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Partial Retirement and Labor Supply: Evidence from Swedish Collective Bargaining Agreements

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Abstract

Aging populations strain pension systems, prompting policymakers to introduce partial retirement schemes to incentivize workers to retire later. I study the impact of introducing partial retirement within collective bargaining agreements in Sweden's manufacturing sector in 2013. Merging collective bargaining data with administrative records, I employ a difference-in-differences methodology to analyze the labor market trajectories of eligible and ineligible cohorts around the introduction year. The results reveal a nuanced picture: while eligible workers are more likely to work and claim pension benefits simultaneously, this comes at the expense of a 10% decline in employment rates and a SEK 50,000 reduction in labor earnings. In summary, partial retirement fails to extend working lives, thus undermining its utility as a one-size-fits-all solution to the future of pension systems.

Keywords: Partial Retirement, Pension, Labor Supply

JEL Codes: D15, J26, J32

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1 Introduction

An aging population puts pressure on pension systems around the world. People are getting older across developed economies, likely increasing dependency ratios. In many countries, the ratio of those ages 65 and above to those of working age will double. This increase will put pressure on public pension systems. Some estimates suggest that old-age expenditure as a share of GDP will have to increase by 180% in the G20 to keep current standards (Rouzet et al., 2019).

To counter this development, governments incentivize people to delay retirement (Huber et al., 2016; Börsch-Supan et al., 2018; Elsayed et al., 2018; Berg et al., 2020). One such tool is partial retirement. Partial retirement refers to schemes that allow workers to claim some pension benefits while working part-time. These programs have ambiguous theoretical effects on labor supply (Tolan, 2017; Haan and Tolan, 2019). On the one hand, workers are incentivized to work fewer hours while still active in the labor market. On the flip side, governments hope that workers combine this with delayed retirement. However, empirical research find mixed results. In this paper, I study how partial retirement affects worker's labor supply.

I provide quasi-experimental evidence on the labor supply effects of workers being offered partial retirement in collective bargaining agreements. Many Swedish workers have employer-paid pension contributions based on their occupation (Hagen, 2017). The details of these occupational pension schemes are bargained by trade unions and employer's associations infrequently on the sectoral level. In 2013, trade unions and employer's associations in the manufacturing sector agreed to let workers aged 60 reduce working time and instead draw on their occupational pension. The parties wanted to promote flexibility and a longer working life (Fryklund et al., 2015).

I compare changes in labor supply for the cohort of eligible workers in 2013 with those in adjacent younger cohorts. I link matched employer-employee data with data on collective bargaining agreements. These agreements are used to define treatment cells based on

cohorts and occupations. I then estimate difference-in-differences models where I compare the evolution of earnings and employment between treated and control cohorts.

Workers with access to partial retirement reduce their labor supply in the short and long run. Treated workers are 4.5% more likely to work and simultaneously take out pension benefits. This is coupled with lower labor supply as the likelihood of working declines by about 10%. Similarly, workers have lower labor earnings (SEK 50,000). However, workers can compensate for the loss in labor income by an increase in benefits. In the end, I find no effect on disposable income.

I contribute to the empirical literature on the labor market effects of partial retirement policies. I study a new setting where occupational pensions induce partial retirement. I can study the mechanisms and heterogeneous responses by adding rich administrative data. Previous research relying on survey data suggests that financial incentives for partial retirement do matter, but not always (Ilmakunnas and Ilmakunnas, 2006; Van Soest and Vonkova, 2014; Kantarcı and van Soest, 2015; Elsayed et al., 2018). We can thus learn additional information by studying reduced-form evidence. There is a small amount of literature that uses credible identification to estimate the effects of partial retirement programs (Graf et al., 2011; Hermansen, 2015; Huber et al., 2016; Albanese et al., 2020; Berg et al., 2020; Knoef, 2021).

Moreover, I contribute to the literature by studying how different groups take up partial retirement. First, there is some research on the effect of different job characteristics in experimental settings Ilmakunnas and Ilmakunnas (2006); Kantarcı and van Soest (2015); Elsayed et al. (2018). Less research focuses on how take-up varies between skill groups (Huber et al., 2016).

In addition, I contribute to the literature studying differences in retirement decisions between women and men. There are a few studies that analyze how women and men react differentially to partial retirement (Ilmakunnas and Ilmakunnas, 2006; Kantarcı and van Soest, 2015; Huber et al., 2016; Albanese et al., 2020; Berg et al., 2020).

Finally, this paper contributes to the literature on pension reforms in Sweden. I contribute by studying the role of retirement and occupational pensions. [Wadensjö \(2006\)](#) discuss a previous system of public partial retirement in Sweden. His analysis suggests that individuals respond to financial incentives and that partial retirement likely boosted the number of hours worked. [Bengtsson et al. \(2022\)](#) discuss early labor market exits in Sweden. Other papers studying financial incentives in the Swedish system include ([Palme et al., 2007](#); [Johansson et al., 2014](#); [Laun and Wallenius, 2015](#); [Laun, 2017](#); [Laun and Palme, 2018](#); [Palme and Laun, 2018](#); [Laun and Palme, 2022](#)).

This paper continues as follows. [Section 2](#) presents the setting and data. In [Section 3](#), I discuss the empirical strategy. Next, the results are presented in [Section 4](#). Finally, I conclude in [Section 5](#).

2 Setting and Data

2.1 Public Pension System

The Swedish public pension system has three main components ([Hagen, 2017](#)), minimum guarantee ("Garantipension"), income pension ("inkomstpension"), and premium pension ("premiépension"). The minimum guarantee is a means-tested benefit for individuals who would otherwise obtain a meager pension. It corresponds to roughly 35% of a blue-collar wage. Next, there is a regular income pension. Employers pay 16% of wages as pension rights to an individual notional account. The government uses the individual contributions to finance a pay-as-you-go system. Individuals can start withdrawing benefits between the ages of 61 to 67. The amount available on the individual accounts depends on the average wage growth. Moreover, there is an automatic balancing mechanism to safeguard the financial soundness of the system at large. Finally, there is the premium pension. 2.5% of wages are invested directly into special funds. Individuals can select from a set of funds approved by authorities. Finally, private pension savings represent 15.5% of total pensions for men born 1941–1945.

2.2 Collectively Bargaining Occupational Pensions

Trade unions and employers' associations bargain over wages and other benefits ([Kjellberg, 2019](#); [Elinder and Hagen, 2018](#)). Most private sector workers are covered by collective bargaining agreements (89%), and even more in the manufacturing sector (98%). There is limited government involvement, no minimum wage, or automatic extension of agreements. Moreover, trade unions and employers' associations can opt out of several labor law sections.

Unions organize workers based on their sector and skill level. Collective bargaining takes place at many levels. Sectoral bargaining negotiates over wage bill increases and additional

benefits such as occupational pensions. Coordination across industries ensures that the wage pressure on the exporting industries is manageable.

Unions and employers' associations bargain over occupational pensions. Around 90% of the workforce is covered by the four major occupational plans (Hagen, 2017). These plans are particularly important for high-income earners since public pensions are capped. Moreover, they are more important today than previously. Occupational pension benefits correspond to 20.3% of total pensions for men born 1927–1931 and 31.2% for men born 1941–1945. Occupational pensions are complicated and are a mix of defined benefits, defined contributions, and fully-funded defined contributions.

