Sweden’s Move to Defined Contribution Pensions

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October 2007
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The AARP Public Policy Institute, formed in 1985, is part of the Policy and Strategy Group at AARP. One of the missions of the Institute is to foster research and analysis on public policy issues of importance to mid-life and older Americans. This publication represents part of that effort.

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Foreword

In the 1990s, Sweden undertook a major reform of its pension system. At the time of the reform, Sweden’s pension system consisted of a universal pension provided to everyone depending on their years of residence in the country and an earnings-related, pay-as-you-go pension. Under the new system, which phased in starting in 1994, a defined contribution scheme replaced the earnings-related pension. Sixteen percentage points of the total contribution of 18.5 percent of earnings is now credited to a notional account that the government controls. The worker has control over the investment of the additional 2.5 percent, which goes into an individual account. A “guarantee pension” is available to each person with no (or a low) pension.

As a result of the reform, the retirement age has become flexible from age 61, and there is an actuarially fair return for each additional year of work. Workers can also collect one-fourth, one-half, or three-fourths of their pensions while continuing to work. This facilitates the phased retirement in which so many older workers seem interested. In addition, benefits are indexed to life expectancy, a change that, as life expectancy rise, will require working longer or saving more for the same benefit.

In *Sweden’s Move to Defined Contribution Pensions*, Edward Palmer, head of the Division of Research and Evaluation of the Swedish Social Insurance Agency and professor of Social Insurance Economics at Uppsala University, discusses in considerable detail the motives for and the design and implementation of the new Swedish pension system. As an expert member of the Swedish government’s Working Group on Pensions that formulated the Swedish pension reform and as a member of the government's pension implementation group, Dr. Palmer is very well informed about Sweden’s pension reform.

Although the pension system’s financial stability was by far the main reason for pension reform, Dr. Palmer notes that inter-generational fairness was another concern. Without change, pension costs would continue to rise for future workers. In addition, the old system was viewed as intra-generationally unfair, in part because benefit calculations led to a redistribution of benefits from low to high earners.

Dr. Palmer concludes that the Swedish pension reform has succeeded in meeting its objectives. The system is financially stable and more inter- and intra-generationally fair. Persons with low lifetime earnings benefit from a minimum guarantee that supplements the new defined contribution accounts. However, some observers have expressed concern about administrative costs and the difficulty that workers may face in choosing among the hundreds of potential investments available in the reformed system. Dr. Palmer addresses these concerns.

*Sweden's Move to Defined Contribution Pensions* is one of several AARP Public Policy Institute reports that examine aspects of social security reform in other countries. The other reports deal with voluntary carve-outs in the United Kingdom, recent developments with individual accounts in Chile, Australia’s system of means-tested benefits and mandatory occupational savings schemes, and the financing policies of the Canada Pension Plan and the Quebec Pension Plan.

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EXECUTIVE SUMMARY

Background

In 1994 Sweden converted its defined benefit public pension scheme into a combination of a notional defined contribution (NDC) pay-as-you-go scheme and a financial defined contribution (FDC) scheme. A defined benefit guarantee constitutes the floor of the overall pension system. Reform of the Swedish pension system was driven by several concerns, including the threat of unsustainable cost increases in coming decades, issues of inter- and intra-generational fairness, and a long-standing concern about the effect of tax and benefit rules on the labor force exit of older workers.

The goal of Swedish politicians in setting up the administration of the FDC component of the new public system was to create a system with privately managed individual investment accounts, where the worker makes his or her own investment decisions within a broad spectrum of alternatives.

When the Swedish system was being designed, there were only a few examples of national mandatory financial schemes in the world. Two important forerunners were the systems set up in the United Kingdom in 1986 and Australia in 1992. Other examples available in the early 1990s were in Latin America. In the Chilean model, pension fund administrative companies from the private market were affiliated with the mandatory public scheme but continued to operate as normal private insurance schemes.

Purpose of This Report

Individual notional and financial defined contribution accounts have now become a part of the everyday economic landscape of the Swedish welfare state. This report discusses why Sweden took the revolutionary step of changing from a defined benefit to a defined contribution framework for pensions, focusing on both the potential advantages and disadvantages of the new framework for public pensions.

Findings

Sweden’s new defined contribution schemes—both the NDC and the FDC—are based on fixed contribution rates that are applied to individual earnings. In the NDC pension scheme, contributions go toward paying the benefits of current pensioners, as in any pay-as-you-go plan. In the FDC pension scheme contributions are allocated to individual financial accounts. A main difference between the NDC and FDC schemes is that money transferred to individual FDC accounts is invested in the financial market and represents financial saving.

In the NDC scheme, all participants earn the same rate of return in any given period, which reflects nominal per capita covered wage growth. Workers make contributions during the accumulation phase prior to retirement and receive an annuity at retirement. In the FDC scheme, the financial rate of return is determined by the individual’s own portfolio investment decisions.

The typical Swedish employee is now covered by a contribution rate of 16 percent for the NDC scheme, 2.5 percent for the mandatory FDC scheme, and around 3.5 percent for an occupational FDC top-up to the public scheme.
Both the FDC and NDC schemes are individual account schemes. Workers pay contributions on their earnings, and the benefits they eventually receive are based solely on their own accounts and their own birth cohort’s life expectancy at the age at which they claim their benefit. There is no built-in redistribution in either of these systems. In this sense, the underlying social policy objective is to create a mandatory framework for providing adequate pensions for the entire working population.

The rate of return on Swedish NDC accounts is based on the average covered wage and the rate of inflation. In this way the system constantly adjusts to changes in both real wages and prices. The accounts of workers and pensioners receive the same indexation, although the mechanism for achieving this differs. This report discusses how the indexation of accounts during the accumulation and retirement phases differ.

During the accumulation phase, accounts receive straight-forward indexation based on nominal average covered earnings. Instead of being indexed annually with nominal covered wage growth, newly granted benefits incorporate from the very outset 1.6 percent real growth, calculated for an expected life. In addition, pensions are price-indexed annually. If real covered wage growth is greater than 1.6 percent, benefits are indexed by the difference between the actual rate of change in the average covered wage and 1.6 percent, plus an increment for inflation.

Participants can claim at the same or separate times one-quarter, half, three-quarters, or a full NDC or FDC benefit while continuing to work full or part time or exiting the labor force fully. Benefits can be claimed from the age of 61. If participants continue to work while collecting their pensions, contributions on earnings continue to be paid into the individual NDC and FDC accounts and the annuities will both be recalculated at a later date, including these new contributions. In principle, workers can combine different percentages of benefits with different percentages of work from age 61.

In the NDC scheme, the retirement benefit takes the form of an annuity based on the retiree’s account balance and the (unisex) life expectancy of the retiree’s birth cohort. In principle, FDC schemes can offer phased withdrawals, lump sums, and annuity products. However, in the Swedish FDC scheme only life annuities are offered.

