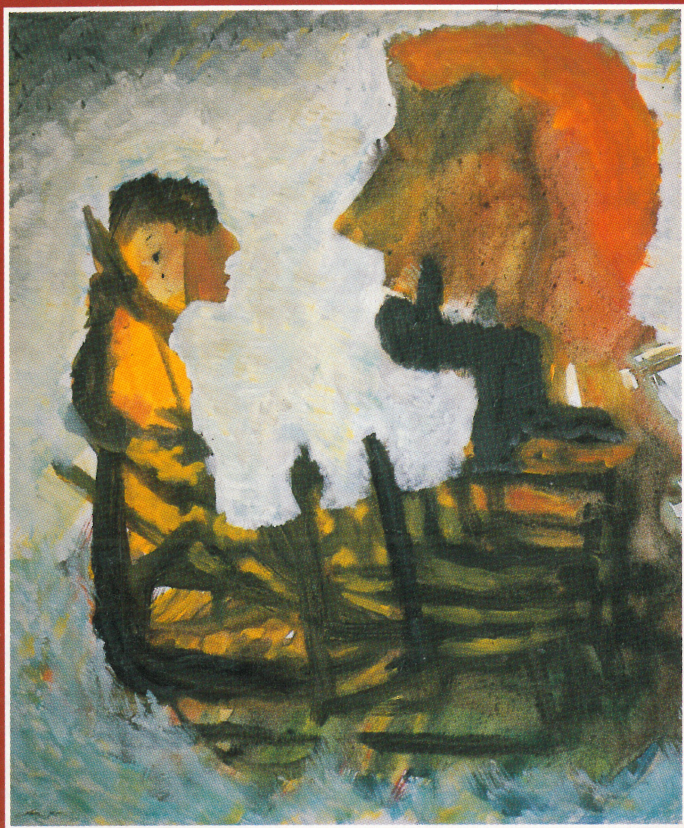


Assar Lindbeck



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Assar Lindbeck
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Preface

About twenty years ago I published the book *Swedish Economic Policy* (1975b), covering the century-long period 1870–1970, with an emphasis on developments after World War II. In hindsight, economic and social policies in Sweden, and indeed some basic features of the economic and social system in the country, turned out to have changed substantially towards the end of the period covered in the book. The performance of the Swedish economy also underwent considerable change. Thus, a new study of the experience of economic and social policies in Sweden would appear to be justified with an emphasis on the period after about 1970. That is the purpose of this monograph, which is a somewhat expanded version of a paper with the same title published in *The Journal of Economic Literature* (September 1997). The most important extensions refer to the discussions of wage bargaining, the distribution of income, unemployment and basic features of the economic and social system in Sweden.

It is not easy to define the economic and social system of a country. Moreover, any such system is seldom constant over time. I have chosen to characterize the economic and social system in Sweden over the last quarter of a century in terms of a number of *institutional features* by which Sweden has differed from most other developed countries during this period. These features refer mainly to the division of responsibilities between the private and the government sector, in particular with respect to economic security, employment, income distribution, consumption and investment. I use the concept of “institutional features” to identify not just existing types of organizations and decision rules within these organizations, but also the *domains* over which different agents have authority and influence.

As the title of this monograph I have chosen *The Swedish Experiment* rather than “The Swedish model”. The reason is that the latter term has often been applied to *some specific* aspects of the economic and social system in Sweden. Some authors have used the term for the often-expressed principle that the government should stay out of the process of collective bargaining in the labor market—even though the Swedish government has, in fact, often intervened with recommendations, appeals and so-called tax-based income policies, in particular since the mid-1970s. Others have referred to the system of centralized wage bargaining, even though wage bargaining has been at least as centralist in other Nordic countries and in Austria. Indeed, in the case of Sweden, “multilevel bargaining” is probably a more appropriate term than centralized bargaining. Still other observers have identified the Swedish model with a specific norm for wage formation, namely that wage rates in the tradable sector should adhere to a trend defined by the sum of price increases on world markets and labor productivity in the tradable sector—a wage norm often called the EFO model (after the initials of three economists affiliated with different labor market organizations in Sweden), or the “Scandinavian model” of wage formation.

There are also some observers who instead regard the Swedish model as synonymous with the so-called Rehn–Meidner policy recommendations, according to which unions and government should squeeze profits and wage differentials (the latter ambitions having been baptized “solidary wage policy”). The negative effects on employment and economic incentives were supposed to be counteracted by Keynesian-type stabilization policy as well as various administrative measures, including increased public sector employment, “active” labor market policy, government control of the capital market and selective taxes and subsidies. For some observers, the essence of the Swedish model has, indeed, been the *combination* of delegating an egalitarian income policy to the labor market organizations *and* a full employment “guarantee” by the government, which in fact resulted in a series of devaluations from the mid-1970s. A related ambition of economic policies in Sweden has been to partition off the return of firms from the earnings of their owners, as an attempt to combine rapid capital accumulation with low capital incomes of individuals.

Finally, the term “the Swedish model” has often been used to refer to certain features of welfare state arrangements in Sweden, such as generous “universal” welfare state benefits, large government provision of

heavily subsidized services to households, and a radical equalization of disposable income. The ambition has been to make the cradle-to-grave welfarestate arrangements sufficiently comprehensive to allow the individual not to have to rely greatly on either markets or civil society (such as relatives) for economic security and personal services.

The title of this monograph, *The Swedish Experiment*, is intended to cover not only these various aspects, but all important features—institutions as well as policies—that differ significantly from those in other developed countries. To achieve some linguistic variation, however, the term “the Swedish model” is used interchangeably with the term “the Swedish experiment”.

As the monograph is written in a non-technical fashion, it may be of interest not only to research colleagues but also to students in economics and other social sciences, as well as general readers.

I am grateful for comments on earlier versions from Jonas Agell, Anders Björklund, Nils Elvander, Magnus Henrekson, Ulf Jakobsson, Lars Jonung, Per Molander, Mancur Olson, Mårten Palme, Mats Persson, Olof Petersson, Birgitta Swedenborg, Lars E. O. Svensson, Hans Söderström and Peter Birch Sørensen, as well as three anonymous referees for *The Journal of Economic Literature*. David Sundén, Lenart Grundberg, Patrik Karpaty, Pavlos Petroulas and Jesper Roine have assisted with the statistics. Julie Sundquist has improved the language. I am grateful for a research grant from Jan Wallander and Tom Hedelius Foundations.

Stockholm, October 1997

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Introduction

Institutions and policies in Sweden have been rather experimental. Some of these experiments may also be relevant, positively or negatively, for other developed countries. Sweden may therefore be regarded not only as a small country on the periphery of Europe, but also as a large (“full-scale”) economic and social laboratory.

During the first decades after World War II, Sweden was able to combine a relatively rapid rate of GDP growth with full employment, considerable economic security, and a fairly egalitarian distribution of income. This combination is a reason why foreign observers have often been so interested in economic and social institutions and policies in Sweden. Exactly how was this combination achieved? And why did economic and social performance in Sweden subsequently deteriorate—in terms of economic growth from about 1970, a slightly more uneven distribution of income from the mid-1980s, and higher levels of unemployment and increased economic insecurity from the early 1990s? In other words, why were the experiments since the late 1960s and early 1970s so much less successful than the earlier experiments?

Was this deterioration merely a result of unfortunate exogenous shocks and “unnecessary” policy mistakes? Or was it also a consequence of basic changes in the economic and social system in Sweden in the late 1960s and early 1970s, when government spending, taxes, and regulations, in particular in the labor market, started to expand quite dramatically? Could it be that some of the economic and social achievements including full employment were not sustainable in the long run, at least not by the methods used in Sweden? It is quite clear that the institutions and policies built up in the 1960s and 1970s were highly vulnerable to domestic and international shocks, including policy mis-

takes that can never be wholly avoided. A more controversial view is that problematic economic, political and social mechanisms had become embedded in the long-term dynamics of the system itself. I suggest in this monograph that all these explanations have some merit.

The emerging problems related to economic efficiency and growth induced institutional reforms in the 1980s and 1990s. The macro-economic policy regime was also changed around 1990 to reduce the inflationary bias of the Swedish economy and hence to escape from the devaluation cycles that had been a characteristic feature of the Swedish economy since the mid-1970s. Ambitions to qualify for the EU, and possibly also the EMU, were probably additional motives. But these reforms also triggered new economic and social difficulties, though some of them may be problems of transition from one policy regime to another rather than new permanent problems of the Swedish society.

Before attempting a verdict on the economic and social experiments in Sweden after World War II, it is useful to specify some characteristic features of the institutional structure in the country (Chapter I). Against this background, four problem areas are highlighted: economic security and the distribution of income (Chapter II); economic growth (Chapter III); economic efficiency (Chapter IV); and macroeconomic instability and unemployment (Chapter V). The book concludes by asking whether the Swedish experiment is gradually unwinding and, if so, why (Chapter VI).

Chapter I

The Institutional Context

A Bird's-Eye View¹

Two broad targets of economic and social policy seem to have been taken more seriously in Sweden after World War II than in most other developed countries: *economic security*, including full employment, and *egalitarianism*, including both a general compression of income differences and the mitigation of poverty. The emphasis on these targets, and their specific design, help explain some characteristic features of the institutional set-up in Sweden during much of the post World War II period—often referred to as a special “Swedish model” of economic and social organization.

This institutional set-up can perhaps best be characterized as *a society dominated by large and centralized institutions*. Important elements are: (i) large public-sector spending and high taxes, reflecting ambitious welfarestate arrangements and large-scale interventions in the economic lives of individuals and households; (ii) a strongly interventionist stabilization policy, originally designed to “fine-tune” full employment, with so-called active labor market policy as an important tool; (iii) government interventions to influence aggregate saving, credit

¹ Other broad expositions on the functioning and performance of the Swedish economy include Lundberg (1985), Lindbeck (1975, 1990), Lindbeck et al. (1994), Myrman (1994), Forslund (1995b), Freeman, Swedenborg and Topel, eds. (1997), and Henrikson, Jonung and Stymne (1996).

Statistics on Sweden in this paper are from Statistics Sweden (SCB) if other sources are not referred to explicitly. International comparisons are based on OECD statistics if not stated otherwise.

supply, and investment, as well as their allocation, by public-sector saving, capital market regulations, taxes and subsidies; (iv) increased centralization within the public sector; (v) centralized wage bargaining at a national level; and (vi) highly centralized decision-making in the private sector, where a small group of large firms predominates on the production side, and holdings of financial assets, including shares, are highly concentrated to a few large institutions—three or four banks, half a dozen insurance companies, and a few investment corporations.¹ These centralist structures have, however, been combined with (vii) a pronounced free-trade regime.

It is important to realize that most of these interventionist policies and the centralist organization of society is of rather recent origin. As late as 1960, public sector expenditures did not exceed the (weighted) average in European OECD countries, i.e., about 31 percent of GNP. The efforts to redistribute income via very high marginal tax rates increased only gradually, culminating in the 1971 tax reform. Moreover, while the *idea* of Keynesian-type full employment policies had been promoted by the Swedish government as early as the 1930s, it had little (hardly any) influence on the policies actually pursued until after World War II (Lars Jonung 1979).² Tight regulations of the labor market were not introduced until the early 1970s, and active labor market policy was not pursued on a large scale until the late 1970s, though the *idea* of such a policy had already been developed in the 1950s, in particular by some labor union economists. Government saving and credit supply did not become important until the mid-1960s, partly in connection with the build-up of the state pensions funds (the AP funds). Traditionally, the organization *within* the public sector has been fairly decentralized in Sweden because of the taxation powers of municipalities and the large degree of autonomy, in the relation to the central government, of various administrative state agencies. Centralization

¹ Anders Lundström et al. (1993) argue that the structure of firms in Sweden does not differ much as compared to other countries in Western Europe. However, scrutiny of all available statistics, as in Henrekson (1996), supports the conventional view that large firms are relatively important in Sweden. But there is also a large number of *very* small firms, in many cases without employees (partly for tax reasons).

² In the 1930s, it was a rapid increase in exports, rather than fiscal policy measures, that pulled Sweden out of the depression. The rise in exports was brought about by a weak Swedish krona and increased international demand for staple Swedish export goods, such as forest products and iron ore.

within the public sector increased, however, as a result of the forced merger of 2,000 municipalities into about 280 between the mid-1950s and 1975. The municipalities have also increasingly been ordered to increase their supply of services in quantities and qualities determined by the central government after the early 1970s. Moreover, even though wage bargaining had already become highly centralized by the late 1950s, it was hardly used to squeeze wage differentials until the late 1960s, by way of so-called solidarity wage policy.¹ Centralization within the private sector also emerged only gradually after World War II, in fact often encouraged by government policies.

Thus, except mainly for the organization of wage bargaining and the experiments with Keynesian-type demand management in the 1950s and 1960s (where Sweden was not unique), these centralized features were created or strongly accentuated only in the late 1960s and early 1970s. My assessment, therefore, is that it was not until then that Sweden diverged from other western countries to the extent that it was appropriate to talk about a special Swedish model. Some of the institutional and ideological roots of the model may, however, be traced back to earlier decades.²

¹ In a study by Harold Lydall (1968, Table 5.6) of the dispersion of earnings in the early 1960s, Sweden was placed in a middle group among developed countries, together with the United Kingdom, Denmark, West Germany, Canada, Belgium, and the United States. Indeed, as late as 1968 the experience-wage profile seems to have been steeper in Sweden than in the United States (Edin and Topel 1997).

² For instance, as in most other developed countries, various welfare state arrangements hark back to the early 20th century (Zetterberg and Ljungberg 1997, pp. 57–84). The idea of “universal” social insurance, tied to citizenship rather than to employment, was introduced already in the pension system legislated in 1913 (though with a flat rate benefit). Moreover, the principle of income protection may be traced back to the work-injury insurance of 1916 (with a replacement rate of two thirds).

Agricultural price regulations and a nationwide system of labor market exchange were built up in embryonic form in the 1930s (Rothstein 1991); some modest subsidization of housing construction started also at that time.

An example of the ideological roots of economic and social policies after World War II may be attributed to some Swedish left-of-centre intellectuals in the 1930s and their visions of rational central economic and social planning (“social engineering”). Alva and Gunnar Myrdal and the Social Democratic ideologist and finance minister Ernst Wigforss were at the core of this group. In his book *Sweden The Middle Way* (1936), Marquis Childs described Sweden in the 1930s as a society “in the middle” between capitalism and socialism. However, his statement reflected the ideas and ambitions of this group of intellectuals rather than Swedish reality at the time.

Centralism, interventionism and “state-ism” also exist, of course, in other developed countries. In this respect, Sweden has probably differed the most from other countries in the ambition to intervene in the lives of families and not just firms, largely to provide economic security and encourage egalitarianism. A characteristic feature of these interventions has been the provision of “standardized” arrangements for households’ demand for income insurance and personal services—regardless of the individual’s income, preferences and geographical location (Petersson 1992, pp. 328–331; Rothstein, 1994, pp. 226–240). The freedom to choose types of insurance and services has not been given a high priority.

The attempts to standardize welfare arrangements received great emphasis after the mid-1960s. All adults in the family were supposed to work in the open market, and the children would ideally get the same type of day care organized by the municipalities, and subsequently also the same education. Standardized housing facilities in large municipal housing complexes were provided. Old-age care was also supposed to be provided by the public sector. As a mirror image, private initiatives were discouraged in the fields of child care, education, health, old-age care and housing. It is somewhat paradoxical that these standardized solutions were accentuated (in the 1970s) just before the population started to become more heterogeneous, and individual preferences developed in more “individualistic” directions according to available studies of attitudes (T. Pettersson, 1992; Ziehe, 1993).

It is, however, quite clear that what has here been characterized as a specific Swedish experiment (or model) was not consciously planned according to some “great design”. Rather, it should be regarded as an *ex post* outcome of hundreds of separate decisions (Stråth 1995). Behind many of these decisions, however, it is possible to detect a specific view of the world, such as a firm belief in the importance of returns to scale, the usefulness of centralized political intervention in the economic life of firms and families, and considerable suspicion of markets, economic incentives and private entrepreneurship not embodied in large firms.

As far back as the 1950s and early 1960s, it was not unusual to talk about a specific Swedish model. But with hindsight, this seems premature, if the term is used as broadly as in this monograph. Or, alternatively: if a “Swedish model” was already a phenomenon in that period (or even in the 1930s), it is obvious that this was a very different model

from the one that emerged as of the late 1960s and early 1970s, and which is the subject matter of this monograph.

Swedish Corporatism

The relation between the representatives of capital and labor in Sweden is often described as highly co-operative, i.e., consensus oriented. This co-operation harks back to the centralist “Saltsjöbaden Agreement” in 1938 between the Swedish Confederation of Trade Unions (LO) and the Swedish Employers’ Confederation (SAF). The agreement was basically designed to settle conflicts peacefully in order to avoid government intervention in the labor market. It is often argued that this co-operation has contributed to the relatively low level of strikes and lock-outs in Sweden after World War II, in contrast to the situation before the war.

By itself, this co-operation can hardly be regarded as an expression of “corporatism”; the government has not been very involved in these processes, except mainly for some “moral persuasion” and sporadic (though not very successful) attempts to pursue a tax-based income policy. As in several other countries in Western Europe, however, there are clear-cut examples of corporatism, if by that term is meant formalized (administrative) co-operation between private organizations and the state. An illustration is that many interest group organizations, partly as an inheritance from World War II, have been represented in various administrative and judicial government agencies, though this practice seems to have receded somewhat in the early 1990s.¹ Moreover, a wide variety of state-independent organizations, which had traditionally constituted an important element of civil society, gradually became financially dependent on the state and its administrative

¹ Important examples are the National Labor Market Board, the Labor Market Court, the Housing Court, and the Anti-Cartel Court. Farmers’ organizations and producers’ co-operatives in the food industry have been involved (since the 1930s) in the administration of agricultural protectionism. In the 1970s the national tenants’ organization (*Hyresgästföreningen*) was given exclusive rights to bargain with landlords about rents as an element of the rent-control system. However, the tradition whereby private organizations are represented in administrative government agencies had already begun in a modest form in the early 1900s.

agencies after World War II. Examples are labor unions, tenants' organizations, cultural and educational organizations, political parties, and the mass media.

Labor unions have exerted a much stronger influence than other organizations on political and administrative decisions. They have also obtained considerable privileges from the state. In the early 1970s, unions succeeded in pushing through important labor market legislation in their favor when they could not get what they wanted through centralized bargaining with employers. Important examples are legislation concerning job security (*Åmanlagarna*) and union influence on the organization of work within firms (MBL). As unions have been given a central role in the administration of this legislation, union power in society has been boosted considerably—in relation not only to firms but also to employees, who have become highly dependent on unions both in matters of job security and the possibilities of influencing the situation at work. Unions also administer unemployment insurance, even though the system is basically tax financed; this helps explain the high degree of unionization in Sweden (80–85 percent). Moreover, by legislation, firms are obliged to provide office space and pay salaries to union functionaries when they conduct firm-related union activities.¹ An important explanation for these legislative victories of unions is their alliance with the Social Democratic party, which has been in power most of the time since 1932, though usually as a minority government or in co-operation with the Peasants' (today Center) party. The Social Democratic party has, in turn, been strongly dependent on union resources, financially and in terms of recruiting personnel and functionaries.

The union's ambitions to gain power peaked in the second half of the 1970s, when they proposed the creation of union-controlled, tax-financed "wage-earner funds", designed to take over the bulk of the ownership of Swedish corporations on the stock market. In addition to their ambitions for power, the unions motivated their proposal as a way of preventing share-holders in high-productivity firms from growing rich as a result of solidarity wage policy, which was believed to hold down wages in such firms. The funds were supposed to be controlled jointly by union officials, representatives of the employers' associ-

¹ Until recently, union fees were deductible for tax purposes (like fees paid by firms to the employers' associations).

ations and politicians, i.e., a pronounced corporatist idea. But the funds were also intended as a tool of “industrial policy” according to values and plans formulated by the labor union movement (Landsorganisationen 1981).

The proposal may, more generally, be seen as a unilateral cancellation of the implicit “co-operative contract” between labor and capital. It contributed, therefore, to a pronounced deterioration in the relations between LO and SAF in the late 1970s and early 1980s. After heated political controversies, and considerable hesitation on the part of the Social Democratic party, a watered down version of the proposed wage-earner funds, tied to the general government pension system, was implemented in 1983. The funds were dismantled by a non-socialist government in 1994.

The deterioration in the relations between the unions and the employers’ associations was accentuated by an ideological offensive when SAF shifted to a more free-market oriented position in the early 1980s. The most prevalent expressions of this deterioration are intensified controversies between the unions and the employers’ associations about the forms wage bargaining should take, the structure of relative wages and, more fundamentally, the proper role of the government in society; see, for instance, Elvander (1988).¹ Rivalry between different unions also increased as unions of white-collar and public sector employees gradually became more powerful, in particular, after the mid-1960s (an issue to be discussed in chapter V).

All this means that the common characterization of Sweden as a country of strong consensus among unions, employers’ associations, and the government does not really seem to be an appropriate description of the dominant power relations in Sweden, particularly since the mid-1970s. It is more appropriate to say that Swedish society after World War II has been dominated by an alliance between the Social

¹ Strikes and lock-outs have, however, continued to be relatively rare by international standards, though they increased from the mid-1960s.

Democratic party and the labor unions, in particular, those belonging to LO, though tensions within this alliance have often risen to the surface.¹

The discussion in subsequent chapters give numerous illustrations of how the influence of unions and other organized interest groups in Swedish society has colored economic and social policies in the country.

¹ The following characterization by Hugh Heclo and Henrik Madsen (1987, pp. 323–324) is quite appropriate: “LO and the Social Democratic Party are two huge, complex, partly overlapping bureaucracies, in effect engaged in a never-ending conversation and at times arguments as to what it means to be a Social Democrat . . . They are in fact social bureaucracies penetrating into the life of communities in a way that is difficult for a foreigner to understand. Perhaps the closest analogy is to think of the labor movement as a church with denominations in some disagreement with one another.”