2.3 Early Exits from the Labor Market

ISF (2008) discuss early exits from the labor market in Sweden. Only 39% of women and 35% of men in the labor market exit at the regular retirement age of 65. About 11% of women and 8% of men exit already before age 50. Those who exit between the ages of 50 and 60 usually receive sickness pay as their primary source of income. In contrast, occupational pensions are the most important source of income for workers who leave the labor market between the ages of 60 and 64.

2.4 The Partial Retirement Reform

Unions and employers agreed to introduce partial retirement in the manufacturing sector in 2013. The primary motivation was to foster flexibility and prolong the working lives of employees (Fryklund et al., 2015). For a more extended discussion, see Agency (2017).

The reform introduced both larger employer contributions and the potential for partial retirement. First, employers must contribute more to occupational pension funds. This increase varied between 0.2%–0.5% of wages depending on the agreement.

Secondly, workers can apply to reduce their working hours and compensate for the wage

loss with occupational pension benefits. The cutoff age is either 60 or 62, depending on the details of the collective bargaining agreement. Employers had to agree to this working time reduction.

2.5 Individual-Level Data

I use matched employer-employee data from the Longitudinal Integrated Database for Health Insurance and Labour Market Studies (LISA) by Statistics Sweden. This dataset covers all individuals aged 16 or above registered in Sweden. Individuals can be followed over time thanks to a unique, anonymous identifier. Statistics Sweden merges information from several databases and can thus provide information on variables such as income, employment status, pension contributions, and occupational categories. Moreover, individuals are also linked to their employers. There is some information on the employer, including size and industry classification. I deflate all nominal values to the level of the consumer price index 2012 and express them in SEK 100 (roughly USD 10).

2.6 Collective Agreement Data

I also use data on collective bargaining agreements from the National Mediation Office ([Medlingsinstitutet, 2014](#)). Unfortunately, these agreements cannot be perfectly matched to workers or firms. Instead, I proxy using data on workers' occupations and industry codes. Workers in the dataset are classified into one of three main trade union confederations: Blue-collar workers (LO), mid-skilled white-collar workers (TCO), and high-skilled white-collar workers (Saco). In this study, I focus on agreements in the manufacturing sector. 17 agreements allow for partial retirement.¹ The agreements are summarized in [Table A1](#).

¹Note that the agreement on the allochemical industry does not specify the relevant age. Since this is a blue-collar agreement, I impute that the applicable eligibility age is 60, similar to other blue-collar agreements.

2.7 Defining Skill Groups

I classify workers based on their occupation codes. Since I cannot link workers to the relevant agreement, I must manually match workers based on their occupation code. Note that collective bargaining agreements cover workers inside and outside the union (Kjellberg, 2019). I use the SSYK 96 (SSYK 2012 from 2014) industry codes. Workers with occupation codes 111–249 (111–267) are high-skilled, 311–348 (311–352) as mid-skilled, and 400– (400–) as low-skilled.

2.8 Analysis Sample

My main analysis focuses on workers in 2013 who (a) works for an employer in the manufacturing sector², (b) belong to the relevant skill group, and (c) are in the correct cohort groups. At baseline, I will focus on the first treated cohort and those born one year later. The relevant cohorts differ between agreements if the eligibility age is 60 or 62.

We see the distribution of eligible workers in [Table 1](#). Most treated workers are eligible at age 60 (7,502 versus 824). Moreover, the majority (4,907) are classified as low-skilled workers. Thus, I will also study the effects separately for workers of different skill groups.

[[Table 1](#) Here]

²I define an individual as working in the manufacturing sector if the employer has the primary SNI code 3.

3 Estimating the Effects of Partial Retirement

3.1 Defining Treatment and Control Groups

Workers can apply for partial retirement depending on age, occupation, and industry. The collective bargaining agreement defines which individuals are eligible. Individuals in the relevant occupation-industry combination can apply when reaching 60 or 62. We can then summarize this into a function f that maps the eligibility of individual i :

$$\text{Eligible}_i = f(\text{Industry}_i, \text{Occupation}_i, \text{Cohort}_i)$$

We can then define an appropriate control cohort as those below the age cutoff in the same combination of occupation and industry. At baseline, I compare individuals in the first eligible cohort with those born one year later. I can eliminate various confounding variables by focusing on a narrow bandwidth.

3.2 Estimating Equations

I estimate a dynamic difference-in-differences model for the years before and after the introduction of partial retirement in 2013. Let y_{it} be some outcome, such as labor supply, of worker i in year t . I then estimate:

$$y_{it} = \alpha + \sum_{s=2008, \neq 2012}^{2017} \beta_s \times \text{Eligible}_i \times \mathbb{1}\{\text{Year}_t = s\} + \mu_i + \mu_t + \varepsilon_{it},$$

where μ_i and μ_t are individual and year fixed effects, and ε_{it} the error term. In this setting, β_s captures the average difference in the outcome for the eligible and not eligible cohorts for each year s . In addition, I estimate static models where I pool the observations into a before and after period. I cluster standard errors on the individual level to account for serial correlation at that level.

3.3 Identification Assumptions

The core identification assumption is that individuals in adjacent cohorts would have had similar labor market outcomes absent the partial retirement reforms. In other words, there should be no other age-specific labor market shocks. I support this assumption in several ways.

First, we see that treated and control individuals have parallel trends, and often also levels, in the years preceding the reform. Thus, the effects are unlikely to be driven by any long-term differences between the two groups.

Secondly, the collective bargaining agreements are negotiated at the sectoral level, making them largely insensitive to firm-specific shocks. Moreover, these negotiations happen at regular intervals and should thus not be correlated with any particular age-specific shocks.

Finally, there were no significant changes in labor law ([Medlingsinstitutet, 2014](#)). This fact brings further credibility that the observed effects come from changes in eligibility for partial retirement.

3.4 Summary Statistics

Both treated and control individuals display similar labor market characteristics in the sample, reinforcing the study's identification strategy. I show summary statistics in [Table 2](#). The sample contains 8,318 treated individuals and 8,334 control individuals. Among the treated, the median age is 59, while it is 58 in the control group. The share of women is 21% and 22%, respectively. The average labor income is roughly SEK 400,000 (about USD 40,000). Moreover, there is a similar skill distribution in the two groups. For instance, 59% are low-skilled, 20% are mid-skilled, and 20% are high-skilled. It is reassuring that the workers are similar in observable characteristics.

[[Table 2](#) Here]

4 Worker-Level Effects of Partial Retirement

4.1 Main Results

[Figure 1 Here]

We see that eligible workers are more likely to both work and obtain pension benefits after the introduction of partial retirement in 2013. These results are shown in [Figure 1](#) and in [Table 3](#). The older and younger cohorts had similar trends and partial retirement levels before the reform. Some individuals start taking out partial retirement in 2013, and the effects then increase to a seven percentage point difference in 2016. The difference between the groups decline to only two percentage points in 2017. These results confirm that partial retirement is desirable and that the younger cohort eventually catches up with the older one. We expect the difference to converge to zero as both groups would be eligible for regular retirement.

[Figure 2 Here]

[Figure 3 Here]

Next, we see that eligible workers work less following the reform. These results are shown in [Figure 2](#) and [Figure 3](#). The corresponding estimates are also shown in [Table 4](#). Before 2013, the two cohorts had similar levels and trends in employment. We then see that workers from both cohorts start leaving the labor force from 2014 onward. However, there is a persistent difference that increases during the sample, reaching ten percentage points at the end of the event window. Moreover, this response on the extensive margin also translates into lower average labor income. Here, the difference peaks at around SEK 51,000. This result complements the previous results by showing that individuals increase partial retirement and stop working altogether.