The contributions of plan participants who do not make an active investment fund choice for their FDC accounts are allocated to a default fund. At the outset, about two-thirds of all participants made an active choice, and one-third ended up in the default fund. In the ensuing years the majority of new participants have not actively chosen funds. For younger participants, the default fund is, in fact, a good alternative as it invests around 80 percent of assets in equities with a good foreign-domestic mix.

New contributions are credited to individual accounts annually, but there is about an 18 month lag time until the contributions are recorded. During the interim, the contributions of all participants are held at the National Debt Office, where they earn a bond rate of return.

Returns averaged 12.2 percent in 2006, but they have fluctuated greatly in some years, e.g., a -31.1 percent in 2002 but rising to 17.7 percent in 2003 and to 30.5 percent in 2005, according to the Swedish Social Insurance Agency.

Much of the criticism of the Swedish FDC system has arisen in conjunction with the large number of investment funds available. Another criticism is that a large number of funds
are costly to manage. As the volume of the system grows over the next 15 years, calculations show that administration will become considerably less expensive.

    The Swedish clearinghouse, called the Premium Pension Authority (PPM or Premiumpensionsmyndigheten) is a clearinghouse for transactions vis à vis the participating fund managers in the system. It also keeps individual accounts, collects and makes available (daily) information on participating funds, provides other information services to participants, and is the single provider of benefits.

    The new system makes gradual exit from the labor force easier. It is possible for workers to claim a partial or full annuity and either leave or remain in the labor force from the age of 61. The NDC and PPM components can be claimed in part or entirely at the same or at separate times. There is no maximum age when a benefit must be claimed.

    The Swedish model centralized all of the functions of the investment business, except for the asset management function, under the umbrella of a clearinghouse. The goal of this approach was to create cost efficiency while enabling an unlimited number of funds to participate and compete for individual account holder investments.

**Conclusion**

    Summing up, the Swedish pension reform was successful in meeting its objectives. The pay-as-you-go commitment has become financially stable through the introduction of the NDC. The combination of the NDC and FDC schemes has brought financial stability to the overall earnings-related component of the public pension system. As a consequence, the overall system has come much closer to inter- and intra-generational fairness in the sense that the contribution rates paid by successive generations are the same and that the value of a krona contributed in a given year by two workers will give the same pension right in the future to both participants, regardless of the shape of their earnings careers or the number of years of participation.

    In addition, the transition from defined benefit to defined contribution pensions has not meant the downfall of social policy. Instead, it has led, first, to an increase in the financial transparency of the overall system. Second, non-earnings-related credits are funded in the same period in which they are granted. For example, money to pay for early retirement for the disabled, child care credits, etc., is transferred on a yearly basis to the NDC reserve fund and to individual accounts in the FDC scheme. Third, the system has become neutral in terms of influencing the work and retirement decisions of older workers, at least in the income range above the guaranteed level. Fourth, the FDC scheme creates saving on a yearly basis of about 1 percent of GDP, which, in the absence of offsetting effects, is new net saving. Finally, the overall system, including the occupational supplements that play a central role in Sweden, will yield good pensions in the future for the average employee, while at the same time there will continue to be a minimum public guarantee.
Introduction

In a series of steps in the 1990s, Sweden converted its defined benefit (DB) public pension scheme—dating from 1960—into a combination of notional defined contribution (NDC) pay-as-you-go and financial defined contribution (FDC) schemes with a defined benefit guarantee constituting the floor of the overall system.¹ The reform was created from 1992 to 1994 in a working group made up of one representative from each of the seven political parties in Parliament at the time and a handful of experts. The group produced its first report in 1992,² which contained an outline of the proposed reform. The initial legal framework was enacted in June 1994,³ with the support of five of the political parties and more than 85 percent of the votes in Parliament.

Following the enactment of the legislation, in the autumn of 1994 the Swedish government changed from a center-right coalition to a Social Democratic-led leftist coalition. Although the Social Democratic Party had supported the reform unanimously in Parliament, there remained an influential faction in the party that still opposed parts of the reform. Because of this, immediately after the new government took power the party leadership declared a so-called “time out” to give their membership a year to discuss and understand the reform.

The implementation process finally got underway in late 1996 as the time out came to a close. Implementation involved developing both new legislation for the NDC and FDC schemes and supporting legislation (including accommodating changes in the tax legislation). During this period historical records were used to create individual NDC accounts for everyone born in 1938 and later.⁴ The implementation phase involved not only the development of new supporting legislation, but also a complete overhaul of the pension administration’s computer system. In addition, the social security administration’s staff needed to be educated about the principles and administrative details of the new pension system. New information technology support and administrative routines were introduced. This process was finished in 1998, and in January 1999 the covered Swedish population received their first individual account statements. Since then personal statements, including a pension projection based on the individual’s own account balances and a simple earnings projection, are sent out annually. The first benefits under the new rules were paid out in January 2001.⁵

During the time out, the predominantly Social Democratic National Federation of Labor (Landsorganisationen, LO), representing about a third of Sweden’s employees and most blue-collar workers, transformed its own DB occupational scheme—which tops up the government schemes—into an FDC scheme. This move was significant given that some of the most

¹ The earnings-related NDC and FDC schemes cover everyone with earnings in Sweden, and the guarantee covers everyone residing in Sweden, with a requirement of 40 years of residence for a full benefit.
² This report contained almost all of the features of the system legislated in 1994 and implemented in steps thereafter during the 1990s (The Working Group on Pensions, 1992).
³ Ministry of Health and Social Affairs (1994).
⁴ Note that the reform is being phased in. The transition rule is that persons born in 1938 receive 4/20ths of their benefit from the new system and 16/20ths from the old system; persons born in 1939 receive, respectively, 5/20ths and 15/20ths, etc. Persons born in 1954 are the first to be fully covered by the new system.
⁵ For more of the details and additional discussion surrounding the reform process see Palmer (2002) and Könberg, Palmer, and Sundén (2006).
influential reform sceptics came from LO and that one of their major criticisms of the reform was, in fact, the introduction of the individual financial account scheme in the new public system. Clearly, the time out had led to a change of mind among the LO sceptics.

Two of the three remaining large confederations, which together cover all public employees, followed suit and converted their schemes from defined benefit to defined contribution (DC). As a result, by 2001 supplementary occupational schemes, covering around 80 percent of Swedish employees, had moved from unfunded defined benefit to funded individual financial account (FDC) schemes. Finally, in early 2006 the last major confederation, covering private white-collar employees, also converted its occupational supplement to the public scheme to an FDC format. The typical Swedish employee is now covered by a contribution rate of 16 percent for the NDC scheme, 2.5 percent for the mandatory FDC scheme, and around 3.5 percent for an occupational FDC top-up to the public scheme.6

What’s more, the administrations of the public and occupational schemes eventually joined hands to create a web site with access to personal information relevant for both the public and occupational schemes. Since 2004 Swedes can log onto a web site and calculate their NDC, FDC, and occupational supplement—using different projections for earnings growth and rates of return—for different hypothetical retirement years, based on their individual account information.

