Policy approaches to promote private and occupational old-age provision in Sweden

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Part I:

Background information

I.1 A brief history of Swedish pensions

The formal history of private insurance in Sweden dates back at least to 1904, when the first regulatory legislation for private insurance was passed in Parliament and a supervisory board was created. The second milestone in Swedish pension history was the passage of legislation in 1913 creating a universal public benefit from age 67. The year 1960 was the next landmark for public pensions, as this was the year in which the universal public earnings-related scheme, ATP (*Allmänna tilläggspension*) was introduced. From 1960, all residents of Sweden were covered by a flat-rate *folkpension* and, if they had earnings from work, by ATP.

With the introduction of ATP, all contractual benefit schemes existing at the time were converted into supplementary benefits. As a result of separate negotiations between the white and blue-collar trade union affiliations and the Confederation of Swedish Employers, from 1974 practically all private-sector employees were covered by either the supplementary contractual scheme for blue-collar workers or the supplementary contractual scheme for white-collar workers. Before 1960, civil servants and other professionals within public service were already covered by benefit schemes that supplemented the flat rate pension, providing the only public benefit at that time. These schemes were also converted into supplementary schemes to the public ATP scheme in 1960. In sum, since the mid-1970s, 80-90 % of employees in Sweden have been covered by one of the four major contractual schemes, all of which provide a supplement to the public scheme.

The most recent reform of the public system, introduced in steps in the 1990s, has also had repercussions for the contractual schemes for blue-collar workers and municipal and county council white-collar employees. These were converted from defined benefit (DB) to defined contribution (DC) schemes in the latter half of the 1990s, to align them better with the defined contribution nature of the new public schemes. In 1999 the reform of the public system became a fact when information explaining the new public pension system, together with individual statements, was sent out to everyone covered by the public scheme, residing both in Sweden and abroad.

The new public pension system is described in detail here to provide the setting needed to understand the role of private insurance and contractual pensions in Sweden. The first part of this paper also illustrates the coverage provided by the public scheme and contractual schemes together, and outlines briefly the role of the financing of health care and care for the elderly in determining the overall welfare of the older population. The point of departure is a description of the public pension system.

I. 2 The public pension system

In 1990, a government commission concluded that Sweden's pension system was financially unsustainable. This was shown by actuarial calculations presented by the National Social Insurance Board in 1982, 1987 and in the commission's own report presented to the government in 1990. With long-term rates of real economic growth considerably under 2 % these schemes would require such high contribution rates that it was unlikely that future workers would be willing and able to honour "commitments." With lasting real economic growth of 1 %, old age pension expenditures were estimated to require a contribution rate of 30 % by 2030 – much above the rate of 18.5 % set in the new system. (See the discussion in Palmer 2000 and 2001b.)

In addition, the system was unfair. ATP required 30 years of coverage for a full benefit. The size of the benefit was based on an average of a participant's best 15 earnings-years. Numerous studies had demonstrated that the 15/30 year rule transferred money from blue-collar workers and others with long and relatively flat earnings careers to persons with shorter earnings careers and steeper income profiles (Ståhlberg 1990). This is, in fact, a typical characteristic of schemes that base the computation of benefits on the best "x" years of some number of years that is less than lifetime earnings. This was why Swedish reformers focused on lifetime accounts in creating the new system.

Increasing longevity was one of the major factors exerting financial pressure on the system. With every new projection, demographers were adjusting life expectancy upwards. In fact, unisex life expectancy, based on actual outcomes, had been increasing at the rate of about one year for every 10 years that passed, from the time ATP was formulated in the 1950s. Put in another way, persons born in 1950, who would become pensioners in 2015, would live 5 years longer than persons 65 years old in 1965, i.e. persons who were among the first pensioners in the new ATP scheme after its implementation in 1960. (Note, however, that there was also a transitional rule that that for the first 20 cohorts covered required 20 years from 1960 to receive a full benefit, and with a reduction in relation to missing years out of 20 for persons without 20 years. So, in practice, initial ATP benefits were small.)

This trend increase in longevity is projected to continue, and perhaps become even sharper. To offset the effects of increasing longevity in the old system, the workforce would have to continue to grow and at a pace sufficient to finance all of these additional years. Sweden has had a birth rate of around 2 children per woman during most of the past century, which is just short of what is needed to reproduce the population, but far from enough to support an increase in longevity that forever increases the payment period from a fixed pension age, for example from age 65.

In a series of steps in the 1990s, Sweden converted its two-tier defined benefit scheme from 1960 into a combination of notional defined contribution (NDC) pay-as-you-go and financial defined contribution (FDC) schemes. (The NDC scheme is called *fördelningssystemet* and the FDC scheme is called p*remiereservsystemet* in Swedish.) Whereas the reform was driven by the threat of future large contribution rate increases and redistributional unfairness in the design of the old system, another goal was to provide a framework that would promote mandatory saving through the public pension system – but with privately managed assets. This is the genesis of the financial defined contribution tier of the new system. It also explains why considerable room has been left for contractual and private initiative.

The overall contribution rate for the NDC and FDC schemes together is 18.5 % of earnings, with a split of 16/2.5 between the notional and financial account schemes. Earnings include all taxable income from employment and self-employment, and are computed annually, and based on income reported to the national tax authority. The annuity in both schemes is based on lifetime account values and unisex life expectancy at retirement. Accounts in the NDC system earn an economic rate of return, whereas accounts in the FDC scheme earn a financial rate of return.

Accounts in the new public NDC and FDC schemes – getting started

New accounts were created in 1998 using information on earnings from existing accounts from 1960 for the NDC scheme and from 1995 for the financial account – FDC -scheme. The financial account scheme began with contributions being paid into an interim lump-sum account at the National Debt Office (Treasury) beginning with earnings from 1995.

The technical conversion of old-system accounts from 1960 into NDC accounts was completed in December 1998. At the same time, individual financial accounts were created for the contributions that had been paid since 1995. The first individual account statements were sent out in the spring of 1999, accompanied by an extensive mass media campaign. Since 1999, account statements are sent out to all participants in the spring of each year.

Owing to a delay in the development of IT support for fund choices and accounting, the debut for individual fund choices in the FDC scheme was postponed from the autumn of 1999 to the autumn of 2000.

Accounts in the new public schemes

Account values in the NDC and FDC schemes grow with new contributions based on earnings; transfers to the system from general revenues for non-contributory rights and rights gained in connection with insurance periods, the most important being periods of compensated sickness, unemployment and disability; a rate of return based on the growth rate of contributions per contributor in the NDC scheme and the return on the individual's fund(s) in the FDC scheme; and inheritance gains, which derive from the accounts of persons who die prior to the minimum retirement age of 61. Inheritance gains are distributed to the accounts of survivors in the same birth cohort as the deceased.

All employees and the self-employed are covered from age 16 in both account schemes, provided they have annual earnings exceeding the minimum earnings for filing an income tax return, presently 10 000 kronor per year or more. In principle, contributions are to be split equally between employee and employer contributions (reflecting a compromise between the liberal-conservative politicians, who favoured individual contributions, and the Social Democratic Party, which favoured employer contributions.) In practice, the conversion from employer to employee contributions is about 90 % finished.

Note, however, that the view usually expressed by economists is that the employee usually pays contributions anyway since contributions come at the expense of forfeited real wage increases. For Sweden, this has also been shown to be the case during a period when the employer contribution rate was increased dramatically in the mid-1970s (Palmer and Palme 1989). Of course, in the short run, employers may be the cost of an increase and profit from a decrease, since there is no mechanism that shifts costs (or gains) directly - and for all - from employers to employees when the employer contribution rate is changed.

The principle of universality in the public system, without any occupational exceptions, is seen as self-evident in Swedish politics. To the extent that there are occupational groups with special privileges regarding the normal age of retirement, these are dealt with within the relevant occupational schemes.

Benefits in the new public NDC and FDC schemes

A full or partial (25%, 50%, 75%) benefit can be claimed from the NDC and/or FDC schemes separately or together at any age from age 61. There is no upper age limit. A benefit can be combined with continued work. All pension benefits – from public, contractual and individual private schemes – are taxed as earnings from 2003, when an extra deduction for pensioners is abolished. The goal has been to put benefits and earnings on an equal tax status.

Contributions paid on earnings from work always yield enhanced account values, even if a benefit is combined with continued work. A person who claims a partial benefit and/or combines a benefit with work will have the benefit recalculated, based on new account values, upon permanent retirement.

The annuity is calculated as: Annuity = Account value / unisexual life expectancy from retirement. In the NDC a real annual return of 1.6% during retirement is also factored into the calculation of the annuity

In the FDC scheme the participant can choose either a fixed or variable life annuity. The fixed annuity is obtained by transferring the participant's financial account to the PPM (*Premiumpensions myndighet*), the public agency responsible for administering the financial account scheme within the public system. The PPM calculates an annuity using traditional actuarial standards. If the PPM is successful in determining the life expectancy factor and if its investment of participant assets yields a good return, there could also be a bonus given to participants. Participants can choose to leave their money in their personal financial market accounts, in which case the annuity will be based on the participant's current personal account balance, and will be recalculated annually. This gives a variable rate annuity. Note also that a joint life annuity is also offered, although with a reduction factor of 14 % (for actuarial reasons).

Within the FDC scheme, a survivor benefit can also be subscribed to during working years. There is no other survivor benefit offered within the public system, although there is a "transition" benefit that is financed with general tax revenues and provides additional income support during a year following the death of a spouse. (For surviving spouses with minor children under 12 years of age, there is a yearly survivor supplement.)

In the NDC scheme the permanent life expectancy factor is set for a birth cohort in the year in which its members turn 65, even for individuals who claim a benefit before or after this age. The annuity in the NDC system is indexed to the CPI. However, a yearly adjustment (up or down) is made in the indexation for trend divergence of real per capita contribution growth from the growth norm of 1.6 % used in calculating the original annuity value. Even benefits of pensioners born 1937 and earlier are indexed from 2002 with inflation plus the difference between 1.6 % and the actual real growth outcome.

