



REPORT SERIES ON RETIREMENT AGES

The Pension Norm in Transition

How Raised Eligibility Ages Affect Pension Claiming

Report No. 1 of the Report Series on Retirement Ages



PENSIONS
MYNDIGHETEN

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Preface

Sweden has for a long time experienced increasing life expectancy, while the average retirement age has remained unchanged. This has created challenges for both the national public pension system and for other parts of the welfare systems. For this reason, Riksdagen (the parliament) decided on raised age limits in the pension system and in adjacent social security systems, which came into force in 2023. From 2026 these age limits will be linked to the target retirement age (riktåldern).

In light of this, the Swedish Pensions Agency is producing a series of reports to study and evaluate the effects of the raised age limits. The purpose is to increase knowledge about the consequences these changes for both individuals and society, and to contribute a factual basis for the ongoing discussion on retirement ages. This first report examines whether the raised age limits have affected social norms for retirement age in Sweden. Two additional reports are scheduled for publication in autumn 2025:

2. *Which exit routes to retirement exist? A study of different income sources prior to pension take-up.* Publication October 2025.
3. *Does an increase in the target retirement age affect employment and labor supply? A study of the 2023 retirement age reform in Sweden.* Publication November 2025.

The report was written by Philip Berlin Jarhamn (project manager), Inger Johannisson and Kristin Kirs. The report was prepared in consultation with Professor Per Johansson, Uppsala University. We are very grateful for Per Johansson's valuable assistance while the Swedish Pensions Agency alone is responsible for the report's content and conclusions. The Swedish Pensions Agency is tasked with administering and paying out the national pension. The Agency is responsible for providing both general and individual information about the entire pension, informing about the factors that affect the size of the pension and clarify the consequences that different choices may have for future retirement income. Furthermore, the Agency shall strengthen pensioners and pension savers as consumers in pension-related areas. The Agency is also responsible for monitoring, analysing and communicating the development and effects of the old-age pension system for individuals and society. In addition, the Agency is responsible to ensure that incorrect payments are not made and counteract benefit fraud.

Stockholm, 25 September 2025.

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Summary

The increase in the age threshold for guarantee pension and other basic protections – from 65 to 66 – has forced those who depend on these benefits to postpone their retirement. Even those who do not receive these benefits have adjusted their behaviour: nearly one in five choose to delay claiming their pension beyond age 65. The norm for when it is normal to retire has changed. The average retirement age is estimated to have increased by 0.1 years during 2023.

The rise in life expectancy implies a risk of lower national public pension levels in the future unless the workforce works longer. To meet this challenge, Riksdagen (the parliament) in 2023 raised the age limit for entitlement to basic protection from 65 to 66 and decided that a new target retirement age will be introduced from 2026. The intention of the target retirement age reform is to influence the norm for when individuals start drawing pensions, so that the raised age limit is regarded as the natural retirement age, instead of 65, which has long been seen as the normal retirement age. Over time the aim is that the target retirement age – which is adjusted in accordance with the average life expectancy – will be the natural retirement age. International research suggests that raised age limits in a pension system can shift norms, but there are few empirical studies on the magnitude of these effects for Swedish conditions.

The 2023 reform offers a unique opportunity to measure the importance of norms in Sweden through a natural experiment. Individuals born in 1958 are the first cohort affected by the raised age limit. By comparing their pension claiming behaviour with the corresponding group born in 1957, who were not affected by the reform, we can analyse the norm effect on retirement age and estimate its size.

All individuals who accrue rights to the income-based national pension are covered by the reform. Those who are financially affected are only those entitled to the basic protection, because the raised age limit means they are forced to postpone retirement by one year to receive the basic protection. Those who are entitled only to the income-based national pension and who are not receiving sickness compensation before retirement are not financially affected by the reform but may be influenced via a norm shift. To measure the norm shift we compare the timing of pension claiming for those born in 1958 with those born in 1957. The method is based on a difference-in-differences (DiD) analysis. The population studied consists of those born in 1957 and 1958 who are entitled only to the income-based pension and are not receiving sickness compensation in the year prior to retirement.

The results show that nearly one in five individuals, or 17 percent, in the population studied who previously claimed their pension at age 65 have postponed retirement. About half of them claimed their pension at age 66, while the remainder defer claiming their pension even longer. The average retirement age during 2023 is estimated to have increased by 0.1 years as a result of the norm change. Previous international studies have measured the total effect, regulatory effect and norm effect, on average retirement age at between 20 and 50 percent of the age increase. Our estimate therefore indicates a clear and relatively large effect.

The Swedish Pensions Agency's conclusions from the analysis are as follows:

- **Raised age limits affect the norm for retirement age.** The reform has changed the norm for what is considered a “normal” retirement age among those born in 1958. This means that more individuals – including those not financially dependent on the pension system’s basic protection or on sickness compensation – postpone their retirement. Our results confirm international research: raised age limits shift norms and also lead to later retirement in Sweden, which previously lacked empirical evidence.
- **Informing individuals well in advance can increase the reform’s impact.** For many born in 1958, retirement plans were probably already set when the decision to raise the age limit was made, which may have limited the reform’s impact. Earlier and clearer communication would likely have given more individuals the opportunity to reconsider their plans. The time span between decision and implementation and how the reform is communicated are therefore important factors to increase impact.
- **Continued follow-up and evaluation of the effects of raised age limits in the pension system are needed.** Norms do not change overnight and we have only studied the initial effect. To understand how the target retirement age will affect individuals’ retirement behaviour it is important to monitor developments over time, especially ahead of the next increase to 67 years in 2026. Because women are more commonly directly affected than men by the raised age limit – due to a larger share having basic protection – it is likely that future increases in the target age will affect women to a greater extent. The Swedish Pensions Agency will monitor developments by sex to analyse potential effects on pension gender equality.