[Figure 4 Here]

[Figure 5 Here]

We also see that treated workers match the loss in labor income with occupational pensions. These results are shown in [Figure 4](#) and [Figure 5](#). Treated workers started using more occupational pensions progressively from 2013 onward. The effect peaks at SEK 20,000. Moreover, workers start using total pension benefits, which peak at around SEK 50,000. These results confirm that partial retirement is indeed coupled with the withdrawal of pension benefits.

[Figure 6 Here]

Taken together, we see that there is no effect on disposable income. We see this in [Figure 6](#). Workers can thus match the loss in labor income by occupational and other pension benefits. In 2017, we see a small negative effect on disposable income, which could be explained by workers eventually exiting into regular retirement.

Workers who are eligible for partial retirement reduce their labor supply without extending their working years. Five years into the policy, the extensive margin response shows a decline of 10%. Previous research relying on survey data suggests that financial incentives for partial retirement do matter, but not always ([Ilmakunnas and Ilmakunnas, 2006](#); [Van Soest and Vonkova, 2014](#); [Kantarıcı and van Soest, 2015](#); [Elsayed et al., 2018](#)). The reduced form evidence suggests that partial retirement reduces hours worked ([Graf et al., 2011](#); [Börsch-Supan et al., 2018](#); [Knoef, 2021](#)), but there are mixed effects if partial retirement can help delay retirement ([Graf et al., 2011](#); [Hermansen, 2015](#); [Huber et al., 2016](#); [Berg et al., 2020](#); [Albanese et al., 2020](#); [Knoef, 2021](#)). Similarly, my results align with studies showing that individuals respond to economic incentives in the Swedish pension system ([Johansson et al., 2014](#); [Laun and Wallenius, 2015](#); [Laun, 2017](#); [Laun and Palme, 2018, 2022](#)).

4.2 Robustness Checks

My results on the take-up of partial retirement and its effect on labor income are robustness to various controls and specification checks. I show these in [Table A2](#) and [Table A3](#) for partial retirement, and in [Table A4](#) and in [Table A5](#) for labor income.

First, from the above analysis, we see that the results are robust to studying different employment (employment dummy and labor income) and pension variables (occupational and total pension). We learn from these analyses that my main findings are not exclusive to one definition of the variables used.

Next, I show that my results are robust to the choice of control variables. I show that the results are robust to controlling for two-digit industry and year fixed effects, skill and year fixed effects, and the combination of the two. These findings mean that sectoral or skill composition differences do not drive the results.

I also show that the results are robust to extending the bandwidth. I only use the first treated cohort and the adjacent control cohort in the main specification. I show that the results become stronger when we use two treated and control cohorts and three treated and control cohorts. These findings suggest that the main results are the most conservative ones.

Moreover, smaller employers are less likely to have signed collective bargaining agreements ([Kjellberg, 2019](#)). I thus run a separate analysis where I only include firms employing at least 50 workers in 2013. I also show the opposite sample, firms employing 50 employees or less. We see that the coefficients are stable across these occupations. In other words, the effect is stable across employers of different sizes.

Finally, I show that the results hold in the three skill groups separately. I run the main model for low-skill, mid-skill, and high-skill workers separately. The coefficients are similar across the three groups. These results mean that the effect is not driven by a particular worker group.

4.3 Extensions

[Figure 7 Here]

Workers across skill groups take up partial retirement to similar degrees. [Figure 7](#) shows the differences in the take-up of partial retirement between treated and control cohorts across the three skill groups. We see that the effects are strong and positive in all three cases. We expect job characteristics to impact the attractiveness of partial retirement. For instance, [Ilmakunnas and Ilmakunnas \(2006\)](#) find that Finnish workers with more mental strain are less likely to postpone retirement. [Elsayed et al. \(2018\)](#) show in a stated preferences experiment in the Netherlands that non-routine workers are more likely to postpone retirement. However, these results contrast with [Knoef \(2021\)](#), who study Dutch local civil servants. They find no effect on wages for lower-wage workers but a positive effect for those higher-up in the income distribution.

[Figure 8 Here]

Women and men both take up partial retirement to similar degrees. I show the differences between treated and control cohorts by gender in [Figure 7](#). We see that the effect is similar for both female and male workers. This result is not apparent since women and men usually have different labor market prospects. Indeed, [Ilmakunnas and Ilmakunnas \(2006\)](#) find that Finnish women are less likely to postpone retirement. Some studies find that partial retirement has similar effects for women and men ([Graf et al., 2011](#); [Knoef, 2021](#)). Other studies find mixed results. [Albanese et al. \(2020\)](#) study partial retirement in Belgium and find that both women and men work longer until they can retire early, which usually takes a longer time for women. [Huber et al. \(2016\)](#) study partial retirement in Germany and find that women in East Germany are more likely than men to take up partial retirement, but not women in West Germany. [Berg et al. \(2020\)](#) study another partial retirement program in Germany. Their findings suggest that male lifetime labor

supply increased, but they cannot conclude this for women. [Kantarci and van Soest \(2015\)](#) find that women are likelier to choose partial retirement.

[Figure 9 Here]

Treated workers are less likely to have sickness benefits ([Figure 9](#)). We see a negative effect on both the extensive and intensive margins. Treated workers are around two percentage points less likely to have sickness payments. Note that this effect could be explained by lower labor supply in general. These results relate to the work by [Kantarci \(2013\)](#), who finds that older American workers who work part-time have better health outcomes than full-time workers but worse overall health than retirees. [Hagen \(2016\)](#) find no effect of delayed retirement in Sweden on mortality or health care use.

5 Conclusion

Governments worldwide introduce policies to increase the labor supply among older workers, including partial retirement. I study the introduction of partial retirement based on occupational pensions in the Swedish manufacturing sector. I study the change in employment and earnings among eligible and just-ineligible cohorts. Eligible individuals indeed take up partial retirement. This pattern holds across gender and skill groups. Partial retirement is thus attractive to many workers. However, I also find that eligible cohorts have lower employment rates and earnings. At the same time, disposable income is upheld by higher pension withdrawals. This finding suggests that partial retirement did not boost the labor supply.

My paper adds to the small but growing literature offering credible identification of partial retirement effects. So far, the impact of partial retirement reforms varies depending on the context. Since this paper only focuses on one sector in Sweden, future research should study additional countries and industries to understand better when and how partial retirement improves labor supply.

Policymakers should be cautious that incentives to work less in the short run need not translate into a higher labor supply in the long run. Governments may need to consider alternative models or supplementary policies to ensure that policies have the desired effects. Moreover, they must consider changes in collective bargaining agreements that affect retirement incentives.