Although early retirement is possible for persons born in 1938 in 2001, most persons born in 1938 will claim benefits in 2003 at the age of 65, which has been a “normal” retirement age for over two and a half decades. (The normal retirement age was 67 until July 1976.)

Why is 65 a “normal” retirement age? This is in part owing to the conditions of contractual retirement benefit arrangements that presently cover about 80 per cent of the workforce, and which define the normal retirement age as 65. In fact, since the mid-1970s, there has been a contractual “obligation“ to retire at age 65. This contractual agreement was criticised as being inconsistent with the idea of creating a flexible retirement age upward in years during the formulation of the reform in the 1990s. The labour market partners were unwilling to change the contractual agreement, however, and as a result the government had no other option than to pass a law that gives people the right to work until the age of 67. To work longer employees will need to have the agreement of the employer, or to leave their normal place of employment and take on the status of self-employed.

I.3 The guarantee benefit in the new public system

There is a guarantee benefit for the “lifetime poor, ” available from age 65. The qualification age of 65 reflects the idea of a “normal” retirement age. This probably could have been set at an even higher age in Sweden, where life expectancy is high and increasing due to substantial improvements in health and work environments, especially in industry.

Persons who cannot work for medical reasons will have disability benefits – including those born with or who have acquired in early life an incapacitating disability – so the guarantee in the old-age system will also apply even to disability recipients when their benefits are converted to old age benefits, also at age 65. The guarantee benefit is an inflation-indexed supplement (with a specified maximum) to the total benefit provided by the NDC and FDC earnings-related schemes, and is financed with general revenues.

Together with a means-tested housing allowance, the guarantee will usually be sufficient to bring a low-income pensioner up to the subsistence norm established by the National Welfare Board. Since it is prorated with regard to years of residence, with 40 years needed for a full amount, it is possible that immigrants who have arrived in Sweden when they were older may nevertheless fall under the subsistence norm and be in need of social assistance, financed by local taxes and provided by municipalities.

The initial level of the guarantee was set at a high enough gross value to align it after-tax with the commensurate benefit in the old system. Since the level of the guarantee is determined by Parliament, whether or not it increases in the future is a social policy issue. The advantage of separating the guarantee from the NDC and FDC insurance schemes is that politicians are given free hands to change it when they desire, without affecting the insurance system itself.

I.4 Earnings-related benefits in the new public and contractual schemes

Table 1 below provides an illustration of how the new NDC system works and Table 2 illustrates with an example replacement rates from the public (NDC and FDC) schemes together with a representative contractual scheme. The individual in the example begins working at age 22. Her or his earnings increase at the same rate as the rate of growth in per capita earnings in the aggregate economy, and this is also the rate of return on NDC account values in the example. The annuity at retirement is computed for a person with the present estimate of life expectancy for a person born in 1975. Given this life expectancy estimate, the remaining variable is the rate of return on the individual's financial accounts in the public and contractual schemes. Three financial rates of return are illustrated in the example in Table 2. One of the rates is set equal to the rate of return in the NDC scheme. If the rates of return in the NDC and financial schemes are the same, then this is the same thing as simply having an NDC scheme, with a contribution rate of (16 + 2.5) 18.5 %.

Table 1 is designed with this assumption, and, thus, indicates the scale of the public scheme, if the economic and financial rates of return are the same. The tables are from Palmer (2000) and Palmer (2001b). These references also explain the characteristics and logic of the new system in greater detail.

Postponing a benefit claim in the NDC and FDC schemes is advantages to the older worker for three reasons: The first is that additional work and contributions create a higher account value, and pension when it is eventually claimed. The second is that because account values grow with wage indexation in the NDC scheme and market returns on FDC, the relatively large account values of older workers yield a large increment simply through a rate-of-return effect. The third is that life expectancy declines with increasing age, and this means the yearly benefit for the remainder of a participant's life will be higher. For the older worker, the latter two factors can be the most important. One of the advantages that can be claimed for NDC and FDC schemes is that workers can combine work (full or part-time) with a partial or full benefit from either or both of the social insurance schemes.

Table 1. NDC. An example with an individual who begins work at 22 and works every year until he/she decides to retire fully at sometime between age 61 and 70. Contribution rate on earnings=18.5 %. Values in US dollars.

Age	**Earnings.** *Individual growth of 2 % per annum*	**Capital index.** *2 % per annum*	**Capital balance.** *End of year*	**Unisex life expectancy.** *Swede born 1975*	**Annuity.** *Based solely on life expectancy*	**Replacement rate.** *% of earnings last year*	**Unisex life expectancy and 1.6% growth.** *Swede born 1975*	**Annuity.** *Based on life expectancy and a real return of 1.6%*	**Replacement rate.** *% of earnings last year*
22	27061	1.000	5006						
23	27602	1.020	10213						
24	28154	1.040	15626						
::	::	::	::						
::	::	::	::						
::	::	::	::						
::	::	::	::						
60	57432	2.122	414368						
61	58580	2.165	433493	24.24	17096	0.30	19.69	21043	0.37
62	59752	2.208	453217	23.41	18516	0.32	19.14	22654	0.39
63	60947	2.252	473557	22.59	20061	0.34	18.58	24397	0.41
64	62166	2.297	494528	21.78	21746	0.36	18.02	26287	0.43
65	63409	2.343	516150	20.97	23588	0.38	17.45	28342	0.46
66	64677	2.390	538438	20.16	25603	0.40	16.88	30580	0.48
67	65971	2.438	561411	19.36	27814	0.43	16.30	33024	0.51
68	67290	2.487	585088	18.55	30262	0.46	15.72	35716	0.54
69	68636	2.536	609488	17.76	32944	0.49	15.14	38654	0.57
70	70009	2.587	634629	16.96	35927	0.52	14.54	41906	0.61

The overall outcome for the individual depends, not surprisingly, on the financial rate of return assumed for the public and occupational financial account schemes. Table 2 provides examples with rates of return of 2 %, 5 % and 8 %. A rate of 2 % coincides with the assumed rate of return in the NDC calculations and is close to the real rate of economic growth in the past four decades, as well as the return on government bonds. A market rate of return of 5 % represents a portfolio consisting of a 50-50 average of bonds and equities, and a rate of 8 % depicts an equity portfolio, with an average historic return for this investment form from the past half century.

Table 2. Replacement Rates. Annuity as a per cent of last earnings.

Age	PAYG. Contribution rate of 16 %	Public Second Pillar (2.5%) + Group Occupational (3.5%) Return of : 2%	5%	8%	Total. Public PAYG and Second Pillar plus Group Occupational Return of: 2%	5%	8%
61	0.32	0.12	0.23	0.47	0.44	0.55	0.79
62	0.33	0.13	0.25	0.52	0.46	0.58	0.85
63	0.35	0.14	0.27	0.57	0.49	0.62	0.92
64	0.37	0.15	0.29	0.63	0.52	0.66	1.00
65	0.39	0.15	0.31	0.69	0.54	0.70	1.11
66	0.42	0.16	0.33	0.76	0.58	0.75	1.18
67	0.44	0.17	0.36	0.83	0.61	0.80	1.27
68	0.47	0.18	0.39	0.92	0.65	0.86	1.39
69	0.50	0.19	0.42	1.01	0.69	0.92	1.51
70	0.53	0.20	0.45	1.12	0.73	0.98	1.65

Note. The individual´s earnings are assumed to grow at a real rate of 2 % per year throughout the earnings career. The rate of growth used for indexation of capital in the PAYG system is 2 %.The pay-as-you-go, second-pillar and occupational annuities are all based on unisex life expectancy and a real rate of return on capital from retirement of 1.6 %.

In practice, both economic growth and financial returns have been volatile, and, as history has shown us, in any given period of 5-10 years the results can vary greatly. For this reason, it is advantageous for participants that they do not have to claim their NDC and FDC annuities at the same time – or in full. Even with a rate of return of “only” 2 %, the overall replacement rates are relatively high. Since the individual in the example is born in (has a life expectancy of a person born) 1975, this individual will be 65 years old in 2040, when it is likely that a “normal” retirement age over 65 is not implausible, given the pace of advancements in living habits, work environments and health care.

I.5 Public and contractual benefits and the disposable income of old-age pensioners in the 1990s

The Swedish system is designed so as to provide adequate income support in old age for both the average worker and for persons who for one reason or another have low or no lifetime earnings. The former is achieved by applying contribution rates that are relatively high – but on earnings under a relatively low ceiling – the system covers earnings up to around 1.5 times the average full-time wage. In addition, the guarantee in the new system – and its counterpart in the old system – together with a housing allowance to which persons with low economic means would normally be entitled - guarantees that the target of providing a satisfactory minimum standard is achieved. To date, Sweden, together with the Netherlands and Canada, is among the most successful countries in the OECD in reducing poverty, according to a recent study of OECD countries (Forester 2000). This study shows that only around 3 % of the population over 65 in Sweden have less than half the median income (adjusted for family composition) for the country as a whole.

Table 3 shows that, once family composition is taken into consideration, for the *median* person in Sweden the distribution of income is very compact. The threshold that is considered acceptable in Sweden is presently around 75 000 kronor. The median old-age pensioner age 65-74 is well over this norm, and persons 75 and older are slightly over the norm. The elderly population of pensioners consists of relatively many women, since they outlive men by 5 years, on average, and are usually 2 years younger than their spouse when they marry. Among pensioners in the 1980s and 1990s were women born around the turn of the century who were highly reliant on survivor benefits from spouses in old age, since their own labour market participation was low.

