levels of debt could benefit from lower interest rates through the euro, but without the corresponding discipline, which could lead to excessive borrowing. Furthermore, it was pointed out that the monetary union in its original design was based on a fundamental imbalance, with monetary policy being determined at European level while fiscal policy remained a national responsibility, which required both discipline and coordination. According to critics, these and other flaws in the design meant that the euro risked creating significant vulnerabilities and tensions rather than economic convergence and growth.

Other concerns related to the risks of political and social integration. Some of these concerns were closely linked to the economic risks of monetary union, which were feared to create new divisions in the common political structure. If certain countries gained economically from the introduction of the euro, while others faced major adjustment pressure and large costs, this could create political division in Europe.

1 This concern is discussed in Chapter 3 by Hansson, Chapter 4 by Waltentin, Chapter 5 by Flodén and Chapter 6 by Calmfors.

Without the right economic policy tools to address asymmetric shocks, these would not only have negative economic consequences, but also far-reaching political effects. Instead of deeper political integration, Europe could suffer disintegration. The American economist Martin Feldstein even argued that the euro could lead to war in Europe (Feldstein 1997). The EMU Inquiry (1997) pointed to another risk of division when it emphasised that the euro could create an A team and a B team in Europe if integration were only deepened for the core member states that were part of the single currency.

Other critics, however, argued that deeper political integration was not desirable in itself. They believed that the transfer of powers to new European institutions would have negative consequences for national sovereignty and democracy, which could not be offset by any positive economic effects or greater European cooperation. Member states would lose control over key areas of economic policy, and decisions would be taken further away from citizens. In the long run, there was also the threat of a European superstate if integration continued unchecked. These political concerns were analysed in the EMU Inquiry (1997). They were a key factor in the opposition to possible Swedish membership of the euro in connection with the 2003 referendum (Oscarsson and Holmberg 2003). The popular movement *Nej till EMU* (“No to EMU”) (2003), for example, argued that “EMU is a political project. The EU is in the process of forming a United States of Europe, where the single currency is one of the prerequisites” (our translation). Economist Nils Lundgren (2003), for his part, argued that a transition to the euro would be harmful to Sweden both politically and economically – a position that won Lundgren’s newly formed party, Junilistan, 14 per cent of the vote in the 2004 European Parliament elections.

3 The euro and political integration

Both the hopes and fears surrounding the introduction of the euro were realised in some respects over the next 25 years, while they in other respects proved to be misguided. The decisive event for political integration was the euro crisis of 2009–15, which both drove institutional

development within the euro area and caused a political backlash in the form of mobilisation by Eurosceptic parties. In this sense, the euro has contributed both to a clear deepening of integration within the EU and to new political lines of conflict.

3.1 Institutional development

Even when the euro was introduced, experts and politicians were aware that the structure of the euro area was unbalanced: while monetary policy had been transferred to the ECB at European level, fiscal policy remained largely national. As discussed above, this was a major objection to monetary union for many critics. However, it was the only solution that was politically feasible for the euro to be established. A common fiscal policy at European level was politically unacceptable in many quarters.

There were essentially two possible strategies for dealing with this imbalance (Buti and Corsetti 2024). The first option, consistent with the German view of the euro, emphasised that euro area countries must ensure that their public finances are in good order at the national level by complying with the fiscal rules, which were operationalised in 1997 in the stability pact (more formally, the Stability and Growth Pact), and by implementing the necessary structural reforms.² The second option, in line with the French view of the euro, envisaged instead the development in the long term of a more common fiscal policy at European level.

For political reasons, the first strategy was the only one conceivable during the euro's first decade, 2000–09. During this period, the ECB's role as the common central bank was consolidated, while the member states were responsible for ensuring that fiscal policy was in line with the fiscal rules. Although the stability pact provided some opportunities to monitor member states' compliance with these rules, it was primarily based on voluntary participation. In practice, the pact was soon watered down, as several countries, including France and Germany, violated the principles without facing sanctions (Calmfors 2005).

2 The Stability and Growth Pact is discussed in more detail in Chapter 7 by Andersson and Jonung.

The flaws in the stability pact's design became fully apparent in connection with the outbreak of the euro crisis in October 2009, when it emerged that Greece's budget deficit was much larger than previously reported and that the country had been granted entry into the monetary union on false premises. The revelation led to a downgrade of Greece's credit rating, soaring bond yields, forced austerity measures and, ultimately, financial support programmes from the EU and the IMF. In the following years, the crisis deepened and spread, eventually engulfing Cyprus, Ireland, Portugal and Spain, and to some extent Italy as well. The recurring pattern was credit rating downgrades, rising borrowing costs, austerity measures, political turmoil and, ultimately, financial support.³

The financial support provided to crisis-hit countries was subject to strict conditions. Recipient countries were forced to implement comprehensive fiscal austerity measures, structural reforms and privatisations following negotiations with the EU, the IMF and the ECB – the so-called troika. These conditions were intended to restore public finances and improve competitiveness, but also led to deep recessions, rapidly rising unemployment and increased social tensions (Pisani-Ferry 2014). For example, unemployment in Greece rose from 7.8 per cent in 2008 to 27.7 per cent in 2013, and in Spain from 8.2 per cent in 2008 to 26.1 per cent in 2013 (Statista 2025). The economic downturn contributed to strong political and popular opposition, particularly in Greece, where several austerity packages were met with widespread protests and government crises. Critics have argued that austerity policies exacerbated the crisis by dampening growth and further increasing the debt burden (Krugman 2012, Stiglitz 2016).

The outbreak of the euro crisis marked the starting point for a gradual expansion of the euro area's institutional framework (Ioannou et al. 2015, Jones et al. 2021). In order to manage the immediate crisis and avoid a possible collapse of the euro, the euro area countries agreed, after tough negotiations, on a series of new institutions, mechanisms and rules, which together meant a significant deepening of political

3 Calmfors (2017) and Frieden and Walter (2017). See also Chapter 7 by Andersson and Jonung in this book.

integration within both the euro area and the EU as a whole (Lundgren et al. 2019, Kudrna et al. 2021).

In research, the combination of crisis and deepening is described using the concept of *failing forward*: At an initial stage, intergovernmental compromises lead to the establishment of incomplete institutions, which lay the groundwork for future crises when these institutions are found to be inadequate, which in turn drives a deepening of integration through reformed institutions (Jones et al. 2016, 2021). This pattern is familiar from other crises in the history of the EU, including the war in the former Yugoslavia in the early 1990s, which drove the development of the EU's common foreign policy. EU pioneer and visionary Jean Monnet captured this recurring pattern in his statement that "Europe will be forged in crises, and will be the sum of the solutions adopted for those crises" (quoted in Guiso et al. 2016).

Table 1 summarises the main steps in institutional development during the euro crisis.⁴ These steps meant that the euro area institutions evolved from a fairly narrow construct focused on monetary policy and fiscal rules to a more comprehensive framework that includes a permanent crisis fund (ESM), stricter budgetary and macroeconomic surveillance, and a yet incomplete banking union. Overall, there was a clear move towards greater coordination and crisis support at European level (Kudrna et al. 2021). But the journey was far from conflict-free. The process pitted lenders against borrowers, the centre against the periphery, and north against south, with the greatest influence coming from creditor countries in northern Europe, including Germany, Finland and the Netherlands (Frieden and Walter 2017, Dellmuth et al. 2020). Compared to the euro area countries, the countries outside the euro were less involved in the negotiations, less inclined to support further European integration, and, by some measures, also less influential.⁵

4 See also Chapter 7 by Andersson and Jonung on fiscal policy and Chapter 8 by Englund and Wissén on financial regulations.

5 Tarlêa et al. (2019) and Dellmuth et al. (2020). See also Chapter 11 by Lundgren.

Table 1 Institutional developments during the euro crisis

May 2010: The European Financial Stability Facility (EFSF) and the European Financial Stabilisation Mechanism (EFSM) are established. Temporary crisis funds.
November 2011: The Six-Pack is adopted. Reform of the stability pact through stronger surveillance and new mechanisms for monitoring and correcting macroeconomic imbalances.
February 2012: The European Stability Mechanism (ESM) is established. Permanent crisis fund.
March 2012: The Fiscal Compact is adopted. An intergovernmental treaty that binds euro area countries to comply with the principles of the stability pact.
May 2013: The Two-Pack is adopted. Further strengthening of macroeconomic surveillance.
October 2013: The Single Supervisory Mechanism (SSM) is adopted. It is governed by the Single Supervisory Board (SSB) at the ECB. It is part of the banking union.
July 2014: The Single Resolution Mechanism (SRM) is adopted. Single Resolution Board (SRB) acts as the primary resolution authority. Part of the banking union.

Institutional deepening also continued after the crisis (Kudrna and Puntischer-Riekmann 2021). One proposal that had long met with resistance from several member states was the idea of joint EU fiscal borrowing on the international capital markets. While countries with weaker public finances and higher borrowing rates, such as Greece, Ireland and Portugal, tended to view the proposal positively, the perspective was often the opposite in countries with strong public finances and lower borrowing rates, including Germany, the Netherlands and Sweden (Kudrna et al. 2021, Dellmuth et al. 2020). The pandemic crisis of 2020–22 changed the playing field.

Inspired by innovations during the euro crisis, the European Commission proposed the establishment of a joint recovery fund – Next-GenerationEU – amounting to €750 billion. After negotiations based on the lines of conflict described above, the member states adopted the proposal in December 2020, thereby giving the European Commission the green light to take out large-scale joint loans, which under the current long-term budget (2021–27) are used to finance grants and on-lending to member states (Wasserfallen 2023). During the same period, SURE was also established – a new financial instrument for

temporary support to member states to reduce the risk of unemployment in the wake of the pandemic crisis.⁶

In May 2025, these initiatives were followed by Security Action for Europe (SAFE), which aims to meet Europe's defence investment needs by on-lending to member states through loans raised jointly by the EU. Moreover, in December 2025, EU leaders agreed to a joint borrowing package of €90 billion to support Ukraine through 2026–27. Although these programmes are intended to be temporary, they represent a significant qualitative step towards the development of a common fiscal policy in the EU.

3.2 Political mobilisation against the EU

The euro crisis not only gave rise to a trend towards deeper integration within the euro area, but also to increased political mobilisation against the euro and the EU by populist and nationalist parties (Hooghe and Marks 2017). Simplifying slightly, the forces behind this mobilisation were twofold. Firstly, the euro crisis had far-reaching economic consequences in the affected countries in the form of deep recession, rising unemployment, emigration and brain drain, and increased domestic social divisions (Frieden and Walter 2017). Secondly, the measures taken to combat the euro crisis created discontent in some member states. This varied depending on whether the country was a lender or a borrower.

In the southern European countries that were hardest hit economically by the euro crisis, both drivers were present (Kneuer 2019). The combination of domestic economic crisis and austerity measures perceived as being dictated by the EU and the IMF created a massive breeding ground for discontent,⁷ which political entrepreneurs successfully exploited (De Vries and Hobolt 2020). In several cases, this cocktail contributed to the emergence of strong left-wing populist parties, which rallied discontent with economic developments and external adjustment requirements.

6 See Chapter 6 by Calmfors and Chapter 7 by Andersson and Jonung.

7 See also Sections 4.1 and 4.2 in this chapter.

In Greece, Syriza's rise was clearly linked to the euro crisis (Stavrakakis and Katsambekis 2014, De Vries 2018, Bergh and Kärnä 2022). The coalition had been formed already in 2004 as an alliance between various left-wing groups, but was a marginal party with less than five per cent of the vote until the euro crisis. Greece was hit hardest by the crisis, with deep recession, mass unemployment and severe austerity programmes as conditions for emergency loans from the EU and the IMF. The traditional parties – the social democratic PASOK and the conservative New Democracy – quickly lost legitimacy because they were associated with crisis management and harsh austerity measures. Syriza, for its part, mobilised on a strong anti-austerity programme focused on stopping cuts, protecting welfare and questioning the EU's crisis management. The party quickly gained popularity, became the largest party in the January 2015 election and formed a government under Alexis Tsipras, who remained in office until 2019. Once in government, Syriza gave up much of its opposition to the austerity demands, subsequently lost ground in the polls and suffered internal conflicts, with consequences for the party's political strength in Greece and the European Parliament. However, Syriza's rise symbolised how the euro crisis could overturn the entire traditional party system (Kneuer 2019).

Similarly, the euro crisis was an important factor behind the emergence and rise of Podemos in Spain (della Porta et al. 2017, De Vries 2018, Bergh and Kärnä 2022). During the euro crisis, Spain suffered a severe economic downturn, mass unemployment, youth unemployment and a banking crisis. This created widespread dissatisfaction with the established parties – the conservative PP and the social democratic PSOE – both of which were perceived as responsible for corruption and cutbacks. Podemos, which had been created in 2014, channelled this dissatisfaction and raised issues of social justice, participatory democracy and the fight against corruption. The party was successful in the 2014 European Parliament elections (eight per cent) and quickly became one of the strongest political forces in Spain. The party challenged the traditional Spanish two-party system and contributed to the fragmentation of parliament. After the 2019 election, Podemos entered into a coalition government with the social democratic PSOE party,

which thus became Spain's first left-wing coalition since the return of democracy. As part of this process, Podemos moderated its criticism of austerity policies (Brown 2024) and, like Syriza, gradually lost votes in both national and European Parliament elections.

In the countries of northern Europe that were lenders rather than borrowers, the main driving force was dissatisfaction with the support measures taken by the EU to help the crisis-hit countries (Kneuer 2019). Although rich countries in northern Europe were also affected by the crisis, it was primarily dissatisfaction with "generous" packages for "wasteful" Greeks and others that lay behind the rise of these parties. Unlike in southern Europe, it was mainly right-wing populist parties that rallied this discontent (De Vries 2018).

In Germany, the early rise of Alternative für Deutschland (AfD) was clearly linked to the euro crisis (Conrad 2020). AfD was founded in 2013 by a group of economists, lawyers and conservative intellectuals who were dissatisfied with how the euro crisis was being handled. Germany was the euro area's main guarantor of the bailout packages for Greece, Ireland, Portugal and Spain. Many Germans felt that they were being made to pay for other countries' lack of budgetary discipline and "irresponsible" indebtedness. The AfD positioned itself as the "anti-euro party," demanding that Germany leave the euro, that the crisis countries leave the monetary union or that it be dissolved. After narrowly missing the threshold for entering the Bundestag in 2013, the party managed to win entry into the European Parliament in 2014 with the help of a platform that criticised the euro and German contributions to the bailout packages. When the migration crisis broke out in 2015, the AfD changed its profile to become a broader right-wing populist and anti-immigration party. The AfD has had significant political success with its broader profile and became the second largest party in the 2025 Bundestag elections with almost 21 per cent of the vote.

In summary, the euro crisis was an important driving force behind the emergence and rise of populist parties of various colours in several euro area countries. While Syriza, Podemos and the AfD were particularly clear examples, a similar dynamic also emerged in other euro area countries. This development is often associated with the end of the long period when the EU "flew under the radar" and instead became an object of discontent and mobilisation (Hooghe and Marks 2009).

4 The euro and social integration

In recent decades, researchers have also discussed whether the euro, in addition to its economic and political effects, has contributed to deepening European integration on a social level. This is often discussed in terms of the euro's contribution to civic engagement and common identity. In practice, this means the extent to which Europeans support the European project, trust its institutions and identify with each other (Fligstein 2008, Hooghe and Marks 2009, Risse 2011). The following combines previous research with our own analysis of opinion data from the Eurobarometer.⁸ We focus on three indicators: support for the EU, support for the euro and the European Central Bank (ECB), and citizens' identification as Europeans. In addition, Section 4.4 analyses some research on how the euro relates to the Europeanisation of public debate, with an emphasis on the euro crisis and national media.

4.1 The euro and support for the EU

A first indicator of social integration is general support for the EU. This is usually measured by the Eurobarometer question of whether EU membership is perceived as “a good thing” for one's own country. The measure is widely used in research as an indicator of citizens' overall support for the European project and European integration (Armington and Ceka 2014, Foster and Frieden 2021).

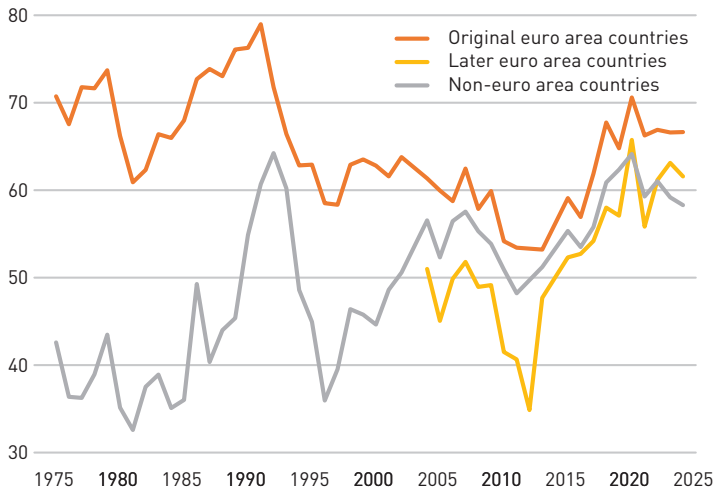
Figure 1 shows support for EU membership in euro and non-euro area countries between 1975 and 2024, with the former group divided into original and later members. Three main patterns emerge. First, support for the EU is consistently higher in the original euro area countries than in non-euro area countries, while the later euro area countries often exhibit the lowest average support. Second, support varies much over time, with distinct declines during periods of economic stagnation and crisis, most notably at the beginning of the 1990s and

8 The Eurobarometer is the European Commission's regular opinion poll, which since the 1970s has measured the attitudes of the adult population towards the EU and its institutions in all member states. The wording of the questions and the response options have sometimes changed over time or have not been consistent across survey waves, making some intertemporal comparisons more uncertain than others.

in connection with the euro crisis of 2009. Third, the gap between non-euro area countries and the original euro area countries tends to narrow over time, as support in the two groups has converged towards a relatively high level in recent years, which has been partly explained by Brexit serving as a cautionary tale that has strengthened pro-EU attitudes in several countries (De Vries 2017).

All country groups saw a decline in connection with the outbreak of the pandemic in 2020, after which support recovered rapidly, possibly as a consequence of the EU's pandemic support (see Section 3.1) and a rally-round-the-flag effect following Russia's escalated war against Ukraine in 2022 (Unan and Klüver 2024). Swedish public opinion has generally developed in a manner similar to the average for non-euro area countries, including a strong increase in support in recent years.⁹

Figure 1 Percentage of the population expressing support for the EU, 1975–2024



Note: Original euro area countries include Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. Later euro area countries are Cyprus, Estonia, Croatia, Latvia, Lithuania, Malta, Slovakia and Slovenia. Non-euro area countries here include Bulgaria, the Czech Republic, Denmark, Hungary, Poland, Romania and Sweden. Unweighted country averages per year.

Source: Own calculations based on Eurobarometer data.

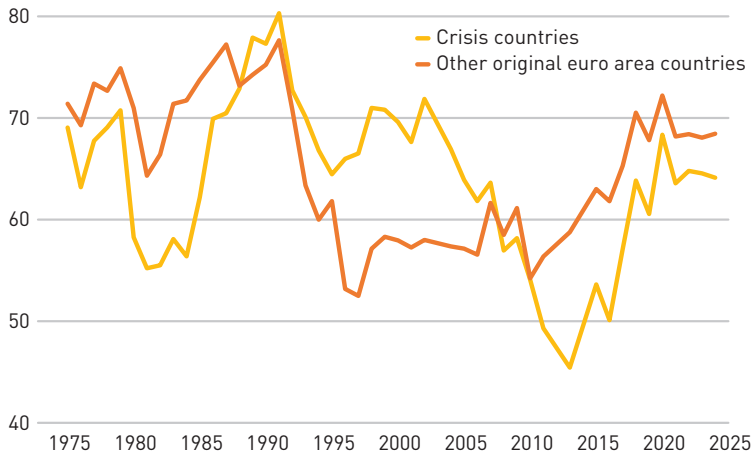
⁹ Johansson and Lewander (2025). See also Chapter 12 by Lindvall.

While support for the EU is higher in the original euro area countries than in other EU countries, these data do not support the interpretation that joining the euro has *in itself* affected support for EU membership. Regression analyses comparing the countries that adopted the euro in 1999 with those that remained outside the euro area at that time show no statistically significant effect of the single currency on support for the EU.¹⁰ The analysis yields similar results if the cut-off point is set at the introduction of the euro as a physical currency in 2002 and regardless of whether Greece (which joined the euro in 2001) is included or not. Although the results should be interpreted with caution, given the small control group (three countries) and the limited number of observations, the analysis provides no statistical support for the idea that euro membership has had any significant average impact on popular support for the EU.

Although joining the euro does not appear to have had a significant average impact on support for the EU, previous research shows that economic factors often play a key role in shifts in public opinion (Eichenberg and Dalton 2007, Wike et al. 2019). This is clearly evident during the debt crisis of 2009, when support for the EU fell particularly sharply in the countries hardest hit by austerity programmes and recession. Figure 2 illustrates this by contrasting EU opinion in crisis countries with that of other original euro area countries.

10 Here and elsewhere in this chapter, we use three different approaches to estimate the effects of the euro. Conventional panel regression with country and year fixed effects compares developments in each country before and after the introduction of the euro with developments in countries that never joined. Sun and Abraham (2021) develop an event study approach that estimates the effects year by year before and after the introduction and makes it possible to follow how the effect develops over time. Callaway and Sant'Anna (2021) introduce a modern difference-in-differences method that calculates both the average effect and how it changes over time for each group and point in time. All models include country and year effects to control for differences between countries and common events in a given year.

Figure 2 Percentage of the population in crisis and other euro area countries who express support for the EU, 1975–2024



Note: Crisis countries include Greece, Ireland, Italy, Portugal and Spain. Other euro area countries include Austria, Belgium, Finland, France, Germany, Luxembourg and the Netherlands. Unweighted country averages per year.

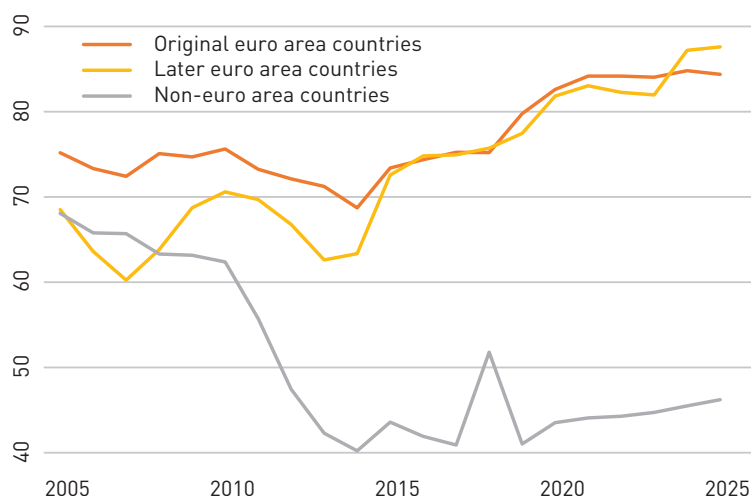
Source: Own calculations based on Eurobarometer data.

On average, the proportion who considered membership to be a “good thing” fell by around 15 percentage points in countries that received financial support from the EU and the IMF (Armingeon and Ceka 2014). In other euro area countries – such as Finland, Germany and the Netherlands – the decline in opinion was much smaller. After reaching rock bottom during the crisis, public opinion began to improve relatively quickly throughout the euro area. The recovery came first in the more stable euro area countries, where support for the EU began to rise already in the early 2010s, while it took somewhat longer in the crisis countries. By around 2020, support for the EU had recovered to roughly pre-crisis levels in the hardest-hit countries and reached higher levels in other euro area countries. These patterns are in line with research findings on the economic drivers of EU opinion (Eichenberg and Dalton 2007, Wike et al. 2019), while also reflecting differences in political mobilisation discussed in Section 3.2. The results suggest that the euro crisis created a rift in public opinion, but not a lasting crisis of legitimacy for the EU project as a whole.

4.2 Support for the euro and the ECB

Public support for the euro is another indicator of integration in terms of popular acceptance. Research usually measures support for the euro using the Eurobarometer question on whether people are for or against a single currency within the EU (Hobolt and Wratil 2015). Figure 3 is based on this measure and shows developments in the original and later euro area countries and non-euro area countries during the period 2004–24.

Figure 3 Percentage of the population expressing support for the euro, 2004–24



Note: Unweighted national averages per year.

Source: Own calculations based on Eurobarometer data.

The chart clearly shows how support for the euro varies between member states. Among the original euro area countries, the average support level is often high. Although there was a decline during the crisis years after 2009, which has also been shown in previous research (e.g., Roth et al. 2016), support recovered and reached historically high levels at the end of the measurement period. In the newer euro countries, there is an even clearer upward trend over time. However, a different pattern

emerges in countries that have remained outside the monetary union. There, support fell sharply in connection with the euro crisis and then rose only slowly, although it has increased somewhat more rapidly in recent years. The trend in non-euro area countries is broadly comparable to Swedish euro opinion, which has shown a U-shaped trend from the beginning of the euro crisis to the present day.¹¹ Taken together, these data reflect a divergence in euro opinion between members and non-members of the monetary union that is well established in research (Hobolt and Wratil 2015, Guiso et al. 2016, Roth and Jonung 2020).