References

- Agency, S. P. (2017). Flexpension och delpension. Technical report.
- Albanese, A., B. Cockx, and Y. Thuy (2020, July). Working time reductions at the end of the career: Do they prolong the time spent in employment? *Empirical Economics* 59(1), 99–141.
- Bengtsson, M., S. König, S. Schönbeck, and E. Wadensjö (2022). Leaving the Labor Market Early in Sweden Learning from International Experience. *SSRN Electronic Journal*.
- Berg, P., M. K. Hamman, M. Piszczek, and C. J. Ruhm (2020, October). Can Policy Facilitate Partial Retirement? Evidence from a Natural Experiment in Germany. *ILR Review* 73(5), 1226–1251.
- Börsch-Supan, A., T. Bucher-Koenen, V. Kutlu-Koc, and N. Goll (2018, April). Dangerous flexibility – retirement reforms reconsidered. *Economic Policy* 33(94), 315–355.
- Elinder, M. and J. Hagen (2018). *Den komplexa tjänstepensionen*. SNS förlag.
- Elsayed, A., A. de Grip, D. Fouarge, and R. Montizaan (2018, June). Gradual retirement, financial incentives, and labour supply of older workers: Evidence from a stated preference analysis. *Journal of Economic Behavior & Organization* 150, 277–294.
- Fryklund, H., K. Skånberg, Å. Liljedahl, and J. Jansson (2015, December). Både företag och anställda tjänar på flexpension. *Dagens samhälle*.
- Graf, N., H. Hofer, and R. Winter-Ebmer (2011, September). Labor supply effects of a subsidized old-age part-time scheme in Austria. *Zeitschrift für ArbeitsmarktForschung* 44(3), 217–229.
- Haan, P. and S. Tolan (2019, January). Labor supply and fiscal effects of partial retirement – The role of entry age and the timing of pension benefits. *The Journal of the Economics of Ageing* 14, 100187.

- Hagen, J. (2016, June). What are the health effects of postponing retirement? An instrumental variable approach. Technical Report 2016:11, IFAU - Institute for Evaluation of Labour Market and Education Policy.
- Hagen, J. (2017, January). Pension principles in the Swedish pension system. *Scandinavian Economic History Review*.
- Hermansen, Å. (2015, January). Retaining older workers: The effect of phased retirement on delaying early retirement. *Nordic Journal of Social Research* 6(1), 44–67.
- Huber, M., M. Lechner, and C. Wunsch (2016). The Effect of Firms' Phased Retirement Policies on the Labor Market Outcomes of Their Employees. *ILR Review* 69(5), 1216–1248.
- Ilmakunnas, P. and S. Ilmakunnas (2006). Gradual Retirement and Lengthening of Working Life. *SSRN Electronic Journal*.
- ISF, S. S. I. I. (2008). Tidigt utträde från arbetslivet bland kvinnor och män. Technical Report 10.
- Johansson, P., L. Laun, and M. Palme (2014, August). Pathways to Retirement and the Role of Financial Incentives in Sweden. In *Social Security Programs and Retirement Around the World: Disability Insurance Programs and Retirement*, pp. 369–410. University of Chicago Press.
- Kantarci, T. (2013, October). The Effects of Partial Retirement on Health.
- Kantarci, T. and A. van Soest (2015, August). Full or Partial Retirement? Effects of the Pension Incentives and Increasing Retirement Age in the United States and the Netherlands.
- Kjellberg, A. (2019). Sweden: Collective bargaining under the industry norm. In *Collective Bargaining in Europe: Towards an Endgame*, Number 3, pp. 583–603. Brussels: Collective bargaining in Europe: towards an endgame,.

- Knoef, M. G. (2021). Employment effects of Incentivized Gradual Retirement Plans.
- Laun, L. (2017, August). The effect of age-targeted tax credits on labor force participation of older workers. *Journal of Public Economics* 152, 102–118.
- Laun, L. and M. Palme (2018, May). The Recent Rise of Labor Force Participation of Older Workers in Sweden. In *Social Security Programs and Retirement around the World: Working Longer*, pp. 231–265. University of Chicago Press.
- Laun, L. and M. Palme (2022). Pension reform, incentives to retire and retirement behavior: Empirical evidence from Swedish micro-data. *IFAU Working Paper 2022:8*.
- Laun, T. and J. Wallenius (2015, July). A life cycle model of health and retirement: The case of Swedish pension reform. *Journal of Public Economics* 127, 127–136.
- Medlingsinstitutet (2014). Avtalsrörelsen och lönebildningen 2013. Technical report.
- Palme, M. and L. Laun (2018, December). Social Security Reforms and the Changing Retirement Behavior in Sweden. In *Social Security Programs and Retirement around the World: Reforms and Retirement Incentives*, pp. 373–395. University of Chicago Press.
- Palme, M., A. Sundén, and P. Söderlind (2007, May). How Do Individual Accounts Work in the Swedish Pension System? *Journal of the European Economic Association* 5(2-3), 636–646.
- Rouzet, D., A. C. Sánchez, T. Renault, and O. Roehn (2019, September). Fiscal challenges and inclusive growth in ageing societies. Technical report, OECD, Paris.
- Tolan, S. (2017). The Effect of Partial Retirement on Labor Supply, Public Balances and the Income Distribution: Evidence from a Structural Analysis. *Discussion Papers of DIW Berlin* (1679).
- Van Soest, A. and H. Vonkova (2014). How Sensitive Are Retirement Decisions to Financial Incentives? A Stated Preference Analysis. *Journal of Applied Econometrics* 29(2), 246–264.

Wadensjo, E. (2006). Part-Time Pensions and Part-Time Work in Sweden. *SSRN Electronic Journal*.

Tables

Table 1: Summary Statistics: Eligible Workers

	60	62	Total
Low-Skill	4,764	143	4,907
Mid-Skill	1,380	345	1,725
High-Skill	1,358	336	1,694
Total	7,502	824	8,326

Notes: The table shows the number of eligible sample workers by age and skill group.

Table 2: Summary Statistics: Older and Younger Workers

	N	Mean	Median	Min	Max	N	Mean	Median	Min	Max
Age	8,318	59.20	59.00	59.00	61.00	8,334	58.21	58.00	58.00	60.00
Female	8,318	0.21	0.00	0.00	1.00	8,334	0.22	0.00	0.00	1.00
Labor Income	8,318	3,989	3,475	0.00	67,000	8,334	4,075	3,505	0.00	150,000
Positive Labor Income	8,318	0.99	1.00	0.00	1.00	8,334	1.00	1.00	0.00	1.00
Partial Retirement	8,318	0.07	0.00	0.00	1.00	8,334	0.06	0.00	0.00	1.00
Low Skill	8,318	0.59	1.00	0.00	1.00	8,334	0.59	1.00	0.00	1.00
Mid Skill	8,318	0.20	0.00	0.00	1.00	8,334	0.20	0.00	0.00	1.00
High Skill	8,318	0.20	0.00	0.00	1.00	8,334	0.21	0.00	0.00	1.00

Notes: The table shows summary statistics for treated and control workers. Treated workers belong to the first cohort that was eligible for partial retirement. Control workers belong to the cohort born one year later. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Maximum values have been censored to preserve confidentiality.

Table 3: Eligibility of Partial Retirement and Take-Up (Event Studies)

	Partial Retirement					
	(1)	(2)	(3)	(4)	(5)	(6)
	All	Low-Skill	Mid-Skill	High-Skill	Men	Women
Treated × 2008	0.004 (0.004)	0.008* (0.005)	0.003 (0.009)	-0.007 (0.009)	0.005 (0.004)	-0.002 (0.009)
Treated × 2009	-0.005 (0.003)	-0.003 (0.004)	-0.010 (0.009)	-0.007 (0.009)	-0.003 (0.004)	-0.012 (0.008)
Treated × 2010	0.001 (0.003)	-0.000 (0.004)	0.005 (0.008)	0.001 (0.008)	0.000 (0.003)	0.002 (0.007)
Treated × 2011	-0.003 (0.003)	-0.006** (0.003)	0.004 (0.007)	0.000 (0.007)	-0.002 (0.003)	-0.005 (0.006)
Treated × 2012	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Treated × 2013	0.026*** (0.004)	0.024*** (0.004)	0.029*** (0.009)	0.029*** (0.009)	0.026*** (0.004)	0.026*** (0.009)
Treated × 2014	0.051*** (0.005)	0.060*** (0.006)	0.052*** (0.012)	0.026** (0.013)	0.051*** (0.006)	0.053*** (0.012)
Treated × 2015	0.051*** (0.007)	0.057*** (0.008)	0.041*** (0.015)	0.044*** (0.015)	0.053*** (0.007)	0.044*** (0.015)
Treated × 2016	0.069*** (0.008)	0.063*** (0.010)	0.082*** (0.017)	0.073*** (0.017)	0.071*** (0.008)	0.062*** (0.017)
Treated × 2017	0.025*** (0.008)	0.041*** (0.010)	0.022 (0.018)	-0.017 (0.018)	0.025*** (0.009)	0.023 (0.018)
Individual Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.352	0.361	0.332	0.348	0.354	0.347
N	165,446	97,748	34,031	33,667	129,699	35,747