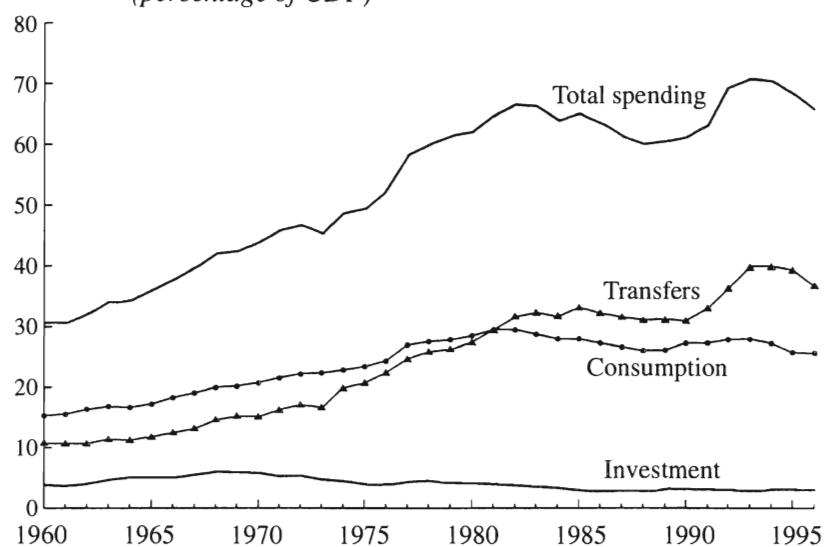
Chapter II
*Economic Security and
the Distribution of Income*

Welfare State Arrangements

The cradle-to-grave welfare state in Sweden matured in the late 1960s and on into the 1970s, with social insurance as the cornerstone. The Swedish social insurance system is usually characterized as (i) “universal” in the sense of covering the entire population; (ii) designed to provide income replacement, rather than flatrate benefits; and (iii) without substantial means testing. However as we shall see subsequently, reality often diverges from these principles. Many benefits are, in fact, tied to previous or contemporaneous labor-force participation rather than to citizenship, so called work fare. The relation between benefits and previous income is quite weak for large population groups. Moreover a considerable proportion of the population live, in fact, on selective, and often means-tested benefits. The benefit levels have, however, been quite generous, with replacement rates of at least 90 percent (up to a ceiling), except in the pension system where they have been about 60 percent. Occupational insurance arrangements, in particular for white-collar employees, often raise the compensation levels (the replacement rates) by five or ten percentage points.

Other types of transfers are also quite generous by international standards, in particular various forms of family benefits. An example is the provision of support to single parents. Moreover, the idea of insurance-based income replacement has been considerably modified by two specific ambitions of welfare state policies in Sweden. One is the emphasis on egalitarianism, which has contributed to raise the floors and lower the ceilings in the social insurance systems, hence strongly weakening the (actuarial) relation between contributions and benefits

Figure 1. *Public Sector Expenditures, Sweden, 1960–1996*
(percentage of GDP)



Sources: OECD Economic Outlook 57, 1995 and National Institute of Economic Research (KI).

in these systems. Another is the idea that individuals should be allowed to withdraw from the labor market on their own discretion in certain situations without much loss in income, for instance to take care of infants or sick children, or to improve their own education.

However, the most characteristic feature of the Swedish welfare state is probably that social services, such as child care and old age care, are provided mainly by the government (in fact, by municipalities and regional governments), rather than by the family or the private sector as in most other developed countries. An expression of this is that tax-financed consumption of “social” services, as usually defined, was about 20 percent of GNP in Sweden in the early 1990s as compared to about 10 percent in the total EU; see Fölster and Lindström (1994).¹

Mainly as a result of generous welfare state arrangements, total public sector expenditures have fluctuated in the interval of 60–70

¹ The share of employees engaged in the production of social services is about the same as the figures for the consumption of such services.

percent of GNP since the late 1970s—at the lower end of the interval in booms and at the upper end in recessions. This should be compared to 45–50 percent for the (weighted) average of European OECD countries. Of these expenditures, transfers have usually accounted for 35–40 percentage points and public consumption for 27–30 percentage points; see Figure 1. If the benefits are measured *net* of income tax paid by the beneficiaries, total public sector spending as a share of GDP in Sweden in the early 1990s was about ten percentage points lower than indicated by the gross figure. By such a net measure, total public sector spending was about the same in Sweden as in Belgium, Denmark and the Netherlands—the other leading countries in this respect.¹

Another way to illustrate the role of government spending in Sweden is to compare the *number* of citizens who are tax-financed to those who are market-financed. The former consists of people who either work in the public sector (except in public utilities or public sector corporations) or basically live on various types of transfer payments. While the ratio between these two groups was 0.38 in 1960, it had reached 1.51 in 1990 and 1.83 in 1995; see Table 1. This is a very high figure internationally.² The relevance of such calculations is that they indicate the fraction of the adult population, and approximately also of the electorate, whose income is almost completely determined by political expenditure decisions.³

When trying to explain the relatively large public sector spending in Sweden, it is again tempting to refer to the long-standing political dominance of the Social Democrats. But then it is necessary to argue that this domination has strongly influenced the positions of other political parties as well, as most decisions about public sector spending

¹ ESO 1994:133. It may be argued that such a net measure is relevant if we want to compare the extent to which the government in different countries directly contributes to the disposable income of beneficiaries. It is then not clear, however, why other taxes (such as consumption taxes and in some cases pay-roll taxes) paid by the beneficiaries should not also be deducted. Gross figures are more relevant if we want to highlight what lies behind the marginal tax wedges in Sweden also for beneficiaries.

² Denmark (with 1.72) and Belgium (1.42) seem to have had the highest figures after Sweden in the early 1990s (calculations by Jan Herin; OECD statistics). Even if old age pensioners are excluded from the Swedish figures, the ratio was as high as 1.22 in 1995.

³ Some of the benefits are, of course, financed by pay-roll taxes, which include elements of compulsory insurance fees; the actuarial connection between fees and benefits is often rather limited, however.

Table 1. *Tax-Financed and Market-Financed Individuals in Sweden*

| | 1960 | 1990 | 1995 |
|------------------------------------------------------------------|-----------|-----------|-----------|
| 1. Public administration and services | 461 000 | 1 493 000 | 1 346 000 |
| 2. Less: Sick leave, parenthood, etc. | -24 000 | -204 000 | -201 000 |
| 3. Old age pensioners | 365 000 | 1 533 000 | 1 584 000 |
| 4. Early retirement | 100 000 | 354 000 | 409 000 |
| 5. Sick leave | 166 000 | 311 000 | 156 000 |
| 6. Leave for parenthood | 9 000 | 162 000 | 163 000 |
| 7. Refugee applicants | 1 000 | 29 000 | 9 000 |
| 8. Engaged in labor market programs | 14 000 | 134 000 | 274 000 |
| 9. Unemployed | 51 000 | 75 000 | 333 000 |
| 10. Total (1—9) | 1 143 000 | 3 887 000 | 4 073 000 |
| 11. Employed in market sector* | 3 154 000 | 2 974 000 | 2 620 000 |
| 12. Less: Sick leave, parenthood, etc. | -165 000 | -405 000 | -392 000 |
| 13. Total (11—12) | 2 989 000 | 2 569 000 | 2 228 000 |
| 14. Ratio of tax-financed to market-financed individuals (10/13) | 0.382 | 1.51 | 1.83 |

* Includes self-employed

Sources: SCB and National Social Insurance Board (RFV)

Note: Double counting has been avoided, for instance in connection with sick leave or leave for child care.

have been taken with great unanimity. Moreover, total public sector spending continued to increase almost as fast as before, relative to GDP, during the center-right coalitions in 1976–1982 and 1991–1994, largely as a result of the relatively deep recessions in both instances. Against this background, it is tempting to argue that the narrow ideological spectrum in Swedish policies has not been conducive to the emergence of political opposition to the dramatic expansion of public-sector spending.

It is also reasonable to argue that the relatively early aging of the population in Sweden contributed to the rapid rise in government spending on pensions, due simply to the growing number of pensioners. Both this demographic development and the huge increase in female labor force participation are also likely to have heightened the political

pressure for generous pensions, subsidized old age care and child care outside the family.¹

The strong influence on government policies exerted by organized interest groups, reflecting the corporatist structure of society, is another conceivable explanation for the huge expansion of public sector spending. It is often also hypothesized that the “universal” welfare-state arrangements in Sweden, covering all income classes, have generated broad political support for generous and expanding government spending programs—both among the beneficiaries and among the large group of publicsector employees producing social services. A further attempted explanation is that the dramatic expansion of public-sector employment is partly a consequence of the government serving as “an employer of last resort”.

We may also speculate that both the rapid expansion of public sector spending and the increased progressivity of the tax-system in the 1970s had something to do with the international radicalization of political opinions at that time. It remains, then, to be explained why these ideological developments had a greater impact in Sweden than in other countries. One conceivable—though also rather speculative—explanation is that the new Swedish constitution dating from 1970 allowed new political winds to influence policies faster than before. Among the changes were that the first chamber in parliament (with an eight year election period) was abolished, the election period for the remaining chamber was shortened to three years, and a shift to strictly proportional elections made it more difficult to obtain a parliamentary majority.² Cross-country studies also suggest that the budget process has been more lax in Sweden than in most other developed countries (Molander 1992)—before the budget reform in the mid-1990s. A more profound question is *why* the budget process has been allowed to be lax. Part of the explanation may be the confidence in political discretion rather than

¹ In 1990, the age group 65 and over was about 28 percent of the population in the age groups 15–64, as compared to 19 percent in total OECD and 21 percent in OECD Europe (OECD data base). Female labor force participation in the age groups 25–64 increased from about 60 percent in 1970 to 80 percent in 1980, but fell in the 1990s.

² So far, there are hardly any generally accepted research results about the relation between the political constitution and the size, or rate of change, of government spending.

fixed rules in Swedish politics; *ad hoc* seems to be the basic principle of political interventions in Sweden.

These attempted explanations of the rapid expansion of public-sector spending refer mainly to conditions in Sweden, which is natural as I want to explain why Sweden has deviated so much from other developed countries during the last three decades. The most obvious *general* explanations, relevant for most countries, are perhaps demographic developments (such as the ageing of the population) and gradually rising real incomes (assuming a high income elasticity of the demand for economic security and services that are traditionally provided by the public sector). In societies with receding party loyalty among voters, it is also tempting to hypothesize that political parties competing for voters have offered more and more benefits to various groups of citizens, while negative effects on the national economy had not yet become apparent. Given this latter view of the world, it is natural to talk about over-extension, or “overshooting”, of the welfare state.

Distributional and Social Achievements

The household distribution of annual disposable income is relatively, though not uniquely even in Sweden (Gottschalk and Smeeding 1997). It gradually evened out during the post-World War II period until the early 1980s. The Gini coefficient fell from about 0.28 in the mid-1960s to about 0.20 in the early 1980s (for heads of households aged 25–64) if the household is defined in terms of consumer units.¹ The incidence of poverty is also relatively low.² Moreover, the low incidence of child poverty most likely contributes to “equality of opportunity” (Björklund and Jäntti 1993).

As in most other developed countries, income mobility is also rather high in Sweden, which means that the distribution of lifetime income is much more even than the distribution of yearly income; see, for in-

¹ Atkinson, Rainwater and Smeeding 1995; Björklund, Palme and Svensson 1995; Smeeding and Peter Gottschalk 1995. The only developed countries with about an equally compressed distribution of disposable income in the 1980s seem to have been Belgium, Denmark, Finland, Luxembourg and Norway.

² Atkinson, Rainwater and Smeeding (1995); Mitchell (1991). Measures of poverty based on income data are hazardous to interpret, however, because of the heterogeneity of low income groups.

stance, Björklund, Palme and Svensson (1995). With regard to income *before taxes* (when income includes pensions and other taxable benefits), the overall dispersion of lifetime income seems to be 35–40 percent lower than the dispersion of yearly income (Björklund 1993b).¹ Most of this difference is, however, accounted for by individuals below the age of 35. For individuals above that age, the dispersion of yearly income is, therefore, a fairly good indicator of the dispersion of overall lifetime income; (the correlation coefficient is 0.8 in Björklund's study).

Income mobility seems to be even higher for individuals with initially very low incomes (less than 50 percent of median income). For instance, it only took six years for most individuals (61 percent) belonging to the lowest groups with respect to *disposable income* in the early 1980s to move into the median income bracket or above (Uddhammar 1997, pp. 64–77). The figure was no less than 70 for individuals in the age group 18–29, but it was as high as 40 percent for individuals in the age group 30–64.

Temporarily very low income is, in fact, often mainly a liquidity problem, sometimes reflecting periods of investment in human capital, with the returns appearing later on. This fact should be granted also when we look at the time path of the distribution of income. For instance, a rise in the number of university students from about 5 to about 20 percent of a cohort of individuals in their early 20's (which has occurred since 1950) will show up in yearly statistics as increased income inequality in spite of the fact that most of these students will have a lifetime income above the mean.

An indicator—albeit rather imperfect—that welfare-state arrangements and related taxes have contributed to the compressed distribution of disposable income is that this distribution is much more compressed than the distribution of factor income. This holds both for yearly and

¹ The statistical measures of dispersion are the Gini coefficient and the coefficient of variation. Income includes earnings from work, capital income, business income, capital gains as well as pensions and taxable benefits in the connection with sickness, unemployment, parental leave etc. The study uses panel data from 1951 to 1989 for men, i.e., for a period of 38 years.

life time income.¹ Moreover, households (including retired people) with disposable income below a conventionally defined poverty line, such as 40 or 50 percent of median income, account for only about a fifth of the corresponding number calculated on the basis of income before social transfers (Luxemburg Income Study).²

Another indicator of the importance of welfare state redistributions is that the factor income distribution did not widen during the period when the tax and benefit systems were made more progressive, i.e., in the 1960s and 1970s. Indeed, the factor income distribution also became more compressed.³ A common judgment among researchers in this field is that the equalization of factor income was a result of *both* market forces, particularly an increase in the supply of well-educated labor, *and* the solidarity wage policy pursued by Swedish unions. Solidarity wage policy was able to achieve this partly because it was pursued under a system of centralized wage bargaining, or rather *multilevel bargaining*, with sequential bargaining on the central, industry and firm levels. It seems that the intentions of union representatives engaged in central bargaining to reduce wage differentials remained more or less unthwarted by subsequent bargaining at lower levels.

¹ The Gini coefficient of the distribution of yearly disposable income is about two-thirds of the corresponding coefficient of the distribution of factor income—0.2 as compared to about 0.33 for households with at least one economically active member (HINK statistics from the SCB's annual income survey, and Lindbeck 1983). Similar observations hold for lifetime income: this distribution is also much more compressed after taxes and benefits than before; see Björklund, Palme and Svensson (1995). There is also a large difference between the before tax and after tax distributions of "synthetic lifetime income" derived from cross sections of cohorts with different professions during a given year (Lindbeck 1983).

² In the mid-1980s, while the so-called poverty gap was only 0.8 percent of GNP in the case of disposable income, it was 3.0 for factor income (Mitchell 1991, p. 57). The poverty gap is then defined as the aggregate amount of income that would have to be redistributed to households below a certain poverty line, in this case 40 percent of median income, in order to bring their income up to this line.

³ The Gini coefficient for the distribution of pre-tax hourly earnings was cut in half for wages of blue-collar workers between 1964 and 1984, and it was reduced by one-fourth among white-collar workers (Långtidsutredningen, SOU 1995:4). A rather even distribution of hours of work among individuals has also contributed to keeping down the dispersion of wage income (Björklund and Freeman 1997). In fact, the *absolute* level of before-tax real wage income for individuals in several academic professions fell by between 13 percent (for male teachers) and 36 percent (for male physicians) from 1970 to 1990.

In the 1960s, solidarity wage policy was largely designed to reduce wage differences between workers with similar training and skills in different production sectors. The *explicit* slogan was “equal pay for equal work”. Subsequently, and particularly during the 1970s, the ambition was changed to reducing wage differentials in all dimensions; the *implicit* slogan, slightly caricatured, then became “equal pay for all work”. In other words, ambitions switched from equity to equality.¹

The male–female wage differential has also narrowed considerably over time. In 1968 women seem to have earned about 23 percent less than men of comparable age and education. By mid-1980 the gap had narrowed to 11 percent, where it has stayed since then (Edin and Topel 1997). The remaining gap is related to differences in occupations and work establishments for men and women rather than to wage differences within occupations and establishments (Petersen and Meyerson 1996).

The redistributive consequences of the welfare-state arrangements in Sweden illustrate a general pattern among countries. The most compressed distribution of (annual) disposable income, and the strongest redistributions via government interventions, seem to have emerged in countries that have large government spending programs covering the entire population, rather than in countries where spending programs are targeted at the poor (McFate 1995; and Korpi and Palme 1997). One attempted explanation is that generous and universal social insurance benefits are more evenly distributed than the benefits of private insurance policies, which play a greater role in countries that have small and highly targeted transfer systems. Some observers have also hypothesized that the political support for transfers to the poor is greater in societies where the government also provides benefits in cash and kind to the non-poor (Korpi and Palme 1997).

There is also rather general agreement among researchers that similar forces, though with opposite signs, have been responsible for *widening* the distribution of factor incomes after the early 1980s. For instance, there was a slowdown in the expansion of the supply of educated labor. Moreover, less centralized wage bargaining, in particular after 1983,

¹ While inter sector wage differences were reduced during the first period, intra sector wage differentials were squeezed during the second period (Hibbs, Jr. and Locking 1995). This provides some additional support for the hypothesis that solidarity wage policy has indeed contributed to the observed compression of the distribution of wages.

seems to have meant less emphasis on solidarity wage policy. In fact, wage bargaining since 1983 has usually taken place only on the two lower, i.e., industry and firms, levels; see Edin and Holmlund (1995); Elvander (1988) and Holmlund (1997). The further increase in the dispersion of factor income in the early 1990s was also caused by the rise in unemployment at this time.

As a result of these developments, the dispersion of yearly disposable income also increased; the Gini coefficient (for household income per consumer unit) increased by 3–5 points between 1980 and 1993, though less so among people in the age group 25–55.¹ There has also been a modest rise in the fraction of households below the poverty line as of the early 1980s, if poverty is defined in terms of *relative* incomes.² Since the early 1990s poverty has also increased to some extent in *absolute* terms (constant purchasing power). It is too early to know if, and to what extent, these changes also reflect a widening of the distribution of life-time income.

Welfarestate arrangements have, of course, much broader social consequences than improving economic security and influencing the distribution of income. For instance, crime-infested slums, as exist in many US and UK cities, can hardly be found in Sweden, probably even less so than in other countries on the European continent. It is tempting to hypothesize that the elaborate welfare state arrangements in Sweden have contributed to this difference, even though only a very small fraction of total government spending programs (6 percent according to Agneta Kruse 1995) are specifically directed towards people with very low income. It seems to be generally agreed, however, that the physical and social environment began to deteriorate in some Swedish suburbs in the 1980s and 1990s, especially where there are large concentrations of municipal housing and recent immigrants (many of whom are refugees). A socially and economically segregated underclass has emerged in some large city suburbs in Sweden.³ Moreover, elaborate welfare state arrangements have not been able to prevent a large (recorded)

¹ Atkinson, Rainwater and Smeeding (1995); SCB's HINK statistics, adjusted for linkages in the statistical series.

² While 2.7 percent of households had a disposable income below 50 percent of median income in 1978, the figure had risen to 5.7 percent in 1993 (Gustafsson 1996).

³ There is still very little systematic documentation of these developments. For some information, see SIFO (1997), SOU 1997:4 and SOU 1997:118.

increase in many types of crimes—in particular property crimes—although from quite low initial levels by international standards (Ahlgren, ed. 1994).

The title of this chapter is “Distributional and Social Achievements”. Here the argument consequently is *not* that the reduction in income disparities in Sweden is necessarily welfare-enhancing, and hence a good thing. What is meant is simply that politicians to a considerable extent have realized their distributional ambitions. The consequences for the level of income and welfare of individuals including low-income groups depend, of course, also on the consequences for economic growth, economic efficiency and macroeconomic stability. These issues will be discussed in subsequent chapters.

Chapter III

Economic Growth

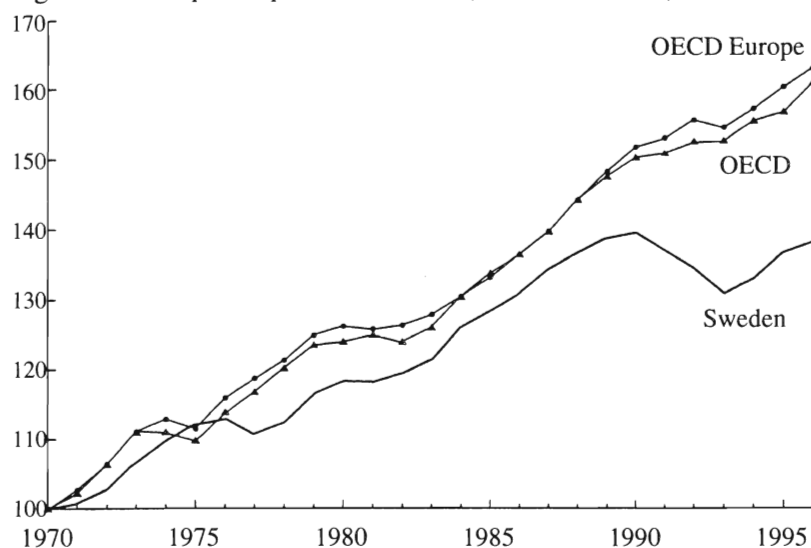
Performance

From the start of the industrialization process in Sweden around 1870 up until about 1950, productivity growth was among the fastest in the world, perhaps *the* fastest (Angus Maddison 1982). Productivity growth was also rather rapid during the Golden Age of the world economy in the period 1950–1970; GDP (Gross Domestic Product) per man-hour increased by 4.20 percent per year in Sweden during this period as compared to 4.46 percent for the total OECD (Maddison 1982, p. 212). The difference between Sweden and the OECD during the period 1950–1970 disappears (in fact, it even changes sign) if we exclude West Germany and Japan, as having been reconstructed after the damage during World War II.

Attempts to explain the relatively fast economic growth in Sweden during the century-long period 1870–1970 have usually emphasized the economic openness of the country, favorable development of terms of trade, freedom of entrepreneurship, stable and efficient rules, large infrastructure investment, large and widespread investment in human capital (practically the entire population was already literate in the late 19th century), relative social peace, and a vital civil society (Lindbeck 1975, pp. 1–10; Myhrman 1994). This suggests that a liberal, pluralistic, and outwardly oriented country, in which the government concentrates on the physical and institutional infrastructure and investment in human capital, is quite conducive to relatively fast productivity growth. Luck, such a staying out of two World Wars, probably also helped.

Thus, Sweden had become a relatively rich society *before* the emergence of a special “Swedish model”. It is also worth noting, however,

Figure 2. *GDP per Capita, 1970–1995 (index 100=1970)*



Sources: OECD National Accounts, vol. 1, 1995; OECD Economic Indicators, 1996:2.

that the *early* build-up of welfare state arrangements in the 1950s and 1960s, and the related rise in the share of public sector spending from 30 to 45 percent of GNP, turned out to be quite compatible with a relatively fast rate of productivity growth during that period.

As in some other countries with relatively high per capita GDP in 1970, such as the United States and Switzerland, labor productivity growth has been less impressive after that time. GDP per employed increased by 1.45 percent per year in Sweden during the period 1970–1996 as compared to 1.73 for the total OECD and 2.02 percent for European OECD.¹ The difference is larger if labor productivity growth is measured in terms of GDP per capita.² Thus, while GNP per capita increased by about 60 percent between 1970 and 1995 in the OECD, the

¹ Available statistics for GDP per man-hour for the (shorter) period 1973–1987 give about the same picture (Madison 1991).