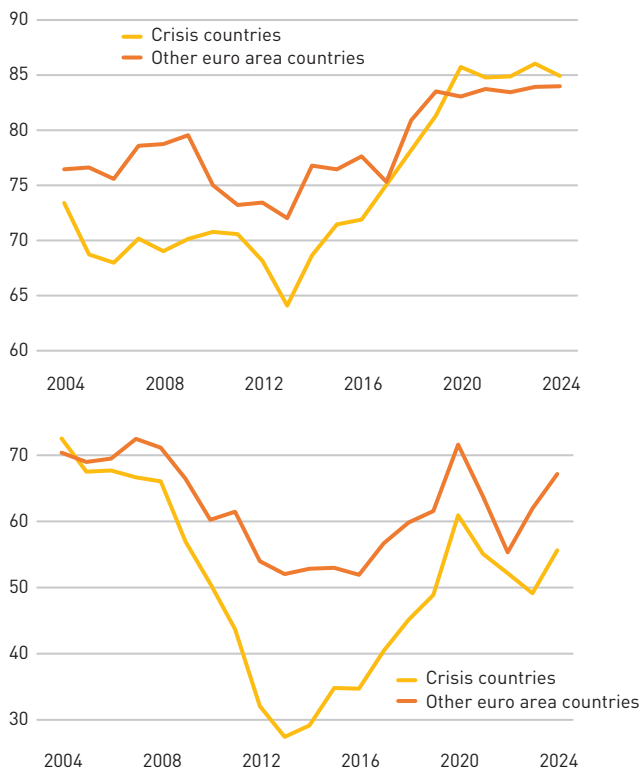
Statistical tests provide further support for the notion that euro membership is associated with stronger average support for the single currency, even when we control for country and year effects. Similar patterns are found in analyses focusing on the ten countries that joined the EU in 2004, seven of which have joined the single currency while three remain outside. Here we see that adopting the euro is followed by a lasting increase in support. Taken together, the results point to a kind of “club effect”: on average, the population expresses stronger support for the monetary union in countries that have joined the euro area than in those that remain outside it.

Research has found that economic factors such as unemployment and GDP growth are important explanations for variations over time in support for the euro within a country.¹² The impact of these factors is clearly reflected when comparing crisis and non-crisis countries, as we do in Figure 4. Figure 4a shows that support for the euro fell in both groups during the period 2009–13, but that the decline – as in the case of support for the EU – was deeper in the crisis countries. Support then recovered and stabilised at an average level above 80 per cent in both groups. This suggests that the euro as a project enjoys broad support among the populations of euro area member states despite previous difficulties. Later research shows that the EU’s fiscal measures during the pandemic, particularly the recovery fund, contributed to a marked and immediate increase in support for the euro (Roth et al. 2024).

11 See, for example, Lundgren (2025) and Lindvall in Chapter 12.

12 Guiso et al. (2016), Roth et al. (2016) and Roth and Jonung (2020). However, see Hobolt and Leblond (2014) for a different view.

Figure 4 Percentage of the population in crisis countries and other euro area countries who express support for the euro and confidence in the ECB, 2004–24



Note: Crisis countries include Greece, Ireland, Italy, Portugal and Spain. Other euro area countries include Austria, Belgium, Finland, France, Germany, Luxembourg and the Netherlands. Unweighted country averages per year.

Source: Own calculations based on Eurobarometer data.

A related indicator is confidence in the ECB, which captures attitudes towards the institutional framework and governance of the single currency. Figure 4b shows that confidence in the ECB fell sharply in connection with the crisis, but that the decline was particularly steep in the hardest-hit countries, where confidence levels at times fell below 30 per cent on average (in Greece as low as 24 per cent). Although there was a recovery thereafter, confidence in the crisis countries remained

somewhat lower than in the other euro area countries. Since this gap did not exist during the early years of monetary union, it indicates that the euro crisis led to more lasting damage to confidence in the ECB than in the euro itself (see also Bergbauer et al. 2020 and Hwang and Lustenberger 2025). One interpretation that has been put forward is that while the currency is perceived to fulfil its everyday functions – serving as a means of payment – and is seen as a symbol of shared values, the ECB is evaluated more on the basis of macroeconomic outcomes and crisis management capabilities (Guiso et al. 2016, Roth and Jonung 2020, Bergbauer et al. 2020). This may explain why support for the euro is more stable, while confidence in the ECB (and other European institutions) varies more strongly over time and appears more difficult to rebuild in hard-hit groups.

4.3 The euro and European identity

A third indicator of social integration is citizens' sense of identity. A shared sense of belonging can facilitate common economic solutions and redistribution (Kuhn and Stoeckel 2014, Bechtel et al. 2017) and is more generally considered to contribute to the legitimacy and sustainability of the European project (Bruter 2005, Risse 2011, Bergbauer 2018). The role of the euro in this context has so far received relatively limited empirical attention, but theoretically and qualitatively oriented researchers have, for example, discussed “banal Europeanisation” as a result of people using the same currency, travelling without exchanging money or seeing common motifs on euro banknotes (Cram 2009, McNamara 2015).

A number of empirical studies have examined the impact of the euro on EU citizens' self-perception. A first generation of studies, conducted at the time of the euro's introduction, suggested that the currency could contribute to a strengthening of European identity (Meier-Pesti, Kirchler and el Sehity 2003, Risse 2003, Jonung and Conflitti 2008). However, these results have since been viewed as uncertain, partly because they are based on data from the very first years of the euro, and partly due to the manner in which they measured identity.

A second generation of studies, which utilise longer time series (repeated measurements of the same thing over time) and more advanced methods, paint a somewhat different picture. These studies use the Eurobarometer identity question – where respondents indicate whether they identify nationally only, both nationally and as European, or as European only – and often contrast the proportion with only national identity with the other categories, all of which imply some form of European identity (Polyakova and Fligstein 2016, Buscha et al. 2017, Negri et al. 2021).

A key contribution is Buscha et al. (2017), who examine whether the introduction of the euro affected citizens' self-perception as Europeans. According to their analysis of Eurobarometer data from 1995 to 2014, citizens in euro area countries consistently experienced a higher level of European identity, but the currency changeover itself did not lead to any further increase. As the authors themselves note: "We do not find any indications that the introduction of the euro did have an effect on the self-perception of European citizens as 'Europeans'" (p. 3). In a supplementary sub-study, Buscha et al. use the circulation of foreign euro coins in France as a measure of exposure to the symbols of other member states. Here too, they find no correlation between the euro and a stronger European identity. Negri et al. (2021), on the other hand, find, on the basis of Eurobarometer data from 1996–2017, that the introduction of the euro was associated with a short-term decline in perceived exclusive national identity (and thus a corresponding increase in perceived European identity) of around three percentage points.

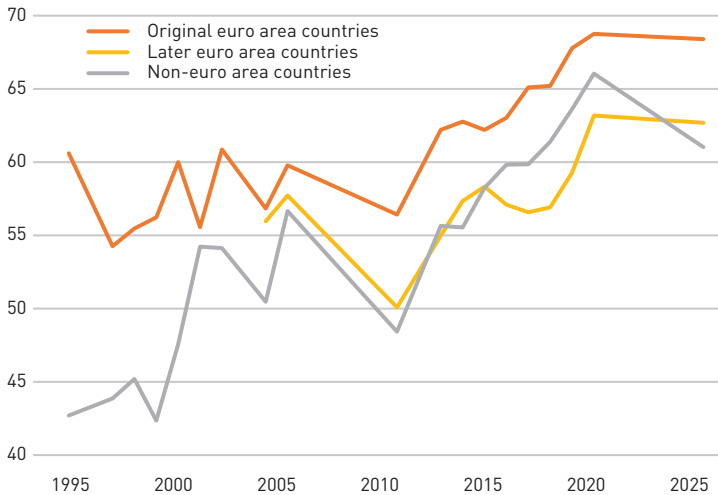
While these studies focus on euro adoption itself, Polyakova and Fligstein (2016) draw attention to the effects of the euro crisis. By comparing two Eurobarometer surveys (2005 and 2010), they show that the proportion of citizens with only a national identity increased significantly during the crisis years, while the proportion with some form of European identity decreased. The effect was particularly strong in the crisis countries. Polyakova and Fligstein's analyses show that a 1 per cent decline in GDP increased the likelihood of an exclusively national identity by around 0.8 percentage points. Overall, they argue that the crisis led people to seek refuge in national communities rather than in

the European project: “the economic and sovereign debt crisis pushed Europeans to embrace national rather than European identities” (p. 78). At the same time, opinion data compiled by the European Commission suggests that the crisis could also create a sense of increased European solidarity, especially in countries that received financial support from the EU. In Cyprus, Greece and Ireland, around half of citizens said that the crisis had made them feel closer to other Europeans, while the corresponding proportion was significantly lower in countries such as Denmark and the Netherlands (European Commission 2014).

To put these results in a longer-term perspective, Figure 5 visualises the development of European identity in euro area countries and non-euro area countries between 1995 and 2024. The figure broadly confirms the patterns that emerge in previous studies. We note initially that the populations of the original euro area countries consistently show a higher average level of European identity. This may be partly because countries with a higher such identity were more inclined to join the monetary union from the outset. However, it may also be a sign that the populations of these countries share a greater sense of a “common destiny” (e.g., Eriksen 2017). Experimental research shows that a stronger European identity leads to a greater willingness to show financial solidarity with other euro area countries (Bechtel et al. 2017, Verhaegen 2018).

We also see in Figure 5 that the proportion of citizens who identify as European is increasing in all country categories, but at different rates. The increase is particularly clear in non-euro area countries, where the proportion rose by more than 18 percentage points between 1995 and 2024, compared with just under 8 percentage points in the original euro area countries. This means that the gap between the original members of the monetary union and non-members has gradually narrowed, at least until around 2020, even though the former still exhibit the highest levels of European identity. We also note that the crisis years around 2010 represent a deviation from the general trend, which is in line with the observations of Polyakova and Fligstein (2016). However, as pointed out by Risse (2014) and Schröder et al. (2025), this change was not permanent.

Figure 5 Percentage of the population identifying as European, 1995–2024



Note: European identity includes those who respond that they have a wholly European identity or a shared national and European identity. Unweighted country averages per year. Data are missing for some years.

Source: Own calculations based on Eurobarometer data.

Our conclusion is that the euro may have had some impact, albeit limited and temporary, on the proportion of people who identify themselves as Europeans. Euro area countries generally score higher than other countries, but we see a broad trend of increased European identification over time. This is probably driven more by general social processes, such as increasing internationalisation among younger generations or the EU project as a whole, than by monetary cooperation specifically. This long-term trend has been punctuated by economic crises, which have temporarily strengthened national identity, and it appears to have slowed in recent years. However, compared with the period before the euro crisis, the proportion identifying as European had by 2024 increased by around ten percentage points in each of the three country groups in the chart.

4.4 The euro and the Europeanisation of public debate

A fourth indicator of social integration concerns public debate. There are many indications that political discourse in EU countries has gradually become more Europeanised, in the sense that EU issues have gained greater visibility, European actors are more present in the national media, and events in other European countries are reported more frequently (Wessler et al. 2008, Koopmans and Statham 2010). Against this background, some research has emerged on whether the euro, and in particular the euro crisis, has acted as a catalyst for deepening this development, and whether there are differences in this development between euro area and non-euro area countries.

Risse (2014) finds that the euro crisis marked a clear shift towards “growing Europeanization with regard to issue salience and to the actors represented” (p. 1208). During the crisis years, the presence of European issues and actors increased significantly in the national news media, with both EU institutions and leaders from other member states gaining a more prominent place. Kriesi and Grande (2015) draw similar conclusions, describing how the euro crisis contributed to a “parallelisation” of national debates, meaning that media in different countries covered the same issues at the same time. They also found that Europeanisation was more pronounced in euro area countries than in non-euro area countries.

There are also signs that the euro crisis contributed to Europeanisation in national parliaments and election campaigns. For example, in a study of parliamentary debates in the current 27 EU countries between 2010 and 2012, Auel and Höing (2014) find that euro area countries devoted significantly more time to debating the debt crisis than non-euro area countries. Similar effects can be found in election campaigns. Jurado and Navarrete (2021) analyse opinion and party data from across the EU and find that voters’ propensity to vote based on parties’ EU positions increased significantly during the crisis years and that the effect was strongest in the core euro area countries (such as Germany and France).

Overall, research on the specific impact of the euro on public debate is still limited, but the available results point relatively consistently to

the euro crisis contributing to a more Europeanised discussion. The research also shows differences between countries, with members of the monetary union, and especially original members, saw more Europeanisation of public debate than non-members.

5 Conclusions

In this chapter, we have attempted to summarise political science research on the euro as a driver of European integration. We have addressed two main aspects: political integration, where we focused on institutional development and political mobilisation, and social integration, where we examined the popular support for the monetary union and its impact on common European identity and debate.

Our main conclusions can be summarised as follows:

- Over the past two and a half decades, the institutional framework of the euro has deepened significantly, primarily through the crisis management logic of *failing forward*: the euro crisis, the pandemic and new security policy challenges have gradually shifted decision-making power and financial tools to the EU level and created a tighter core of integration around the euro area.
- Monetary cooperation has contributed to the increased politicisation of EU issues. The euro crisis gave rise to new lines of conflict between lenders and borrowers and became a springboard for populist parties, especially in the hardest-hit countries, even though the salience of euro issues has diminished in recent years.
- On average, the single currency enjoys strong popular support in the participating countries. Support declined during the euro crisis, but has since recovered and is now at historically high levels.
- The impact of the euro on European identity appears to be limited: although members of the monetary union on average display a stronger European identity than non-members, the evidence is mixed as to the extent to which this difference is driven by monetary cooperation rather than other long-term social processes.
- The euro, and in particular the euro crisis, has contributed to the Europeanisation of public debate in many countries, with EU issues

and European actors featuring more prominently in the media and parliaments, especially in euro area countries.

Overall, the euro appears primarily as a driver of integration at the institutional level, where crises have prompted deeper governance and coordination, while its political and social effects are more indirect. It has created new lines of conflict and been followed by increasing Europeanisation of public opinion and debate, but made a more marginal contribution to an already strong European identity at the citizen level.

In light of these conclusions, we conclude by highlighting four political and social factors that should be taken into account in Sweden's position on the euro.

- Participation in monetary cooperation may give Sweden better opportunities to influence the institutional development of the euro area, judging by the experiences of the reforms in the wake of the euro crisis. Although Sweden seems to have largely succeeded in compensating for its non-membership (see Chapter 11 by Lundgren in this volume), participation in the euro would give it a voice in the forums that set the EU's overall economic and institutional direction.
- Participation in the euro could fuel euroskeptic parties and opinion in Sweden if the euro area suffers new crises with negative economic consequences and increased political tensions in Europe as a result. At the same time, the effects of the euro crisis were temporary, as the euro has receded as a mobilising force for both left-wing populist parties in crisis countries and right-wing populist parties in creditor countries.
- Joining the euro could result in increased public support for the euro in Sweden. On average, euro membership is associated with higher support for the euro, with accession itself linked to a noticeable increase. Swedish entry would probably normalise and, in the long term, strengthen support for the monetary union, in line with the experiences of other countries that have joined.
- Euro membership may possibly affect Swedes' national/European identity, but this impact would likely be marginal, judging by the experience from other countries. For countries participating in the

euro, European identification is stronger than for those outside the euro area. This is consistent with the view that citizens of euro countries consider themselves to have a greater sense of a “shared destiny”.

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Does membership of the monetary union affect Sweden's influence in the EU?

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1 Introduction

From the outset, the question of Swedish participation in the EU's monetary union has extended beyond monetary policy and exchange rate regimes. The EMU Inquiry (1997) emphasised that monetary union is also a political project of central importance to European integration. The Inquiry warned that remaining outside this cooperation could have negative consequences for Sweden's political influence in the EU, primarily by undermining the country's credibility, limiting access to information and hindering participation in informal networks. Since then, a growing literature has assessed the actual consequences of euro participation for political influence within the EU. Several studies have revisited the concerns raised by the EMU Inquiry, particularly in the wake of the European debt crisis, when the Eurogroup established itself as a political centre for economic policy coordination in the EU.

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At the same time, other research – including quantitative analyses of cooperation networks and negotiation success – shows that Sweden often retained a strong position in EU decision-making processes, despite the country remaining outside the euro. This tension between different research results motivates a comprehensive analysis of what we actually know about Sweden's political influence as a non-member of the monetary union.

The purpose of this chapter is to summarise political science research on how Sweden's influence in the EU is affected by its non-participation in the euro. Three questions guide the analysis: To what extent does Sweden's non-participation limit the country's influence in EU decision-making? Does the effect vary between different policy areas? And to what extent are research findings likely to remain valid as the EU and the monetary union continue to develop and expand?

The chapter focuses on research that conceptualises influence as the ability to influence formal decisions in line with one's preferences. Influence in a broader sense – such as agenda-setting power or impact in the debate of ideas – is addressed to a more limited extent.² The analysis covers a range of policy areas, including the design of fiscal frameworks and broader EU policy. It does not, however, cover influence over monetary policy decisions taken by the Governing Council of the European Central Bank (ECB), where Sweden has no representation, or by the ECB General Council, which includes all EU countries but has no substantive policy responsibilities and has not been the subject of systematic influence research. Existing research rarely draws clear distinctions between policy areas, especially within the fiscal policy domain. Nevertheless, where possible, this chapter will seek to identify differences in patterns of influence across different policy areas.

Influence is multifaceted and difficult to measure. Three main approaches have emerged in research on influence within the EU (Dür 2008). The first relies on qualitative case studies that analyse member states' actions and impact in specific decision-making processes. The second draws on survey data in which officials and decision-makers assess which countries are most central in day-to-day negotiations. The third uses preference attainment models, in which actors' initial

2 See Tallberg et al. (2011) for a broader analysis of power and influence within the EU.

positions are compared with actual decision outcomes to measure the degree of negotiating success.

The chapter contains three empirical sections corresponding to these methodological approaches. The first section examines qualitative studies, reviewing the influence considerations raised in the EMU Inquiry and how these have been addressed in later research. The second section analyses network capital based on survey data, with a particular focus on Sweden's role in the preparatory bodies of the Council of Ministers. The third section examines negotiating success as preference attainment, both in general EU policy and in negotiations on reforms of the monetary union after the euro crisis. The chapter concludes with a synthesis of the research and a discussion of how Sweden's influence may develop in different future EU scenarios.

2 The EMU Inquiry and later qualitative research

2.1 The EMU Inquiry's analysis

From the outset, Sweden's membership of the EU has been framed in terms of sovereignty and national influence. A central principle in the assessments³ of the consequences of Sweden joining the EU in 1994 was the notion of a "sovereignty calculation," weighing losses of formal sovereignty against increased opportunities to influence decisions that would affect Sweden regardless. A key argument was that, for a small state, influence is better preserved through international engagement than through attempts to reclaim national decision-making authority. This line of reasoning was also reflected in the EMU Inquiry (1997), which examined both the economic and political dimensions of Sweden's potential membership of the monetary union. The Inquiry emphasised that the monetary union constituted both an "economic and a political project" and analysed both "direct" and "indirect" influence.⁴

3 For example, the EG-konsekvensutredningarna (1994).

4 P. 239.

Direct influence concerned the formulation of monetary policy. The Inquiry noted that the independence and governance structure of the ECB limited the scope for political control, but that membership would nonetheless provide greater influence, both formally, through representation on the ECB's Governing Council, and informally, insofar as the ECB could be expected to display a "degree of political receptiveness".⁵ If Sweden remained outside the monetary union, by contrast, the Inquiry concluded that opportunities to exert direct influence would be "very limited," with some variation depending on whether Sweden clearly distanced itself from the euro or signalled an ambition to join at a later stage.⁶

Indirect influence concerned Sweden's ability to shape decisions more broadly, i.e., beyond the domain of monetary policy.⁷ The Inquiry emphasised political credibility as a source of influence at the European level. Membership of the monetary union would signal political will and long-term commitment, thereby strengthening Sweden's reputation as a reliable and responsible member. In an EU characterised by compromise and reciprocity, countries perceived as "free riders" or "reluctant Europeans" risked finding it more difficult to make their voices heard. Membership would also confer advantages in terms of access to information and opportunities for coalition-building. Specifically, membership of the monetary union was expected to strengthen Sweden's ability to influence the EU's original members, particularly Germany and France, which were seen as driving forces in the Union's strategic and ideological discussions.⁸

In summary, the EMU Inquiry concluded that Swedish membership would create opportunities for Sweden to exercise influence within the EU more broadly.⁹ Sweden would move closer to the Union's "inner core," where agendas are set and key political decisions are made. However, the Inquiry ultimately recommended postponing Swedish participation in the monetary union. At the time, the economic arguments against joining were considered to outweigh the political arguments in

5 P. 219.

6 P. 240.

7 P. 239.

8 P. 239.

9 P. 245.

favour. The Inquiry assessed that the political costs of initial non-participation were not “unacceptable,” provided that Sweden continued to signal a positive attitude towards the EMU project.¹⁰ It warned, however, that these costs could increase if exclusion became protracted or if the majority of EU member states, including Denmark and the United Kingdom, were to join the monetary union.

2.2 Qualitative research provides a more nuanced view of the costs of non-participation

The conclusions of the EMU Inquiry regarding the political consequences of Sweden joining the euro were based on theoretical reasoning and limited case study evidence from other EU countries’ experiences. However, the Inquiry was conducted before the monetary union had been established and therefore lacked the opportunity to test its assumptions against empirical evidence from actual outcomes. In light of later research and practical experience, the arguments advanced in the Inquiry have been nuanced and partially re-evaluated, both for Sweden specifically and for non-members in general.

First, later qualitative studies suggest that the institutional marginalisation of non-euro area members has often been less pronounced than the EMU Inquiry anticipated. For example, a study based on interviews with Swedish EU ambassadors finds broad support for the conclusion that “Swedish influence in the EU has *generally* not been negatively affected by Sweden’s non-participation in the euro”.¹¹ Other research suggests that, apart from the ECB’s monetary policy, from which non-euro area countries are completely excluded, differences in institutional influence between euro area and non-euro area countries have often been relatively limited, especially during the first decade of the monetary union (Adler-Nissen 2016, Akbik 2022).

Second, several studies emphasise that expectations regarding European integration have changed over time, loosening distinctions between “insiders” and “outsiders.” Dyson and Marcussen (2010)

¹⁰ P. 335.

¹¹ Eriksson 2017, p. 7.

describe this as a development towards “transversal integration,” in which participation in specific institutions or policy processes is a matter of degree rather than absolute categories. Jerneck (2014) argues that the increasing number of EU member states has led to greater tolerance for variation in institutional arrangements, which is why institutional uniformity becomes less normative and “keeping track of what different states do and do not do in different contexts becomes ... unfeasible and probably also less interesting.”¹² According to this analysis, a larger and more diverse EU thus offers greater opportunities for a medium-sized country to deviate from the integration norm without incurring substantial political costs.

At the same time, researchers and commentators have continued to revisit the EMU Inquiry’s reasoning and concerns about exclusion (see Lundgren 2003 for an early and clear example). Jerneck (2014) and Bäckman and von Sydow (2015) argue that Sweden is still often regarded as a “reluctant European,” which has undermined the country’s political credibility. Although Sweden has generated goodwill through constructive participation, the country has paid a “price of exclusion” with consequences for its influence, particularly in the EU’s ideological debate and discussions on the long-term direction of the Union (see also Gustavsson and Nilsson 2013).

Similar arguments appear in research on Denmark and the United Kingdom. For example, Adler-Nissen (2008, 2014) finds that opt-outs (formal exemptions from parts of EU cooperation) can create suspicion and “stigma” within the EU, as they violate the prevailing norm of integration. Case studies on Finland likewise underscore the importance of political credibility as a source of influence. Through its early accession to the monetary union and consistent pro-European stance, Finland was able to generate significant political capital, according to domestic analysts, in contrast to Sweden and Denmark, which were perceived as more ambivalent about European integration (Raunio and Tiilikainen 2003, Jokela 2015).

These lines of argument gained renewed relevance after the European debt crisis, which many regard as a turning point in the EU’s institutional balance of power. Qualitative research has particularly high-

12 P. 4.

lighted how, in the early 2010s, the Eurogroup – the informal meeting of euro area finance ministers – went from being a low-profile preparatory body to a central body in EU coordination and decision-making in the field of economic policy (Johansson 2011, Puetter 2016, Abels 2019, Csehi and Puetter 2020, Akbik 2022). According to Adler-Nissen (2016), the Eurogroup became “the de facto engine room of integration.” Adler-Nissen describes a growing “exclusion zone,” where the division between members and non-members of the monetary union has deepened through special meeting formats and preparatory processes in which only euro area countries participate. Since the Eurogroup meets the day before the Ecofin Council – the formal Council of Ministers in which all EU countries’ finance or economy ministers participate – one consequence of the closer coordination between euro area countries has been that non-members of the monetary union are increasingly faced with compromises that have already been negotiated. Several scholars argue that this exclusion weakens the ability of non-euro area countries to influence the EU’s long-term economic policy (Jerneck 2014, Adler-Nissen 2016). Although the Eurogroup is formally confined to euro-related matters, in practice its influence has spilled over into adjacent areas of economic policy, as the boundary between euro-area and EU-wide issues has proved difficult to maintain.