NDC and FDC individual accounts have now become a part of the everyday landscape of the Swedish welfare state. More than a decade after the initial parliamentary decision, the reform still enjoys the strong political backing it had from the outset. This report discusses why Sweden took the revolutionary step of moving from a defined benefit to a defined contribution framework for pensions and presents and discusses many of the details of the new Swedish public pension system.

**Why Did Sweden Reform Its Public Pension System?**

Reform of the Swedish public pension system was driven by several concerns. The first was the threat of unsustainable cost increases in the coming decades. A second, related issue was that rising contribution rates would tax the incomes of future workers more than current workers and in the more pessimistic among realistic scenarios, the increase would be as much as 50 percent more. There was also considerable intra-generational unfairness built into the old system. In the old public DB system, a krona of contributions paid by two workers in any given year could—and usually did—result in different pension amounts at retirement. This was because a full benefit required only 30 years of coverage and was based on the best 15 earnings years rather than all career earnings and contributions. Hence, individuals with steep earnings profiles toward the end of their careers were clear winners. There were also economic reasons for reform. The two most important were, first, to create a system that would be neutral with regard to the

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6 Note, however, that there is a ceiling on covered earnings in the public NDC and FDC schemes. Generally, the occupational schemes also provide earnings replacement above the ceiling, too, albeit, with the exception of the occupational scheme for blue-collar workers, this component is generally a defined benefit. The occupational schemes have arisen through agreements that have evolved over almost a century between the central labor confederations and representatives of management in the various sectors.
labor market exit decision of older workers and second, to provide a vehicle that would meet the goal of enhancing overall national saving. Here these issues are discussed in greater detail.

The first concern of policymakers and the overriding driver of the Swedish pension reform was the financial instability of the old system. Due to its construction, the old system was not resilient—neither economically nor demographically. Economically, the old system’s cost as a percent of gross domestic product (GDP) and the nation’s wage base were greater with low growth and lower with high growth. Demographically, with a fixed pension age and increasing longevity, costs would increase with each new generation of pensioners. For example, with a fixed pension age of 65 (the normal retirement age in the old—and to date the new—system), a worker born in 1970 who entered the labor force in 1990 and would retire around 2035 could expect to receive a benefit six to seven years longer than a worker born in 1925 who had retired in 1990. In short, an aging population was constantly pushing the relative cost of the system upwards.

There are several issues around the topic of the aging population. Because of steady improvements in medical technology, health care, and healthier life styles, people live longer and are expected to live even longer, healthier lives in the future. Moreover, the changing structure of employment and continuously improving work environments—in addition to contributing to improved health, per se—mean that work conditions are becoming increasingly more environmentally friendly for older workers. Hence, as older Swedish workers have become healthier and workplaces more amenable to older workers, a fixed pension age of 65 has become increasingly less justifiable. In the reform discussion in the early 1990s, it became an axiom among policy experts and policymakers in Sweden that policy should encourage longer working careers and support the gradual exit of older workers from the labor force.

In principle, public pension policy should be neutral or positive in influencing the decisions of older workers to exit from the labor force. First, it is easy to argue that pension systems should be designed so that, on the margin, there is an incentive—and, certainly, no tax-or benefit-based disincentive—for older workers to continue to work if they desire to do so. Work has a value in itself, which is yet another reason why pension systems should have a neutral effect on the retirement decision. Second, it is difficult to defend public pension systems with fixed pension ages that subsidize increasingly longer periods of leisure for healthy persons. Healthy older workers who can work several more years and still enjoy a long period of retirement should not be enticed out of the workforce at too early an age with a public benefit. Instead, early retirement for healthy workers should be financed by voluntary private saving.

Swedish policymakers came to the conclusion that although there must be a minimum pension age at which participants can first claim a public benefit, there should be no mandatory age of exit from the labor force. Furthermore, life expectancy at retirement should be considered in calculating the benefit, and life expectancy adjustments should occur continuously as longevity increases. With an actuarial benefit calculation, the typical participant does not lose the pension increment to lifetime income due to the choice of retirement age. Postponing retirement leads instead to a higher annuity when claimed later in life. An actuarial life expectancy adjustment has become, thus, an integral part of both Sweden’s new NDC and FDC schemes.
At the time of the reform, Sweden’s demographic future was troublesome in yet another respect. All other things being equal (including the rate of growth of individual earnings and benefits per person), it would be possible to keep finances in balance in spite of increasing longevity if the contributors increased at the same rate as pensioners. The underlying determinant of labor force growth is the fertility rate. Although, by European standards, births per woman have remained high in Sweden in recent decades, at 1.7 to 1.8 the fertility rate has still remained well under the 2.1 children per woman needed to reproduce the population. Swedish population growth has instead taken place thanks to net migration into the country. Although the gap between the actual birth rate and the number of births needed to reproduce the population is not as dramatic as in much of Europe, Sweden is nevertheless faced with the prospect of a dwindling workforce over the coming half century. There will be fewer workers in the future to support the increasing number of pensioners.

With a fixed pension age, increasing longevity and a low fertility rate lead to a steadily increasing ratio of pensioners to workers. Increasing longevity from a fixed pension age and a low fertility rate work together, then, to create constant upward pressure on the percentage of the national product needed to finance the old-age pension scheme. From the mid-1950s up until 1992, when the government’s working group began formulating the reform in 1992, the dependency ratio had dropped from a little more than three workers per old-age pensioner to a little more than two. Furthermore, although demographers have long believed that longevity will “soon” reach a ceiling, it has yet to show an inclination to do so.

Historically, the increase in the dependency ratio was a major structural driver in the cost of pensions as a percentage of GDP, and at the time of the reform it was projected to continue to play this role in coming decades. The introduction of DC schemes brought an automatic adjustment mechanism for declining labor force growth. The new FDC scheme is resilient to a declining labor force by definition. The automatic balance (to be described below) in the Swedish NDC scheme helps balance the system when necessitated by a declining labor force.

Another concern driving Swedish pension reform was inter-generational fairness. This is the flip-side of the financial instability issue. With no change in the design of the system, the share of earnings needed to finance pay-as-you-go pensions would continue to increase for future generations of workers. As was mentioned above, the higher the rate of growth of the economy, and hence, contributions, the easier it is to pay for a given level of commitments. Calculations for the old Swedish system showed that with a growth rate of 3 percent per year or more, the contribution rate would remain relatively stable. At the time of the reform, the long-term real growth rate was around 2 percent. With sustained annual growth of less than 2 percent, which economists viewed at the time as the most likely long-term perspective, projections of pension system costs showed that contributions would not increase fast enough to cover commitments. Instead, considerable contribution rate increases would be required. Generally speaking, the lower the rate of growth, the greater would be the share of future worker earnings that would have to be transferred to cover pension commitments. This feature of the old system created an unacceptable downside risk.