² These figures are 1.14 for Sweden, 1.98 for total OECD, and 1.84 for European OECD (OECD National Accounts, Main aggregates, vol. 1, 1995; and Labor Force Statistics, 1995.)

Table 2. *GDP per Capita, percent of OECD Average, Current PPP*

| 1970 | | 1990 | | 1995 | |
|------|-------------------|------|-------------------|------|-------------------|
| Rank | Index | Rank | Index | Rank | Index |
| 1 | Switzerland 154 | 1 | Luxembourg 143 | 1 | Luxembourg 159 |
| 2 | United States 148 | 2 | United States 137 | 2 | United States 138 |
| 3 | Luxembourg 131 | 3 | Switzerland 133 | 3 | Switzerland 127 |
| 4 | Sweden 115(106*) | 4 | Canada 114 | 4 | Norway 121 |
| 5 | Canada 108 | 5 | Japan 110 | 5 | Denmark 112 |
| 6 | Denmark 106 | 6 | Norway 109 | 6 | Japan 110 |
| 6 | France 106 | 7 | France 108 | 7 | Canada 109 |
| 8 | Australia 104 | 7 | Iceland 108 | 7 | Austria 109 |
| 8 | Netherlands 104 | 9 | Sweden 106(95*) | 9 | Belgium 108 |
| 10 | New Zealand 101 | 10 | Austria 104 | 10 | Germany 106 |
| 11 | United Kingdom 98 | 11 | Denmark 103 | 11 | Iceland 104 |
| 12 | Belgium 95 | 12 | Belgium 102 | 11 | France 104 |
| 12 | Germany 95 | 12 | Italy 102 | 13 | Italy 102 |
| 14 | Austria 91 | 14 | Finland 101 | 14 | Netherlands 101 |
| 15 | Italy 89 | 15 | Germany 100 | 15 | Australia 99 |
| 15 | Norway 89 | 15 | Netherlands 100 | 16 | Sweden 95(84*) |
| 17 | Finland 86 | 15 | Australia 100 | 16 | United Kingdom 95 |
| 18 | Japan 85 | 18 | United Kingdom 99 | 18 | Finland 89 |
| 19 | Iceland 83 | 19 | New Zealand 84 | 19 | New Zealand 87 |
| 20 | Spain 67 | 20 | Spain 74 | 20 | Ireland 85 |
| 21 | Ireland 56 | 21 | Ireland 70 | 21 | Spain 74 |
| 22 | Greece 53 | 22 | Portugal 59 | 22 | Portugal 67 |
| 23 | Portugal 47 | 23 | Greece 57 | 23 | Greece 61 |
| 24 | Mexico 37 | 24 | Mexico 32 | 24 | Mexico 35 |
| 25 | Turkey 28 | 25 | Turkey 29 | 25 | Turkey 29 |

Sources: OECD National Accounts, vol. 1. 1996; Economic Indicators, 1996:2.

* If Mexico and Turkey are excluded.

corresponding increase was 37 percent in Sweden (Figure 2). Observe that the diagram compares the rate of change, not the level, of GDP per capita in Sweden and other developed countries. (Levels will be compared subsequently; see Table 2.)

As a result of these developments, Sweden's position on the ranking list of *levels* of per capita GDP among OECD countries has fallen considerably since about 1970. For PPP-based calculations, Sweden occupied fourth position among 25 OECD countries in 1970, with per capita GNP 15 percent above the OECD average (six percent above

excluding Mexico and Turkey); see Table 2.¹ By 1990 Sweden had fallen to ninth position, 6 percent above the OECD average (5 percent below excluding Mexico and Turkey). By 1995, two years after the bottom of a deep recession, Sweden had dropped to sixteenth position, 5 percent below the OECD average (16 percent below excluding Mexico and Turkey).

I have emphasized the growth performance from about 1970 (rather than, for instance, from 1950). The reason is, of course, that it is only from about this time that institutions and policies in Sweden have differed substantially from those in other OECD countries. As seen from Figure 2, depicting the entire growth path for GDP per capita from 1970, the Swedish “growth lag” shows up, in particular, in two recession periods: 1976–1978 and 1991–1993. This observation cannot, however, explain the relatively poor long-term growth performance in Sweden, as other countries have also experienced negative short-term macroeconomic shocks, though often with different timing than Sweden. Attempts to measure the timing and size of the growth lag is complicated by the cyclical component of the GDP path. For instance, while time series ending in 1995, just after an exceptionally deep recession in Sweden, may underestimate Sweden’s relative growth trend after 1970, statistics ending in the overheated (indeed unsustainable) boom of 1987–1990 overestimate it.²

The sluggish aggregate productivity growth in Sweden after about 1970 is to some extent the result of the large size of the public sector, with slow productivity growth. Indeed, available—though highly uncertain—calculations suggest that labor productivity growth in the pub-

¹ PPP calculations imply that the relative purchasing power of income in each country is taken into account when GDP (per capita) is compared. This means that we do not have to base the comparison on the Swedish exchange rate, which only very imperfectly reflects differences in the price level between Sweden and other countries.

² Dowrick (1996) argues that “*at least up until 1990* there is nothing in the Swedish growth performance which suggests substantial underperformance”. He seems to refer to the period 1950–1990, rather than to the period after 1970 which is in focus in this paper (as well as in the Swedish discussion). Moreover, he overlooks the fact that the capacity utilization of labor in the period 1987–1990 (with an unemployment rate of 1.6 percent on average according to national statistics) was clearly unsustainable. In a number of papers Walter Korpi (1996), a Swedish sociologist, has taken the same position, in contrast to the generally accepted view among Swedish economists; for a rebuttal to Korpi, see Henrekson (1996).

lic sector was, in fact, *negative* during the period 1970–1992 (ESO 1994:24; Murray 1996). Nevertheless, labor productivity growth in the public sector is schematically set at zero in the Swedish national accounts. Thus, it would seem that the statistical conventions concerning public sector production in the Swedish national accounts have biased the calculations of GDP growth *upwards* during the 1970s and 1980s, rather than downwards as is often asserted. The substantial shift of service production from households to the public sector (where such production is statistically recorded in the national accounts) has also biased calculations of GDP growth in Sweden upwards as compared to other countries.

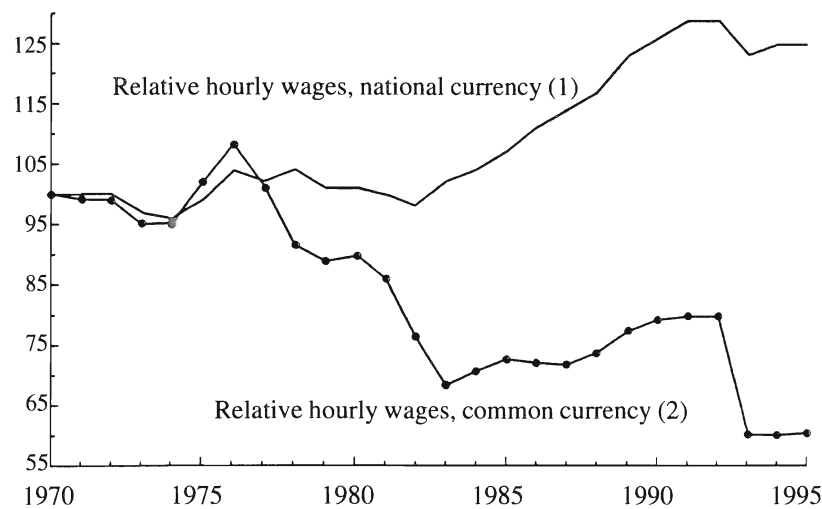
The fact that much of the production of household services takes place in the public rather than the business sector in Sweden also biases the figures for productivity growth in the latter sector upwards as compared to other countries, since productivity growth is slower in the service sector than in manufacturing. Recorded labor productivity growth (per hour) in the business sector during the period 1973–1990 was nevertheless 0.2 of a percentage point slower per year than the OECD average and 0.8 of a percentage point slower than European OECD, with a somewhat greater difference in the 1970s than in the 1980s.¹ The lag of productivity growth relative to the OECD is more pronounced in the manufacturing sector: 0.6 of a percentage point per year during the period 1971–1990, again with a greater difference in the 1970s than in the 1980s.

Estimates of *total factor productivity* growth are much more hazardous. Available studies indicate, however, that this was also relatively slow in the business sector in Sweden between 1973 and 1990, in particular as compared to Western Europe; see Appendix 1.

Sweden's lagging productivity performance is also reflected in statistics on relative hourly wage costs. When measured in common currency, these seem to have fallen gradually though not monotonically from 1970 (or perhaps rather from 1976) to the mid-1990s. According to Figure 3a, the fall is about 40 percent relative to the country's trading partners among developed countries. Thus, the picture provided by Figure 3a is consistent with Figure 2 and Table 2. More surprisingly, there has also been a gradual fall in relative unit labor costs (RULC), indeed, by about 25 percent; see Figure 3b. In other words, the (effec-

¹ For relevant statistics on productivity growth see Appendix 1 at the end of the book.

Figure 3a. *Relative Wage Costs, Sweden, 1970–1995, index=1970, Manufacturing*



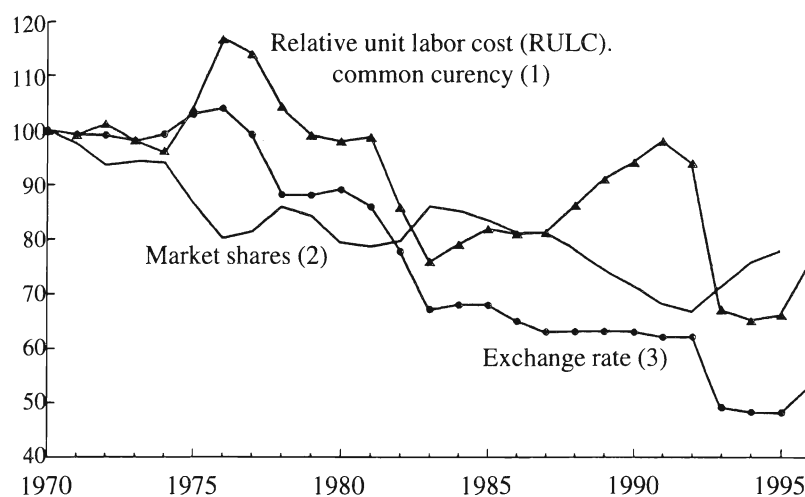
Sources: SCB and National Institute of Economic Research (KI).

Note: Countries are weighted by size of export competition with Sweden in various OECD countries. The weight for country j is $\sum_{k=1}^N \omega_k \cdot m_{jk}$, where ω_k = Sweden's export to country k as a share of Sweden's total export to N developed countries. m_{jk} = country j 's share of country k 's import from the other N countries. Thus, not only the size of Swedish export to a specific country is considered, but also the size of exports to that country from other developed countries.

tive) depreciation of the Swedish krona since 1970, by altogether about 50 percent, has been stronger than can be explained by the faster wage inflation and the slower rate of productivity growth than in other developed countries. I will return to this.

Productivity growth recovered dramatically in both the business sector and manufacturing during the severe macroeconomic crisis in the first half of the 1990s; see Appendix 1. One reason is the closing down of low-productivity activities, another the reduction in overstaffing when absence from work declined (including absence for sick leave, maternity leave and study leave). Both mechanisms were reflected in a fall in employment in the private sector by 12 percent during the deep business downturn in 1990–1993. One reason for the continued pick-up

Figure 3b. *RULC, Exchange Rate and Market Shares, Sweden, 100 = 1970, Manufacturing*



Forecast for 1996 by KI.

1. Measured in Swedish kronor.
2. Share of Swedish export volumes in import of other OECD countries.
3. See note in figure 3a.

Sources: SCB and National Institute of Economic Research (KI).

in productivity growth during the period 1993–1995 is the rise in capacity utilization of then existing plants.

Proximate Sources of Productivity Growth

It is likely that the slow-down of productivity growth in all developed countries since the early 1970s to some extent is a statistical artifact. However, this does not explain why Sweden lags other countries. Technological “catch-up” (by other countries) is probably part of the explanation for the relatively slow rate of productivity growth in Sweden. After all, the operation of catch-up mechanisms is a common result in the empirical literature on cross-country regressions of economic

growth.¹ For instance, catch-up mechanisms help explain why some countries, such as the United States and Switzerland, have lost part of their lead over other developed countries. But such mechanisms cannot explain why Sweden was *overtaken* by twelve other OECD countries between 1970 and 1995, and wound up with a level of per capita GNP considerably below the OECD average, particularly, when the developing countries Mexico and Turkey are excluded. It is one thing to lessen your lead in a race, quite another to *fall behind* as Sweden has done.

Demographic factors, in particular the rapid increase in the number of citizens above pension age (65 years), have certainly contributed to the relatively slow rate of per capita growth (though not necessarily productivity growth) in Sweden. The reduced rate of physical (material) capital accumulation, from originally rather high levels, also explains part of the slow-down. Indeed, the aggregate investment share fell from a level of about 2.5 percentage points above the OECD average in the 1960s to about 2 percentage points below in the 1980s (OECD National Accounts).² Aggregate saving has moved approximately in parallel with aggregate investment.

The bulk of the fall in investment occurred, however, outside the business sector, i.e., in housing construction and the public sector. This suggests that the slow-down of labor productivity growth in the business sector is not mainly caused by reduced accumulation of capital; formal growth accounting seems to confirm this interpretation.³ It is also worth noting that investments in buildings fell relative to machines in the business sector. This suggests that Swedish firms were more anxious to “rationalize”, in the sense of substituting capital for labor,

¹ For a survey of this literature, see, for instance, Levine and Renelt 1992. The catch-up hypothesis is also consistent with Table 2 in the present paper, as the dispersion among countries in this table has fallen between 1970 and 1995. In a *univariate* catch-up regression for OECD countries during the period 1973–1992, Dowrick (1996) concludes that Swedish aggregate growth performance (GDP per capita) lags by 0.3 percentage points per year compared with predicted performance (i.e., when the figures are adjusted for the catch-up factor).

² According to Edward Leamer and Per Lundborg (1997), as a result of these developments, Sweden has moved from a top ranking to a position just above the average among developed OECD countries in terms of physical capital per capita. For statistics on the GDP shares of investment and saving, see Appendix 2.

³ For statistics on growth accounting, see Appendix 3.

than to expand their production capacity.¹ A reflection of this phenomenon is that aggregate industrial production in Sweden lagged by 27 percent relative to the OECD average between 1970 and 1990, though the lag had shrunk to 23 percent by 1995 (in connection with the brisk pick-up in industrial production after the fall in value of the Swedish krona in November 1992).

In spite of a huge reduction in relative unit labor costs, Sweden has experienced a gradual decline in its market share in other OECD countries (Figure 3b and Jagrén and Jakobsson 1993). It is not obvious how this should be interpreted. A modest part of the explanation is the increase in exports of new industrial countries. Another explanation could be that labor and capital have been stuck in sectors with falling terms of trade on world markets, and that wages in Sweden have been forced to adjust downwards accordingly.² This interpretation is consistent with Ragnar Bentzel's growth-accounting calculations, according to which reallocation of resources contributed to only 0.3 of a percentage point of annual production growth in the period 1970–1993 as compared to 0.9 in the period 1950–1970.³ Another explanation might be that the improvement over time in the *quality* of products from Swedish plants has not been as fast as quality improvements abroad, and that this has forced Swedish firms to lower their relative export prices, and hence also wages (in common currency) as compared to other countries.⁴

¹ According to Bentzel's growth accounting (Appendix 3), the ratio of machine capital to total capital in the business sector increased from 0.17 in 1950 to 0.25 in the late 1970s and to 0.27 in the early 1990s.

² The aggregate terms of trade for Sweden fell by altogether about 25 percent from 1960 to 1992 (World Bank, p. 478, 1976 and p. 63, 1994).

³ Another indicator that the reallocation of resources among sectors was slow during the 1970s and 1980s is that Swedish exports (in terms of value added) in the early 1990s were still heavily concentrated to about the same sectors as many decades ago: forest products (50 percent of *net* exports) and iron and steel (8 percent); NUTEK (1994).

⁴ Sweden, like the United States, was probably a leader in product quality during the first decades after World War II. It is likely that technological catch-up by other countries has reduced this leadership. This interpretation is consistent with findings which assert that relatively little production in Sweden, at least until the late 1980s, has been reallocated to high-tech products as usually defined, although such measurements are open to controversy (Ohlsson and Vinell 1987; Hansson and Lundberg 1995). An acceleration in the shift towards high-tech sectors seems to have taken place in the 1990s.

It is also important to note that Swedish multinational firms, as organizations, have not experienced losses of market shares; in fact, their market shares have increased through rapid growth of production abroad (Andersson, Fredriksson and Svensson 1996). This suggests that Sweden's production problems are not embedded in Swedish *firms*, as organizations, but rather in the plants in Sweden, or in their economic and social environment.

Investment in *human capital* was also relatively strong in Sweden in the 1960s and 1970s. Indeed, international studies suggest that the scholastic competence among the population as a whole is quite high (Sohlman 1996, pp. 65–79). But Sweden started to lag other developed countries in terms of higher education in the 1980s.¹ Though the number of students in both short university education (less than three years) and adult education has kept up rather well, the number of students with university education of “normal” length (at least three years) fell during the 1980s, both absolutely and relative to other countries. While 14–16 percent of individuals born in the late 1940s and early 1950s have completed a university education (at least three years), the corresponding figure is only 8–10 percent for individuals born in the mid-1960s (NUTEK 1994, pp. 148–152). In particular, the number of people with university training in engineering and natural science is relatively small in Sweden in these age groups (OECD 1995).²

It is more difficult to judge the *efficiency* and *quality* of education in Sweden. Government spending per child in the school system (below university level) is relatively generous, which in itself may be tempting to interpret as reflecting high quality. But both the number of days per year that students spend in the classroom and the number of hours they spend on homework have been relatively low in Sweden for a long

An observation that squares with the hypothesis of a relative fall in product quality is that R&D spending, and also the number of patents, are relatively high in Sweden. It is important to note, however, that R&D units in Sweden serve not only plants in Sweden but also foreign plants of Swedish multinational firms. While Swedish multinationals produced 44 percent of their output (value added) at home in 1990, the corresponding figure for R&D was 83 percent (Fors and Svensson 1994).

¹ Sohlman (1996); Hansson and Lundberg (1995); Leamer and Lundborg (1997); and OECD (1993).

² Leamer and Lundborg (1997) assert that as a result of these developments, Sweden has ended up in a position just above the average of developed countries also in terms of human capital per capita.

while. In the mid-1980s homework accounted for only 2.3 hours per week, of which 0.6 hours in mathematics (OECD 1995; Fägerlind 1991 and 1993). This is important as the number of hours students spend this way is a basic component of investment in human capital (Pashcal et al. 1984). Overall, the achievements of students in recent decades seem to have been about average in Sweden among developed countries (Fägerlind 1993).¹ It is also striking that government spending per student is relatively low at the university level.² The number of Ph.D.'s is also relatively small both in Sweden as a whole and in the private sector.

Physical Capital Incentives

The sluggishness in investment in physical and human capital cannot be explained without looking at the return on such investment. Figure 4 reports an attempt to measure the real return before tax on physical capital (buildings, machines and inventories) in manufacturing.³ The return seems to have fallen considerably from a peak in the early 1950s, though with sharp short-term fluctuations in connection with changes in the terms-of-trade and wage-devaluation cycles; the rise after the fall in the Swedish krona in late 1992 is particularly pronounced. Available—albeit hazardous—studies also indicate that the return in recent decades has been lower in Sweden than in most other OECD countries (NUTEK 1994). Calculations in terms of Tobin's q give similar results, though such calculations are also hazardous.⁴ Aggregate figures conceal, of course, a wide dispersion among sectors and firms.

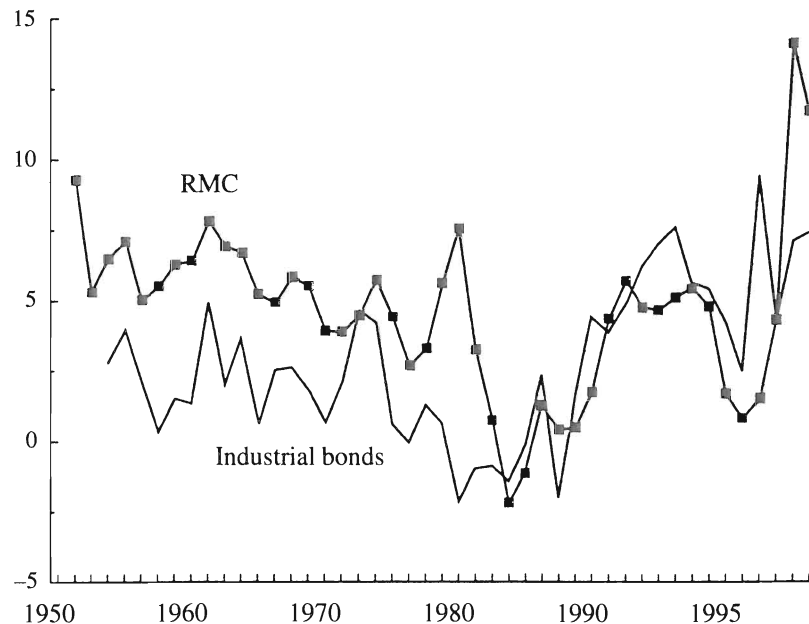
¹ One explanation for the high expenditures per child is large spending on non-scholastic tasks and the resources devoted to classes in the "home language" of immigrants.

² According to Forslund (1995b, p.20), spending per student at the university level was USD 7,120 in Sweden in 1992, as compared to 10,030 for the OECD as a whole. Such spending as a share of GNP was 1.0 percent in Sweden as compared to 1.7 for the OECD.

³ The statistics have been provided by Jan Södersten. For a description of the methods of calculation, see Bergström and Södersten (1979). The effective tax rates vary markedly between types of investment, sectors and firms.

⁴ Tobin's q measures the rate of return on real assets in terms of the ratio of the market value of such assets and the reproduction costs of the assets. A number of studies indicate that Tobin's q has been below unity most of the time, and that it has been lower than in other countries, except immediately after the big Swedish devaluations in the early 1980s, and probably also in the early 1990s (Örtengren et al. 1988, pp. 95–96).