Interviews with officials from several member states about the negotiations on the reforms of the monetary union in 2010–15 further support the conclusion that the euro crisis deepened the exclusion of non-euro area countries (Wasserfallen et al. 2019). Although the interview material contains some variation in how the exclusion was perceived, the separation between euro area and non-euro area countries is a recurring theme. For example, an Estonian negotiator stated that “everything was decided in the Eurogroup,” while a Swedish official noted that “countries outside the euro area have gradually lost influence, while the Eurogroup has strengthened its position.” An illustrative example is the negotiations on the so-called Six-Pack, a set of reforms to the Stability and Growth Pact that formally applies to the entire EU, but where the sanction mechanisms only apply to euro area countries. Despite its broad application, the interview material indi-

cates that the Eurogroup took the lead in both drafting proposals and coordination. Furthermore, respondents point to a broader grey area of policy areas where the boundary between issues specifically affecting the euro area and the EU as a whole was unclear. This reinforces the picture that a broader spectrum of issues has gradually come to be coordinated within the framework of the Eurogroup.

Other studies find that these exclusionary effects may have been exacerbated following the United Kingdom's withdrawal from the EU. As a result of Brexit, Sweden lost not only a strategic partner with similar preferences on many issues, but also the heaviest political counterweight to the Eurogroup (Eriksson 2017, Grech 2021, Ehin 2025). With the British gone, the euro area countries account for approximately 77 per cent of the EU's population and over 70 per cent of the member states (Tokarski and Funk 2019). This means that these countries can achieve a qualified majority in the Council of Ministers on their own, while the non-members of the monetary union are unable to form a blocking minority.¹³ Although many Council decisions are *de facto* taken by consensus, this voting arithmetic changes the conditions for negotiations and compromise. Interviews with Swedish EU ambassadors reveal a heightened sense of vulnerability after Brexit, particularly in processes where the Eurogroup negotiates internally and then presents a coordinated position to other member states (Eriksson 2017).

2.3 How non-euro area countries seek to maintain influence

Although the Eurogroup has grown in importance and at times marginalised non-euro area in economic policy matters, the latter countries have not remained passive. On the contrary, research shows that they have, in several cases, developed strategies to maintain or regain influence. This section highlights three such strategies: institutional

13 Decisions in the Council of Ministers are often taken without a vote, but for a decision to be adopted, it must be supported by 55 per cent of the member states, representing at least 65 per cent of the EU population (qualified majority). To block a decision, at least four countries representing more than 35 per cent of the EU population are required. Decisions on issues such as foreign policy, taxation and new membership require unanimity.

protection mechanisms, participation in informal networks, and coalition-building beyond euro membership.

First, studies suggest that non-members of the monetary union have pushed for institutional solutions designed to protect their interests. One example is the UK's actions during the negotiations on the banking union in 2012, when it secured a special decision-making rule in the European Banking Authority (EBA) requiring a "double simple majority," meaning that decisions had to command support from both euro area and non-euro area countries (Tokarski and Funk 2019). Another example is the renegotiation of the European Financial Stabilisation Mechanism (EFSM), a temporary precursor to the permanent European Stability Mechanism (ESM), which resulted in non-euro area countries being exempted from financial responsibility for supporting euro area countries (Eriksson 2017). Although the United Kingdom, a significantly larger country than Sweden, was the driving force in both of these contexts, these experiences indicate that it is possible for non-euro area countries to create institutional protection mechanisms and that euro area countries have, at times, been willing to accommodate such demands.

Second, research indicates that formal exclusion can be offset by constructive participation in informal networks. Schilin's (2024) study of the Eurogroup and its preparatory body, the Eurogroup Working Group (EWG), shows that non-members of the monetary union are sometimes excluded from negotiation processes, but that this does not necessarily prevent them from exerting influence. On the contrary, Schilin argues that non-euro area countries such as Sweden and Denmark have managed to gain some access to these forums through compliance with norms and active participation: "intensive interaction and uncertainty triggered socialisation processes amongst Euro area member states representatives, helping deliberation and consensus-building norms to maintain their robustness" (Schilin 2024). This type of norm-based "insider status," which also draws strength from the countries' high compliance with EU fiscal rules, can thus serve as a compensatory mechanism. At the same time, Schilin notes that access to informal networks requires that a country be perceived as contributing "added value" by euro area members, which suggests that this

channel of influence is conditional on the goodwill of these countries and is therefore vulnerable.

Third, case studies show that lines of conflict in EU economic policy-making rarely coincide with the divide between euro area and non-euro area countries. This has given Sweden the opportunity to exert influence by participating in coalitions of interest. The negotiations on pandemic support in 2020–21 are a clear example of this. After the initial SURE employment support, NextGenerationEU was negotiated, a support package worth €750 billion, financed through joint borrowing via the Commission. However, the lines of conflict were not between euro area countries and others, but mainly along a north-south axis. The strongest opposition to subsidies and joint debt came from the so-called “frugal four” – Austria, Denmark, the Netherlands and Sweden – a coalition of like-minded countries that included both members and non-members of the monetary union (de la Porte and Jensen 2021). Sweden’s participation in this coalition (and other similar coalitions, such as the “New Hanseatic League”)¹⁴ was made possible largely by the country’s reputation for fiscal prudence. The coalition succeeded in pushing through reduced subsidy volumes and increased rebates on EU fees, while accepting joint debt – a strategic victory for France and Germany and perceived by many as a step towards a common fiscal policy (Jones 2021, Howarth and Quaglia 2024, Andersson and Jonung in Chapter 7) These negotiations thus mainly reflected traditional communities of interest rather than the distinction between euro area and non-euro area countries.

In summary, qualitative research provides some support for the concerns raised in the EMU Inquiry. The Eurogroup has grown in importance, and countries outside the monetary union such as Sweden, have on several occasions been confronted with pre-negotiated compromises. Several studies indicate that this development was reinforced after the debt crisis and Brexit, when the Eurogroup strengthened its position, both institutionally and politically.

14 The “New Hanseatic League” was a group of northern EU countries (Denmark, Finland, Ireland, the Netherlands, Sweden and the Baltic states) that collaborated on budgetary discipline issues from 2018 onwards.

At the same time, qualitative research cannot clearly demonstrate that exclusion has led to a substantive loss of influence. Research is particularly uncertain about how other member states actually perceive the standing of Sweden and other non-members of the monetary union, and to what extent such perceptions are attributable to non-membership as such. On the one hand, some studies suggest that non-euro area countries are perceived as “bad Europeans” who lack a full understanding of the euro area’s perspective and dynamics (Adler-Nissen 2014). On the other hand, they are described as “favourite outsiders” and appreciated for their expertise and compliance with fiscal rules (Schilin 2025). The evidence on this issue sometimes appears anecdotal. However, given that concerns about institutional exclusion have been aired for several decades and are a recurring theme in interviews, it is reasonable to conclude that this constitutes a real challenge, particularly in matters relating to the euro.

3 Euro membership and network capital

A second branch of political science research on political influence within the EU focuses on network capital, understood as the extent of actors’ cooperative relationships within the EU’s institutional and political networks (Lindahl and Naurin 2005). Actors with more cooperation partners are considered to have greater opportunities to control information flows and build coalitions, which in turn is assumed to increase their ability to influence formal decision-making processes (Tallberg 2008, Naurin and Lindahl 2010). Network capital is therefore best regarded as a measure of *potential* influence, in the sense that large network capital is a facilitating but insufficient condition for influencing joint decisions.

Network capital has been measured using survey methods in which representatives from EU member states in the preparatory bodies of the Council of Ministers are asked which other member states’ representatives they most often collaborate with (Naurin et al. 2020). Surveys have been conducted regularly every three years since 2003

with representatives from eleven of the Council's preparatory bodies, including the Permanent Representatives Committee (Coreper) and working groups and committees in individual policy areas. Each survey round has aimed to include one representative per member state and committee. Some 220–250 respondents have been interviewed per round, which means an average response rate of around 80 per cent (Johansson et al. 2023).

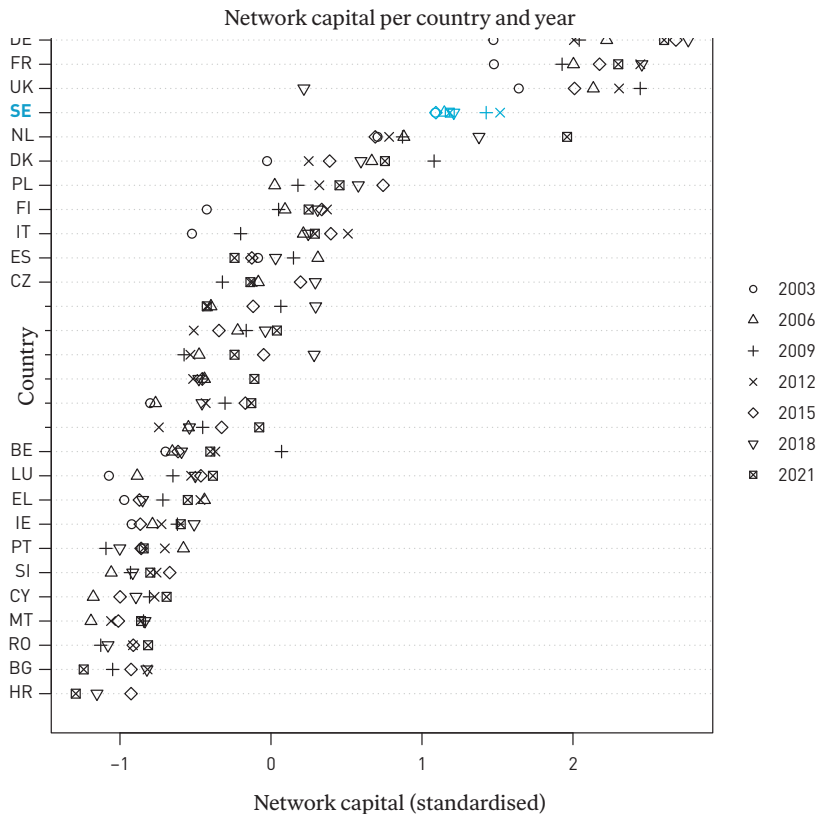
Figure 1 shows the member states' network capital, calculated as the standardised ranking score each country receives from other member states. The results indicate clear differences between countries: Germany, France, the Netherlands and Sweden consistently rank at the top, implying that their officials are often mentioned as important cooperation partners. The United Kingdom ranked among the top countries until the 2018 survey, when the country's impending withdrawal from the EU had clearly already begun to affect its position in Brussels. At the opposite end of the spectrum are many smaller or newer member states, particularly from Central and Eastern Europe. Overall, studies of network capital point to a persistent pattern whereby the EU's founding members and older Western European members more often occupy central positions, while other countries tend to have a somewhat more peripheral position.

None of the seven measurements conducted between 2003 and 2021 indicate that euro area members systematically exhibit greater (or lesser) network capital than member states outside the monetary union (Figure 1). Instead, research shows that network relations within the EU are largely shaped by structural factors such as similarities in political-economic systems, economic weight and attitudes towards European integration (Johansson et al. 2023). Patterns of cooperation at the civil servant level often seem to follow geographical and political proximity rather than euro membership.

These results have been confirmed in research that directly investigates whether euro membership impacts a country's network position (Lindahl and Naurin 2010, Naurin and Lindahl 2010, 2014). Lindahl and Naurin (2005), for example, find that countries outside the monetary union have well-developed cooperation networks and that "standing outside the euro does not seem to preclude a central place inside the

negotiation machinery of the European Union.” These findings challenge a common theme in qualitative research, which, as mentioned above, argues that Sweden and other non-euro area countries pay a “price of exclusion” in the form of lost goodwill and lower credibility, which is linked to political marginalisation and less influence (see, for example, Lundgren 2003 and Jerneck 2014). I will return below to how these contradictory results can be understood and possibly reconciled.

Figure 1 Network capital per country and year



Note: Network capital is a measure of how often a country's officials are mentioned as partners in the EU's preparatory bodies. Countries are listed using the EU's two-letter abbreviations (SE = Sweden).

Source: Own calculations based on data from Naurin et al. (2020). The measure is standardised to take into account changes in the number of EU member states over time.

One exception to this general pattern is fiscal and economic policy, where exclusion is considered to have a greater impact on cooperation patterns. In an early study of these policy areas, Lindahl and Naurin (2005) show that views on euro outsiders vary depending on the subject area. When asked directly, 79 per cent of officials responded that a country's status as a non-member of the monetary union does not affect cooperation patterns. However, among the 21 per cent who believed that it does, the majority were found in the Economic Policy Committee (EPC), one of the preparatory bodies of the Ecofin Council (and the Eurogroup).¹⁵ This suggests that a country's exclusion from the monetary union is mainly significant in those parts of the decision-making apparatus where the euro is relevant, while in other policy areas it has little or no impact.

Lindahl and Naurin's twenty-year-old findings are supported by analyses covering the period 2003–21. Figure 2 shows the average network capital in the EPC for euro area and non-euro area countries. The diagram does not indicate any systematic differences in levels between the groups. However, a difference-in-differences analysis¹⁶ shows that a country's network capital tends to increase after joining the euro.¹⁷ The effect is positive and statistically significant, which means that euro entry is associated with a stronger network position within the EPC over time. The analysis controls for country and year effects, which strengthens the interpretation that it is the introduction of the euro – rather than other underlying factors – that drives the change. In the longer term, this is consistent with an interpretation that euro area countries are becoming more closely interconnected in the EPC, while other countries are relatively downgraded. At the same time, caution is

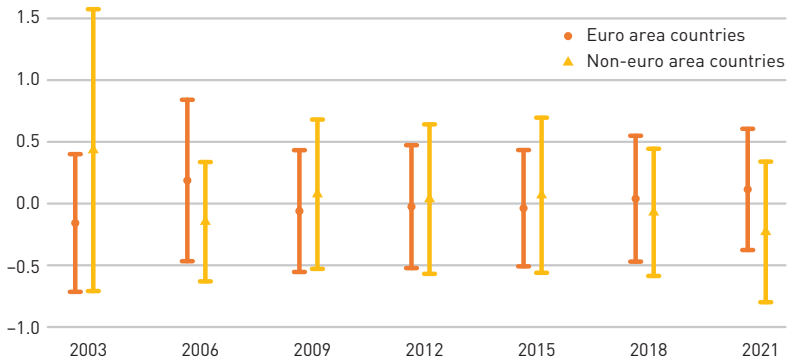
15 The EPC deals with issues relating to growth, employment, structural reforms and public finances. In addition to the EPC, there is the Economic and Financial Committee (EFC), which prepares the coordination of economic policy, financial market issues and exchange rate policy. The EFC also meets in a euro-specific constellation, the Eurogroup Working Group (EWG). Data on network capital are not available for the EFC and EWG.

16 Difference-in-differences is a quasi-experimental method that estimates the effect of an event by comparing the change over time in a treatment group (in this case, countries that have adopted the euro) with the change in a control group (in this case, EU countries that have not adopted the euro).

17 During this period, Slovenia (2007), Cyprus (2008), Malta (2008), Slovakia (2009), Estonia (2011), Latvia (2014) and Lithuania (2015) joined the monetary union. Croatia joined in 2023.

warranted when generalising from patterns observed in a single preparatory body to the economic policy area as a whole.

Figure 2 Network capital over time, euro area countries and non-euro area countries in the Council's Economic Policy Committee (EPC)



Note: Estimated mean values per group with a 95 per cent confidence interval.

Source: Own calculations based on data from Naurin et al. (2020).

An illustrative example of how euro membership can relate to network capital over time is provided by the comparison between Finland and Sweden – two countries with similar conditions, where one has joined the euro while the other has not. Figure 3a shows that Finland's network capital in the EPC has increased relative to Sweden's from 2003 onwards.¹⁸ Although the estimates are uncertain, the trend is that Finnish officials are increasingly mentioned as cooperation partners, while Sweden exhibits the opposite pattern. This is consistent with the broader conclusion above that euro membership can strengthen a country's position in forums where euro-related issues are discussed.

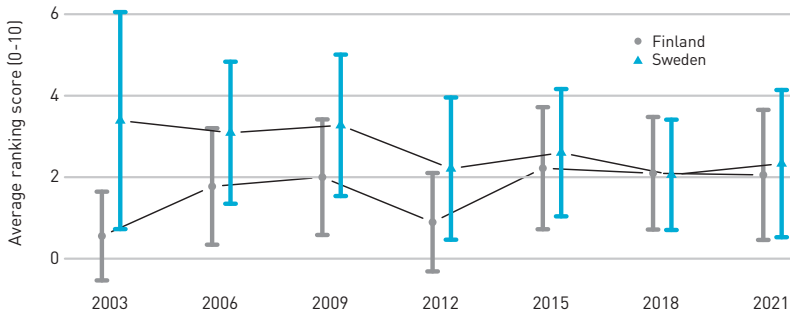
At the same time, data on network capital in Figure 3b shows that Sweden is regarded as a more important partner than Finland from the perspective of Germany and France, the two countries identified

¹⁸ Data on network capital is not available before 2003. In the comparison between Sweden and Finland (which introduced the euro in 1999), this is therefore not a difference-in-differences analysis of the same type as in Figure 2.

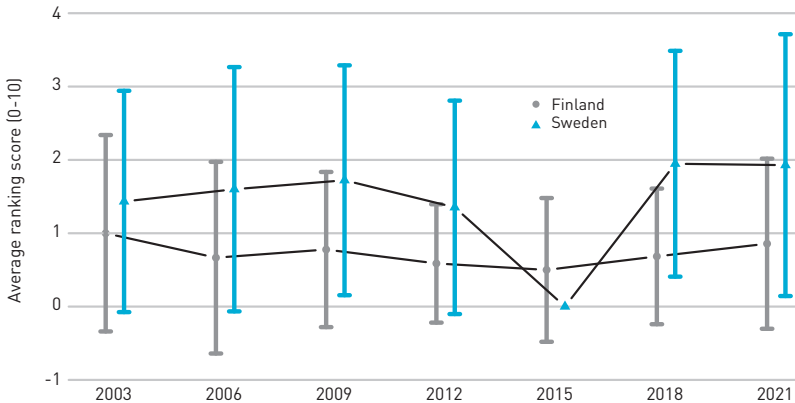
as particularly important in the EMU Inquiry and often seen as driving forces in EU cooperation (Tallberg et al. 2011, Degner and Leuffen 2019). The estimate is uncertain, but with the exception of 2015, the difference is stable over time and suggests that Sweden's non-membership has not impaired its standing among the EU's core countries (the results are the same when considering the EU as a whole; see Figure 1).

Figure 3 Network capital over time, Sweden and Finland

(a) in the Council's Economic Policy Committee (EPC)



(b) in general, according to Germany and France



Note: Estimated mean values per country and year with a 95 per cent confidence interval. For Sweden in 2015, when all observations are zero, no confidence interval is shown.

Source: Own calculations based on data from Naurin et al. [2020].

Network capital is an important source of potential influence in the EU, but a number of limitations should be borne in mind when interpreting the results. A first limitation is that the measure reflects networks within preparatory bodies at the civil servant level. It is not obvious that the same patterns apply at the political level, for example in the Council of Ministers or in leaders' discussions on the strategic direction of the EU. A second limitation is that the measure focuses primarily on the breadth of cooperation rather than its depth. It is entirely possible that a smaller number of deeper relationships provide more influence than a large number of superficial relationships, although there is no reason to believe that members and non-members of the monetary union would differ in this respect. A third limitation is that the measure is based on subjective assessments. For example, the fact that the survey is administered by Swedish researchers may have led to some overestimation of Sweden's position, although this does not alter the conclusions regarding the country's stability over time or broader comparisons between euro area and non-euro area countries. Finally, as Eriksson and Ljungkvist (2021) note, the measure may favour small and medium-sized member states such as Sweden, which have stronger incentives to actively seek broader cooperation than larger states.

With these limitations in mind, research on network capital supports the conclusion that it is possible to have broad cooperation networks in Brussels regardless of euro membership. Sweden, which is outside the monetary union, is consistently ranked as a key player in the EU's broader cooperation networks, as are Denmark and the United Kingdom (up to the 2015 measurement). At the same time, the analyses here show that euro membership has some significance in fiscal and economic policy, where countries that join the euro tend to strengthen their network position over time. To the extent that presence in these networks is a resource for influencing the design of fiscal rules, the choice to remain outside the euro entails some loss of influence for Sweden.

4 Euro membership and negotiating success

The third prominent approach in research on political influence examines negotiation success in terms of preference attainment. Based on spatial negotiation models for multilateral decision-making (e.g., Bueno de Mesquita and Stokman 1994), negotiation success is defined as the distance between an actor's starting position (which is assumed to reflect their policy preferences) and the decision outcome (Bailer 2004, Thomson et al. 2006, Arregui and Thomson 2009, Aksoy 2010, Thomson 2011, Cross 2013). If a decision is close to an actor's starting point, the actor is considered successful, while a greater distance indicates a lower degree of negotiation success. This measure thus captures influence in the sense of "getting what you want".

One strength of the negotiation success measure is that, unlike network capital, it focuses on actual decision outcomes. It is therefore closer to realised than potential influence. At the same time, the measure's focus on visible decision-making implies a risk of overlooking forms of power exercised through agenda control or the exclusion of issues from the decision-making process altogether (the second dimension of power; Bachrach and Baratz 1963). There is also a risk that the measure overestimates the influence of member states that adopt intermediate positions at the start of negotiations, as these may benefit from the EU's consensus-oriented decision-making and achieve high preference attainment without necessarily having exercised substantive influence. Another debate concerns whether stated preferences are strategic or genuine and to what extent this affects the validity of the approach (see Vannoni and Dür 2017 for a longer discussion).

To measure negotiation success in terms of preference attainment, several data sets have been constructed, most notably *Decision-making in the European Union* (DEUI, II, III), the latest version of which covers negotiations on 363 specific issues in 141 major legislative proposals between 1996 and 2019 (Arregui and Perarnaud 2022). Most studies in this literature have found a remarkably even distribution of negotiation success over longer periods of time (e.g., Bailer 2004, Arregui and Thomson 2009, and Thomson 2011). This pattern is usually explained

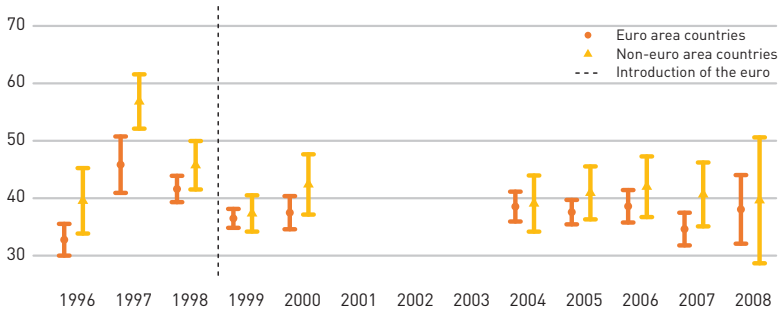
by the fact that negotiations within the EU are characterised by consensus norms and backroom bargaining, or that compromise solutions are often found between the extreme positions of the larger member states (Hayes-Renshaw et al. 2006). The implication is that, while individual negotiations produce winners and losers, these differences tend to even out over time.

Given the relatively even distribution among member states, it is therefore unsurprising that studies rarely find any consistent correlations between structural resources, such as a country's size or economic strength, and negotiating success (Thomson 2011, Cross 2013, Arregui 2016, Mariano and Schneider 2022). However, some studies show that countries with much network capital, those holding the rotating presidency and those with salient preferences tend to achieve greater success (Panke 2010, Golub 2012). Other findings suggest that countries advocating major departures from the status quo achieve less success (Thomson 2011), while a Eurosceptic domestic opinion can provide negotiating advantages (Mariano and Schneider 2016). Yet other studies find that individual variables, such as the expertise of national representatives, can help countries secure favourable outcomes in individual EU negotiations (Lundgren et al. 2022; see also Tallberg 2008).

