

ORANGE REPORT

ANNUAL REPORT OF
THE SWEDISH PENSION
SYSTEM 2008

MORE KNOWLEDGE, LESS WORRY

Ingrid Bonde on how capital markets
affect pensions

WHEN HOUSEHOLDS INVEST THEIR PENSION MONEY

Professor John Y. Campbell discusses investment
strategies



Contents

More Knowledge, Less Worry	3
When Households Invest Their Pension Money	6
How the National Pension System Works	10
Costs of the Old-Age Pension System	16
The Rate of Return in the Pension System	22
Three Scenarios for the Future of the Pension System	29
Special Feature: The Retirement Age	41
Total of All Orange Envelopes	48
Orange Report 2008 in 7 Minutes	52
Income Statement and Balance Sheet	55
Accounting Principles	58
Notes and Comments	62
Audit Report	77
Appendix A. Calculation Factors	78
Appendix B. Mathematical Description of the Balance Ratio	85
List of Terms	88

Welcome to the Orange Report – The Annual Report of Sweden’s National Pension System for 2008. Its Balance Sheet Exceeds SEK 7 000 Billion, by Far the Largest in Sweden

The inkomstpension system reported a loss of SEK 261 billion for 2008, turning the system’s surplus into a deficit of SEK 243 billion. This means that the balance ratio has dropped below 1.000 for the first time. The decrease in the assets of the National Pension Funds accounts for most of the negative outcome, but the result is also explained partly by a somewhat greater increase in the pension liability than in the contribution asset.

The extremely serious financial crisis that struck the world’s economies in 2008 has been followed by a sharp economic downturn, with slackening growth in income and mounting unemployment. The pension system is designed to be financially stable and thus follows the economy as a whole. In good times, economic growth benefits pensioners and earners of pension credit. Until now this has meant that pension accounts have obtained a high return and that pension disbursements have been raised each year. In less prosperous times, the system ensures that pensioners and pension savers share the adverse consequences.

The current dismal state of the economy will be reflected in the wallets of pensioners in 2010. The outlook for the system in the next few years will be affected by the duration and severity of the present economic slump.

The annual report of the pension system is part of the information provided on the pension system. For the seventh year in a row, the Swedish Social Insurance Agency (SSIA) is issuing this unique publication. Since the reformed pension system was introduced, the SSIA and the Premium Pension Authority (PPM) have sought to simplify and improve information on pensions. Year 2008 marks the tenth year for the annual account statement – Orange Envelope – that is distributed to more than six million recipients. The Envelope has become a familiar trademark, and today its orange colour symbolizes pensions as a concept rather than just the national public pension.

Despite all efforts to provide better information on pensions, further measures are needed. This is one of the main reasons for the comprehensive change soon to take place in the management of Sweden’s pension system. As from 1 January 2010, a new pension agency will be formed by merging the current pension management provided by the SSIA and the PPM into a single administration.

All this and much more are described in the Orange Report. In a new section, this year’s report reviews the rate of return of the pension system in 2008 and explains the importance of a long-term view. We take a closer look at the retirement age in practice – when do people actually retire in a country with a flexible retirement age? We have interviewed Ingrid Bonde on the importance of capital markets for pensions, and we have spoken with Professor John Y. Campbell on how pension savers think and act when they invest.

It is my hope that all our readers will find this report informative and interesting, and I would be grateful for any comments that you might have. I can be reached at: adriana.lender@forsakringskassan.se.

Adriana Lender
Director General





More Knowledge, Less Worry

Ingrid Bonde, managing director of AMF Pension, will tell you that the Swedish pension system is basically a good one. Knowledge is the key to power over your own financial future. It can also relieve some of the worry about how last year's turbulent capital markets will affect pensions.

BY AGNETHA JÖNSSON, REPORTER, AFFÄRSVÄRLDEN
PHOTOGRAPHY: HANS ALM

The dramatic developments on world capital markets last year were exceptional, with the Stockholm Stock Exchange falling by 42 percent. The banking system was under heavy pressure, and short-term interest rates plummeted during the autumn. We met with Ingrid Bonde to hear her views on how this will affect our pensions. These questions are very important to her as managing director of AMF Pension. Formerly director general of the Financial Supervisory Authority (FI), Ingrid Bonde was ultimately responsible for the regulatory and control systems applicable to operators on financial markets. And there is no doubt about her strong confidence in Sweden's national pension system.

"It is important to make clear that basically we have a very good pension system, though of course it could always be even better. We have to keep up with developments, and maybe we should help people to appreciate the basic financial security that they actually have," says Ingrid Bonde.

For the national inkomstpension, the development of the labour market is more important than what happens on the stock market. Today's pensions are paid for largely by today's wages, which are the foundation of the system. The principal factors are thus demographic, in

other words, the number of people working and paying money into the system in relation to the number of pensioners. The National Pension Funds, on the other hand, are affected by the development of the capital market. These funds are intended to serve as a buffer during periods when payments into the system are less than pension benefits disbursed. If the value of system assets, i. e. contributions paid in plus the buffer fund, falls below a certain level, balancing is activated, meaning that in acute situations old-age pensions will be indexed at a lower rate. This will affect pensions in 2010 and may be a source of worry to some of today's pensioners.

"I can easily understand why pension savers and pensioners worry that their pensions might be cut. We have had a number of very good years, when pensions kept pace with the general upward tendency of the economy. But now that times are harder, the so-called "brake" will be applied. We all need to be knowledgeable on issues relating to pensions; this is extremely important, particularly in view of the rapid decline on world stock markets. Those of us who provide other types of pensions, such as occupational pensions and private pension insurance, must do our best to make sure that pension savers get by as well as possible even in these turbulent times. We respond to the effects of the financial crisis

in every way we can, so that we will remain strong and capable of offering secure pension solutions,” she emphasizes.

Depending on individual choices, capital markets may have a greater impact on the premium pension, occupational pensions, and any private pension insurance.

”Of course pension saving is affected by what happens on the stock market. But since it is for the long term – the average duration of private pension saving is roughly 20 years, and even longer, 30–40 years, for occupational pensions and the national public pension – the probability is much greater that you will actually get a better outcome if you invest in stocks. For stocks have still provided a good return over time,” notes Ingrid Bonde.

”I would even say that precisely in this difficult period, conventional life and pension insurance are managing quite satisfactorily. As of September 30, most insurance companies were reporting losses, but they were doing a lot better than ordinary funds,” she continues.

But in the shorter term, falling stock markets can have major consequences. During the last stock-market downturn, following the turn of the millennium, many insurance companies ran into trouble and were forced to sell stocks. The question is whether history will repeat itself.



”At that time pension companies had done very well in a rising stock market; they shared the benefits with pension savers, and guaranteed rates of return were relatively high. Then conditions changed; rates of return dropped, and the stock market suffered a fairly sharp downturn. People had not really thought about how to deal with such a situation. There were no risk-measurement systems that sounded the alarm early enough,” she explains.

Since then, one step taken by the FI has been to introduce a ”traffic-light system” that measures the degree of risk for life insurance companies and will sound the alarm if it gets too high. And the companies have learned their lesson.

”Obviously everyone is affected when capital management is not doing well. But I believe that people are better prepared mentally and have better systems and methods today to avoid the kind of dramatic development that we experienced in 2002,” says Ingrid Bonde.

The investments of life insurance companies depend on the strategy of each company; with fund insurance, pension savers make their own decisions, and the National Pension Funds invest according to Government directives. It has been estimated by the First National Pension Fund that the average annual return on buffer fund capital must be in the range of 5.1 to 6.1 percent for the inkomstpension to be stable in the long run. Until the financial crisis, this requirement had been met. The First–Fourth National Pension Funds have the same investment policies; briefly, these stipulate that at least 30 percent of fund assets be invested in interest-bearing securities with a low credit and liquidity risk, and that no more than 5 percent be invested in unlisted securities. These rules leave some scope for varying the proportion of stocks over time. In regard to types of assets, the distribution also varies among the different funds, but normally about 60 percent of assets consist of Swedish and foreign stocks, whereas 35–40 percent are invested in interest-bearing securities. The proportion of stocks may seem high; the question is whether it is too high.

”In pension saving it is natural to have a high proportion of stocks, as higher risk and active management have historically generated the optimal long-term return desired in the case of pension saving,” says Ingrid Bonde.

If we look ahead, we must ask whether we will have to get used to pensions that vary with the development of incomes and the stock market; in other words, whether we can always be really sure about the size of our future pensions. In the last 10–20 years, notes Ingrid Bonde, the tendency has been for households to make more of the decisions that affect their personal finances. This is the

”IT IS IMPORTANT TO REALIZE THAT WE ACTUALLY HOLD THE POWER OURSELVES”

case in a number of areas, both premium pension and occupational pensions and other kinds of saving, and also in regard to electric power companies and other suppliers.

”As a private individual, I face a number of major decisions and choices. This is basically a good thing, as it gives me more of a voice in matters that concern me personally. But it also requires me to deal with complex, difficult questions that may affect my entire financial future,” she emphasizes.

According to Ingrid Bonde, there is a pressing need in society for information and education on these issues. Here Sweden lags behind other countries to some degree.

”I think that schools and other educational institutions give us very little of the knowledge and support we need for dealing with this kind of responsibility. We have to help people to understand these matters better so that they can make sufficient demands and also realize the consequences of their long-term decisions,” she tells us.

But we need to do more than educate children and young people, although it is helpful to teach them the basics of the relationship between risk and return early on, while they are still in school. Life and the world around us are changing, new financial products are being marketed, and people’s financial circumstances confront them with new challenges. That is why both the public and the private sector must help us to gain more knowledge.

”What I mean is that knowledge is power. I believe that the knowledge we all possess, that gives us the self-confidence to make demands, is vital to the stability of the country’s financial system.

The message that Ingrid Bonde wishes to convey to Swedish pension savers is this:

”It is important to realize that we actually hold the power ourselves over our own financial situation and that we are going to use it,” she underscores.

For a number of years, we have had a law on providing financial advice to consumers. Its purpose is to protect individuals from poor advice and from buying products that do not fit their needs. We took the opportunity to ask Ingrid Bonde what she thinks of this law.

”The law on financial advice to consumers is basically a good one that was enacted rather early on; we were one of the first countries in the EU to adopt such a law. I think it is good to require more consumer information, to require a risk analysis, and to require that sellers advise against buying products that do not fit the buyer’s risk profile. In this way, the law provides a fairly strong built-in safety net.

”Then, once the stock market is out of its current slump, we will have to see how the law has worked in practice. This will be the first real test of the law since it became effective,” notes Ingrid Bonde.

She adds that Sweden differs from other countries; there are a number of companies on the market who sell financial products as well as provide advice about them. In other countries it is more common to have independent advisers who do not sell their own products.

”That does not mean, however, that one system is better or worse than another. The picture in Sweden is just a little different, and the knowledge and legislation needed must be adjusted accordingly.”

When we turn to future pension products, Ingrid Bonde compares the present situation with the days when we first started to use personal computers. The procedure was extremely complicated; manuals were inches thick, and few people could install products on their own. Then users began making demands, and producers had to adapt. Today anyone can easily get started and use a computer just by pushing a few buttons. That is roughly what Ingrid Bonde believes will happen on the pension and savings market in the years ahead.

”Here, too, users – pension savers, that is – will force producers to develop products that are simple and easy for everyone to understand,” she concludes.

When Households Invest Their Pension Money

No one thinks that people who lack the necessary training and experience should fix their own teeth, install their own washing machine, or drive a car. But in Sweden, as in many other countries, ordinary wage earners are expected to make their own decisions on investing part of their pension money. One thing is clear: mistakes are made.

BY INGRID KINDAHL, FINANCIAL REPORTER

PHOTOGRAPHY: STU ROSNER

Sweden is the world's number-one country when it comes to statistics. That is no myth, and John Y. Campbell, professor of economics at Harvard University, USA, has taken advantage of this in his research. His fields of interest include the capacity of households to invest their savings and manage financial risk – which is not easy to measure. In his work he has received considerable help from Sweden, whose central office of statistics, Statistics Sweden, keeps track of people's wealth, how it is invested, and the age, gender, and education level of those who invest – in other words, the Swedish people. One reason why the statistics are so detailed is that until very recently Sweden taxed the wealth of its residents.

John Campbell has studied investment strategies in general without more closely examining the pension investments of Swedes. There is reason to believe that his findings on investment strategies in general also apply to pension savings, but he would like to add a word of caution:

"You have to realize that people do not have the same burning interest in pension saving as in shorter-term saving. For most individuals, retirement is very distant," he comments.

When John Campbell examined the investment portfolios of Swedes, he was pleasantly surprised by what he found.

"The portfolios are well diversified, globally speaking. You Swedes are quite aware that you live in a small, open economy. As a group, Swedish households are more diversified than the OMX index and thus receive a better return in relation to risk," says John Campbell.

More or Less Sophisticated Saving

But this statement is a generalization. Some groups act more intelligently than on average, some less so. John Campbell has found that what he terms "less sophisticated savers" obtain a lower return since they take less risk than people who are more sophisticated. The degree of sophistication depends on education, income, and wealth.

"Less sophisticated savers rarely buy stock in an individual company, and they tend to put their money in the bank rather than in an equity fund. Who can say that they are wrong? If you live in modest financial circum-

stances, you are wise first to make sure that you can pay for your housing and second to build up an easily accessible reserve. Long-term saving will have to wait; that is exactly the way you should think," according to John Campbell.

This advice should not stop less sophisticated savers from also investing more efficiently and earning a better return. To do this, they need information and education – but they must also be offered a good default option by the various pension systems.

"In a good default option it is important to include funds that reallocate assets according to the saver's age," John Campbell emphasizes.

Until now, the default option in the premium pension system has lacked this kind of generational feature. That shortcoming will now be corrected by transforming the default option of the Premium Savings Fund (Premie-sparfonden) into a life-cycle fund.

"I'm all for this, since so few Swedes actively choose the funds in which their pension savings are invested," says John Campbell.

Paying attention to risk is central to John Campbell; in his view, most savers need to think more in these terms.



That is true of just about everyone, both risk-averse individuals and people whose occupation and education should give them a good picture of their own finances and the economy as a whole. To put it briefly, everyone makes mistakes that can be avoided. What you have to do is extend your thinking beyond your own portfolio of funds and stocks.

One of the most frequent mistakes is not to make any decisions on saving at all. Even if they have a little money left over, some people tend to be paralyzed by all the information available to them. By not making any decision on their saving, they risk missing out on their potential future return – a risk that many take without knowing it and thus without assessing it.

Another mistake is to look at only one part of your personal finances at a time, like your private pension saving, and assess the distribution of risk in that particular area alone. You do this without realizing, for example, that your national pension is comparable to an investment in government bonds, and without including your "miscellaneous" saving. This may consist solely of fund saving, invested in equity funds.

But John Campbell does not think you should limit yourself to your saving when assessing your financial risk. You should also think about where your salary is coming from.

"Most people do not realize that there may be a correlation between their earnings and financial markets like the stock market. People employed in the finance sector risk losing their jobs in times of financial unrest; we saw that in the autumn of 2008," he reminds us.

This means that people who earn their living at firms in the financial sector should act more cautiously than others; in fact, they should never even invest in the stock market. In a severe market slump, they could lose both their savings and their jobs.

Similarly, you should think carefully before joining a stock option program at the company where you work. If the company goes out of business, you could lose everything. In the United States it is quite common for employees to put virtually all of their eggs in one basket: salary, pension saving, and health insurance, all provided by the same company. If it should go bankrupt, the consequences would be disastrous.

How Come Private Individuals Do Not See These Risks?

"People often confuse security with familiarity. They feel safe with the stock options of their employer since they think they know how the system works. But in fact,

employees often have only a vague idea of how their company is managed,” John Campbell explains.

He refers to a recent US study where a number of private individuals were asked to select the telephone company in which they would prefer to invest; they were given a choice of several companies. A relatively large proportion of respondents indicated the company where they were customers, as they were familiar with that particular company. No other reason was given for this fictitious investment decision.

”The most prudent strategy for private individuals is to invest as broadly as possible and to look for saving arrangements with low fees. In general, people pay too little attention to fees. In a weak economy like the one at present, many people are given an eye-opener when they turn their attention to fees and costs in other areas,” says John Campbell.

He sees a need for a consumer uprising against the fees charged on the financial market. There is a danger, in his opinion, that the present fee structure, with its concealed and confusing charges, may undermine confidence in the entire industry. But – again – consumers need knowledge if they are going to revolt.

How Do Savers React in Times of Crisis?

The last economic downturn, at the outset of the 2000’s (when the stock market declined for three years in a row), showed that Swedes as a group acted very prudently, according to John Campbell’s studies. We neither bought nor sold very aggressively. We withdrew from the stock market in an orderly fashion, and without rushing we bought back into it once prices had fallen.

But this is an overall picture. There are always quite a few who tend to sell winning positions while holding on to losing ones, simply because they are passive. In a rising stock market they thus assume a greater financial risk without realizing it.

”With the stock market booming in recent years, asset prices surged, and portfolios inconspicuously grew more risky. The present crisis may sound a much-needed alarm, warning people to take more control of their assets in good times than they generally do. Bad times are the times to buy,” adds John Campbell.

”This may seem obvious, but the human brain does not think that way. As savers, people tend to relax in good times, in the mistaken belief that the rising stock market will take care of their savings “automagically”. Then when the downturn comes, the newspaper headlines are

filled with cries of experts calling for people to sit tight and hold on to what they have. But if you own stocks or shares in equity funds, it is smart to be alert all the time, even if not hyperactive. While we have seen that Swedes are capable of leaving the market in an orderly fashion, the value of our assets decreases unnecessarily if we fail to act. When the market was rising, stocks increased in value more than other portfolio assets. When that happens, the distribution of risk is no longer the one chosen earlier.