Figure 4. *The “Rate of Return Gap”. Swedish Manufacturing Sector, 1951–1995, percent*



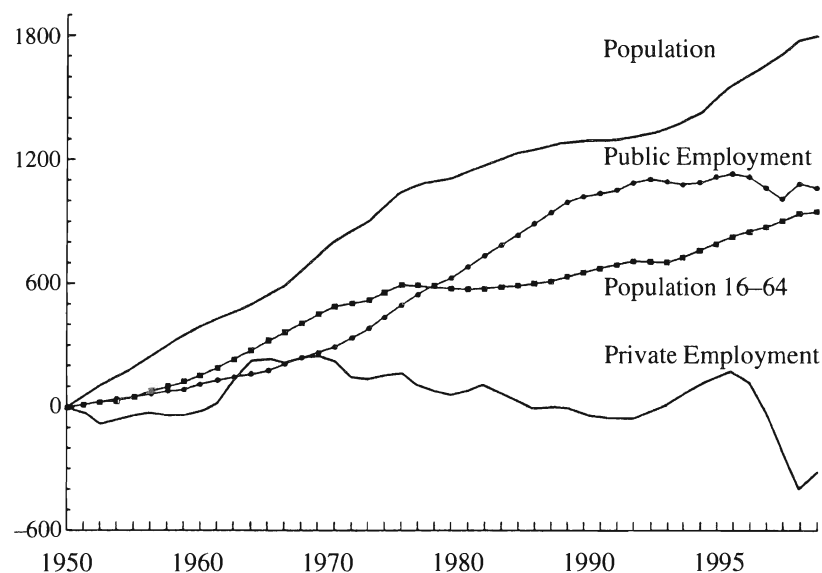
RMC = (Gross surplus-economic depreciation) / (Value of machines, buildings, inventories)

Source: Calculations by Jan Södersten.

Note: RMC = Return on Material Capital in manufacturing before tax.

The falling rate of return on physical capital in the 1950s and 1960s was no accident, but at least partly the result of deliberate policies. Both the government and the labor unions wanted to squeeze profits between rising wage costs and a fixed exchange rate, in conformity with the so-called Rehn–Meidner model (named after two leading labor union economists, Gösta Rehn and Rudolf Meidner). In addition, solidarity wage policy was designed to make the profit squeeze particularly strong for low-profitability firms. The negative effects on aggregate employment and investment could, it was argued, be effectively counteracted by mobility-enhancing labor market policies and selective investment subsidies. The net result was asserted to be a faster rate of reallocation of resources and speedier productivity growth.

Figure 5. *Population and Employment, 1950–1995 (cumulative change in thousands)*



Source: SCB National Accounts and calculations by T. Lindh and G. Gunnarsson, University of Uppsala.

Thus, the favorable attitudes of unions in Sweden towards reallocation of resources and productivity growth were based on a specific idea of how these developments should come about. This growth strategy—characterized by low profits, small wage differentials and selective government interventions in capital and labor markets—is an important example of the influence of the labor union movement on government policies in Sweden. Indeed, the *combination* of solidarity union wage policy and interventionist government policies in labor and capital markets has been a characteristic feature of the Swedish model for a long time. This combination was asserted to be favorable both for equality and efficiency.

The reallocation of resources during the 1970s and 1980s was broadly consistent with the predictions of the Rehn–Meidner model; resources moved from low to high productivity firms in the private sector (Edin and Topel 1997). However, on a net basis labor moved rather to the public sector; see Figure 5. Moreover, it turned out that the “high-

wage strategy” favored by unions could not prevent a substantial gradual fall in wages in Sweden relative to other countries, as illustrated by Figure 3a. It is also worth noticing that the welfare implications differ when labor is pushed out of low-productivity sectors rather than pulled out of these sectors by higher wages elsewhere. The “push method” of reallocating labor does not allow workers to choose between income and social environment (including workplace and friends) in the same way as “pull mechanisms”.

It also turned out to be possible to maintain rather high aggregate investment in the private sector for a considerable time. The level was kept up in manufacturing until the mid-1970s and in the business sector until the mid or late 1980s; see Appendix 2. One explanation is that interest rates were kept down by capital market regulations and, in the case of *ex post* real interest rates, also by rapid inflation that was not fully reflected in nominal interest rates. A rough attempt to indicate the path of real interest rates is presented in Figure 4, which depicts the interest rates on industrial bonds adjusted for changes in the CPI.¹ (It should, however, be noted that central bank rationing of bond issues before the mid-1980s forced many firms to pay higher interest than those on corporate bonds.) Another explanation as to why real investment was kept up for such a long time is selective investment subsidies to industries with specific profitability problems (such as steel and shipbuilding) which delayed, but did not stop, contraction and rationalization of these sectors. A third explanation is favorable tax treatment of firms that invest heavily; this was brought about, in particular, by accelerated depreciation.² Moreover, foreign exchange controls largely prevented Swedish firms from shifting their investment activities abroad.

¹ Dowrick (1996) argues that “*at least up until 1990* there is nothing in the Swedish growth performance which suggests substantial underperformance”. He seems to refer to the period 1950—1990, rather than to the period after 1970 which is in focus in this paper (as well as in the Swedish discussion). Moreover, he overlooks the fact that the capacity utilization of labor in the period 1987—1990 (with an unemployment rate of 1.6 percent on average according to national statistics) was clearly unsustainable. In a number of papers Walter Korpi (1996), a Swedish sociologist, has taken the same position, in contrast to the generally accepted view among Swedish economists; for a rebuttal to Korpi, see Henrekson (1996).

² In fact, for firms that invested heavily, the profit tax often functioned as an investment subsidy in the 1970s and 1980s (Agell, Englund and Södersten 1995, p. 118).

Nevertheless, domestic financial capital flows gradually moved away from Sweden's tightly controlled capital market institutions, such as banks and insurance companies. This development was also activated by expansion of the market for government securities in connection with growing government budget deficits. Moreover, domestic capital market controls were removed in the mid-1980s. The control of international capital movements also became less effective due to the expansion of trade and the internationalization of production firms. And at the end of the 1980s, exchange controls were also abolished. All this made it increasingly difficult to keep interest rates below foreign levels and prevent a fall in domestic real investment. Indeed, Figure 4 suggests that the risk premium on investment in real assets disappeared after the late 1970s—excluding the complications related to taxation.

The profit squeeze in the tradables sector also seems to have become stronger than the authorities had intended. This was indicated by government warnings that rapidly rising wages in Sweden posed a threat to full employment. Other indications were frequent discretionary devaluations and a floating krona after November 1992, all designed to restore profits, production, investment and employment in the tradables sector; see Figure 3b for information on the path of the effective exchange rate.

Some of the effects of these policies and developments on the *allocation* of investment were clearly intentional, such as favoring housing construction and investment in a number of large export firms. But the combination of fast inflation and huge asymmetries in the taxation of different types of assets clearly had *unintentional* effects as well. In particular, capital costs have varied strongly and arbitrarily among types of investment, types of financing and, therefore, also among production sectors and firms (McLure, Jr. and Norrman 1997; Agell, Englund and Södersten 1995). This is bound to have reduced economic efficiency and, at least during a period of transition, economic growth as well.

A special ambition of Swedish economic policy towards private firms has been to partition off the returns of firms from the earnings of their owners. The idea has been to prevent the accumulation of wealth within firms from making the owners richer. (The argument is clearly similar to one of the arguments behind the union proposals for “wage-earner funds”.) The technique has entailed keeping taxes low on retained profits but high on the income and wealth of the owners. Such a tax system may not harm large corporations very much if they have

access to international capital markets, although a conserving effect on the allocation of resources is unavoidable. The consequences are more problematic for small firms; in this case it is impossible to tax the owners heavily without also hurting their firms. In the 1980s, marginal *nominal* capital tax rates on the owners of such firms (profit tax plus taxes on dividends and capital gains) were often in the interval of 65–70 percent for those firms which could not take advantage of tax incentives for investment (calculations by Du Rietz for this book). Indeed, owner's returns often became negative in *real terms*. To this should in many cases be added wealth and inheritance taxes.

A low *household saving rate*, as measured by the national accounts, has been another characteristic feature of the Swedish economy since the 1960s. Indeed, the net household saving rate fell gradually from 6–7 percent (of disposable income) in the 1950s to a bottom notation of *minus* 5 percent in 1988 and 1989 (prior to an abrupt increase in the early 1990s). There is no general agreement today about the extent to which this negative trend can be explained by the aging of the population, the slowdown in income growth of households, low (often negative) real after-tax interest rates, and/or the removal of important motives for individual life cycle and precautionary saving due to increasingly generous welfare state arrangements.

In the aggregate, low private saving and credit supply were compensated by large public sector saving and credit supply for a long while. Net public sector saving in the 1960s and 1970s often amounted to about half of net national saving, and public sector credit supply to about half of total credit flows in the organized credit market. This, however, is not a solid foundation for a sustainable private enterprise system, which requires domestic private, including household, accumulation of wealth. This is particularly important for small and medium-sized firms, as well as for the entry of such firms. The tax system has also been unfavorable to direct shareholdings by households, which have fallen dramatically.¹

¹ The tax system has favored not only debt financing but also shareholding by various institutions, such as insurance companies and charitable foundations. The fraction of total shares held *directly* by households fell from 85 percent in 1950 to 15 percent in the late 1980s and early 1990s, in spite of a large increase in the *number* of households that own shares via various funds. If mutual funds owned by households are recorded in the household sector, the figure (in the mid-1990s) is 25 percent (information from the National Association of Shareholders).

These features of institutions and policies in Sweden—high taxation of the owners of firms, selective subsidies to large firms, capital-market regulations, low household saving and the discrimination of shareholdings by households—probably go a long way in explaining the weak entry and growth of small and medium-sized firms. For instance, while the entry of new firms in manufacturing constituted about 4 percent of the stock of firms during the period 1920–1946, the figure fell to less than 2 percent in the 1960s and 1970s, and to about 1 percent in the 1980s (Pontus Braunerhjelm 1993), though a modest increase occurred in the mid-1990s. It is also tempting to hypothesize that in contrast to large firms, small and medium-sized firms find it more difficult to bargain with government authorities about selective subsidies.¹

Human Capital Incentives

The return on human capital also fell during the 1970s. In the case of university studies, the (after-tax) return seems to have fallen from about 12 percent in the 1960s to about 1–3 percent in the early 1980s, using “static” calculations (Edin, Fredriksson and Holmlund 1993).² This is likely to be an important explanation for the slow-down in the 1980s in the enrollment of students to higher education (in particular, at least three years of university studies).³

The drastic squeeze of after-tax wage differentials among different skill categories of employees during the 1970s also reduced the economic incentives to acquire skills, which presumably had negative consequences for labor productivity growth. Moreover, piece rates,

¹ Total subsidies to production were about SEK 50 billion per year in the 1980s. Only about SEK 311 million of this amount may be classified as *direct* support to small firms, though some general subsidies, in particular to agriculture and housing construction, also favor small and medium-sized firms in those sectors (Barkman and Fölster 1995, p.118).

² The calculated return is, of course, higher if it is assumed that the real wage rate will grow in the future, which is not assumed in the “static” calculations above. The figures are raised further if subsidized loans and stipends are included in the calculations (Edin, Fredriksson and Holmlund 1993). Such subsidies, however, function as support to devoting time to studies in general, rather than to the acquisition of human capital with economic return in the marketplace.

³ Empirical studies indicate that enrolment has varied quite closely, after some time lag, with the wage premia to university education (Edin and Holmlund 1995).

which were used to a large extent in Sweden in the 1950s and 1960s, became less prevalent in the 1970s.¹ There are no empirical studies to show us whether this change in the incentive element of wage contracts helps explain the slow-down in productivity growth.

The after-tax return on higher education recovered, however, in the mid-1980s and early 1990s to about 5 percent (with the same “static” calculations as above), partly as the result of increased wage dispersion and less progressive taxes on labor income. This rise in the return is, most likely, part of the explanation for the brisk increase in the applications to university studies in the first half of the 1990s. Another explanation is a rise in unemployment for students leaving high school. There has also been an expansion in the capacity of the university system, in particular outside the traditional universities. For instance, while only about 10 percent of 20 year old individuals studied at university in 1990, the corresponding figure had reached 24 percent by 1995. If this high enrollment continues, and if students also take academic degrees, the previously mentioned internationally rather low figures on university trained individuals in the labor force in Sweden will change within the next decade. Moreover, the wider dispersion of after-tax wages among workers since the early 1980s should have restored some of the incentives to acquire skills.²

The Upshot

There is no question that both productivity growth and per capita GDP growth have been rather slow in Sweden from about 1970—as compared to preceding decades as well as the OECD average. In addition to factors such as the aging of the population and technological catch-up by some other countries, it is natural to take into account the slow-down in the accumulation of physical and human capital in the 1970s and, in particular, in the 1980s. Low returns to both physical and human capital are a potentially important background factor. These low returns were

¹ While piece rates were used about 65 percent of the time among workers in manufacturing in the early 1960s, the corresponding figure had fallen to about 45 percent by the early 1980s, and stayed at about that level (calculations for the author by Stefan Olby; statistics from SAF).

² While the ratio between the wage rate of the 9th and the 1st decile fell from 1.58 in 1970 to 1.33 in 1980, it had increased again to 1.43 by 1995 (Edin and Topel 1997).

to a considerable extent a deliberate result of the policy choice by government and unions. The internationalization of factor markets has, however, made it increasingly difficult to pursue this policy strategy. Low household saving in the 1970s and 1980s is probably another important factor behind the sluggish accumulation of physical capital in small and medium-sized firms, for which we would expect a strong connection between domestic saving and investment.

Policy-induced distortions in the *allocation* of labor, physical and human capital are also bound to have retarded productivity growth. The tax system, characterized by high marginal tax rates (though not for non-distributed corporate profits) and considerable asymmetries in the taxation of different types of income and assets, is perhaps the most obvious example. The combination of falling terms of trade and reduced international market shares in the 1970s and 1980s also suggests some inability of the production system in Sweden either to reallocate resources to expanding segments on world markets (with favorable price trends) or to improve product quality at the same rate as other countries—or both.

It is too early to say whether the faster growth of productivity in the 1990s—during and immediately after the deepest recession after World War II—signals a new long-term trend.

Chapter IV

Economic Efficiency

Let us shift from economic growth to economic efficiency at a given point in time. While the rate of growth may be depicted diagrammatically as the *slope* of the GDP path over time, economic efficiency is reflected in the *level* of the path at a given point of time. As emphasized by modern theories of “endogenous growth”, several factors, such as investment in human capital, that influence economic efficiency may, however, also affect the growth rate—and vice versa. I will concentrate on two important factors influencing economic efficiency: the role of the market structure of firms (including the degree of competition) and the consequences of various welfare state arrangements.

Market Structure of Firms

During much of the post World War II period, economic efficiency has been relatively high in Sweden as compared to most other developed countries. Deficiencies in the market structure of firms in Sweden are nevertheless often asserted to constrain economic efficiency. An important element is weak competitive pressure, particularly, in the non-tradables sector (constituting about three quarters of the national economy). Reference may be made not only to the dominant role of a small number of large firms but also to the cartellization of large sectors of the national economy; anti-cartel policies have been very lax in Sweden. Indeed, in various sectors with weak competition there are indications that economic efficiency is rather low as compared to some other

developed countries.¹ After joining the EU (in 1995) Sweden will, however, be forced to adhere to stiffer anti-cartel rules.

In several regulated sectors, tight co-operation has also emerged between politicians, the regulators and the regulated firms, with obvious risks of “regulatory capture”. It is in such sectors that so-called iron triangles of tightly knit power groups of representatives from both the private and the public sector are often said to have arisen, with potentially severe barriers to entry as a result. Examples often mentioned include agriculture, the food industry, the retail sector, housing, the construction sector, energy, the financial sector and insurance. Here, then, is an additional expression of corporatist elements in Sweden, and possibly also another explanation for the domination of large firms.

Moreover, a basic idea in Swedish economic policy during the 1970s and 1980s was to replace spontaneous market mechanisms and competition with political and administrative decision-making, including selective taxes and subsidies, and in some sectors direct controls of prices (in particular, in agriculture, housing and until the mid-1980s capital markets). Thus, a reduced role for economic incentives and markets was supposed to be compensated for by selective government financial support and interventions. The experience of these policies illustrates the well-known observation that new policy actions are often undertaken simply to counteract undesired, and often also unpredicted side effects of previous policy actions: “intervention breeds intervention”.

For instance, attempts to keep down interest rates induced the government to regulate the portfolios of financial institutions, in particular forcing them to lend to housing construction and large export firms, as well as to the government itself. The general profit squeeze of production firms induced politicians to implement selective subsidies, “active” labor market policies and permanent public sector employment. The conserving effects on the production structure in agriculture due to protectionism were counteracted by “administrative” consolidation and rationalization of farms, conducted by special government agricultural agencies (*jordbruksnämnder*). Since agricultural protection was implemented by tariffs on processed products rather than targeted at the farm level, regulations had to be imposed in the domestic food industry, which was cartellized to a considerable extent with the help of the

¹ Lindbeck et al. (1994); McKinsey (1995); Henrekson (1996a); Fölster and Sam Peltzman (1997).

government and the farmers' co-operatives. Moreover, competition has been restricted in retailing by the land-use planning monopoly of Swedish municipalities, which has been used to protect both existing stores and municipal shopping centers against new competitors. Rent control made it necessary to subsidize or socialize housing construction to prevent it from collapsing; but as a result incentives to keep down building costs were largely removed. And so on. (Problems in the labor market will be discussed in the subsequent section and in Chapter V.)

The Role of the Welfare State

It is a commonplace that the welfare state comprises both efficiency-enhancing and efficiency-reducing effects. The most obvious example of the former is perhaps that compulsory social insurance helps overcome well-known imperfections in private capital and insurance markets. Another example is that subsidies to investment in human capital (education, prenatal care, child care, health care, etc.) counteract tendencies to underinvest which otherwise pose a threat in this sphere. The theory of endogenous growth asserts, of course, that not only economic efficiency but also long-term productivity growth are favorably influenced by investment in human capital.

It is often also hypothesized that a less dispersed distribution of income mitigates social conflict and that a tight safety net makes citizens more favorably inclined towards continuing reallocations of resources. Both features are said to enhance economic efficiency, and probably also long-term economic growth. These hypotheses sound reasonable; there might even be empirical support for them. But they require qualifications. This is also illustrated by the Swedish experience. In the case of social conflicts, the consequences of a compressed distribution of income and wealth must depend on *how* such compression has come about. For instance, it is likely to be more advantageous for economic efficiency and growth if compression results from more widely dispersed initial holdings of human and non-human capital than if it is brought about by permanently high marginal tax rates and price regulations, not to mention the nationalizations of assets.

We may also speculate that the relation between income equality and social conflicts is not monotone, at least not when brought about by taxes and welfare state benefits. One reason is that such policies neces-

sarily result in *politicization* of the distribution of income. Many individuals are then likely to start regarding the distribution of income as “arbitrarily” determined in the political process, rather than as fulfilling important functions for the allocation of resources and economic efficiency. As a result, distributional conflicts may in fact, after a point, be accentuated by reduced income differentials. Indeed, it is not obvious that distributional conflicts have diminished in Sweden after the radical equalization of income in the late 1960s and early 1970s via solidary wage policy, taxes and transfer payments. Moreover, the tolerance for reallocations of resources has certainly not been strong enough in Sweden to prevent political protests against large geographical movements of labor. In the late 1970s, such protests actually forced politicians to increase various kinds of regional subsidies in order to reduce the exit of labor from stagnating regions, and hence to slow down the geographical reallocation of resources.

It is not difficult to enumerate likely negative efficiency (and growth) effects of welfare state policies. The difficulty lies in quantifying their importance. The reasons are both analytical complexities and deficiencies in statistical data. As regards negative efficiency effects, the most obvious suspects are, of course, the wide tax and benefit wedges that emerge in advanced welfare states like Sweden. In the 1980s, most income earners in Sweden were exposed to marginal tax wedges of 70–80 percent (including all types of tax and benefit wedges).¹ The development of these tax wedges over time is illustrated in Figure 6, which shows the “marginal income after tax” (one *minus* the marginal tax wedge) for two groups of wage earners.

Empirical studies of the costs to the Swedish economy due to the tax wedges for households have usually been cast in terms of “the marginal costs of public funds”. In the case of average income earners, the estimates in most studies for the late 1980s vary from about SEK 1.15 to 2.75 per krona in tax revenues.² In addition to the various analytical difficulties inherent in such studies, an important limitation is that most of them have been confined to the effects on only one or a few types of

¹ Part of the pay-roll tax is not a proper tax, as individual benefits are to some extent tied to previous pay-roll tax payments. The figures in the text encompass this fact.

² For surveys, see Agell, Englund and Södersten (1995, chap. 8); and Aronsson and Walker (1997). Most of these studies have assumed that the (compensated) elasticity of labor supply is as low as 0.1 for the average employee.

Figure 6. *Marginal Take-Home Pay Rate (one minus total marginal tax rate, in percent) Sweden, 1952–1997*



Source: Du Rietz (1994) and new calculations by Du Rietz.

Note: The marginal tax rates are evaluated at mean earnings each year. “Executive” is defined as an individual in the management group (below the CEO) in a private firm.

economic decisions. Thus, they do not capture the *pervasiveness* of the effects. I refer, of course, to the many margins of decisions that are influenced—leisure, household work, barter of goods and services, the intensity and quality of work, investment in human capital, choice of job, the geographical (also international) mobility of labor, the size and allocation of saving and investment in physical and human capital, tax avoidance, tax evasion, other types of economic crime¹, etc. Unfortunately, there is not much systematic quantitative knowledge about any of these behavior adjustments in Sweden, except possibly in the case of hours of work.

With respect to disincentive effects in the context of benefit systems, it has not been possible to avoid poverty traps, for instance for single

¹ Most estimates of the “underground” economy (i.e., the non-tax market sector) are in the interval of 4 to 8 percent of GNP. All such studies, of course, are extremely hazardous. For a survey, see Tengblad (1994).

mothers. Problems of moral hazard and cheating with benefits seem to be particularly relevant in the case of sick benefits, work injury benefits, economic support to single parents, selective housing subsidies, social assistance and subsidized early retirement. For instance, in the late 1980s, when the replacement ratio in the *sick benefit* system in Sweden was 90–100 percent, people stayed away from work for alleged sickness on an average of 26 days per year as compared to 14 days in 1955.¹ As a result, employers were often forced not only to engage in considerable overstaffing but also to reorganize their work teams depending on who showed up for work.

There has also been a gradual increase in the number of households receiving *social assistance* (“welfare” in U.S. terminology). While about 4 percent of the population (households) received such benefits in any given year over the period 1950–1965, the figure had risen to about 10 percent in 1996.² The composition of the recipients of social assistance has also changed. The elderly and the sick have been replaced by people of working age, often quite young individuals. In fact, social assistance and other means tested benefits have tended to become rather “normal” features at some phase in the life span of Swedish citizens.³ The growing number of people who depend on social assistance in the 1990s is also connected with higher unemployment and reduced benefit levels in general transfer systems (Salonen 1996).

The number of individuals with subsidized *early retirement* (originally designed for disabled persons) reached 8 percent of the labor force in the 1980s, i.e., long before unemployment had accelerated much. Still, labor force participation in the age group 55–64 has not fallen as much in Sweden as in several other countries in Western Europe. It was 70 percent for males and 63 percent for females in 1995, as compared to 57 and 30 percent, respectively, in OECD Europe.