Notes: The table shows event study estimates of partial retirement eligibility on take-up. Column (1) has the full sample. Column (2) has low-skilled workers. Column (3) has mid-skilled workers. Column (4) has high-skilled workers. Column (5) has men. Column (6) has women. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

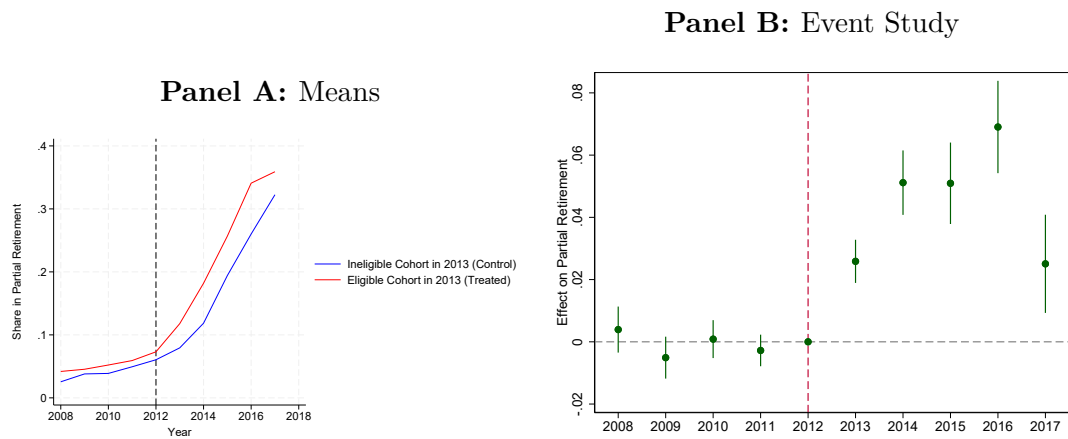
Table 4: Eligibility of Partial Retirement and Other Outcomes (Event Studies)

	Employed	Labor Income	Disposable Income	Occupational Pension	Total Pension	Poistive Sickness Pay	Sickness Pay
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Treated × 2008	0.002 (0.002)	16.819 (22.607)	-32.682 (36.444)	-10.275 (6.532)	-13.698** (6.778)	0.008 (0.006)	-3.580 (3.841)
Treated × 2009	0.001 (0.002)	21.104 (22.544)	-27.095 (36.594)	-6.936 (6.187)	-10.020 (6.404)	0.004 (0.006)	-1.536 (3.781)
Treated × 2010	0.001 (0.002)	-5.786 (31.005)	-43.135 (38.669)	-6.963 (5.746)	-11.692** (5.926)	0.007 (0.006)	2.076 (3.586)
Treated × 2011	0.002 (0.001)	-17.612 (18.755)	-24.830 (48.145)	-6.408* (3.745)	-10.581*** (3.862)	-0.002 (0.006)	-4.472 (3.060)
Treated × 2012	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Treated × 2013	0.001 (0.001)	-25.227 (17.818)	-83.160** (37.303)	8.579 (5.625)	13.769** (5.996)	-0.001 (0.006)	-2.041 (3.614)
Treated × 2014	-0.009*** (0.003)	-81.584*** (29.647)	-74.043* (38.482)	38.706*** (11.109)	83.777*** (12.172)	0.003 (0.006)	-0.567 (4.733)
Treated × 2015	-0.027*** (0.004)	-157.007*** (34.211)	53.228 (80.002)	75.808*** (16.246)	186.147*** (18.639)	-0.019*** (0.007)	-9.067* (5.283)
Treated × 2016	-0.058*** (0.005)	-394.154*** (41.377)	-46.832 (49.120)	196.526*** (20.438)	380.663*** (24.628)	-0.021*** (0.007)	-15.170*** (5.610)
Treated × 2017	-0.097*** (0.006)	-507.672*** (47.373)	-123.351*** (44.900)	199.449*** (23.451)	448.866*** (29.414)	-0.017*** (0.006)	-12.181** (5.228)
Individual Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.249	0.712	0.300	0.383	0.411	0.189	0.225
N	165,446	165,446	165,446	165,446	165,446	165,446	165,446

Notes: The table shows event study estimates of partial retirement eligibility on various outcomes. Column (1) has partial retirement. Column (2) has a dummy variable if labor income is positive. Column (3) has labor income. Column (4) has disposable income. Column (5) has occupational pension benefits. Column (6) has total pension benefits. Column (7) has a dummy variable if sickness payment is positive. Column (8) has sickness payments. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