”The secret is to be active during the upswing by selling from time to time and rebalancing your money into more secure assets. Conversely, when prices have fallen, you should enter the market and buy stocks or equity funds. That way you maintain your desired distribution of risk,” says John Campbell.

One factor that clouds the view of most people is that in a bull market investors who have done well become highly visible. Not only managers, but also individuals, who have earned a high return receive publicity and give the impression of being experts in equity investment. Few recall that you never hear much about these people in a bear market.

”Many who have done well have simply taken a lot of risk, but they have been lucky and have received a good return. As for the numerous Swedes who bought Ericsson stock before the market collapse at the outset of the 2000’s, were they idiots or geniuses? Neither one – they were just unlucky,” says John Campbell.

If many of those who earn a high return in a bull market are actually riding a wave rather than benefiting from their own skill, the task of investing appropriately must be very exacting. Even among the most skilled professional managers, very few emerged unscathed from the record drop in the stock market during 2008. Yet we Swedes are expected to invest a portion of our pension capital ourselves, and we have nearly 800 funds to choose from. How are we to deal with that situation?

If it is difficult to measure the investment strategies of ordinary savers, it may be even harder to construct a reliable forward-looking model that will tell them what to do. Not even John Campbell can present such a model; instead, he relies on history when he says:

”Young people should have 100 percent of their long-term savings in a well-diversified portfolio of stocks or equity funds. At age 50 you should be gradually increasing the proportion of your savings invested in interest-bearing securities. But you should not forget that even people who have just retired will need to save for the long run, and so they should keep some of their investment in equities.

“But that is not enough. As discussed previously, you should also take your salary into account, and of course other assets like your principal residence and your vacation home. They are not liquid assets, but they should be included.”

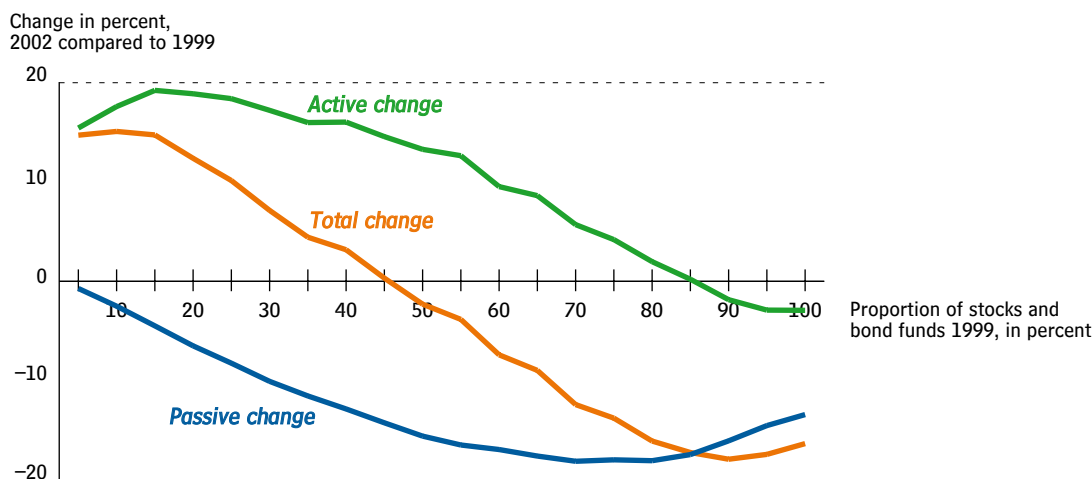
Actually, John Campbell thinks that fund savers, too, should be given the option of including nonliquid assets in their portfolios to provide better balance. At present Sweden offers virtually no alternatives to liquid funds, that is, funds for which a price is quoted daily, like those in the premium pension system. People whose pension savings are in conventional pension insurance may also include a certain proportion of real estate in their insurance assets.

But to be part of the premium pension system, a fund must be liquid, with a price quoted daily. This requirement is a drawback, according to John Campbell, who also sees a need for global currency-secured funds.

“Most investors in foreign funds do not realize that they are assuming a currency risk,” warns John Campbell.

And awareness of risk is essential for all savers.

Swedish Household Savings: Proportion of Stocks and Bond Funds



Source: Calvet, Campbell, and Sodini: Fight Or Flight? Portfolio Rebalancing by Individual Investors (QJE, February 2009)

“The last economic downturn, at the outset of the 2000’s, showed that Swedes as a group acted very prudently.”

The graph illustrates how the IT collapse in the early 2000’s affected the proportion of stocks and bond funds in household savings.

The orange line shows the total change in the proportion of stocks in household savings, expressed as the share in 2002 compared to 1999.

The total change can be broken down into two factors: the change in stock market prices and the change in the composition of households’ asset portfolios. The blue line shows the average change in the portfolio due to the change in stock market prices, or so-called passive change. The green line shows the effect of household behaviour, that is, purchases and sales of stocks by households during the period. The overall trend has been for households with a relatively small initial proportion of stocks to increase it, whereas households with an initially large proportion of stocks have tended to reduce it.

How the National Pension System Works



The national public pension is based on straightforward principles. The outline shown in the margin should enable the reader to grasp its essential features. For anyone wishing to understand the system more thoroughly, it should suffice to read this section.

Almost Like Saving at the Bank ...

The national pension system works much like ordinary saving at the bank. The comparison applies to both earnings-related parts of the system, the inkomstpension and the premium pension. Each year pension contributions are paid by the insured, their employers and in certain cases the central government. Contributions are recorded as pension credit in the “bankbook” of the insured – i.e., the respective accounts for the inkomstpension and the premium pension. Savings accumulate over the years with the inflow of contributions and at the applicable rate of “interest”. The statement sent out each year in the “Orange Envelope” enables the insured to watch their own inkomstpension and premium pension accounts grow from year to year. When the insured individual retires, the stream of payments is reversed, and the inkomstpension and premium pension are disbursed for the remaining lifetime of the insured.

... but Entirely a Form of Pension Insurance

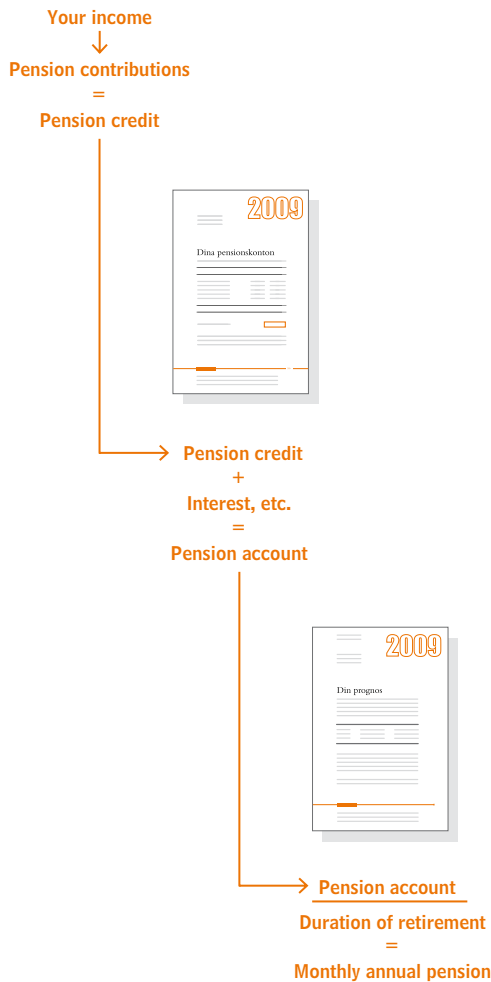
One feature of pension insurance is that savings are blocked; it is impossible to withdraw all or any part of them before the minimum age for receiving a pension. That age is 61 years for both the inkomstpension and the premium pension.

Pension insurance is intended to redistribute assets from individuals with shorter-than-average life spans to those who live longer. The pension balances of deceased persons – so-called *inheritance gains* (see Appendix A) – are redistributed each year to the surviving insured in the same birth cohort. Also after pension withdrawal begins, assets are redistributed from those with shorter-than-average life spans to those who live longer. This is done by basing monthly pensions on average life expectancy but paying them out as long as the insured lives. Consequently, total pension disbursements to persons who live for a relatively short time after retirement are less than their pension savings, and those who live longer than average receive more than the value of their own pension savings.

The balance of an insured’s pension account consists of the sum of her/his pension credit (contributions), accrued interest and inheritance gains. A charge for administrative costs is deducted from the account each year.

One Krona of Pension Credit for Each Krona Contributed

The pension contribution is 18.5 percent of the pension base. The pension base consists of pension-qualifying income and pension-qualifying amounts. In addition to earnings, benefits from the social insurance and



Proportion* Granted a National Pension at Different Ages, Percent

Birth cohort	Age at first withdrawal									
	61	62	63	64	65	66	67	68	69	70
1938	3.7	2.3	2.3	2.1	77.4	4.0	3.2	0.8	0.3	0.3
1939	4.0	1.9	2.1	2.3	75.8	6.3	2.3	0.8	0.3	
1940	3.1	2.2	2.5	3.2	76.1	4.9	2.5	0.7		
1941	3.0	2.3	3.1	3.7	73.3	6.1	2.7			
1942	3.6	3.0	3.5	3.9	70.9	5.9				
1943	4.2	3.2	3.6	5.3	66.7					
1944	4.8	3.3	4.5	5.7						
1945	5.2	4.1	5.1							
1946	6.0	4.7								
1947	6.3									

* The proportions are for new retirees in relation to the potential number of retirees as of December 2008. Individuals who have drawn only a premium pension are not included in the table. The ages are as of December 31 of the year concerned.

unemployment insurance systems are treated as income. Pension-qualifying amounts are a basis for calculating pension credit but are not income, properly speaking. Pension credit is granted for pension-qualifying amounts for sickness and activity compensation, years with small children (child-care years), studies and compulsory national service. The maximum pension base is 7.5 income-related base amounts (SEK 360 000 in 2008). Pension credit is earned at 16 percent of the pension base for the inkomstpension and 2.5 percent for the premium pension.¹

Who Pays the Contribution?

The insured pays an individual pension contribution to the national public pension of 7 percent of her/his earnings and any benefits received from the social insurance and/or unemployment insurance schemes. The contribution is paid on incomes up to 8.07 income-related base amounts² and is paid in together with the withholding tax on earnings. The individual pension contribution of 7 percent is not included in the pension base. Annual earnings are pension-qualifying when they exceed the minimum income for the obligation to file a tax return, which as from 2003 is 42.3 percent of the current price-related base amount.³ When an individual's income has exceeded this threshold, it is pension-qualifying from the first krona.

For each employee, employers pay a pension contribution of 10.21 percent of that individual's earnings.⁴ This contribution is also paid on earnings exceeding 8.07 income-related base amounts. Since there is no pension credit for earnings above 8.07 income-related base amounts, these contributions are in fact a tax. They are therefore allocated to the central-government budget as tax revenue rather than to the pension system.

For recipients of pension-qualifying social insurance or unemployment insurance benefits, the central government pays a contribution of 10.21 percent of these benefits to the pension system. For persons credited with pension-qualifying amounts, the central government pays a contribution of 18.5 percent of the pension-qualifying amount to the pension system. These central government contributions to the old-age pension system are financed by general tax revenue.

The total pension contribution is thus 17.21 percent, whereas the pension credit and the pension contribution are 18.5 percent of the pension base. The reason for the difference is that the contribution base is reduced by the individual pension contribution of 7 percent when pension credit is calculated.⁵ This means that the maximum pension base is 93 percent of 8.07, or 7.5 income-related base amounts. The maximum pension credit in 2008 was SEK 66 600.

Where Does the Contribution Go?

Of the pension contribution of 18.5 percent, 16 percentage points are deposited in the four buffer funds of the inkomstpension system: the First, Second, Third and Fourth National Pension Funds.⁶ Each fund receives one fourth of contributions and finances one fourth of pension disbursements. The monthly pension disbursements of the inkomstpension system thus come from the buffer funds. In principle, the same moneys that were paid in during the month are paid out in pensions.

The premium pension contribution, 2.5 percent of the pension base, is invested by the Premium Pension Authority (PPM) in interest-bearing assets until the final tax assessment is complete. Only then does the PPM know how much premium pension credit has been earned by each insured. When this amount has been determined, the PPM purchases shares in the funds selected by the insured. Contributions of insured persons who have

¹ Pension credit for the premium pension may be transferred between spouses. Pension capital transferred is currently reduced by 8 percent. The reasons are the assumption by the PPM that more such transfers will be made to women than to men, and the fact that women on average live longer than men, with the result that pensions based on transferred credit are likely to be disbursed for a longer period.

² For 2008, $8.07 \times 48\,000 = \text{SEK } 387\,360$.

³ For 2008, $0.423 \times 41\,000 = \text{SEK } 17\,343$.

⁴ Self-employed persons pay an individual pension contribution of 7 percent and a self-employment contribution of 10.21 percent.

⁵ $0.1721/0.93 = 0.185$

⁶ In addition, there is the Sixth National Pension Fund, which is an asset in the inkomstpension system but provides no contributions and pays no pensions.

not selected a premium pension fund are invested in the Premium Savings Fund. At the end of 2008 the premium pension system included 773 funds, administered by 83 different fund managers. When an insured person retires, the PPM sells shares in the retiree's funds, and the proceeds are paid out as a pension.

Funds in the Premium Pension System, 2008

	Number of registered funds, 2008	Managed capital, December 31, billions of SEK			
		2008	2007	2006	2005
Equity funds	585	105	163	141	99
Mixed funds	48	10	10	9	7
Generation funds	31	29	35	31	23
Interest funds	108	24	13	7	5
Premium Savings Fund (an equity fund)	1	63	87	79	58
Total	773	231	308	267	192

Interest on Contributions That Gave Rise to Pension Credit

Savings in a bank account earn interest, and the national public pension works in the same way. The interest on the inkomstpension account is normally determined by the growth in average income. Average income is measured by the *income index* (see Appendix A). The equivalent of interest on the premium pension account is determined by the change in the value of the premium pension funds chosen by the insured.

Thus, the interest earned on pension credit depends on the development of different variables in the general economy. The inkomstpension account earns interest at the rate of increase in incomes – in the price of labour, to put it another way. The development of the premium pension account follows the tendency on financial markets, which among other things reflects the price of capital. Neither of these rates of interest is guaranteed; they may even be negative. Through apportionment of contributions to separate subsystems where the rate of return depends on somewhat differing circumstances, risks are spread to some extent. Since 1995, the average rate of return in the inkomstpension system, measured as the capital-weighted rate of return, has been 3.1 percent. Since the first payments into the premium pension system in 1995, the average return of the premium pension system, after deduction of fund-management fees, has been –0.8 percent.

Annual Income Indexation and Return on Premium Pension System, Respectively, 1995–2008, Percent

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Income indexation	1.8	1.8	2.8	3.4	1.7	1.4	2.9	5.3	3.4	2.4	2.7	3.2	4.5	6.2
Return, premium pension system*	4.6	4.6	4.6	5.0	3.7	0.7	–8.6	–31.1	17.7	7.9	30.5	12.2	5.3	–34.3

* Capital-weighted return (internal rate of return).

A Rate of Interest Other Than the Income Index – Balancing

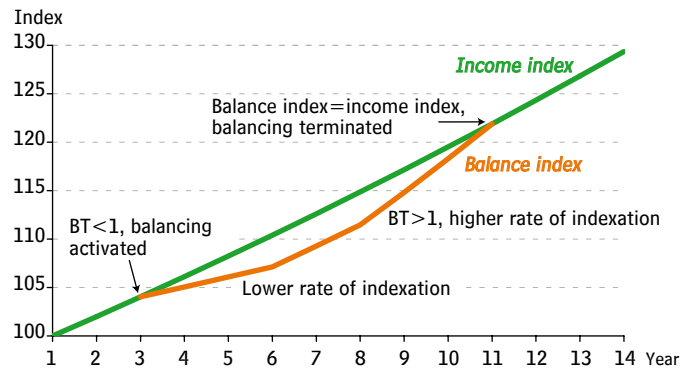
Under certain demographic and economic conditions, it is not possible to earn interest on the inkomstpension account and the inkomstpension at a rate equal to the growth in average income and at the same time to finance payments of the inkomstpension with a fixed contribution. In order to maintain the contribution rate at 16 percent, income indexation must be suspended in such a situation. This is done by activation of so-called balancing.

Dividing the assets of the system by the pension liability, we obtain a measure of the financial position of the system, the *balance ratio*. If the balance ratio exceeds one (1), assets are greater than liabilities. If the balance ratio is less than one, liabilities exceed assets, and balancing is activated. When balancing is activated, pension balances and pensions will be indexed by the change in a *balance index* instead of the change in the income index. The balance index changes as a result of the change in the income index and in the balance ratio.

An example: If the balance ratio falls below 1.0000 while the income index rises from 100.00 to 104.00, the balance index is calculated as the product of the balance ratio (0.9900) and the income index (104.00), for a balance index of 102.96. The indexation of pension balances is then 2.96 instead of 4 percent.⁷ Indexation of pensions is reduced to the same extent.

If the balance ratio exceeds 1.0000 during a period when balancing is activated, pension balances and pensions will be indexed at a rate higher than the increase in the income index. When pensions regain the value that they would have had if they had been indexed only by the change in the income index – that is, when the balance index reaches the level of the income index – balancing is deactivated, and the system returns to indexation solely by the change in the income index.

Balancing



⁷ The balance index for the next year is calculated by multiplying the balance index (102.96) by the ratio between the new and the old income index, multiplied in turn by the new balance ratio.