Indeed, a substantial fraction of the population receives some kind of selective benefit from the government during a given year. In both the early 1980s and the early 1990s, about 19 percent of all individuals in

¹ See Henrekson, Lantto and Persson (1992) and Johansson and Palme (1996).

² Socialstyrelsen 1994:24.

³ According to a study from 1990, some 14–30 percent of the population in a number of cities in Southern Sweden had received social assistance at least once during the past decade (Salonen 1993, pp. 95–103). For 24 year-olds, the corresponding fraction was 20–38 percent.

the age group 18–64 received one of the following types of selective benefits at least part of a given year: social assistance, early retirement pension or unemployment benefit. The figures are even more striking for young people, in particular, if we extend the time perspective. For instance, among those born in 1965, 55 percent had on some occasion during the ten-year period after age 18 received selective benefits in the form of social assistance or unemployment benefit.¹ For the overwhelming majority, this dependency on selective benefits has turned out to be temporary, however.

We do not know much about the extent to which these figures reflect benefit wedges and moral hazard. For obvious reasons, our knowledge of the quantitative importance of *benefit cheating* is also very limited. The most obvious case of outright benefit cheating is perhaps that some individuals work (possibly in the underground economy) while receiving benefits reserved for those who are not able to work; examples are unemployment compensation, sick pay or early retirement pensions. Other examples are that individuals deliberately exaggerate their physical inability to work or misreport their marital status and domicile.²

It may also be hypothesized that several types of disincentive effects are delayed because economic behavior is, most likely, constrained by social norms against living on benefits and cheating with benefits and taxes. It will probably take time before such norms adjust to a new system of economic incentives (Lindbeck 1994; Lindbeck, Nyberg and Weibull 1996).

The division of labor among the family, the market and the government is, of course, affected by various welfare state arrangements and related taxes. High marginal tax rates create substitution effects in favor of not only leisure but also household production of services, at the expense of purchasing such services in the market. For a supplier of household services in the market to earn, say, an extra USD 100 after tax, the buyer of a service in Sweden has to earn four to nine times this

¹ These figures are based on Uddhammar 1997, pp.85 and 114, and information from the author. If also selective (means tested) housing subsidies are included, the corresponding figures are 25 percent for the entire sample (the age group 18–64) and 68 percent for the younger age group (those born in 1965).

² A preliminary and highly incomplete study by the National Audit Bureau (*Riksrevisionsverket* 1995) has identified such cheating as amounting to SEK 5–7 billions, which corresponds to some 6–9 percent of the payments in the relevant benefit systems.

amount before tax (depending on the buyer's and seller's marginal tax rate). This is due to the joint effects of all marginal tax wedges (income tax and pay-roll tax for both, and VAT for the supplier). This contributes to strengthening the substitution effect against labor supply in the open market, as well as to reducing the market demand for household services.

The negative substitution effects on labor supply are counteracted, however, by other features of the tax and welfare state systems. After a tax reform in the early 1970s, income taxes have been assessed individually rather than on family income; the marginal tax rate of the "second" income earner, who is usually female, was then reduced considerably. Labor supply, in reality mostly that of females (including single mothers), has been further stimulated as the result of heavily subsidized child care and old-age care outside the household. Labor force participation is also encouraged by tying many benefits to work. For instance, while benefits in connection with maternity leave and retirement are tied to previous work, unemployment benefits and social assistance are tied to the willingness to search for and accept offered jobs. Female labor supply has also been induced by the high *average* tax rates of many households, which make it difficult to finance a family on one income (reflecting a positive income, or perhaps rather a liquidity effect, on labor supply).

All this helps explain the relatively high female employment rates in Sweden, although usually on a part-time basis; even most single mothers (indeed 70–80 percent) participate in the labor market. This has, in fact, been a direct *purpose* of government policies under the banner "equality between genders". The huge increase in the demand for labor by the public service sector since the early 1970s is often claimed to have contributed to this development.¹

These developments illustrate the well-known point that the consequences of welfare state and tax arrangements depend not only on the level of total welfare state spending, and hence on the overall generos-

¹ The employment rate for females is marginally higher in Sweden than in the United States—about 75 percent as compared to 71 percent in 1995 for the age group 25–64. Adjusted for hours of work, however, it is marginally higher in the United States (Jonung and Persson 1993).

ity of the benefits, but also on the “fine structure” of these arrangements.¹

A combined result of the tax and benefit systems in Sweden is that “the care of things”, such as maintenance of property and durable consumer goods, has shifted from the market to the household sector (because of wide marginal tax wedges), while “the care of individuals” has shifted from the family to the government sector (because of high subsidies to public sector services, e.g., for children and the elderly). Whereas production firms were socialized in socialist countries, the Swedish welfare state has instead, to a broad extent, socialized the provision of personal services to individuals and families (Lindbeck, 1988). As pointed out by Sherwin Rosen (1997), one result of the large subsidization of public-sector services in Sweden is that *total* consumption of household services—produced by either households or the public sector—expands at the expense of the consumption of material goods.

Public services are probably of relatively high quality in Sweden. There is also a rather even distribution of such services. Child care is an example. The public service sector has, however, not been spared the usual difficulties of achieving economic efficiency and adjustments to consumer preferences in the absence of markets and competition for its services. The earlier mentioned negative productivity trend in this sector in the 1970s and 1980s illustrates these difficulties. There is also an obvious risk of an insider-outsider problem when services are rationed. For instance, personnel and parents in child care units have a joint interest in keeping down the number of children in a given service unit, even if the quality of the services would not change much if more children were admitted; see Bjurek et al. 1996. In spite of the partial socialization of household services, many personal services are still provided by relatives and friends. For instance, about a fifth of all adults seem to be heavily involved in providing personal services (in addition to child raising) outside of official institutions in the case of the sick, the handicapped and the elderly (Busch-Zetterberg 1996).

Concern among economists and politicians about serious problems of disincentives, moral hazard and cheating on taxes and benefits probably stems more from fragmented evidence like that mentioned above than from systematic econometric studies, which are scarce and shaky.

¹ This point has been stressed by, for instance, Freeman (1994) and Atkinson (1995).

For instance, Gunnar Myrdal's (1978) impressionistic assertion that Sweden had become "a nation of cheaters" has become one of the most quoted formulations in the political discussion in Sweden.

The *tax and benefit reforms* in 1983 and, more fundamentally, in the early 1990s have gone some way in reducing the magnitude of various disincentive problems. In particular, the essence of the 1991 tax reform was to replace the highly progressive income-tax schedule with two tax brackets: about 31 percent for the majority of tax-payers (exposed only to local government taxes) and 51 percent for tax-payers at the upper end of the income distribution (approximately the two highest deciles) who also pay a 20 percent income tax to the central government. Instead, the tax base was broadened. As a result of tax changes between 1983 and 1995, the total (explicit and implicit) marginal tax wedges were reduced by about 15 percentage points for most income-earners. The top rates typically fell from 85 to 70 percent, and from 75 to 60 percent for most other full-time income-earners. These rates started to rise again, however, after a few years; see Figure 6.

The replacement rates in most social security systems were reduced from 90 or 100 percent to 80 percent (and temporarily to 75 percent) in the early 1990s—basically to reduce the public-sector budget deficit. Moreover, employers were forced to take over the payment and administration of sick benefits during the first two weeks (and subsequently for four weeks) of sick leave; one waiting-day was also introduced. There was a remarkable decline in the number of sick days in connection with these reforms. Between 1989 and 1995 average absence for (asserted) sickness seems to have dropped from 24 to about 11 days per year (statistics from Riksförsäkringsverket). The rise in unemployment in the early 1990s, however, is also likely to have contributed to this development. The eligibility rules of work-injury insurance were also considerably stiffened in the early 1990s, which reduced the number of granted work-injury compensations drastically—by about 80 percent between 1990 and 1996.

Summary Evaluation

It is a commonplace that several "classical" tasks of the government may enhance economic efficiency—for instance, by guaranteeing law and order, including a legal framework for voluntary economic trans-

actions; providing physical infrastructure; and stimulating investment in research and education. There is also rather general agreement that some welfare state arrangements may contribute to economic efficiency, obvious examples being arrangements that compensate for limitations in private capital and insurance markets, mitigate “social exclusion”, and perhaps even contribute to social and political stability.

The most manifest efficiency problems in connection with welfare state arrangements—in Sweden as well as in other countries—are perhaps the risk of inefficiencies in the sector of government services, and the distortions in private decisions due to tax and benefit wedges, moral hazard and cheating. In the case of Sweden, other examples are the authorities’ lax attitudes towards cartels, and obstacles to the entry and growth of small firms (partly due to a fine network of regulations).

More recently, some of these negative influences on economic efficiency may have been mitigated. For instance, progress has been made in boosting economic efficiency in the government sector in the 1990s in connection with the financial squeeze of governments on all levels—local, regional and national. The tax reforms in the 1980s and early 1990s have reduced some of the tax distortions; some benefit wedges have also been reduced (by lower replacement rates). Anti-cartel policy has recently become stricter due to adherence to EU rules. Casual observation also suggests that Swedish politicians and the mass media are becoming more positively inclined towards private entrepreneurs.

Chapter V

Macroeconomic Instability and Unemployment

Macroeconomic Policy Regimes

It is useful to distinguish between three different regimes of macroeconomic policy after World War II.

(i) The period 1950–1975 was the heyday of Keynesian demand management in Sweden, though this policy relied on much more selective interventions than those suggested in Keynesian-oriented textbooks. A major ambition was to smooth the path of private investment by means of taxes, subsidies and regulations, and to influence housing construction and infrastructure investment by administrative controls. During most of this period, macroeconomic policy actions in the product market were, indeed, often countercyclical and macroeconomic instability was smaller than in most other OECD countries.¹ But the countercyclical pattern of *discretionary* fiscal policy tended to deteriorate from the mid-1960s. For instance, in the boom of 1964–65, restrictive policy actions were much delayed, and they were not undertaken, in fact, until the next boom of 1969–1970 was over (Matthiessen 1971; Lindbeck 1975b, pp 78–81 and 89–93). It was this experience that first called my attention to the possibility of a “political business cycle” grafted onto the conventional, market-induced business cycle (Lindbeck 1973 and

¹ See, for instance, Lindbeck 1956; Matthiessen, 1971; Lindbeck 1975, pp. 70–93; Andrea Bolto 1989. These studies presuppose that the time lag of fiscal policy actions is not very long (not longer than two years). The studies also assume, realistically, that demand management may speed up the movement of the macroeconomy towards the equilibrium unemployment rate, partly as a result of the sluggish adjustment of nominal wages and prices to product demand shocks.

1975a)—around the same time that similar observations concerning various countries were being made by others. Later on, discretionary policy actions seem to have been countercyclical at some occasions and neutral or procyclical at others (though systematic studies hardly exist for the period after the early 1970s). Still, the volatility of economic fluctuations tended to be relatively low in Sweden until the mid-1980s as compared both to other countries and to the period between the two world wars, partly as a result of the automatic fiscal stabilizer (Sheffrin 1988; Ohlsson and Vredin 1996).¹

Inflation during this period was supposed to be kept in check by a fixed exchange rate in the context of the Bretton Woods system. The parties in wage bargaining were assumed to guarantee that wages would not increase faster than the “room” for wage increases. This “room” was then defined as the sum of the increase in labor productivity in the tradables sector and the rate of price increase on world markets. The whole idea, often called the “Scandinavian model of inflation” (or the EFO-model, see Edgren *et al.* 1973), was sometimes interpreted as a descriptive (positive) theory, but more often as a norm of wage policy. Thus, the responsibility for making the fixed exchange regime compatible with a high level of employment in the tradables sector was, in fact, delegated to labor market organizations in the context of centralized wage bargaining. This is an important example of corporatist elements in Swedish economic policy. The wage norm of the Scandinavian model of inflation was clearly in conflict with the earlier mentioned idea that profits should be squeezed between a fixed exchange rate and rising wage costs. The conflict was “solved” by a compromise: the wage trend exceeded the Scandinavian wage norm somewhat, in fact by about half a percentage point per year.

While domestic macroeconomic policy in the 1950s and 1960s was constrained by the fixed-exchange rate regime of the Bretton Woods system, the absence of large and free private capital movements

¹ Unfortunately, the same type of systematic studies of the effects of discretionary policies that have been made for the 1950s, 1960s and early 1970s are not available for later periods. (There is a brief and schematic discussion of policies in Lindbeck and Hassler 1996). Due to the automatic fiscal stabilizer, the overall (total) effects of discretionary fiscal actions *plus* automatic stabilizers seem, however, to have been broadly stabilizing (Ohlsson and Vredin 1994 and 1996), with a reservation for the possibility that very large budget deficits may destabilize expectations—an issue to be discussed below.

softened this constraint. After the first oil crises (in 1974), attempts by the Social Democratic government to “bridge” the international recession by selective fiscal expansion including large subsidies to inventory investment ended, however, in a wage-cost explosion in the mid-1970s. Thus, the adherence to the Scandinavian model of inflation broke down in Sweden shortly after the model had been explicitly formulated (by Norwegian economists in 1967 and by Swedish economists in 1973). This breakdown was partly a reaction to the strong recovery of profits in 1973 and 1974 (Figure 4) in association with drastically improved terms-of-trade for Sweden, which generated concern among union leaders about “excessive profits”. The wage cost per hour increased by altogether about 65 percent during the three-year period 1974–1976, resulting in an overvalued krona and sluggish production and investment in the tradables sector.¹ These problems were accentuated by overcapacity on international markets in traditional (“basic”) industries of great importance in Sweden, such as mining, steel and shipbuilding (Schön 1994). Thus, the poor GDP performance in Sweden in the period 1976–1978 (Figure 2) was due to a combination of a general profitability squeeze for firms in the tradable sector and specific crises for some traditionally important branches of industry in Sweden.

(ii) The crisis in the tradable sector in the mid-1970s was met by devaluations on the part of the new center-right government in 1976 and 1977, by altogether about 12 percent (effective exchange rate). This marked the end of a twenty-five year period of *fixed and constant* exchange rates, even though the authorities have afterwards tried (rather unsuccessfully) various types of fixed exchange rate arrangements. The new macroeconomic policy regime was characterized by recurrent discretionary devaluations—also in 1981 and 1982. Indeed, the devaluation in 1982 was presented as an “offensive” policy action, in the sense that it should not only accommodate previous cost increases but also create an undervalued krona in order to give the national economy a big expansionary boost. This meant, in fact, that an important part of the Rehn-Meidner model, namely low average profitability, was given up at least in the case of the tradable sector.

Wage devaluation cycles during this period also made variations between overvalued and undervalued exchange rates an important fea-

¹ For statistics on yearly rates of change in labor costs (per hour), see Appendix 4.

ture of domestic macroeconomic instability. Another unavoidable consequence of the devaluation policy was a rather steep inflation trend. The CPI increased by about 8 percent per year in Sweden during the 1980s as compared to 6 percent in the OECD area as a whole (excluding Turkey). However, open unemployment continued to fluctuate within a narrow band, 1.5–3.5 percent (national statistics), at the same time as it increased mercilessly in most other developed countries.

A new inflationary element emerged in the 1980s: the “explosion” of asset prices, including the prices of real estate and shares.¹ One factor behind this development was the deregulation of domestic capital markets around 1985, which was followed by an expansion of bank credit by about 20 percent per year in an economy that was already stimulated by the large devaluations in 1981 and 1982 (by 10 and 16 percent, respectively). The asset price boom was enhanced by the fact that nominal interest rates were fully deductible against high marginal income tax rates, which contributed to making real after tax interest rates quite low, often in fact negative, for households.²

Moreover, the government waited until 1989 before fully deregulating the market for foreign exchange and allowing free international portfolio investment. So an increased domestic demand for assets, including real estate, was to a considerable extent “bottled up” in the Swedish economy. The boom in real estate prices was accompanied by a strong building boom for office space and housing, particularly in the latter part of the 1980s. As there was also a boom in consumption expenditures over the period 1984–1988, it is hardly surprising that the end result was an “overheated” economy. This was reflected in both a fall in the aggregate unemployment rate (to 1.3 percent in 1989 according to national statistics), and wage cost inflation of about 9 percent per year during the period 1984–1991.

(iii) A third macroeconomic policy regime emerged in the early 1990s. Its main characteristic was a greater emphasis on price stability, as a

¹ The prices of office buildings seem to have increased by a factor of at least four between 1980 and 1990 and the prices of apartment houses by a factor of about five, while consumer goods prices increased by a factor of about two. Share prices increased by a factor of ten during the same period (SNS 1993, Ch. 5).

² Real *after tax* (long-term) interest rates for households hovered around *minus* 5–6 percent during the 1970s and the first half of the 1980s and about *minus* 2 percent during the second half of the 1980s (Agell and Lennart Berg 1996).

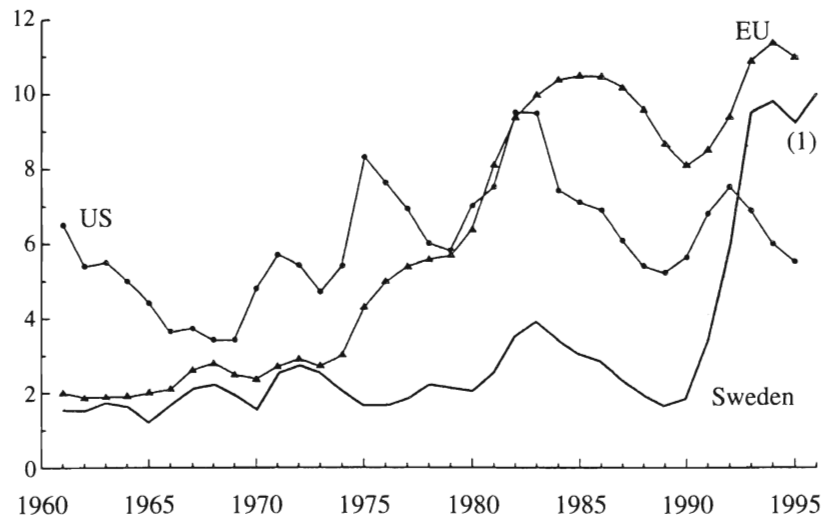
reaction against the rapid inflation in the 1970s and 1980s. The new policy stance was officially announced by the Social Democratic government in its January 1991 budget proposal, where low inflation was established as the overriding target of macroeconomic policy. The new policy strategy in Sweden was no doubt inspired by similar ambitions in other countries. But it may also be seen as an attempt to return to “the Scandinavian model of inflation” of the 1960s and early 1970s with a fixed exchange rate as an intermediary target of monetary policy. To increase the credibility of the new policy stance—often characterized as a “norm-based” policy—the krona was tied to the ecu in May 1991. By then, however, a rapid wage cost increase had already, once again, made the krona overvalued; see Figures 3a and 3b.¹

The new policy strategy succeeded in the sense that inflation was brought down to about 3 percent within one or two years as a result of tight monetary policy, partly as a result of higher unemployment and reduced pay-roll taxes, but partly also through the assistance of a government-appointed stabilization commission. The “Rehnberg Commission”, as it was called, convinced the organizations in the labor market to accept low wage increases during the three-year period 1992–1994 (Elvander 1997). The policy strategy of “no more devaluations” failed, however. It turned out to be impossible to borrow credibility for the Swedish krona from the DM-zone. Expectations of a future devaluation of the Swedish krona during the second half of the 1980s continued, and were accentuated, into the early 1990s, often reflected in interest rate differentials between Swedish and German bonds of 2–4 percentage points. Not even a spectacular increase in interest rates to 500 percent for loans in the Central Bank in the fall of 1992 could save the krona, which was allowed to float, or rather “sink”, in November 1992 (Figure 3b).

By far the most spectacular macroeconomic development in Sweden in the early 1990s, however, was the emergence of the deepest recession since the 1930s. The accumulated fall in GDP was 5 percent during the three-year period 1991–1993, and manufacturing output declined by altogether 15 percent from the top to the bottom quarter. Total employment fell by about 11 percent between 1990 and 1993. Open unemploy-

¹ The idea of such a norm-based macroeconomic policy strategy was advocated, in particular, by some economists associated with the Center for Business and Policy Studies (SNS) in Stockholm.

Figure 7. *Open Unemployment Rate, 1961–1966 (percent of labor force OECD, standardized figures)*



(1) The Swedish figures for the period 1993–1996 are about 1.5 percentage points lower in Swedish national statistics.

Source: OECD Labor Force Statistics 1986; OECD Economic Outlook 3; SCB.

ment had increased to 8 percent by 1994 (10 according to internationally standardized statistics; see Figure 7) and total unemployment to 13 percent (open unemployment *plus* people in various labor market programs).¹ The figures have more or less remained at these levels since then (at least until late 1997). For the age group 16–24, open unemployment had increased to about 17 percent and total unemployment to about 35 percent by 1994 (30 percent in 1997).

The most obvious “proximate” explanation for the depth of the recession in the early 1990s is that no attempts were made this time to accommodate cost and demand shocks, for instance, by devaluation or domestic demand expansion for products or labor. There was also an unusual *coincidence* of negative supply and demand shocks. Important examples are the international recession, the rise in real interest rates on

¹ For national statistics on open and total unemployment in Sweden during the period 1970–1996, see Appendix 5.

world markets and even more in Sweden, the drastic fall in previously inflated asset prices,¹ and the collapse (by about 75 percent) of building activity in the real estate sector, which was accentuated by the reduction in capital-income tax rates against which interest costs can be deducted. Meanwhile, the financial system underwent a severe solvency crisis, which compelled the government to issue depositor and creditor guarantees in all major financial institutions. The government also had to bail out three banks by an amount equivalent to about 4 percent of one year's GNP. (About 90 percent of this bail-out went to one bank, Nordbanken, in which the government was a majority owner.)

Unfortunately, it has not been possible to determine which one of these various explanations of the deep recession in Sweden in the early 1990s is the most important one. My personal (subjective) judgement is that the most important factors were the overvalued exchange rate and the real interest shock, the latter being partly a result of the overvalued exchange rate. Several of the negative shocks to the Swedish economy in the early 1990s were clearly "legacies" from developments and policies in the 1980s, obvious examples being steep wage inflation and an increasingly overvalued exchange rate, the fall in "blown-up" asset prices and the collapse of the overheated building boom.

Later on during the recession, the financial saving rate of households increased from minus 2 in 1990 to plus 10 percent of household disposable income (in 1994), which corresponds to a fall in aggregate demand by 6 percent of GNP.² As financial saving also increased in the business sector, *total* private financial saving rose by as much as 19 percent of GNP. Since the current account of the balance of payments did not change much, the financial position of the public sector shifted, as a mirror image (by the national account identity), from plus 4 to minus 13 percent of GNP. As a result, central government debt in-

¹ In the period 1990–1993, the prices of office buildings fell by about 50 percent, and the prices of apartment buildings and owner-occupied houses by about 30 percent. According to Agell, Englund and Södersten (1995) about half of the latter fall was attributable to nothing other than a capitalization of the less favorable tax rules from 1991.