There are no previous studies that focus explicitly on how euro membership affects negotiating success in general EU policy. Calculations of average negotiating success based on DEUIII data for euro area and non-euro area countries (Figure 4) suggest that the former group is slightly less successful, but the difference is not statistically significant. The chart covers the period from 1996 to 2008, allowing for a comparison of the groups before and after the introduction of the euro in 1999. A difference-in-differences model that estimates the effect of euro membership shows a slightly negative but statistically insignificant effect. In practice, this model compares the twelve original members of the monetary union with the three that chose to remain outside – Sweden, Denmark and the United Kingdom – and suggests that the

latter group's influence in EU negotiations was not negatively affected by their remaining outside the euro, at least up to 2008.¹⁹

Figure 4 Negotiation success, euro area and non-euro area countries, general policy, 1996–2008



Note: Annual average negotiation success, 0–100, where 100 means total preference attainment on all issues. The analysis covers 324 issues in different policy areas. The analysis only includes EU15 countries to keep the number of member states constant. Preferences are weighted according to intensity (salience). Data are missing for 2001–03.

Source: Own calculations based on DEUIII data (Arregui and Perarnaud 2022).

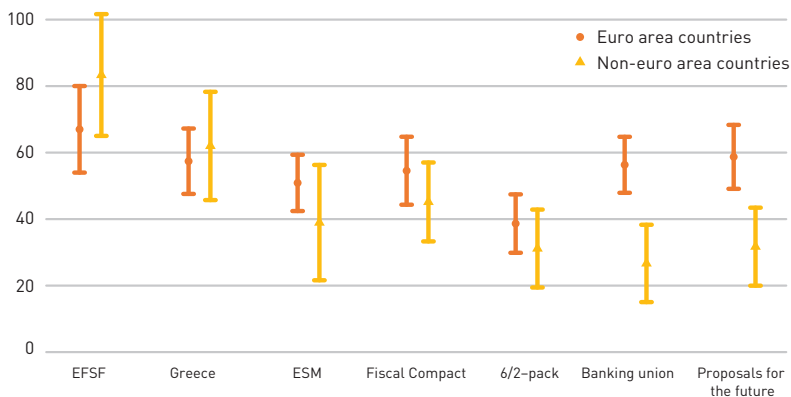
A small number of studies have examined how euro membership affects negotiating success in economic policy contexts. Several rely on data from the *EMU Choices* project (Wasserfallen et al. 2019), which mapped member states' policy preferences and actual outcomes in negotiations on crisis-response packages and fiscal policy frameworks during the period 2010–15. The data, which largely follow the same design as the DEU data sets, are based on document analysis and interviews and cover 47 reform issues across seven major negotiation packages.

Calculations based on these data provide an initial overview of the positions taken by member states in the negotiations on reforms to euro area governance. Figure 5 shows the average preferences of euro area and non-euro area countries across the key negotiation packages. In five of these, non-euro area countries advocated less integra-

¹⁹ The DEU-III data is not sufficiently comprehensive after 2008 to allow for a comparable analysis in recent years.

tion-oriented positions than euro area countries. The differences are particularly clear on issues relating to the banking union and long-term reform proposals for deeper fiscal integration, including proposals for the ‘completion’ of the monetary union in the Five Presidents’ Report (Juncker et al. 2015). This provides some support for the view that euro area countries constitute a more integration-oriented group, particularly on issues involving joint responsibility in fiscal policy. At the same time, substantial variation within both groups suggests that the differences should not be overstated, making it difficult to speak of a clearly cohesive ‘inner core’ based on euro membership during this period, with the possible exception of views on the banking union and forward-looking proposals.

Figure 5 Average preferences, EMU reforms, 2010–15



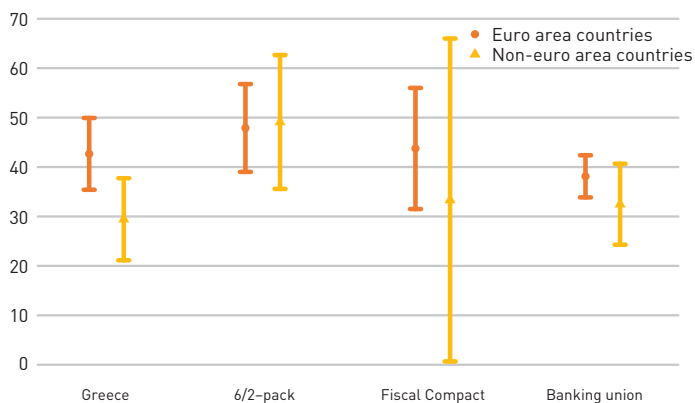
Note: The figure shows average preferences for euro area countries and non-euro area countries across seven negotiation packages, including financial crisis management (EFSF, ESM and support package for Greece), reforms of the Stability and Growth Pact (Six-Pack, Two-Pack and Fiscal Compact), the formation of the banking union, and a collection of proposals for the future (including the Five Presidents’ Report). Preferences are standardised between 0 (least integration) and 100 (most integration).

Source: Own calculations based on data from Wasserfallen et al. [2019].

Lundgren et al. (2019) use data from *EMU Choices* to examine which member states achieved the greatest success in the reform negotiations during 2010–15. Based on statistical analyses covering some 30 different issues, they find no statistically significant difference in negotiation

success between members and non-members of the monetary union across the negotiation process as a whole.²⁰ Figure 6 shows the average negotiation success for euro area and non-euro area countries across four key reform areas. Even at this more disaggregated level, the differences appear to be small and within the margin of error.

Figure 6 Negotiation success in EMU reform negotiations, 2010–15



Note: Average negotiation success, 0–100, where 100 means total preference attainment on all issues. The data cover 31 specific negotiation issues within four major packages. The ESM and EFSF are excluded as these were dealt with by the Eurogroup.

Source: Own calculations based on data in Lundgren et al. (2019) and Wasserfallen et al. (2019).

Nor does existing research find any clear difference between euro area and non-euro area countries when influence is measured in terms of negotiating success. At first glance, this result may seem surprising, given the central role that euro area countries – especially the larger ones – are considered to have played in driving the reform process after the crisis. In their discussion, Lundgren et al. (2019) offer two possible explanations that nuance the picture and shed light on why euro membership does not necessarily translate into negotiating influence.

²⁰ Only issues on which decisions were taken can be used to measure negotiation success, which is why, for example, proposals on future fiscal integration, where no compromise was ever reached, are not included in the analysis.

First, large euro area countries may have weakened their negotiating position through their strong commitments to ensuring the survival of the monetary union (Dyson 2012). According to negotiation theory, actors who are more dependent on an agreement are often in a weaker position than those with a credible option of staying out (Schelling 1960; for applications in the EU context, see Moravcsik 1998). This dependency may have made it difficult for the larger euro area countries to maximise their negotiating gains.

Second, the authors suggest that larger euro area countries may have exercised their main influence by setting the parameters of the negotiations. Within these parameters, other actors could then pursue their interests, which may help explain the relatively even distribution of negotiating success in observable decision outcomes. This form of influence – shaping the broader negotiating framework rather than individual decisions – is consistent with the theory of the second dimension of power mentioned above: controlling which options are on the table, rather than which ones are chosen (Bachrach and Baratz 1963). Parts of the interview evidence cited above support such an interpretation. In connection with the debt crisis, for example, some non-members of the monetary union found themselves coming to a “pre-negotiated” table where the members of the Eurogroup had already drawn up the outlines before others entered the process.

A third possible explanation is suggested by Eriksson and Ljungstedt (2021), namely that euro area countries have been receptive to influence from non-euro area countries because, with the exception of Denmark, these countries have a formal obligation to join the euro in the future. This prospective membership creates incentives for euro area countries to include them in discussions on the future design of the monetary union, not least to secure broad political support and avoid future friction.

Additional context for understanding the outcome of these negotiations is provided by Moloney and Whitaker (2023), who also draw on data from *EMU Choices*. They show that the main dividing lines in the reform negotiations during 2010–15 ran not between euro area and non-euro area countries, but between net contributors and net recipients of financial support within the euro area. Countries with

low debt and restrictive fiscal policies – regardless of euro membership – were more successful than highly indebted countries in shaping the new regulatory framework. In line with this, Lundgren et al. (2023) show that the European Commission exerted greater influence over member states most exposed to the crisis, primarily southern European debtor countries. These findings suggest that bargaining power during the euro crisis and its aftermath was more a function of economic strength than euro membership, a conclusion also supported by broader political-economic analyses of the reform process (Frieden and Walter 2017).

In summary, quantitative research on negotiation success does not provide clear support for the idea that euro membership in itself leads to greater influence in EU decision-making. On the contrary, several studies show that non-euro area countries such as Sweden, Denmark and, previously, the United Kingdom have been highly successful in attaining their preferences, both in general policy negotiations and in negotiations on fiscal rules. At the same time, some empirical evidence suggests that euro area countries on average adopt more integration-friendly positions than non-euro area countries, especially on issues relating to deeper institutional cooperation within the monetary union. Differences in negotiation outcomes are instead mainly explained by other factors, such as economic vulnerability, preference salience and substantive positioning, rather than by membership of the monetary union. It should nevertheless be borne in mind that these studies focus on observable outcomes at the negotiating table, which means that other forms of influence, such as agenda control and norm setting, are not captured.

5 Summary and implications for Sweden's future influence

5.1 Summary of the state of research

The research as a whole does not provide clear answers as to how Sweden's political influence in the EU is affected by remaining outside the

monetary union. Some qualitative studies emphasise that the Euro-group has grown in importance and reinforced institutional exclusion, while others suggest that non-membership continues to undermine Sweden's political credibility and influence, particularly in long-term, strategic discussions. Quantitative studies of network capital, by contrast, show that Sweden is consistently regarded as a key partner in the EU's decision-making system, even though countries that join the monetary union tend to gain network advantages in the area of economic policy. Studies of negotiating success find no statistically significant differences between euro area and non-euro area countries, either in general policymaking or in most areas of economic policy.

The fact that research results differ across approaches need not be contradictory, but may instead reflect that different forms of influence are being captured. Case studies document exclusion processes and political costs that are difficult to measure quantitatively, while survey and negotiation data mainly capture observable patterns of cooperation and outcomes. Differences may also depend on policy area, the level of decision-making, and the time period covered by the analysis. Perhaps the most reasonable interpretation is that the research yields different results not because the approaches are incompatible, but because the effect of euro membership on political influence varies along three main dimensions: policy area, political level and time.

First, research indicates that the effect of euro membership on political influence varies across *policy areas*. The difference is most pronounced in monetary policy: non-members of the monetary union are not represented on the ECB Governing Council and therefore have no direct influence over its monetary policy decisions (while retaining the option of pursuing an independent monetary policy). These countries also have considerably more limited influence in matters relating to fiscal policy in individual euro area countries and the euro area as a whole. Decisions in these areas are prepared within the Eurogroup, in which Sweden does not participate. At the same time, several studies indicate that euro area countries have sought to include non-members in certain discussions, particularly potential future members, which is also consistent with the patterns that emerge in quantitative data. In the broader field of fiscal policy, the differences appear more mar-

ginal, although the Eurogroup's strengthened coordination is widely perceived to have effects extending beyond its formal mandate. By contrast, in other policy areas – such as the single market, climate, energy and so on, which cover most of the EU's decision-making powers – there is no systematic evidence that euro membership affects member states' influence.

The influence effect of remaining outside the monetary union also varies by *the political level*. At the highest level, in the European Council and in discussions on the EU's long-term direction, qualitative research suggests that Sweden's non-membership may contribute to a loss of credibility.²¹ The country may be perceived as ambivalent towards European integration, which is considered to affect its influence in strategic deliberations. This type of influence is difficult to quantify and the evidence appears to be partly anecdotal, but the concern has recurred in theoretical and qualitative studies for three decades. At the civil servant level, the picture is different. Research on network capital shows that non-euro area countries, including Sweden, have central positions in the EU's preparatory machinery and maintain broad cooperative relationships. This also holds in economic policy, although the data indicate that countries that join the euro tend to gain cooperative advantages over time. Case studies further suggest that Sweden's diplomatic networks and constructive approach have helped compensate for formal exclusion at the civil servant level.

Finally, results also vary by *time period*. In the early phase after the establishment of the monetary union, research suggests that the difference in institutional influence between members and non-members of the monetary union was relatively limited. The euro crisis of 2009, however, increased the importance of the Eurogroup, which emerged as a central forum for coordination, with the consequence that countries outside the monetary union such as Sweden were sometimes faced with pre-agreed compromises. Following the UK's withdrawal, this development was further reinforced, as non-euro area countries lost an important cooperation partner and euro area countries were

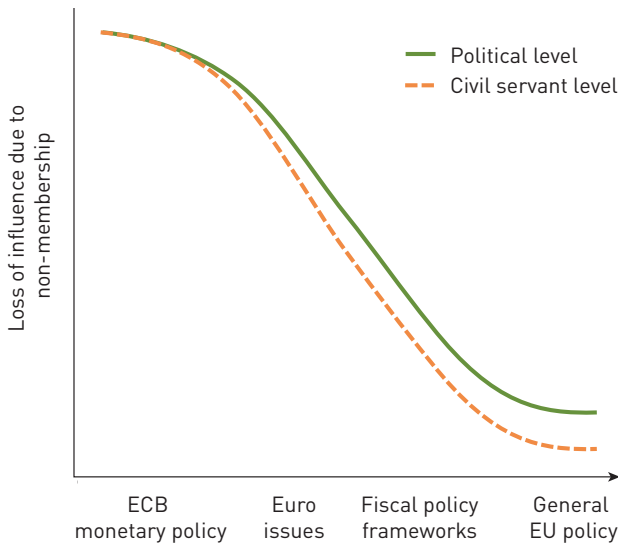
21 The European Council consists of the heads of state and government of the EU member states and the Presidents of the European Commission and the Council. It determines the overall political direction of the EU.

able to form a qualified majority on their own. In recent years, however, this divide has possibly become less pronounced, as the EU's joint pandemic support for 2020–21 was negotiated within the framework of the EU27 and was characterised by a more pan-European approach to crisis management.

In summary, the partly contradictory findings in the literature can perhaps be reconciled through a “ski jump model” of how Sweden's influence has been affected by its position outside the monetary union (Figure 7). Across policy areas, the loss of influence is almost complete in the area of monetary policy, significant in matters relating directly to the euro area (especially those dealt with by the Eurogroup), marginal but growing in broader fiscal policy coordination at the EU level, and marginal or non-existent in other areas. Across political levels, influence losses are greatest at the highest political level, especially in discussions about strategic direction, while they are less pronounced at the civil servant level, where Sweden's strong position in informal networks serves as a countervailing force. Over time, the loss of influence appears to have increased somewhat in euro and fiscal policy matters, while remaining largely unchanged in other areas (which means that the curve in Figure 7 may have become steeper).

These conclusions are based on the current state of knowledge, which remains limited in several respects. This applies in particular to effects at the highest political level (such as the European Council), where formal decision-making structures operate alongside informal and personal negotiating relationships that are difficult (though not impossible) to map. Here, Sweden's position in strategic discussions is particularly poorly understood, given recurring claims in qualitative studies about reduced impact in ideational and strategic debates. Comparative analyses across non-euro area countries are also relatively few, making it difficult to assess how Sweden's more cautious stance – compared to, for example, Denmark's clear and formal exemption – affects credibility and influence. Finally, there is a lack of longitudinal studies covering the period following the pandemic response, which limits our understanding of how Sweden's position has developed in recent years. Future research in the network and negotiation success traditions is therefore likely to provide important new insights.

Figure 7 Summary model of Sweden's loss of influence as a result of not being part of the monetary union



5.2 Consequences for Sweden's future influence

Future changes in the EU may affect the validity of the reported research results and thus Sweden's strategic considerations regarding the monetary union. Over the coming decade, the EU is likely to undergo a series of changes that could reshape the institutional and political landscape. Three trends are particularly significant: geographical enlargement, the expansion of the monetary union, and a potential deepening of fiscal policy cooperation.

The issue of enlargement has been attained renewed priority following Russia's invasion of Ukraine in 2022. According to the European Commission, preparations should be made for enlargement to 30, 33 or 36 member states, depending on which groups of candidate countries join (Ehin 2025). This includes the so-called Association Trio (Ukraine, Moldova and Georgia), the countries of the Western Balkans (Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia), and, in a more hypothetical scenario, Turkey, even though its

accession negotiations are currently frozen. At the same time, further enlargement of the monetary union is likely, albeit at a slow pace. Croatia joined the euro in January 2023, Bulgaria in 2026, and Romania has expressed its ambition to follow suit. Finally, it is possible that the euro area countries will move towards deeper cooperation to address future crises, which will likely revive debates on differentiated integration as a means of reconciling a larger membership with the need for deeper coordination (Schimmelfennig 2023).

To structure the discussion on how Sweden's choices regarding the euro may affect its future political influence, a scenario-based approach is adopted. The six scenarios analysed below are derived from different possible developments in the EU and the euro area and how these may affect the mechanisms that research has consistently identified as sources of influence: formal participation and decision-making power, the ability to build effective coalitions and networks, and political credibility in integration issues. This is not an exhaustive analysis, either in terms of the range of possible scenarios or the full implications of each scenario for political influence.

(1) The same members in both the EU and the monetary union as today. This is the scenario in which existing research findings are most directly applicable, and the general conclusions can therefore be expected to remain valid. If Sweden remains outside the monetary union, it will continue to lack formal representation in the Eurogroup and experience some exclusion in fiscal policy coordination, while its broader political influence is unlikely to be substantially affected. Empirical analyses of both network capital and negotiation success show no systematic differences in influence between euro area and non-euro area countries in today's institutional context, and Sweden has so far succeeded in building broad coalitions and achieving success in negotiations even without euro membership.

(2) Same EU members but expanded monetary union. In this scenario, more countries choose to join the euro, while only a few remain outside. The monetary union would thus encompass a large majority of the EU's population and member states. The formal distribution of decision-making power would not be directly affected, since a united euro bloc already commands a qualified majority today, but a larger euro

area could lead to stronger internal coordination and more extensive informal decision-making within the Eurogroup. One risk is that this could, over time, undermine Sweden's network capital and coalition-building opportunities. With fewer natural alliance partners outside the monetary union, greater demands would be placed on active diplomacy to defend Swedish positions and form coalitions in the Council, especially on issues with financial or macroeconomic implications. Although the conclusions remain uncertain, interview studies indicate that such a development could increase the political costs of continued non-participation and thus likely intensify pressure on Sweden to clarify its long-term position on the euro, either by preparing for entry or by initiating negotiations on a formal opt-out similar to that of Denmark.

(3) An enlarged EU with unchanged membership of the monetary union. An eastward and southward expansion of the EU would alter the formal balance of power within the Union. Calculations by Ehin (2025) show that the share of euro area countries in an EU of 36 members would decrease from 74 per cent to around 61 per cent, increasing the relative weight of non-euro area countries. Due to their larger population (69 per cent), the members of the monetary union would still be able to achieve a qualified majority under the current decision-making rules. At the same time, eastward enlargement would shift the balance of power from the large, older member states in the north and west to smaller, newer members in the east and south. In an EU36, post-communist states would constitute a majority of members (Ehin 2025). For Sweden, this could open up a theoretical possibility for new coalitions. However, existing research suggests that Sweden has traditionally had weaker ties and fewer shared interests with countries in Eastern Europe in EU negotiations. This increases the risk that Sweden will end up in a "residual bloc" of non-euro area countries whose institutional, political and economic profiles differ from Sweden's. Moreover, research on differentiated integration (e.g., Schimmelfenig 2023) suggests that a more heterogeneous EU likely implies a clearer division between a core – in practice, the euro area – and other member states. While the literature offers no clear predictions regarding the precise consequences for influence, this scenario makes it more likely

that continued non-participation could entail further, albeit marginal, exclusion of Sweden.

(4) *Enlargement of both the EU and the monetary union.* If both the Union and the euro area were to expand in parallel, the balance of power between participants and non-participants in the monetary union would not change substantially: even in a larger EU, the euro area countries would still be able to form a qualified majority. At the same time, the euro area would become more heterogeneous, which could make internal agreement more and, to some extent, reduce the internal coordination advantages of the Eurogroup. In that case, it would potentially reduce the above-mentioned exclusionary effects. For Sweden, this scenario could open up new opportunities for coalition building with both new EU and non-euro area countries. However, as mentioned in scenario 3, there is a lack of clear common interests, and previous research shows that Sweden's network capital vis-à-vis many Eastern and Southern European members remain weak. The political costs of continued non-participation may therefore become more salient in this scenario, especially if the euro area grows more rapidly than the EU as a whole and reinforces the euro as the default norm rather than a voluntary option.

(5) *Deeper cooperation within the monetary union.* In this scenario, membership remains unchanged, but the euro area takes steps towards deeper integration. This could involve, for example, common fiscal stabilisation instruments, increased coordination of national fiscal policy or strengthened institutional powers for the Eurogroup. For Sweden, such developments would not alter the formal balance of power, but deeper coordination within the Eurogroup entails a risk that Sweden will find it more difficult to bridge the institutional gaps that already exist today. Opportunities for coalition-building would be less directly affected, but there could be an increased risk that the euro area would in practice function as a more closed political sphere, which might gradually reduce access to information and network capital. Over time, the political costs of remaining outside are therefore likely to increase, particularly if the euro area comes to be perceived not only as a monetary union but as the engine of EU cooperation. If, by contrast, deeper fiscal policy cooperation were to develop at the pan-European level,

similar to NextGenerationEU, these exclusionary effects would be less pronounced.

(6) *New euro crises or renewed tensions within the euro area.* This scenario captures a situation in which internal tensions within the monetary union recur, for example through a new debt crisis or increased imbalances among member states (see Andersson and Jonung in Chapter 7). Past experience, particularly from the euro crisis, suggests that such challenges can shift some decision-making processes to the Euro-group, increasing the risk that non-euro area countries such as Sweden are excluded from key coordination processes. When it comes to coalitions, though, evidence from previous crises suggest that negotiations have often cut across the euro/non-euro divide, as groups with similar views on fiscal discipline and solidarity have tended to cooperate. For Sweden, this means that remaining outside the euro does not necessarily preclude participation in coalitions with other countries during periods of crisis. Sweden's influence is likely to be shaped less by formal euro membership than by the political logic that prevails in the next crisis, i.e., whether the crisis is framed as primarily affecting the euro area members or the EU as a whole. The negotiations on pandemic support (and later defence and Ukraine) point to a desire for broader solutions in times of crisis, which could tend to reduce the importance of non-membership.

Overall, the scenarios show that Sweden's continued non-participation in the monetary union would entail varying degrees of loss of influence depending on how the EU develops. The scenario with the least impact is (1), where the current balance between participants and non-participants in the monetary union remains, as research has shown that Sweden has largely succeeded in compensating for its exclusion. The most challenging scenario from an influence perspective is (2), where the euro area grows to include a clear majority of EU member states. In this case, the risk of marginalisation increases, as deeper integration in the euro area would likely reinforce informal coordination and negotiations in institutional arenas where Sweden lack voting rights, reduce opportunities for coalition-building as fewer strategic partners remain outside the euro area, and raise the political

costs of remaining outside as the euro becomes the norm rather than the exception.

Scenario (5), involving deeper cooperation within the euro area, would likely reinforce existing exclusion effects. Scenario (3), a larger EU but no enlargement of the monetary union, represents more or less a continuation of the current situation and would therefore imply status quo regarding exclusion effects, provided that the euro area does not develop into a more clearly defined core that sets the agenda for the EU as a whole. Finally, scenario (6), involving a renewed euro crisis, is the most unpredictable. Although these predictions are highly uncertain – and the probability of each scenario is also difficult to assess – an overall assessment suggests that the challenges of continued non-participation are more likely to increase rather than to decrease over time.

5.3 Concluding discussion

The EMU Inquiry (1997) highlighted that Swedish membership in the monetary union would increase presence and influence in central institutions, but also entail the loss of an independent monetary policy tailored to Swedish conditions. This trade-off remains relevant, even though the surrounding conditions have changed. Sweden's non-membership has so far proved manageable, but the factors that have enabled continued influence – in particular access to informal networks, coalition-building ability, and a good reputation – may be affected in the future as both the EU and Sweden evolve.

Swedish membership of the monetary union would remove the institutional exclusion currently faced by non-euro area countries. Sweden would gain direct representation on the ECB Governing Council and participation in the Eurogroup, which, according to research, would strengthen its opportunities to exert influence. Joining the euro could also strengthen Sweden's political credibility as an actor committed to European integration, potentially increasing its influence in debates about the future of the EU. At the same time, research does not support the view that euro membership in itself guarantees greater negotiating success or a stronger network position.

If Sweden chooses to remain outside the monetary union, the challenge of compensating for institutional exclusion remains. As long as the balance between members and non-members of the monetary union persists, and the Eurogroup remains relatively open, research suggests that Sweden has good opportunities to limit the “price of exclusion.” However, if the euro area expands or cooperation within the Eurogroup deepens, the risk of marginalisation increases. In such a situation, it becomes particularly important for Sweden to continue to take action to mitigate the effects of exclusion. Sweden could, for example, work to increase the transparency of the Eurogroup and its preparatory bodies, thereby creating better opportunities to defend Swedish (and other non-euro area countries’) interests. Continued – or even increased – investment in diplomatic networks and coalitions would strengthen informal influence. As mentioned above, these strategies are inherently vulnerable, as they rely on the goodwill of the euro area countries, which can be influenced by a wide range of factors, including a country’s reputation, domestic political conditions, personal chemistry and other ones that are difficult to control and predict.