Pensions Reduced by Costs of Administration

The costs of administering the inkomstpension are deducted annually from pension balances through multiplication of these balances by an administrative cost factor (see Appendix A). This deduction is made only until the insured begins to withdraw a pension. At the current level of costs, the deduction for costs will reduce the inkomstpension by approximately 0.5 percent compared to what it would have been without the deduction.⁸

In a similar manner, the costs of administering the premium pension are deducted each year from premium pension capital. In this case, however, the deduction continues to be made after the insured begins to draw a pension. The current level of costs is 0.46 percent per year. However, costs of administration are expected to decrease and to average 0.27 percent for the next 31 years. At this level of costs, the deduction for administrative costs will reduce the premium pension by an average of about 10 percent from what it would have been without any cost deduction.⁹

⁸ On average, 1 krona (SEK 1) remains in the system for about 21 years before payout commences. Annual administration costs of 0.04 percent reduce the inkomstpension to $(1 - 0.0004)^{21} \approx 99$ percent of what it would have been with no cost deduction.

How is the Inkomstpension Calculated?

The inkomstpension is calculated through dividing the pension balance by an annuity divisor (see Appendix A) at the time of retirement. Divisors are specific for each birth cohort and reflect the remaining life expectancy when a pension is first withdrawn as well as an interest rate of 1.6 percent. The remaining life expectancy is an average for men and women. Owing to the interest of 1.6 percent, the annuity divisor is less than life expectancy, and the initial pension is higher than it would have been otherwise.

As an example, suppose that the annuity divisor is 16 and that an individual at age 65 has an inkomstpension account balance of SEK 2 million. That individual's inkomstpension will then be SEK 125 000 (SEK 2 million/16) per year, or SEK 10 400 per month.

The inkomstpension is recalculated annually by the change in the income index less the interest of 1.6 percentage points credited in the annu-

⁹ The average time during which the deduction for costs is made is 31 years. Administrative costs of 0.27 percent per year reduce the premium pension to $(1 - 0.0027)^{31} \approx 92$ percent of what it would have been with no cost deduction.

¹⁰ It is somewhat misleading to state “minus”; the inkomstpension is recalculated by the ratio between the new and the old income index, divided in turn by 1.016.

ity divisor,¹⁰ so-called adjustment indexation. In other words, pensions will only be unchanged in real terms if wages and salaries go up by precisely 1.6 percent *more* than inflation. For example, if wages and salaries rise by 2 percent more than inflation, pensions will increase by 0.4 percent in real terms. If wages and salaries increase by 1 percent more than inflation, pensions will decrease by 0.6 percent in real terms. When balancing has been activated, the balance index replaces the income index in the indexation of pensions.

How is the Premium Pension Calculated?

The premium pension can be drawn as either conventional insurance or fund insurance.

In both forms of insurance, the value of the pension account is divided by an annuity divisor, in the same way as with the inkomstpension. But for the premium pension, unlike the inkomstpension, the annuity divisor is based on forecasts of future life expectancy. Interest is currently credited at 2.2 percent in conventional insurance and 3.9 percent in fund insurance, after deduction of 0.1 percent for PPM costs.

If the premium pension is drawn in the form of conventional insurance, the pension is calculated as a guaranteed life-long annuity payable in nominal monthly instalments. In this case the PPM sells the insured's fund shares and assumes the responsibility and the financial risk. The pension is calculated to provide an assumed nominal return that is presently –0.1 percent after the deduction for costs. The amounts disbursed may be greater because of so-called rebates if the conventional life-insurance operation reports a positive result (see Appendix A).

Fund insurance means that the pension savings remain in the PPM funds chosen by the insured. The amount of the premium pension is recalculated once each year based on the value of fund shares in December. In each month of the following year, a sufficient number of fund shares are sold to finance payment of the calculated premium pension. If the value of the fund shares increases, fewer shares are sold; if it decreases, more shares are sold. Variations in prices of fund shares affect the value of the following year's premium pension.

The premium pension may include a survivor benefit for the period of disbursement. This means that the premium pension will be paid to either of two spouses or cohabitants as long as one of them survives. If the survivor benefit is elected, the monthly pension will be lower.

¹¹ These provisions concern the guaranteed pension for persons born in 1938 or later. For older individuals, other rules apply.

Guaranteed Pension¹¹

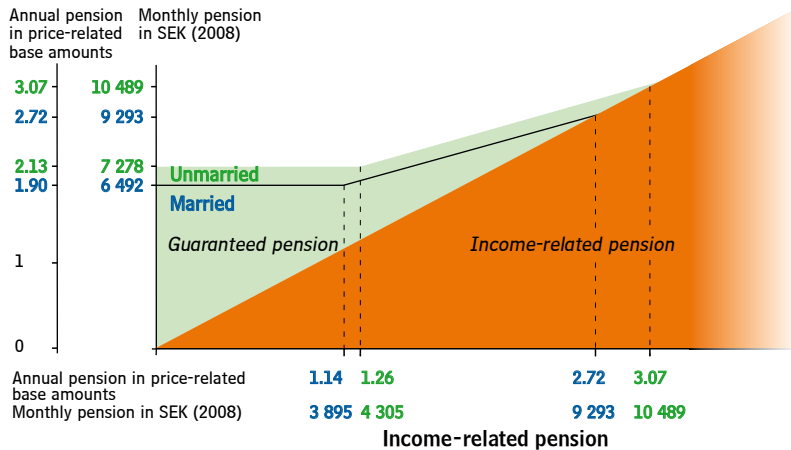
The guaranteed pension provides basic social security for individuals with little or no income. Residents of Sweden are eligible for a guaranteed pension beginning at age 65. To receive a full guaranteed pension, an individual must in principle have resided in Sweden for 40 years after age 25. Residence in another EU/EEA country is also credited toward a guaranteed pension.

In 2008 the maximum guaranteed pension for a single pensioner was SEK 7 278 per month (2.13 price-related base amounts¹²) and for a married pensioner, SEK 6 492 per month (1.90 price-related base amounts). The guaranteed pension is reduced for persons with an earnings-related pension. The reduction is taken in two steps: for low incomes, the guaranteed pension is decreased by the full amount of the earnings-related pension; for higher incomes, the guaranteed pension is decreased by only 48 percent. This means that a single pensioner with a monthly earnings-related pension of SEK 10 489 or more received no guaranteed pension in 2008. For a married pensioner the corresponding income limit was SEK 9 293.

¹² In 2008 the price-related base amount was SEK 41 000.

An example: A pensioner living alone has an earnings-related pension equivalent to 2.26 price-related base amounts. The guaranteed pension is reduced by the full amount of income up to 1.26 price-related base amounts. The remainder of (2.13–1.26 =) 0.87 price-related base amount is reduced by 48 percent of the income above 1.26 price-related base amounts, or by 0.48 price-related base amount, for a guaranteed pension of 0.39 price-related base amount. The total annual pension will then be 2.65 price-related base amounts.

Income-related pension + guaranteed pension



When the guaranteed pension is calculated, the premium pension is disregarded. Instead, the inkomstpension is calculated as if it had been earned at 18.5 percent of the pension base, rather than 16 percent. One reason for these provisions is that they are considered to simplify administration of the guaranteed pension. When the premium pension has become more substantial, the rules may be revised.

The guaranteed pension is financed directly by the tax revenue of the central-government budget and is therefore not included in the income statement and balance sheet of the pension system.

ATP

Persons born before 1938 have not earned either an inkomstpension or a premium pension. Instead they receive the ATP, which is calculated by pre-existing rules. The level of the ATP pension is based on an individual's income for the 15 years of highest income, and 30 years with income are required for a full pension.

For persons born in 1938–1953, there are special transitional provisions. These individuals receive a portion of their earnings-related old-age pension as an ATP and the rest as an inkomstpension and a premium pension. The younger the individual, the smaller the proportion of the ATP. Persons born in 1938 receive 80 percent of their ATP; those born in 1939 receive 75 percent of their ATP, etc. There is an additional guarantee that the pension received will not be less than the ATP earned by the individual through 1994 – the year of the decision in principle to adopt the pension reform. Those born in 1954 or thereafter earn their entire pensions under the provisions for the inkomstpension and the premium pension. Beginning with the year when the individual reaches age 65, the ATP is adjustment-indexed in the same manner as the inkomstpension. For pension withdrawals before the year when the individual turns 65, the ATP is price-indexed.

Costs of the Old-Age Pension System

The income statements of the inkomstpension and the premium pension show the costs reported by the SSIA, the PPM and the National Pension Funds in their own income statements as "costs reported gross."¹³ The capital management costs of the National Pension Funds and the premium pension system that are reported "net,"¹⁴ that is, against revenue or as a lower return on funds, are not shown directly in the income statement of the pension system.

In this section, costs reported gross and costs reported net are compiled, as are transaction costs that can only be captured partly in the accounts of the National Pension Funds and the PPM. The purpose is to provide as full a picture as possible of the total costs of the old-age pension system.

As far as the insured individual is concerned, the effects of costs reported net differ for the premium pension and for the inkomstpension. In the premium pension system these costs decrease either the return or the premium pension account through a deduction for costs. Thus costs reduce assets and thereby the future premium pension of the insured. On the other hand, the costs reported net by the National Pension Funds are not included in the costs deducted from the pension account, and normally¹⁵ the indexation of pension capital and pensions is not affected, either. The costs reported net by the National Pension Funds affect only the assets of those Funds. Since only system assets, not liabilities, are reduced by these costs, their impact on the result of the system is negative. This means that costs reported net have a negative effect on the balance ratio. But this effect is small, as costs reported net are quite limited in relation to the pension liability.

Accounting for Total Costs

The total costs of insurance administration and capital management for the pension system were just less than SEK 4.4 billion, of which SEK 1.8 billion are reported in the income statement of the pension system. This amount of SEK 1.8 billion represents the total costs of insurance administration (1 047 million) and capital management costs reported gross (778 million). See the table Reported Costs of the Old Age Pension System.

For the inkomstpension, costs reported in the income statement for 2008 totalled SEK 1 388 million, of which 610 million were for insurance administration and 778 million were capital management costs reported gross. This amount (1 388 million) is charged to the inkomstpension accounts of the insured individuals in the Orange Envelope, though with certain discrepancies due to periodization. In addition to the SEK 778 million, the National Pension Funds sustained costs in the form of commissions and result-based fees/costs of SEK 792 million, as well as transaction costs of 430 million. Thus, the total costs of the inkomstpension system were SEK 2 610 million.

The income statement of the premium pension shows administrative costs of SEK 432 million. That sum does not include SEK 5 million for management of conventional insurance, reported net, through reduction of the return on funded capital (see Note 17). The total costs of insurance administration for the premium pension are thus SEK 437 million; see the item of Total, insurance administration, in the table below. For the premium pension, the item of Capital management costs, net, refers to the fees charged by the funds after rebates to premium pension savers. As the fee was SEK 758 million, and rebates were SEK 1 246 million, the fee before rebates was SEK 2 004 million. In addition to 758 million in capital management costs,

¹³ The concept of costs reported gross is used here for costs like those reported by the National Pension Funds, the SSIA and the PPM as costs in their income statements.

¹⁴ The concept of costs reported net is used here for costs like those reported by the National Pension Funds as costs of commissions and result-based fees/costs, and those that are reported by the PPM as the net of the items termed Capital management costs and Rebates, capital management costs.

¹⁵ Only when balancing is activated do the costs of the National Pension Funds reported net affect indexation of pensions.

the costs of capital management have also been charged with SEK 592 million in transaction costs. As with the corresponding item for the National Pension Funds, this amount does not fully account for all transaction costs. The total capital management costs of the premium pension have reduced the return (see Note 16).

Reported Costs of the Old-Age Pension System, Millions of SEK

	Inkomst- pension	Premium pension	Total
Collection of contributions, etc. (National Tax Board)	353	55	408
Pension administration	257 *	382	639
Total, insurance administration	610	437	1 047
Capital management costs reported gross	778	0	778
Capital management costs reported net	792	758	1 550
Transaction costs**	430	592 ***	1 022
Total, capital management	2 000	1 350	3 350
Total costs	2 610	1 787	4 397

* The amount is the one decided for reimbursement of administrative costs to the SSIA from the National Pension Fund.

** These consist primarily of transaction costs on the stock market. Transaction costs on bond and foreign exchange markets arise from the difference between bidding and asking prices. Such costs are not reported in this table.

*** The costs included here are only those of the funds that report the so-called total cost share (TCS) to the PPM. These funds account for roughly 95 percent of the capital in the premium pension system. The amount also includes costs of interest and coupon (dividend) taxes in the funds.

Costs of the Swedish Social Insurance Agency (SSIA)

The income statement of the pension system includes the compensation that National Pension Funds are required to provide to the SSIA for its administrative costs. The accounting of the inkomstpension is on a cash basis rather than an accrual basis. The difference between the compensation received from the National Pension Funds and the cost reported by the SSIA for the inkomstpension is offset by the compensation received by the agency two calendar years after the difference arises. The table below shows both the compensation decided, i. e. the cost included in the annual report of the pension system, and the accrued cost, or “cost outcome,” used in the time series below.

Costs of the Inkomstpension to the SSIA, Millions of SEK

	2001	2002	2003	2004	2005	2006	2007	2008	2009
Opening balance	45	61	-70	-92	16	139	312	302	66
Compensation decided*	734	730	785	904	895	794	514	257	544
Cost outcome**	719	861	807	796	772	622	524	493	
Net income / -loss for the year	15	-131	-22	108	123	172	-10	-236	
Closing balance	61	-70	-92	16	139	312	302	66	

* Compensation from the National Pension Funds, the cost reported in the income statement of the inkomstpension.

** The cost included in the tables Costs of the Old-Age Pension System 2001–2008 and Costs per Insured, 2001–2008.

Development of Costs, 2001–2008

In order to put costs in perspective, the tables below show the items of cost each year beginning with 2001, the first year that the annual report of the pension system was prepared. Costs are reported in SEK and in SEK per number of insured, i. e. the number of people with pension accounts, including pensioners. To facilitate comparison with other National Pension Funds, the Sixth National Pension Fund has changed its accounting principle beginning with 2008 to the one followed by the other National Pension Funds. The historical data for the item Capital management costs reported gross in the table have been changed in accordance with the new accounting principle. Consequently, the accounting in this section differs from that in the annual report of the previous year.

Costs of the Old-Age Pension System 2001–2008, Millions of SEK

IP = inkomstpension, PP = premium pension

		2001	2002	2003	2004	2005	2006	2007	2008
Collection of contributions, etc. (National Tax Board)	IP	250	297	340	344	279	403	287	353
	PP	–	–	–	–	43	63	45	55
Pension administration	IP*	719	861	807	796	772	622	524	493
	PP	499	442	351	285	244	272	273	382
Total, insurance administration	IP	969	1 158	1 147	1 140	1 051	1 025	811	846
	PP	499	442	351	285	287	335	318	437
Capital management costs reported gross	IP	832	877	1 060	1 299	663	700	752	778
	PP	–	–	–	–	–	–	–	–
Capital management costs reported net	IP	–	–	–	–	769	672	803	792
	PP	306	273	374	523	697	892	924	758
Transaction costs**	IP	..	..	305	414	369	424	435	430
	PP	..	..	..	..	503	537	713	592
Total, capital management	IP	..	..	1 365	1 713	1 800	1 796	1 990	2 000
	PP	..	..	..	..	1 200	1 429	1 637	1 350
Total costs	IP	..	..	2 512	2 853	2 851	2 821	2 801	2 846
	PP	..	..	..	..	1 487	1 764	1 955	1 787

* In 2001 and 2002 the costs included are those of the National Social Insurance Offices, the National Social Insurance Board, National Government Employee Pensions Board, the KPA Pensions Company and the National Institute of Economic Research. In 2003 and 2004 the costs of the National Social Insurance Offices and the National Social Insurance Board are included. From 2005 on, the costs of the old-age pension systems are those of the SSIA. The amount reported for the inkomstpension is the actual cost, whereas the amount in the table Reported Costs of the Old-Age Pension System refers to the compensation received from the National Pension Fund for costs of administration.

** See explanation in the table Reported Costs of the Old-Age Pension System.

The table shows that the costs of the old-age pension system for the inkomstpension have remained relatively unchanged in the last few years. The costs of the old-age pension system for the premium pension decreased from 2007 to 2008, as the capital managed had also decreased.

In order to compare the size of costs in relation to the "capital" from which the costs are deducted, the amount of the pension liability is shown in the table.

Pension Liability/Capital from Which Cost Deduction Was Taken, 2001–2008, Billions of SEK

		2001	2002	2003	2004	2005	2006	2007	2008
Pension liability from which cost deduction was taken	IP*	3 943	4 157	4 314	4 486	4 613	4 751	4 910	5 157
	PP	65	59	94	125	193	269	310	233

* The pension liability of the pay-as-you-go system, excluding the liability for the ATP and for the inkomstpension during disbursement. There is no cost deduction from pensions.

By agreement between the SSIA and the PPM, joint costs of the inkomstpension and the premium pension are allocated, as from 2005, according to their respective proportions of the total contribution, i. e. 16/18.5 and 2.5/18.5. The largest joint cost is for the work of the National Tax Board in collecting contributions and in calculating and confirming pension-qualifying income. Other cost items include producing and distributing the Orange Envelope and maintaining the pension website, minpension.se. Before 2005, the inkomstpension financed virtually all joint costs.