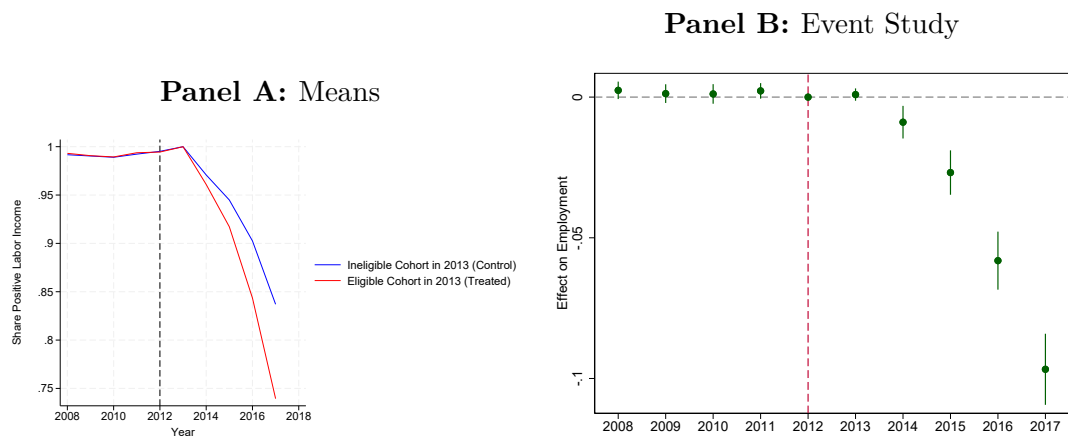
Figures

Figure 1: The Effect of Partial Retirement on Take-Up



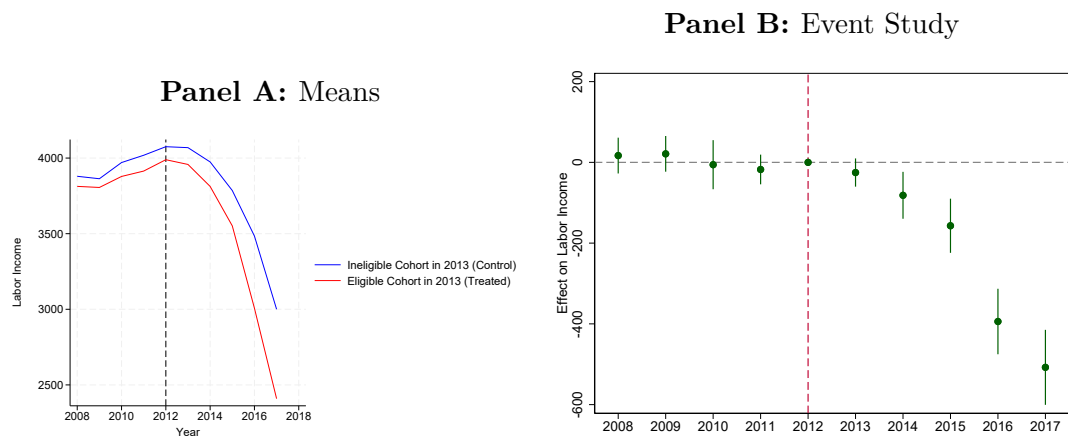
Notes: The figures shows the effect of partial retirement eligibility on the take-up of partial retirement. Partial retirement is defined as positive labor income and positive pension benefits. Panel A shows the evolution of mean values for the first treated cohort and the adjacent younger cohort. Panel B shows the corresponding event study estimates. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

Figure 2: The Effect of Partial Retirement on Employment



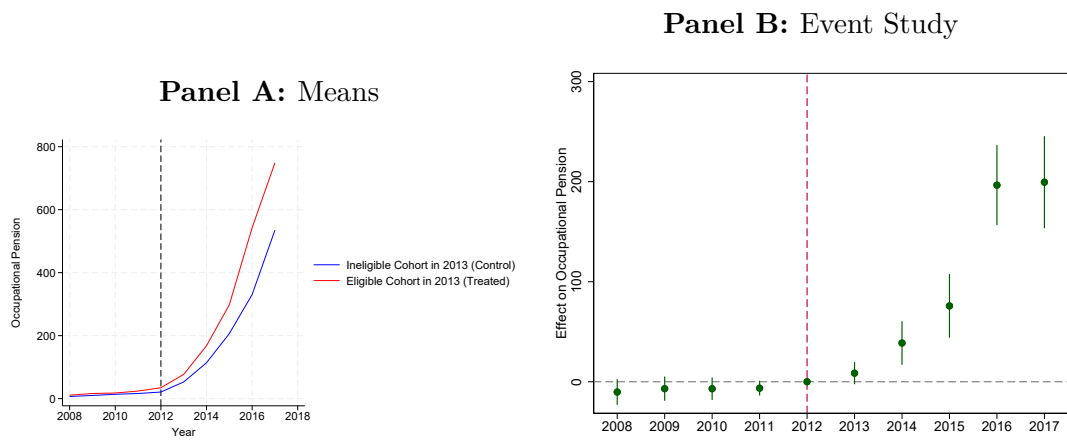
Notes: The figures shows the effect of partial retirement eligibility on employment. Employment is defined as positive labor income. Panel A shows the evolution of mean values for the first treated cohort and the adjacent younger cohort. Panel B shows the corresponding event study estimates. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

Figure 3: The Effect of Partial Retirement on Labor Income



Notes: The figures shows the effect of partial retirement eligibility on labor income. Panel A shows the evolution of mean values for the first treated cohort and the adjacent younger cohort. Panel B shows the corresponding event study estimates. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

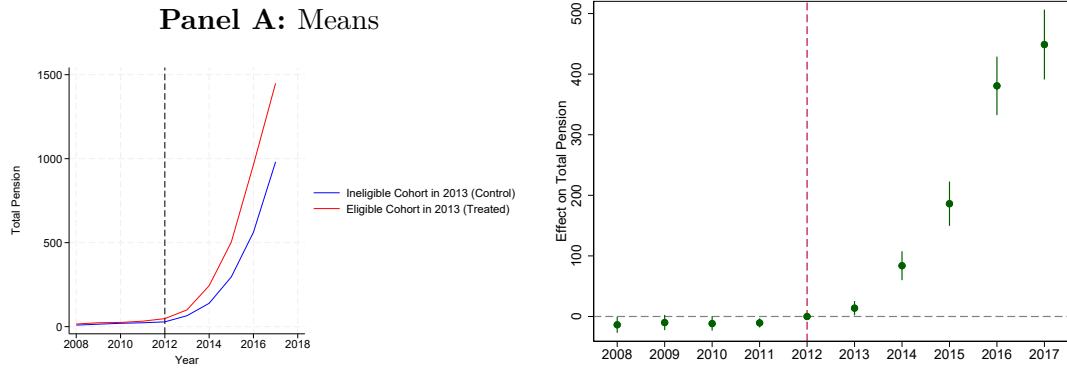
Figure 4: The Effect of Partial Retirement on Occupational Pensions



Notes: The figures shows the effect of partial retirement eligibility on occupational pensions. Occupational pension is defined as the sum of occupational pensions received in the year. Panel A shows the evolution of mean values for the first treated cohort and the adjacent younger cohort. Panel B shows the corresponding event study estimates. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

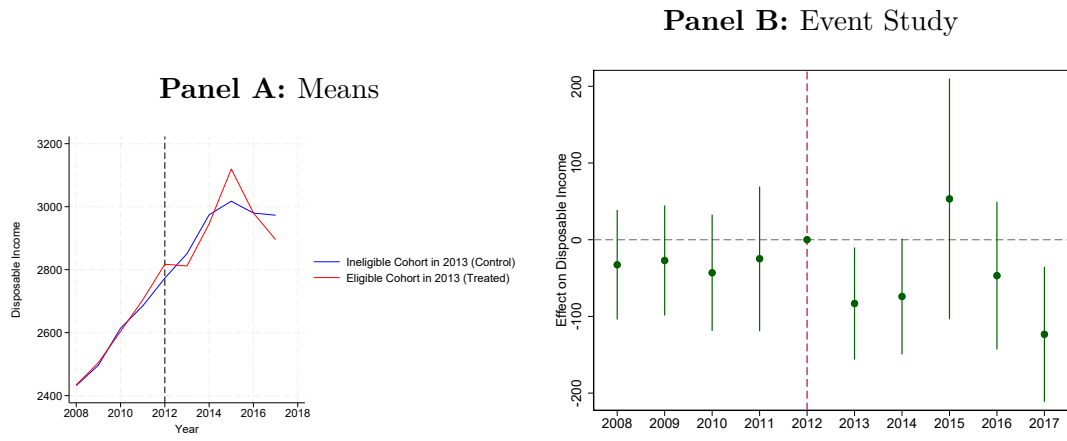
Figure 5: The Effect of Partial Retirement on Total Pension

Panel B: Event Study



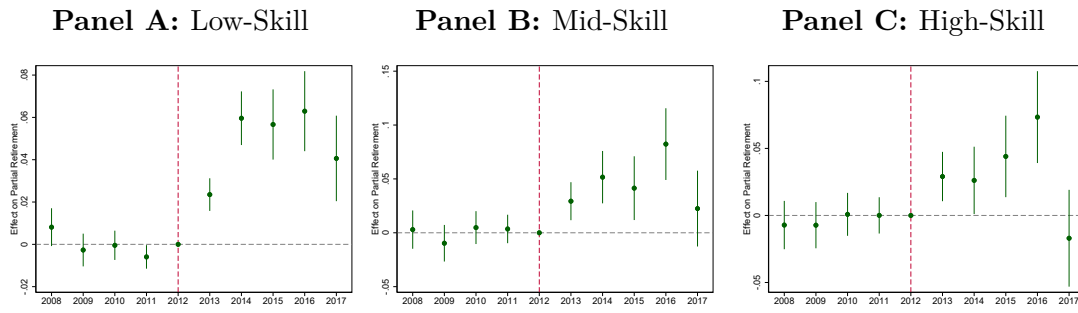
Notes: The figures shows the effect of partial retirement eligibility on total pensions. Total pension is defined as the sum of total pensions received in the year. Panel A shows the evolution of mean values for the first treated cohort and the adjacent younger cohort. Panel B shows the corresponding event study estimates. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