In the longer term, Sweden’s influence could likely be strengthened by clarifying its position vis-à-vis the monetary union. Although research on this topic remains limited, there are indications that the difference between formal and de facto opt-outs matters (see Adler-Nissen 2014). Denmark has a treaty-based exemption and is perceived as a legitimate outsider, while Sweden occupies a more ambiguous middle ground, where it is formally obliged to join but maintains a politically cautious stance. This ambivalence may weaken the credibility of Swedish positions on euro-related issues and thereby indirectly reduce their influence. A clearer stance – whether it means preparing for entry or seeking a formal opt-out – could reduce uncertainty and signal a more consistent approach to European integration.

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CHAPTER 12

A new decision on the euro

Johannes Lindvall

1 Introduction

When eleven European Union member states introduced the euro as their currency on 1 January 1999, Sweden chose to remain outside the monetary union. In the early 2000s, the euro was a matter of intense debate in Sweden, culminating in a referendum on 14 September 2003, where 55.9 per cent of voters voted no, 42.0 per cent voted yes, and 2.1 per cent abstained. Since 2003, the euro has not been a salient issue in Swedish politics. Individual parties, especially the Liberals, have sought to revive the debate from time to time, but without much success.

Recently, however, several party leaders have said they are open to a renewed debate on the euro. Ahead of the 2024 European Parliament elections, the leader of the Social Democrats, Magdalena Andersson, said both the “advantages and disadvantages” of the euro had become more pronounced (Olsson 2024, our translation), and the leader of the Moderates, Ulf Kristersson, called for a “serious discussion” (TT 2024, our translation). In a special debate in parliament on 27 January 2026, the Social Democrats and the Moderates signalled openness to revisiting the issue, whereas other parties, including the Sweden Democrats, reiterated their opposition to Swedish euro adoption.

This chapter discusses the possibility of a new Swedish decision on the euro from a constitutional, historical, comparative, and theoretical perspective. It asks whether a new decision should be preceded by a new referendum or whether the Swedish parliament, the Riks-

dag, should decide on its own. My conclusion is that a new referendum would be the best option. The euro referendum was the most successful referendum in Swedish history: the alternatives were clear, the debate preceding the referendum was informative, and most citizens were happy with how it was conducted. There are good prospects for repeating this success if the euro issue were to return to the political agenda – especially given that public opinion appears to be less polarised today than it was in the early 2000s.

2 Constitutional considerations

Let us begin with the constitutional aspects of the euro issue. Who gets to decide which currency should be used in Sweden?

2.1 Sweden and the EU

According to Article 140 of the Treaty on the Functioning of the European Union (formerly Article 109j of the EC Treaty) and the Protocol on the convergence criteria, EU member states are expected to adopt the single currency when four criteria are met: (1) low and stable inflation (no more than 1.5 percentage points above the average of the three member states with the lowest inflation); (2) sound public finances (the deficit must be below 3 per cent of GDP and government debt below, or approaching, 60 per cent of GDP); (3) participation in the ERM II exchange-rate mechanism for at least two years without serious difficulties and without devaluing the national currency against the euro; and (4) long-term interest rates that do not exceed the interest rates in the three member states with the lowest inflation by more than 2 percentage points.

Unlike its neighbour Denmark, Sweden has not requested a formal derogation from these provisions. The formal reason that Sweden has not introduced the euro is instead that the third convergence criterion has not been met, which in turn is due to Sweden's decision not to join ERM II.

There are strong reasons to believe that Sweden could participate fully in the monetary union if it chose to do so. Several legal experts, notably Ulf Bernitz (2000, 2002), have therefore argued that Sweden is in breach of the EU treaties by not actively seeking to introduce the euro. According to this view, the matter of the euro was in fact already decided when Sweden joined the EU on 1 January 1995.

However, ever since Sweden joined the European Union, it has claimed a right to decide for itself whether and when to adopt the single currency. When the membership negotiations began in 1993, the Swedish government stated that “a final Swedish position relating to the transition from the second to the third stage will be taken in the light of future events and in accordance with the provisions of the Treaty” – a statement that did not provoke any reaction from the EU (EMU Inquiry 1997, p. 238). The EU has not taken any steps to force Sweden to adopt the euro. Notably, the EU Treaties do not specify a deadline for when the convergence criteria must be met.

It should therefore remain possible for the Swedish government and parliament to maintain their current position that it is ultimately up to the Riksdag to decide whether Sweden should adopt the euro.

This is also the only politically tenable position, since both the euro referendum more than twenty years ago and the referendum on EU membership more than thirty years ago assumed the Riksdag would have the final say. For example, in the government bill that called for the referendum on EU membership in 1994, the government stated that “the Riksdag will decide on the issues of a common currency and central bank when they become relevant” (Proposition 1993/94:245, our translation). Changing course more three decades later by saying Sweden has no choice in the matter after all is hardly a politically acceptable alternative (Eriksson and Ljungkvist 2021).

It was probably a conscious decision by the political parties to remove the issue of the common currency from consideration in the 1994 referendum. Public opposition to the emerging monetary union was much stronger than opposition to the EU as such. If the euro issue had been included in the original referendum on membership, the result might have been different.

2.2 The Riksdag, the government, and the people

The government does not have the authority to decide on its own to adopt the euro. Only the Riksdag can. This follows from several key provisions of Sweden's main constitutional document, the Instrument of Government. It says the government "is responsible for general currency policy matters" (Chapter 9, Section 12) but also states that the government cannot, on its own, enter into binding international agreements of major importance (Chapter 10, Section 3). The Instrument of Government also states directly that only the Riksdag can transfer decision-making powers to the EU (and the transfers must not compromise basic constitutional principles).

It could be argued that Sweden has already entered into a binding international agreement by ratifying the Treaty on the Functioning of the European Union and that the Riksdag has consequently agreed in principle to introduce the euro in Sweden. However, as noted above, this was not how the EU treaties were perceived in Sweden when they were ratified. Furthermore, adopting the euro would require several changes in ordinary legislation, and only the Riksdag can enact legislation in Sweden. For example, Chapter 4, Section 1 of the Sveriges Riksbank Act states that "Sweden's currency shall be called the krona" (our translation). This is an additional reason why adopting the euro would require a decision by the Riksdag.

In principle, the Riksdag could decide on its own to adopt the euro even if the 'no' side won the 2003 referendum, because the referendum was not binding, but advisory. In Sweden, binding referendums are only held on constitutional issues and may only be used to stop pending constitutional amendments, not to take new political initiatives. Chapter 8, Section 16 of the Instrument of Government states that a referendum on a pending constitutional proposal shall be held "if proposed by at least one tenth of the members of the Riksdag and at least one third of the members vote in favour of the proposal" (our translation). The vote itself is held in conjunction with the next parliamentary election, where voters can "declare whether they accept the pending constitutional amendment or not." If more than half of those who have cast valid votes in the parliamentary election vote 'no', the constitutional

amendment is rejected; if not, the Riksdag will vote on the proposal again after the election. This procedure has never been used.

This means that all referendums held in Sweden so far have been advisory, not binding. Only the Riksdag may decide to hold a country-wide advisory referendum and how to conduct it (Chapter 8, Section 2 of the Instrument of Government), and it is not formally required to follow the outcome. In the referendums on the EU and the euro in 1994 and 2003, respectively, the political parties promised to follow the results, but those promises were not legally binding; they were comparable to election promises. A party that breaks such a clear promise to the voters is likely to pay a high political price for doing so, but the party itself decides what to do (or, ultimately, the individual members of the Riksdag who represent the party).

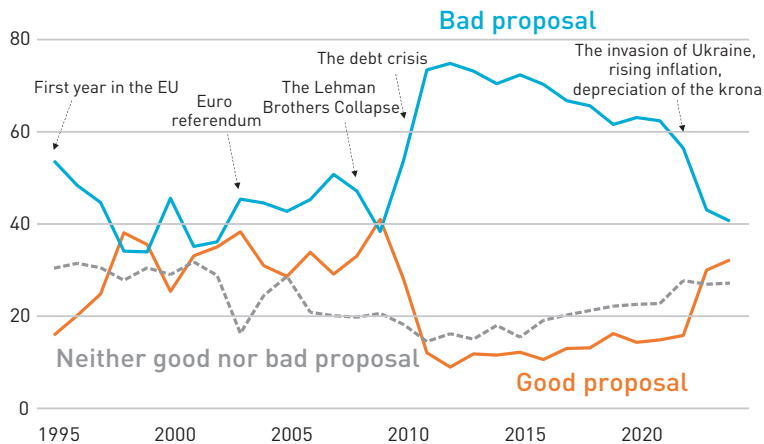
Legally speaking, it would thus be possible for the Riksdag to adopt the euro without first holding a referendum. The more difficult and important question is whether it would be desirable.

3 The euro issue in Sweden

Figure 1 describes Swedish public opinion on the euro using survey data collected by the SOM Institute at the University of Gothenburg. The wording of the questions in the SOM surveys has varied over the years. Between the middle of the 1990s and the middle of the 2000s, respondents were asked about their views on possible “membership in the EMU”. Since the middle of the 1990s, they have been asked for their opinion on a proposal to “introduce the euro as currency”. The diagram also highlights several events that have likely influenced Swedes’ views on the euro.¹

1 For more detailed analyses of Swedes’ views on both the EU and the euro, see especially Johansson and Lewander (2024, 2025). The reason why the SOM surveys in the 1990s and early 2000s asked respondents for their views on ‘membership of the EMU’ even if Sweden was already a member was that this terminology was common in the political debate in Sweden prior to the referendum in 2003.

Figure 1 Swedes' opinions on the euro (SOM surveys), 1995–2014, per cent of respondents



Note: Between 1995 and 2005, respondents were asked to respond to the statement 'Sweden should become a member of the EMU'. From 2006 onwards, they were instead asked to respond to the statement 'Sweden should adopt the euro as its currency'. In both cases, the response options were 'very good proposal', 'fairly good proposal', 'neither good nor bad proposal', 'fairly bad proposal' and 'very bad proposal'. In the figure, the response options 'very good proposal' and 'fairly good proposal' have been combined into 'good proposal'. 'Very bad proposal' and 'fairly bad proposal' have been combined into 'bad proposal'.

Source: The national SOM surveys 1995–2024.

As Figure 1 shows, Swedes were predominantly negative towards European monetary unification during the first two years after Sweden joined the EU on 1 January 1995. At the end of the 1990s and in the beginning of the 2000s, public opinion was more balanced. After the 2003 referendum, which was won by the 'no' side, opposition to the euro remained relatively strong until the global financial crisis of 2007–2009, when support for the euro increased.

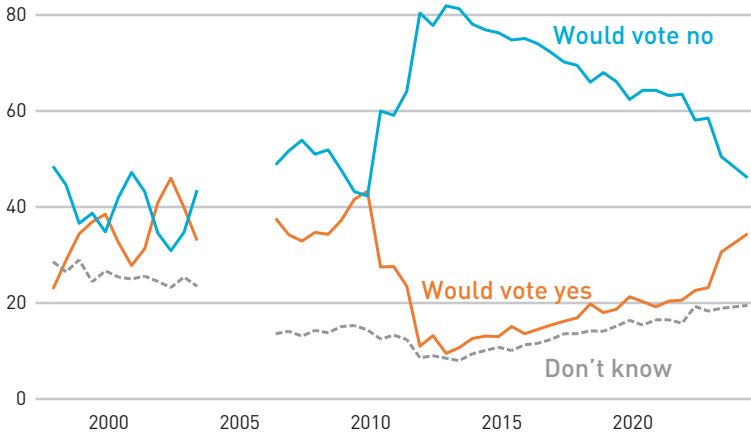
When the economic downturn in the late 2000s turned into a broad and deep fiscal crisis in many euro area countries in the early 2010s, opposition to the euro grew significantly. The gap between the yes and no sides remained very large until 2022–23. Over the past two to three years, the difference between the yes and no sides has narrowed to roughly the same level as in the referendum in 2003. This change in public opinion is probably related to the sharp fall in the exchange rate

of the krona in 2022–23 and the uncertain security environment after Russia's attack on Ukraine in 2022.

It is likely that the events highlighted in Figure 1 – EU membership, the referendum, the global financial crisis, the European debt crisis, the war in Ukraine, and the falling krona exchange rate – have influenced Swedes' views on the euro. However, there are relatively few studies that test different hypotheses about changes in public opinion on the euro since Sweden joined the EU more than thirty years ago. It is also important to note that citizens' interpretations of major political and economic events depend on historical experiences that differ across countries. Sundell (2024) compares public opinion on the euro in Denmark, Finland, and Sweden and shows that the European debt crisis had different effects in the three countries. In the late 1990s and early 2000s, public opinion was very similar in the three countries, but when the euro banknotes and coins were introduced in Finland in early 2002, the Finns became much more positive to the euro than Danes and Swedes. Ten years later, the European debt crisis had a clearly negative effect on public opinion regarding the euro in Denmark and Sweden, but no noticeable effect in Finland. These patterns suggest that events such as the euro crisis can be interpreted very differently depending on the political and economic context.²

2 See also Roth and Jonung (2020), who draw similar conclusions from a comparison between Austria, Finland and Sweden.

Figure 2 Swedes' opinions on the euro (Statistics Sweden's party affiliation surveys), 1997–2024, per cent of respondents

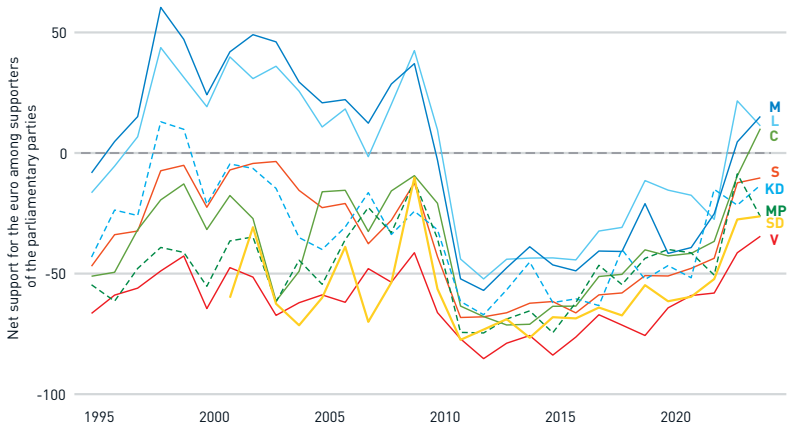


Note: Over the years, the wording of the questions has changed: 'Several countries within the EU have formed the European Monetary Union (EMU), which will, among other things, mean a common currency in these countries. If we were to vote on Sweden joining the EMU, how would you vote – for or against joining?' (until 2001); 'Several countries within the EU have formed the European Monetary Union – EMU – which, among other things, means a common currency in these countries. If we were to vote on Sweden joining the EMU, how would you vote – for or against joining?' (2002); 'This autumn, we will have a referendum in Sweden. How would you vote if the referendum were held today? Would you vote YES or NO to the question: Do you think Sweden should adopt the euro as its currency?' (2003); 'If we were to hold a referendum today on replacing the *krona* as our currency, would you vote yes or no to introducing the euro as Sweden's currency?' (from 2006 onwards). There is a break in the series between 2004 and 2006, which means that the data before and after are not directly comparable.

Source: Statistics Sweden's party affiliation surveys 1997–2024.

Figure 2, which uses data from Statistics Sweden's recurring party affiliation surveys rather than data from the SOM Institute to describe public opinion on the euro during roughly the same period as in Figure 1, paints a similar picture. The main difference between Figure 2 and Figure 1 is that respondents in the Statistics Sweden surveys are asked to consider a hypothetical referendum, whereas the SOM surveys include the euro question as part of a large battery of political issues.

Figure 3 Opinions on the euro among supporters of the parties in the Riksdag (SOM surveys), 1995–2024, per cent of respondents



Note: Between 1995 and 2005, respondents were asked to respond to the statement 'Sweden should become a member of the EMU'. From 2006 onwards, they were instead asked to respond to the statement 'Sweden should adopt the euro as its currency'. In both cases, the response options were 'very good proposal', 'fairly good proposal', 'neither good nor bad proposal', 'fairly bad proposal' and 'very bad proposal'. In the figure, the response options 'very good proposal' and 'fairly good proposal' have been combined into 'good proposal'. 'Very bad proposal' and 'fairly bad proposal' have been combined into 'bad proposal'.

Source: The national SOM surveys 1995–2024.

Figure 3 describes net support for the euro – the percentage who think it would be a good idea to introduce the euro minus the percentage who think it would be a bad idea – among voters for the eight parties that are represented in the Riksdag (or, to be more specific, among respondents who have stated a preference for a particular party). As the diagram shows, the ranking of the political parties has remained relatively unchanged over time, with the exception that Centre Party voters have become substantially more positive towards the euro over time. Voters for the Liberals and the Moderates have consistently been the most positive, while voters for the Green Party, the Sweden Democrats, and the Left Party have consistently been the most negative. The Christian Democrats and the Social Democrats have been more divided.

Figure 3 also shows that the distances between the parties have decreased over time. In connection with the European debt crisis in the early 2010s, voters across parties became clearly more negative towards the euro. The upturn in recent years has likewise been common to voters of all parties. This means that the political situation today is both like and unlike that at the time of the referendum in 2003. The similarity is that the gap between the yes and no sides in the whole population is roughly the same as it was around 2003. The difference is that the euro issue is less politicised today. This is because Liberal and Moderate Party voters are less positive than they were previously, while Green Party, Sweden Democrats, and Left Party voters are more positive.

This reduced party-political polarisation has important implications for the question of a second referendum on the euro. The conditions for an informative debate on the issue are probably somewhat better than in 2003, as all parties include large groups of voters who disagree with the party line. At the same time, even more parties today than at the beginning of the 2000s have strong incentives to choose the referendum option, as their voters hold conflicting views on the euro.

There is another source of data on public opinion regarding the euro, the European Commission's Eurobarometer surveys, particularly the targeted surveys conducted in EU countries that have not yet adopted the euro as their currency. In the Eurobarometer surveys, support for the euro generally appears to be slightly higher than in the Swedish surveys conducted by the SOM Institute and Statistics Sweden. The main explanation is that the special Eurobarometer survey in member states with their own currencies does not ask respondents specifically how they feel about the proposal to introduce the euro or how they would vote in a hypothetical referendum. Instead, it asks a more general question: 'Overall, are you personally more positive or negative towards introducing the euro [in Sweden?]' In the Eurobarometer, the question is also asked after a long series of other questions about the EU and the euro, which probably influences respondents who are generally positive towards the EU but hesitant when it comes to the euro. There are strong reasons to believe the SOM and SCB surveys provide

a more reliable picture of public opinion in Sweden over time than the Eurobarometer surveys.

4 Previous referendums in Sweden

The referendum on the euro in 2003 was the sixth national referendum in Swedish history (see Table 1). The five previous referendums concerned a proposed ban on alcoholic beverages (1922), driving on the right side of the road (1955), pensions (1957), nuclear power (1980) and EU membership (1994).

Table 1 National referendums in Sweden, results in per cent

Question	Date	Yes	No	Line 1	Line 2	Line 3	Voter turnout
Prohibition of alcoholic beverages	27/8 1922	49	51	–	–	–	55
Right-hand traffic	16/10 1955	16	83	–	–	–	53
Pensions	13/10 1957	–	–	46	15	35	72
Nuclear power	23/3 1980	–	–	19	39	39	76
EU membership	13/11 1994	52	47	–	–	–	83
Euro	14/9 2003	42	56	–	–	–	83

Note: In the 1957 referendum on pensions, there were three alternatives: option 1 – general and compulsory supplementary pensions (ATP), advocated by the Social Democrats and the Communists; option 2 – voluntary supplementary pensions with state guarantees, proposed by the Centre Party; and option 3 – voluntary occupational pensions through collective agreements without state guarantees, supported by the Liberals and the Conservatives. In the 1980 referendum on nuclear power, there were also three alternatives: option 1 – gradual phase-out of nuclear power without a specific time frame, with continued private ownership, mainly supported by the Moderates; option 2 – similar to option 1 but with the requirement that future energy plants be owned by the state and municipalities, supported by the Social Democrats and the Liberals; and option 3 – phase-out of nuclear power within ten years, no further expansion, and investment in renewable energy sources, supported by the Centre Party, the Communists and the Christian Democrats.

Advisory referendums have thus been held throughout Sweden's history as a democracy, but they have been quite rare: the average interval between two referendums is 16 years, or four to five electoral terms. As shown in Table 1, voter turnout in the referendums has increased

over time. In the first two referendums, it was below 60 per cent, in the next two above 70 per cent, and in the last two, on the EU and the euro, above 80 per cent. The wording of the questions has varied. In the first two and the last two referendums, voters answered straightforward yes-or-no questions. For example, the Act (1922:176) on the referendum on a proposed prohibition of alcoholic beverages stated the following simple rule: “Those who wish to see a law adopted on the complete prohibition of alcoholic beverages in the realm shall vote yes; those who do not wish this shall vote no” (our translation). In the referendums on pensions and nuclear power in the 1950s and 1980s, voters chose between three alternatives, which made the results more difficult to interpret.

In general, voters have acted conservatively in referendums so far. As Oscarsson (2021, p. 554) points out, the Swedish voters chose to maintain the status quo in five out of six referendums: they voted against a general ban on alcoholic beverages, against driving on the right side of the road and against the euro, and the most radical proposals (line 1 and line 3) did not receive majority support in the referendums on pensions and nuclear power.

4.1 The aftermaths of previous referendums

The results of the two referendums on the EU and the euro in 1994 and 2003 have come to be regarded as more definitive than the results of earlier referendums. This is probably due to the high turnout and the fact that the issues voters were asked to consider were straightforward and simple. In the case of EU membership, it would also entail very high costs to revoke the decision to join the Union.

The debate on alcohol policy did not end with the 1922 referendum but continued in the following years, leading to far-reaching regulations of the sale of alcohol in Sweden. Despite the very clear ‘no’ result in the 1955 referendum, eight years later the Riksdag decided to introduce right-hand traffic (the transition finally took place on 3 September 1967). After the 1957 referendum on pensions, the parties in the Riksdag attempted to reach a broad compromise, and it was only when these efforts failed that the ATP system proposed by the Social Dem-

ocrats was introduced after an extremely close vote in the Riksdag in 1958. Thirty-five years later, the Riksdag decided on a major reform of the pension system. The result of the 1957 referendum has thus come to play an increasingly minor role in that policy area.

The nuclear power issue has also remained highly topical in Swedish politics since the referendum in 1980. Between 1999 and 2015, six reactors were shut down, but nuclear power still accounts for 30 per cent of Sweden's electricity production. The Riksdag has also recently decided that the government may grant major loans for new investments in nuclear power. As in the area of pensions, the result of the referendum has thus become less important over time for energy policymaking.

The EU referendum in 1994 and the referendum on the euro in 2003 have been interpreted differently. In these cases, the results of the referendums have continued to guide the policies of the political parties – and inform public opinion – to this day. Support for EU membership has grown steadily in the Swedish electorate since the late 1990s: last year, in 2024, only 13 per cent of respondents in the national SOM survey said they wanted Sweden to leave the EU (SOM Institute 2025). Regarding the euro, public opinion has fluctuated more over time, but as we saw in Section 3, support for the euro remains somewhat weaker than it was at the time of the referendum.

4.2 The right-hand traffic referendum

If the Riksdag were to decide to introduce the euro as Sweden's currency without first holding a new referendum, it would be comparable to its decision in 1963 to introduce right-hand traffic despite the fact that the 1955 referendum had resulted in a clear 'no'. It is therefore instructive to examine the arguments put forward by the proponents and opponents of driving on the right side of the road in the Riksdag debates in the Second Chamber on 10 May and in the First Chamber on 17 May 1963.

The bill on switching to right-hand traffic that the government submitted to the Riksdag in the spring of 1963 said very little about the possibility of holding a new referendum, although the Association for

Left-Hand Traffic had asked for one. Communications Minister Gösta Skoglund merely stated that the bill had been preceded by “consultations ... with representatives of the democratic parties” and that “agreement had been reached that a decision should be made on the transition to right-hand traffic, that a new referendum should not be held and that a bill proposing a change in traffic should be presented to the Riksdag this year” (Proposition 1963:58, p. 36, our translation).