Costs per Insured, 2001–2008, SEK

		2001	2002	2003	2004	2005	2006	2007	2008
Collection of contributions, etc. (National Tax Board)	IP	37	43	48	47	38	54	38	46
	PP	–	–	–	–	8	11	8	9
Pension administration	IP	106	124	114	109	105	84	69	64
	PP	101	87	68	53	45	48	47	64
Total, insurance administration	IP	143	167	162	156	143	138	107	110
	PP	101	87	68	53	53	59	55	73
Capital management costs reported gross	IP	123	126	150	178	90	94	100	101
	PP	–	–	–	–	–	–	–	–
Capital management costs reported net	IP	–	–	–	–	105	90	106	103
	PP	63	54	71	98	128	157	158	126
Transaction costs	IP	..	..	43	57	50	57	58	56
	PP	..	..	..	..	92	94	122	99
Total, capital management	IP	..	..	193	235	272	241	264	260
	PP	..	..	..	..	220	251	280	225
Total costs	IP	..	..	355	391	388	379	371	370
	PP	..	..	..	..	273	310	335	298
Number insured	IP	6 774 199	6 951 248	7 090 267	7 284 999	7 352 026	7 437 041	7 557 655	7 692 423
	PP	4 894 470	5 081 073	5 233 891	5 350 154	5 456 306	5 689 608	5 838 802	6 004 438

Capital Management Costs in Relation to Capital Managed

Yet another way to view the costs of capital management is to compare them with the capital under management. The capital management costs of the inkomstpension are the costs of the First–Fourth and Sixth National Pension Funds. The capital management costs of the premium pension refer to the fees that the premium pension funds, including the Seventh National Pension Fund, have deducted after rebates, as well as the capital management costs of the PPM for conventional life insurance. The economies of scale for the four major National Pension Funds in the inkomstpension system are clearly apparent from the table below. In 2008, the total gross and net costs of these funds, and for the much smaller Sixth National Pension Fund, were 0.20 percent. Their transaction costs were 0.05 percent, and the item of Total, capital management, was 0.25 percent. The capital management costs of the far more numerous and much smaller funds in the premium

Costs of the Old-Age Pension System

pension system were 0.30 percent; transaction costs were 0.23 percent, and the item of Total, capital management, was 0.53 percent of the capital managed. However, the differences in costs are due not only to disparity in economies of scale, but also to the type of investment. Thus, the funds in the inkomstpension system invest some 42 percent of their capital in bonds or similar securities, with relatively low management costs compared to stocks, whereas in the premium pension system, only about 23 percent of assets are invested in such assets.

Capital Management Costs in Relation to Capital Managed, 2001–2008, Percent

		2001	2002	2003	2004	2005	2006	2007	2008
Capital management costs reported gross	IP	0.15	0.17	0.20	0.21	0.09	0.09	0.09	0.10
	PP	–	–	–	–	–	–	–	–
Capital management costs reported net	IP	–	–	–	–	0.11	0.08	0.09	0.10
	PP	0.45	0.44	0.43	0.42	0.42	0.40	0.33	0.30
Transaction costs	IP	..	..	0.06	0.07	0.05	0.05	0.05	0.05
	PP	..	..	..	..	0.30	0.24	0.25	0.23
Total, capital management	IP	..	..	0.26	0.28	0.25	0.22	0.23	0.25
	PP	..	..	..	..	0.72	0.64	0.58	0.53
Average capital managed*	IP	572 038	526 355	532 238	611 569	707 695	813 564	878 205	802 780
	PP	68 000	62 000	87 000	121 000	167 711	226 014	283 972	254 336

* Calculated as capital at the beginning of the year + capital at year-end divided by two, in millions of SEK.

Actual Cost Deductions Taken, 2001–2008

In 2008 the deduction from pension balances for costs was 0.0226 percent in the inkomstpension system. The deduction for costs is only done until pension disbursement begins. As noted above, neither the capital management costs reported net, 0.10 percent of capital managed (0.02 percent of the pension liability), nor the transaction costs of 0.05 percent of capital managed (0.01 percent of the pension liability) are charged to pension savers as a deduction for costs. In the pension projections in the Orange Envelope, the deduction for costs is assumed to remain constant at 0.045 percent.

In 2008 the deduction for the administrative costs of the PPM was 0.16 percent, based on the capital managed in the premium pension system as of May 1, 2008. Here the cost deduction continues even after pension disbursement begins. The average cost deduction by fund managers after rebates was 0.30 percent in 2008. In addition, there were transaction costs of approximately 0.23 percent in the form of brokerage etc. The annual percentage cost deduction will diminish in the years ahead. As funded capital grows, it is estimated that the administrative costs for the premium pension will drop from 0.16 percent to around 0.07 percent, and the rebates returned from fund managers and credited to pension savers are expected to increase.

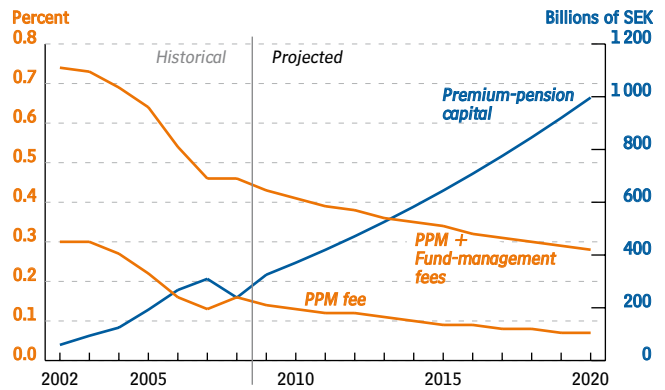
Deductions for Costs, 2001–2008, Percent

	2001	2002	2003	2004	2005	2006	2007	2008
IP	0.0340	0.0520	0.0480	0.0604	0.0509	0.0312	0.0440	0.0226
PP, PPM	..	0.30	0.30	0.27	0.22	0.16	0.13	0.16
PP, funds	0.45	0.44	0.43	0.42	0.42	0.40	0.33	0.30
PP, total	..	0.74	0.73	0.69	0.64	0.56	0.46	0.46

One would expect the cost deducted from inkomstpension accounts to correspond to the cost reported in the income statement of the inkomstpension. That amount, divided by the pension liability – the inkomstpension account balances of the insured – for which disbursement has not yet begun would be the cost deduction expressed as a percentage. However, this is not so. One reason is related to the phase-in of the system; until the year 2021, the cost deduction will be increased stepwise to 100 percent (see Note 11). Another reason is that the costs deducted from estimated account balances are budgeted costs; the (minor) discrepancies thus arising between costs deducted and actual costs are followed up and corrected in the cost deduction of the next year.

For the premium pension there are equivalent small periodic discrepancies between the contribution charged and the PPM’s actual cost. These discrepancies are also corrected on an ongoing basis.

Costs of the Premium Pension



What Difference Do Costs Make in the Size of a Pension?

Costs are an important factor in determining the size of a future pension. A seemingly modest charge for costs of administration can reduce a pension substantially since it is paid over a long period. Among factors affecting pension capital, the magnitude of costs is the one over which the responsible authorities have the most control; moreover, the insured are in a position to influence the costs of their premium pensions.

The following simplified calculation provides a fairly accurate portrayal of how a certain cost percentage affects the size of the pension disbursed. The average time for which a paid-in contribution remains in the system before being disbursed is roughly 21 years, and the average time for which one krona remains in the system during pension disbursement is about 10 years. If the cost of the inkomstpension is 0.04 percent, the charge for administrative costs will reduce the inkomstpension to $(1-0.0004)^{21} \approx 99$ percent of what it would have been without the charge, or by roughly 1 percent. If the costs of the premium pension decrease, for example, to 0.3 percent, the charge for costs will still reduce the premium pension appreciably to $(1-0.003)^{31} \approx 91$ percent of what it would have been without the charge, or by 9 percent. The reason why the charge for costs is deducted for 31 years is that in the premium pension system the deduction continues during the period of pension disbursement. A fairly normal management fee in Sweden for saving outside the national pension system is around 1 percent – not infrequently, it is even higher. If the charge for costs for the same period as in the example above is 1 percent, pension capital savings will be 73 percent of what they would have been with a fee of 0 percent; in other words, 27 percent is lost in charges for costs.

The Rate of Return in the Pension System

Sweden's national pension is based primarily on earnings in the economically active years. Gainfully employed individuals contribute a certain portion of their income toward a pension. The bulk of their contribution goes to the *inkomstpension* system, a lesser share to the *premium pension* system. Pension credit is accumulated over a long period, 40–45 years, sometimes even more. The size of future pensions will thus depend heavily on the rate of return of contributions paid into the system. The rate of return is like the interest earned on a savings account at a bank. For example, someone who deposits a constant amount each year for 40 years, at an annual interest rate of 2 percent, will end up with balance that is 54 percent higher than it would have been with no annual return.

In the *inkomstpension* system the rate of return is determined by the percentage increase in the income index. This index follows the average rate of growth in the earnings of the economically active. In the *premium pension* system, on the other hand, the outcome is determined by the return on the funds selected by pension savers. Another difference is that the rate of return for the *inkomstpension* is the same for everyone, whereas the return to savers in the *premium pension* system may vary considerably from one individual to another, depending on the type of funds chosen.

Development During 2008

The economy entered a severe downturn during 2008, both in Sweden and elsewhere in the world. One conspicuous feature of the decline was the sharp drop in stock prices on equity markets. On the Stockholm Stock Exchange, shares of stock lost more than 40 percent of their value at the outset of the year. The return on stocks is of principal importance for saving in the *premium pension* system, where the bulk of pension saving has been invested in stocks.

However, it also has an impact on the *inkomstpension* system, via the capital of the National Pension Funds, since more than half of their assets consist of stocks. The fall in the market value of National Pension Fund investments will be a factor in the activation of so-called balancing in 2010 (for a more detailed discussion see the section “How the National Pension System Works”). Balancing will reduce the indexation of the *inkomstpension* and the ATP, from 2009 to 2010. There will be a similar reduction in the indexation of the *inkomstpension* credit of the economically active.

The balancing that takes place in 2010 will not be affected by any increase in stock prices during 2009 – the relevant date for the valuation of the National Pension Funds is the last day of 2008.

By contrast, the *premium pensions* that are now being disbursed and are linked to the development of stock markets will be negatively affected already in 2009. So far, however, pensions from the *premium pension* system are quite modest as the system is still in an early build-up phase. In the PPM fund system the return was negative, –34.5 percent, in 2008. It should be noted that *premium pension* capital is not affected by the above-mentioned balancing, which applies only to the *inkomstpension* and ATP systems.

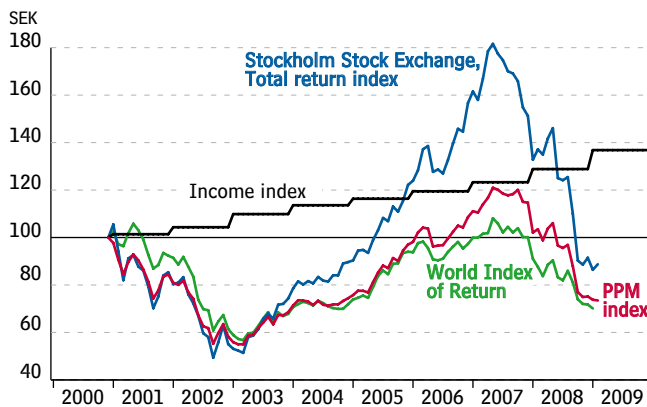
Pension balances in the *inkomstpension* system are revalued by the change in the income index. Unlike the *premium pension* system, the change in value occurs only at the outset of each year. At the beginning of 2008 the income index was raised by 4.5 percent, and at the beginning of

2009 by 6.2 percent. So far, premium pension capital equals just 3 percent of inkomstpension capital; consequently, total pension capital continued to increase during 2008.

The Inkomstpension and the Premium Pension Are Complementary

One reason for establishing the premium pension as complement to the pay-as-you-go system was that variations over the years in the growth of earnings and return on capital might tend to offset each other. In 2008 this distribution of risk functioned as intended. The relatively substantial increase in the income index compensated for the negative return on capital and resulted in a relatively good overall return for the pension system. The spreading of risk will become more important in the future as premium pension funds account for a growing share of total pension capital.

Value of SEK 100 Paid into the Inkomstpension System in December 2000 (Income Index) and in the Premium Pension System (PPM Index), and in an Average Portfolio of Stocks on the Stockholm Stock Exchange and on the Global Equity Market, Respectively



Return index for the Stockholm Stock Exchange according to Affärsvärlden, World Index of Return on Stocks according to Morgan Stanley Capital International Inc., converted into SEK.

In December, 2000, premium pension savers could begin investing their capital in the funds of the system. Before then, the capital had been under temporary management, which had invested it in an interest-bearing account at the Swedish National Debt Office (Riksgäldskontoret). The value of an amount invested at the outset of 2000 has varied sharply, on average, over the years. Until the spring of 2007, the inkomstpension and the funds in the premium pension system had earned almost the same cumulative return: an increase in value of approximately 20 percent since the end of 2000. After the stock market drop in 2008, the value of the funds had decreased by an average of 24.9 percent since 2000, as measured by the PPM index, whereas the income index was still rising.

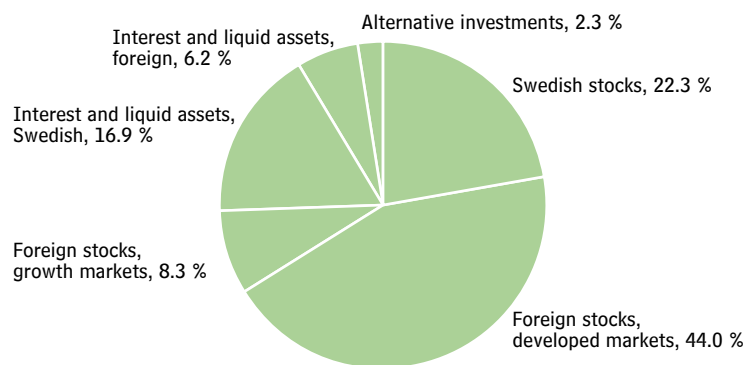
The PPM index measures how much an amount invested in the system at a certain point in time has changed, on average, over a given period (the so-called time-weighted return). Individual pension savers have normally obtained different average returns, depending not only on the type of investment, but also on the amount of capital that they have invested individually at various points in time. This return is called the internal rate of return, or capital-weighted return, and is discussed in a separate section below.

The premium pension system has been through two sharp stock-market downturns and one long upswing: the downturn in 2000–2003, the upswing in 2003–2007 and the downturn in 2007–2008. As an initial year, 2000 does not provide an accurate reflection of the performance of the system thus far – at that time, stock prices were still very high after surging in the 1990’s.

The current state of the market at the time when a premium pension is first drawn may have considerable significance. For a cautious investor, it may be appropriate a number of years before retiring to switch to funds that normally vary much less in value, such as bond funds. A risk seeker, though, may want to take the chance of accumulating a large pension capital by the intended time of retirement and invest heavily in stocks, while running the risk that the capital might in fact turn out to be much less. It should be emphasized, however, that retirement need not mark the end of the change in value. Those who retire when the market is doing poorly may be able to improve the level of their pensions substantially later on by electing to keep their pension savings invested in fund insurance (as most pensioners have done so far). For the relatively few who have switched to conventional life insurance, with a guaranteed future monthly benefit, the prospects of subsequently recouping a loss are more limited. If such compensation is nevertheless obtained, it will be in the form of a rebate granted by the PPM.

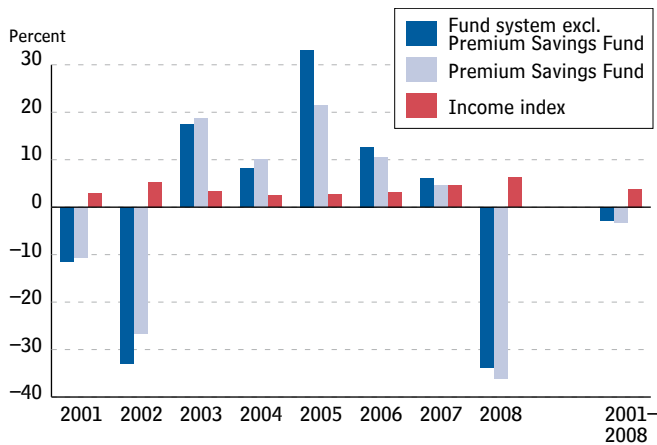
The total return index of the Stockholm Stock Exchange rose much more than the PPM index in 2003–2007 but then dropped more precipitously in 2008. The main explanation for these different paths of development is that premium pension savers had invested primarily in foreign stocks. Both the upswing until 2007 and the downturn that followed were more pronounced on the Stockholm Stock Exchange than on most major stock exchanges abroad. Moreover, a portion of the investments made were in interest-bearing funds with a steady return. Premium pension savers investing in foreign funds have also benefited to some extent by the fall of the Swedish krona during 2008, which has limited the decrease in foreign equity capital in terms of Swedish currency.

Distribution of Premium Pension Capital by Type of Investment at the End of 2008



For those who have refrained from selecting funds, their moneys have been invested in the Premium Savings Fund and managed by the Seventh National Pension Fund. This group has had roughly the same return as the average investor making an active choice. At the end of 2008, an amount invested in the Premium Saving Fund in December 2000 would have received a negative return of -3.2 percent per year, compared with -2.9 percent for those choosing funds themselves.