The third argument for Swedish pension reform was that the old system was intra-generationally unfair. The old system redistributed lifetime income from persons with long, but relatively flat, working career earnings profiles to persons with shorter and steeper lifetime
earnings profiles. Recall that only 30 years of contributions were required to obtain a full pension in the old earnings-related scheme, while the benefit itself was based on an average of the worker’s 15 best earnings years. Empirical analysis of the old pension system (Ståhlberg, 1990) demonstrated that these rules led to a systematic redistribution of lifetime earnings from persons with low career earnings to persons with high career earnings. This is a characteristic shared by most defined benefit systems. The shift to the DC framework in which all years of earnings and contributions count toward a benefit remedied this.

The Swedish reform was also motivated by macro-economic concerns. First, at the time of the reform, Swedish politicians were concerned about the level of private saving. There was empirical evidence (Markowski and Palmer, 1979; Palmer, 1981; Berg, 1983) that the ATP scheme in place since 1960 had led to lower private saving rates. The data also suggested, however, that by collecting contributions exceeding what was needed to finance current benefits and funding them, the forced saving created over a 30-year period through 1990 had compensated for the loss in private saving.

In other words, prior to the 1994 reform, Sweden already had a history of mandated pension saving under the “umbrella” of a pay-as-you-go scheme, albeit held in government funds. Since the very outset in 1960, economists and politicians had debated the pros and cons of publicly versus privately managed funds. With the reform, Swedish politicians saw a mandatory FDC scheme with privately managed assets held in individual accounts as a vehicle that could increase national saving, while taking advantage of the investment opportunities in the financial market.

The second economic consideration behind the design of the Swedish pension reform was a long-standing general concern with the effect of tax and benefit rules on the exit from the labor force of older workers. By international standards, Sweden already had tax-benefit rules that contributed to the high labor market participation of older workers (Palme and Svensson, 1999; Gruber and Wise, 1999). The threat of demographically driven labor shortages in the future was nevertheless a strong concern of experts and politicians—and it still is. By moving to defined contribution schemes, the pension system became neutral in its effect on the work and retirement decisions of workers. In the new system, it is possible to claim either partial or full benefits from either or both the NDC and FDC schemes while retiring completely or working either part or full time. As a result older workers can choose from among a broad range of exit alternatives.

In sum, the conversion of the public pension system into an NDC and FDC framework fulfilled the requirements of reformers to create financial stability, reduce inter- and intra-generational unfairness, provide a neutral setting with regard to worker retirement decisions, and provide a vehicle to increase saving. The defined contribution framework with a fixed contribution rate creates financial stability and inter-generational fairness in the sense that all future cohorts will pay the same percentage of their earnings into the public pension system. NDC introduces intra-generational fairness in the sense that a krona of contributions paid in any given year by two workers will contribute with the same value toward a pension regardless of how the individuals’ earnings careers evolve. Both the NDC and FDC schemes are actuarially fair and, hence, in principle, are neutral in terms of their influence on the decision to exit the labor force. Finally, the FDC scheme will augment national saving, compared with the counterfactual of a larger pay-as-you-go system.
In closing this overview of the transition to defined contribution public benefit schemes it is important to fill in the entire picture with what can be called the social policy components of the reform. First, a minimum guarantee provides a “floor” that protects persons with poor earnings careers and that is means-tested vis-à-vis the NDC and FDC benefits. This is supplemented by a quasi-means-tested housing allowance for those who still need an income supplement to bring them up to the poverty line. General revenue financed, non-contributory rights provide an additional buffer. These provide a substitute for up to four years of earnings for time spent caring for younger children, and also cover periods of military conscription and higher education. In addition, periods of insured disability, sickness, and unemployment yield coverage in the new pension schemes, with financing coming from the national government’s general tax revenues. This framework for dealing with the distributional goals of the policy creates transparency, since the creation of a credit has to be accompanied by the creation of a financial source—apart from the earnings-related contributions—and, as a result, creates greater political accountability in the overall social security system.

The Basics of NDC and FDC Individual Account Schemes

What is a notional defined contribution? One approach to explaining an NDC scheme is to compare it to an individual financial account—that is, a financial defined contribution scheme. There are many similarities between NDC and FDC pension schemes. To begin with, both are individual account schemes, and contributions to both are based on fixed contribution rates applied to individual earnings. In an NDC pension scheme contributions go toward paying the benefits of current pensioners, as in any pay-as-you-go plan, and in an FDC pension scheme contributions are allocated to individual financial accounts. It follows, then, that a main difference between NDC and FDC schemes is that money transferred to individual FDC accounts is invested in the financial market and represents financial saving.

The NDC scheme is a defined contribution, pay-as-you-go pension plan. As in the FDC scheme, the contributions of participants are noted on individual accounts. However, they are non-financial—that is, they are not invested in the financial market. In this sense they are notional. As in any pay-as-you-go scheme, NDCs finance the benefits of current pensioners, but as opposed to a defined benefit system, they do so within the framework of a fixed contribution rate.

The financial accounts earn a rate of return. In the FDC scheme, this is determined by the individual’s own portfolio investment decisions. In the NDC scheme, all participants earn the same rate of return in any given period, which in the Swedish NDC scheme reflects nominal per capita covered wage growth.

At retirement, in the NDC scheme the benefit takes the form of an annuity based on the retiree’s account balance and the (unisex) life expectancy of the retiree’s birth cohort. In principle, FDC schemes can offer phased withdrawals, lump sums, and annuity products.

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However, in the Swedish FDC scheme only life annuities are offered, as will be discussed in greater detail below.

**Indexation and Financial Stability in the NDC Scheme**

The rate of return on Swedish NDC accounts is based on the average covered wage and the rate of inflation. In this way the system constantly adjusts to changes in both real wages and prices. The accounts of workers and pensioners receive the same indexation, although the mechanism for achieving this differs. How the indexation of accounts during the accumulation and retirement phases differ is explained here.

During the accumulation phase, accounts receive straightforward indexation based on nominal average covered earnings. Instead of being indexed annually with nominal covered wage growth, newly granted benefits incorporate from the very outset 1.6 percent real growth, calculated for an expected life. In addition, pensions are price indexed annually. The fact that pensions already embody 1.6 percent real wage growth means that the difference between 1.6 percent growth and the actual growth rate must also be accounted for in order to keep the system in line with actual per capita wage growth, which is required to maintain financial equilibrium in the overall scheme. What does this mean for the pensioner? It means that if real covered wage growth is greater than 1.6 percent, benefits are indexed by the difference between the actual rate of change in the average covered wage and 1.6 percent, plus an increment for inflation. For example, if the real rate of growth of the covered wage is 3 percent and inflation is 2 percent, total benefit indexation can be viewed as including 2 increments, 1 is an additional 1.4 percent for covered wage growth exceeding 1.6 percent and the other is 2 percent compensation for inflation. This yields total indexation of 3.4 percent. Similarly, if real growth falls short of 1.6 percent the pensioner receives less than the full inflation adjustment.