The committee report was also brief:

Finally, regarding the matter of a new referendum, the committee would like to point out that the circumstances are markedly different from those in 1955, especially when it comes to the forecasts for the growth of motoring, and that there are strong indications that public opinion has shifted since the referendum. Although the committee believes that it would have been desirable to ask for the people's opinion once again, in view of these considerations and the urgency of implementing the reform quickly, there is no reason to delay the process by holding a referendum. (Betänkande 1963:L3u23, p. 40, our translation)

In addition to the three arguments put forward in the committee report – the rapid development of motoring since 1955, the presumed shift in public opinion, and the alleged urgency of implementing the change – two additional arguments against holding a new referendum were put forward in the parliamentary debate. One was that the referendum was only advisory, not binding, and the Riksdag was therefore not required to follow the result. For example, the Social Democrat Hilding Johansson said as follows:

It is alleged that due to the 1955 referendum, no reform can be implemented in this area until a new referendum has produced a different result. This argument would be entirely correct if we had had a binding referendum. But we have not. (Protokoll 1963:21, AK, p. 85, our translation)

However, this argument appears to be dependent on the earlier argument that motoring had developed rapidly since 1955, as is evident from Johansson's continued reasoning:

How long should the result of a referendum be considered? Obviously, it is impossible to specify a definite period. For my part, I would say that the result should be considered while the situation remains the same as when the advisory referendum was held. The most important consideration is whether the situation itself has changed since 1955. I have concluded that we have a new situation. (Protokoll 1963:21, AK, p. 86, our translation)

The final argument was that voter turnout in the referendum had been low. Olaus Nyberg of the Liberal Party referred to the 1950 report of the government commission on referendums and the electoral system, which stated that the government and the Riksdag could consider themselves unbound by a referendum if the result “does not appear to be clear-cut due to low voter turnout or a narrow majority”. He believed this applied to the 1955 referendum:

Everyone knows that voter turnout in 1955 was relatively low, at around 53 per cent, and it is doubtful to what extent the result of the vote could be considered binding on the government and parliament immediately after the vote. Now, eight years later, this binding effect must be regarded as weaker still. (Protokoll 1963:21, AK, p. 27, our translation)

Some of the advocates of right-hand traffic hesitated but ultimately supported the government’s proposal. For example, Axel Gustafsson, a Liberal member of parliament, had this to say:

For me, as for many others, going against a referendum has been something of a moral dilemma, and I am not yet completely free of that moral dilemma. The 83 per cent in favour of left-hand traffic in the 1955 referendum was, after all, the people’s answer to a question that had been put to them. (Protokoll 1963:21, AK, p. 106, our translation)

Opponents in parliament were critical of the fact that the government and opposition parties had agreed in advance to introduce right-hand traffic without first holding a new referendum. John Eriksson of the Centre Party, for example, said that the approach was ‘undemocratic and unappealing’:

The government has already secured the support of the opposition parties to such an extent that the matter is practically decided before it has even reached the Riksdag. (Protokoll 1963:21, AK, p. 75, our translation)

Many, like the right-wing politician Jöns Nilsson, believed that the result of the referendum should have been respected:

The majority of the Swedish people have expressed their opinion on the issue, but this is being completely ignored. (Protokoll 1963:21, AK, p. 52, our translation)

The only communist in the Riksdag who still supported left-hand traffic in 1963, Henning Nilsson, believed that advocates of right-hand traffic were underestimating the pace of technological development in the transport sector, which would soon render cars unnecessary:

It is assumed that the cars of the future will look like today's cars, or rather that the traffic of the future will be served by the same means of transport that we have today. I do not think it is at all unrealistic to imagine that in 10–20 years' time we can expect airborne public transport, which will reduce the need for privately owned vehicles. The pleasure of owning a car will be replaced by the pleasure of owning a private aeroplane, and car ownership will be considered outdated. (Protokoll 1963:21, AK, p. 90, our translation)

One cannot help but feel sad that this grand vision did not become reality.

In summary, the bill, the committee report, and the parliamentary debates in 1963 presented five different arguments for introducing right-hand traffic without first consulting the people a second time, despite the clear result of the 1955 referendum: (1) the referendum was only advisory, not binding; (2) the social and economic conditions had changed since 1955; (3) voter turnout in the referendum was low; (4) public opinion had allegedly shifted since the vote was held; and (5) it was urgent to implement the change.

In retrospect, several of these arguments appear remarkably weak, especially the second and fifth. The number of passenger cars in Sweden increased more than tenfold between 1945 and 1955, so the rapid development of motoring was probably obvious to many voters when the referendum was held, and there was also ample time for a new ref-

erendum, considering the fact that the switch to driving on the right on 3 September 1967 was implemented more than four years after the Riksdag's decision in the spring of 1963.

If one nevertheless entertains the idea that the Riksdag's actions in the spring of 1963 can be seen as a precedent for when the Riksdag has good reason to go against a previous referendum, one notes that several of the conditions from 1963 are not met in the case of the euro. The 2003 vote on the euro was, of course, advisory, not binding, but the political parties declared more clearly than in 1955 that they would abide by the result. Voter turnout in the euro referendum in 2003 was not low, but remarkably high. After the referendum, public opinion has fluctuated, but mostly in a negative direction – the opponents have outnumbered supporters in all SOM surveys since 2003 except one, and the same goes for the Statistics Sweden surveys.

5 The referendum on the euro

There are strong reasons to believe that the 2003 referendum on the euro was the best Swedish referendum so far. Oscarsson and Holmberg (2004a, pp. 463–68) highlight the following facts:

1. Voters were presented with two simple alternatives: yes or no to the euro. In this respect, the euro referendum differs from the 1957 pension referendum and the 1980 nuclear power referendum, in which voters were asked to choose between three complex alternatives.
2. Voter turnout was high, unlike in 1922 and 1955. It was even higher than in the previous parliamentary election – something that had not happened since 1922 (voter turnout was even lower in the 1921 parliamentary election, the first democratic election in Sweden, than in the referendum the following year).
3. Voters appear to have considered the issue at stake and were guided both by their general views on European integration and their assessments of the economic effects of the euro itself. The proportion who voted along party lines was relatively low. The view that differences in economic interests explain how citizens voted is sup-

ported not only by the studies in Oscarsson and Holmberg (2004b) but also by other studies, such as Jonung and Vlachos (2007).

4. Newspapers, radio, and television made major efforts to educate the public, giving both experts and politicians a chance to express their views. At least the most interested and engaged citizens appear to have developed new arguments for and against the euro during the campaign, even though it seems to have had relatively weak knowledge effects.
5. A clear majority of voters, including many on the losing side, believed it was a good thing that the referendum was held.
6. After the referendum, 63 per cent of survey respondents said it had been conducted fairly. This is more than the number who voted for the winning alternative. After the 1994 referendum on EU membership, the corresponding figure was only 50 per cent – fewer than those who voted for the winning alternative.
7. Voters who supported the losing alternative – that is, the yes side – did not lose confidence in the political system. On the contrary, confidence among yes voters increased to a greater extent than among no voters (Esaiasson 2004).

Other things did not work as well. For example, there was a clear imbalance in financial resources between the yes and no sides. However, there are strong reasons to believe that the financial advantage of the yes campaign did not have a significant impact on the result. It may even have had the opposite effect. Several studies note that the contest between the no side and the yes side was perceived by many voters as akin to the struggle between David and Goliath.³

The end of the referendum campaign was overshadowed by the murder of Foreign Minister Anna Lindh on 11 September 2003. The murder affected the campaign since several important events were cancelled and people's attention turned to the tragic event in Stockholm. However, most indications are that the murder had a very limited effect on attitudes to the euro. Holmberg (2004) argues that the referendum was not decided in the final days of the campaign.

3 See, for example, Asp (2004), p. 180, and Strömbäck (2004), p. 215.

If a new referendum on the euro were to be held, there is much to be learned from the experiences of 2003, both in terms of how to conduct a referendum in a way that strengthens public confidence in the political system and in terms of which campaign strategies work and which do not.

6 Referendums in other countries

It is not unusual for European countries to decide on issues related to the European Union through referendums. Over the years, citizens in EU member states have voted on joining the Union, leaving it, approving new EC and EU treaties, admitting new member states, and specific policy issues decided by the EU. Denmark has held no fewer than nine referendums on the country's relationship with the EC and the EU – on membership (1972, 63 per cent in favour), on the Single European Act (1986, 56 per cent in favour), on the Maastricht Treaty (1992, 51 per cent against), on the Treaty of Edinburgh (1993, 57 per cent in favour), on the Treaty of Amsterdam (1998, 55 per cent in favour), on the euro (2000, 53 per cent against), on European patent law (2014, 63 per cent in favour), on reconsidering Denmark's opt-out from EU cooperation on justice and home affairs (2015, 53 per cent against), and on reconsidering the opt-out from defence cooperation (2022, 67 per cent in favour).⁴

However, it has been unusual for EU member states to vote specifically on the euro. The referendums in Denmark and Sweden in 2000 and 2003 are in fact the only examples. The Danish and Swedish governments chose to hold referendums on the euro because of the widespread opposition to the EU in both Denmark and Sweden during the 1990s, a period in which several of the leading political parties were internally divided on their views of the EU in general and the monetary union in particular. The governments and parliaments of Denmark and Sweden therefore chose to remove the issue of the euro from consideration when they decided to ratify the Maastricht Treaty (Denmark) and

4 Svensson (2021), p. 696.

join the EU (Sweden). In Denmark, the 2000 referendum was a consequence of Danish voters rejecting the Maastricht Treaty in a referendum held in 1992. Denmark negotiated several exemptions from the provisions of the Maastricht Treaty, including about the euro. These exemptions can only be changed following a referendum, something that did not happen in the case of the euro in the 2000 vote but did happen in the case of European defence cooperation in the 2022 vote.

How well have referendums on EU issues worked? Political science research has pointed in different directions. Many scholars believe that referendums often work poorly because they tend to focus on issues other than the matter at hand. Like elections to the European Parliament, referendums on EU issues sometimes become 'second-order elections', in which voters take the opportunity to express dissatisfaction with the incumbent national government rather than taking a position on the issue the referendum is actually about. After the Brexit vote in 2016, many researchers were highly critical of how the referendum had been conducted and of the actions of the political parties, arguing that the campaign had been biased and populist and that the vote placed the United Kingdom in a very difficult political and economic situation. Rose (2020) even concluded that referendums such as the Brexit vote risk undermining representative democracy in Europe.

However, the most comprehensive political-science study of referendums on EU issues, Sara Hobolt's *Europe in Question* (2009), concludes that most European referendums have worked reasonably well. Her comparative analyses suggest that citizens have been able to make sensible and well-considered decisions about the political issues at stake, if they have been given sufficient information and political parties have exercised leadership by presenting clear alternatives. She concludes by stating that 'voters are smarter than they are often given credit for':

They may not be fully informed about European politics, but they do consider the issues at stake before they go to the ballot box, and they make use of the information provided by parties and the campaign environment. (Hobolt 2009, p. 249)

Hobolt's nuanced conclusions resemble those Oscarsson and Holmberg (2004a) drew a few years earlier regarding the Swedish referendum in 2003. Both the Swedish euro referendum and the Danish euro

referendum three years earlier are among the referendums that, in comparative studies of EU referendums, appear to have been the most successful. Perhaps there is something about European currency cooperation that encourages well-informed political debates, despite the technical nature of the issue and the fact that many voters have limited knowledge of monetary and exchange rate policy. The social and political circumstances in Denmark and Sweden may also have been particularly favourable, since political parties are relatively well organised and public confidence in the democratic system is relatively high.

However, the most important conclusion that can be drawn from comparative scholarship on referendums is that it matters greatly how a referendum is organised and how the campaign is run. This is important to bear in mind if the euro issue should return to the political agenda in Sweden.

7 A new decision on the euro

There are both political and economic circumstances that might bring about a new decision on the euro. The political costs of remaining outside the euro area appear to have been low so far (see Chapter 10 by Lundgren). Sweden's influence over common monetary and exchange rate policy is, for obvious reasons, limited, but the decision not to introduce the euro does not seem to have had major effects in other areas. However, it is conceivable that future changes in the political system of the European Union could lead to an increase in the political costs of remaining outside the monetary union. Economically, the euro issue might return to the political agenda if the costs of remaining outside are seen to be increasing and if Swedish policymakers conclude the country does not benefit from the monetary policy autonomy that comes with a floating exchange rate anyway. The rapidly changing security environment is another possible reason for Sweden to forge stronger ties with other EU countries. It is likely that Finland's decision to join the euro was partly motivated by the country's historically strained relationship with Russia (see, for example, Calmfors 2021, pp. 166–67).

Meanwhile, as some of the other contributions to this volume show, several important arguments against adopting the euro remain, and a few of those arguments are stronger today than they were at the time of the referendum in 2003. The European debt crisis demonstrated that joining the monetary union comes with risks, not least when it comes to being forced to contribute to solving other countries' fiscal problems – an issue discussed by Andersson and Jonung in Chapter 7.

7.1 Is a referendum necessary?

If the euro issue returns to the political agenda, a basic question is how to view the result of the 2003 referendum. Formally, it was advisory, which means that the Riksdag is not legally bound to follow the result. However, the political parties announced before the vote that they intended to abide by it. As we saw in Section 4, most of the arguments that political parties have previously used when going against the result of a previous referendum are hardly applicable in the case of the euro.

One possible objection to this view is that many other decisions of major foreign policy significance – such as the decision to approve Sweden's accession to NATO in 2023 – have been taken by the Riksdag without a prior referendum. How should the Riksdag decide if the euro issue reemerges in a situation in which the economic situation or security environment is changing very rapidly, while opinion polls indicate that there has been a major change in public opinion about the euro – that is, a situation similar to that in the spring of 2022, when Sweden abandoned its old policy of neutrality and decided to seek NATO membership? My answer is that although it may be possible to imagine scenarios in which a new referendum on the euro is unnecessary, they are not particularly likely, since the euro issue differs from the NATO one in several important respects. Voters have already been invited twice to participate directly in political decision-making on the EU and the euro. There is no such tradition in military and security policy, where decisions have always been taken by the government and the Riksdag – often after cross-party negotiations and based on a broad political consensus. The result of the 2003 referendum has also long

been regarded as binding by most political parties. Changing course now would require very strong reasons.

In political theory, there are several ways to understand the role of referendums. A common view is that they are a form of direct democracy. This implies that a modern representative democracy that occasionally organises referendums has a mixed form of government, with elements of direct democracy in an otherwise representative system. Tuck (2016) has described the people in a modern democracy as a 'sleeping sovereign' – a latent political force that normally delegates its power to elected representatives but sometimes 'wakes up' and temporarily regains power. Invernizzi Accetti and Oskian (2022) argue instead that consultative referendums should be seen as a form of communication between elected representatives and the people within the framework of representative democracy, not a competing type of democracy. In this view, the result of a referendum should not be regarded as a binding instruction to decision-makers, but rather as a 'signal' of the state of public opinion at a particular moment in time. Politicians therefore have a responsibility to interpret referendum results considering subsequent events and changing circumstances. One example is the aftermath of the 2016 Brexit vote in the United Kingdom. Invernizzi Accetti and Oskian argue that British politicians misinterpreted their mandate by treating an advisory result as binding and thereby evading responsibility for the consequences of leaving the EU and for how it was done.

It is worth reiterating that, constitutionally speaking, the Riksdag decides on the euro, not the people. However, given that a referendum has already taken place and that it worked as well as it did, I conclude that a new decision on the euro ought to be preceded by a new referendum. The result of the 2003 referendum was a 'signal' from the Swedish voters, not a binding instruction – but it remains a strong signal. Moreover, the positive experiences from 2003 show that it is possible to conduct an informative and objective campaign that allows voters to familiarise themselves with important political issues and participate in the decision-making process in a way that strengthens the public's confidence in the political system.

7.2 What should the decision-making process look like?

If the euro issue becomes relevant again, it is important that the political parties carefully consider how a new referendum and election campaign should be organised.

A key practical question concerns timing. In my view, a possible referendum should be held before Sweden joins the ERM II exchange rate mechanism. If the referendum is held after Sweden has joined ERM II, citizens may feel that they are being presented with a *fait accompli*, and it will also be more difficult for Sweden to maintain its current position that it does not qualify for the euro area since it pursues a floating exchange rate policy. It would be preferable to follow the model from the early 2000s: to hold the referendum before the formal work on introducing the euro begins, allowing the fundamental issue of currency cooperation to take centre stage in the political debate rather than, for example, the anticipated conversion rate of the *krona*.

This reasoning assumes that joining ERM II entails a commitment to introduce the euro, since participation in ERM II is one of the four convergence criteria. However, a future decision to join ERM II might be motivated by other monetary policy considerations. In 1982, Denmark chose to peg its *krone* to the West German Mark and has participated in ERM II since 1999. It is conceivable that a future Swedish government might wish to pursue a similar monetary policy without eventually introducing the euro as Sweden's currency. The government does, of course, have that freedom: as noted in Section 2, Chapter 9 of the Instrument of Government states that the government is responsible for 'general currency policy matters.' However, Sweden would no longer be able to justify its decision not to participate fully in euro cooperation on the grounds that one of the convergence criteria has not been met, so a transition from the current floating exchange rate to a fixed exchange rate against the euro without the intention of later introducing the euro – that is, a 'Danish' solution – would therefore probably require negotiations with the other member states about granting Sweden a formal derogation similar to Denmark's.

To summarise the implications of the arguments in the concluding section on the question of how a new referendum should be conducted:

- Any new referendum on the euro should be held before Sweden joins ERM II, to avoid presenting voters with a *fait accompli*.
- The question should be simple and direct, preferably identical to the one asked in 2003: 'Do you think Sweden should adopt the euro as its currency?'
- Although the uneven distribution of resources between the yes and no sides does not appear to have determined the outcome in 2003, it is important that both sides have reasonable opportunities to present their arguments, not least for reasons of political legitimacy.
- The 2003 referendum campaign was information rich. This is also desirable in future referendums and depends primarily on the behaviour of media outlets and political parties.

Since 2003, opposition to the euro has remained strong in Sweden, while support for the EU has grown steadily. Twenty years ago, Lindahl and Naurin (2005) suggested that there is a connection between these trends – that the legitimacy of EU cooperation was strengthened by the referendum, as it gave citizens an opportunity to participate directly in political decision-making and as the political parties accepted the result. It would be unwise to risk that balance by going against the 2003 referendum result twenty years later. If the euro issue returns to the political agenda, the goal should be to hold a referendum that works as well as the 2003 vote – or better.

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CHAPTER 13

On joining the euro

Stefan Ingves

1 Introduction¹

Almost 25 years have passed since Sweden's accession to the euro was thoroughly discussed. In the meantime, the euro has established itself as a major currency, the EU has gained more members and more countries have joined the euro. My view is that Sweden should also join the monetary union. If this were to happen at the time of writing and as an illustration, a conversion rate of SEK 11 per euro would be appropriate. A narrow exchange rate band of ± 2.25 per cent, i.e., SEK 10.75–11.25 per euro, should be chosen when participating in the ERM II exchange rate mechanism, which precedes euro adoption.

This chapter deals with various aspects of joining the euro. In Section 2, I review the macroeconomic and financial market situation in Sweden in relation to the euro area and note that there is considerable covariation and that, with a large financial sector and potentially large capital flows, we are in any case dependent on the monetary union. In Section 3, I discuss the requirements that Sweden must meet in order to join the monetary union, the so-called convergence criteria, and describe both the decision-making process and actual ERM II participation in two previous typical country cases.

Section 4 discusses Sweden's path towards the euro via the exchange rate mechanism ERM II, with the necessary adjustments to, among other things, the central bank foreign exchange reserve and central

¹ Thanks to Jesper Hansson for helping me with all the figures.

bank legislation. Section 5 shifts the focus to the new decision-making structures that are required and the adjustments that need to be made. The major payment and settlement and other financial infrastructure systems are already European or are in the process of moving in that direction. This facilitates the adoption of the euro. To put it bluntly, from a technical perspective, we are already practically on board, without yet being formally so.

Section 6 contains concluding remarks summarising my view of the current situation. In addition to the discussion in this chapter, it could be argued that Sweden should participate in the monetary union for geopolitical reasons. However, this aspect is not discussed here.

2 Some stylised facts

This section summarises the starting point for a discussion on Sweden's accession to the euro. Section 2.1 discusses some facts regarding the monetary union and Section 2.2 regarding Sweden.

2.1 About the monetary union

The monetary union was formed in 1999 after a long decision-making process. Sweden participated in the technical discussions that shaped the early monetary union. Sweden chose not to join, and since then there has been little discussion of the euro in Sweden.

Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain joined in 1999, followed by Greece in 2001, Slovenia in 2007, Cyprus and Malta in 2008, Slovakia in 2009, Estonia in 2011, Latvia in 2014, Lithuania in 2015 and Croatia in 2023. Most recently, Bulgaria joined on January 1 this year. After the United Kingdom's withdrawal from the EU in 2020, the EU members the Czech Republic, Denmark, Hungary, Poland, Romania and Sweden remain outside the monetary union. In different ways, Denmark and Romania have a fixed exchange rate against the euro, while the Czech Republic, Hungary, Poland and Sweden have a floating exchange rate. Among the countries that do not use the euro, only Denmark has a for-

mal derogation. The others are expected to join when they meet the treaty requirements for economic and legal convergence. Most EU members use the euro. Poland is the only major country that does not. As a share of GDP the monetary union accounts for approximately 85 per cent of the entire EU.² The Union has a total population of approximately 450 million, of which approximately 350 million use the euro.

The participating countries joined at different times, either because it took time to meet the conditions for participation or because they entered the EU at different times. A combination of the two is also common. A geographically close example is the accession of the Baltic countries to the EU and their shared goal of also joining the euro.

One issue that was discussed at length early in the process leading up to the introduction of the euro was the extent to which the participating countries could be considered an optimal currency area in economic terms. Were the prospective members sufficiently similar, and were their economic policies such that a common currency would work? There is a wealth of literature on the subject. Bayoumi and Eichengreen (1994) state: "Overall, however, the results suggest that several potential monetary unions in other parts of the world are relatively similar in key respects to the U.S. currency union." The implication was that it ought to be possible to create a functioning euro, but it was not obvious which countries should be included.

Currencies do not come into existence by themselves. Political decisions and a legislative process are required to define a currency. Given the growing list of participants, the political process in many countries appears to be such that the euro is attracting more EU members. The EU is no longer a free trade area with many relatively small currencies. The euro dominates, which countries outside the EU must take into account.

The monetary union has also been reshaped and deepened along the way. In the wake of various banking crises, in connection with the global financial crisis of 2008–09, it was concluded that a single currency is not compatible with national, decentralised banking supervision. This applies in particular to large systemically important banks.

2 Eurostat.

Thus, the banking union was created in 2014, with its three components: banking supervision by the ECB, a single resolution authority, and a single resolution fund.³ One of the conditions for joining the euro is now participation in the banking union.

This chapter deals with the monetary union and various aspects of Sweden's accession to it. The introduction of the euro is part of a larger integration process in Europe, and the choice between participating or not participating in the euro area affects how Sweden positions itself in this process. There has been a long-standing debate about the consequences for the institutional structure of the EU if the number of members increases. It is difficult to predict the final outcome, but the EU and the euro are attractive, and there will probably be a desire for EU membership in various quarters for the foreseeable future.

A report by the French and German governments, the Group of Twelve (2023), envisages a Europe with a core and surrounding circles with increasingly loose affiliations. The core includes members of the monetary union. If a country chooses to remain outside the euro, it will be further removed from the decision-making process, even though it will still be affected by it as a consequence of trade, free capital flows and geographical proximity. It is difficult to know how well-founded the proposals in the report are, but the direction is clear: the euro area countries are at the centre, with the institutions and institutional structures that follow. In the financial market area, decision-making power increases if there is both a large monetary union and a well-developed capital market union, covering both equities and bonds.

The monetary union is not the same today as when it was formed in 1999. The number of participants has increased and the financial market structure within it, with its additional institutions, is a fact, while the integration process appears to be continuing. Remaining outside the monetary union on a permanent basis today is different from when it was formed in 1999.

3 The banking union is described in more detail in Section 5.2. It is also discussed by Englund and Wissén in Chapter 8.

2.2 And what about Sweden?

The macro picture

Economies can be compared in different ways. This text focuses on the Swedish economy in relation to the monetary union. The approach is to make comparisons at the macro level in certain cases, starting in 1999 and continuing until 2024, or as far as comparable data are available. In the global currency market, the euro accounts for 31 per cent of daily turnover and the Swedish *krona* for 2 per cent. Sweden's population accounts for approximately 3 per cent of the population in the euro area, while Sweden's GDP is approximately 4 per cent of that of the euro area countries. Sweden is thus a small open economy in relation to the euro area.⁴

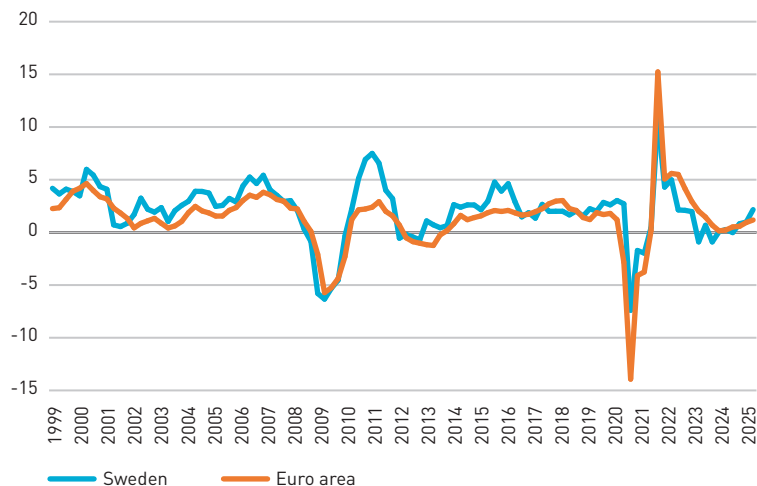
Sweden's exports and imports have gradually increased and today account for nearly 50 per cent of GDP.⁵ The economic development is therefore more dependent than ever on our ability to trade with other countries. Another consequence is that we are increasingly dependent on international economic developments. It is difficult to fully compensate for, for example, a decline in international demand or other significant economic disturbances through domestic economic policy alone. In the best-case scenario, many countries – for example, within the euro area – coordinate their economic policies in order to benefit from each other's measures.