With the passage of time, increasingly more women have claimed and will continue to claim old-age pensions based on increasingly longer careers outside the home. With persons born from 1945 (who will be claiming pensions around 2010) and later, contribution records indicate that there will be relatively little or no gender difference between men and women due to covered years. However, since women usually work in lower paying occupations – and more often than men work part-time - there is likely still to be a noticeable gender difference in the average benefit even in 2010 and later.

Table 3. Equalised Disposable Income. Median value in thousands of kronor.

Age	1996	1997	1998	1999
18-24	70.6	75.5	75.7	78.8
25-34	91.3	93.4	95.7	102.3
35-44	88.3	89.5	89.9	94.3
45-54	106.7	107.5	111.1	112.3
55-64	115.9	121.4	123.4	126.9
65-74	93.3	93.7	94.2	97.7
75-	78.6	78.1	79.7	82.4
All ages	91.9	93.7	94.9	99.7

Source. Income Distribution Survey in 1999. Statistics Sweden

Table 4 illustrates the relative importance of public pensions, other pensions (contractual and private insurance) and earnings in determining the total income of the average male and female pensioner of different ages in the 1990s. The relatively stronger importance of non-public benefits for men can probably be explained mainly by the fact that the earnings of men are more frequently above the ceiling on covered earnings in the public system, and that this segment of earnings is covered by the occupational supplement. from the supplementary contractual schemes. A second consideration is that women born before 1945 have different career profiles than younger women and to a greater extent may have less than full rights in the contractual schemes. This explains why women age 73-79 and 80-86 have progressively smaller non-public benefit components.

In addition to income from pensions and earnings, many also own their own homes. Overall in Sweden, about 40 % of all households own their own home, and another 15 % own apartments, while the remaining 45 % live in rentals. On average, in 1997 individuals 65-74 years old owned a home with a market value of 330 000 kronor, and about 600 000 kronor per household. Persons 65-74 had homes valued at 190 000 kronor per person and 420 000 kronor per household (Statistics Sweden 2000).

Table 4. Gross Income of Persons Age 66-86.
Components as a per cent of total gross income.*

	Age 66-72	Age 73-79	Age 80-86
Men			
Gross income	100.0	100.0	100.0
All pension income	92.2	97.3	98.7
Public pension	75.2	80.6	81.8
Other pensions	17.0	16.7	16.9
Earnings	7.8	2.7	1.3
Women			
Gross income	100.0	100.0	100.0
All pension income	95.7	99.1	99.7
Public pension	86.9	94.6	97.7
Other pensions	8.8	4.5	2.0
Earnings	4.3	0.9	0.3

*Based on data from 1991.
Source. *Worse for me – better for us*. Ministry of Health and Welfare. Swedish Government Publications. Ds 1999:5.

I.6 Individual outlays for health and home care

Expenses for health care and medicine are covered largely by the public sector. There is a patient fee for health care services that varies between regions, and, for example, in the year 2001 is 120 kronor per visit in Stockholm. Once the patient has come up to 900 kronor, regardless of geographic residence, all remaining care is free of charge for a year. Similarly, although prescription medicine is covered by social insurance, people may be required to pay fees, but only up to a maximum total of 1800 kronor per year. Thereafter all prescription medicine is free for the coming year. The maximum amount a person could pay out of pocket per year for medical care and medicine is, thus, 2 700 kronor – or a little over 3 % of median income for a retired person - and with recurring expenses at the maximum level the actual amount paid amount per year would be half of the maximum (a little over 1.5 % of median income). Dental care is not well covered by social insurance. The patient may have to pay her or himself around 60 % of the costs of an expensive dental work, and just about all of the cost of around 500-800 kronor for a normal visit to the dentist. One visit per year without major dental work would cost about 1 % of median income.

The local community is responsible for providing other necessary care for the elderly, but will also charge a fee to cover part of the services. According to a recent study (National Welfare Board 2000), in the latter half of the 1990s a person who required home care services 35 hours per month would have between 3 190 (with a high rent) and 3 670 kronor per month left (with a relatively low rent) after paying rent and fees for home care services. This can be compared with the standard of 3 700 per month set at by the Social Welfare Board as the targeted amount. In other words, for a person in need of much home help, the local community takes in fees up to (or a little over) than the amount they should, if the individual is to be left with what the Social Welfare Board judges people need to live on.

I.7 Pensions and saving

Households have a strong motive not to save on their own if mandatory and quasi-mandatory contractual schemes provide a substitute for private saving. If the pension system is a pay-as-you-go system, then there is no offset in the form of mandatory pension savings either. In the late 1970s and early 1980s, there were a number of studies in Sweden that addressed the question of whether private and national saving had been affected negatively by the introduction of the ATP scheme in 1960. One study attempts to estimate the effect of contractual schemes – through the early 1980s – on personal saving.

Markowski and Palmer (1979) found that the saving rate of households during 1960-1976 was 2.3 percentage points lower than it would have been without ATP. These results were confirmed in Palmer (1981) for longer periods. Using a simulation model, Ståhlberg (1983) found that the effect of introducing ATP on personal saving was to decrease the saving rate of households by 1.3-2.3 %, which was in line with the estimates of Palmer and Markowski, and Palmer. Berg (1983) found that ATP and contractual benefits together had reduced personal saving by about 4 % of GDP or about 8 % of personal disposable income – of which about half was attributable to ATP, and the other half to the contractual schemes. Berg's estimates may be the most reliable as the wealth variable used in his econometric analysis was more sophisticated than those used in previous studies. In sum, in the period 1960-80, ATP may have lowered the personal saving ratio by 2-4 percentage points according to several studies, and contractual benefits may have reduced personal saving by another approximate 4 percentage points, according to Berg's results. Unfortunately, there is no other study available to corroborate Berg's results for contractual schemes, which seem high.

The new schemes introduced in Sweden for blue-collar and municipal and county council workers are defined contribution, financial account schemes. Previously, the scheme for municipal and county council workers was pay-as-you-go, and the scheme for blue-collar workers set off funds for participants only at retirement. By definition, these financial account schemes will add to savings, as long as there is no offset through a reduction in other saving.

With the changes made in the 1990s in the public and contractual schemes, there is every reason to believe that pension saving will increase, by definition. In the public scheme, the FDC scheme will grow as the funds in the NDC scheme are drawn upon to pay benefits of the large cohorts from the 1990s. In other words, there will be more saving than there would have been with a pure pay-as-you-go arrangement. On the other hand, demographic dissaving is likely to occur from around 2010 as large birth cohorts born around the mid-1940s retire. These cohorts will draw down national saving by using the reserves of the public NDC pay-as-you-scheme.

Part II:

Fully funded private, hybrid and occupational pension schemes

II.1 The general framework

Background

Since 1917 private-sector employers have been able to finance pension plans through a private insurance company established specifically for this purpose, SPP (*Sveriges Privatanställdas Pensionskassa*). Initially, it was only possible to purchase one type of plan. From 1925, however, the insurance could be adapted to the needs of the client company. By 1957, when the first major post-World-War-II reform of the public system was being formulated, private employees covered by employer-financed benefits accounted for 8 to 9 per cent of the workforce, and those covered were typically white-collar workers (Markowski and Palmer 1979). With the introduction of the new public scheme in 1960, existing employer-financed private schemes for white-collar workers, but also for civil servants and municipal workers, were converted into quasi-mandatory schemes that were designed to supplement the public system. It took until 1974, however, for occupational schemes to come for blue-collar workers.

In 1973, an agreement was reached between the central confederation of blue-collar workers, LO (*Landsorganisationen*) and the employers confederation, SAF (*Svenska arbetsgivarföreningen*) to provide a supplement to the public system for blue-collar workers. In 1974 this group consisted of about 33 per cent of the workforce, and, in fact, this is about the percentage of the workforce covered by this agreement today, too.

Also in 1974, a new agreement was concluded between SAF and the unions representing private-sector, white-collar employees in industry and commerce. This agreement was implemented in 1977, and by this time just about all white-collar employees in the private sector – about 22 per cent of the total workforce in 1977 - were covered by this supplementary scheme for salaried employees in industry and commerce, called ITP (*Industrins och handelns tilläggspension*). In sum, by the mid-1970s practically all private-sector employees had a supplementary benefit in old age covered by one of the two major schemes for these groups, and this is still the situation.

Public sector employees were already largely covered by occupational schemes in 1960, when the public earnings-related ATP scheme was introduced, and these, like the white-collar schemes, were converted in 1960 to provide a supplement to the public earnings-related scheme, ATP. There are separate occupational schemes for state employees (civil servants) and white-collar employees of municipal and county-council governments. The latter group encompasses employees working in health care services, day care of children, services for the elderly and handicapped, primary and secondary education, and police and firemen. In addition to civil servants, the scheme for state employees covers university professional staff. Employees of the public sector working in occupations normally covered by the blue-collar scheme are also covered by this scheme even though they work in the public sector.

Table 5. Major groups covered by collective agreements in Sweden

	Per cent of workforce in 2000
Private white-collar employees	16 %
Private blue-collar employees	35 %
Civil servants	6 %
Municipal and county council employees	20 %
Insurance and bank employees, architects, journalists	3 %

All of the occupational schemes are quasi-mandatory. In other words, individuals working in the occupations covered by these contractual agreements are covered, even if they are not members of the union that is a part in the agreement, and there is no possibility to opt out. The other side of the coin is that employers are required to pay contributions for all employees in a group normally covered by one of the relevant schemes, even if the individual is not affiliated to the union whose members are covered by the collective agreement.