² If household saving is measured as the change in real wealth, rather than as the difference between current income and the purchase of consumer goods (as in the national accounts), the saving rate in fact *increased* in the second half of the 1980s and *fell* in the early 1990s, while the saving rate in the national accounts moved in the opposite direction (Englund 1995).

creased to about 80 percent of GDP by 1996, and the net debt of the total (“consolidated”) public sector to about 30 percent of GDP. This illustrates the high sensitivity of the budget deficit to variations in capacity utilization of the national economy.

After the fall in the floating krona by about 20 percent (effective exchange rate) at the end of 1992, the idea of a fixed exchange rate as an intermediate target of monetary policy was replaced in January 1993 by an explicit inflation target for the Central Bank along the lines of New Zealand, Canada and the UK: a two percent rise in the CPI per year (plus/minus one percent).

The macroeconomy recovered gradually from the deep recession following the fall of the krona, as it did after the big devaluations in the early 1980s; see Figure 2.¹ On both occasions, the expansion was led by increased exports, while the recovery of domestic consumption came much later, largely in the connection with a fall in the household financial saving rate (from 10 to 5 percent during the period 1994–1997). The persistent nature of aggregate output shocks in Sweden in the past, however, casts some doubt on the extent to which this output loss can be recaptured in the near future, as long as attempts are not made to overhaul basic structural features of the Swedish economic system.² During the recovery, however, the high sensitivity of industrial production to the real exchange rate was illustrated once again. It increased by as much as 7 percent per year in the four-year period 1993–1996; by 1996 the pre-recession level (1990) was exceeded by 17 percent (yearly figures).

As during the economic recovery in the second half of the 1980s, the public sector budget deficit fell as dramatically as it had previously increased—this time from 12 to 4 percent of GNP between 1993 and 1996. It seems to be 2 percent in 1997. About two thirds of this reduction was a result of discretionary tax increases and spending cuts (divided about equally), while the rest was a consequence of the automatic budget response, sales of assets, and some elements of “creative bookkeeping”. The debt ratio stabilized, and may even start to fall if the boom continues.

¹ GDP increased by about 2.8 percent per year during the three-year period 1994–1996.

² A VAR study by Thomas Uhrl (1996) suggests that domestic shocks in Sweden have usually had permanent rather than temporary effects on aggregate output.

Lessons from the Macroeconomic Experience

Six lessons stand out from the macroeconomic experience in Sweden during recent decades.

(i) While “fine-tuning” is a hazardous operation in the product market, it has succeeded better in the labor market in the sense that various labor market programs have often moved countercyclically. Both types of policies are, of course, vulnerable to the classical problem of an accommodating policy stance: sooner or later private agents may start anticipating accommodating policy actions, which means that they may not hesitate to push up wages and prices.

(ii) The importance of proper sequencing and timing of major policy reforms has also been highlighted. Perhaps the most obvious example of unfortunate sequencing in Sweden is that deregulation of domestic capital markets was implemented prior to both a radical tax reform (including reduced tax rates on capital income) and the removal of exchange controls. An important example of unfortunate timing (indeed, largely “bad luck”) was the sharp rise in after tax real interest rates in 1992, i.e., exactly when building activity collapsed also for other reasons.¹ Another example is that the reforms of sick pay insurance reduced absence from work exactly when full employment broke down.

(iii) A lesson from the 1920s had to be relearned in the 1980s and 1990s. Boom and bust of credit flows easily result in large fluctuations in asset prices and in serious solvency and liquidity problems for financial institutions. These phenomena may contribute to macroeconomic instability—as highlighted a long time ago by Irving Fisher’s and Friedrich von Hayer’s theories of credit cycles and debt deflation. This experience suggests some care when deregulating capital markets.

¹ The short-term macroeconomic effects of the 1991 tax reform as a whole are difficult to assess, as the after tax return on both investment and saving, and hence also the after tax capital costs, were raised. Moreover, household disposable income was boosted as the tax reform was underfinanced. A study by Agell, Englund and Södersten (1995, chap. 6) argues that the net effect was contractionary, mainly via the negative effects on the capital value of housing property and hence also on housebuilding.

(iv) A fourth lesson pertains to potential instability in the financial saving rate of households. In the case of Sweden, the most obvious explanations are perhaps the need for stock adjustments of households' portfolios in connection with the deregulation of capital markets, sharp fluctuations in asset prices, huge swings in after-tax real interest rates and variations in the growth rate of real disposable income. Increased uncertainty about jobs in the early 1990s probably also contributed to the rise in the household saving rate at that time. As will be discussed below, the large swings in the budget deficit in the 1980s and 1990s are also likely to have contributed to the instability of the household saving rate. There is, however, no consensus about the relative importance of these various factors; many of them were induced by government policies.

(v) In countries with generous welfare state arrangements, including Sweden, the budget deficit tends to "explode" in deep recessions.¹ Several observers have, therefore, recently questioned the traditional Keynesian view that automatic changes in the government budget deficit always function as a macroeconomic stabilizer. Reference is then made not only to the hypothesis of "Ricardian equivalence" according to which private saving would increase by as much as government saving has decreased. A recent more radical "revisionist" view is that galloping government debt may, in fact, have *restrictive* effects on the national economy. One reason would be increased uncertainty among private agents concerning the ability of the government to live up to its financial commitments. More specifically, households are assumed to become uncertain about already promised social security entitlements, which is likely to raise their precautionary saving, in particular perhaps via reduced purchases of durable consumer goods. (Uncertainty about future taxes, however, may have the opposite ef-

¹ In the two recessions in 1981–1982 and 1991–1993, the budget deficit increased by 8 percent of GNP and by 16 percent of GNP respectively. Part of this result was due to the "normal" automatic fiscal stabilizer, part to changes in the composition of GNP and part to policy decisions, such as increased government spending to reduce open unemployment.

fect.)¹ And lenders are asserted to become uncertain about the ability of the government to meet its debt commitments without increased inflation, with large increases in nominal and probably also real interest rates as a result (*ex ante* as well as *ex post*).

According to this revisionist view, there is a risk that the traditional fiscal stabilizer could, in fact, turn into a destabilizer in exceptionally deep recessions in countries where the budget deficit is highly sensitive to fluctuations in output and employment. Recent experience, in Sweden as well as in other countries, also illustrates that galloping government debt may make the authorities hesitate, even in deep recessions, to take *discretionary* expansionary fiscal policy measures.

(vi) Finally, a fixed exchange rate did not turn out to be an effective method for keeping inflation in check in Sweden. The macroeconomic policy actually pursued was not consistent with the chosen exchange rate regime. As a consequence, private agents often had reasons to expect new devaluations, which also came about subsequently. The devaluation cycle in Sweden has also been closely connected with the violent swings in the budget deficits: the budget deficits has increased dramatically in periods of an overvalued exchange rate, when capacity utilization has been falling, while the budget deficit has gone down equally rapidly when the exchange rate has been undervalued. Moreover, the internationalization of financial markets and the breakdown of the Bretton Woods System undermined the confidence in fixed exchange rates.

It remains to be seen if a combination of a floating exchange rate and an explicit inflation target will have better success. The experience during the period 1993–1996 is encouraging, as inflation fell to one percent and the interest rate gap relative to Germany (for 10 year bonds) went down to about one percentage point. However, it is too early to tell how this type of policy will function in a longer term perspective, in particular with lower unemployment. Moreover, the experiment would, of course, be discontinued if Sweden were to join the Exchange Rate

¹ It is from that point of view interesting to note that the household financial saving rate was relatively high in the periods of huge government budget deficits in 1980–1985 and 1992–1995, while it was much lower (indeed negative) in the period of budget surpluses in 1987–1989. Moreover, it declined when the budget deficits fell in 1996–1997.

Mechanisms (ERM) of the European Union, or the European Monetary Union (EMU).

The Employment Experience

The Swedish employment experience raises two related questions. How was it possible to keep the unemployment rate low for such a long time, and why did full employment break down in the early 1990s?

Five major attempts seem to have been made in the literature to explain low unemployment in the 1970s and 1980s: (i) that “responsible” centralized wage bargaining kept real product wages down; (ii) that strict “work requirements” in the unemployment benefit system encouraged job search; (iii) that “active” labor market policy mitigated tendencies towards open unemployment during recessions and improved the functioning of the labor market; (iv) that an expansionary, or at least “cost-accommodating”, demand management policy was pursued, with recurring devaluations as an important element by which real product wages were reduced time after time; and (v) that a rapid increase in permanent public sector employment kept up aggregate labor demand, in particular for females.

(i) Real product wages were no doubt reduced on several occasions when unemployment tended to rise. This has often been interpreted as downward “real wage flexibility” brought about by *centralized wage bargaining*. However, it was not through nominal wage moderation, but via a series of devaluations, that real product wages fell in these situations. If the parties engaged in central wage bargaining were so “responsible”, why did they agree to nominal wage increases by altogether six hundred percent (eight hundred percent including pay-roll taxes) between 1970 and 1993? There was hardly any leeway at all for higher real after tax wages, in the sense that the latter remained virtually unchanged over the entire period (Figure 8). Indeed, raising nominal wage costs by six to eight hundred percent seems to be a rather clumsy way of bringing about constant real after tax wages.

Thus, central wage bargaining in Sweden can at most be credited with ensuring that the unions did not ask for immediate full compensation for the reductions in real wages after each major decline in the value of the krona. This means that the famous “real wage restraint” of

Swedish central bargaining appears to have materialized only on very specific occasions of acute crisis immediately after devaluations of the Swedish krona (Elvander 1988, pp. 207–209).

Moreover, the degree of centralization of wage bargaining in Sweden is often exaggerated. It is true that nationwide central bargaining agreements were made regularly during the entire period 1956–1983, as well as during the periods 1986–1987 and 1989–1992. However, wage drift, i.e., an increase in addition to wage agreements on the central or industry level, has usually amounted to nearly half (often about 40 percent) of the total wage increase. Several features of central bargaining have also been transformed over time due to changes in the relative importance of various participants in peak level bargaining, and in some cases the emergence of new parties in the bargaining process. During the period 1956–1965, LO and SAF were “wage leaders” in the sense that the outcome of peak level bargaining between them was largely followed by other organizations. Subsequently, however, wage bargaining in the public sector became increasingly important due to the dramatic increase in the number of public sector employees. Moreover, in 1966 these employees obtained legal rights for full-fledged bargaining, including the right to strike. The wage leadership of LO and SAF was also challenged by the rise in the number of white-collar employees in the private sector and their bargaining cartel (PTK) which was formed in the early 1970.

The transformation of centralized bargaining from the mid-1960s may thus be characterized as a gradual shift from LO–SAF hegemony to multipolar centralism, with considerable rivalry among different peak level organizations (A. Olsson 1989, pp. 51–54; Elvander 1988). The loss of LO–SAF hegemony in wage bargaining is partly a result of the rise in membership of unions not belonging to LO. Indeed, while the membership of LO was about 3.5 times as large as that of all other unions combined in 1955, the corresponding figure had fallen to 1.7 in 1975 and to 1.3 in 1995. In Mancur Olson’s (1965 and 1990), terms, peak level labor market organizations gradually became less “encompassing” than during the period of LO–SAF domination.

All this means that centralized bargaining became increasingly difficult to co-ordinate. Attempts by the government to contribute to such co-ordination have usually failed, except for the earlier mentioned Rehnberg Commission in the early 1990s. For instance, after the first oil price shock, a centralized “package solution” of wages and taxes

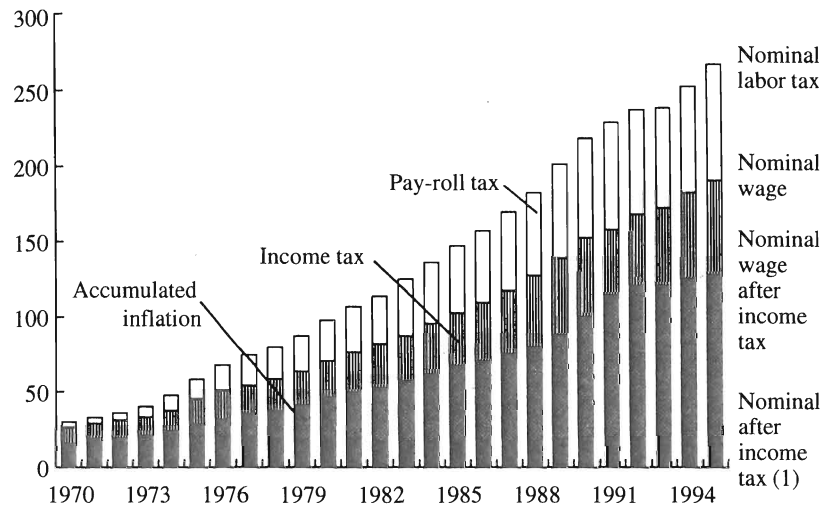
was arrived at on the initiative of the government in the so-called Haga Meetings in 1974–1975, with the participation of all major peak level unions and employers' associations in both the private and the public sector. This co-ordination ended, however, in the most dramatic wage-cost explosion since the inflationary boom of the early 1950s (in connection with the Korean War); see Appendix 4. In addition to high negotiated wage increases and large wage drift, there were also huge increases in payroll taxes—the latter by as much as 4 percent per year during the period 1974 to 1977. Thus, the steep trend of wage inflation in Sweden between the mid-1970s and the early 1990s occurred, in fact, during a period of a highly centralized and co-ordinated process of wage bargaining.

The rivalry among different labor market organizations, and related problems of co-ordinating centralized wage bargaining, may very well have contributed to the rapid wage inflation in the 1970s and 1980s. There are, however, other important explanations, such as the expansionary demand management policy pursued after the first oil price shock in order to “bridge” the international recession; occasional overheating of the domestic economy (as in the latter part of the 1980s); and, more fundamentally, the shift to a “devaluation strategy” from the mid-1970s. All these factors were undoubtedly interconnected.

Some economists have traditionally rationalized centralized wage bargaining as a way of internalizing various negative externalities of high nominal and real wage increases. The most frequently cited negative externalities are inflation and unemployment. Some studies covering the 1970s and 1980s also provided empirical support for this hypothesis (Calmfors and Driffil 1988), but the support is much weaker in studies covering subsequent years (OECD Employment Outlook 1997).

Needless to say, co-ordinated centralized wage bargaining should not be painted in too rosy colors. It is, for instance, far from self-evident that the theoretical possibility of internalization will actually materialize in a long-term perspective. There are several reasons for this skeptical view. Individuals engaged in centralized bargaining may not have enough knowledge to pursue an effective internalization. Moreover, society is not comprised entirely of union members, even in countries where 80–85 percent of employees are organized, as in Sweden. For instance, the interest of new entrants to the labor market, the unemployed, pensioners and housewives may be neglected. The leaders of

Figure 8. *Labor Cost per Hour for Industrial Workers, Sweden, 1970–1995, (thousands of SEK)*



(1) 1970 prices

Source: SCB.

central organizations may also pursue their own ambitions, for instance to exert power, rather than concern themselves with conditions in society at large.

More important perhaps: even though conflicts among different peak level employee organizations are avoided (by definition) when there is only one such organization on each side of the bargaining table, it is likely that conflicts are instead fought *within* a peak level organization, with rather uncertain outcomes for the aggregate wage level. Such conflicts may, in fact, make peak level bargaining unsustainable in the long run.

The increase in the number of peak level organizations in wage bargaining was accompanied by a shift to more industry level bargaining, in particular after 1983. This development was initiated mainly by the employers' association (SAF)—in spite of the fact that the centralized bargaining initiative in the 1950s originated with that organization. The shift in SAF's opinion on this matter partly reflects employers' dissatisfaction with the far-reaching wage compression which

occurred during the period of centralized bargaining. Some previously high wage workers (such as miners and metal workers) were also dissatisfied. Recent tendencies of firms to reorganize work along non-Tayloristic lines may also have raised the costs of centralized wage bargaining. As jobs and workers tend to be increasingly heterogeneous among such firms, it has become more difficult for centralized organizations to acquire relevant information on efficient wage scales (Lindbeck and Snower 1997).

It should also be kept in mind that unemployment may be caused not only by “too high” *average* real (product) wages but also by highly distorted *relative* wages, in the sense that the wage costs for low-skilled and inexperienced workers are much higher than their productivity. Indeed, centralized bargaining often seems to result in such a compression of relative wages. Why did then the huge rise in the relative wages of unskilled workers in Sweden from the early 1960s to the early 1980s not raise unemployment drastically for this category of employees? One explanation is that market forces during this period happened to operate in the same direction as unions policies; in particular, there was a large increase in the supply of individuals with higher education (tertiary and university educations). Another important answer is probably that the shortage of skilled labor, in an economy characterized by “overfull” employment, induced a substitution of unskilled for skilled labor (Topel and Edin, 1997). Moreover, the huge increase in public sector employment kept up the demand for low- and medium-skilled women; (about 70 percent of the employees in the public sector are females). This must also have indirectly increased the job opportunities for low-skilled men, at least temporarily, since they did not have to compete with so many low-skilled females in the private sector.

Employers also noticed that centralized wage bargaining could give unions, in particular LO, strong *political power*, as governments are often anxious to see only modest wage increases. It would seem that these political powers did not recede by the gradual erosion of LO’s wage leadership in the 1970s. As a matter of fact, it was in the 1970s and early 1980s that the unions, lead by LO, induced the government to initiate laws and regulations in their favor—at the expense of employers’ perceived interests. The most pronounced examples are perhaps LO’s push for job security legislation, laws on co-determination in firms and wage-earner funds.

(ii) Assertions that the construction of the *unemployment benefit system* in Sweden has kept the unemployment rate down find some support in cross-country regressions, according to which fixed duration of benefits and strict work requirements are conducive to low unemployment (Layard, Nickell and Jackman 1991). However, such arrangements have turned out to be politically difficult to maintain during periods of high unemployment. Since the early 1990s, unemployed individuals in Sweden have been allowed to qualify for new periods of unemployment benefits by participating in various labor market programs, so that the benefit period has, in fact, become unlimited. It has also been hypothesized that work requirements are difficult to enforce when there is heavy unemployment and there are very few vacancies in the labor market (Ljungqvist and Sargent 1997).

(iii) *Active labor market policy*—direct job creation, training programs and mobility-enhancing measures—is a specific Swedish contribution to economic policy. There is no question that direct job creation in the form of public works and employment subsidies can generate jobs. The difficult question is how large and fast the crowding-out effects are on ordinary jobs—directly via substitutions on the production and labor-input side, as well as indirectly via higher taxes that reduce demand for private goods, upward pressure on real product wages, etc. Empirical studies in Sweden indicate that crowding-out is considerable, 50–80 percent, in the case of direct job-creating activities by the government, particularly in the case of construction work; this experience parallels experiences in other countries (Forslund 1996). However, these studies have not detected any direct crowding-out of private employment when the government has increased employment in the social service sector (Forslund and Krueger 1997, and Calmfors 1993). An obvious explanation here is that private production has hardly been able to develop, to begin with, in this sector because of government-imposed discrimination of private provision of such services (e.g., child care and old-age care). Thus, we may say that even the *emergence* of private production and employment was crowded out long ago in this sector. When married women are stimulated to enter the private labor market, this should, however, raise their demand for private goods and services; but the wide tax wedges have prevented the emergence of a (legal) market in this area.

Mobility-enhancing policies and training programs are, no doubt,

promising ways of improving the functioning of the labor market. They have, however, some obvious limitations. For instance, no more than 17 percent of those who get jobs in Sweden over any given period of time seem to do so with assistance from the official nationwide (near-monopoly) labor market exchange.¹ Moreover, labor mobility policies and training programs cannot be successful without a considerable number of job vacancies; after all, these policies are supposed to help people “swim faster” from the unemployment islands to vacancy islands. This means that such policies are not likely to be very successful in deep recessions.

A striking illustration of the limitations of active labor market policy is the Swedish experience in the early 1990s. About 5 percent of the labor force engaged in different programs, organized by the Labor Market Board, could not stop a dramatic rise in open unemployment (Figure 7), and a large increase in long-term non-employment. Studies also indicate that the economic returns of retraining programs conducted by the National Labor Market Board are quite modest; cf. Forslund and Krueger (1997) and Calmfors (1993) for surveys.² One reason may be the large volume of these programs in Sweden. Another may be that workers sometimes have chosen such programs simply to qualify for a new period of unemployment benefits (before changes in the rules from 1996). It is also tempting to speculate that the focus on active labor market policy, and on the open unemployment rate, has distracted the political discussion away from measures designed to improve the overall performance of the private sector, including expansion of private employment.

(iv) Discretionary aggregate *demand management* in the product market may not have been systematically countercyclical after the mid-1960s. Cost-accommodating demand management and recurring *devaluations* may nevertheless have kept down unemployment in Swe-

¹ The figure rises to 23 percent if re-employment by previous employers is excluded from the statistics (statistics from National Labor Market Board).

² In early 1994, 46 percent of all registered job searchers (including people in retraining programs) had been out of work for at least one year (NUTEK 1994, pp. 47–49). Various empirical studies suggest that the labor income obtained is not (much) greater for those who have participated in official retraining programs than for those who have not (Björklund 1993). Serious attempts have been made to correct for selection bias in these studies, though we cannot be sure that this has succeeded.

den on several occasions, at least for a while. One reason is that nominal wages and prices do not catch up immediately after such policy actions, which allows for temporary real effects.

But why would such policies have *prolonged* real effects in the labor market? One explanation is that devaluations often occur in situations where the real product wage is in disequilibrium, in the sense that international competitiveness is severely threatened. Under such circumstances, insiders and labor union leaders in the tradables sector may occasionally accept lower real (product and consumption) wages via higher output prices (in domestic currency) in order to reduce their own unemployment risks. In this way, a devaluation may speed up the transition to a sustainable (“equilibrium”) employment level. This experience is quite consistent with Keynes’ celebrated assertion that workers and their unions are often willing to accept real wage reduction via inflation, though not by nominal wage cuts (or even cuts in the rates of nominal wage increases). This does not necessarily reflect “money illusion”; a devaluation helps solving a co-ordination problem, as it reduces real wages for *all* workers simultaneously. A series of devaluations may then repeatedly rescue the economy from winding up in situations of heavy unemployment—at least temporarily. Such policies may, therefore, prevent various mechanisms of unemployment persistence from starting to operate.

(v) It is often also argued that the low unemployment rate in Sweden during the 1970s and 1980s was a result of the expansion of permanent *public sector employment* by about 600,000 people (15 percent of the labor force) from 1970 to 1985 (Figure 5). Why was private employment then not crowded out by about the same amount? As in the case of increased *temporary* public sector employment via active labor market policy, part of the answer is probably that crowding-out takes time. It may, however, also be argued that some crowding out did, in fact, occur: some women would have got jobs in private service production (as in the United States) if government service production had expanded less.