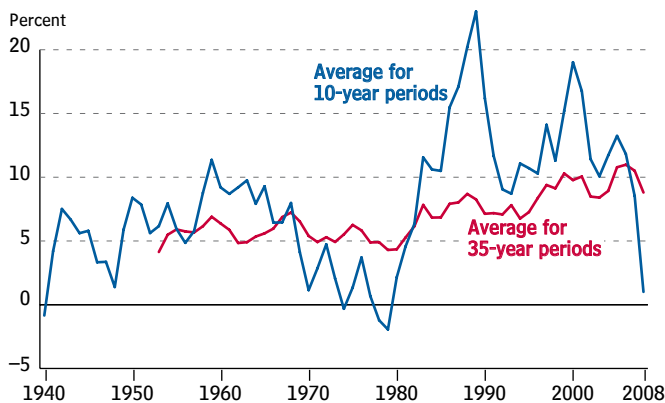
Rate of Return in the Premium Pension System and Changes in the Income Index



Importance of a Long-Term View

As noted, the premium pension system cannot be evaluated on the basis of its average return since 2000. The importance of a long-term view is easily underestimated, both when stock prices are rising and when they are falling. During the 90-year period from 1918 to 2008, the average real rate of return on the Stockholm Stock Exchange was 6.3 percent per year. However, this does not provide assurance of such a return in 10 or even in 20 to 30 years. For different 10-year periods since 1930, the real return has varied from 23 percent per year (1980–89) down to *minus* 2 percent per year (1970–79). The real rate of return was also negative for the ten-year period 1931–40. During the 10-year period 1999–2008 the real return on equities was 1.2 percent per year, but if the period is shifted back just one year (to 1998–2007) the figure jumps to 8.5 percent. This case is not unique. Similarly large and rapid changes between 10-year averages have occurred before.

Real Rate of Return on the Stockholm Stock Exchange in Successive 10- and 35-Year Periods



For each year the curves show the average real rate of return for the past 10 and 35 years, respectively. At the point represented by 2008, for example, the returns shown are 1.2 percent per year for the 10-year period 1999–2008 and 8.9 percent per year for the 35-year period 1974–2008.

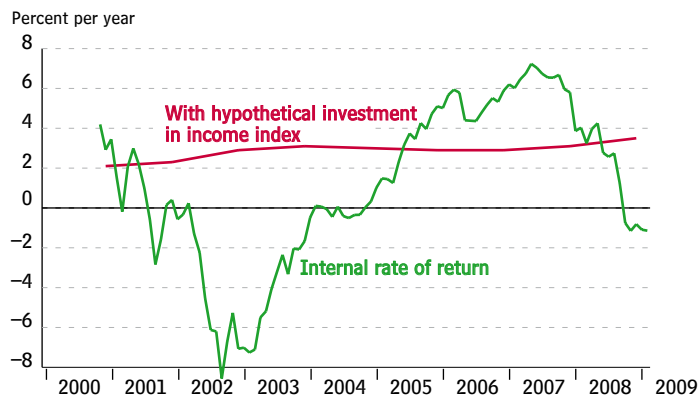
The conclusion is that the "long run" is not 5–7 years as is sometimes said, but that people should think in terms of a much longer period. Where pensions are concerned, a reasonable time horizon for younger people would be 30–40 years. Historically, the development of value over 35-year periods has been more stable, varying between 5 and 10 percent per year; one would do well to keep these figures in mind, particularly after the development of value in 2008.

Return in the Premium Pension System as Measured by the Internal Rate of Return

The measure of return shown above is sometimes called the "time-weighted" return, and it does not take into account the possibility of substantial changes in the amount of capital during the period of saving. What is shown for the premium pension system as a whole is how the value of one krona paid in has developed on average over a certain period. For individual savers in the premium pension system, it is important to use another measure for reporting, namely the internal rate of return. The reason is that since the beginning, the capital in pension savers' accounts has increased considerably as the system has been built up. At the end of 2007, there was six times as much capital in the funds as at the end of 2000. Thus, for example, the amount on which the extremely high return was obtained in 2005 was much larger than the amount adversely affected by the equally negative return of 2002. The internal rate of return, or the "capital-weighted" return, takes this difference into account by assigning greater weight to 2005 than to 2002. In the PPM's calculations of internal rate of return, consideration is also given to other factors, such as management fees, rebates and inheritance gains.

For this reason the internal rate of return in the pension system as a whole has been better than the time-weighted yield. If the internal rate of return in the premium pension system is calculated for the period since the start in 1995, thus including the return achieved by temporary management until 2000, roughly 5 percent per year, the resulting return is still negative. Through the end of 2008, the return has averaged minus 0.8 percent per year.

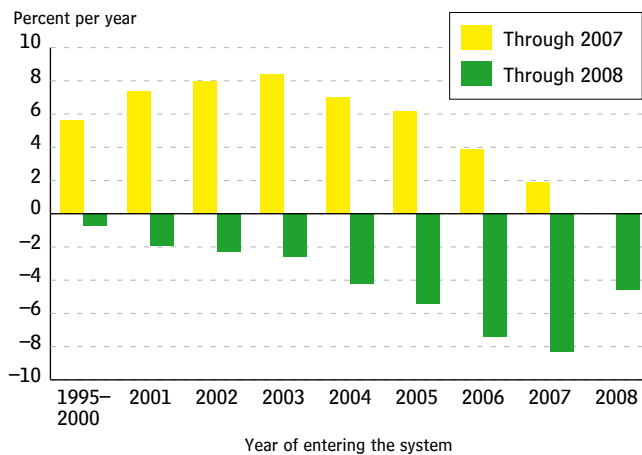
Average Internal Rate of Return for All Premium Pension Savers until Different Points in Time in 2000–2008, Beginning with Their Respective Years of Entry



For the income index, which determines the development of the value of the inkomstpension, a calculation of internal rate of return does not have the same relevance as in the premium pension system, since there have been no similarly large changes in the number of people paying contributions, and since variations in the rate of increase in the income index have been limited. However, the PPM normally performs a parallel calculation of the internal rate of return that pension savers would have obtained if all of them had invested their savings in a *hypothetical bond with a yield equal to the growth in the income index*. "Non-choosers" are assumed to have made this investment. As it turned out, the internal rate of return on this hypothetical investment through the end of 2008 would have been 3.5 percent per year, calculated as an average from the time beginning with the savers' respective years of entry into the system. This average may be compared to the *actual internal rate of return* in the fund system. That rate, as just mentioned, was minus 0.8 percent through the end of 2008.

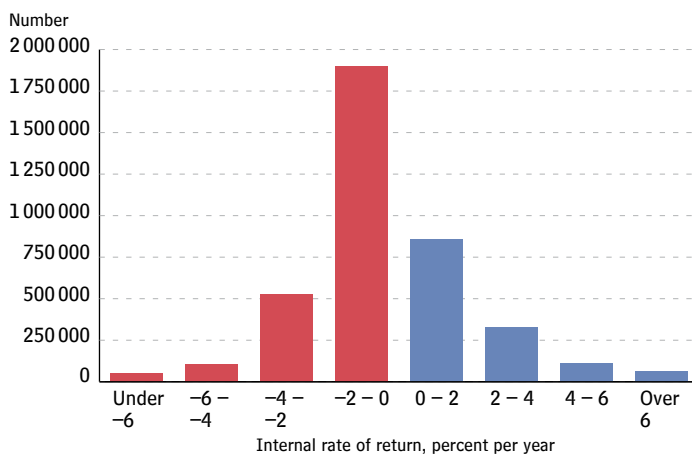
For pension savers entering the system in most recent years, the internal rate of return has of course been worse. For those entering the system prior to 2004, however, losses have been more limited as some of their payments into the system were made in 2005–2006, when yields were very high. Furthermore, those not entering the fund system until 2008 have suffered little loss of value, despite the drop in the stock market. The explanation is that for most of the time when they were paying contributions to the premium pension system (since 2006), their money have been under so-called temporary management at the rate of interest offered by the National Debt Office (5–6 percent).

Average Internal Rate of Return from Year of Entry through the End of 2007 and 2008, Respectively, for Premium Pension Savers, by Year of Entry into the Fund System



Among the pension savers joining the premium pension system since its inception in 1995, 65.5 percent sustained a negative development of value (negative internal rate of return) through the end of 2008. It may be mentioned that one year earlier, up to the end of 2007, only 1.1 percent showed a negative return. Through the end of 2008, 12.8 percent received a return above 2 percent on an annual basis. At the same time, 17.2 percent had a return below -2 percent per year.

Pension Savers Who Began Paying into the Premium Pension System in 1995, by Levels of Internal Rate of Return through 2008



Data based on a sample of approximately 22 000 persons who began paying into the system in 1995.

Since the data refer to persons participating since 1995, the reason for the considerable spread is not that they entered the system at different times (compare the previous figure showing the distribution by year of entry). Rather, it is primarily the choice of fund investments with substantial differences in return.

Rate of Return in the National Pension Funds

The role of the National Pension Funds is to serve as a financial buffer to smooth out periods of current surpluses and current deficits in the inkomst-pension system. Beginning in 2009, the current expenditure of the system will exceed current revenue, requiring annual net supplements from the buffer funds.

First–Fourth and Sixth National Pension Funds, Rate of Return after Deduction for Costs

Percent

National Pension Fund	2008	2007	2006	2005	2004	Average 2004–2008
First	–21.9	4.6	9.6	17.4	11.2	3.2
Second	–24.1	4.0	12.8	18.5	11.4	3.3
Third	–19.8	5.0	9.5	17.7	11.2	3.8
Fourth	–21.0	2.4	10.4	16.8	10.5	2.9
Sixth	–16.6	14.1	13.7	8.9	8.7	5.1
Total	–21.6	4.2	10.7	17.4	10.9	3.3

The aggregate decrease in the value of the buffer funds was almost 22 per cent in 2008. However, owing to a positive stock market development in preceding years, the average yield for the five-year period 2004–2008 was positive, more than 3 percent per year.

Three Scenarios for the Future of the Pension System

To show how different developments can affect the financial position of the pension system and the level of pension benefits, projections are presented for the evolution of the system over the next 75 years.

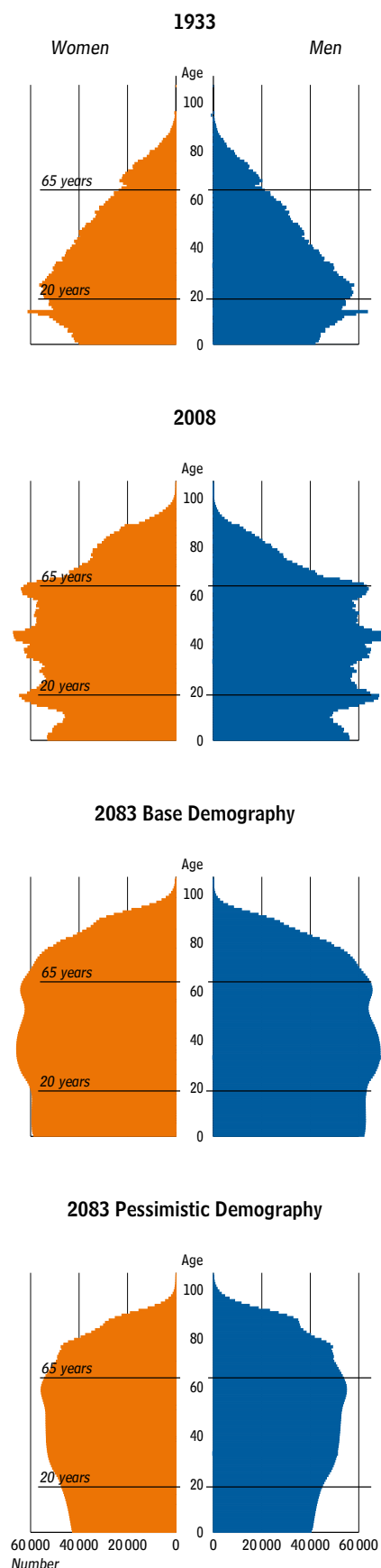
The long-term financial development of the inkomstpension system is described below in three different projections, referred to as the base, optimistic and pessimistic scenarios, and the assumptions for the calculations are the same as in previous Orange Reports. Thus, no adjustment has been made, for example, in the assumptions about the return on funds in light of recently plunging share prices on stock exchanges, for the primary purpose of the projections is to illustrate the long-run development of the system under different conditions. In the base scenario, which starts with the latest population forecast by Statistics Sweden, it is assumed that incomes will grow by 1.8 percent annually in real terms and that the real annual rate of return on buffer-fund assets will be 3.25 percent. In the other two scenarios, assumptions have been made about more and less positive paths of development for the finances of the inkomstpension system.

The three projections extend 75 years into the future. The projected population structure in 75 years is different from the structure in Sweden today, as is illustrated by the population pyramids in the margin. In the base and optimistic scenarios, the demographic assumptions are the same. For comparison, the population pyramid 75 years ago, that is, in 1933, is also shown. At that time the remaining life expectancy of a 65-year-old was roughly 13 years; today it is about 19 years, and in 2083 it is expected to be 23 years. The share of the population aged 65 or above was 9 percent 75 years ago; today it is over 18 percent. In 2083 it will be an estimated 24.5 percent in the base-demography scenario and 35 percent in the scenario with pessimistic demography.

The results of the projections are reported as calculations of net contribution, size of buffer fund, balance ratio and average pension level for new pensioners. In summary, net contributions will be negative in all three scenarios beginning in 2009 and for quite a few years thereafter. Pension disbursements are thus projected to exceed contribution revenue, but only in the pessimistic scenario does this trend ultimately exhaust the buffer fund. The reason why the fund is used up is that both the working-age population and the return on the buffer fund are low in this scenario.

The financial position of the pension system deteriorated during 2008 – see the section "Orange Report 2008 in 7 Minutes". The balance ratio has been calculated to be 0.9672, which means that balancing will be activated in 2010. As a result, disbursements of the inkomstpension and ATP during 2010 will be reduced by 3.28 percent compared to a situation without balancing. The reduction will be partly offset by a higher guaranteed pension. Pensioners with an income-related pension between 1.26 and 3.07 price-related base amounts (1.14–2.72 for married persons) will receive compensation for 48 percent of the reduction through a higher guaranteed pension, while those with a lower pension will receive full compensation. The diagram on page 30 shows the effect of balancing on the total pension. Pensioners with only a guaranteed pension or a low inkomstpension will not be affected at all by balancing. As the inkomstpension component of the total pension increases, and the guaranteed-pension component decreases, the balancing effect increases. An individual with a pension of SEK 137 000 or more in

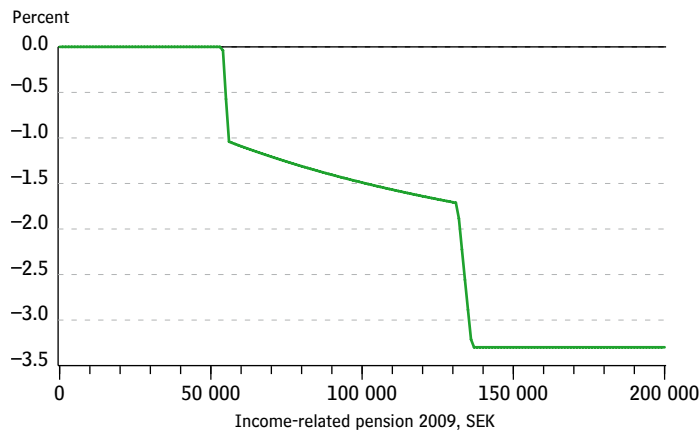
Population 75 years ago, at present, and in 75 years in the two demographic scenarios



Source: Statistics Sweden (SCB)

2009 will be above the limit for entitlement to a guaranteed pension even after balancing in 2010. At that level of income, the balancing effect will no longer be softened by the guaranteed pension.

Effect of Balancing on the Total Pension in 2010



Balancing will be activated for different lengths of time in the three scenarios. In the base scenario, the balance ratio is expected to be around 1.0 until 2035. The prolonged period of a weak balance ratio is explained by the fact the buffer fund will remain at its 2008 level – as a consequence of the assumptions in the projection scenarios.

This chapter concludes with a discussion on the calculation of pension levels and compensation rates. In addition to the pension levels in the projections, compensation rates provided in each individual's Orange Envelope are also presented. These compensation rates have been calculated through division of each individual's projected pension at 65 by her/his own income.

Base Scenario

The demographic development in the base scenario follows the latest population forecast of Statistics Sweden from 2008. There it is assumed that the birth rate will remain stable at its present level of 1.85 children per woman for the entire forecast period. Life expectancy for men was 79 years in 2008 and is assumed to increase to 83.7 years in 2050. For women, life expectancy is anticipated to rise from 83 to 86.3 years in the same period. After 2050 the assumptions on mortality, i. e. life expectancy, are unchanged. Net immigration, which has averaged 24 400 per year for the last 20 years, was 50 000 in 2006 because of the temporary law on asylum; it was high in 2007 and 2008 as well, reaching about 54 000. In the first years of the projection until 2010, annual net immigration is expected to remain high. From that year on, the annual average is estimated at about 24 000. The proportion of persons aged 16–64 with an annual income over one (1) income-related base amount is assumed to remain at the current level of about 85 percent, corresponding to an employment rate of roughly 80 percent, as defined in the Labour Force

Surveys (AKU). Real growth in average income is assumed to average 1.8 percent per year. The real rate of return on the buffer fund is assumed to remain unchanged at 3.25 percent per year. The same return, after costs of administration, has been assumed for the premium pension funds in the calculation of the future premium pension for a newly retired individual.

Optimistic Scenario

The demographic assumptions are the same as in the base scenario; the two scenarios differ only in respect to economic factors. In the optimistic scenario, the proportion of persons aged 16–64 with an annual income exceeding one income-related base amount is 86 percent; real annual growth in average income is 2.0 percent after 2010; and the real rate of return on the buffer fund is 5.5 percent. The return for the premium pension system, after costs of administration, is also assumed to be 5.5 percent in real terms. By historical standards, neither the assumed growth rate nor the assumed rate of return is particularly high.