1. Introduction

The Swedish income and premium pension systems are primarily designed according to the principle of actuarial fairness. This means that the size of an individual's pension is directly proportional to the contributions paid in during their working life. One purpose of this design is to create financial incentives for individuals to work longer in line with increases in life expectancy. The later a person chooses to start drawing their pension, the higher their annual pension will be. If the individual instead retires early, the accrued pension must be distributed over more years, resulting in a lower annual payment. However, the pension system does not provide strong financial incentives to start claiming the pension at a specific age.

For those who have not accrued sufficient rights in the pension system there is a basic protection. The most common benefit within this basic protection is the guarantee pension. Individuals with weak attachment to the labour market, who depend on benefits that stop when reaching the age that guarantee pension can be claimed, often have strong financial incentives to claim their pension at that age. Until 2023 this age was 65.

Life expectancy in Sweden has increased steadily and is expected to continue to do so. Despite this, the most common retirement age has been 65 for at least the past two decades. The proportion claiming pension before 65 has even increased more than the share doing so after 65. Taken together, this has led to a slight decline in the average retirement age¹ and a marked decrease in the replacement rate – the pension as a share of the final salary².

The fact that so many have claimed their pension precisely at age 65 is, according to the Pension Age Commission's Report: *Measures for a Longer Working Life*, SOU (2013:25), due both to the fact that this age was when entitlement to the pension system's basic protection occurred and entitlement to other social security benefits ended, and to social norms. It can be assumed that these social norms originate from the former pension system (ATP system) where the retirement age was reduced from 67 to 65. This norm for retirement age has persisted even after the current pension system was introduced, despite retirement becoming flexible. According to the Pension Age Commission's Report, the 65-year norm was maintained precisely because the age limits in the benefit systems were not raised.³

To strengthen incentives to work longer, Riksdagen has raised the age limits for earliest take-up of the guarantee pension and other basic protection benefits. In

¹ See Pensionsmyndigheten (2025) Pensionsåldrar och arbetslivets längd.

² See SOU 2025:41 s. 91ff.

³ SOU 2013:25 s. 32.

2023 it was raised from 65 to 66. The age limits for unemployment insurance, sickness benefit and sickness compensation were also raised to 66. The first cohort affected by these changes were individuals born in 1958.⁴ From 2026 a target retirement age will be introduced, which will determine various age limits in the pension system and other related social security systems. The target retirement age will change in line with life expectancy and has been set by Riksdagen at 67 years for 2026. One intention of the target retirement age is that it should become a clear benchmark for retirement age for those who want to secure an acceptable pension level.⁵

Statistics from the Swedish Pensions Agency show that the most common retirement age has increased, from 65 to 66, following the raising of the age limit. A large share of those who have postponed claiming pension have done so for financial reasons. This includes, partly, those who received sickness compensation as their main source of income in the year prior to retirement. For that group, the pension simply becomes a new income source. It also includes those who have had low or no accrual to the income-based pension and for whom the guarantee pension will constitute the larger part of the national pension. For that group there is no additional benefit to postponing drawing their pension further. For other individuals there are no strong financial incentives in the pension system to claim pension at a specific age. Still, the statistics for that latter group also show a reduced share claiming pension at 65 and an increased share claiming pension at 66, which suggests that the social norm for retirement age has shifted.

The purpose of this report is to examine whether the increases in the earliest age for claiming basic protection benefits have influenced retirement age norms in Sweden. The Pension Contributions Commission's Report: *Pension Levels and the Pension Contribution*, SOU (2025:41), emphasizes that a higher retirement age is crucial for maintaining the pension levels in the national income-based pension. In the long run, this requires that the entire population – not only individuals with basic protection – postpone retirement. Whether the raised age limits also affect the norms about when it is “normal” to claim pension is therefore a key question for future pension levels.

Our hypothesis is that the reform has contributed to a shift in norms – a changed perception of what constitutes a “normal” retirement age – even among individuals who are not directly affected financially by the raised age limit.

⁴ In 2020 the minimum age for claiming the income-based pension was raised from 61 to 62, and in 2023 it was raised further to 63. From 2026 a target age (riktålder) will be introduced, meaning that the age limits in the pension system and related social insurance benefits will be adjusted to life expectancy.

⁵ See SOU 2013:25 s. 31.

No previous research in a Swedish context has examined whether increases in the age limits in the pension system affect the social norms, or the magnitude of any such a norm shift. Research from other countries indicates that similar reforms can influence social norms regarding retirement. Behaghel and Blau (2012) found that the most common retirement age changed in line with increases in the so-called normal pension age. Cribb et al. (2016) found that higher state-set pension ages affected individuals' behaviour, even among those not directly affected financially. Studies by Seibold (2021) and Lalive et al. (2023) show that official pension ages function as psychological reference points: they signal when it is socially acceptable to leave working life. In summary, the results suggest that raised age limits for claiming pensions contribute to norm changes, which in turn lead more individuals to delay their retirement.

A background report⁶ to Pension Age Commission's Report compiled international research on how much the retirement age rises after a comparable increase in the target retirement age, where the rise in retirement age included both regulatory and behavioural (norm) effects. The compilation indicates that the average retirement age increases by 20–50 percent of the age increase. The scenarios in the Pension Age Commission's report on how much a target retirement age increase would affect employment in the Swedish population were based on this background report. In Government Official Report, *Economic Effects of a Longer Working Life* (Ds 2014:12), the norm effect was estimated at 60 percent based on the medium scenario of the Pension Age Commission.⁷ Based on this estimate Pension Age Commission then assumed a 60 percent norm impact from a target retirement age increase in its projections of pension levels.⁸

The analysis in this report is based on data from the Swedish Pensions Agency's data warehouse PEDAL. The purpose is to examine whether the 2023 increase in age limits has influenced the norm for retirement age for those born in 1958 – the first cohort affected by the increase of the basic protection age limit to 66. This

⁶ Om effekter på arbetsutbud och pensionering av förändringar av pensionsåldern – en forskningsöversikt, Pensionsåldersutredningen (S 2011:05).