Rights accumulated in one of these schemes are portable to other schemes. Generally speaking, before the reform of the public system, the contractual schemes required 30 years of coverage for a full benefit, which was in line with the rules of the old public system. The thirty-year rule meant that one could compute a right based on “x” of thirty years and carry this annuitized right into a new system. However, if the salary on which the right was computed was the final salary (or average of some years prior to the change) then this was disadvantages, compared with staying in the same scheme and waiting for a usually much higher final salary. As will be discussed in greater depth below, coverage in a contractual scheme required 30 years from age 28. As the occupational schemes followed the reform of the public system and converted to defined contributions, they have also moved in the direction of covering lifetime earnings. In principle, the advantage of a life earnings, financial account scheme is that earnings in earlier years accrue interest throughout one´s career. This is an advantage in switching schemes compared to the sort of DB computation just described.

Over 75 per cent of the workforce is covered by one of the four major collective agreements (Table 5). In addition to the four major contractual groups, there are separate supplementary schemes for insurance and banking employees, co-op employees, architects and journalists (which together are about 2 –3 % of the workforce).

The general framework for contractual and private insurance benefits in Sweden

The public schemes are the main pension schemes in Sweden, and have remained so after the reform of the public pension system in the 1990s. In 1960, when the earnings-related ATP scheme was introduced, the distance between an average wage and the ceiling was great. By the mid-1990s, the ceiling on earnings covered in the public system had become relatively low (about 1.5 times the average wage of a full-time worker), as the ceiling had been only inflation-indexed from 1960. This has left considerable room for the development of both contractual and individual initiative to provide income replacement for higher levels of earnings. Prior to the reform of the 1990s, contractual schemes provided an important part of the overall framework, and this role was maintained after the reform.

The role of contractual schemes has been threefold. First, they provide a small supplement to all covered participants within the occupational group. Second, they provide early retirement benefits for a very limited number of specific occupations where the normal retirement age is considered to be too high. Third, they provide coverage for earnings above the ceiling in the public system. One of the factors limiting the scope of the coverage provided by the public system in the reform of the 1990s was the goal to leave room for contractual and individual initiative to develop further to provide both supplementary coverage for the average worker and the main coverage for persons with earnings above the ceiling in the public system.

With this in mind, the contribution rate on earnings to the public schemes was set at 18.5 %, and the ceiling was kept at the relatively low level it had reached by the mid-1990s. The new public NDC and FDC pension schemes together were to give about the same income replacement as the they did before the reform, for a person with a little over forty years of contributions, and retiring at age 65 for present retiring cohorts, but with careers longer than 40 years for younger birth cohorts with longer life expectancy. The future commitments of the new public scheme are well defined after the reform. They are the account values based on contributions deriving from a contribution rate of 18.5 % on earnings below the ceiling, and the rates of returns of accounts.

By offering comprehensive support for the “average worker,” the Swedish public scheme has focused on reaching a good standard of living for older, retired persons, while earnings replacement for persons with higher earnings has been left to contractual and individual initiative. The contractual schemes are of relatively marginal overall importance in determining the living standard of an average pensioner, as the overview of pensioners’ income in Part I shows. During the 1990s, together with private insurance they accounted for around 15 % of the gross income of the median old-age male pensioner, and somewhat less for female pensioners. On the other hand, contractual schemes are central for persons with earnings above the ceiling in the public system.

Finally, private insurance has had only marginal importance for those birth cohorts who were pensioners in the 1990s, compared to those who will become pensioners in the future. As will be shown in detail in a separate section below, only a small per cent of the work force had private insurance until the mid-1980s. Interest in private insurance has increased considerably in the 1990s, however, as will be discussed in a separate section below.

It is noteworthy that the value of assets of contractual and private traditional life and unit-link insurance companies corresponds to about 85 % of GDP, which puts Sweden close to the top in Europe, behind such countries as the Netherlands, Switzerland and the UK, but far ahead of, for example, Austria, France, Germany, Italy and Spain.

The financial market has developed in leaps and bounds in the 1990s, accommodating the demand for new products. Although there are many traditional life insurance companies in Sweden, as will be discussed in greater depth in a separate section below, both insurance companies and other financial institutions, mainly banks, can offer tax deductible individual retirement accounts, which compete with traditional and unit-link insurance for savings for old age. In practice, then, the accumulation period of saving for old age has no institutional barrier. What distinguishes insurance products from "saving withdrawals" is that insurance companies can offer various insurance products that combine insurance for the participant and the survivor. In addition, alliances have developed between banks and insurance companies, placing both banking and insurance under the umbrella of a single concern.

Regulation of the financial market

Regulation of banking, insurance and the securities market are all under one roof – the Financial Supervisory Authority (*Finansinspektionen*), which is a public agency. The integration of all these activities into one supervisory agency is logical, given the development of the financial markets during the past two decades. Planning and execution of the supervisory function for various financial institutions is performed jointly for banking, insurance and other areas (Symreng 2001).

In the year 2000 there were 482 insurance companies registered and operating in Sweden, of which 26 offered traditional life insurance. In recent years, on average, the Financial Supervisory Authority has performed an on-location inspection of about 90 companies per year. Quarterly and annual reports, special questionnaires, on-location inspection and market and specific company analysis provide the basis for inspection. Generally, the focus of inspection is on solvency. Quarterly information is processed to examine information flows on premium payments, insurance payments, portfolio development, sensitivity to market risks and the development of life companies collective consolidation (Symreng 1999).

On-location inspections focus on the quality of internal controls and customer information, but also company-specific questions or problems identified through company-specific analysis. The Financial Supervisory Authority grants the right to establish a company in Sweden, but the government makes decisions on questions of principle. From 1999 foreign-based companies can operate in Sweden without establishing a registered company, by registering with the Financial Supervisory Authority.

A major focus of the Financial Supervisory Authority in recent years has been on the customer information provided by life insurance companies.

Presently, all companies provide satisfactory annual information to customers and written information upon request (Symreng 1999).

Regulations in the accumulation phase

There are regulations for companies providing life and pension insurance regarding the portfolio composition of the reserves that cover current insurance commitments. For these reserves companies are allowed to have up to 25 % of a portfolio in equities, an additional 25 % in real estate, 10 % in lending with other security than real estate, and a maximum of 3 % in cash. The remainder of the portfolio is to be held in bonds, with a possible maximum portfolio bond-composition of 100%. Companies are free to invest all reserves in excess of these technical reserves without regulation, although following prudent investment policy. Towards the end of the 1990s, around 60 % of reserves fell into the latter category, and, as a result, the proportion of portfolios held in equities was much higher than the 25 % maximum allowed for technical reserves. The development of world stock markets in 2000-2001 affected, of course, the size of overall portfolios and with this the relative proportion of assets invested freely. Generally speaking, it is not possible for insurance funds to use derivatives.

For an investment fund to operate in Sweden, it must adhere to EU rules. There are no additional rules for operation in Sweden, not even for investment funds registered with the PPM in the public FDC scheme.

Liquidation of a company presents a special problem, however, and according to EU legislation, the home country is responsible for determining the procedure to be applied in these cases. In the case of liquidation, participants have the right to all technical reserves – corresponding at least to their premium payments, and the right to other reserves after deduction for other debts, for example for wages and salaries of employees. A minimum solvency criterion has been established by the European Union, which from 2002 is 3 million Euro for life insurance companies.

The introduction of unit-link insurance in Sweden has meant that participants can choose freely among a large number of funds. These funds can be owned by either foreign or domestic companies. They can also have participants from unit-link insurance, which is a part of both the private insurance market, the contractual schemes (see below for more detail) and the FDC scheme that is a part of the public pension system. Note that the public FDC scheme is designed so that the PPM, i.e. the central agency managing the scheme, is the *sole customer* of any of the around 500 investment funds now registered to operate within the PPM system. Sweden has developed the so-called clearinghouse model for the PPM's operations, which means that the PPM accumulates all buy and sell orders on each transaction day and executes one single order vis á vis a single fund at the end of the transaction day. The investment fund managers have no knowledge of or contact with the individual fund-share holders.

Financing and taxation during the accumulation phase

All the contractual schemes are financed by employer contributions. Payments into contractual schemes are tax deductible for employers, but benefits once they are paid out become taxable income for the recipients. Private insurance premium costs are deductible from individual income up to a specified limit (see the separate section on private insurance), and private insurance benefits are taxed once they are claimed. Contractual contributions paid by employers are deductible and the benefits are taxed as normal income once they are paid out.

Funds deriving from contractual and life insurance premiums based on tax-deductible contributions are taxed annually by computing a rate of return on total capital reserves, calculated using the average rate on government borrowing the preceding year. The tax rate applied to this result is 15 %. Non-tax deductible reserves are taxed with a tax rate of 9/30 %. Note also that funds invested through the PPM in the mandatory public FDC scheme are not taxed. Since funds are taxed when they are withdrawn, the taxation of funds is a form of double taxation, and for this reason has been criticised heavily for some time now, although, to date, to no avail.

Regulations in the withdrawal phase

Individual annuities in private insurance can be claimed from age 55, with a minimum phased withdrawal of five years. Lump sum payments are not allowed. Individual annuities can be combined with survivor products – for example life insurance can work both as a survivor benefit and an old-age pension benefit for the subscriber. The benefit and annuity products available through contractual insurance are defined by the occupational schemes. Some of these cover the needs of a small number of occupational groups to leave their normal occupations before what is presently viewed as the normal pension age of 65 for defined benefit schemes.

Private insurance products can be defined benefit or defined contribution products. In both cases, the amount of a benefit is determined on actuarial grounds, so the "penalty" for claiming a benefit earlier rather than later is that life expectancy from the time the benefit is claimed is factored into the computation of the annuity. As will be discussed in depth below, two of the four contractual schemes are defined contribution schemes (the schemes for blue-collar and municipal and county council workers) and one is a hybrid (the scheme for white-collar workers in industry and commerce), with a defined benefit scheme supplemented by a defined contribution scheme. In principle, with defined contribution, the longer one postpones taking a benefit, the higher the annual benefit will be once it is claimed – since the lifelong accumulation of capital will be large and the contribution provided account growth will be large. In addition, postponement means that the life expectancy factor used in computing the annuity decreases. In accordance with a ruling of the European Court, unisex life expectancy at the age at which the annuity is claimed is used in computing annuities in the contractual and public schemes.