Net Contribution

The size of pension disbursements depends on the rules of the system and their interaction with demographic and economic developments. Since birth cohorts vary in size, and to some extent have worked to different degrees, the contribution revenue and pension disbursements of the system vary over time. To permit comparison of net contributions in the three scenarios – that is, contribution revenue received minus pensions disbursed – the net contribution in each scenario has been divided by the contribution revenue in that scenario. The volume effect of different growth rates on the monetary value of the net contribution is thus eliminated.

When the ATP system was introduced in 1960, contributions exceeded pension disbursements, which were initially limited; in proportion to contributions, there was a large surplus. From 1980 on, net contributions have varied considerably. The variations have been due primarily to changes in rules; the changes regarding the contribution percentage affect revenue, and the changes in the calculated base amount impact expenditure. To a lesser degree, the variations in net contribution have been due to changes in the number of pensioners and in the number gainfully employed.

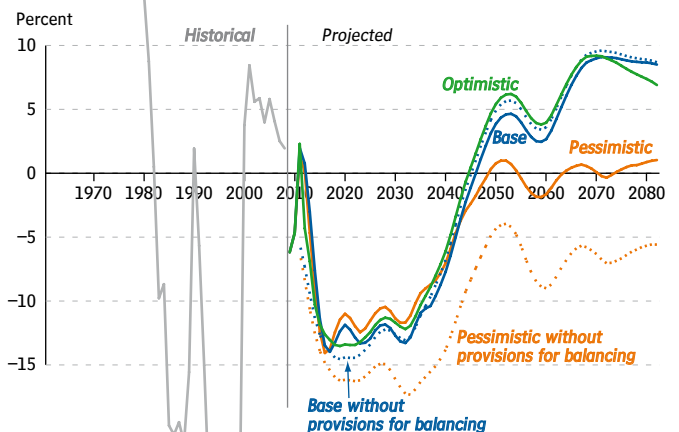
The net contribution is expected to be negative beginning in 2009, when the large birth cohorts of the 1940's leave the labour force and begin drawing pensions. Around 2020 the weakening trend begins to lessen, and the net contribution deficit gradually diminishes. Revenue exceeds expenditure after 2046 (2043 in the Orange Report for 2007) in the base scenario, and around 2043 in the optimistic scenario. In the pessimistic scenario, on the other hand, the net contribution remains negative until 2050.

Buffer Fund

The size of the buffer fund can be expressed in terms of fund strength, that is, fund capital divided by pension disbursements for the year. Fund strength shows how many

Net Contribution

Contribution revenue less pension disbursements as a percentage of contribution revenue



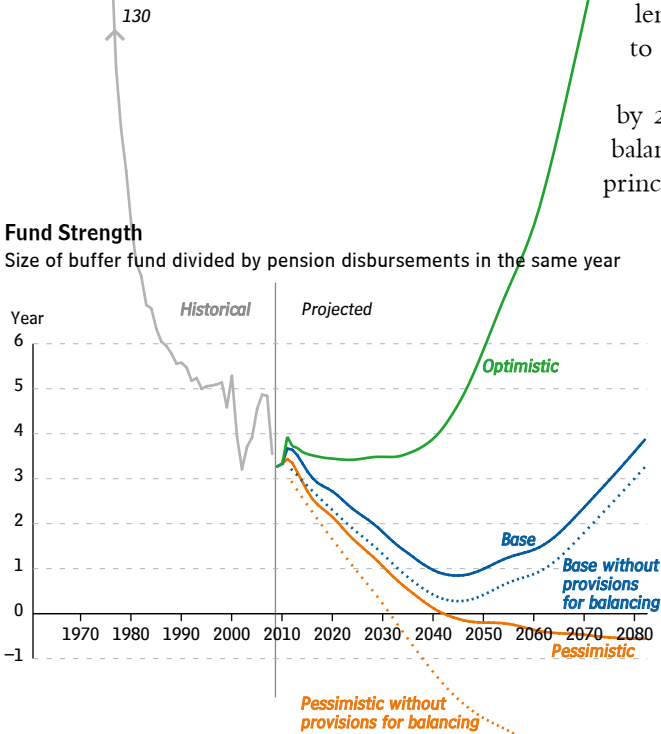
Pessimistic Scenario

In the pessimistic scenario, the assumed birth rate and net immigration are lower than in the base alternative. The birth rate is assumed to be 1.65 children per woman, and net immigration is assumed to average 17 000 per year until 2015 and 15 000 per year thereafter. The birth rate and migration are in accordance with the low assumptions in the 2007 population forecast of Statistics Sweden. Life expectancy develops as in the other two scenarios. The assumption for labour force participation is the same as in the base scenario, but here the real long-term rate of growth in average income is 1 percent. The real rate of return on the buffer fund and on premium pension funds, after costs of administration, is also 1 percent. Equalling the increase in average income, the return on the buffer fund provides no contribution, in principle, to the long-term financing of pensions. The buffer fund is then a demographically determined repository of pension capital with a neutral impact on the financing of the system. On the assumptions in the pessimistic scenario, contribution

revenue increases slowly in relation to the desired indexation of average income. The pessimistic scenario describes the risks managed through balancing and how pensions are affected by a prolonged negative trend.

Three Scenarios for the Future of the Pension System

¹⁶ One contributing cause is the lag between the time when the deficit arises and the time when balancing corrects it.



years of pension disbursements can be financed by the fund without additional contributions or a higher return on assets. The varied development of the buffer fund in the three scenarios is due to differences both in net contributions and in the assumed return on the buffer fund.

Historically, fund strength has been high. As the number of ATP pensioners has increased, fund strength has decreased. Since 1990, fund strength has averaged slightly less than five years. At the end of 2008, fund strength was 3.2 years.

In the base scenario, fund strength gradually decreases because of the net contribution deficit. Fund strength reaches a low point in 2045, when it is equivalent to just over 10 months of pension disbursements with the rate of return assumed to be 3.25 percent.

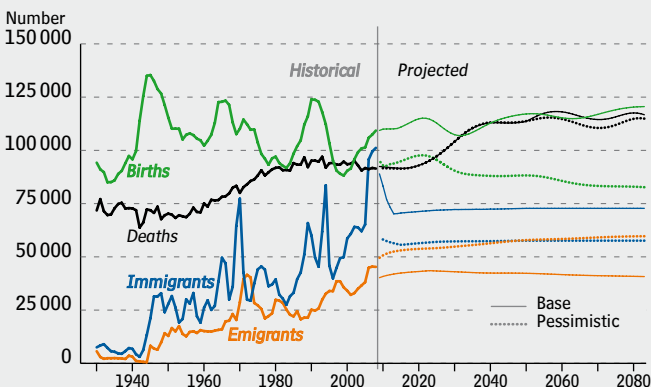
In the optimistic scenario, there is a substantial increase in fund strength. The explanation is the limited contribution deficit and the high rate of return on the fund in relation to the development of average income. Fund strength is equivalent to nearly six years of pension disbursements in 2050 and to 10 years of disbursements in 2065.

In the pessimistic scenario, the buffer fund is exhausted by 2043 and is slightly negative thereafter. Thus, even though balancing is activated, the fund is used up and turns negative. The principal explanation¹⁶ is that in the calculation of turnover duration, the population is implicitly assumed to be constant. With a declining trend in the working-age population, this assumption means that turnover duration is somewhat overestimated. Balancing was deliberately designed not to eliminate the risk of exhausting the buffer fund. This risk has been addressed by authorizing the funds to borrow money. Any borrowing is to take place via the National Debt Office.

When the assumed population decrease comes to a halt, the buffer fund is guided toward fund strength of at least zero. During the years when the fund is negative, interest is paid on amounts borrowed. In the diagram it is assumed that the interest rate on these loans, taken via

Comments on the Assumptions in the Scenario

Births, Deaths, Immigration and Emigration, 1928–2008 and Assumptions Through 2083



The diagram shows population growth over the past 75 years and the assumptions about it for the next 75 years. The large birth cohorts of the 1940's, 1960's and 1990's stand out clearly. The number of deaths increases each year, not because mortality is on the rise, but because the population is growing. The peak years for immigration are the 1960's and 1970's, when there was substantial immigration of labour, primarily from Finland. There was another peak in the early 1990's, with numerous refugees from ex-Yugoslavia. The peak levels of immigration in the last few years are also shown clearly. The demographic conditions are the same in the base and optimistic scenarios.

the National Debt Office, is the same as the assumed rate of return in the scenario, i. e. 1 percent.

When balancing begins in 2010, the annual reduction in pension levels relative to the development of average income is large at first, but it decreases over the period. For the next few years balancing will depend primarily on the global financial crisis and the economic slump in its wake. In a longer-term perspective, the duration of balancing will also be affected by macro-economic and demographic factors.

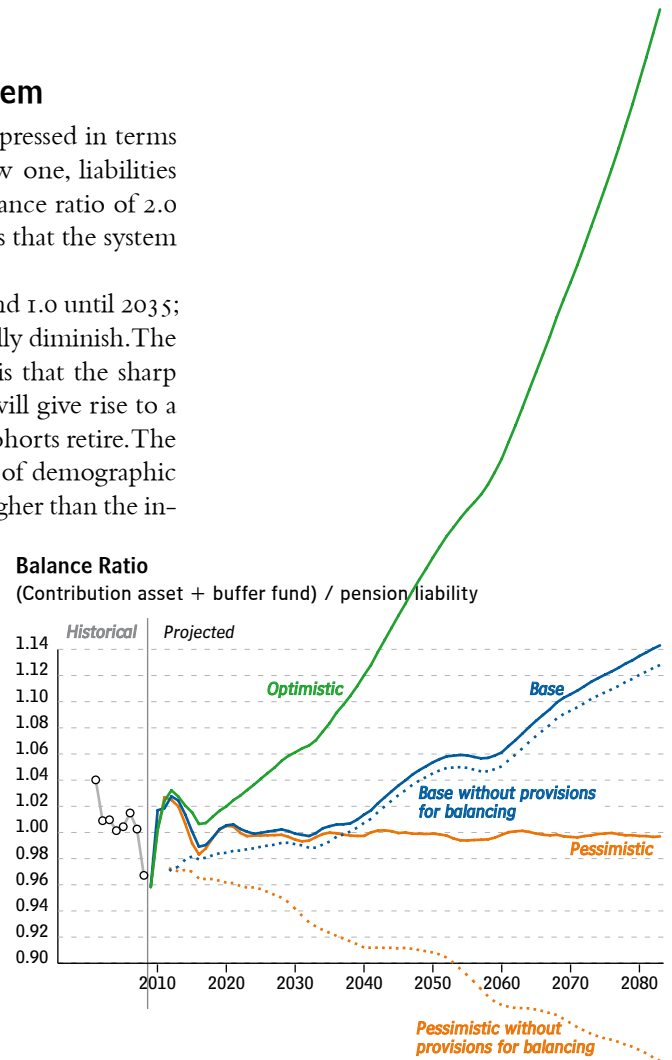
Financial Position of the Inkomstpension System

The financial position of the inkomstpension system is expressed in terms of the balance ratio. When the balance ratio drops below one, liabilities exceed assets, and balancing is activated. In principle, a balance ratio of 2.0 – that is, when assets are twice as great as liabilities – means that the system is fully funded.

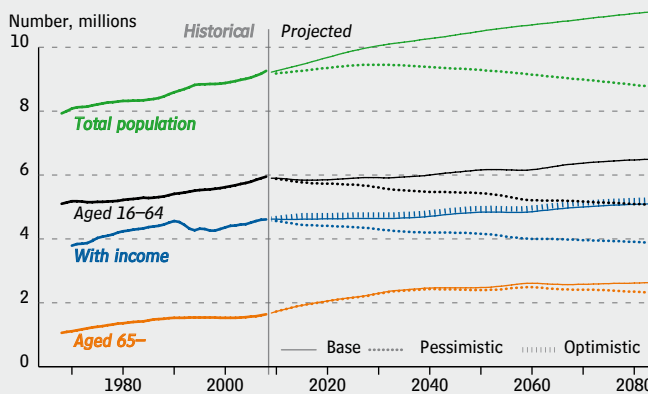
In the base scenario, the balance ratio fluctuates around 1.0 until 2035; variations are greater at the outset of the period and gradually diminish. The reason for the long period of a balance ratio around 1.0 is that the sharp drop in the value of the National Pension Funds in 2008 will give rise to a relatively low buffer fund for a long period as large birth cohorts retire. The balance ratio will gradually strengthen after 2035 because of demographic factors, and because the return on the buffer fund will be higher than the income index. In 2075 the balance ratio will reach 1.1, a level which as proposed by the government report *Utdelning av överskott i inkomstpensionssystemet* (Distribution of Surpluses in the Inkomstpension System), SOU 2004:25, means that there is a distributable surplus. However, no provisions to this effect have been enacted by the Swedish Parliament.

In the optimistic scenario, the balance ratio exceeds 1.0 by 2012 and strengthens after 2015. As a result of the high return, the buffer fund will improve continuously during the period. Beginning in 2039, the balance ratio will exceed 1.1.

In the pessimistic scenario balancing continues because of the low return on the buffer fund and less favour-



Population Size, etc.



The scenarios do not differ significantly in respect to the number of persons over 65, as the assumptions regarding mortality are the same in all scenarios. The number of persons with income refers to those with earnings above one income-related base amount. The historical data are estimates.

The assumptions regarding the proportion with income are the same in the base and pessimistic scenarios and higher in the optimistic scenario.

able population growth. With balancing, the liability of the system accrues interest at the same rate as the growth in system assets. As a result, the balance ratio stabilizes around 1.0.

Development of Pension Levels for Different Birth Cohorts

The pension level is defined here as the average national pension benefit at age 65 in relation to the average pension-qualifying income for persons aged 16–64 with such income. For this level to be constant, one requirement is a roughly constant relationship between the number of economically active years and years of retirement. If this condition is to be satisfied at the same time as life expectancy is increasing, either the retirement age must be raised, or the age of entry into working life must be lowered. Moreover, for the value of pensions to remain constant in relation to incomes, balancing must not be activated.

In the scenarios, the average national pension at age 65 as a percentage of average income is shown in the following bar graphs, one for each scenario.

In the base scenario, the average pension level for the year when the individual turns 65 drops from 66 percent for birth cohort 1944 to approximately 53 percent for birth cohort 1990. Of this decrease, roughly 9 percentage points are due to the anticipated increase in life expectancy. As

for the remainder of the decrease, one explanation is that the calculations are for persons with 30 years or more of working life in Sweden. In relation to the new system, the ATP system is especially generous to persons who have worked only 30 years. If working life is prolonged to neutralize the effect of longer life expectancy on pension levels, the pension level stabilizes at just above 60 percent of average income. A longer working life also increases pensions through the pension credit earned in the additional years. Of the total increase in life expectancy, therefore, about 67 percent should be added to years of working life while 33 percent can be added to life as a pensioner with an unchanged pension level. The effect of

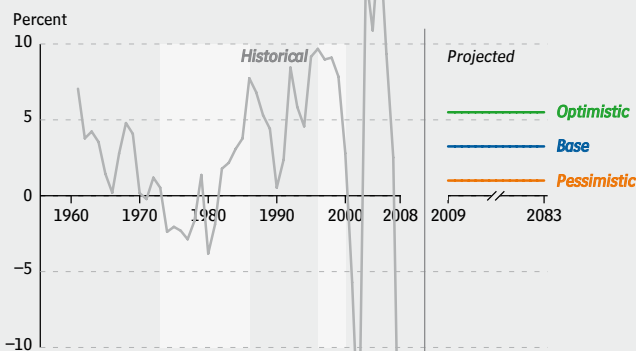
Average Income and Pension, Base Scenario

Amounts in SEK

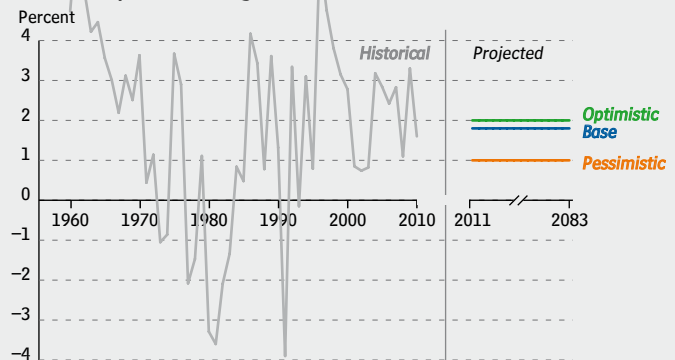
Year of birth	Pension at age 65	Average income	Pension level, percent
1944	11 900	18 600*	64
1965	14 500	26 900	54
1990	22 300	42 000	53

* An average monthly income for a full-time employee is about SEK 30 600. The reason why average income is lower than this amount is that the calculation of average income includes all persons aged 16–64 – whether or not they have had any income in the year concerned. The only requirement for inclusion in the calculations is that the individual at age 65 has had at least 30 years of pension-qualifying income. Inclusion of individuals with part-time or seasonal employment lowers both average income and pensions. The exclusion of incomes above the ceiling from average income reduces the latter by about 10 percent.

Real Return on the Buffer Fund, 1960–2008, and Assumptions Through 2083



Growth in Real Earnings, 1960–2008, and Assumptions Through 2083



longer life expectancy on the retirement age, in order to maintain the same pension level as for older birth cohorts, is shown in the table on page 37.