Since the system was introduced in 2001, the real rate of growth of covered earnings has surpassed the “norm” of the 1.6 percent used to calculate annuities in every year. This means that since 2001 all pensioners, including those who retired prior to the reform, have received a positive real adjustment of their pensions—on top of the standard price adjustment. This actually represents an improvement for pensioners compared with the pre-reform regime where benefits were only price indexed.

In order to maintain a constant contribution rate in an NDC scheme, system assets must be at least as great as system liabilities. In the Swedish NDC design, each year a calculation of system assets and liabilities is performed. If the value of system assets falls below the value of system liabilities, the automatic balancing mechanism (ABM) is triggered and account values of workers and pensioners are adjusted with the percent required to achieve balance. Once negative balancing has occurred it can be followed by positive balancing—that is, an upward adjustment of accounts—until indexed account values are at the level at which they would have been without the initial balancing reduction. Otherwise, there is no upward adjustment in accounts of workers or pensioners when assets exceed liabilities. Note that balancing can be viewed as constituting an extra (albeit negative) rate of return component—in addition to the real growth and price adjustment just discussed.

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To date the balancing mechanism has not been triggered. However, it has been close to being triggered in recent years. This indicates that it may be triggered in the very near future. An important principle that the ABM fulfills is that it guarantees that the NDC system runs autonomously from political intervention. Adjustments required to maintain financial stability do not require a discretionary parliamentary decision, with the risk that they may not occur. The question remains, however, whether the announcement of balancing might create, if and when it occurs, some form of political backlash.

The Design of the FDC Scheme

The goal of Swedish politicians in setting up the administration of the financial defined contribution component of the new public system was to create a system with privately managed individual investment accounts, where the worker makes his or her own investment decisions within a broad spectrum of alternatives. In addition, the focus in the design of the FDC scheme was on creating a structure that minimizes the overall costs of administration. This section discusses how these goals are achieved and also, more generally, describes how the Swedish FDC scheme functions.

When the Swedish system was being designed there were only a few examples of national mandatory financial schemes in the world. Two important forerunners were the systems set up in the United Kingdom in 1986 and Australia in 1992. Both took advantage of the existing market for private insurance. The Australian model made mandatory what had previously been voluntary employer-financed plans, with the result that all of the nation’s employees were to become affiliated with an insurance company. The UK model made it possible for individuals to opt out of the public pay-as-you-go pension scheme (the State Earnings Related Pension Scheme or SERPS) and contract with a private insurance company of their choice. At that time, it was likely that participants in the UK and Australian systems would contract for a defined benefit plan and that the managing company, rather than the participant, would make the investment decisions. Nowadays, defined contribution plans have become more prominent in these systems.

Other examples available in the early 1990s were in Latin America. In the Chilean model, which was the forerunner of a large number of reforms in Latin America, pension fund administrative companies from the private market were affiliated to the mandatory public scheme but continued to operate as normal private insurance schemes. What was characteristic of all of the systems at the time was that participating companies provided all of the services required to run an individual pension account business. The mandated schemes essentially channelled funds into existing insurance companies. Each separate company was responsible for the whole bundle of services surrounding individual accounts. This includes collecting contributions, keeping accounts, investing participant funds, and providing benefits. The Swedish model broke with this approach.

The Swedish model centralized all of the functions of the investment business, except for the asset management function, under the umbrella of a clearinghouse. The goal of this approach was to create cost efficiency while enabling an unlimited number of funds to participate and compete for individual account holder investments. The details will be discussed below, but first, it is important to describe the clearinghouse, which is the central administrative body in the
The Swedish clearinghouse, called the Premium Pension Authority (Premiumpensionsmyndigheten or PPM), is a clearinghouse for transactions vis à vis the participating fund managers in the system. It also keeps individual accounts, collects and makes available (daily) information on participating funds, provides other information services to participants, and is the single provider of benefits. The following sections explain in greater detail how the Swedish administration is set up to fulfil the goals of minimizing costs and providing a broad spectrum of investment choices.

Functional Overview of the FDC Scheme

This section describes how the different functions of providing the services needed to run the “investment business” are organized in the Swedish public FDC scheme.

Contributions. Contributions to the financial account scheme are collected along with all other social insurance contributions and taxes by the National Tax Authority. Compared with a model where participants contract with a number of insurance companies (with each one collecting contributions from employers), this construction is cost efficient, both for participants and employers. This set-up minimizes the administrative burden on employers because the same procedures (income definitions, auditing procedures, etc.) are used for collecting both taxes and pension contributions.

Employers pay contributions to the Tax Authority on a monthly basis but are required to provide individual employee information only once a year. New contributions are credited to individual accounts annually, after individual income tax declarations have been filed and approved. This leads to an average lag time of 18 months until contributions are credited to individual accounts. Before they are credited, the contributions of all participants are held [on account OK?] at the National Debt Office, where they earn a bond rate of return.

Fund investment services, information services, and account keeping. The PPM acts as a broker between account holders (workers) and the participating investment funds. All requests to buy and sell fund shares are grouped together and executed jointly on each transaction day by the staff of the PPM. Even though many individuals may register an order to switch funds on any given day, there is never more than one daily transaction per fund. Needless to say, this reduces the funds’ administrative costs compared with having to execute every individual transaction separately. Likewise, individuals are all in one accounting system at the PPM and they all receive one statement per year.

It follows from this description of how the system operates that the PPM is the legal client of the fund managers. Individual participants have no client or legal relationship with fund

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9 In principle, the clearinghouse could be owned and operated by a private company, but this option was not considered in Sweden. In addition, it would be consistent with the model to let the private market provide annuities, once the system has matured.
managers. As a result, fund managers have no information on who their individual fund shareholders are. This eliminates the opportunity for direct fund-client relationships and steers competition for clients more in the direction of investment portfolio composition, risk profiles, fund performance, and administrative costs.

Information on investment performance and costs is gathered, organized, and published by the PPM. The PPM computes and publishes performance measures for all participating funds on a yearly basis. Printed information on all funds and a brochure on how to determine one’s investment strategy are sent to all new entrants. The same information can be obtained upon request by other participants. Fund values are also noted daily in major newspapers and can be accessed over the internet from the PPM or major newspaper web sites.

All participants have PPM personal identification numbers and can log into their own accounts using the internet. Here, they can follow the performance of their funds, examine the performance of other funds, and initiate fund switches. They can switch funds (to date without a charge) either online or by contacting the PPM’s call center.

Participating funds. All investment funds licensed to operate in Sweden and/or the European Union are allowed to participate in the PPM system. Fund managers are required to follow the rules and regulations set out by the Swedish Financial Supervisory Agency and to sign an agreement with the PPM. Companies signing the agreement must provide information to the PPM upon request, must provide periodic reports on the administrative fees they charge, and cannot charge withdrawal fees. Fund managers are required to compute fund share values and report them electronically to the PPM on a daily basis. Companies registered to do business in the PPM system can provide one or more funds. There are more than 75 domestic and foreign companies managing more than 700 funds registered to operate in the PPM system.