Insurance companies cannot require information about genetic or family histories for insurance that yields a lump-sum amount (as in the case of death) under 15 base amounts – about 565 000 kronor in 2001 - or a life annuity of one base amount or less (37 700 kronor in 2001). Private insurance products take the separate longevity risks of men and women into account in computing annuity products. Normal benefits under the contractual schemes covering disability and death supplements to the public schemes fall under this category, and are not subject to these genetic or family history inquiries. This means that to date these more specific criteria are applied only in a small number of judgements.

On the other hand, there is an awareness that adverse selection can be a problem that comes with the right to free subscription to insurance. Adverse selection can be seen as an argument supporting the extreme alternatives of universal coverage – or exclusively individual-based coverage, rather than free choice of coverage within contractual schemes. Free choice is probably best left to the market, where considerations such current health and age can be factored into the availability and price of a product, especially when adverse selection can easily occur.

Taxation of benefits

One of the goals of the reform of the public system in the 1990s was to put pension income and earnings on an equal status. This makes it possible for people to work and take a pension from either the public schemes and/or the contractual schemes, with neutral tax treatment of income regardless of its source. The pre-reform benefit-tax system had an extra exemption for pensioners, but this is abolished from 2003. (Since this also applies to persons who already have pensions, the amount of their gross pensions will be increased to cover the effect on benefits of abolishing the deduction. The fact that *all* pension benefits are taxed as earnings was also taken into consideration in designing the level of the guarantee in the new system.)

In the pension reform discussion of the 1990s, the Working Group on Pension Reform originally proposed that occupational benefits should be taken into consideration in the determination of the guarantee amount in the public system. After considerable debate, however, it was decided that this would not be the case. So, the guarantee in the public scheme is only reduced as the public-scheme benefits increase. On the other hand, in determining the need for social assistance in Sweden, all sources of income and assets are taken into consideration. Social assistance is the safety net of last resort, when all assets have been exhausted and the total of all income sources is still not sufficient to provide a minimum standard.

II.2 Schemes established through collective agreements

The supplementary pension for salaried employees in industry and commerce (ITP and ITPK) – an overview

The supplementary scheme for salaried employees in industry and commerce, i.e. “white-collar” workers in the private sector, provides old-age, disability and survivor benefits. The scheme covers all salaried employees in accordance with a collective agreement between the Confederation of Employers, SAF, and the affiliation of unions covered, called *Privattjänstemannekartellen* (PTK). In practice this means that employees from seniority level 2-8 are covered, and that managing directors in stock companies are exempted from participation, if this is their choice.

Self-employed persons and the spouse of a person working in a company are not required to affiliate to the ITP scheme. Self-employed persons are defined as persons working for themselves, persons who are one or more of a number of joint owners of a legal company, the general partner in a limited partnership and persons in a limited company, who alone or with direct family members own at least one-third of the shares in the company.

Employers can choose between paying contributions for the ITP scheme to the insurance company Alecta (previously called SPP) and keeping the debt within the company. Frequently, larger companies choose to keep their funds within the company. An option available under the alternative of retaining the debt in the company is to move part of this debt over to a trust for portfolio management.

If companies choose to retain their pension debt, they must reinsure it with a company set up to perform this function – *försäkringsbolaget pensionsgaranti* (FPG). When the time comes for a participant to draw on her or his pension, FPG assures that the transfer of money is made to Alecta, which administers the payment of all benefits under the ITP scheme.

Participants are covered in the ITP scheme by disability and survivor benefits from one month after their 18th birthday. Coverage for an old-age benefit begins with a participant's 28th birthday. The basic old-age scheme is a defined benefit (DB) scheme that requires 360 months of participation to qualify for a full benefit. Persons with a salary in excess of 10 "base amounts," i.e. 369 000 kronor in 2001, can choose to be in a DC scheme, instead of the DB scheme. This can be either a traditional insurance or unit-link scheme, depending on the participant's choice. The annuity at retirement in the DC scheme is determined by the financial rate of return on the participant's lifetime investments, the insurance company's administration costs and life expectancy at retirement.

Of course, even the benefit within the DB scheme is determined implicitly by life expectancy, however, adjustments can be made in the contribution rate, when necessary. If funds are considered to be more than sufficient to guarantee the payment of future defined benefit commitments, participating employers can be granted a rebate, and if they are judged to be too low, the contribution rate must be increased. Following the introduction of the public DC schemes, there has been discussion about converting the entire ITP old-age benefit scheme into a DC scheme, similar to the option now available to persons with higher incomes – and in line with the new agreement for blue-collar and municipal and country council workers (see below). To date, there is, however, no new agreement.

Table 6. Schedule for supplementary benefits in the ITP agreement

Salary in base amounts*	Salary in kronor, 2001	ITP supplement to the old-age pension (% final salary)
Up to the ceiling (7.5 base amounts in 2001) in the public scheme	Up to 282 750	10 %
7.5 - 20	282 751 – 738 000	65 %
20 - 30	738 001 – 1 107 000	32.5 %

*A base amount is 37 700 kronor in 2001. It is adjusted annually with the change in the consumer price index.

The ITP supplement is based in principle on a participant's final salary. However, to avoid misuse of the system, if salary increases have been higher than earlier during the last five years prior to a claim, a lower salary than the final salary will be determined to compute the size of the benefit. The size of the supplement provided in the DB scheme depends on whether the participant's salary is below or above the ceiling applying in the public system. Table 6 shows how the supplement is determined in the ITP scheme.

If in changing jobs an individual changes occupational pension schemes, for example by going from the public sector to a private company and occupation covered by ITP, coverage is co-ordinated between the other scheme and ITP. The participant retains earned rights in the previous scheme and acquires new rights in ITP. Of course, it is always difficult to move between two DB schemes that are set up differently, or from a DB to a DC scheme. One of the arguments in favour of converting the entire ITP scheme to a DC scheme is easier co-ordination with the newly converted DC schemes for blue-collar and municipal and county council workers. Another is that contributions in the ITP DB scheme are not linked to benefits. Employers pay a specified contribution rate on the combined salaries of all employees, whereas employees with higher earnings get relatively more out of the scheme.

ITPK is a supplement to ITP, which covers persons born 1932 and later. ITPK is based on a defined contribution of 2 % of earnings from age 28 for persons born 1939 and later. Persons born in 1935-36 pay 2.2% and persons born in 1937-38 pay 2.1 %. Since it is a DC scheme, the benefit depends on contributions, life expectancy from retirement and the performance of the funds of the insurance company chosen by the participant. Since 1990, participants in ITPK can make their own choice of provider. From 1993, when unit-link insurance entered the Swedish market, unit-link insurance has also become a possible option (offered by some of the same companies offering traditional insurance). The number of major providers is 15, with some companies providing both traditional insurance and unit-link alternatives. Unit-link enables the participant to choose among several investment funds during the saving phase.

Upon death prior to the retirement age, the money accumulated by the deceased is paid to the family, with payments being distributed over at least five years. If the participant dies during the retirement phase, depending on the insurance company chosen, payments may be made to the surviving family through a contractual withdrawal period. In addition, a separate survivor benefit of a specified amount (two times the base amount) and paid out during 5 years after the death of the policy holder can be purchased within the specified contribution rate. This choice reduces the old-age component by the amount of contributions transferred into the survivor scheme.

There are three possible models for withdrawal in the combined ITP and ITPK schemes. First, some groups may have an agreement to retire at some specified age, for example age 62, or the agreement may allow retirement prior to the normal retirement age of 65. In this case, the individual would claim the ITP (but not the ITPK) benefit for the period up until the normal pension age of 65. Second, from age 65, the public pension benefits (NDC and FDC) would be claimed and supplemented by both ITP and ITPK. Finally, ITP is a lifelong benefit, whereas ITPK can be withdrawn during a period of five years or more, which is decided by the retiree.

The new pension agreement for blue-collar workers

From 1974 through 1995 blue-collar workers were covered by a defined benefit scheme that provided supplementary earnings replacement of 10 % on top of the public benefits for earnings below the ceiling. This was similar to the supplementary benefit in the ITP scheme for persons with earnings under the earnings ceiling for the public system. Earnings above the ceiling were not covered. During 1996-99, this scheme was phased out and replaced with a defined contribution scheme, and with no ceiling on covered earnings.

In the old system, workers were covered for years in which they worked at least 208 hours annually, beginning from age 28. Persons born in 1932-1967 constitute the transition cohorts from the old system, who will receive an individually calculated sum for years during which contributions were made prior to 1996. (A person born in 1967 – or later - was 27 years old – or less - in 1995, when the agreement was reached, and, thus, was not covered by the old system.) In 2000 – 2001 the age for coverage was reduced to 22, and from 2002 it is 21. The employer is also obliged to pay contributions for periods of sickness covered by the employer period in sickness insurance (but not during the period covered by social insurance). An advantage of the new system is that contributions are based on annual earnings, rather than hours worked. Initially in the new system, the contribution rate for the individual's own pension was 2 %, with an additional 1.5 % going to finance the transition costs. From 2000

3.5 % goes to finance the individual's own future benefit. When the new system was introduced, participants were obliged to keep their accounts in one insurance company, AMF (*Arbetsmarknadsförsäkringar, pensionsförsäkrings-bolag*), which had traditionally administered this group's insurance. From 1999, however, participants have been allowed to choose from among a number of insurance companies offering traditional insurance and unit-link products. In principle, these were the same companies – and in practice the major providers of insurance products on the Swedish market – from which participants in the ITPK scheme could choose.