⁷ Three scenarios – low, medium and high – were used when simulating Pensionsåldersutredningen's proposals. These corresponded to the scenarios used in Pensionsåldersutredningen's final report in the sense that they were constructed to produce equivalent employment effects (see p. 33). To simulate delayed labour-market exit a simple principle was used: individuals are "rejuvenated" gradually in labour-market terms. This means that the employment probability for an individual at a given age was calculated as that of a somewhat younger individual who is otherwise identical. A corresponding age shift was applied when computing the probability of transitioning to old-age pension. The effect was a gradual and parallel shift of exit and retirement ages. The magnitudes of the shifts in the different scenarios were then chosen so that the increase in the number of employed persons aligns with Pensionsåldersutredningen's scenarios (see p. 31).

⁸ This was implemented in the SESIM model in the same way as in Ds. 2014:12, i.e. by having individuals behave like younger persons with regard to pension decisions, which implies delayed retirement. A norm effect of 60 percent means that individuals are "rejuvenated" by 60 percent of the age difference between the target age for the year in question and the age 65 (see pp. 229f.).

group constitutes the treated population in the study. The comparison group is the cohort born in 1957, which was not affected by the reform. We apply a Difference-in-Differences (DiD) method with two-way fixed effects to capture behavioural differences between the cohorts. To isolate differences in the social norm, we exclude individuals who may have economic incentives to claim pension at age 66 – the age at which eligibility for sickness compensation ends and basic protection benefits can be claimed for the 1958 cohort. This means we exclude individuals who received sickness compensation in the year prior to retirement and those who receive guarantee pension.

The results show that the causal norm-shift effect is 5.5 percentage points. This implies that between 3.2 and 5.4 percent of the 1958 cohort postponed claiming pension from age 65 due to the changed norm. About half of them claimed pension at age 66, while the remainder claim their pension even later. The average retirement age is estimated to have increased by 0.1 years in 2023 due to the norm change.

The norm change is of a comparable magnitude for women and men – roughly the same share in both groups have delayed retirement. However, more women receive guarantee pension or sickness compensation, which means women are more affected than men by the combination of the regulatory change and the norm shift. If this pattern persists, future increases in the retirement age may lead to women retiring at increasingly higher ages to a greater extent than men.

2. Definitions

This chapter describes the pension-related definitions used in the report.

Norm: In this report, a change in norms is defined as changed retirement behaviour that is not due to altered financial incentives. This includes social norms – unwritten rules or expectations that steer individuals’ retirement behaviour – for example that a partner’s or colleagues’ choice of retirement age influences an individual’s decision to claim pension. The norm for retirement age has long been 65: this is the age at which the largest number of individuals have chosen to claim their pension, although this has loosened somewhat in recent years. More individuals start claiming pension earlier compared to later than age 65. The norm for retirement age has coincided with the age limit for earliest entitlement to the basic protection benefits in the pension system.

Pension claiming: The definition of pension claiming follows the same method used to calculate the average retirement age in the Swedish Pensions Agency’s report *Pension Ages and the Length of Working Life* (Pensionsåldrar och arbetslivets längd).⁹ By comparing the share of an individual’s income pension that is claimed between December of the studied year and December of the previous year, a person is defined as having claimed pension. Someone who claims their entire annual amount during the period is counted as a full retirement, while a claim of, for example, 50 percent of the amount is counted as half a retirement.

National public pension: In the report, unless otherwise stated, national public pension consists of the income-based pension (inkomstpension and premium pension) and guarantee pension.

Guarantee pension: This benefit is the most common form of basic protection among recipients. The guarantee pension is residence-based. To receive the full amount an individual must have been a registered resident in Sweden for at least 40 years, from age 16 up to and including the age at which the guarantee pension can be paid out at the earliest. The statutory earliest age for payment is 65 for those born in 1957 and 66 for those born in 1958.¹⁰ The amount also depends on how much the individual receives from their inkomstpension and on marital status; the guarantee pension is phased out as the inkomstpension rises. In 2022, the 1957 cohort turned 65 and the income thresholds for losing guarantee pension were about SEK 13,000 per month for single individuals and about SEK 12,000 for

⁹ Pensionsmyndigheten (2025a).

¹⁰ The residence period for those born in 1957 is therefore calculated from age 16 up to and including age 64. For those born in 1958 the residence period is calculated from age 16 up to and including age 65.

married individuals. In 2024, the 1958 cohort turned 66 and the corresponding thresholds were about SEK 18,000 and about SEK 16,500 per month.¹¹

Sickness compensation: A benefit administered by the Swedish Social Insurance Agency that an individual can be entitled to if, due to illness or disability, they will never be able to work full time. An individual is entitled to sickness compensation up to and including the year they are eligible for the old-age pension system's basic protection (such as guarantee pension, housing supplement and the elderly support benefit). The right to sickness compensation therefore ended at age 65 for the 1957 cohort and at age 66 for the 1958 cohort.

Target retirement age (riktålder): Starting in 2026, the target retirement age is established as a formal age limit, aligned with expected life expectancy for each cohort. By target retirement age we mean the age at which an individual is recommended to first begin claiming their inkomstpension and premium-pension. The target retirement age will also be the minimum age at which an individual can receive basic-protection benefits within the national pension system, and the age at which entitlement to sickness compensation and other non-pension social security entitlements cease. In this report we use the term target retirement age as if it has already been introduced, i.e. as the earliest age at which an individual can receive basic-protection benefits and the age at which rights to sickness insurance, unemployment insurance, etc., end. For those born in 1957 the target retirement age, in our terminology, is 65 (which they reached in 2022). Likewise, the target retirement age is 66 for those born in 1958 (which they reached in 2024).