Part of the agreement between fund managers and the PPM involves accepting a system of what the PPM calls rebates—which in practice function as a fee discount. What does this mean in practice? First, note that funds available to PPM participants are generally also available for individual investors. This means that prior to entering into the PPM system all funds already have a fee that they normally charge non-PPM participants. Second, the philosophy behind the PPM rebate schedule is that the more PPM participant money a fund manages, the lower the management costs should be and, consequently, the lower the fee charged should be. The rebate is the difference between the fund’s normal market fee and the fee it is allowed to charge according to the PPM’s rebate schedule. The rebate schedule requires, thus, that the fund charge less per participant as the total PPM participant money it manages increases.10

Because of a delay in the development of computer technology to administer fund choices and accounting, the debut for the first individual fund choices was postponed from the early autumn of 1999 to the same time in 2000. One of the choices available to participants is the option not to make a fund choice. Contributions of those who do not actively choose are allocated to a default fund. In 2000, when all participants entitled to make a choice made their first choices, about two-thirds of them made active choices, and one-third ended up in the default

10 See Palmer (2000) for more details.
Since the first choice occurred in 2000 most new participants (80 percent to 90 percent) have not actively chosen funds. At first, this seems alarming and it has, in fact, attracted much mass media attention. However, this phenomenon is not so startling once one considers that, after 2000 when everyone was a new entrant, each successive year’s “new entrants” are persons paying contributions for the very first time. To begin with these include many young teenage summer workers or seasonal workers (such as university students). They also include immigrants (usually younger) entering the Swedish labor market for the first time. For younger participants the default fund is, in fact, a good alternative as it invests around 80 percent of its assets in equities with a good mix of foreign and domestic investments. The real test of new participants’ willingness to choose will come with time as these younger new entrants become older and have more reason to concern themselves with choosing.

The default fund is by far the largest fund in the system, with around a third of the system’s total assets. The next 19 largest funds taken together hold almost another third of all PPM assets. In other words, the top 20 funds hold two-thirds of total assets. The other approximately 700 funds hold the remaining third of total PPM assets.

Returns averaged 12.2 percent in 2006, but they have fluctuated greatly in some years, e.g., a -31.1 percent in 2002 but rising to 17.7 percent in 2003 and to 30.5 percent in 2005 according to the Swedish Social Insurance Agency (Swedish Social Insurance Agency, 2007: 16).

More than 75 percent of total PPM money is invested in equities. This is a much larger percentage of equities than what a traditional insurance company would hold. In judging whether or not the large share of PPM assets held in equities is desirable it is important to consider several factors. The first is that the NDC component is the most important component of a participant’s overall pension. The PPM component is only of marginal importance for the overall pension. This is even more the case for participants who were older when the system was introduced and who can only accumulate contributions during a few years. Second, given the principle that the share of equities in portfolios should be greater for younger participants, there is justification for the top-heaviness on the equity side. The age profile of savings in the PPM system is “young.” This, in combination with the fact that older participants probably view their small sums of PPM money as being so marginal that they can take large risks, goes a long way in explaining the high equity content in the system at present. This is likely to change once the transition birth cohorts from the 1940s and 1950s have retired.

Much of the criticism of the Swedish PPM system has been focused on the large number of investment funds available to participants. Many critics claim that it is not necessary to have so many choices. An alternative suggested by some of the critics would be to offer a limited number of equity and bond index funds, and perhaps to require that participants mix these in proportions determined by their age. The small number of fund managers that are allowed to participate would presumably be selected by the PPM through a bidding process. It can be argued that the large scale of business directed to a few funds would lead to low administrative costs. This is because large funds enjoy economies of scale, which the PPM could take
advantage of in determining the funds that are allowed to participate. In principle, the bidding process itself would encourage fee competition. On the one hand, there is a risk that the funds that win the bidding competition will be less interested in fee competition thereafter. This could be countered by calling for a new bidding at regular intervals or requiring them to follow a schedule with fee reductions that follow increases in PPM assets held. On the other hand, in a new bidding it could prove difficult for the PPM to deny continuation rights to funds already in the system. This would result in a perpetual “monopoly” on managing PPM funds for those funds that won the initial bidding.

A counter argument to the critics of having a large number of funds is that it would be easy for the PPM to sort funds within a specific category by fee charges and implicitly steer participants in the direction of choosing on the basis of costs. For example for world index funds, of which there are several dozen in the PPM system, participants could be recommended to use the fee charge as the main criterion for choice since they will not be able to make informed choices about the portfolio composition alternatives. What’s more, in the longer run it is likely that individual funds within a given category will tend to obtain similar yields. This could be combined with diversification advice, depending (among other things) on the participant’s age—which is already a component of the PPM information strategy.

A second, related criticism put forward is that having a large number of funds is costly to manage. One can counter this claim with the claim that it is the participants who bear the cost of their individual fund choices, and as just argued, once they have chosen a given portfolio profile they should choose specific funds based on costs. Within the present framework they always have the option of choosing funds that charge lower fees—while retaining the freedom to choose any fund (including funds charging high fees) if for some reason they believe the fund portfolio justifies this choice. In addition, the marginal cost for the PPM to administer transactions with many funds is small since the administration of transactions is largely electronic. In other words, the individual who chooses a fund with a high fee has nevertheless made a conscious informed decision based on individual preferences—while the overall PPM fee, which all members share, is almost unaffected by the large number of funds.

Generally speaking, the system is already relatively inexpensive, and calculations show that it will become a great deal less expensive as the volume of money in the system grows over the next 15 years. In another publication this author (Palmer, 2004) has presented a scenario for future costs that assumes growth in volume, a fixed distribution of money among the funds presently in the system, and no change in the fee schedule. The results suggest that the overall cost of the system (encompassing PPM administration, fund administration, and the money paid to the tax authority for the PPM’s proportional share of tax administration) will fall from its present level of about 0.6 percent of total PPM capital in 2005 (and 0.5 percent in 2008) to around 0.28 percent in 2020. Furthermore, if participants were to concentrate their investments in the 30 to 50 largest funds, given the PPM fee schedule, by 2020 the overall cost of the PPM system could fall to around 0.17 percent to 0.18 percent of capital.

In sum, there are pros and cons associated with letting an unlimited number of funds participate in the PPM system and with no individual portfolio investment restrictions, as now, or at the other extreme restricting choices to a small number of bond and equity index funds,
perhaps with some age-related restriction on the allowable mix of these. Admittedly, it is easier to argue for fewer restrictions the less important the financial component for overall retirement income. Since the financial component is relatively small in the Swedish system, the argument for limiting choices is even weaker.

**Annuities.** Possible annuity products are specified in the law and by law the PPM is the sole provider of these products. Participants can choose between single and joint life annuities, with fixed or variable rates. Participants cannot claim lump-sum payments or phased withdrawals. Annuities are calculated using *unisex* life expectancy tables, in compliance with a European Union court decision regarding public pension schemes. Participants can also contract for survivor insurance during the accumulation phase of the program.