Figure 6: The Effect of Partial Retirement on Disposable Income



Notes: The figures shows the effect of partial retirement eligibility on disposable income. Disposable income is defined as total income net of taxes and transfers. Panel A shows the evolution of mean values for the first treated cohort and the adjacent younger cohort. Panel B shows the corresponding event study estimates. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

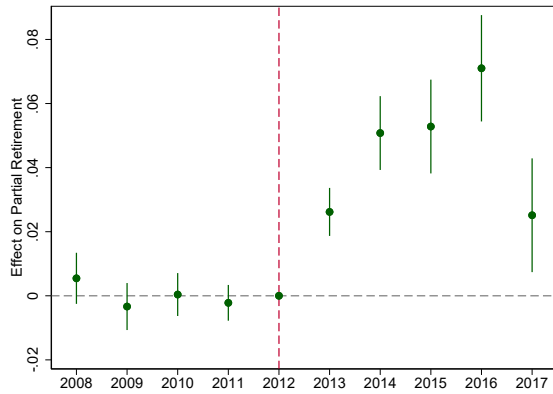
Figure 7: The Effect of Partial Retirement on Take-Up By Skill Group



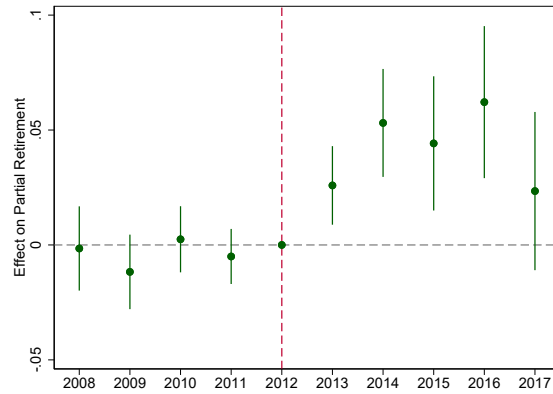
Notes: The figures shows the effect of partial retirement eligibility on partial retirement. Partial retirement is defined as positive labor income and positive pension benefits. Panel A shows the corresponding event study estimates for low-skilled workers. Panel B shows the corresponding event study estimates for mid-skilled workers. Panel C shows the corresponding event study estimates for high-skilled workers. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

Figure 8: The Effect of Partial Retirement on Take-Up By Gender

Panel A: Male



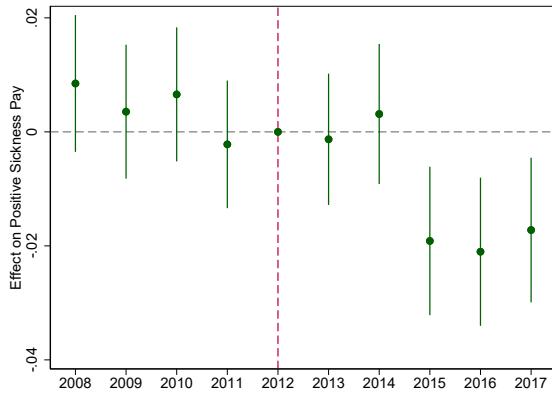
Panel B: Female



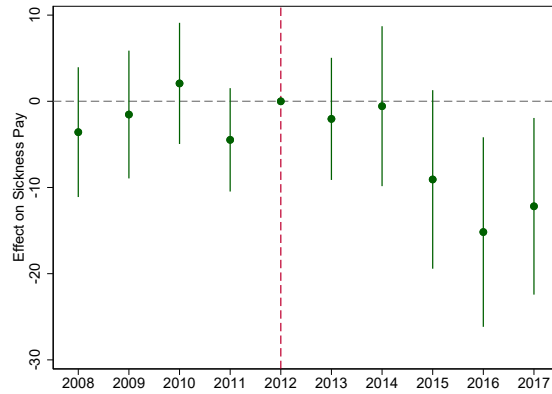
Notes: The figures shows the effect of partial retirement eligibility on partial retirement. Partial retirement is defined as positive labor income and positive pension benefits. Panel A shows the corresponding event study estimates for males. Panel B shows the corresponding event study estimates for females. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

Figure 9: The Effect of Partial Retirement on Sickness Pay

Panel A: Has Any Sickness Payment



Panel B: Sickness Payment



Notes: The figures shows the effect of partial retirement eligibility on sickness payment. Sickness payment is defined as the sum of sickness payment (sjukpenning). Panel A shows the corresponding event study estimates for an indicator if an individual has any sickness payments. Panel B shows the corresponding event study estimates for atotal sickness payments. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level.

Table A1: Summary of Collective Bargaining Agreements

Identifier	Parties		Name	Eligibility Criteria		Additional Increases		Matched Two-Digit SNI Codes						Matched Skill Group	
	Employers' Association	Trade Union		Age	Year	2014	2015	1	2	3	4	5	6		
1	Föreningen Sveriges Skogsindustrier	GIS – Facket för skogs-, trä- och grafisk bransch	Sågverksindustri	60	2013	0.2	0.3	16							1
2	Föreningen Sveriges Skogsindustrier	Sveriges Ingenjörer	Massa och Pappersindustri	60	2013	0.2	0.3	17							3
3	Föreningen Sveriges Skogsindustrier	Unionen	Massa och Pappersindustri	60	2013	0.2	0.3	17							2
4	Innovations- och kemiarbetsgivarna	IF Metall	Allokemisk industri		2013	0.3	0.8	20							1
5	Innovations- och kemiarbetsgivarna	Unionen	Tjänstemannaavtal	62	2013	0.2	0.3	20	21	22	23				2
6	Livsmedelsföretagen	Livsmedelsarbetarförbundet	Livsmedelsavtal	60	2013	0.2	0.3	10	11						1
7	Livsmedelsföretagen	Sveriges Ingenjörer	Tjänstemannaavtal	62	2013	0.2	0.3	10	11						2
8	Livsmedelsföretagen	Unionen	Tjänstemannaavtal	62	2013	0.2	0.3	10	11						3
9	Stål- och Metall Arbetsgivareförbundet	Sveriges Ingenjörer	Stål- och Metallindustri	60	2013	0.2	0.3	24							3
10	Stål- och Metall Arbetsgivareförbundet	Unionen	Stål- och Metallindustri	60	2013	0.2	0.3	24							2
11	Teknikarbetsgivarna	IF Metall	Teknikavtalet	60	2013	0.3	0.3	25	26	27	28	29	30		1
12	Teknikarbetsgivarna	Sveriges Ingenjörer	Teknikavtal Tjänstemän	60	2013	0.3	0.3	25	26	27	28	29	30		3
13	Teknikarbetsgivarna	Unionen	Teknikavtal Tjänstemän	60	2013	0.3	0.3	25	26	27	28	29	30		2
14	Innovations- och kemiarbetsgivarna	Naturvetarna	Tjänstemannaavtal	62	2013	0.2	0.3	20	21	22	23				2
15	Innovations- och kemiarbetsgivarna	Sveriges Ingenjörer	Tjänstemannaavtal	62	2013	0.2	0.3	20	21	22	23				3
16	Stål- och Metall Arbetsgivareförbundet	Ledarna	Stål- och Metallindustri	60	2013	0.2	0.3	24							3
17	Trä- och Möbelföretagen	GIS – Facket för skogs-, trä- och grafisk bransch	Träindustriavtalet	60	2013	0.5	0.5	16	31						1

Notes: The table shows the collective bargaining agreements that included partial retirement in 2013. Column (1) has the identifier. Columns (2) and (3) have the signatory parties involved. Column (4) has the name of the agreement. Column (5) has the eligibility age. Column (6) has the eligibility year. Columns (7) and (8) state the additional employer contributions to occupational pension. Columns (9)–(14) states the matched two-digit SNI codes for the employers. Column (15) states the workers' matched skill (occupation) group. The raw data comes from (Medlingsinstitutet, 2014).