¹¹ The income thresholds for guarantee pension are indexed to price inflation in Sweden. The much higher levels in 2024 compared with 2022 are due to the relatively high inflation over the period: the price base amount increased by 8.7 percent in 2023 and 9.1 percent in 2024.

3. Descriptive Statistics

Each year, between 100,000 and 140,000 individuals in Sweden start claiming the national public pension, distributed across different ages. Over the past two decades – up to and including 2022 – age 65 has been the most common retirement age, coinciding with the then-applicable age limit for earliest entitlement to basic-protection benefits. At the same time, developments show that fewer and fewer individuals choose to claim pension specifically at age 65 and that more individuals tend to retire before rather than after 65, although the share claiming pension after 65 has also increased over time.¹²

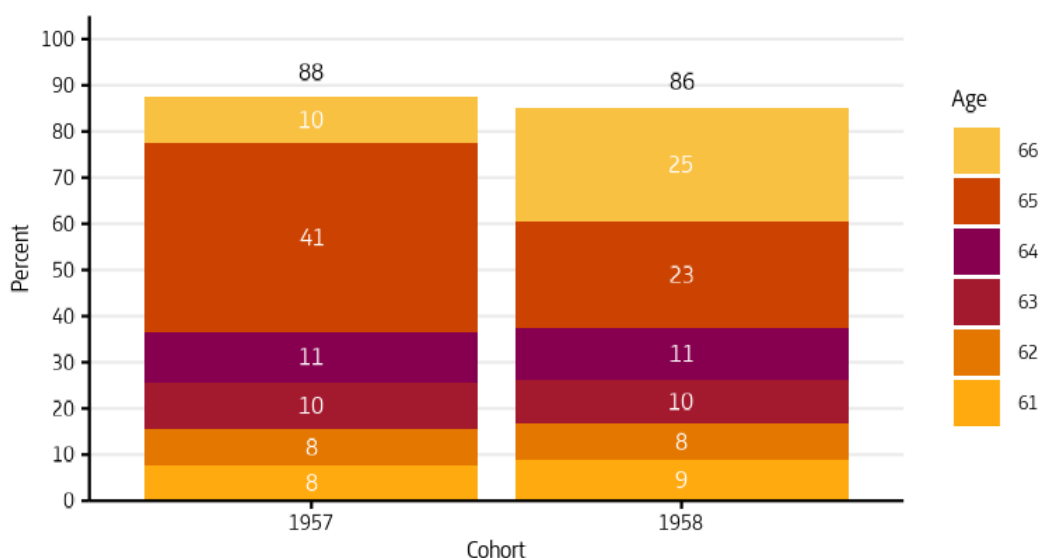
Those born in 1958 are the first cohort covered by the increase of the target retirement age to 66. The increase has had a clear effect: the share claiming pension at age 65 fell markedly compared with previous cohorts. At the same time, the share claiming pension at age 66 increased, meaning the most common retirement age shifted from 65 to 66 as a result of the reform.¹³

Below we present statistics on retirement behaviour for the cohorts born in 1957 and 1958.

3.1 Pension Claiming in Numbers

Figure 1 illustrates the difference in the share claiming pension at different ages up to 66 between the cohorts born in 1957 and 1958.

Figure 1 Share claiming pension by age and cohort, percent



¹² See Pensionsmyndigheten (2025a).

¹³ See Pensionsmyndigheten (2025a).

Figure 1 shows that the retirement behaviour is similar between the cohorts up to age 65. After that there is a clear decrease in the share claiming pension in the 1958 cohort compared with 1957. The decline at age 65 is largely compensated by an increase at age 66, but not fully. Overall, the share of retirements up to and including age 66 is 2 percentage points lower in the 1958 cohort than in the 1957 cohort, suggesting some individuals in the 1958 cohort choose to postpone retirement to an even later age.

At age 66 there are about 110,000 individuals registered in Sweden in each of the 1957 and 1958 cohorts. Of these, around 59,700 (1957 cohort) and 48,100 (1958 cohort) receive guarantee pension. In the year prior to retirement 11,200 individuals in the 1957 cohort and 11,600 in the 1958 cohort receive sickness compensation. Some individuals appear in both groups because they transitioned from sickness compensation to guarantee pension at retirement. According to Table 7 in Appendix 1, more women than men receive one or both of these benefits. Individuals with these benefits have strong financial incentives to wait until the target retirement age to claim their pension, which is presented in Appendix 1.

We examined whether to include in the analysis individuals who had sickness compensation in the year before retirement when that compensation constituted only a small share of their pension-qualifying income, and individuals whose guarantee pension constituted only a small part of their national pension. After reviewing the data, we concluded that only in groups where sickness compensation constituted less than 5 percent of pension-qualifying income and where guarantee pension constituted less than 5 percent of the national pension can we, with reasonable confidence, isolate a norm effect — i.e., a change in perceptions of what constitutes a “normal” retirement age rather than a direct regulatory effect resulting from the raised target retirement age.¹⁴ Individuals receiving the elderly support benefit and housing supplement are also excluded from the main analysis because those benefits are linked to the target retirement age. This leads to the exclusion of about 300 additional individuals who receive these benefits but have neither guarantee pension nor sickness compensation. For other benefits such as unemployment insurance and sickness benefit, which are also limited by the target retirement age, the data show no clear impact on retirement timing; consequently