A fixed annuity is purchased from the PPM at retirement. In practice this means that the participant closes his or her investment account and turns over the funds to the PPM. The PPM then assumes the investment responsibility for these funds. To date, about 90 percent of those who have become eligible for an annuity have chosen this option. The choice of investment service provider(s) for money turned over to the PPM during the retirement phase is made by the PPM's Board of Directors. To date, the PPM has enlisted the services of a government-run investment company to invest this money. Presently a little less than 30 percent of these funds are held in equities and 70 percent are in interest-bearing assets. In the future other market-based investment services may be enlisted.

The alternative retirement product to a traditional fixed annuity is an annuity where the participant continues to invest his or her money in a market-managed fund. The PPM draws on money from the participant’s fund(s) to finance the annual payment to the retiree. The benefit is recalculated annually on the basis of money remaining in the individual’s account. About 10 percent of those eligible to claim an annuity have chosen this option.

It is reasonable to ask why Sweden has been so keen on bringing the private financial market into the system during the accumulation phase but not during the payout phase. The government—i.e., PPM—monopoly can be justified on the grounds that in a public system there should be no risk differentiation. The argument is that in a mandatory public scheme everyone should be entitled to the same product regardless of his or her individual risk profile. The alternative would be to allow an annuity market to emerge that provides a number of products based on an evaluation of the risk shared by both the insured and the insurers. An example would be separate insurance products for smokers and non-smokers. This was not the path taken in Sweden. In fact, as has already been mentioned, the same (unisex) life expectancy factor is used for both men and women, even though the life expectancy of women is presently about five years longer than that for men.

There is also good reason to begin with a government monopoly (as opposed to contracting out administration) in the start-up phase of the system. In the initial decade or so the actual volume of money in the public pension scheme is very small. Since the older participants only have a few years of contributions with low total amounts, the annuities of the initial cohorts are very small. With a small overall volume, very small average individual accounts, and no knowledge of which customers select which companies, there is a general start-up risk that
companies would have to charge unduly high fees to safeguard against eventual losses. In contrast to this, the PPM monopoly creates the largest possible insurance group, enabling the insurer to hold down the cost of administration in the initial phase of the system.

Finally, we note that there is a need to reconsider the annuity products offered in the PPM system, even if the choices remain limited. First, consideration could be given to making a joint rather than a single annuity the default option for spouses. Second, the amount of money backing annuity accounts will be considerable with time. This suggests that at some point private companies could be contracted for money management or that the PPM could invest the money of retirees in a mix of private bond and equity index funds determined by the age structure of annuity beneficiaries. Third, instead of the PPM contracting money management, the participants could be allowed to move their money into annuities provided by the private insurance market. Fourth, the option to purchase a survivor benefit during the accumulation phase should be eliminated because the risk of “adverse” selection—which the scheme’s actuaries take into account when calculating the benefit—creates high costs for healthier subscribers. Subscribers are not conscious of the fact that a privately provided product may be a better choice.

Financial supervision. The Financial Supervisory Agency regulates and supervises the activities of all financial institutions in Sweden, including the PPM and the funds participating in the PPM system.

Do PPM Participants Know Enough to Make Informed Decisions?

Every year since 1999, the Swedish Social Insurance Agency has conducted a survey to find out what people know about and associate with the overall pension reform. Only about 10 percent of respondents believe they have the right knowledge to invest their PPM money judiciously. The results of a survey of PPM web site users conducted in 2004 may present a clearer view of Swedish public opinion, however. Among this more select group of participants, more than 50 percent responded that they felt at home with the technicalities of the PPM system.

The introduction of the FDC system has no doubt increased public financial market interest and financial literacy. Not surprisingly, companies have also emerged that offer to manage the accounts of subscribers. All in all, however, it is probably still safe to conclude that although more than half of the population already had private investments in equities or in funds holding equities prior to the introduction of the FDC system, many do not feel comfortable managing their own portfolios. The PPM works with this issue by providing information packages that help participants with regard to some of the fundamentals of investing. Without eliminating the right for participants to choose, in principle, there is little more that can be done than to provide easily accessible information.

The Swedish FDC system was implemented right before the technology stock bubble burst in 2001-2002. Over the first two years of operation PPM accounts dropped about 40 percent in value. For most, this loss had been recovered by 2005 and the future now appears brighter. In part as a result of this bleak beginning, there is considerable public awareness that the return on equity funds is volatile. Nevertheless, as has already been discussed, participants have invested and continue to invest heavily in equity funds. It is worth noting that world index
funds are relatively popular and that this is a choice in line with the advice that many economists would have given.

FDC accounts can be expected to earn a higher working career rate of return than NDC accounts. Hence, how participants invest their PPM money is important and this is well recognized. The interest of individuals in their account performance is also confirmed by the rapid increase since the outset in fund switches per year, which have now reached around 1.5 million switches for a covered working-age population of around 5 million persons. When the system was new, it was viewed as appropriate that the PPM pay for fund switches. However, the costs of the PPM are also paid by the participants, which means that those who do not switch funds subsidize those who do. The question of charging for switches is also one of the issues in the public discussion of the PPM.

Finally, because participants indicate that they need to know more to make more informed choices, the PPM identifies target groups and tailors information with the aim of improving worker and pensioner knowledge about the system and how to use it.

Coverage for the Typical Swedish Worker

As was noted in the introduction, around 90 percent of the employees in the Swedish labor market are also covered by contractual pension arrangements that top up the public pension. By 2006, all of these had converted to defined contribution. In discussing the coverage of the typical Swedish employee, then, it is important to include this top-up in the overall picture. The overall pension portfolio of Sweden’s employees consists then of 2 FDC components with a total contribution rate of 6 percent (2.5 percent from the mandated public scheme plus 3.5 percent from a contractual supplementary scheme), which “tops up” the NDC scheme (16 percent) bringing the typical contribution rate to an overall 22 percent.

Table 1 has been constructed to provide some idea of what the overall picture looks like for a typical Swedish worker. The calculations assume that the individual enters the workforce at age 22 and contributes to the public and contractual schemes every year until retirement, which in the examples occurs at age 65 or 67. The real rate of growth of average earnings is assumed to be 2 percent per annum, and the real rate of return on PPM and occupational accounts invested in the financial market is calculated for real rates of return of 2 percent and 5 percent. A rate of return of 2 percent is very conservative, and 5 percent is closer to what many analysts consider to be standard. Of course in practice not everyone will have uninterrupted careers from age 22 to 67, which means that the average replacement rate will be lower than those in the table. On the other hand, the real earnings profiles of many workers will flatten out in the 10 to 15 years prior to retirement, which means that the pension amount is likely to be larger as a percent of the final wage than in the table.
Table 1. Pension Replacement Rates for a Person Born in 1975 (Who Pays Contributions into the Public and Occupational Schemes Every Year from Age 22)

<table>
<thead>
<tr>
<th>Contribution rate</th>
<th>NDC</th>
<th>FDC (2.5%) + Occupational Supplement (3.5%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of return</td>
<td>2%*</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Age 65</td>
<td>39</td>
<td>15</td>
<td>54</td>
</tr>
<tr>
<td>Age 67</td>
<td>44</td>
<td>17</td>
<td>61</td>
</tr>
</tbody>
</table>

*Individual and aggregate wage growth of 2 percent.