Employees can also choose to pay a fixed premium per month to purchase a survivor benefit. The participant chooses between two levels of a benefit (1 or 2 base amounts per year for the survivor), and the benefit is paid out over a period of five years.

The DC scheme for this group, together with the public scheme, sets off contributions to the public NDC and FDC schemes, and the collective group scheme amounting to an overall contribution rate of 22 % (16 % + 2.5 % + 3.5 %) which, according to the calculations shown in Part I of this paper will provide an adequate benefit with low rates of market returns and a rather substantial benefit with returns of 5 per cent or more.

The new pension agreement for municipal and county council employees

Municipal and county council employees are covered by the pension and insurance agreement for municipal and country council employees concluded in 1998, PFA 98 (*Pensions- och försäkringsavtal 1998*). PFA 98 covers persons born in 1938 and later – the same birth cohorts as those covered by the new public system – and has been operative since January 1, 1998. PFA 98 includes a normal old-age pension supplement to the public system, an early retirement benefit for police and firemen (which can be claimed from age 61), and a defined benefit for surviving spouses (and registered cohabitants) and/or the children of a deceased participant. Rights earned prior to 1998 in the previous DB scheme are converted into benefit payments upon retirement.

PFA 98 also provides a defined-benefit supplement that replaces 62.5 % of earnings over the ceiling on earnings covered in the public system (7.5 base amounts in 2001) up to 20 base amounts (the base amount is defined above). In addition it provides an extra DC supplement to the public pension below the ceiling, as well as a supplement to the DB component covering earnings above the earnings ceiling in the public system. The supplement below the ceiling is determined by a contribution rate of 3.4 - 4.5 % paid by the employer for employees 28 years old and older. The supplement (to the general replacement rate of 62.5 %) above the ceiling is based on a contribution rate of 1 – 2.1 %. The percent actually applying depends on the participant's occupational group. For example an assistant nurse is entitled to a contribution rate of 4.5 % and a social worker to a rate of 3.5 %.

The supplement based on the contribution rate of 3.4 – 4.5 % below the ceiling and 1 – 2.1 % above the ceiling includes what is called an individual component and an employer component. The employer decides the distribution between these, but contributions deriving from a contribution rate of at least 1

% must be allocated to the individual component. In practice most employers have allocated most or all of the contributions to individual responsibility. Employees can choose from among a number of traditional or unit-link insurance companies, similar to the procedure already described above for private-sector white-collar employees. People who do not make an active choice are allocated to a non-chooser insurance company (*KPA Pensionsförsäkring AB*). Funds remaining with the employer are required to give a government bond rate of return.

The conversion from defined benefit to defined contribution benefits for municipal and county council employees fulfilled two goals. The first was to fund the liabilities of the pension scheme. The unfunded liabilities of these employers implied a substantial future tax increase. The second was that by converting to a DC scheme, the supplementary scheme was brought into line with the public NDC and FDC schemes. The overall level of a benefit for a person with earnings below the ceiling will resemble that for a blue-collar worker – on average – since it is based on the public system combined contribution rate of 18.5 % plus at least another 3.5 %. As in the case of the typical blue-collar worker, the table providing illustrations of replacement rates in Part I gives an indication of what today's younger workers can expect to receive upon retirement.

Civil servants

The scheme for civil servants requires 360 months of coverage for a full benefit. A benefit can be claimed as early as age 55, but this will reduce substantially the size of the benefit during the remainder of life. Instead, normally, a benefit would be claimed at age 65. This would provide an extra replacement percentage of 10 % up to the earnings ceiling for the public system. Above the ceiling the scheme provides replacement of 65 % up to 20 base amounts and 32.5 % from 20 to 30 base amounts, as does the scheme for private white-collar workers (see Table 6 above). An average of the past five years is used to calculate the earnings upon which the benefit is based. The basic scheme for civil servants is unfunded.

Even civil servants have an additional supplement, however. This is a defined-contribution, funded scheme based on a contribution rate of 1.5 %. The money is invested by the state, and there is no element of individual choice in the investment decision. An annuity can be claimed from age 65. The annuity can be paid out over five years, or the entire lifetime. Presently, there is discussion between the employer representative for state employers and the unions to convert this scheme entirely into a DC scheme. This would probably also mean that the average worker with earnings below the ceiling would have contractual financial accounts based on a contribution rate of 3.5 % (the existing 1.5 % plus another 2 % which corresponds roughly to the 10 % increment offered by the present defined benefit supplement), and presumable would be given a choice of financial market alternatives, as in the other schemes.

II.2 Private insurance and individual retirement saving accounts

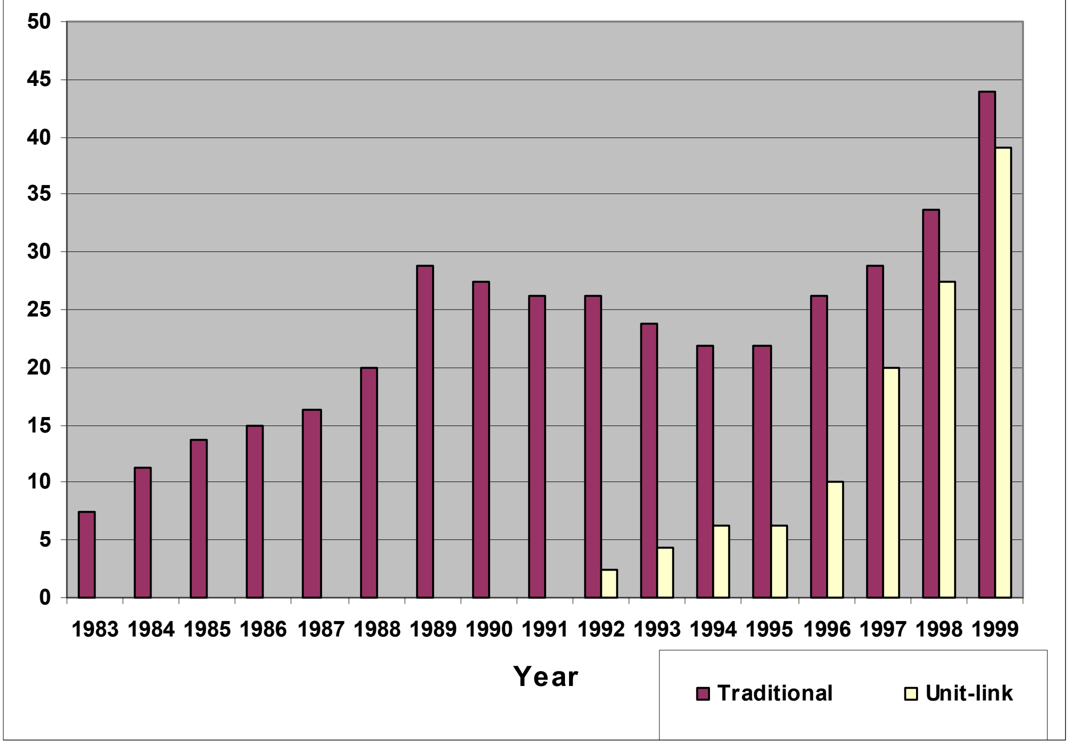
For several decades up until 1995, individuals could deduct from taxable income premium payments up to two base amounts (about 69 000 kronor in 1994). In 1995 the deduction was halved. Generally speaking, relative to normal earnings, the magnitude of the deduction decreased for a long time with the general upward rise in real wages – just as the earnings ceiling in the public system did. Until the 1990s, probably the main reason to contract private insurance was to contract some form of life insurance to supplement the income of survivors upon the death of a spouse. This is because the typical blue-collar worker's earnings were clearly under the ceiling until the end of the 1990s, and since the earnings above the ceiling of a typical white –collar worker were covered under the ITP, municipal employee or state scheme.

For a long time, private insurance gave a better return than most other financial investment alternatives, largely due to the fact that premiums were tax deductible, and for this reason alone might have been attractive as an investment form. During the period 1963-1982, for persons with high earnings, the asset that gave the best after-tax return in Sweden was in fact private insurance, since marginal taxes could be over 70 %. In this period, inflation was high, the equity market was depressed, and the *real* after-tax return on all other financial assets was negative (Palmer 1985). An even better way to earn a good return in the high inflation environment of the times was to borrow money and purchase a private home.

In spite of the favourable return, few people purchased private insurance before the 1990s. In 1980, only 4 per cent of persons 16-64 utilised a tax deduction for insurance premium payments (Johannisson 2000), even though it was a financially sound thing to do. One reason for the low interest in private insurance was probably the fact that only a few people had earnings over the ceiling for earnings covered by the public scheme. In 1985, the earnings of 9 per cent of male and 1 per cent of female workers were over the ceiling.

Around 1990, the picture began to change. In 1989 the widow's benefit was abolished for women born 1945 and later, and annual premiums paid to insurance companies increased by about 50 % from 1988 to 1990 (Figure 1). As the 1980s progressed financial markets became increasingly deregulated, both in Sweden and abroad. The Swedish stock market began to blossom in the late 1980s and continued to prosper in the 1990s. With this the general interest in the stock market increased. In 1993 a third major event occurred. Unit-link funds were introduced into private insurance in Sweden. This meant that insurance customers were given much more latitude in determining how their money would be invested during the accumulation phase. From their introduction in 1993, unit-link insurance growth has led market growth (Figure 1).

Figure 1. Development of Traditional and Unit-link Insurance. Billions of SEK
Source. Berg 2000



Source. Palmer 2001a.

A fourth factor influencing the development of private insurance and contractual schemes was the reform of the public pension system. With the introduction of the main concept outlining the principles of the scheme, the discussion of financial account schemes gained new impetus. As we have seen, two of the major contractual schemes were converted into financial account schemes in the latter half of the 1990s, which brought them into line with the public reform concept. In addition, ITPK, the new supplement in the private white-collar scheme had also moved in this direction.