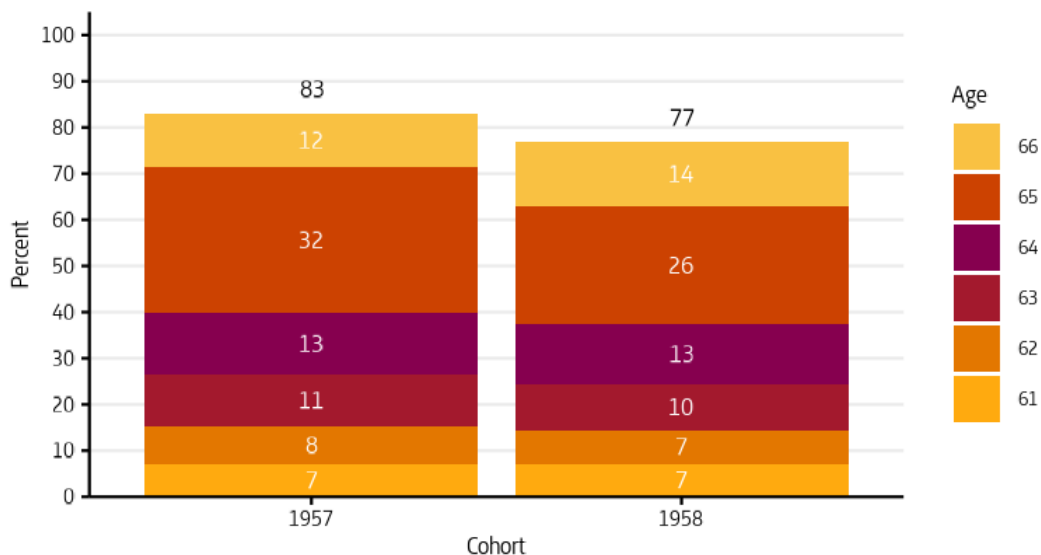
¹⁴ Figures 4, 5 and 6 in Appendix 1 show that the share of individuals claiming pension at the target retirement age generally increases with the proportion receiving guarantee pension and with sickness compensation. It is therefore only among the group for whom guarantee pension constitutes at most 5 percent of the public pension, or whose sickness benefit in the year prior to retirement constituted at most 5 percent of the pensionable income, that we can assume there are no individuals whose pension-taking decision has been influenced by the rules (i.e., the target retirement age).

we include individuals with those benefits in our continued analysis.¹⁵ This group will henceforth in the report be referred to as the group without guarantee pension or sickness compensation, since the majority of individuals in the group do not receive either benefit.

3.2 Change for the Group without Guarantee Pension or Sickness Compensation

For individuals who neither had sickness compensation before claiming pension nor receive guarantee pension, the income-based pension system provides no financial incentives to claim pension at a specific age. Despite this, Figure 2 shows a similar pattern to Figure 1, with a decreased share claiming pension at age 65 in this group and an increased share claiming pension at age 66.

Figure 2 Share claiming pension by age and cohort, without guarantee pension and without sickness compensation, percent



The figure shows that the share claiming pension is slightly lower at almost every age when those with guarantee pension and sickness compensation are excluded. In this group a larger share chooses to claim pension after age 66, for both the 1957 and 1958 cohorts. The overall pattern from Figure 1 nevertheless remains.

¹⁵ See Appendix 1. Entitlement to the two benefits is also governed by the target retirement age, since it is not possible to receive unemployment insurance and entitlement to sickness benefit is restricted once an individual has reached the target retirement age. The analysis indicates that the share of unemployment insurance relative to pensionable income in the year prior to retirement and beginning to claim pension at the target retirement age are negatively correlated — the higher the share of unemployment insurance, the fewer retire at the official retirement age. No relationship can be discerned between the share of sickness benefit and retiring at the target retirement age.

An important difference is that age 65 is still the most common retirement age for those born in 1958, which is not the case when we analyse the whole population. Additionally, the difference in the cumulative share claiming pension up to and including age 66 is substantially larger — 6 percentage points, compared with 2 percentage points in Figure 1.

3.3 Cohort Composition

To ensure that the 1957 cohort is a good control group for the retirement behaviour of the 1958 cohort, we compare the composition of the different cohorts, see Table 1.

Tabell 1 Cohort composition, whole population

Variable	Average 1957	Average 1958	Difference in average (percentages)
Man	49,8%	50,0%	-0,3%
Woman	50,2%	50,0%	0,3%
Married / Registered partner	20,8%	21,0%	-0,1%
Unmarried	79,2%	79,0%	0,1%
Older partner	24,6%	24,4%	0,2%
Younger partner	25,3%	24,9%	0,4%
Lower secondary or lower educational attainment	18,9%	17,8%	1,0%
Upper secondary education	46,6%	47,3%	-0,7%
Tertiary education	34,6%	34,9%	-0,3%
Low income	33,5%	32,5%	0,9%
Middle income	33,2%	32,8%	0,3%
High income	33,4%	34,6%	-1,3%
Metropolis	33,2%	33,5%	-0,3%
City	40,0%	39,9%	0,1%
Town or village	26,8%	26,6%	0,2%
Observations	676 499	670 409	

Table 1 shows that there are only small differences between the two cohorts in terms of gender distribution, marital status, education level, income group, and geographic residence. One minor deviation is that the 1958 cohort have a slightly higher education level than the 1957 cohort. This is also reflected in the income groups, where the 1958 cohort includes somewhat more high earners than the 1957 cohort. We nevertheless conclude that there are no significant differences between the cohorts, and therefore the 1957 cohort is a suitable control group for the 1958 cohort when analysing the entire population.

The analysis will be carried out on the population from which all individuals receiving guarantee pension and/or sickness compensation are excluded. The composition of the cohorts within this population is presented below in Table 2.