Generally, Table 1 indicates that replacement rates are likely to be more than 50 percent for the almost full career worker. Also the table indicates that working to age 67 instead of age 65 is a relatively profitable choice. Finally, it can be noted that with a 5 percent average rate of financial return and everything else being equal, a 55 percent to 60 percent replacement rate is possible with around 35 years of coverage. The average worker will probably fall somewhere within the range of 55 percent to 80 percent replacement, given the assumptions behind the calculations in the table, depending on the number of years of coverage.

“Social Policy” Within the Pension Framework

Both the FDC and NDC schemes are individual account schemes. Workers pay contributions on earnings and the benefits they eventually receive are based solely on their own accounts and their own birth cohort’s life expectancy at the age at which they claim their benefit. There is no built-in redistribution in either of these systems. In this sense, the underlying social policy objective is to create a mandatory framework for providing adequate pensions for the entire working population—which is no short order.

Within this framework, politicians can go one step further and create non-contributory rights. This is what Sweden has done, as has already been outlined in the introduction. The Swedish framework includes non-contributory rights for parents in conjunction with childbirth, for time spent in higher education, and for time spent in military conscription. The most generous of these is the credit granted in conjunction with childbirth. Either spouse can claim this credit, which consists of a contribution based on whichever is higher of the worker’s own earnings prior to making the claim or the average covered worker’s earnings. It can be claimed for up to four years per child. Calculations show that the income of the parent—usually the mother—who is out of the labor force in conjunction with childbirth during some or all of this four-year period will normally not be penalized with a lower pension. In addition, a separate rule makes it possible to combine this credit with work during the four-year period.

These credits have to have a source of financing that is separate from the contributions on earnings that are credited to NDC and FDC accounts. In Sweden the source is general tax revenues from the national government. This money is transferred on a yearly basis as credits are...
accrued to the NDC scheme (where it is held in the reserve fund) and to the individual accounts in the FDC scheme. In addition, the national government budget covers contributions into the NDC and FDC schemes for periods of sickness, disability, and unemployment covered by national insurance.

The most important example of the social policy of the new Swedish pension system is, however, the guaranteed benefit. The guarantee functions as a “top-up” to the combined NDC and FDC benefits for those whose NDC and FDC benefits are below a certain threshold when they choose to retire at the age of 65 or later. The guarantee, which is also financed with general tax revenues, provides, thus, a top-up for persons with low pensions, and the entire benefit for persons with no earnings-related benefits. Generally, the guarantee is not sufficient to reach the official minimum standard-of-living of an old-age pensioner in Sweden. For this reason, if the pensioner has no other means, he or she can qualify for a quasi-means-tested housing allowance. The combination of a guarantee and a housing allowance is usually sufficient to bring low-income pensioners up to the official poverty level.

In sum, “social policy” is added into the NDC/FDC framework through three vehicles. The first is non-contributory rights, where money going into the contributory insurance system is transferred from general tax revenues. In addition, even periods without earnings that are covered by national sickness, unemployment, and disability insurance give rise to credits financed (largely) through national tax revenues. Finally, the system is anchored with a minimum benefit guarantee, which supplements the NDC/FDC benefit from age 65 up to a certain threshold level.

Flexible Retirement

Participants can claim one-quarter, half, three-quarters, or a full benefit from either their NDC or FDC account at the same or different times—or claim one without claiming any part of the other—while continuing to work full or part time or leaving work fully. Benefits can be claimed from the age of 61. If participants continue to work while collecting their pensions, contributions on earnings continue to be paid into the individual NDC and FDC accounts and the annuities will both be recalculated at a later date, including these new contributions. In principle, then workers can combine different percentages of benefits with different percentages of work from age 61.

A component of the reform was the rewriting of the tax laws. After the reform, pension income was given the same status as earned income for tax purposes. In the old system there was a special tax deduction for pensioners, which created a strong marginal effect that had to be considered by older workers in deciding whether to remain in or exit from the labor force. Persons qualifying for the guarantee under the reformed system still have a “marginal” effect to consider, since at low pension levels additional years of work may not yield more than what the guarantee already offers. However, most will have pension income above this threshold.

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11 The guarantee cannot be claimed prior to the age of 65.
12 The general rule for contributions is that about half are paid by employers and half by employees. The government pays for the entire contribution for those who receive disability benefits, but individuals pay the employee share for compensation for sickness and unemployment.
There is no age limit for claiming benefits. To date, however, collective bargaining agreements between unions and management have restricted the right of employees to maintain their jobs beyond a given age. Prior to the reform this age was 65. About 90 percent of Swedish employees are unionized, which means that in practice workers who wanted to continue past the age of 65 did not have the right to do so without the explicit consent of the employer. At the time of the reform politicians attempted to convince union leaders and management representatives to change these agreements, but with no success. Finally Parliament passed a measure against age discrimination up to the age of 67 to “override” the collective labor agreements that previously effectively set the retirement age at 65.

The de facto age of exit is not 65 in Sweden, if one takes an exit with a disability or a collectively bargained occupational early retirement benefit into account. This gives an average exit age of close to 63. Increasing the de facto exit age will require lowering disability take up and raising the normal age of retirement for occupations where an early exit—financed by the occupational schemes themselves—is the norm. The goal of the current policy is to encourage people who can to remain in the labor force until the age of 67. The new pension system provides a supportive institutional framework for this. One of the political challenges in the not so distant future will be to go beyond this “limit.”

Some Final Remarks

Summing up, the Swedish pension reform was successful in meeting its objectives. The pay-as-you-go commitment has become financially stable through the introduction of the NDC. And the combination of the NDC and FDC schemes has brought financial stability to the overall earnings-related component of the public pension system. As a consequence, the overall system has come much closer to inter- and intra-generational fairness in the sense that the contribution rates paid by successive generations are the same and that the value of a krona contributed in a given year by two workers will give the same pension right in the future to both participants, regardless of the shape of their earnings careers or the number of years of participation.

In addition, the transition from defined benefit to defined contribution pensions has not meant the downfall of social policy. Instead, it has led, first, to an increase in the financial transparency of the overall system. Second, non-earnings-related credits are funded in the same period in which they are granted. For example, money to pay for early retirement for the disabled, child care credits, etc., is transferred on a yearly basis to the NDC reserve fund and to individual accounts in the FDC scheme. Third, the system has become neutral in terms of influencing the work and retirement decisions of older workers, at least in the income range above the guaranteed level. Fourth, the FDC scheme creates saving on a yearly basis of about 1 percent of GDP, which, in the absence of offsetting effects, is new net saving. Finally, the overall system, including the occupational supplements that play a central role in Sweden, will yield good pensions in the future for the average employee, while at the same time there will continue to be a minimum public guarantee.
References