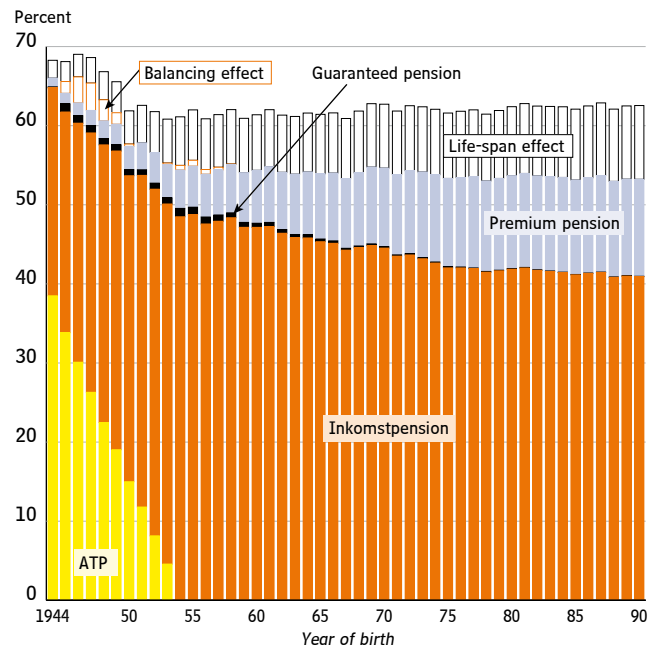
The relationship between the return of the premium pension system and the growth in average income affects the relative size of the premium pension. The greater the positive difference between the rate of return and the rate of growth, the larger the share provided by the premium pension. In the base scenario, the return of 3.25 percent for the premium pension system exceeds the assumed rate of growth in average income, which is 1.8 percent. As a result, the premium pension accounts for a disproportionately large share of the national pension in relation to the corresponding contributions.¹⁷ For the youngest birth cohorts, the premium pension is about 11 percent of average income, and the inkomstpension is about 41 percent. In the base scenario, the guaranteed pension for persons who have worked at least 30 years is small from the very beginning. Since the guaranteed pension is assumed to remain constant in real terms, its significance decreases each year with the growth in incomes.

The pension level of a birth cohort in relation to the average income at age 65 is affected by whether balancing is activated. The period of balancing beginning in 2010 will thus affect pension levels at age 65, especially for birth cohorts 1945–1949. Their pension levels at age 65 will be lower in relation to average income by 1.5 to 3.5 percent. The negative effect of balancing on a newly granted pension will thereafter diminish gradually, disappearing entirely for those who retire after 2025.

In the optimistic and pessimistic scenarios, the growth in average income is lower and higher, respectively, than in the base scenario. As long as balancing is not activated, the inkomstpension accrues interest (is indexed) according to the growth in average income and thus increases at the same rate as average income. The relationship between pensions and average income is then unaffected by this growth, and pensions remain unchanged in proportion to income. On the other hand, the inkomstpension will of course be less in monetary terms if growth is lower and greater if growth is higher.

¹⁷ Another reason why the premium pension is relatively larger is that the interest credited in the annuity divisor is higher for the premium pension than for the inkomstpension; see the section “How the National Pension System Works” and Appendix A.

Average Pension at Age 65 as a Percentage of Average Income, Base Scenario



Other Assumptions in the Calculations

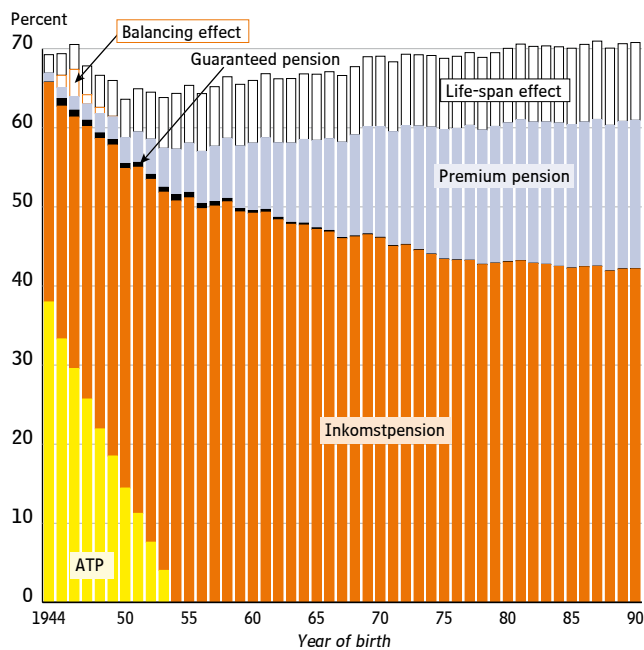
The assumptions for the scenarios apply from 2011 on. For 2009 and 2010, the forecast of the National Institute of Economic Research (NIER) in December 2008 is used, but the scenario assumptions apply to the return on the fund as from 1 January 2009.

The guaranteed pension is price-indexed. Consequently, the lowest pensions will gradually decrease in relation to average income, as will the tax component of the pension contribution for individuals with modest incomes. The effect over 75 years is very powerful. If average annual income grows by 1.8 percent per year, it will be almost four times as great in 2083 as in 2008. Thus, the guaranteed pension will become totally marginal toward the end of the calculation period.

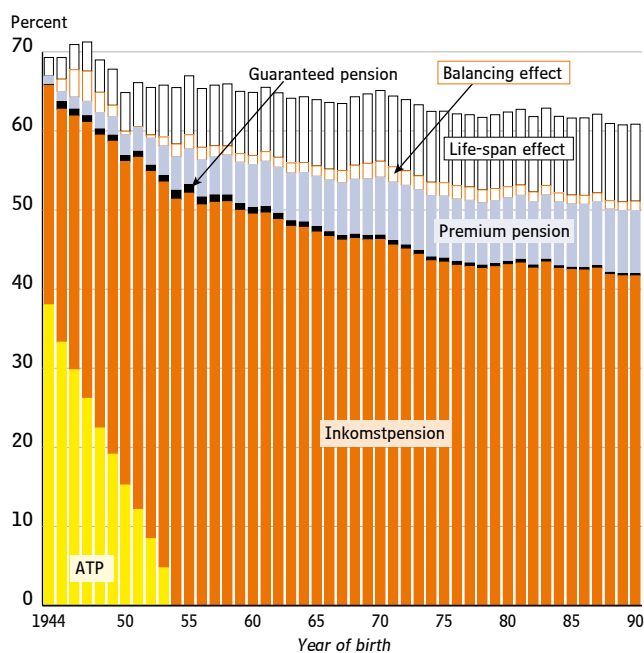
With the pension liability indexed to growth in average income, it may appear unnecessary to vary the growth in average income in the scenarios, for the inkomstpension system is designed to adjust the value of pensions to the development

of average income. However, since pension points earned are indexed by the rate of increase in prices, the inkomstpension system is initially unstable in relation to growth in average income. Furthermore, the relationship between the increase in average income and the return on the buffer fund influences the financial development of the inkomstpension. The relationship between the return and the growth in average income also affects pension levels via the premium pension. The three scenarios differ regarding the contribution of the buffer fund to the financing of the inkomstpension. In the base scenario, the return on the buffer fund exceeds growth in average income by 1.45 percentage points (3.25–1.8). In the optimistic scenario, the return is 3.5 percentage points higher than growth in average income. In the pessimistic scenario, the return is equal to the rate of increase in average income.

Average Pension at Age 65 as a Percentage of Average Income, Optimistic Scenario



Average Pension at Age 65 as a Percentage of Average Income, Pessimistic Scenario



In the **optimistic scenario**, the return on the premium pension is 3.5 percentage points higher than the growth in average income, or 5.5 percent compared to 2 percent. The relatively large premium pension resulting from the high return compensates in part for the effect of longer life expectancy. If the retirement age were to increase at the same rate as life expectancy, the pension level would remain constant at about 70 percent for birth cohorts 1970–1990. In the optimistic scenario the balance ratio is below 1.0 in 2010 and 2011. Balancing continues until 2013 and thus affects pension levels at age 65 for birth cohorts 1945–1948. For persons born in 1945, the effect is 3.3 percent, and for those born in 1948 it is 0.8 percent.

In the **pessimistic scenario**, growth in average income is 1.0 percent, or 0.8 percentage point less than in the base scenario. The rate of return is also lower, 1 percent instead of 3.25 percent. The lower rate of return means that the premium pension will be less both in monetary terms and as a share of the total pension. With income-related pensions relatively lower than in the base scenario, the guaranteed pension becomes more important.

In the pessimistic scenario the system is undergoing balancing for the entire projection period, thus affecting pension levels for all birth cohorts. The average effect is around 1.5 percent, and somewhat greater for the oldest birth cohorts. For birth cohort 1944, the pension level is about 66 percent, whereas for birth cohort 1990 it is roughly 51 percent. For birth cohort 1990, balancing lowers the level of the income-related pension by 1.9 percentage points, whereas the guaranteed pension raises it by 0.3 percentage point. The guaranteed pension provides partial compensation for the reduction in the inkomstpension in the case of a negative development. This means that the central government finances a portion of the reduction. In situations where the resources of the general economy are normally decreasing, there is thus a greater element of income redistribution in the national pension system.

Life Expectancy Effect and the Required Retirement Age

In the present calculation, the effect of an anticipated further increase in life expectancy is compared with the average life span for persons born in 1930, who were aged 65 at the time of the decision on pension reform. It is assumed by Statistics Sweden that the average life span will increase rather substantially in the years ahead. As a consequence, remaining life expectancy at age 65 will rise from 17 years and 5 months for persons born in 1930¹⁸ to 22 years and 1 month for those born in 1990. This is equivalent to an increase in life expectancy of 4 years and 8 months for birth cohort 1990 relative to birth cohort 1930. If those born in 1990 are to have the same monthly pension level as those born in 1930, a portion of the anticipated increase in remaining life expectancy at age 65 must be spent working further. For birth cohort 1990, working life must be extended by 3 years and 1 month if its members are to have the same pension level as birth cohort 1930. At the same time, those born in 1990, despite the higher retirement

¹⁸ No annuity divisors have been set for birth cohort 1930, whose initial pensions were calculated entirely by the rules of the ATP system.

age, can look forward to being pensioners for 2 years and 1 month longer than persons born in 1930.

The first birth cohort with a retirement age of 65 was born in 1911. When this cohort reached age 65 in 1976, the normal retirement age was lowered from 67 to 65. They could then expect to live as retirees for approximately 16 years.

Life Expectancy and Retirement Age

Birth cohort born in	..reaches 65 in	Life expectancy at 65	Retirement age required	Time spent retired*	... compared to birth cohort 1930
1930	1995	82 yr 5 mo	65 yr	17 yr 5 mo	0
1938	2003	83 yr 4 mo	65 yr 8 mo	17 yr 10 mo	+5 mo
1940	2005	83 yr 7 mo	65 yr 9 mo	18 yr	+7 mo
1945	2010	84 yr 3 mo	66 yr 3 mo	18 yr 3 mo	+10 mo
1950	2015	84 yr 10 mo	66 yr 7 mo	18 yr 6 mo	+1 yr 1 mo
1955	2020	85 yr 3 mo	66 yr 11 mo	18 yr 8 mo	+1 yr 3 mo
1960	2025	85 yr 7 mo	67 yr 2 mo	18 yr 10 mo	+1 yr 5 mo
1965	2030	85 yr 11 mo	67 yr 5 mo	18 yr 11 mo	+1 yr 6 mo
1970	2035	86 yr 3 mo	67 yr 7 mo	19 yr 1 mo	+1 yr 8 mo
1975	2040	86 yr 7 mo	67 yr 10 mo	19 yr 2 mo	+1 yr 9 mo
1980	2045	86 yr 10 mo	68 yr	19 yr 3 mo	+1 yr 10 mo
1985	2050	87 yr	68 yr 2 mo	19 yr 4 mo	+1 yr 11 mo
1990	2055	87 yr 1 mo	68 yr 2 mo	19 yr 5 mo	+2 yr

* Time spent retired is calculated as life expectancy at the required retirement age.

Remarks on the Pension Level and the Compensation Rate

There are numerous methods of calculating the compensation rate of a pension system. The income with which the estimated pension is compared can be defined in different ways, and there are many possible samples of individuals to select for the calculations.

Which income is appropriate for the comparison with estimated pension benefits depends on the income profile used in the calculation. If a straight-line income profile¹⁹ is used, it is natural to compare the size of the pension benefit with the income of the individual in the year before retirement.

If a concave²⁰ income profile is chosen, the question what income to use for comparison with the pension becomes more difficult. If the compensation rate is calculated by comparing the pension with the final year's income, the resulting compensation rate may appear deceptively high. One way to manage the problem is to compare the pension with average income for a number of years prior to retirement, normally the average income at ages 60–64.

In calculations of the pension level in this chapter, the question of the income with which to compare a pension at age 65 has been handled differently. Here a pension is compared with the average income for all individuals in the calculation who are between the ages of 16 and 64. One reason for this approach is that it reduces the sensitivity of the pension level to assumptions about income profile. The comparison income chosen, however, has the obvious shortcoming that the pension level calculated says nothing, in principle, about the change in income that may be expected when the individual begins to draw a pension. Therefore, the concept of pension level is used here to emphasize that what is shown is not a compensation rate.

¹⁹ With a straight-line income profile, income for all ages in the labour force develops at the same rate as the general development of income until retirement age; a straight-line profile means that in each year the development of income for all individuals is assumed to be the same until they retire.

²⁰ With a concave income profile, the development of income for each age group will be age-specific each year until retirement. Normally incomes increase faster in the early years of working life and start dropping around age 57. One explanation for the decrease is that people at this age tend to cut back on work hours, a step that may be viewed as preparation for the transition to retirement.

The fact that the pension level as defined above in principle provides no information on the change in income at retirement does not prevent it from yielding such information in practice. The reason is that the average pension-qualifying income (PQI) for persons aged 16–64 is very close to the average PQI for persons aged 60–64. It does not matter much for the outcome which definition is used. Thus, the pension level calculated here is very similar to the compensation rate that would have resulted if the average income of each individual at ages 60–64 had been used as the comparison income. On the other hand, if income at age 64 were used as the comparison income, compensation rates would be considerably higher in relation to the pension levels shown here.

For the pension levels shown, persons with fewer than 30 years of income of at least one income-related base amount at age 65 are excluded from the calculation of the average pension and average income. The reason is that the pension level is intended to reflect conditions for individuals who have spent most of their working life under this pension system.

Another question is whether to include incomes not insured in the national pension system in the calculation of the comparison income. Here we have chosen to include only income insured in the national pension system. Of all pension-qualifying income in Sweden, roughly 11 percent exceeds the pension-credit ceiling of 8.07 income-related base amounts. If income above the income ceiling is added to the comparison income, defined as average PQI for persons aged 16–64 with PQI, the average PQI increases by 11 percent, reducing the pension level by about 10 percent.

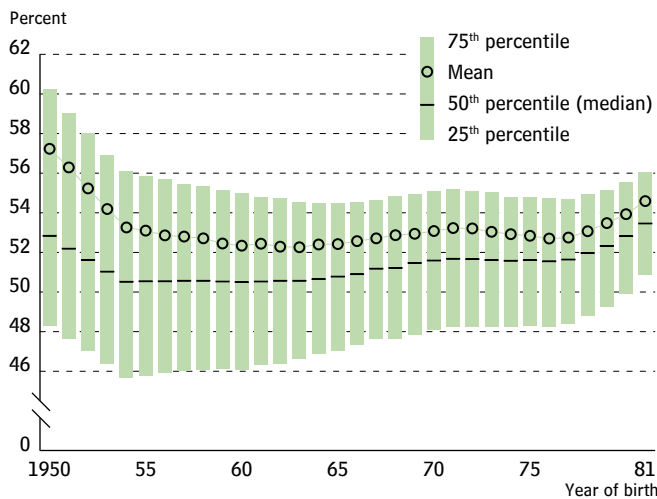
Here gross pensions are compared with gross incomes. In 2007 a tax credit for earned income became effective. Because of this credit, the tax on pensions is no longer the same as the tax on most of the income included in pension-qualifying income. In 2008 and 2009 the tax credit for earned income was reinforced, and pensioners were granted tax relief in 2009 in the form of a higher basic deduction. Of pension-qualifying income under the income ceiling, about 94 percent consists of earnings. The tax credits decrease the pension level by roughly 1.9 percentage points if differences in the taxation of various types of income are considered.

The Orange Envelope provides pension projections each year for every individual insured based on that individual's actual pension credit earned. When the envelope is sent out in February/March, the latest data available are for income reported two years earlier. Thus, the envelope posted in 2009 was based on all incomes of the individual through 2007. It is assumed in the projection that the balance ratio is greater than one for the entire projection period. After the projection was made, it has become clear that there will be balancing for 2010.

In calculating the compensation rate on the basis of these projections, the pension projection of each individual at age 65 in the zero-growth alternative, excluding any guaranteed pension, has been divided by the pension-qualifying income of the same individual in 2007.²¹ An average for each birth cohort from 1950 to 1981 has then been calculated by summation of all compensation rates and division of the sum by the number of individuals in the birth cohort.

²¹ For individuals with no income this year, no compensation rate can be determined, and they are excluded from the calculation. Individuals with a compensation rate above 150 percent have also been excluded, as such high compensation rates are normally due to an income so low that it is normally temporary.

Compensation Rates in the Orange Envelope – National Pension at Age 65 as a Percentage of Final Pension Qualifying Income. Guaranteed Pension Not Included



Both the assumptions underlying this calculation and the method applied differ in important respects from those in the calculation of pension levels in the table on page 34 and in the three bar graphs. In the calculation of the pension level, the comparison income is the average income below the ceiling on pension credit for persons aged 16–64 in the respective year. In the diagram above, the comparison income is the respective individual’s income below the ceiling in 2007, equivalent to the projected final income since real growth in earnings is assumed to be zero. For young individuals, who have earned few years of pension credit, this means that the compensation rate has been calculated with a virtually straight-line earnings profile. For individuals relatively close to retirement age, the pension has been calculated on the basis of their actual incomes – this means that on average the profile will be concave.