Tabell 2 Cohort composition, no guarantee pension / sickness compensation

Variable	Mean 1957	Mean 1958	Difference in mean (percentages)
Man	55,8%	57,1%	-1,3%
Woman	44,2%	42,9%	1,3%
Married / Registered partner	17,4%	17,8%	-0,4%
Unmarried	82,6%	82,2%	0,4%
Older partner	25,1%	24,2%	0,9%
Younger partner	29,3%	29,5%	-0,1%
Lower secondary or lower educational attainment	15,1%	14,4%	0,7%
Upper secondary education	44,6%	44,4%	0,2%
Tertiary education	40,3%	41,2%	-1,0%
Low income	11,4%	11,5%	-0,1%
Middle income	39,0%	36,5%	2,5%
High income	49,6%	52,0%	-2,4%
Metropolis	33,4%	34,7%	-1,3%
City	39,8%	39,5%	0,3%
Town or village	26,8%	25,8%	1,0%
Observations	439 354	429 671	

When all individuals receiving guarantee pension or who had sickness compensation prior to claiming their pension are excluded, the composition of the population changes compared with the full cohorts. This population contains a substantially larger share of men and high earners for both cohorts. As in the earlier comparison, Table 2 shows that the differences in cohort composition remain relatively small. However, the differences between the cohorts in terms of gender, income groups and geographic residence are somewhat larger in this population than in the full cohorts. We assess that these differences are not substantial enough to undermine our assumption that the 1957 cohort provides a suitable control group for the 1958 cohort.

3.4 Clear Indications of a Shift in Norms

In summary, Figures 1 and 2 show that the proportion of new pensioners in the 1958 cohort up to and including age 66 is lower compared with the corresponding proportion in the 1957 cohort. This pattern holds both for the entire population and for the group excluding individuals with sickness compensation or guarantee pension. That a larger share of individuals in the latter group – those not financially

affected by the raised target age – postpone claiming pension at age 65 supports our hypothesis that a norm shift is occurring regarding what it is considered a “normal” age to claim pension.

4. Empirical Strategy

4.1 Data and Studied Population for Estimating the Norm Shift

The data follow an unbalanced¹⁶ panel structure, tracking annual individual observations for those born in 1957 and 1958 between the ages 61 and 66. The total population on which our descriptive statistics are based comprises 230,822 unique individuals and 1,346,908 observations.

The investigations are conducted only on individuals who were registered residents in each given year. For each year, we exclude those who die or emigrate during that year. We have also identified a clear incentive to claim pension at the target retirement age for those with guarantee pension and sickness compensation. To estimate a norm change, we therefore exclude individuals affected by the target retirement age rules, i.e. individuals with more than 5 percent of their pension coming from guarantee pension and sickness compensation. The analysis is thus based on a population with little or no no guarantee pension or sickness compensation, comprising 150,892 unique individuals and 869,025 observations.

4.2 Difference-in-Differences Regression Model

Difference-in-differences (DiD) is the method we employ to investigate whether the raised target retirement age has influenced retirement norms in line with our hypothesis — namely, whether a greater number of individuals retire at older ages. The method compares a treated group with a control group. The change observed in the untreated group represents the change that would have been expected in the treated group had no treatment occurred. Any additional change is then attributed to the treatment effect.

DiD requires that the treated group and the control group would have followed parallel trends after the treatment/reform had it not occurred. In practice, this assumption is generally considered satisfied if the pre-treatment/pre-reform trend are similar. In this context, it means that retirement behaviour in the two groups followed the same trend prior to the implementation of the raised age limit.

In our analysis, individuals born in 1958 constitute the treated group. This cohort is the first to be affected by the increase of the target retirement age to 66. The control group consists of individuals born in 1957, the last cohort with a target retirement age of 65. By choosing the adjacent 1957 cohort as the control group, we reduce

¹⁶ A balanced dataset refers to tracking the same individuals (or observations) across all studied time periods. Because we follow all registered individuals over time, some individuals will not appear in every period due to emigration or death. As a result, the dataset unbalanced.

the risk that the two groups would have followed different pre-reform trends in retirement behaviour. It should be noted that our estimate of the norm-change also captures individuals with guarantee pension who claim their pension after the official retirement age.

The DiD model we have chosen is a two-way fixed effects DiD with multiple periods, which we estimate by OLS¹⁷. Having multiple periods allows us to capture the dynamic effect, i.e., how the treated group differs from the control group at each given age. In a dynamic model one year must be excluded and serve as the reference year. We have chosen age 64 as the reference age.

$$y_{t,i} = \alpha_i + \gamma_t + \sum_{j=-4}^{-2} treated_i \times (age_{t,i} - 65 = j_{t,i})\delta_j + \sum_{j=0}^1 treated_i \times j_{t,i}\beta_j + \varepsilon_{t,i}$$

The dependent variable $y_{t,i}$ is a variable that can take the values 0, 0,25, 0,5, 0,75 and 1 depending on the extent to which the individual has claimed their public pension (excluding premium pension) during the year. The *treated* variable is a binary variable that equals 1 if the individual was born in 1958, otherwise 0. The variable j measures relative age to 65, with 64 ($j = -1$) as the reference year and therefore omitted from the regression estimates. We do not include any additional control variables in the regression.¹⁸ Index t denotes age and i denotes individual. The model includes fixed effects for age- (γ_t) and individual (α_i). The coefficient δ_j , $j = -4, -3, -2$, is the difference between the groups at ages 61, 62 and 63. The estimated coefficients should be close to zero for the parallel-trends assumption to hold. The coefficient β_j , $j = 0, 1$, measures changes resulting from the reform's effect on the norm for the "normal" age to claim pension. β_0 is therefore expected to be negative, while β_1 is expected to be greater than zero. This implies a decrease in claiming pension at age 65 and an increased propensity to claim pension at age 66.

Because the analysis involves of a regression with five coefficients of interest, we must account for the risk of false positives in significance testing. We address this by applying a Bonferroni correction. We use a desired significance level of 1 percent. The Bonferroni correction entails dividing the desired significance level by the number of hypothesis tests – in this case, five. Accordingly, we use a 0.2 percent significance level for the individual tests in our analyses. These are indicated with a star in the result tables.