The final factor influencing the development of the private market was the introduction of individual retirement saving (IRS) accounts in 1994. These are tax deductible under the same rules as premiums paid for private insurance. Banks and investment funds provide the account services, and the provider typically offers a choice of investment funds.

Private pensions and IRS accounts can be drawn upon from the age of 55, but with a minimum withdrawal period of 5 years. They are illiquid up until the age of 55, and thus are an imperfect substitute for other more liquid forms of private saving. The data show (Johannisson 2000) that, since 1991, more women than men make deductions, i.e. make premium payments or put money into an IRS account, and that the gender gap is increasing. This suggests that abolishing the widow benefit created demand for a private substitute – in addition to what is offered under the contractual schemes, discussed above. According to the same source, in 1997 about 33 % of women and 25 % of men had utilised a deduction, and, not surprisingly, it is more likely that the person claiming the deduction is a better-paid white-collar worker.

There are about 130 nation-wide providers of insurance on the Swedish market. Of these six administer the contractual schemes. Of the remainder, 12 provide unit link insurance and 24 provide traditional life insurance. The remainder of companies provide other forms of insurance products. Total assets of traditional life and unit-link insurance were around 800 billion kronor in 1999. This means that total assets of the life insurance companies and the companies managing the quasi-mandatory contractual schemes amounted to about 85 % of GDP. Table 7 shows the distribution of assets in traditional life and unit-link companies together.

Table 7. Assets of Traditional Life and Unit-link Insurance Companies, 1999.

	Total		Of which foreign assets	
	Billions of SEK	% of total	Billions of SEK	% of total
Bonds	276	34.1	73	26.5
Shares	453	56.0	145	31.9
Real estate	41	5.0	1	3.2
Other	40	4.9	3	6.7
Total	810	100	212	27.4

Part III

Financial Education Policies

New also with the new public pension scheme in Sweden is the provision of annual information to all participants. Statements and general information have been sent out on a yearly basis since 1999. This includes information on contributions and the size of a future pension from the NDC and FDC schemes together, under certain assumptions.

One of the aims is to attempt to provide a picture of the future, and in doing this to give individuals an opportunity to take part themselves in arranging for their future security beyond what is provided by the public schemes. This also gives the contractual parties an opportunity to weigh their own contributions into the overall result, and in principle, exchange wage increases for contribution rate increases in wage negotiations.

All the occupational schemes also send information to participants, so, in principle, people are fully informed. In practice, however, it would probably be better from the individual point of view to receive a statement summarising their current status in public and occupational benefit schemes together. There are presently discussions, initiated by the National Social Insurance Board, with this goal in mind.

Prior to the introduction of the financial account system nearly half of all Swedes had some personal experience with financial market funds. However, there was opposition to the introduction of the financial account scheme in the public system from important quarters. Most noteworthy is that initially the central blue-collar organization (LO) appeared to oppose the advance-funded component of the public system. However, this union changed its mind, and negotiated a shift from its own defined benefit supplement to a defined contribution supplement that closely resembled the new public FDC component, as has been discussed above.

Both (LO) and the Confederation of Employers (SAF) supported the move towards NDC in the public system. Blue-collar workers, who usually have long, but flat earnings profiles – compared to managers and professionals – could easily see the advantages in fairness to their members in introducing lifetime earnings into pensions through notional and financial account schemes in social insurance. For employers there was a clear advantage to a system with a contribution rate that, in principle, will be fixed forever.

How have people in general reacted to the switch to defined contribution schemes? In 1998-2000, first the blue-collar workers, then the participants in the public FDC scheme (all the Swedish labour force) and then the municipal and county council employees were given the opportunity to make their fund choices. On each occasion, comprehensive information was sent out, and when it came time to make a decision, insurance companies and funds advertised extensively in mass media.

In the public FDC scheme, participants can compose their own portfolios by combining up to five private investment funds. Information on all the approximately 450 funds registered with the system at the time the first choice was to be made, in 1999, was sent out to all participants. The information included profiles of all funds, based on previous history. These profiles also included statistics on returns during the past years and a measures of risk. The written information sent out in the mail to all individuals also had the goal of leading people through the process of evaluating funds, and to judge their own degree of risk aversion.

When the opportunity came to choose within the public scheme, 67% of all those covered made an active choice. There was widespread mass medial coverage of the events surrounding the first opportunity to make fund choices, and the whole process appeared to go very smoothly – judging by the lack of negative press coverage. In short, it appears that the Swedish people have accepted the reform and with it a paradigm change in the provision of social security and contractual insurance with the occupational schemes.

The conversion of the public and contractual schemes to notional and financial defined contribution schemes has brought the question of pensions to the forefront. Major newspapers publish information on the funds that people hold within the financial schemes on a daily basis. So, in principle, people can follow the development of their funds in the major newspapers. The idea that investments in equity funds should be seen as long-run investments has also become "common knowledge." Probably, most people hope that their financial accounts will provide better results in the long run than the pay-as-you-go system.

There are no specific government sponsored campaigns to inform people in the schools about the new systems. On the other hand, the government has requested that the National Social Insurance Board to produce information aimed at creating a better understanding of the new public pension schemes, and to measure the results with the help of nation-wide surveys.

Both management and unions have an implicit responsibility to help explain the development of Sweden's public and contractual pension schemes in recent years. In fact, the whole reform process has in itself been an educational process that undoubtedly has increased the general knowledge of the Swedish population about pensions, funds and insurance.

Part IV:
Personal Assessment

The Swedish system, with a universal, public pension that provides adequate minimal coverage for the whole population, and together with contractual supplementary benefits offers adequate pension coverage to persons living and working in Sweden during a normal life career.

The move towards lifetime account schemes and use of life expectancy in computing life annuities in the earnings-related public system, and subsequently in major contractual schemes gives a clear improvement over the old systems in intragenerational fairness, and by stabilising the contribution rates in these schemes can be claimed to improve intergenerational fairness. The cost of increasing longevity and "early" retirement (working less instead of more) has been moved from taxes on future workers to current workers. In individual terms, if you want to exit from the labour market early, the you also bear the cost individually in the new DC schemes, or if you belong to a an occupational group where the whole group is judged to need early retirement, then the cost will be covered by occupational benefits.

Social policy has become explicit. The new Swedish system has substantial non-contributory rights, but these are to be determined in the Parliament on their own merits in terms of fulfilling social policy goals, and are financed with general revenues, which are transferred top the public pension insurance system. This enables the insurance schemes to remain insurance schemes.

The poverty rate among persons over 65 was very low in the 1990s. The introduction of account lifetime schemes will tend to reflect more the distribution of earnings in the overall economy, than would schemes with weaker earnings-related features. Even if the position of the mean average or median pensioner may be unchanged after the reform, it is likely that the incidence of low-income pensioners right at the margin can increase – since DC schemes reflect the income distribution directly.

Also, Sweden is a country that has taken in many immigrants every year, and if the workforce is to grow in the future, will have to continue to do so. Many of these will not have been in the country and working long enough to accumulate large enough account values to receive a benefit of an average size. Since the universal flat rate benefit in the old system also prorated for years of residence, there was, however, no change in principle with the reform, although the change to lifetime accounts in the earnings-related components of the public and some contractual schemes has sharpened this.

The Swedish system of public and contractual benefits combines a substantial pay-as-you-go base with financial account schemes in both the public and contractual schemes. With a contribution rate of 16 % (plus for most an occupational supplement of around 10 % replacement) in pay-as-you-go, and 2.5 % in the public FDC scheme plus, for many, around 3.5 % in occupational financial schemes Swedes now have a “mixed portfolio” that will reflect both the advantages and disadvantages of pay-as-you-go and financial account schemes. This can be claimed to be a good risk strategy.

In fact, a financial account scheme based on an overall contribution rate of 6 % and with a portfolio consisting mainly of equities over the lifetime can be expected to give a better rate of return than the pay-as-you go system – reflecting the greater risk of equity investments. On the other hand, history has shown that over a long investment period, characteristic of pension systems, individuals will frequently (but not always) do well with such schemes. In this authors opinion, it is, in fact, questionable whether a financial account scheme that invests solely or mainly in government bonds is in principle different from a lifetime NDC account scheme (see Góra and Palmer 2001).

Finally, the Swedish notional defined contribution (NDC) account scheme and financial account schemes have brought financial stability into the public pension system (Palmer 1999b and Settergren 2001). As this system is designed, the contribution rate of 16 + 2.5 per cent will always hold in the future. Necessary adjustment in conjunction with in increasing longevity and labour force trends will be reflected in the development of account values and annuities (see Palmer 2000 and 2001 and Settergren 2001). In addition, these schemes both take into account fluctuations in cohort size by building up financial reserves when large cohorts are working.

The fact that municipal and county council benefits are now funded moves the tax burden for financing the pensions from future generations of workers to current generations of workers. It appears that the occupational scheme for civil servants is moving in the same direction. This helps create contracts where benefits are really a part of the current contract, instead of an unfinanced burden on future taxpayers. The fact that blue-collar schemes have become explicitly funded has the characteristic of moving them from implicit debts for companies to explicit accounts, and may, on average, also give better financial returns.

Perhaps the most important change is that participants in these new contractual schemes can take advantage of the general performance of Swedish and other equity markets, and have been given considerable freedom of choice over their own portfolios. Some would claim, however, that Sweden has gone too far in offering participants freedom of choice in investments. The half-way point would be to allow freedom of choice among a limited number of index portfolios and to offer standard annuity products, as in the present Swedish public and contractual schemes. This would have the advantage of providing a "market expected" return on accumulation and an annuity at lowest cost. The Swedish scheme operates at low cost now compared to many comparable schemes in other countries (Palmer 2001X), but the cost advantage could become even greater by offering even more limited choice.