Figure 1 shows the annual percentage change in GDP in Sweden and the euro area between 2000 and 2024. It is clear that the correlation is not 100 per cent. However, the covariation is high and Sweden does not differ significantly from the euro area. Since economic fluctuations are similar, economic policy will be similar, but not identical. This is particularly true as long as there is no pan-European fiscal policy. Economic fluctuations are sufficiently similar for Sweden to be part of the monetary union.

4 Sources for the data are Eurostat and BIS (2022).

5 See also Chapter 2 by Forslid.

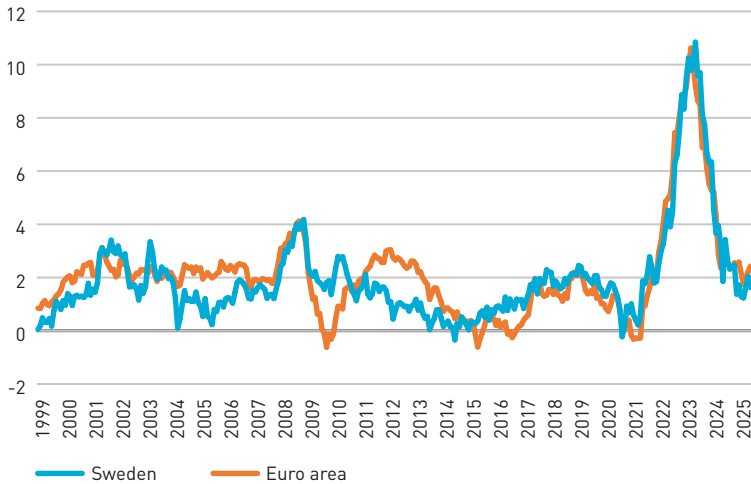
Figure 1 Annual GDP growth in Sweden and the euro area, 2000–24, per cent



Sources: Eurostat and Statistics Sweden.

Figure 2 shows inflation in Sweden and the euro area during the same period, 2000–24. For ease of comparison, the EU-harmonised inflation measure is used here, which does not differ markedly from the Swedish CPI. Here, the correlation is slightly higher than for GDP.

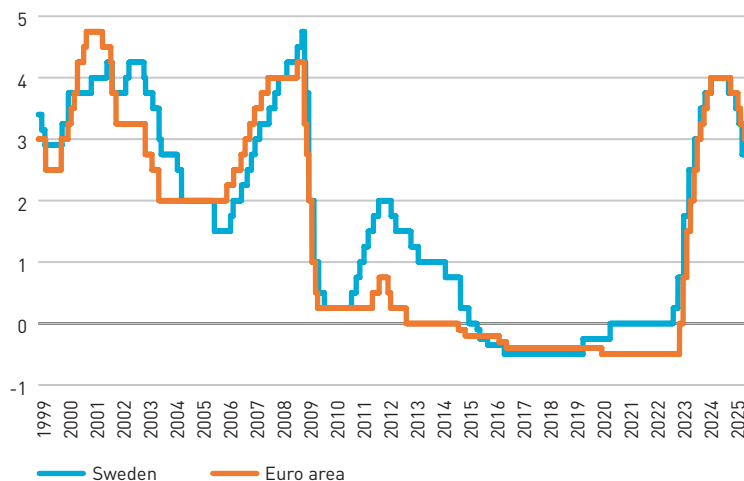
Figure 2 Inflation in Sweden and the euro area, HICP, 2000–24, annual percentage change



Sources: Eurostat and Statistics Sweden.

Since both the Riksbank and the ECB have an inflation target of two per cent and the technical design of monetary policy is similar, one would expect interest rate setting to be similar as well. This is evident from Figure 3, where the correlation is very high, except in connection with the euro crisis. Given the high correlation, one might think that monetary policy has been coordinated, but both the Riksbank and the ECB are independent institutions with their own decision-making processes. The Riksbank's monetary policy meeting minutes also show that there has been no coordination. The policy rate similarity is due to similar cyclical developments and the fact that countries with free capital movements and well-functioning financial markets tend to adapt to the general international interest rate level. If cyclical developments remain reasonably similar in the future, joining the monetary union will not entail any dramatic changes.

Figure 3 Policy rates in Sweden and the euro area, 2000–24, per cent



Sources: ECB and the Riksbank.

Financial markets

When Sweden's accession to the monetary union was discussed in the late 1990s, the financial sector and financial markets were not addressed to any great extent.⁶ Similarly in other countries, the focus was on the macroeconomic adjustments required prior to the introduction of the monetary union. During the period that the euro has been in existence, there have been major structural changes in the Swedish financial sector. These changes began with the deregulation that took place in the 1980s. At the same time, regulations and decision-making structures within the EU and the monetary union have also changed along the way. If Sweden remains outside the euro area, it must accept that its influence will diminish. It is within the euro area that the major and structurally important decisions are made.

⁶ See the EMU Inquiry (1997).

The development of the financial sector can be described in various dimensions.⁷ It is often said that there has been increasing *financialisation*. Financial markets in a broad sense have become increasingly important for more and more people. At the same time, public sector debt has been reduced significantly. The end result is that the government has borrowed less and less, while firms and households have borrowed more and more. During the 1990s, the discussion centred on fiscal dominance (government debt dominance, i.e., a situation where government debt grows rapidly to an unsustainable level, complicating monetary policy and potentially leading to exchange rate concerns). Today, with large debt stocks in the private sector, other risks are emerging. Instead, there is concern about financial dominance, which can affect both crisis management and “normal” economic policy. The issue is strategically important, and how it plays out depends on whether a country sticks to its own small, and probably volatile, currency or belongs to a much larger community such as the euro area.

Breman et al. (2024) describe the changes that have taken place over the past 30 years and note that structural changes also affect monetary policy. With free movement of capital, this is not so surprising, but it is yet another sign that the Swedish financial market is increasingly dependent on the outside world (not only the euro area, but it is still the closest and largest neighbour). The report shows that an increasing proportion of corporate financing is in foreign currency, with the euro dominating.

It is fully possible to have a large financial sector without being a member of the monetary union. It is not a major issue on the economic agenda as long as a kind of “controllable normality” can be maintained. This, in turn, requires very strong institutions with the ability to slow down, for example, a sharp expansion of credit. In my opinion, Sweden has weak and politically controlled macroprudential supervision, and the latest version of the Riksbank Act limits the Riksbank’s room for manoeuvre. Sweden also has limited room for manoeuvre when it comes to regulation, which is set at the EU level, where euro members

7 See also Chapter 8 by Englund and Wissén.

dominate. In this respect, the Swedish economy is vulnerable, and it is difficult to see the advantage of having its own currency.

It is important to reflect on unlikely, but possible, events and to imagine how they should be handled if one is part of or not part of the monetary union. My experience of difficult policy situations is that it is always the weaker party that becomes dependent on the stronger party, for example the Riksbank vis-à-vis the ECB. In that respect, it is better to belong to a larger collective, a kind of mutual insurance collective, than not to do so. Sweden and Switzerland are not two comparable economies, but they nevertheless illustrate the trade-offs that may need to be made. At present, the Swiss central bank's foreign exchange reserves amount to approximately 100 per cent of GDP.⁸ This is a consequence of previous currency interventions to prevent the franc from becoming too strong. Translated into Swedish terms, this would mean a foreign exchange reserve of around SEK 6,000 billion. Conversely, if the Swedish *krona* were to depreciate sharply, this would affect both interest rates and inflation, while at the same time exporting our problems to others. Whether this would be accepted in the long run by other EU member states, most of which are members of the monetary union, is an open question.

3 Convergence

3.1 Convergence requirements

For a monetary union to function in the long run, the economic developments of the member countries need to be reasonably uniform, both when they join the monetary union and in the long. Perhaps most importantly, economic decision-makers need to be aware of the consequences of participating in the monetary union. In order to join, a number of conditions for economic and legal convergence and participation in the banking union must be met.

The convergence criteria are well documented in a number of annual convergence reports from the ECB and the European Commission. My

⁸ <https://www.snb.ch/en/>.

starting point is the ECB's convergence report (2024c). The convergence criteria can be classified and numbered in various ways. Below are ten criteria that a country must meet in order to join the monetary union.

Economic convergence

1. The inflation rate must not exceed that of the three countries in the monetary union with the lowest inflation rates by more than 1.5 per cent.
2. The general government budget deficit must not exceed three per cent of GDP.
3. General government gross debt must not exceed 60 per cent of GDP.
4. The country must have participated in the ERM II exchange rate mechanism for at least two years, during which time the exchange rate against the euro must not deviate by more than ± 15 per cent from the agreed central rate.
5. Maintaining the exchange rate band in ERM II is a mutual commitment. Unilateral devaluation by the candidate country is not accepted.⁹
6. Serious exchange rate difficulties, such as sharp exchange rate fluctuations, must not arise during ERM II membership.
7. Long-term interest rates must not exceed the corresponding interest rates in the three countries in the monetary union with the lowest inflation by more than two percentage points.
8. A general statement on "other relevant factors," such as various measures of inflation, unit labour costs, external balance and degree of market integration.

It is not clear how "other relevant factors" should be interpreted. One possibility is to view them as macroeconomic factors that may affect economic developments and, by extension, the precise convergence requirements: a kind of warning flag, even if other requirements are

⁹ The exchange rate mechanism ERM I, which was established in 1979, was transformed into ERM II when the euro was introduced in 1999.

met at a given point in time. The ECB also makes a backward-looking assessment of the past ten years and a forward-looking assessment of the extent to which a candidate country appears to have the capacity to maintain convergence and thereby contribute to lasting economic stability within the monetary union.

Legal convergence

9. Legal convergence is assessed on the basis of whether national legislation is compatible with euro membership. It is not only a formal assessment; a candidate country is also expected to align its legislation in general with the spirit of European treaties and statutes. The ECB's convergence assessment places great emphasis on the independence of the national central bank.

Banking union

10. Finally, since 2014, euro membership requires the country to participate in the banking union, as far as it has been established. This means participating in the Single Supervisory Mechanism managed by the ECB, participating in the Single Resolution Board and contributing to the banking union's Single Resolution Fund.¹⁰ As the banking union develops over time, it can be expected that the commitments will gradually increase.

3.2 The formal decision-making process

The first step towards membership of the monetary union is to participate in the ERM II exchange rate mechanism for at least two years, i.e., to maintain a largely fixed exchange rate against the euro. Participation in ERM II is a trial period during which a country must demonstrate that it can cope with the adjustment, with all the conditions listed above. In addition, a domestic preparation and decision-making pro-

¹⁰ See also Section 5.2.

cess is required, which means euro membership from start to finish is likely to take between three and four years.

Entry into ERM II requires mutual formal decisions by the acceding country and the ERM II countries. In practice, such a process requires discreet soundings to prepare for the decisions. Formal decisions are usually well prepared over a long period of time, and the likelihood of a formal rejection of participation in public is small. Once the preparatory work and soundings have been completed, the finance ministers of the monetary union member countries, representatives of the ECB and the finance ministers and central bank governors of the non-euro area countries participating in ERM II (currently Denmark) meet. The process also includes consultations with the Commission and the part of the Economic and Financial Committee (EFC) that consists solely of euro area members. The decisions require unanimity among all parties involved.

The central exchange rate is the conversion rate that is normally used when joining the euro. The ECB's policy document on ERM II participation also states – very vaguely – that a fluctuation band narrower than ± 15 per cent may be possible. My own assessment is that such a decision is unlikely. However, a country joining ERM II may unilaterally choose a narrower fluctuation band. If, for example, a country has had a fixed exchange rate arrangement, a narrower band is natural. Then there is no reason to temporarily deviate from an exchange rate that is already virtually constant against the euro.¹¹

The central rate should be the best possible estimate of an equilibrium exchange rate on entry into ERM II. At the band limits, there is a mutual commitment to essentially automatic and unlimited currency interventions.¹² Part of the agreement includes the possibility for all parties to propose an adjustment of the central rate in secret. Under normal circumstances, the arrangement means that unlimited interventions are unlikely. Instead, the central rate is adjusted before the band limits are reached.

Now, assume the convergence criteria, including participation in ERM II, are met. Then there is a detailed decision-making process

11 This process is well described in ECB (2003) and Dorrucci et al. (2020).

12 See, for example, Official Journal of the European Union (2006).

where the European Council (heads of state and government) decides if the country can switch to the euro. The decision is made following a proposal from the Commission, consultation with the ECB, a recommendation from the euro area members and consultation with the European Parliament. An important issue is the agreed conversion rate, since this decision is irreversible.¹³

3.3 Two typical cases

ERM II has now been in existence for more than a quarter of a century, and a large number of countries have passed through this system on their way to monetary union. The ECB's ERM II agreement has been amended from time to time as new countries have joined, but the decision-making mechanisms and structure have remained largely unchanged. It is a tried and tested system that has worked well. This does not mean that the accession process has been the same for all new members. Two factors play a particularly important role. The first is the degree of adjustment required to meet the convergence criteria, and the second is the exchange rate regime used prior to joining ERM II, and the extent to which the exchange rate was stable at that time and during the period in the system. All variables are interlinked in some sense, as exchange rates and general macroeconomic balance are interrelated. Below are two typical cases that both led to ERM II membership, but where the starting points were different. The focus is on exchange rate developments, but macroeconomic developments are in the background and influence when conversion to the euro is both possible and agreed.

Finland

In the early 1990s, Finland went through an economic crisis similar to that in Sweden. On the road to macroeconomic stability, it had a floating exchange rate and an inflation target as a monetary anchor for a fairly short period.¹⁴ In this respect, Finland's situation prior to its

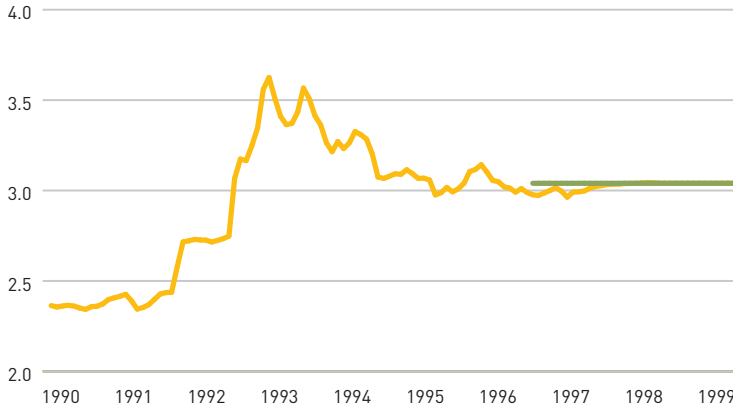
¹³ <https://www.consilium.europa.eu/en/policies/join-the-euro-area/#Decision>.

¹⁴ See, for example, Korhonen (2001).

decision to apply for membership of the monetary union is reminiscent of what Sweden would face if it decided to join the euro.

On the one hand, macroeconomic adjustment in Finland began before entry into ERM II, while on the other hand, the exchange rate stabilised almost immediately on entry into ERM II. One reason for this was that general economic policy became increasingly credible in combination with ERM II membership. In order to counter exchange rate fluctuations and avoid appreciation, the Bank of Finland intervened for a period, with the result that foreign exchange reserves doubled. The exchange rate movements that occurred did not lead to the band limits being breached. Figure 4 shows how quickly exchange rate variations declined and that the central rate was approached almost asymptotically.¹⁵ Despite major economic concerns in the early 1990s the euro accession process was rapid and virtually problem-free in terms of the exchange rate.

Figure 4 Exchange rate between the Finnish markka and the D-mark in the 1990s



Source: Korhonen (2001).

¹⁵ The figure shows the central rate in terms of the D-mark. The euro did not exist at this point in time. The ERM II period is indicated by the horizontal line at 3.04.

Slovakia

Slovakia joined the EU in 2004 and adopted the euro in 2009. The country's starting point and adjustment requirements were very different from those of Finland. Slovakia needed to catch up in terms of institution building, develop markets and achieve increasing economic integration from a weak economic position relative to the existing EU member states.¹⁶ Slovakia made it clear early on that it intended to join the monetary union, with 2009 being indicated as a suitable date for this. The country pursued a successful stabilisation policy, which led, among other things, to appreciation trends for the Slovak *koruna*. Slovakia joined ERM II in 2005. A key issue was how to deal with the choice of the central rate in a situation with appreciation pressure. When the lower limit of the intervention band was approached on two occasions (an appreciation), the question arose as to whether the central rate should be changed. The *koruna* was revalued and a new central rate was agreed. The Finnish example is preferable, but since an economic adjustment is a dynamic process, flexibility is reasonable.

Today, 21 countries are members of the euro area, with Bulgaria being the most recent entrant (1 January 2026). I have focused on ERM II to highlight how exchange rate adjustment has taken place on the path towards the central rate and the conversion rate. Each country has its own specific history, but at the same time there are some recurring themes:

- If a fixed exchange rate has been in place for a long time, joining the euro will be a continuation of, and thus also the final stage of, the exchange rate system that has already been applied.
- ERM II has a wide intervention band. Joining ERM II implies an expectation of a renegotiation of the central rate before approaching the intervention limits. ERM II can deal with changing conditions in a flexible manner. The system is a kind of semi-fixed exchange rate arrangement, but with a clear expected end point.
- In some cases, there has been confidence in economic policy prior to ERM II entry. In the case of Finland, this led to rapid exchange rate

¹⁶ ECB (2008).

stabilisation prior to entry. In other cases, however, ERM II participation appears to have been a stabilising factor.¹⁷

- The flexibility on the path to monetary union has made it possible to deal with countries with very different initial conditions, both in terms of “catching up” in economic terms and in terms of making ERM II membership function as a steering mechanism when their own economic policies have had difficulty maintaining macroeconomic balance.

Against this background, Denmark and Sweden represent two extremes. Denmark, with its formal derogation from participation in the monetary union, has had a fixed exchange rate and a narrow intervention band of ± 2.25 per cent for a long time, and de facto much more limited fluctuations within the band.

4 Sweden’s path towards the euro

4.1 Convergence

I do not discuss the overall political decision-making process here.¹⁸ The presentation focuses on what the path to the monetary union might look like after a possible political decision has been made.

The ECB (2024c) noted that Sweden meets the macroeconomic convergence criteria for budget deficit, public debt and long-term interest rates, but deviates by three-tenths of a percentage point with regard to inflation. Given the economic correlation I discussed earlier, it is highly likely that Sweden will continue to meet the macroeconomic convergence requirements in the future. This leaves legal convergence and membership of ERM II.

With regard to legal convergence, the ECB has stated in great detail that the new Riksbank Act does not meet the requirements.¹⁹ The main issue concerns the independence of the Riksbank in various respects, for example with regard to the definition of monetary policy,

¹⁷ Hochreiter and Tavlas (2006).

¹⁸ See Chapter 12 by Lindvall.

¹⁹ Act 2022:1568 on Sveriges Riksbank.

which is restrictive in relation to the purchase and sale of securities. Government securities should be treated similarly as other securities. The prohibition on instructions about monetary policy should also be amended, as it is very narrowly worded. Furthermore, the Riksdag should not be able to review what is meant by price stability. There has been a political interest to limit the independence of the Riksbank. At the same time, the ECB's objections have been well known. This is a situation that needs to be rectified. Technically, it should not be difficult to amend the law so that the convergence criterion is met.

Joining the monetary union requires a planning horizon of three years or more, if the usual schedule is followed. Three years before a planned accession to the euro, some form of document is needed that expresses a political will and describes roughly how the accession process will proceed. In addition to issues of macroeconomic and legal convergence, it is necessary to specify the organisation required to participate in ERM II, what the transition to the euro entails in legal terms, what legislation is needed, how various IT systems and accounting need to be adapted, and how the exchange of banknotes and coins will take place. Presently, there is plenty of experience among new and old euro area members to learn from. Communication, timetables and clarity will be important throughout the adaptation process.

4.2 Membership of ERM II

In Section 3.2, I briefly described how decision-making regarding ERM II membership works within the EU. Choosing a central rate requires careful preparation. Nor is the issue suited to protracted open negotiations that ebb and flow. Such a process would create uncertainty and volatility – the opposite of a predictable and stable transition to ERM II.

Under the Currency Policy Act, the government decides on the system to be used to determine the value of the *krona* in relation to foreign currencies (the exchange rate system). If necessary, the government shall also decide on the central rate and the band width.²⁰ Prior to such

20 Act amending the Act (1998:1404) on exchange rate policy, SFS 2022:1576.

a decision, the Riksbank must be given the opportunity to express its opinion. The Riksbank also has the right to submit a proposal that the government should decide on the exchange rate system, central rate and bandwidth. In other words, there is a mutual dependency between the government and the Riksbank, which is the authority responsible for implementing the chosen exchange rate system. The Riksbank must then assess whether the choice of exchange rate system can work, given the objective of price stability and general economic developments. In an ERM II context, this means that the government and the Riksbank need to agree on the central rate and the fluctuation band. Anything else would be impracticable in reality. It would be difficult to maintain an exchange rate system that one party does not believe in. Before Sweden approaches the ERM II counterparties, internal work needs to be carried out to arrive at a proposal for a central rate and a band that is both a stable, feasible solution for Sweden and acceptable to the euro area members and other ERM II members. For such domestic preparatory work to be effective, time, appropriate working methods and discretion are required.

The issue of the central rate, and ultimately the final conversion rate to the euro, can be approached in different ways. It is desirable to choose a central rate that is stable during the ERM II period and that can also serve as a kind of guide for a final decision on the conversion rate. Part of this process involves focusing on the factors that, at least in theory, determine an equilibrium exchange rate. The goal should be an economic development that provides both internal and external balance. One way to describe such an idealised state is when the economy is producing at approximately its capacity, unemployment is low (or normal), interest rates are normal, the inflation target of two per cent is being met, and the exchange rate is reasonably stable.

All economic development over time is a dynamic process. This is even more true in a small open economy that is constantly exposed to disturbances from the outside world. This means that no equilibrium lasts very long. A hypothetical equilibrium exchange rate is therefore a perishable commodity. Nevertheless, this stylised way of describing an economy is helpful when assessing where a future equilibrium exchange rate might lie.

Prior to the previous discussion on the euro, a number of calculations were made regarding a possible conversion rate. Nilsson (2002) is an example of how a theoretical/empirical approach could be used at that time. He notes: “Apart from the statistical uncertainty of the model, such assessments by necessity rely on a number of additional assumptions.” In a comprehensive analysis of the *krona*’s exchange rate development, Flam and Persson (2024) arrive at a similar conclusion: “The theories that exist for determining the exchange rate are not useful in the short term” (my translation). Ca’Zorzi et al. (2020) note that there are models that have better predictive power than random walks, but that these are at the same time weakly linked to economic fundamentals in the long run. The researchers further argue that a floating exchange rate does not appear to help when it comes to closing a current account gap. Sweden is an example of this, as we have had a steady current account surplus for a long time without the Swedish *krona* systematically appreciating.

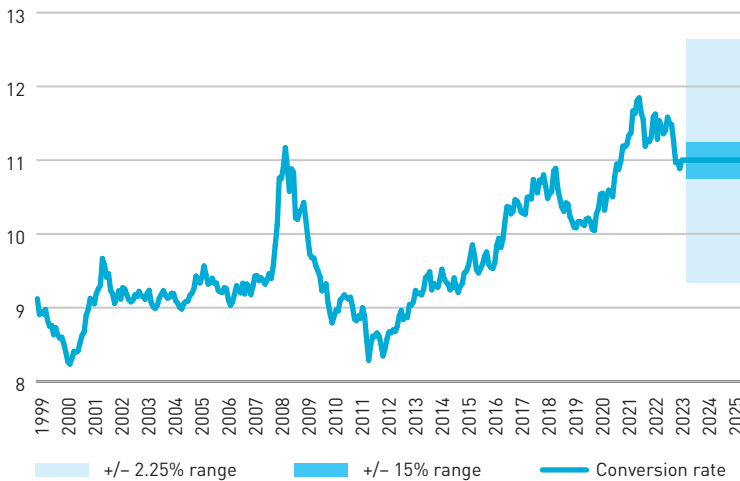
The conclusion is that a model analysis probably provides limited guidance when choosing a central rate. At the same time, it is well worth conducting such model analyses. They provide important background information, not least because for example, the ECB and the Commission are likely to conduct similar analyses. One issue that needs to be given particular attention, and which real economic models do not generally address, is the significance of completely free capital movements in combination with a large financial sector that can generate large inflows and outflows of capital. Risk premiums and how a relatively small currency is viewed in relation to the major currencies also play a role here. There is ample scope for further empirical research in this area. This work should preferably be initiated as soon as possible.