¹⁷ Ordinary Least Square (OLS).

¹⁸ Because we apply individual fixed effects, this captures unobserved heterogeneity at the individual level. In this report we are not aiming to identify what causes the decision to claim pension, but rather how behaviour has changed for the cohort affected by the reform. Instead of including control variables for factors that may cause the pension decision, heterogeneity is handled with individual fixed effects.

Fixed effects are used to handle unobserved heterogeneity for individuals and for age. Because time is perfectly correlated with the variable age, a disadvantage of this specification is that we cannot control for time and thus cannot account for whether the business cycle in the labour market or other changes affected these two cohorts differently. We discuss this in more detail in Appendix 2. Our assessment is that these potential confounding effects are marginal.

5. Results

5.1 Regression Results

Table 3 presents the results from the regression analysis. For each retirement age, the estimated difference in the share of individuals claiming a pension in the 1958 cohort compared with the 1957 cohort, is reported. Age 64 serves as the reference age within each cohort and therefore has no estimated coefficient.¹⁹

The results are statistically significant for ages 65 and 66. At age 65, the estimated norm change corresponds to 5.5 percentage points fewer new pension claimants. At age 66, the norm change is positive, with 2.7 percentage points more new claimants in the 1958 cohort compared with the 1957 cohort. The fact that the increase at age 66 not fully offset the decrease at age 65 indicates that some individuals postpone claiming pension to even later ages. Relative to the share claiming a pension at age 65 in the 1957 cohort, the estimated norm change corresponds to approximately 17 percent ($= 5.5 / 32$).

Tabell 3 Regression results for pension claiming by age, percentage points

	Estimate	Standard errors
Age 61 * Treated	0.4%	0.3%
Age 62 * Treated	-0.5%	0.3%
Age 63 * Treated	-1.0% *	0.3%
Age 65 * Treated	-5.5% *	0.3%
Age 66 * Treated	2.7% *	0.3%
Observations	869 025	

NB: The overall significance level is 1 percent. We have accounted for the fact that we perform five tests, and with the Bonferroni correction this means we used a 0.2 percent significance level for each individual test. This level is marked with * in the table.

That all estimates prior to the age increase, at ages 61 – 63, show only marginal differences supports the model’s core assumption of parallel trends between the treated and control groups – that is, that both cohorts exhibit similar retirement behaviour before age 65. To assess the sensitive of the estimates to the chosen cutoff of a maximum 5 percent guarantee pension and sickness compensation, we conducted a sensitivity analysis, the results of which are presented in Appendix 3, Table 7. In addition, robustness checks were performed to ensure that the findings

¹⁹ Age is a discrete variable and therefore it must be related to another age to be captured. We have chosen age 64 as the reference age but could have chosen a different age – see also Chapter 5 on methods.

are not driven by model choice; these include a placebo regression and a logistic regression.²⁰

To examine whether the norm change differs between women and men, we estimated the same regressions as above but based the analysis on sex-specific datasets — see Table 4 below. The results indicate that the magnitude of the norm change is similar for men and for women, and given the size of the standard errors, we assess that the estimates are not statistically different from each other. Men and women without guarantee pension or sickness compensation therefore appear to have adjusted their choice of retirement age to a similar extent.

Tabell 4 Regression results for pension claiming by age, split by sex, percentage points

	Men Estimate	Men Standard errors	Women Estimate	Women Standard errors
Age 61 * Treated	0.5%	0.3%	0.3%	0.4%
Age 62 * Treated	-0.7%	0.3%	-0.3%	0.4%
Age 63 * Treated	-1.0%	0.3%	-1.1%	0.4%
Age 65 * Treated	-5.2% *	0.4%	-5.8% *	0.4%
Age 66 * Treated	2.5% *	0.4%	2.9% *	0.4%
Observations	490 727		378 298	

NB: The overall significance level is 1 percent. We have accounted for the fact that we perform five tests, and with the Bonferroni correction this means we used a 0.2 percent significance level for each individual test. This level is marked with * in the table.

5.2 Number of Individuals Who Postponed Pension Claim

From the regression analysis above we can estimate the number of individuals without guarantee pension and sickness compensation who postponed their retirement due to a changed norm by converting the percentage-point estimate into a headcount (multiplying by the total number of individuals in the population). Excluding individuals with guarantee pension and sickness compensation likely leads to an underestimate of the number who postponed claiming pension because of a norm change. It is reasonable to assume that some individuals with a (small) share of guarantee pension or sickness compensation also changed their retirement behaviour due to a norm shift rather than because of changed rules. From Figures 4 and 5 in Appendix 1 we conclude that only groups with 100 percent guarantee pension or 100 percent sickness compensation can be assumed to be entirely driven

²⁰ For presentation of the tests, see Appendix 3 Table 8, Table 9 and Table 10.

by the benefits' financial incentives; at lower shares of these benefits, fewer individuals claim pension at the target retirement age.

Estimating the total number of individuals who postponed retirement because they changed their view of a “normal” retirement age is useful both to give a concrete measure of the effect and to calculate how the Swedish Pensions Agency's measure of average retirement age has been affected by the norm change. This can only be a rough estimate because we do not know which individuals with guarantee pension or sickness compensation are rule-driven (i.e., motivated by benefit incentives) and which are not. We therefore calculate a plausible range for the number who postponed their pension claiming due to a norm change: between 3,500 and 6,000 individuals. This corresponds to between 3.2 and 5.4 percent of the entire 1958 cohort.

The range has been calculated as follows. The lower bound is obtained by assuming that a norm change occurred only in the group without guarantee pension and sickness compensation, and by using the regression point estimate of 5.5 percentage points minus 1.96 standard deviations, which yields a reduced share of 65-year-old claimants of 5.0 percentage points; multiplying this by the number of claimants in the cohort at age 65 who do not have guarantee pension or sickness compensation gives roughly 3,500 individuals ($0.05 * 70,624$), or 3.2 percent of the cohort ($3,500 / 110,603$).