These explanations of the successful employment performance in Sweden in the 1970s and 1980s find support in the earlier mentioned fact that full employment broke down exactly when the authorities decided *not* to accommodate negative macroeconomic shocks by new rounds of either discretionary devaluations or increased public sector

employment. Indeed, the latter was *reduced* by about ten percent in the early 1990s. It is also interesting to note that the rise in unemployment in the early 1990s was several (2–5) percentage points higher than would be expected on the basis of Okun-type estimates of the relation between changes in output, relative to the growth trend, and the unemployment rate (Gylfason, ed. 1997). The reduced overstaffing of firms when absence from work fell drastically in the early 1990s is certainly one of the explanations.

An important question of political economy then is *why* the previous accommodation policy was abandoned. One obvious answer is that politicians had become anxious to bring down the inflationary trend, presumably due to growing awareness of economic distortions and arbitrary redistributions of wealth by inflation in the 1970s and 1980s. The shift in policy may also have been a response to anti-inflationary policies abroad, for instance, to qualify for future membership in the Common Market (and possibly also the EU). Possibly, there was also a realization that wage devaluation cycles contributed to excessive instability in the rate of return on investment in the tradables sector. Moreover, it became clear that public sector employment cannot increase forever, as a share of total employment, without undesired consequences for the allocations of resources and economic incentives.

The fact that politicians finally decided that devaluations and further expansion of public sector employment were not acceptable methods of keeping the unemployment rate down means that the previous success of full employment was not sustainable in the long run. In this sense, a rise in unemployment had simply been postponed, though the dramatic rise in the early 1990s was also, as we have seen, related to the coincidence of a large number of negative macroeconomic shocks. It also turned out that the problem of unemployment persistence is probably no less serious in Sweden than in other European countries.¹

There are clearly some new tendencies in employment policy in Sweden, induced by high and persistent unemployment. In the late 1990s, emphasis appears to have shifted from ambitions to expand aggregate employment—the so-called work strategy (*arbetslinjen*)—to

¹ Persistence mechanisms also make statistically measured “equilibrium unemployment rates” dubious, as such statistics tend to “shadow” the actual unemployment rate. One study concludes that the equilibrium unemployment rate increased from about 3 to between 4 and 7 percent from the 1970s to the early 1990s (Forslund 1995a).

various attempts to lower open unemployment by reducing the labor supply. The most obvious examples are proposals for work sharing via shorter working hours and early retirement. While measures like these are not likely to reduce the unemployment rate in the long run, they may very well cut it in a short-term perspective (if wage costs per hour are not increased at the same time). It is also likely that greater emphasis on training and education is motivated not only by a desire to boost investment in human capital, and possibly make some individuals more attractive on the labor market in the future, but also by an ambition to remove some individuals from the unemployment statistics.

Chapter VI
Is the Swedish Experiment
Unwinding?

Let me summarize. Relatively fast productivity growth during the century-long period 1870–1970 gave Swedes a higher income standard than that of citizens in most other industrial countries. Increasingly ambitious welfare state arrangements and full employment after World War II also provided high economic security, generous provision of public sector services and a relatively even distribution of income. It therefore seems natural that, especially during the early postwar decades, Sweden was generally regarded as having been able to combine economic equality, generous welfare state benefits and full employment with high economic efficiency and rather fast productivity growth. But slower economic growth from about 1970, a collapse of full employment in the early 1990s, a recent (though modest) widening of income differentials and some (also modest) retreats of various welfare state benefits have made the picture of the Swedish experiment, or the Swedish model, less idyllic.

These problems may be regarded as a result of *both* exogenous changes in the environment of the Swedish model *and* endogenous dynamics of the model itself, though this distinction is far from clear-cut. Obvious examples of the former are the aging of the population and the internationalization of the economic system. Changes in the political constitution (in the early 1970s) and fragmentation of the structure of political parties are often believed to have rendered the economic incentives of politicians less conducive to favorable development of society as a whole. The fragmented structure of interest group organizations in the labor market has been asserted to have similar consequences (Olson 1990). When evaluating these various “fragmentation hypotheses”, however, it is important to note that the extreme alterna-

tives—monopoly-like positions of political parties and interest group organizations—are also problematic.

Timely examples of endogenous long-term dynamics in Swedish society are behavior adjustments by individuals to various government-created disincentives, including moral hazard and cheating on taxes and benefits. Endogenous changes in social norms, such as a reduced stigma from living off selective social benefits, may be part of this process; systematic empirical studies of this issue do not yet exist, however. Another example of endogenous dynamic adjustment is the adaptation of wage bargaining to expectations about cost-accommodating macroeconomic policies, including reoccurring devaluations—a point highlighted by the theory of rational expectations. By far the most important “endogenous dynamics” have probably been the ever higher ambitions of politicians to expand various government programs, and the gradually rising ambitions of union officials to compress the distribution of wages and expand the powers of unions. Kurt Lewin’s well-known psychological theory of a “rising aspiration level” in response to previous success is perhaps a useful analytical paradigm (Lewin et al. 1944).

It is also tempting to speculate that the favorable economic and social trends in Sweden in the 1950s and 1960s created “overconfidence” in the robustness of the Swedish economy. Indeed, the political discussion often gave the impression that fast economic growth was regarded more or less as “manna from heaven”. Early warning signals from the economic statistics in the 1970s and 1980s were often interpreted as reflecting temporary cyclical set-backs; worries expressed by some economists, politicians and journalists were often dismissed as expressions of general pessimism or political ideology. This probably helps explain why it took so long to start reforming institutions and policies which, later on, were generally regarded as having contributed to the deterioration in economic performance.

It is rather meaningless to ask whether the poor macroeconomic performance in the early 1990s was a result of macroeconomic shocks *or* structural weaknesses in the Swedish economy. It was a combination of both. The macroeconomic shocks cannot be denied. But they were not unrelated to basic structural features of Swedish society. Obvious examples are the apparent inflationary bias in wage formation and the expectations among firms, employees and unions regarding a cost-accommodating macroeconomic policy. Of course, the way the Swed-

ish economy has reacted to various macroeconomic shocks also depends on structural features of the system. The high sensitivity of the budget deficit to variations in GDP growth and capacity utilization is one example. Industrial production is also exceptionally sensitive to the real exchange rate. One reason might be the important role in the Swedish economy of multinational firms, which can easily shift production between plants in different countries. Another reason might be the industrial structure in Sweden: a large fraction of exports are bulk products for which Swedish firms are price takers. Various mechanisms of unemployment persistence, after the emergence of high unemployment, also reflect structural features of Swedish society.

The collapse of full employment in the early 1990s also changed the general conditions for the operations of institutions and policies in the country. For instance, active labor market policy—the success of which requires lots of vacancies—became less effective. The welfare state was also undermined financially. The “workfare strategy” of the social insurance systems also became more problematic. Two classes of beneficiaries now tend to emerge, with drastically different benefit levels: those with and those without sufficient previous work experience to get generous benefits. This has accentuated the “insider–outsider” character of Swedish society. In addition to insiders and outsiders in the labor and housing markets, and perhaps also in the provision of some public sector services, there are now also insiders and outsiders among those living on various benefit systems.

The “Swedish experiment” is to some extent simply an attempt to extend “typical” Western European policies further than in most other countries. Obvious examples are the transfer systems, the redistribution of income and the labor-market regulations. In these instances, experiences in Sweden highlight trends, achievements and problems shared by many countries in Western Europe. The “Swedish experiment” includes, however, also some fairly idiosyncratic features. Important examples are active labor market policy, ambitions to partition off the profitability of firms from the rewards to the owners, the large provision of public-sector services to households, and in more general terms, the far-reaching government interventions in the economic lives of individuals and families.

I have also emphasized the central role of labor unions in Swedish society. In particular, the LO is not only an important agent in wage bargaining. It has also for a long time been the most powerful pressure

group in Swedish politics, largely by operating as a partner to social democratic governments. As illustrated in previous chapters of the book, this influence has penetrated many important fields of government policies—labor-market interventions, welfare-state arrangements, redistribution policies, industry policies, and macroeconomic policies. Labor unions—in particular some of their economists (such as Gösta Rehn and Rudolf Meidner)—have also supplied new ideas to the political arena, including radical proposals to change fundamental aspects of the economic system in the country, such as the ownership of firms (in favor of the government and unions). It is, therefore, natural that the role of the LO in Swedish society has been running as a main thread through the book.¹

Another recurrent theme is the question of whether various achievements in Swedish economic and social policies are sustainable in a long run perspective. Obvious examples where a negative answer may be considered are the attempts to sustain full employment by recurring devaluations and gradually higher public-sector employment. Other examples are the attempts by unions and the government to squeeze profits without hurting investment, and to equalize the disposable income of wage earners without harming the functioning of the labor market or reducing investment in human capital. In fact, various policy retreats in the late 1980s and early 1990s suggest that a number of influential politicians have started to doubt the sustainability of some of these policies.

The reforms were initiated by a Social Democratic government: deregulation of domestic capital markets and international capital movements in the 1980s, tax reforms in the mid-1980s and early 1990s, and a shift to an “anti-inflationary” macroeconomic policy regime in

¹ Mancur Olson (1990) has hypothesized that the domination of centralized bargaining between LO and SAF in the 1950s and 1960s *both* restrained real wages, by mitigating rivalry among different groups of employees and employers, *and* contained interest-group pressure to expand public-sector spending. The loss of LO–SAF hegemony in the labor market since then would then, the argument goes, help explain both why public-sector spending accelerated after the mid-1960s and why wage formation came out of control in the mid-1970s. I do not know how seriously these asserted explanations should be taken. I have earlier pointed out that the “wage explosion” in the mid-1970s took place in a situation when wage bargaining was particularly centralized (“encompassing” in Olsons’s terminology), and that the political influence of LO was particularly high in the 1970s and early 1980s.

early 1991. On these matters, Sweden followed, of course, an international trend. But domestic policy failures certainly also helped induce changes in the policy strategy. Advice from Swedish economists, and other participants in the economic policy debate, probably also had an influence on the policy shift.

The center-right government in 1991–1994 proceeded with the reforms, in particular by reducing the generosity of various benefit systems and by improving conditions for small and medium-sized firms. Important examples of the latter are the removal of double taxation of profits, a reduction in wealth taxes and some modest deregulation of the labor market. They also abolished the wage-earners funds. Most of these reforms were sustained by the Social Democrats when they came back into power in 1994. Some reforms were even accentuated, such as further (though temporary) reduction in the replacement rates in various social security systems, and further decisions to consolidate the government's financial position, as well as additional tightening of the institutional framework of the budget process itself.

But other reforms were rolled back, such as a return to the double taxation of profits and higher wealth taxes, as well as restoration of the previously strict job security legislation. (Some retreats from these retreats seem to be in the cards, however.) Taxes and fees also increased again, from about 50 to nearly 54 percent of GDP between 1994 and 1997, as a result of a combination of higher tax rates and an expanded tax base in the context of a still somewhat progressive tax system.

It also turned out to be difficult to prevent serious *problems of transition* in connection with these reforms. Not only did the reforms contribute to temporary macroeconomic instability. Cuts in welfare state benefits also created economic hardship, in particular among households that had chosen not to accumulate much reserves themselves. People suddenly found that they had planned their lives, including their saving and insurance policies, on false expectations about future benefits. Moreover, the strongly discriminated private sector for household services is not in good shape to take over the production of such services when public sector cutbacks start to take effect.

It is also noteworthy that several government institutions and policies in Sweden function as an *integrated* system, with strongly com-

plementary features.¹ Different elements of the system have supported each other, or at least counteracted various undesired side effects of other elements. Changes in one part of the system often have quite complex, and indeed unpredictable effects. Sometimes, there are hardly any effects at all, for instance when other elements of the system effectively constrain the behavior of individuals. An example is that policy actions which stimulate the unemployed to search more do not boost employment much unless the costs of hiring workers are reduced and relative wages become more flexible. In other cases, an isolated policy change may instead have unexpectedly dramatic effects. When a binding constraint on individual behavior is suddenly removed, then the effects on individual behavior of other elements of the system may come into full force. An example is when capital market regulations were removed in the 1980s without a sufficient reduction in marginal income tax rates, against which individuals were allowed to deduct interest payments.

What are then the future prospects of the Swedish economy? To the extent that the poor economic performance since about 1970 is due to factors such as distorted economic incentives, regulated markets and weak competition, recent reforms are likely to improve the performance in the future. Obvious examples are the tax reform in 1991, reduced replacement rates and (somewhat) stiffer eligibility requirements in various social insurance systems in the first half of the 1990s, and an adjustment to the anti-cartel legislation in the EU. The risks of new cost crises have also been reduced by a flatter inflation trend and a shift to a floating exchange rate regime. The budget process has been stiffened and the acute budget crises of the early 1990s removed. As during the economic boom in the second half of the 1980s, the ratio of public-sector spending to GDP seems to fall again as long as the boom continues.

There are, however, important reservations to this positive picture. A fairly substantial budget surplus is required for a long period of time to bring down the central government debt considerably from the peak level of 80 percent of GDP in 1996, and central government interest payments from about 6 percent of GDP. Otherwise serious debt prob-

¹ This point has been made by both advocates of the system (Anna Hedborg and Meidner 1984) and various observers (Freeman 1995; Lindbeck et al. 1994; Jakobsson 1996).

lems may arise in the next deep recession. Tax wedges are still quite wide, which means that it is difficult for the individual to change his economic situation by his own work effort in the official labor market. Heavy taxation also means that a large fraction of the population depends heavily on transfers in cash and kind, which results in strong pressure from voters for transfer payments. The ensuing high tax burden may create difficulties to finance the “traditional” functions of the government, i.e., of providing collective goods, infra-structure, education, health, etc.¹ Moreover, very few reforms have (so far) been implemented in the labor market, and the conditions for small enterprises and owners of firms have not improved much. There is also a risk that the budget deficit will explode again in the next recession if this turns out to be deep.

We have also seen that the Swedish model has been in a state of great flux during the last decade. This has accentuated the “instability of rules” that has evolved as a characteristic feature of Swedish economic and social policies in recent decades.² The general trend, however, implies that Sweden has become a more “normal” West European country again—as it was prior to the radical experiments starting in the mid-1960s and early 1970s. Membership in the EU as of 1995 is likely to accentuate this development. If recent developments of the Swedish economic and social system continue, the Swedish model, as defined in this paper, will turn out to have been a brief historical episode—an interlude lasting no more than about three decades, from the mid-1960s to the late 1990s.

Yet history never ends. It is impossible to say, with any confidence, how Sweden’s membership in the EU, and possibly also EMU, will affect institutions and policies in Sweden in the future, partly because we do not know what will happen in the EU itself. Moreover, we really know very little about the extent to which recent tendencies towards reforms and retreats of important features of the Swedish model are

¹ This risk was emphasized already in the mid-1950s by Lindbeck and Palme (1954). It is somewhat ironic that the largest expansion of transfer payments took place when one of the authors had considerable influence on Swedish politics.

² Not only taxes and regulations but also benefit systems have been highly unstable in recent years. For instance, during the period 1991–1996, there have been close to 300 changes in the rules of the social insurance system and 50 changes in the labor market rules (Riksförsäkringsverket, 1996).

permanent or temporary. In other words, we do not know if Sweden will turn out to be one of the pioneers, not only in building up an elaborate welfare state but also in reforming and rewinding it. It may be that the values, ideologies, power relations and mechanisms which originally converged to create the model could make the former policy, or a new variant of it, rebound in the future. For instance, we know from a number of opinion studies that the support among voters of many government spending programs is very strong—except mainly for public administration, selective housing subsidies and perhaps social assistance (Svallfors 1992).

Several interest groups, including labor unions, have also pledged a return to previous institutions, rules and policies. Obvious suggestions include restoring previous benefit levels in the social insurance systems and more tax hikes, in particular for upper income households. Proposals to increase the collective ownership of firms continue to emerge from time to time—as evidenced by recent suggestions that the government-operated pension funds should invest heavily in the stock market. Furthermore, about 65 percent of the electorate receive (nearly) all their income from the public sector—either as employees of government agencies (excluding government corporations and public utilities) or by living off transfer payments (Table 1). Is this “a point of no return”?

Appendices

Appendix 1

The OECD (*Economic Outlook*, June 1996, Annex Table 59, and calculations by the OECD secretariat for this book) reports the following statistics for the business sector:

| | Labor productivity growth | | | Total factor productivity growth | | |
|--------------|---------------------------|---------|---------|----------------------------------|---------|---------|
| | 1973-79 | 1979-90 | 1990-95 | 1973-79 | 1979-90 | 1990-95 |
| Sweden | 1.4 | 1.5 | 3.4 | 0.0 | 0.8 | 1.9 |
| OECD | 1.7 | 1.7 | 0.9 | 0.8 | 1.0 | 0.3 |
| West. Europe | 2.7 | 2.1 | 1.2 | 1.4 | 1.3 | 0.5 |

Labor productivity growth (output per hour) in manufacturing (National Institute of Economic Research):

| | 1971-79 | 1979-90 | 1990-96 |
|-------------------|---------|---------|---------|
| Sweden | 3.62 | 2.95 | 3.66 |
| 11 OECD countries | 4.69 | 3.23 | 3.06 |

The 11 countries are Canada, USA, Japan, Belgium, France, Italy, the Netherlands, UK, Germany, Denmark and Norway.

Appendix 2

The GDP shares of total investment and saving have developed as follows:

| | | 1970-74 | 1975-79 | 1980-84 | 1985-89 | 1990-95 |
|------------|-----------------|---------|---------|---------|---------|---------|
| Investment | | 21.7 | 20.3 | 18.9 | 19.9 | 16.7 |
| of which: | business sector | 12.7 | 12.8 | 11.2 | 12.8 | 10.0 |
| | manufacturing | 4.0 | 3.3 | 3.0 | 2.4 | 2.4 |
| Saving | | 23.6 | 19.5 | 16.3 | 18.4 | 14.8 |

Appendix 3

Growth accounting, according to statistics provided by Ragnar Bentzel for this paper, suggests that slower capital accumulation explains about 10 percent of the slow-down in labor productivity growth in the *business sector* between the period 1950-1970 and the period 1970-1993. Bentzel's calculations (with the coefficient for the contribution of capital set at 0.25) may be summarized as follows:

| | Production growth | Contribution of labor | Contribution of capital | Contribution of reallocations | Unexplained residual |
|-----------|-------------------|-----------------------|-------------------------|-------------------------------|----------------------|
| 1950-1970 | 3.88 | -0.40 | 1.23 | 1.00 | 2.05 |
| 1970-1993 | 1.10 | -1.15 | 1.01 | 0.23 | 1.01 |

Appendix 4

The percentage change in labor costs (per hour), including pay-roll taxes, from the preceding year was:

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|-----|-----|------|-----|-----|
| 1970 | -71 | -72 | -73 | -74 | -75 | -76 | -77 | -78 | -79 | -80 | -81 | -82 |
| 10.2 | 13.6 | 10.2 | 11.5 | 17.0 | 22.2 | 16.9 | 12.1 | 9.2 | 8.7 | 11.8 | 9.6 | 6.1 |
| 1983 | -84 | -85 | -86 | -87 | -88 | -89 | -90 | -91 | -92 | -93 | -94 | -95 |
| 9.0 | 10.0 | 7.7 | 7.8 | 7.8 | 8.0 | 11.2 | 9.1 | 8.0 | 2.4 | -2.1 | 3.3 | 5.0 |

Source: *Fakta om Sveriges Ekonomi* (Facts about the Swedish Economy), SAF, 1996.

Appendix 5

The path of open unemployment (according to national statistics) was:

| | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-------|--------|--------|--------|-------|-----|
| 1970 | -71 | -72 | -73 | -74 | -75 | -76 | -77 | -78 | -79 | -80 | -81 | -82 | -83 |
| 1.5 | 2.5 | 2.7 | 2.5 | 2.0 | 1.6 | 1.6 | 1.6 | 2.3 | 2.1 | 2.0 | 2.5 | 3.3 | 3.5 |
| 1984 | -85 | -86 | -87 | -88 | -89 | -90 | -91 | -92 | -93 | -94 | -95 | -96 | |
| 3.1 | 2.6 | 2.7 | 1.9 | 1.6 | 1.3 | 1.6 | 2.7 | 4.8 | 8.2 | 8.0 | 7.7 | 8.0 | |
| | | | | | | | | (7.0) | (10.4) | (10.3) | (10.1) | (9.5) | |

Internationally standardized figures (from the OECD and the EU) are higher than figures according to national Swedish statistics (SCB), presented in this table. For the mid-1990s, the difference is 1.5–2.0 percentage points. (New statistics from the Labor Market Board, AMS, for the 1990s, presented in the fall of 1997, provide figures close to internationally standardized statistics. These new figures are in parenthesis in the table.)

The corresponding path of “total unemployment” (including people sponsored by the Labor Market Board) was:

| | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|-----|
| 1970 | -71 | -72 | -73 | -74 | -75 | -76 | -77 | -78 | -79 | -80 | -81 | -82 | -83 |
| 2.7 | 4.0 | 4.6 | 4.5 | 3.6 | 2.9 | 3.2 | 3.7 | 4.6 | 4.4 | 3.6 | 3.9 | 5.1 | 5.7 |
| 1984 | -85 | -86 | -87 | -88 | -89 | -90 | -91 | -92 | -93 | -94 | -95 | -96 | |
| 6.0 | 5.1 | 4.6 | 3.6 | 3.3 | 2.6 | 2.7 | 4.7 | 8.4 | 12.8 | 13.3 | 12.1 | 12.6 | |

Sources: Statistics Sweden (SCB) for figures on open unemployment *plus* statistics from the Labor Market Board (AMS) for various labor market programs (public works, adult reeducation and training, temporary youth training programs, job introduction projects (ALU) and temporary recruitment subsidies)

References

- Agell, Jonas and Berg, Lennart. "Does Financial Deregulation Cause a Consumption Boom?", *Scandinavian Journal of Economics*, Dec. 1996, 98 (4), pp. 579–601.
- Agell, Jonas; Englund, Peter and Södersten, Jan. *Svensk skattepolitik i teori och praktik. 1991 års skattereform*. SOU 1995:104, Suppl. 1. Stockholm: Allmänna Förlaget, 1995.
- Ahlberg, Jan, ed. *Brottsutvecklingen 1992 och 1993*. BRÅ-rapport 1994:3, Stockholm, 1994.
- Andersson, Thomas; Fredriksson, Torbjörn and Svensson, Roger. *Multinational restructuring, internationalization and small economies, the Swedish case*. London: Routledge, 1996.
- Arbetsmarknadsstyrelsen. "Arbetsförmedlingens medverkan vid förmedlingen av arbete till arbetslösa och åtgärdsplacerade", Rapport URA, Stockholm, 1996:1.
- Aronsson, Thomas and Walker, James R. "The Effects of Sweden's Welfare State on Labor Supply Incentives", in Richard Freeman, Birgitta Swedenborg and Robert Topel, eds. *The Welfare State in Transition—Reforming the Swedish Model*. 1997.
- Atkinson, Anthony B. "The Welfare State and Economic Performance", Suntory-Toyota International Center for Economics and Related Disciplines, No. WSP/109, 1995.
- Atkinson, Anthony B.; Rainwater, Lee and Smeeding, Timothy. "Income Distribution in European Countries", in Anthony B. Atkinson, ed., *Incomes and the welfare state*, Cambridge: Cambridge University Press, 1995, pp. 41–77.
- Barkman, Catharina and Fölster, Stefan. *Företagsstödet—vad kostar det egentligen?* DS 1995:4, Stockholm: Finansdepartementet.