Table A2: Eligibility of Partial Retirement and Take-Up

	Partial Retirement					
	(1)	(2)	(3)	(4)	(5)	(6)
	No Controls	Industry FE	Skill FE	Industry-Skill FE	± 2 Cohorts	± 3 Cohorts
Treated \times Post	0.045*** (0.004)	0.046*** (0.004)	0.045*** (0.004)	0.046*** (0.004)	0.105*** (0.003)	0.149*** (0.002)
Individual Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	No	No	No	Yes	Yes
Industry-Year Fixed Effects	No	Yes	No	No	No	No
Skill-Year Fixed Effects	No	No	Yes	No	No	No
Skill-Industry-Year Fixed Effects	No	No	No	Yes	No	No
Adjusted R-Squared	0.352	0.357	0.352	0.359	0.352	0.349
N	165,446	165,446	165,446	165,446	329,966	493,579

Notes: The table shows difference-in-differences estimates of partial retirement eligibility on take-up. Column (1) only includes individual and year fixed effects. Column (2) adds a two-digit industry (SNI) code by year fixed effects. Column (3) adds skill group fixed effects. Column (4) adds skill group and two-digit industry code fixed effects. Column (5) uses two cohorts as treatment and two as control. Column (6) uses three cohorts as treatment and three as control. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A3: Eligibility of Partial Retirement and Take-Up (Additional Results)

	Partial Retirement							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	≥ 50 Employees	≤ 50 Employees	Income > 0	Income $> 1,000$	Income $< 10,000$	Low-Skill	Mid-Skill	High-Skill
Treated \times Post	0.041*** (0.005)	0.056*** (0.009)	0.045*** (0.004)	0.045*** (0.004)	0.046*** (0.004)	0.049*** (0.006)	0.045*** (0.009)	0.034*** (0.010)
Individual Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.337	0.390	0.352	0.351	0.353	0.361	0.331	0.347
N	122,174	43,602	164,506	160,339	162,068	97,748	34,031	33,667

Notes: The table shows difference-in-differences estimates of partial retirement eligibility on take-up. Column (1) limits the sample to employers with at least 50 employees in 2012. Column (2) limits the sample to employers with no more than 50 employees in 2012. Column (3) limits the sample to individuals earning more than SEK 0 in 2012. Column (4) limits the sample to individuals earning more than SEK 100,000 in 2012. Column (5) limits the sample to individuals earning no more than SEK 1 million in 2012. Column (6) limits the sample to low-skilled workers. Column (7) limits the sample to mid-skilled workers. Column (8) limits the sample to high-skilled workers. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A4: Eligibility of Partial Retirement and Labor Income

	Labor Income					
	(1)	(2)	(3)	(4)	(5)	(6)
	No Controls	Industry FE	Skill FE	Industry-Skill FE	± 2 Cohorts	± 3 Cohorts
Treated \times Post	-233.865*** (27.034)	-237.951*** (26.371)	-234.552*** (26.677)	-240.703*** (26.326)	-534.235*** (18.809)	-827.771*** (16.040)
Individual Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	No	No	No	Yes	Yes
Industry-Year Fixed Effects	No	Yes	No	No	No	No
Skill-Year Fixed Effects	No	No	Yes	No	No	No
Skill-Industry-Year Fixed Effects	No	No	No	Yes	No	No
Adjusted R-Squared	0.712	0.719	0.718	0.724	0.723	0.733
N	165,446	165,446	165,446	165,446	329,966	493,579

Notes: The table shows difference-in-differences estimates of partial retirement eligibility on take-up. Column (1) only includes individual and year fixed effects. Column (2) adds a two-digit industry (SNI) code by year fixed effects. Column (3) adds skill group fixed effects. Column (4) adds skill group and two-digit industry code fixed effects. Column (5) uses two cohorts as treatment and two as control. Column (6) uses three cohorts as treatment and three as control. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A5: Eligibility of Partial Retirement and Labor Income (Additional Results)

	Labor Income							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	≥ 50 Employees	≤ 50 Employees	Income > 0	Income > 1,000	Income < 10,000	Low-Skill	Mid-Skill	High-Skill
Treated \times Post	-260.900*** (33.511)	-147.706*** (41.536)	-233.216*** (27.073)	-228.208*** (27.461)	-256.733*** (19.366)	-188.421*** (17.477)	-303.264*** (47.946)	-299.285*** (110.938)
Individual Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-Squared	0.717	0.636	0.712	0.711	0.661	0.560	0.616	0.684
N	122,174	43,602	164,506	160,339	162,068	97,748	34,031	33,667

Notes: The table shows difference-in-differences estimates of partial retirement eligibility on labor income. Column (1) limits the sample to employers with at least 50 employees in 2012. Column (2) limits the sample to employers with no more than 50 employees in 2012. Column (3) limits the sample to individuals earning more than SEK 0 in 2012. Column (4) limits the sample to individuals earning more than SEK 100,000 in 2012. Column (5) limits the sample to individuals earning no more than SEK 1 million in 2012. Column (6) limits the sample to low-skilled workers. Column (7) limits the sample to mid-skilled workers. Column (8) limits the sample to high-skilled workers. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.

Table A6: Eligibility of Partial Retirement and Other Outcomes

	Partial Retirement	Employed Labor	Income Disposable	Income Occupational Pension	Total Pension	Positive Sickness Pay	Sickness Pay	
	(1)	(2)	(3)	(4)	(5)	(7)	(8)	
Treated × Post	0.045*** (0.004)	-0.039*** (0.003)	-233.865*** (27.034)	-29.218 (24.975)	109.007*** (13.713)	229.858*** (15.786)	-0.014*** (0.003)	-6.244** (3.124)
Individual Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Adjusted R-Squared	0.352	0.245	0.712	0.300	0.382	0.408	0.189	0.225
N	165,446	165,446	165,446	165,446	165,446	165,446	165,446	165,446

Notes: The table shows difference-in-differences estimates of partial retirement eligibility on various outcomes. Column (1) has partial retirement. Column (2) has a dummy variable if labor income is positive. Column (3) has labor income. Column (4) has disposable income. Column (5) has occupational pension benefits. Column (6) has total pension benefits. Column (7) has a dummy variable if sickness payment is positive. Column (8) has sickness payments. Monetary values are expressed in SEK 100 and deflated to the 2012 value of the consumer price index from Statistics Sweden. Standard errors are clustered on the individual level. * $p < 0.1$, ** $p < 0.05$ and *** $p < 0.01$.