The Swedish reforms of the 1990s have nevertheless left some open question marks. One question is whether Sweden went too far by abolishing the public system's survivor benefit. This has undoubtedly been one of the factors behind the growth in private insurance discussed in this paper, but from the point of view of social policy it is questionable. The assumption behind having no survivor benefit is that single pensioners can – and should – live on their individual benefits. That is, no one should have to rely on a spouse's income for basic support. In practice, the fact that both men and women can live on their own benefits probably reflects reality for most persons born after

1945. On the other hand, there is a long tradition in social policy that says that a household with two persons with the same income is “wealthier” than a household with one person and half of the income of a two-adult household, because there are economies of scale in larger households. This is, of course, the main argument for a universal survivor benefit. For this reason, we might find Sweden taking a step back in the future when it comes to the survivor benefit.

Another question has to do with the fact that many people now have both a public and a contractual financial account scheme, with separate administrations. If one had been designing the overall set-up from the beginning, it would undoubtedly have been claimed that two administrations for essentially the same product is too costly. A single scheme would have cost less. On the other hand, contractual schemes are not universal, and, in addition, the fact that they already existed put a practical restriction on the overall design. Given this restriction, the fact that both the public and contractual schemes have moved in similar directions is clearly advantageous.

In fact, there is a greater role for contractual schemes to provide a “bridge” between full employment an full retirement in the future. As the public and contractual schemes have developed during the 1990s (together with the change in tax rules creating equal treatment of all income regardless of source), the idea of flexible retirement with all conceivable combinations of work and leisure for older workers can become a reality. First, however, it has to become accepted in the minds of both employers and employees. This requires a big break with the past, where people have become used thinking of a “normal” retirement age. Finally, the fact that investment funds of pension schemes are taxed remains a blemish in the eyes of many, though apparently not all, since it has survived.

References

Ackerby, S. (1992). *Pensionsfrågan.* (*The Pension* Question) Bilaga *12 till Långtidsutredningen 1992.* Finansdepartementet. Stockholm.

Berg, L, (1983). *Konsumtion och sparande – en studie av hushållens beteende* (*Consumption and saving – a study of household behavior*). Uppsala universitet, Uppsala.

Bröms, J. (1990). *Ur askan av ATP* (From the ashes of ATP), SACO. Stockholm

Förster M. (2000). Trends and Driving Factors in Income and Distribution and Poverty in the OECD Area. Paris: OECD.

Góra M. and E. Palmer (2001). "A New View on Pension Economics." Processed.

Markowski, A. and E. Palmer (1979). "Social Insurance and Saving in Sweden". In von Furstenberg, G. M. (ed.) Social Security versus Private Saving in Postindustrial Democracies, Vol. 1. Ballinger. Cambridge, Mass.

Ministry of Welfare (1999). *Sämre för mig bättre för oss – En analys av pensionarernas ekonomiska situationen under 1990-talet* (*Worse for me – better for us)*. Ministry of Health and Welfare. Swedish Government Publications. Ds 1999:5.

National Welfare Board (2000). *Taxor och avgifter för vård och omsorg*. Äldre uppdraget 2000:1 *(Study of fees paid by the elderly for public health and home care*). Stockholm, Sweden.

Palmer, E. (1981). *Determination of Personal Consumption: Theoretical Foundations and Emprical Evidence from Sweden*. Almqvist & Wiksell International. Stockholm.

Palmer, E. and M. Palme (1988). "A Macroeconomic Analysis of Employer-Contribution Financed Social Security in Sweden" in *The Political Economy of Social Security*. Ed. by A. Klevmarken and B. Gustafsson. Elsevier. Science Publishers: Amsterdam.

Palmer, E. et al. (1994). *Reformerat pensionssystem. Kostnader och individeffekter* (1994). (Reforming the Pension System – Financial and individual effects). SOU 1994:20. Bilaga A. Stockholm.

Palmer E. (1999a). "Exit from the Labor Force of Older Workers: Can the NDC Pension System Help?" in *The Geneva Papers on Risk and Insurance*, Vol. 24, October, pp. 461-472.

Palmer, E. (1999b). "Individual Decisions and Aggregate Stability in the NDC System." Processed.

Palmer, E. (2000). "The Swedish Pension Reform - Framework and Issues". *World Bank Pension Primer*, Washington D.C.

Palmer, E. (2001a). "The Evolution of Public and Private Insurance in Sweden in the 1990s" in (ed. X. Scheil-Adlung) Building Social Security: Tfhe Challenge of Privitization, The International Social Security Association´s International Social Security Series, Vol. 6, Transaction Publishers, New Brunswick (USA).

Palmer, E. (2001b). "Swedish Pension Reform-How Did It Evolve and What Does It mean for the Future?" in M. Feldstein and H. Siebert (eds.) *Coping with the Pension Crisis: Where Does Europe Stand?* Chicago: University of Chicago Press (forthcoming).

Perttu, L. (1999) *Ny försäkringslagstiftning* (*New Insurance Legislation*) in Svensk Försäkring. Årsbok 1999. The Swedish Insurance Federation. Stockholm, Sweden.

Privattjänstemannakartellen (2000). *Handbok för försäkringsrådgivare* (*Handbook for insurance advisors – for employees in industry and commerce covered by the ITP and ITPK*). Stockholm, Sweden.

Scherman, K-G and Palmer, E. (1993). *En ny socialförsäkring. Rapport till Ekonomikommissionen* (A New Approach to Social Insurance – A Report to the Economic Commission). Riksförsäkringsverket. Stockholm.

Settergren, O. (2001). "The Automatic Balancing Mechanism of the Swedish Pension System- a non-technical introduction", Wirtschaftspolitische Blätter 4/2001.

Settergren, O., Holmgren N., Leander, J. and D. Mikula (2000). *Automatic balancing of the old-age pension system. Calculations performed for the government*. National Social Insurance Board. Stockholm.

Ståhlberg, A.-C. (1988). *Pensionsystemets inverkan på hushållens sparande* (The pension system's effect on household saving) Spardelegationen. Allmänna förlaget. Stockholm.

Ståhlberg, A.-C. (1990). *ATP-systemet från fördelningspolitisk synpunkt* (*ATP and redistribution*) , *expertrapport till Pensionsberedningen.* SOU 1990:78.

Statens pensionsverk (2001). PA-91 F Tjänstepensionen. En översiktlig beskrivning av dina förmåner (Pension Agreement from 1991 - An overview of benefits for civil servants). Sundsvall, Sweden.

Statistics Sweden. (2000). *Förmögenhets fördelningen i sverige 1997* (*The Distribution of Wealth in Sweden, 1999*). Rapport 2000:1. Örebro. Sweden.

Sundén, Annika (1998) "The Swedish NDC Pension Reform," in *Annals of Public and Cooperative Economics*, vol. 69, no. 4, pp 1-13.

Svenska Kommunförbundet (2000) *Din kommunala avtalspension – PFA 98* (*Your municipal pension – Pension and insurance agreement 1998*). Stockholm, sweden.

Symreng, J. (1999). *Tillsynsverksamheten 1998/1999* (*Supervision in 1998/1999*).) in Svensk Försäkring. Årsbok 1999. The Swedish Insurance Federation. Stockholm, Sweden.

Symreng, J. (2000). *Finansinspektionen – tillsynen 1999/2000*. (*The Financial Supervisory Authority – Supervision in 1999/2000*) in Svensk Försäkring. Årsbok 2000. The Swedish Insurance Federation. Stockholm, Sweden.

Symreng, J. (2001). *Tillsynsverksamheten 2000/2001* (*Supervision in 2000/2001*).) in Svensk Försäkring. Årsbok 2001. The Swedish Insurance Federation. Stockholm, Sweden.

Swedish Insurance Federation (1999, 2000). Swedish Private Insurance in Figures. Stockholm, Sweden.

Official Publications in the Reform of the Public Pension System (all are in Swedish)

Allmän pension (1990). (The Pension System – Report of the Government's Pension Commission). Huvudbetänkande av pensionsutredningen. Stockholm 1990. SOU 1990:76.

Riksförsäkringsverket *En strategi för ATP-systemets framtid* (1991) (A Strategy for the Future of ATP). Stockholm.

Ett reformerat pensionssystem – Bakgrund, principer och skiss (1992). (A reformed pension system – Background, principles and a sketch – The Swedish Concept presented by the Working Group on Pensions) En promoria av Pensionsarbetsgruppen. Socialdepartementet. Ds 1992:89.

Reformerat pensionssystem. Betänkande av Pensionsarbetsgruppen (1994). (Reforming the Pension System – Report of the Working Group on Pensions) SOU 1994:20. Stockholm.

Reformerat pensionssystem. Kostnader och individeffekter (1994). (Reforming the Pension System – Financial costs and individual effects) SOU 1994:20. Bilaga A. Stockholm.

Reformerat pensionssystem.Kvinnors ATP och avtalspension (1994). (Reforming the pension system. Womens ATP and contractual benefits) SOU 1994:20. Bilaga B. Stockholm.

Reformering av det allmänna pensionssystemet. Regeringsproposition 1993/94:250. Riksdagen. Stockholm. (Reforming the Pension System. The Governmen's Proposal)

Reformerat pensionssystem – lag om inkomstgrundad ålderspension. Del 1 och Del 2. (1995). Socialdepartementet. Ds 1995:41. (Reforming the Pension system. Law on the earnings-related old-age pension. Part I and Part II)

Allmänt pensionssparande. Delbetänkande av Premiereservutredningen. SOU 1996:83. Stockholm. (Pension saving – report of the commission on financial accounts in the public system)

Lag om premiepension (1997). Betänkande av 1997 års premiereservutredning. SOU 1997:131. (Premium Pension Law – the law for the financial account system)

For Current Information see also the Social Insurance Administration's Web Sites

www.pension.nu
www.ppm.nu