ERM II, an example

When the euro was introduced in 1999, one euro cost approximately SEK 9.50. Today (October 2025), the exchange rate is around SEK 11 (see Figure 5). Even when measured in terms of the real exchange rate, i.e., the relationship between domestic and foreign price lev-

els expressed in the same currency, the *krona* has weakened.²¹ Here, I focus on the nominal exchange rate. This is the exchange rate that applies to ERM II participation in terms of both the central rate and the conversion rate. At the same time, the real exchange rate is one of the underlying background variables.

Figure 5 Swedish exchange rate against the euro, 1999–2024, *kronor* per euro



Sources: The Riksbank and own calculations.

In Section 2, I showed that the general macroeconomic picture in Sweden is quite similar to that in the euro area. Inflation, interest rates and growth are roughly the same in Sweden and the euro area. This means that the real and nominal exchange rates can be expected to develop in a similar way in the short run. This is how one should view accession to ERM II. In the short run, there will not be much change in wage and productivity trends. Sweden has long had a well-developed currency

²¹ Starting approximately in the 1990s, the real exchange rate of the *krona* has weakened against many currencies. Belfrage (2021) provides a good description of how this process has unfolded over a long period of time. See also Flam and Persson (2024) and Chapter 5 by Flodén.

market with good turnover, while various models provide limited guidance on the central rate. The conclusion is therefore that, under normal economic conditions, the market valuation of the *krona* should be a strong guide when choosing a central rate. It is also reasonable to avoid fluctuations in the near term. This can be done, for example, by using the average exchange rate over the past year.

One counterargument is based on Sweden's long-term current account surplus and continued high savings. From this perspective, the central rate should be stronger than the prevailing market rate. A fully possible scenario is that the market rate will strengthen as soon as the euro discussion takes on a more concrete form. Ultimately, the central rate is determined in negotiations between Sweden and the euro/ERM II members. Based on the market rate, each side will then debate what can be considered a stable central rate over a two-year period. It is impossible to predict in advance where the balance of these negotiations will end up, but it is unlikely that it will be far from the market rate. The choice of central rate is also a step towards deeper economic cooperation, a long-term commitment from both sides. In such a negotiation, it is important that the views of both sides are taken into account. A short-term "win" in the negotiations could lead to problems further down the line.

In light of the above, at the time of writing and as an illustration, an appropriate central rate is SEK 11 per euro with a mutual intervention band with an upper limit of 12.65 and a lower limit of 9.35, i.e., ± 15 per cent around the central rate.

Choice of ERM II strategy

Since the 1990s, Sweden has had a well-established monetary policy anchor, an inflation target of two per cent. With free capital flows, it is not possible to have both an inflation target and a fixed exchange rate. At the same time, ERM II membership represents a kind of hybrid solution during a transition period when Sweden is to switch its anchor from a national to a European inflation target. It is necessary to determine how the convergence period in ERM II should be handled.

This issue was briefly touched on by the Riksbank (2003). One extreme solution would be to allow the *krona* to float freely within the broad intervention band for almost two years and then intervene in the foreign exchange market to allow the central rate to also become the conversion rate, even if there have been long periods of deviation from the central rate. It is doubtful whether this approach would send a sufficiently clear signal of the intention to join the monetary union. It is also difficult to predict what the counterparties would say about such an arrangement.

Another option is to “think out loud” before joining ERM II about what the central rate might be and then, on joining ERM II, unilaterally declare that the intention is to keep the *krona* within a much narrower range. The width of the band could be stated more or less clearly. In its simplest and clearest form, a band width would be announced and then adhered to. Choosing the Danish band width ± 2.25 per cent is a realistic possibility.²² With an exchange rate of SEK 11 per euro, the lower limit would then be 10.75 and the upper limit 11.25. These would be three nominal figures that would quickly gain acceptance. This is the strategy I recommend. It shows that euro adoption is being taken seriously and that there is a willingness to act accordingly early in the process. The objective is then also for the central rate to become the future conversion rate.

The wide band includes a mutual intervention commitment. The ECB may, but is not obliged to, enter into a similar agreement for the narrower band. In negotiations, Sweden should therefore also make such a request regarding the narrower band. At the same time, previous examples show that both the agreement and the reasoning do not presuppose ERM II membership without any flexibility. If the economic circumstances change so much that an adjusted central rate is agreed, a new one is set. It is an advantage if this is not necessary, but in an uncertain world it is a reasonable safety valve.

Moving from a floating to a fixed exchange rate is not just an intellectual and conceptual change. Daily currency trading will be affected, and the way professional currency traders, firms and the general pub-

22 Ecofin (1998).

lic think about exchange rates will change compared with a floating exchange rate. The transition needs to be supported by information that clearly explains what is happening. Today, the Riksbank's foreign exchange reserve management is based on two main premises: (i) a floating exchange rate and (ii) a focus on financial stability, where it should be possible to quickly provide the financial sector with liquid foreign exchange in circumstances that risk threatening financial stability in a systemically important way.

Excluding the Riksbank's gold holdings, the foreign exchange reserve is approximately SEK 450 billion, of which 64 per cent is in US dollars and 21 per cent in euros.²³ The foreign exchange reserve corresponds to approximately 7 per cent of GDP. Sweden does not need to copy Denmark in any way, but it is appropriate to make a comparison, as Denmark has had a fixed exchange rate against the euro since its introduction. In the Danish case, the share of dollars is 10 per cent and the share of euros is 79 per cent. The foreign exchange reserve accounts for approximately 15 per cent of GDP.²⁴ Using this comparison as a guideline, Sweden needs to both change the composition of its foreign exchange reserve and increase it significantly. If the Danish example is followed, the foreign exchange reserve must be more than doubled. The Riksbank has long had a currency swap agreement with the ECB, but this cannot replace the need to rebalance the foreign exchange reserve and to analyse a new appropriate size of the foreign exchange reserve.²⁵ The most transparent approach is to specify how much the foreign exchange reserve needs to increase and then buy euros in the market. Such purchases are a form of currency intervention, but simplicity and clarity are preferable to financial engineering.

Maintaining a fixed exchange rate also requires a different type of preparedness than in an inflation-targeting regime. Above all, there must be organisational preparedness to intervene immediately in the foreign exchange market if necessary. This requires new internal decision-making procedures and a revival of old "fixed exchange rate expertise" at the Riksbank. There also needs to be an understanding on

23 Sveriges Riksbank (2024d).

24 Nationalbanken (2023) and forexleaderboard.com.

25 Sveriges Riksbank (2024d), footnote 43.

the part of the owner, the Riksdag, that the Riksbank may need to use its balance sheet in a different and very decisive manner.

Need for adaptation

I noted in Section 2.2 that economic developments in the euro area and Sweden have been similar. At the same time, for various reasons, economic developments can always lead to tensions between countries. It is possible to create various hypothetical examples where economic developments in Sweden, and the euro area pull in different directions. When constructing such examples, one can do so in three different economic worlds: before ERM II, when a country is a member of ERM II, and when a country has introduced the euro. The first example describes today's exchange rate system with a floating exchange rate and an inflation target. In this case, there is no reason to discuss the adjustment mechanisms under the current conditions.

Now, assume Sweden has joined ERM II with a central rate and a narrow band. Let us also say that inflation in Sweden has been lower than in the euro area. This will lead to an increase in exports, a decrease in imports and appreciation pressure on the Swedish *krona*.

When the *krona* strengthens, it hits the lower limit of the band (fewer *kronor* are needed per euro). The Riksbank intervenes, buying euros and selling *kronor*. The foreign exchange reserve grows and the amount of *kronor*, i.e., liquidity, increases. Interest rates are also likely to be lowered and inflation rises after a while. Furthermore, there will be discussions about what mix of monetary and fiscal policy could resolve the tensions. If the appreciation pressure continues, sooner or later a decision must be made on whether to continue buying euros and creating *kronor* or to renegotiate the central rate.

Now suppose that the opposite situation has arisen. Inflation in Sweden is higher than in the euro area. Exports are falling and imports are rising, the *krona* is depreciating and the upper limit of the band is reached (it takes more *kronor* per euro). In that case, the Riksbank will sell euros and buy *kronor*. The currency reserve will decrease and the amount of *kronor* will also decrease accordingly. Interest rates will then probably rise and inflation will fall after a while. Here too, there is a

need to discuss which domestic policy mix will correct the problems. If this development continues, the foreign exchange reserve will fall until the central rate is renegotiated. The Swedish *krona* will be devalued. In the best-case scenario, a comprehensive economic policy will be pursued that restores balance without renegotiating the central rate. If the problems are not addressed, it is likely that the macroeconomic convergence criteria will be breached and that euro adoption will be postponed.

Once the euro has been introduced, adjustment is still possible but will not be achieved through domestic monetary policy. How adjustment will take place in that situation is beyond the scope of this chapter.

5 Some adjustment issues

5.1 New decision-making structures

All EU countries are shareholders of the ECB, and Sweden's capital share is approximately three per cent. Non-members of the monetary union pay 3.75 per cent of their capital share, and euro countries pay 100 per cent. The ECB's capital is just over SEK 100 billion, and on joining the euro, Sweden would then pay in approximately SEK 3 billion. At the same time, this gives a right to dividends from the ECB and, conversely, a liability for any capital contributions in the event of losses.²⁶

Paid-in capital is a formality, but it is also a form of receipt for full participation and risk sharing. Full members also get a seat on the ECB's Governing Council, which consists of the heads of the national central banks and the bank's six-member Executive Board. This means that Sweden becomes part of the monetary policy decision-making system and at the same time participates in all other decision-making relating to the ECB's activities in the monetary union. This provides completely different opportunities to take part in decisions on monetary policy, payment systems, structural issues and more at European level than with today's membership of the ECB's General Council, which also

26 ECB (2024a).

includes non-participants in the monetary union. As the latter group has shrunk, the General Council now only fulfils a diplomatic function and has no real influence. Since the pandemic, meetings have become less frequent and have been partly replaced by digital meetings.

5.2 Banking union²⁷

The Single Supervisory Mechanism (SSM) began operating as part of the ECB in 2014 and has functioned successfully since then. Today, membership of the banking union is a mandatory part of the monetary union. All banks defined as systemically important are subject to SSM supervision.²⁸ For Sweden, this means that Handelsbanken, SEB and Swedbank will be subject to SSM supervision. In addition, it needs to be determined which other banks may be subject to European supervision. (Nordea is already subject to SSM supervision due to its legal domicile in Finland.)

The Riksbank's response to the Banking Union Inquiry captures well why it is reasonable to join the banking union and not a difficulty when participating in the monetary union:²⁹

The fact that banks within the banking union are subject to joint supervision and resolution, and contribute by sharing risk between themselves, has, in the Riksbank's assessment, been positive for the stability of the European financial markets. The single banking supervision makes it possible to conduct comprehensive analyses and comparisons of banks in the 19 countries that currently participate in the banking union.

From the Riksbank's perspective, membership of the banking union has good prospects of working well for Sweden. The Swedish banking sector has a high degree of cross-border activity, particularly within the EU. This means that EU-wide supervision and resolution are better suited to the Swedish banking sector – which has become increasingly international – than national supervision and

27 The banking union is discussed in more detail by Englund and Wissén in Chapter 8.

28 Bankunionsutredningen (2019).

29 Sveriges Riksbank (2020)

resolution. If Sweden were to participate in the banking union, we would also benefit from the expertise and experience that the banking union has accumulated by dealing with so many more banks than the Swedish authorities do.

Membership of the monetary union, and thus also of the banking union, gives Sweden the opportunity to participate in the SSM Supervisory Board and, through a rotation procedure, to participate in the Supervisory Board's Steering Committee. Sweden will be fully integrated into European supervisory work, with the opportunity to exert influence in a different way than today.

The Single Resolution Board (SRB) is tasked with working with national resolution authorities to manage banks in crisis.³⁰ The SRB has a complex management structure, but Sweden will participate in it and its substructures if we join the banking union. Part of this structure is the Single Resolution Fund (SRF), which is controlled by the SRB. The SRF has a target level of one per cent of the deposits of participating credit institutions.

5.3 Some open structural issues

The third part of the banking union is a common European deposit guarantee scheme. Various attempts have been made at the political level to agree on how such insurance could be designed. If agreement is reached in the future, euro membership will also entail adaptation to such a system.

Over the past ten years, the introduction of central bank digital currencies (CBDCs) has been discussed in many different forums.³¹ The ECB has been working on a project to introduce a digital euro for several years and has announced that, provided new legislation is in place by 2026, it will launch a pilot project in 2027 with a view to issuing a digital euro in 2029.³² Given the requirement for two years of membership in ERM II, Swedish membership of the euro could roughly

30 SRB website, <https://www.srb.europa.eu/en>.

31 Prasad (2021) and Rosa and Larsen (2024).

32 ECB (2024d, 2025) and Sveriges Riksbank (2024a).

coincide with the introduction of a digital euro. If this assumption is correct, it would require a separate Swedish CBDC project.

One issue that has been discussed for a long time is the requirement for clearing of derivative contracts within the EU.³³ The issue also concerns the clearing of contracts in Swedish *kronor*, but will require some form of compliance upon membership of the euro area. The core issue concerns London's role in clearing derivative contracts in euros. This is a trade policy issue on which Sweden cannot deviate from other euro area countries.

The vision of a capital markets union encompasses many different measures designed to improve capital allocation within the EU, enable more cross-border transactions and create better functioning markets. The lack of progress has brought the issue back to the fore.³⁴ Most recently, this has been done from a European competitiveness perspective. The European Securities and Markets Authority (ESMA) is the embryo of a more powerful authority at the European level. If a new ESMA is created, it is reasonable to assume that euro membership will also involve a shift in supervision from the national to the European level.

During the 1980s, the Swedish financial sector was deregulated, and since then there have been significant structural changes that have affected the allocation of savings and investments and increased the financialisation of the Swedish economy. A part of the structural transformation that began in the 1980s consisted of a merger of the Swedish Insurance Supervisory Authority and the Swedish Banking Supervisory Authority into the Swedish Financial Supervisory Authority. The merger took effect in 1991. Euro membership is a continuation of the structural transformation where more and more supervisory functions are transferred to the European level. This is a reasonable development after the introduction of a single currency and common regulations, when at the same time financial transactions are becoming increasingly cross-border. Against this background, now is the right time to accept the consequences of what is happening and look into a merger of the Financial Supervisory Authority and the Riksbank. The arguments for

33 ESMA (2024) and ECB (2024b).

34 See, for example, Wyplosz (2024), Letta (2024) and the European Commission (2024).

efficiency and competence that existed at the end of the 1980s still apply, but now in a world where Sweden needs to be even more competitive and concentrate the human capital needed to make our voice heard in the monetary union.

5.4 Financial infrastructure

Once Sweden has met the convergence criteria and has been participating in ERM II for two years, it can apply to become a member of the monetary union. This will require a long series of adaptations at the technical level. In turn, this will require both legislation, since a very large number of old contracts will have to function in the euro area, and a significant effort in the IT field. Legislation and IT projects need to go hand in hand. At this stage, there is a great deal of knowledge to draw on, since a number of countries have already gone through this process.

Banknotes and coins

During the discussions on joining the euro in the early 2000s, there was a lot of focus on issues relating to banknotes and coins. How would the old national banknotes be withdrawn and replaced with euro banknotes? Today, money is predominantly digital and the digital transition to the euro is the norm, but the exchange of banknotes and coins is an important symbolic and practical project in itself. In Sweden, an extensive banknote and coin exchange was completed in 2017.³⁵ This project is well documented and worked well. In practical terms, introducing the euro means reviving the procedures and work flows that existed at the time. When implementing the changeover, a decision also needs to be made on whether to have a transition period or a big bang. One way to proceed is to distribute new banknotes and coins for example, over a period of six months, while withdrawing the old banknotes and coins.

The monetary policy framework

In order for monetary policy to have an impact on interest rates and/or exchange rates, a central bank uses its balance sheet and influences

³⁵ Sveriges Riksbank (2018).

interest rates in the economy through lending, deposits or both. In most cases, monetary policy operational frameworks in different countries are similar, even though definitions and terminology may differ. On joining the euro, the Riksbank will need to adapt to the operational framework applied by the ECB and the national central banks that are part of the Eurosystem. This is not a dramatic issue, but it will nevertheless require adjustments for both the Riksbank and the Swedish financial sector so that the monetary policy toolbox also works with the euro as the currency. A special project focusing on this narrow but important part of the financial infrastructure is therefore required.³⁶

Payments, settlements and securities depositories

Today, money and securities are defined by a combination of law and technology, primarily in the form of IT systems. Early systems were often a national concern and were built “piece by piece” in combination with national legislation. This is roughly how the Swedish Central Securities Depository was created. The Riksbank’s large value payment system, RIX, was also a payment system created domestically. This is less and less the case for financial infrastructure today. Technological developments, increased cooperation, standardisation and economies of scale create a need for uniform rules and IT systems. In this respect, microstructures, technical currency cooperation, cross-border trade, capital movements and the capital markets union are all pulling in the same direction. These trends are facilitating factors in terms of the practical consequences of introducing the euro.

Central banks are the banks’ banks and handle transactions between banks. RIX currently has 45 participants, payments are made in real time and turnover is approximately SEK 500 billion per day. The Riksbank is about to modernise its payment platform and has recently decided to start negotiations with the ECB regarding using its T2 payment system.³⁷ T2 has more than a thousand participants and, including branches and subsidiaries, more than 43,000 banks can be reached worldwide. It is a system of a different dimension than today’s RIX.

³⁶ Schnabel (2024)

³⁷ Sveriges Riksbank (2024b).

Note that this issue concerns T2 for Swedish *kronor*. If Sweden introduces the euro, participation in the *krona*-based T2 project is a major advantage, as it will then already be working with or is about to be working with the T2 system. Once joining the euro, it will be possible to participate fully in the governance structures associated with T2. Danmarks Nationalbank has decided to use the T2 platform from 2025; Norges Bank and Sedlabanki Islands are also investigating a possible transition to T2. If these projects are completed, it will mean that the Nordic region will become an integrated part of the European payment infrastructure.

Another part of the ECB's payment infrastructure is TIPS (Target Instant Payment Settlement), which handles payments in real time, 24 hours a day, all year round.³⁸ Since 2024 all *Swish* payments in Swedish *kronor* have been made via TIPS, but under the name RIX-INST. Similarly to T2, Danmarks Nationalbank and Norges Bank also intend to use TIPS, and Sedlabanki Islands is considering joining. From a technical perspective, there should be no major problems with switching from transactions in Swedish *kronor* to euros within the system. One TIPS-related project involves using the system to make transactions between currencies in real time. From a consumer perspective, it is a major advantage that Sweden is participating in this project, as international payments are currently both expensive and inefficient. If many countries participate, the economies of scale should become apparent after a while.³⁹

When an investor buys or sells securities, the securities move in one direction, while money moves in the opposite direction. To avoid uncertainty and risks, transactions should ideally take place simultaneously. T2S (TARGET2-Securities) is the ECB's system for handling this type of simultaneous transactions, together with 24 central securities depositories in 23 countries. T2S is part of the effort to create a uniform, standardised, borderless cross-border securities market in Europe. The Riksbank has concluded that Sweden should join this system and is working towards that goal.⁴⁰ It is a project that will take many

38 Sveriges Riksbank (2020).

39 ECB (2024e).

40 Sveriges Riksbank (2024c).

years to complete, but the ultimate goal is clear – Sweden is adapting to what has already happened or is happening elsewhere in Europe. Again, this is a project that does not have joining the euro as its end goal, but if we adapt in every other way to European securities systems, it makes things easier, because some of the work will already be done.

Euroclear Sweden, formerly Värdepapperscentralen, is now a subsidiary of the Euroclear Group, which has subsidiaries in a number of EU countries, most of which use the euro.⁴¹ Without going into the group structure, this means that Euroclear Sweden is well placed to take advantage of the group's internal knowledge when it comes to switching to the euro.

Here, I have described what happens with regard to the major transaction systems. If we compare this to electricity transmission, it is a question of what happens to the national grid. In order to participate fully in the single market, standardisation is needed, while at the same time the economies of scale and network effects are such that it seems rational and natural to share IT systems with our neighbours and other EU countries. All these processes facilitate the introduction of the euro, as we are then, in technical terms, almost there already. One clear difference is that the financial infrastructure I have described also has such governance structures that if you belong to the inner circle, you have opportunities to influence the design of these systems in a different way than if you are outside the monetary union or join late.

A customer perspective, front end

The term front end refers to IT systems or apps that end customers, consumers and investors can use and observe. Front-end systems are now more important than banknotes and ATMs. In this area too, developments are likely to be similar to those for central transaction systems, i.e., fewer national solutions and more standardised systems covering many countries.

The Stockholm Stock Exchange is part of the Nasdaq Group, which operates stock exchanges in Helsinki, Riga, Tallinn and Vilnius, among other places. All of these are cities where the euro is the national cur-

⁴¹ Euroclear (2023).

rency. Nasdaq therefore has good opportunities to adapt its operations to the euro, as the knowledge already exists within the organisation. Another step towards creating a unified European capital market is the *Consolidated Ticker Tape Project*, in which Nasdaq is participating together with 13 other stock exchanges and is working to create unified consolidated stock market information to enable trading in Europe at the best price, regardless of on which stock exchange platform the trading takes place.⁴² Technically, it is entirely possible to use T2S, Euroclear and Nasdaq for Swedish *kronor* in the pan-European transaction environment I have described, but it will become increasingly difficult to justify such a choice in the long run. Another type of front-end system consists of Mastercard, Visa, Apple Pay, Google Pay, Swish and a variety of cash register and terminal systems for handling payments. Furthermore, it is possible to pay in various ways in a large number of apps. In these cases, a transition to the euro should not be a major problem; on the contrary, in some cases it is an advantage to have one less currency to manage.

The above summary review shows that fewer and fewer IT systems in the financial sector are nation-specific. In some cases, a single system handles many different currencies. The economies of scale are such that Sweden has already integrated itself into larger systems in many different ways. This is roughly what one would expect, given the technological development in a small open economy. From this perspective, choosing to introduce the euro should not be a major problem.

6 Concluding remarks

The EU is no longer just a free trade area/customs union where the participating countries each have their own currency, in some cases with a fixed exchange rate and in others with a floating exchange rate. Not only has the Union grown, but the euro has also established itself as a functioning major currency with fewer and fewer EU members outside the monetary union. Regardless of various economic arguments,

⁴² Global Trading (2023).

participation in the monetary union also has a political dimension and a direct bearing on how the EU is governed and developed, as well as on the influence a country has in that process. Does Sweden want to belong to the inner circle or not? The geopolitical situation may also motivate belonging to the core of the EU.

From a narrower financial market perspective, with freedom of establishment and free movement of capital, national rules and national supervision are not a rational and sustainable long-term equilibrium. The move towards increased European supervision has been ongoing for a decade and is likely to continue. A small currency and a large financial sector are risks in themselves. It is more robust to join the euro and participate in the emerging European supervisory and insurance systems. Without participation in the monetary union, we are de facto approaching the old EEA Agreement, with very limited influence when decisions are made.⁴³ Such a choice can be made, but in my opinion, it benefits neither Sweden nor the EU if we remain outside the euro area in the long run. That is the reality we need to face. The situation now is different from when the issue was last discussed almost 25 years ago.

I have shown that, at the macro level, there is considerable correlation between economic developments in the monetary union and in Sweden. Furthermore, Sweden can meet the convergence criteria without any major difficulties. Joining ERM II also offers sufficient flexibility to make it manageable to cope with the transition period from a Swedish to a European inflation target, from a floating *krona* to a floating euro. The euro accession project is likely to take three to four years from announcement to implementation. The goal should be for the central rate in ERM II to also become the conversion rate. Prior to ERM II membership, the Riksbank's foreign exchange reserves need to be increased and rebalanced from dollars to euros. In the long run, and in order for us to compete successfully in Europe and globally, it is reasonable to merge the Financial Supervisory Authority with the Riksbank. Furthermore, technological developments mean that the major IT systems, the backbone of the financial sector, are already European or are in the process of becoming so, which facilitates euro adoption.

43 EEA stands for European Economic Area and, in addition to the EU countries, also includes Iceland, Liechtenstein and Norway.

Building separate systems are no longer economically rational. Natural cooperation partners can be found within the euro area.

To sum up: Sweden is already close to joining the monetary union, both at the macro and micro levels. We can join without any major difficulties, and the arguments for staying outside are becoming increasingly difficult to find.

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When the euro was introduced, Sweden chose to remain outside. But we now live in a very different economic and political reality than at the turn of the millennium. Sweden's economy is stronger and more closely intertwined with the global economy. More countries have adopted the euro, the institutions of the EU and the monetary union have evolved, and the geopolitical situation has changed dramatically.

The Calmfors Commission of 1995–96 provided the analytical basis for Sweden's decision not to join the euro at its launch. In this report, leading Swedish economists and political scientists present new analyses of the implications of euro membership for Sweden and how this could be achieved.

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