- Bergström, Villy and Södersten, Jan. "Nominella och reala vinster i svensk industri", *S-E-Bankens kvartalstidskrift*, (1/2), 1979, pp. 47–57.
- Bjurek, Hans; Gustafsson, Björn; Kjulin, Urban; and Kärby, Gunni. "Efficiency and Quality when Providing Public Child Care in Sweden", *Scandinavian Journal of Educational Research*, 40(3), 1996, pp. 217–238.
- Björklund, Anders. "Measuring Labour Market Measures", in *Effects and Measuring of Effects of Labour Market Policy Initiatives*, Copenhagen: Ministry of Labour, 1993a.
- . "A Comparison Between Actual Distributions of Annual and Lifetime Income: Sweden 1951–92", *Review of Income and Wealth*, Series 39, No 4, December, pp. 377–386.
- Björklund, Anders and Freeman, Richard B. "Generating Equality and Eliminating Poverty—The Swedish Way", in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*, 1997.
- Björklund, Anders and Jäntti, Markus. "Intergenerational Income Mobility in Sweden Compared to the United States", Working Paper 1993:4, Swedish Institute for Social Research, Stockholm University, 1993b.
- Björklund, Anders; Palme, Mårten and Svensson, Ingemar. "Tax Reforms and Income Distribution: An Assessment Using Different Income Concepts", *Swedish Economic Policy Review*, Jan. 1995, 2(2), pp. 229–265.
- Bolto, Andrea. "Did Policy Activism Work?", *European Economic Review*, Dec. 1989, 33(9), pp. 1709–1726.
- Braunerhjelm, Pontus. "Nyetablering och småföretagande i svensk industri", Chap. 4 in Pontus Braunerhjelm 1993, *Den långa vägen*. Stockholm: IUI.
- Busch-Zetterberg, K. 1996, *Det civila samhället i socialstaten: Inkomstkällor, privata transfereringar, omsorgsvård*, Stockholm: City University Press, 1996.
- Calmfors, Lars. "Lessons from the Macroeconomic Experience of Sweden", *European Journal of Political Economy*, 1993, 9(1), pp. 25–72.
- Calmfors, Lars and John Driffill, "Bargaining Structure, Corporatism and Macroeconomic Performance", *Economic Policy*, no 6 April, 1988, pp. 17–62.

- Childs, Marquis W. *Sweden, the Middle Way*. New Haven: Yale University Press, 1936.
- Dowrick, Steve, "Swedish Economic Performance and Swedish Economic Debate: a view from outside", *Economic Journal*, 1996, 106 (439).
- Du Rietz, Gunnar. *Välfärdsstatens finansiering*. Socialstatsprojektet 1994:4, Stockholm: City University Press.
- Edgren, Gösta, Faxén, Karl-Olof and Odhner, Clas-Erik. *Wage Formation and the Economy*, London: Allen & Unwin, 1973 (Swedish ed. 1970).
- Edin, Per-Anders; Fredriksson, Peter and Holmlund, Bertil. "Utbildningsnivå och utbildningsavkastning i Sverige", in Ekonomiska Rådets Årsbok 1993. Stockholm: Konjunkturinstitutet, 1994, pp. 7–37.
- Edin, Per Anders and Holmlund, Bertil. "The Swedish Wage Structure: The Rise and Fall of Solidarity Wage Policy?", in Richard Freeman and Lawrence Katz, eds., *Differences and Changes in Wage Structure*. University of Chicago Press: Chicago 1995, pp. 307–43.
- Edin Per-Anders and Topel, Robert. "Wage Policy and Restructuring—The Swedish Labor Market since 1960", in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*, 1997.
- Elvander, Nils. *Den svenska modellen*. Stockholm: Allmänna Förlaget, 1988.
- . "The Swedish Bargaining System in the Melting Pot", in Elvander Nils and Holmlund Bertil (eds.), *The Swedish Bargaining System in the Melting Pot*, National Institute for Working Life, Stockholm, 1997.
- Englander, Steven A. and Gurney, Andrew. "OECD Productivity Growth: Medium-Term Trends", *OECD Economic Studies*, Spring 1994, 22, pp. 111–29.
- Englund, Peter. "Balansräkningarna och den ekonomiska politiken", in *Ekonomisk Politik. En vänbok till Assar Lindbeck*. Stockholm: SNS Förlag, 1995, pp. 25–44.
- ESO (Expertgruppen för Studier i Offentlig Ekonomi). *Den offentliga sektorns produktivitetsutveckling 1980–1992*. Ds 1994:24. Stockholm: Finansdepartementet, 1994.
- . *Nettokostnader för transfereringar i Sverige och några andra länder*. Ds 1994:133. Stockholm: Finansdepartementet, 1994.
- Fägerlind, Ingemar. "Utbildningsstandarden i Sverige 1970–1990 och

- produktivitetens utvecklingen”, i *Arbetskraft, arbetsmarknad och produktivitet*, Expertrapport nr 4, Produktivitetsdelegationen, Stockholm: Allmänna Förlaget, 1991, pp. 225–256.
- . *Utbildningen i Sverige och det mänskliga kapitalet*. Appendix 9, SOU 1993:16. Stockholm: Allmänna Förlaget, 1993.
- Fölster, Stefan and Lindström, Eva. *Sveriges offentliga sektor i europeisk konkurrens*. Appendix 6, EG-Konsekvensutredningen. Stockholm: Fritzes, 1994.
- Fölster, Stefan and Peltzman, Sam. “The Social Costs of Regulation and Lack of Competition in Sweden”, in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*, 1997.
- Fors, Gunnar and Svensson, Roger. “R&D in Swedish Multinational Corporations”, Working Paper No. 406, Stockholm: IUI, 1994.
- Forslund, Anders. “Unemployment—Is Sweden Still Different?”, *Swedish Economic Policy Review*, Spring 1995a, 2(1), pp. 15–58.
- . “The Swedish Model—Past, Present and Future”, Manuscript. Egon Sohmen Symposium, Prague, Aug.–Sept., 1995b.
- . “Direkta undanträngningseffekter av arbetsmarknadspolitiska åtgärder”, Report for The Accountants of Parliament, Stockholm, 1996.
- Forslund, Anders and Krueger, Alan B. “An Evaluation of the Swedish Active Labor Market Policy: New and Received Wisdom”, in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*. 1997.
- Freeman, Richard B., ed. *Working under different rules*. New York: Russel Sage Foundation, 1994.
- Freeman, Richard B. “The Large Welfare State as a System”, *American Economic Review*, Papers and Proceedings, May, 1995, pp. 16–21.
- Freeman, Richard; Swedenborg, Birgitta and Topel Robert, eds. *The Welfare State in Transition—Reforming the Swedish Model*, Chicago: NBER and Chicago University Press, 1997.
- Gottschalk, Peter and Smeeding, M., “Cross-National Comparisons of Earnings and Income Inequality”, *Journal of Economic Literature*, Volume XXXV, No 2, 1997, pp. 633–687.
- Gustafsson, Björn. “Fattigdom i Sverige”, in Nordiska Ministerrådet, *Den nordiska fattigdomens utveckling och struktur*, Stockholm: Tema Nord, 1996.

- Gylfason, Thorvaldur, ed. *I otakt med omvärlden?*, Konjunkturrådets rapport 1997, Stockholm: SNS Förlag, 1997.
- Hansson, Pär and Lundberg, Lars. *Från basindustri till högteknologi? Svensk näringsstruktur och strukturpolitik*. Stockholm: SNS Förlag, 1995.
- Hassler, John and Lindbeck, Assar, "Fel argument mot EMU", *Dagens Nyheter*, Nov. 27, 1997.
- Heclo, Hugh and Madsen, Henrik. *Policy and politics in Sweden, principled pragmatism*. Philadelphia: Temple University Press, 1987.
- Hedborg, Anna and Meidner, Rudolf. *Folkhemsmodellen*. Stockholm: KF:s Förlag, 1984.
- Henrekson, Magnus. *Företagandets villkor. Spelregler för sysselsättning och tillväxt*. Stockholm: SNS Förlag, 1996a.
- . "Sweden's Relative Economic Performance: Staying on or Lagging Behind?", *Economic Journal*, 106 (439), 1996.
- Henrekson, Magnus; Jonung, Lars and Stymne, Joakim. "Economic Growth and the Swedish Model", in *Economic Growth in Europe since 1945*. Nicholas Crofts and Giani Tonioto, eds, Cambridge: Cambridge University Press, 1996.
- Henrekson, Magnus; Lantto, Kari and Persson, Mats. *Bruk och missbruk av sjukförsäkringen*. Stockholm: SNS Förlag, 1992.
- Hibbs Jr, Douglas A. and Locking, Håkan. "Wage Dispersion and Productive Efficiency: Evidence for Sweden", Working paper No. 128, FIEF, Stockholm, 1995.
- Holmlund, Bertil. "Some New Evidence of Wage Behaviour in Sweden", in Elvander and Holmlund (eds), op. cit., 1997.
- Jacobsson, Ulf. "Räcker reformerna av den svenska modellen?", in *Vad vill Sverige med EU? Konjunkturrådets rapport*, Stockholm: SNS Förlag, 1996.
- Jagrén, Lars and Jakobsson, Ulf. *Den underliggande konkurrenskraften*. Appendix 15, SOU 1993:16. Stockholm: Allmänna Förlaget, 1993.
- Johansson, Per and Palme, Mårten. "Do Economic Incentives Affect Work Absence? Empirical Evidence Using Swedish Micro Data", *Journal of Public Economics*, 1996, 59(2), pp. 195–218.
- Jonung, Lars. "Knut Wiksell's Norm of Price Stabilization and Swedish Monetary Policy in the 1930s", *Journal of Monetary Economics*, Oct. 1979, 5(4), pp. 459–96.

- Jonung, Christina and Persson, Inga. "Women and Market Work: Misleading Tale of Participation Rates in International Comparisons", *Work, Employment and Society*, 1993, 7(2), pp. 259–274.
- Korpi, Walter. "Eurosclerosis and the Sclerosis of Objectivity: On the Role of Values among Economic Policy Experts", *Economic Journal*, 106 (439), 1996.
- Korpi, Walter and Palme, Joakim. "The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality and Poverty in Western Countries". Institutet för Social Forskning, Working Paper 3, 1997.
- Kruse, Agneta. "Offentliga utgifter för välfärdsstaten, 1993", (Manuscript), University of Lund, Sweden, 1995.
- Landsorganisationen i Sverige (LO). *Fackföreningsrörelsen och den fulla sysselsättningen*. Stockholm, 1951.
- . *LO 80-Report*. Stockholm, 1981.
- Layard, Richard; Nickell, Stephen and Jackman, Richard. *Unemployment, macroeconomic performance and the labor market*. Oxford: Oxford University Press, 1991.
- Leamer, Edward and Lundborg, Per. "Sweden Competing in the Global Marketplace—a Heckscher–Ohlin View," in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*. 1997.
- Levine, Ross and Renelt, David. "A Sensitivity Analysis of Cross-Country Growth Regressions", *American Economic Review*, Sept. 1992, 82(4), pp. 942–963.
- Lewin, Kurt, Dembo, T., Festinger, L. and Sears, P. "Level of Aspiration" in J. McV. Hunt, ed. *Personality and the Behavior Disorders*, vol. 1, New York: Ronald Press, 1944.
- Lindbeck, Assar. *Statsbudgetens verkningar på konjunkturutvecklingen*, SOU 1956:48, Stockholm: Finansdepartementet, 1956.
- . "Endogenous Politicians and the Theory of Economic Policy", Seminar Paper No 35, Institute for International Economic Studies, Stockholm, 1973.
- . "Business Cycles, Politics and International Economic Dependence", *Skandinaviska Enskilda Banken Quarterly Review*, No, 2, 1975a, pp. 5368 (also reprint IIES, No 39).
- . *Swedish economic policy*. London: Macmillan, 1975b (Swedish editions 1968 and 1975).

- . “Interpreting Income Distribution in a Welfare State: The Case of Sweden”, *European Economic Review*, April 1983, 21, pp. 227–256.
- . “Consequences of the Advanced Welfare State”, *The World Economy*, Mars 1988, 11, pp. 19–37.
- . “The Swedish Experience”, Institute for International Economic Studies, Seminar Paper No. 482, 1990.
- . “Overshooting, Reform and Retreat of the Welfare State”, *The Economist*, 1994 142(1), pp. 1–19.
- . “Hazardous Welfare-State Dynamics”, *American Economic Review*, May 1995, 85(2), Papers and Proceedings, pp. 9–15.
- Lindbeck, Assar and Palme, Olof, “Reformpolitik vid skiljevägen”, *Tiden* 47:3, 1955, pp. 135–142.
- Lindbeck, Assar; Molander, Per; Persson, Torsten; Petersson, Olof; Sandmo, Agnar; Swedenborg, Birgitta and Thygesen, Niels. *Turning Sweden around*, Cambridge, MA: MIT Press, 1994. (Swedish original: *Nya villkor för ekonomi och politik*, SOU 1993:16, Stockholm: Allmänna Förlaget, 1993.)
- Lindbeck, Assar; Nyberg, Sten and Weibull, Jörgen W. “Social Norms, The Welfare State, and Voting”, Seminar Paper No 608, Institute for International Economic Studies, University of Stockholm, 1996.
- Lindbeck, Assar and Snower Dennis S. “Centralized Bargaining, Multitasking and Work Incentives”, CEPR Discussion Paper No 1563, 1997.
- Ljungquist, Lars and Sargent, Thomas. “Taxes and Subsidies in Swedish Unemployment”, in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*, 1997.
- Lundberg, Erik. “The Rise and Fall of the Swedish Model”, *Journal of Economic Literature*, Mars 1985, 23(1), pp. 1–36.
- Lundström, Anders et al. “De nya och små företagens roll i svensk ekonomi”, Expert report no 18, *Nya villkor för ekonomi och politik*, SOU 1993:16, Stockholm: Fritzes, 1993.
- Lydall, Harold. *The Structure of Earnings*. London: Oxford University Press, 1968.
- Långtidsutredningen. SOU 1995:4, Stockholm: Allmänna Förlaget, 1995.
- Maddison, Angus. *Phases of Capitalist Development*. Oxford: Oxford University Press, 1982.

- . *Dynamic Forces of Capitalist Development*. Oxford: Oxford University Press, 1991.
- Matthiessen, Lars. "Finanspolitiken som stabiliseringspolitiskt instrument", i Lundberg E. (ed.), *Svensk finanspolitik i teori och praktik*, Stockholm, 1971.
- McFate, Katherine, Lawson, Roger and Wilson, William J. (eds.). *Poverty, Inequality and the Future of Social Policy*, New York: Russel Sage Foundation, 1995.
- McKinsey Global Institute. *Sweden's economic performance*. Stockholm, Sept. 1995.
- McLure Jr, Charles E. and Norrman, Erik. "Tax Policy in Sweden", in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*. 1997.
- Mitchell, Deborah. *Income Transfers in Ten Welfare States*. Studies in Cash and Care. Aldershot: Avebury, 1991.
- Molander, Per. *Statsskulden och budgetprocessen*. Report to ESO, Ds 1992:126, Stockholm: Fritzes, 1992.
- Murray, Richard. "Productivity of the Public Sector in Sweden", (manuscript). Stockholm: Finansdepartementet, 1996.
- Myrdal, Gunnar. "Dags för ett bättre skattesystem", *Ekonomisk Debatt*, 1978, 6(7), pp. 493–506.
- Myhrman, Johan. *Hur Sverige blev rikt*. Stockholm: SNS Förlag, 1994.
- National Institute for Economic Research (KI), Stockholm (database).
- NUTEK (Närings- och Teknikutvecklingsverket). *Näringslivets tillväxtförutsättningar till 2010*. Appendix 6 to Långtidsutredningen. Stockholm: Fritzes, 1994.
- . *Svenskt näringsliv och näringspolitik*. Stockholm: Fritzes, 1996.
- OECD. *Economic Outlook*. Paris: OECD, various years.
- . *Education at a Glance*. Paris: OECD, 1993 and 1995.
- . *Employment Outlook*, Paris: OECD, various years.
- . *National Accounts*, Vol I and II, *Main Aggregate*. Paris: OECD, various years.
- . *Main Economic Indicators*. Paris: OECD, various years.
- . *Labour Force Statistics*. Paris: OECD, various years.
- Olsson, Anders S. *The Swedish Wage Negotiation System*. Uppsala: Department of Sociology, 1989.
- Ohlsson, Henry, and Vredin, Anders, "Political Cycles and Cyclical Policies", *Scandinavian Journal of Economics*, 98(2), 1996, pp. 203–218.

- Olson, Mancur. *The Logic of Collective Action. Public Goods and the Theory of Groups*, Cambridge, Mass: Harvard University Press, 1965.
- . *How Bright are the Northern Lights? Some Questions about Sweden*. Lund: Lund University Press, 1990.
- Ohlsson, Lennart and Vinell, Lars. *Tillväxtens drivkrafter*. Stockholm: Industriförbundets Förlag, 1987.
- Örtengren, Johan et al. *Expansion, avveckling, företagsvärdering i svensk industri*. Stockholm: IUI, 1988.
- Pashcal, R; Weinstein, T. and Walberg, H.J. "Effects of Homework: A Quantitative Synthesis", *Journal of Educational Research*, 1984,78 (2), pp. 97–104.
- Petersen, Trond and Meyerson, Eva. "The Within-Job Gender Wage Gap, The Case of Sweden", manuscript, IUI, Stockholm, October 1996.
- Petersson, Olof. *Svensk politik*, Stockholm: Publica, 1992.
- Pettersson, Thorleif. "Välfärd, värderingsförändring och folkrörelseengagemang", in Sigbert Axelson and Thorleif Pettersson (eds.) *Mot denna framtid*, Stockholm: Carlssons Förlag, 1997.
- Riksförsäkringsverket, *Regelförändringar*, Memo 1996-07-01.
- Riksrevisionsverket (National Accounting and Audit Bureau). *Fusk—systembrister och fusk i välfärdssystemen*. Stockholm: RRV 1995:32.
- Rosen, Sherwin. "Public Employment and the Welfare State in Sweden", in Richard Freeman, Birgitta Swedenborg and Robert Topel, *The Welfare State in Transition—Reforming the Swedish Model*, 1997.
- Rothstein, Bo. "State Structure and Variations in Corporatism: The Swedish Case", *Scandinavian Political Studies*, 1991, 14, pp.149–171.
- . "Vad bör staten göra?". Stockholm: SNS Förlag, 1994.
- SAF. *Fakta om Sveriges ekonomi*. Stockholm, 1996.
- Salonen, Tapio. *Margins of welfare*. Hällestad: Hällestad Press, 1993.
- . "Sammanfattning av övervältringsstudie första halvåret 1996", manuscript, Socialhögskolan, Lund University, Sweden.
- SCB (Statistics Sweden) database.
- Schön, Lennart. *Omvandling och obalans, mönster i svensk ekonomisk utveckling*. Expert Report 3 in Long-term Report, Stockholm: Fritzes, 1994.

- Sheffrin, S. M. "Have Economic Fluctuations Been Dampened? A look at evidence outside the United States", *Journal of Monetary Economics*, vol 21, 1988, pp. 73–83.
- Socialstyrelsen. Rapport om socialvård, 1994:4, Stockholm.
- . *Socialbidragsnormen—en översyn*. SOS-rapport 1994:24.
- Sohlman, Åsa. *Framtidens utbildning. Sverige i internationell konkurrens*. Stockholm: SNS Förlag, 1996.
- Smeeding, Timothy M. and Gottschalk, Peter. "The International Evidence on Income Distribution in Modern Economies. Where Do We Stand?", Working Paper No. 137, Luxemburg Income Study, 1995.
- SIFO, *Att växa upp i storstädernas utsatta bostadsområden*. Stockholm: SIFO AB, 1997.
- SNS. Konjunkturrådets rapporter, Stockholm: SNS Förlag, 1985–1997.
- SOU 1997:24. *Välfärd i verkligheten—pengarna räcker inte*. Stockholm: Department of Social Affairs, 1997.
- SOU 1997:118. *Delade Städer*, Stockholm: Department of Social Affairs, 1997.
- Stråth, Bo. *The organization of labor markets*. London: Routledge, 1995.
- Svallfor, Stefan. "Den stabila välfärdsopinionen. Attityder till svensk välfärdspolitik 1986–92". Working Report, Department of Sociology, Umeå University, 1992.
- Svenska Kommunförbundet. "Övervältringar inom socialsektorn", memo, Stockholm, 1996.
- Tengblad, Åke, "Skattefusk", in Malmer, Håkan et al. *Århundradets skattereform*. Stockholm: Fritzes, 1994.
- Uddhammar, Emil. *Arbete, välfärd och bidrag: en dynamisk analys av folkets välstånd och välfärdsforskningens missförstånd*. Stockholm: City University Press, 1997.
- Uhr, Thomas. "Internationalists, Regionalists, or Eurocentrists", Manuscript, National Institute for Economic Research, Stockholm, 1996.
- UHÄ. *Civilingenjörsutbildning i kris—resurser och kvalitet*. UHÄ-rapport 1985:15, Stockholm, 1985.
- World Bank. *World Tables* (computer file). Washington DC: International Reconstruction and Development, various years.
- Zetterberg, Hans and Ljungberg, Carl, J. *Vårt land – den svenska socialstaten*. Stockholm: City University Press, 1997.

Ziehe, Thomas. "Kulturanalyser. Ungdom, utbildning, modernitet".
Eslöv Symposium, 1993.

Institutions and policies in the economic and social fields have been rather experimental in Sweden. The experiences of some of these experiments are also relevant, positively or negatively, for other developed countries. Sweden may therefore be regarded not only as a small country on the periphery of Europe, but also as a large ("full-scale") economic and social laboratory. This book discusses the experience of economic and social policies in Sweden after World War II, emphasizing the period after about 1970.

In **The Swedish Experiment** Assar Lindbeck characterizes the economic and social system in Sweden in terms of a number of institutional features by which Sweden has differed from most other developed countries. They refer mainly to the division of responsibilities between the private and the government sector, in particular with respect to economic security, employment, income distribution, consumption and investment. The book concludes by asking whether the Swedish experiment is gradually unwinding and, if so, why.

The Swedish Experiment is written in a non-technical fashion and should be of great interest not only to professional economists, but also to students of economics and other social sciences as well as to general readers.

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