The upper bound is obtained by instead assuming that a norm change also occurred among individuals with guarantee pension and sickness compensation, that the total change in the number claiming pension at 65 is the sum of the change for those driven by the rules and the change for those affected by a norm shift, and that the norm change is equally large for all individuals regardless of the share of guarantee pension or sickness compensation; applying the estimate from the regression for the group without guarantee pension and sickness compensation and a simple algebraic calculation yields about 6,000 individuals. See Appendix 4 for a more detailed description of the calculation.

By the same logic, the increase in the number of individuals claiming a pension at age 66 is estimated to be between 1,500 and 3,100 individuals, corresponding to a 1.4–2.8 percent of the cohort.

5.3 Impact of the Norm change on the Average Retirement Age

In 2023, the year the 1958 cohort turned 65, the average retirement age rose sharply from 64.8 to 66.0. Because the average retirement age is calculated as a weighted mean based on how many individuals claim pension at each age, we can

use our above estimate of the number of individuals who changed their behaviour due to a norm change to approximate the share of the increase in the average retirement age that can be attributed to a norm change. This calculation assumes *ceteris paribus*, that we only change the number of new claimants at each age for those born in 1958. We use the midpoint values of the ranges given above in section 5.2. We assume that, absent any norm change, about 4,700 more individuals would have claimed pension at age 65 according to the estimate in the previous section; at age 66, conversely, about 2,300 fewer individuals would have claimed pension. The outcome of the calculations is presented below.

Tabell 5 Average retirement age, with and without norm change

Year	Average retirement age	Average retirement age without norm change	Difference
2022	64.83		
2023	65.96	65.82	0.14
2024	65.50	65.49	0.01

The norm change explained about 12 percent of the increase in the average retirement age reported in 2023. For 2024, the average retirement age fell from the previous year; the norm changes then marginally attenuated that decline.

6. Conclusions and Policy Implications

The purpose of this report is to examine whether the raised age limit for earliest take-up of the national pension system's basic protection, introduced by the government in 2023, has influenced individuals' pension claiming behaviour beyond the financial incentives created by the reform. Those born in 1958 are the first cohort covered by the reform and for them the age limit is 66. For older cohorts the age limit is 65.

Our hypothesis is that the reform has contributed to a shift in norms — a changed perception of what constitutes a “normal” retirement age. To test this hypothesis and assess the effect size, we study individuals who are not directly financially affected by the raised age limit. Using a Difference-in-Differences (DiD) model, we compare individuals born in 1958 with those born in 1957 to investigate whether an actual behavioural change has occurred.

6.1 Raised Age Limits Affect the Norm for Retirement Age

Our results indicate a measurable norm shift. For the group in the 1958 cohort who are not entitled to guarantee pension and not receiving sickness compensation prior to retirement – and thus are not directly affected by financial incentives associated with the target retirement age – the share taking their pension at age 65 decreased by 5.5 percentage points compared with the 1957 cohort. This implies that nearly one in five, or 17 percent, of the studied population who previously claimed their pension at age 65 have postponed pension take-up. In absolute terms, this corresponds to at least 3,500 individuals, or 3.2 percent of the 1958 cohort. About half of these individuals claimed their pension at age 66, while the remainder postponed retirement even further. The fact that individuals without guarantee pension or sickness compensation also tend to delay pension take-up suggests that changes in the target retirement age have the potential to affect the social norm regarding what is considered a “normal” retirement age.

When we include individuals with guarantee pension and sickness compensation, the estimated number who postponed retirement due to a changed norm is at most about 6,000 individuals, corresponding to 5.4 percent of the cohort.

The analysis indicates that both women and men have adjusted their norm-related retirement behaviour to a similar extent. At the same time, a larger proportion of women than men are directly affected by the target retirement age, as women more often receive guarantee pension and sickness compensation. If this pattern persists in younger cohorts, future increases in the target retirement age are likely to have a greater impact on women than on men with respect to retirement timing.

6.2 Informing Individuals Well in Advance can Increase the Reform's Impact

It is important to emphasise that our results are based on the first cohort affected by the raised age limits — those born in 1958. Norm changes typically take time to have full effect. Many individuals in the cohort had likely already finalised their retirement plans when Riksdagen decided in May 2022 to raise the age limit. This may have limited the reform's impact on individuals who are not dependent on the pension system's basic protection or sickness compensation.

International studies, including Seibold (2021) and Lalive et al. (2023), show that official age limits in pension systems serve as psychological reference points. These studies indicate when it is perceived as socially acceptable to leave the workforce, thereby shaping the social norms that influence individuals' behaviour. It is reasonable to assume that the clearer and earlier these signals are communicated, the greater the opportunity for individuals to adjust their decisions.

Therefore, it is likely that more of those born in 1958 would have postponed retirement if the decision to raise the age limit had been made and communicated well in advance. An early and clear announcement would have given individuals the opportunity to reconsider existing plans and thus strengthened the reform's impact among those not financially dependent on the basic protection or sickness compensation.

The time span between decision and implementation, as well as the manner in which the reform is communicated, are therefore important factors for the reform to achieve full impact.

6.3 Need for Continued Follow-Up and Evaluation

As noted, norms do not change overnight, and we have only studied the initial effect of the raised age limits. To understand how increased age limits affect individuals' retirement behaviour, it is important to monitor developments over time. This is particularly relevant ahead of the next increase to age 67 in 2026, which will be implemented during 2026–2030 and will cover the cohorts born 1960–1964. The new target retirement age will then apply to more cohorts and provide them longer advance notice in their pension decisions, which may further reinforce norm change.

The Swedish Pensions Agency will also monitor developments by sex to identify any impact on equality in pensions.

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