The high compensation rates for the oldest birth cohorts are explainable partly by the fact that their own incomes, which are taken here as comparison incomes, have begun to decrease. As a consequence, the compensation rate is higher with the method used here. A further explanation is that for older birth cohorts a portion of their pension is calculated according to the provisions of the ATP, which on average are more favourable. The reason why the variation in compensation rates decreases with the descending age of birth cohorts is that the calculation becomes more fictitious and straight-line the younger the birth cohort. The slightly rising compensation rates beginning with the birth cohorts of the mid-1950’s reflect the increasing importance of the premium pension for these birth cohorts. With the assumptions of an excess return of 3.5 percent and a slower increase in life expectancy, the compensation rate will show a slight upturn beginning with birth cohort 1955.

Guaranteed Pension and Its Coverage

In more ways than via balancing alone, the guaranteed pension and the inkomstpension function to some extent like communicating vessels. For an unmarried individual, the guaranteed pension is reduced to zero with an inkomstpension of SEK 132 000 (at the price-related base amount for 2009). The importance of the guaranteed pension decreases with the number of years of gainful employment.

Three Scenarios for the Future of the Pension System

²² This is roughly equivalent to SEK 342 000 for men and SEK 290 000 for women in age interval 25–34. Data taken from Survey of Household Finances (Hushållens ekonomi – HEK 2006), Statistics Sweden, for fully employed persons, increased by the growth in hourly earnings until 2009.

A man born in 1980, with an average income²² and zero growth in real earnings, must work for 38 years in order to receive an inkomstpension so large that his guaranteed pension is reduced to zero. A woman born in the same year, with an average income and zero growth in real earnings, will have to work 40 years for an equally large inkomstpension.

With annual growth in real earnings of 1.8 per cent as in the base scenario, the number of years of work required to exceed the limit for the guaranteed pension decreases. For unmarried persons born in 1980, the number of years required is 20 for men and 24 for women. In the last 15 years growth in real earnings has averaged just over 2 percent.

Special Feature: The Retirement Age

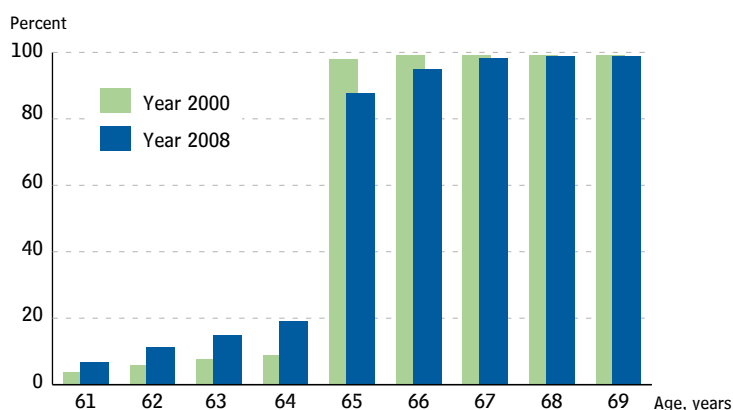
In the Swedish system with its income-related old-age pension, the retirement age is flexible from 61 on. In principle, the system is financially neutral between an early or a late retirement age, both for the system and for the individual. The level of pension benefits depends on life expectancy after retirement. An early retiree receives a lower annual pension; someone who retires later benefits from a higher pension. The lifetime income principle on which the system is based also means that someone who continues to work earns additional pension credits to distribute over the remaining number of years that he/she is expected to live.

The Retirement Age in Practice

Despite this flexibility, a majority of the population begin drawing their national old-age pension when they reach age 65. This tradition has begun to relax its hold in recent years. More are waiting before drawing their pension benefits, and more are starting to draw them earlier. These two tendencies have been offsetting so far, and for many years the average age when a pension is first drawn has remained seemingly unchangeable at a few months short of 65 years.

In 2008 nearly 90 percent of 65-year olds were receiving an old-age pension. While there has admittedly been a slight decrease since 2000, only a few are still not drawing a pension by age 67.

Share of the Population of Different Ages Receiving an Old-Age Pension



Persons with only a premium pension have been excluded.

Source: Adaptation of SSIA pension statistics and the population statistics of Statistics Sweden

There is no restriction on working even for recipients of a full-time old-age pension. At ages 65–69, only about 5 percent are not receiving an old-age pension, and almost all pensioners are drawing a full-time pension. Nevertheless, 17 percent of the population in this age group are still working, which means that many supplement their pension benefits by earnings from work. Their work is often part time or sporadic; the average number of hours worked is 26 per week. The traditional gender pattern prevails; the rate of labour force participation and the number of weekly hours are higher for men than for women.

The rules of the pension system may encourage postponement of pension withdrawal, though those born in the 1940's may not be fully aware how much they gain financially by waiting. Up to age 65, the system covers only a portion of their earnings (half, for example, for those born in 1944). The rest is governed by the rules of the old ATP system for earning pension credits. But once they have reached age 65, the *entire* pension contribution of this

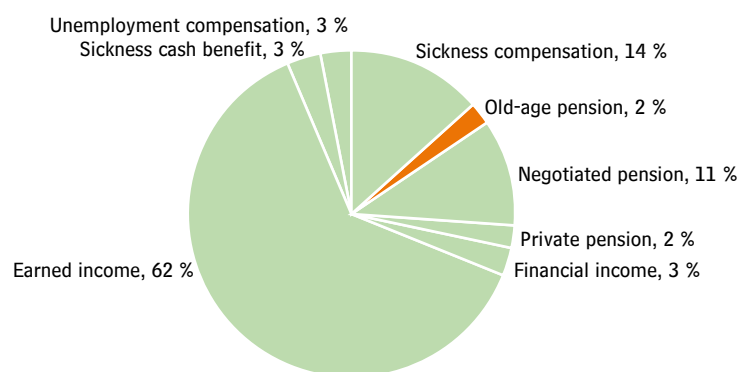
group is credited toward their inkomstpension. This means that they receive pension credits for each additional krona of earned income, which is not the case under the ATP rules. The first to benefit from this new provision were persons born in 1938; beginning with precisely that birth cohort, the proportion postponing withdrawal of their pension benefits has increased sharply. Of pensioners born in 1937, 6 percent postponed drawing a pension until after age 65; for pensioners born in 1938 the corresponding proportion was 14 percent. Of individuals born in 1942 who were receiving an old-age pension at the end of 2008 (thus at age 66), almost 12 percent had begun drawing it after age 65. At the same time, about 5 000 of Sweden's 66-year-olds were still not receiving an old-age pension. When this group also begin to draw that pension, the proportion of birth cohort 1942 waiting to do so until after age 65 will probably have increased to about 16 percent.

There is also a parallel tendency: more are drawing public pension benefits *before* age 65. There may be several reasons (aside from drawing a part-time premium pension solely to benefit from discounts on public transport, etc.):

- Some believe that they have little time left to live and want to benefit from the system as much as possible. Typically some receive sickness compensation (formerly disability pensions) while drawing an old-age pension at the same time.
- Some like the idea of continuing to work and thus being able to invest their pensions at a return that will compensate for the life-long loss of a higher pension level. Whether this strategy pays off is uncertain.
- Some feel overworked, or are tired, sick or unemployed, but have not been granted sickness cash benefit or sickness compensation.
- Fewer have been able to obtain negotiated or occupational pensions before age 65 because of higher age limits and/or less capital in pension funds.

Despite this increase, the national old-age pension provides just a minor contribution, approximately 2 percent, to the overall income of individuals in age group 60–64. Negotiated pensions still matter much more, sickness compensation more still. And wage earnings remain the primary source of income for this age group.

Sources of Income for the Population Aged 60–64 in 2005



Source: Adaption of Statistics Sweden's LISA data base

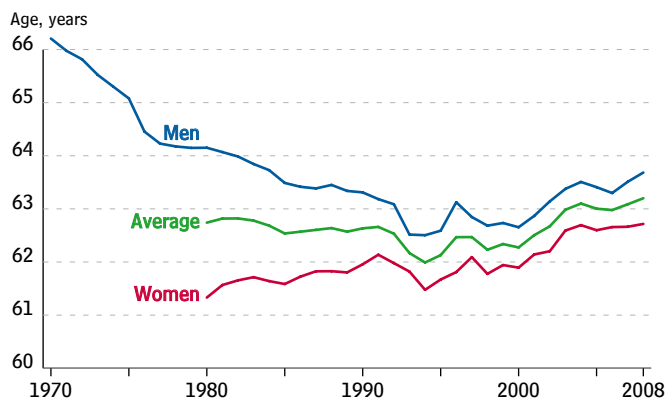
The tendency to start drawing an old-age pension earlier is not accompanied by a reduction in labour force participation among the population aged 60–64. On the contrary, that rate rose from 55 to 63 percent between 2000 and 2008. But most of the increase occurred in the years through 2004 – thereafter, little has changed in this regard.

Age of Leaving the Labour Force

Half of the population has left the labour market before age 65. Their exit path is most often by way of sickness compensation and negotiated or occupational pension benefits. The average age at which people leave working life is 63.1 years. That figure rose somewhat from 2000 to 2004 but has gone up only marginally since then. The tendency largely reflects labour force participation in the age group 60–64.

The increase in the age of leaving the labour market is explained at least partly by the fact that the generation born in the 1940's – who now average 63–64 years of age – is better educated than previous generations and has a different occupational structure. There was an educational revolution in the 1960's. Physically demanding labour in industry has largely disappeared, owing partly to the relative decline of the industrial sector, and partly to the technical modernization of work in industry. The slowing increase in the age of leaving the labour force may be due to a diminishing “1940's effect,” with the generation of the 1940's differing less from the following generation in respect to education etc. than from the preceding generation.

Average Age of Leaving Working Life



The calculations are based on labour force participants at age 50.
Source: Adaption of Statistics Sweden's Labour Force Surveys (AKU)

The importance of raising the retirement age from 65 to 67, or better yet to 70, is often emphasized. It is just as important, though, to encourage people approaching retirement to stay in the labour force, and make it possible for them to do so, beyond age 63. With 63 as the *average* age of exiting the labour force, many will have already left at age 60 or even earlier.

Leisure as a "Commodity"

A common argument for a higher retirement age is that since the average life span is increasing, it is reasonable to raise the retirement age to the same extent. The idea is thus that life as a pensioner would cover a roughly constant number of years. This assumption is questionable, however. The average life span is largely dependent on economic growth, and the latter is accompanied by greater demand – and greater opportunities – for leisure. In extremely poor countries with no pension system, the age of leaving the labour force is roughly the same as the average life span. With rising prosperity, the average life span increases, and the age of leaving the labour force decreases. Demand for leisure, including years of free time as a pensioner, then goes up – just like demand for any other commodity.

Since 1913, when Sweden's first pension system was introduced, there has been enormous growth in prosperity. Income-creating production capacity, measured as GDP per hour worked, is estimated to be 13 times greater, at

constant price levels, than in 1913. This difference corresponds to annual growth of 2.8 percent. As an illustration of the increase, the average lifetime income in 1913, but with present productivity, could have been earned in three years!

Essentially, the growth potential of an economy can be used in two ways: for a higher material living standard (greater GDP per capita) or for more leisure (shorter working hours). During the period since 1913, the former use has predominated. GDP per capita has risen by 2.4 percent per year, whereas the number of hours worked per inhabitant has been reduced by only 0.4 percent per year (or cumulatively by 30 percent).

More years of retirement are only one manifestation of the decrease in time devoted to work. The number of hours per week has been cut back; vacations have been introduced and lengthened, etc. In addition, young people are now entering the labour market at a later age as the number of years of education has increased; this tendency in itself has been one of the principal factors making possible the enormous growth of productivity in the economy. At the same time, some public debaters on education argue that studies could be conducted more efficiently, and that a growing number of years are required to attain a given level of knowledge useful in working life. It is difficult to prove these assertions, one reason being that the focus of knowledge has changed so greatly, but the implication is essentially that years of youth have been spent to a greater extent on consumption of leisure, roughly like the years of old age. For this to be possible, the prerequisite is also the same: an enhanced capacity of the economy to provide a living. The growth of prosperity has been used partly to shorten working life. Basically this is neither more nor less “immoral” than spending the growth margin on ordinary consumer goods.

The Increasing Burden of Support

However, there is a future macroeconomic problem of supporting the population. The support ratio between the number of elderly people and the number of economically active will rise sharply. The large birth cohorts of the 1940's are reaching age 65, and they can be expected to live longer than previous generations. In the 2030's they will be followed by the similarly large generation of the 1960's.

Providing support to growing numbers of elderly people and of others who are economically inactive has been facilitated over the past 50 years by the increase in the employment rate and working hours of women. The difference between genders in this regard cannot diminish much further. There is no reserve of labour comparable to that consisting of women at the outset of the 1960's. The coming “old-age explosion” will therefore pose problems. Taxes and contributions from the gainfully employed may not be enough to continue providing the elderly with a high living standard.

Our old-age pension system is admittedly designed to be financially stable, but it does not provide a long-run guarantee that there will be a “pie” large enough to split between pensioners and the economically active to everyone's satisfaction. With stagnant employment, there is a greater risk that the balancing mechanism of the system will be activated repeatedly. Pension benefits and pension credits will then be indexed at a lower rate than otherwise. The burden of adjustment in that case will be borne by pensioners; there is no built-in device to strengthen the financing of the system as needed by raising contributions or in some other way. A continued decrease in the ratio of pensions to earnings may give rise to conflicts between generations that must be resolved by new political decisions.

One feature of the reformed pension system, however, can indirectly affect the size of the pie itself. If pensions tend to be unacceptably low (because of balancing, for example), an individual about to retire may improve her/his own situation by continuing to work instead. If large numbers do the same, they will contribute to higher employment and output in the economy and thus increase the contributions paid to the pension system. This in turn will lessen the likelihood of further balancing and improve the prospects for harmony between generations.

Increased employment is also the key to financing greater public-sector consumption of health care, schools and nursing through tax revenue. With the current trend in the support ratio, the expenditure of society, particularly for care of the elderly, will increase. There will be a vast need to provide nursing for the elderly at ages 75–80, which the generation of the 1940's will reach in the 2030's – unfortunately at the same time as the generation of the 1960's will add to the support burden by retiring.

Older People in Working Life

As noted above, the average age of exit from working life is about 63. It used to be much higher (for men), almost 68 in the mid-1960's, when many continued to work after reaching the age for drawing a public pension, then 67. One reason for still working may have been that pensions were small – the ATP system did not yet provide substantial pensions. However, the age of leaving the labour force dropped sharply, especially after the retirement age was lowered to 65 in 1976. But it had already been decreasing, and it continued to do so through the late 1990's. In contrast to men, the retirement age for women used to be lower than it is now. One reason was that gainful employment for women was not as common as today, and women – if they worked at all – often stopped at the same time as their husbands, who averaged several years older.

The longer life span, in itself, is no proof that human aging now begins later. On this point academics disagree. Some defend the dismal hypothesis that a longer life span is usually linked to a longer period of ill health and weakness in life's late stages. The most common view, however, is that at least some healthy years are added to people's lives.

It is thus difficult to argue that the health and working capacity of older members of the labour force at given ages have deteriorated over time – at least not in relation to the requirements that would have applied in a static labour market with no changes in the work to be done, occupational roles or needed skills. But working life *has* been changing, perhaps at an accelerating rate, and possibly in ways that have put older people at a disadvantage in relation to their juniors. The natural aging of totally healthy older people may be more of a problem than it used to be. Previously, retirement posts for older members of the labour force – usually with less pay – were a common feature of working life. Now their tasks are performed by dedicated labour, often employed by specialized contractors with their own strict requirements of efficiency. Today, in addition, employers play a part in arranging alternative means of support, which may include disability pensions, perhaps financed by public funds, but often at the company's own expense as well. For the individual concerned, the reduction in income is about the same as in the past, but now – for better or for worse – he/she is no longer employed. To put it succinctly: fewer and fewer are working with increasing productivity and they must somehow support everyone else.

Old age is not an illness, and it is not possible to obtain sickness compensation on the ground that aging is an obstacle to working. But in practice aging *is* often an obstacle to working. Aging has many aspects; these vary

in regard to their effect on the capacity to perform different kinds of work. On average, there is a marked decrease in physical mobility and muscular strength between the ages of 40 and 60. Sometimes mental capacity deteriorates in certain respects. One problem is that the rate of aging is highly variable. In a group of 40-year-olds with similar capabilities, some individuals will hardly have changed at all after 20 years. Others will show considerable deterioration – though they cannot be considered sick for that reason.

One factor that works in the opposite direction is that the experience of older people may be very valuable in certain kinds of work. It is probably no coincidence that the age of retirement is often quite high in "intellectual" occupations.

From the standpoint of the economy as a whole, it is profitable – in theory – for a person to go on working as long as what he/she produces is worth more than the cost of the materials, facilities, etc. that go into it – in other words, as long as the value added is positive. The drawback is that the wage corresponding to the result of production may be very low if it is set by the market. At a workplace, there is a lower limit to wages and salaries that would match low productivity. Even though the flexibility and distribution of wages and salaries in society are probably greater on the whole, it is now *less* acceptable, if anything, to cut the pay of an aging employee. However, it may be rational from a good-will standpoint for an employer to keep older personnel on the payroll, with pay that exceeds the value of their output. A workplace may thus function somewhat like a miniature pension system, with younger people paid less, and older people more, than the value of their respective output – a kind of social contract.

But there is of course a limit to the extent to which such redistribution is profitable, or considered reasonable. The limit is determined partly by the attitude of younger people toward the arrangement. If their acceptance decreases, older people will be forced to retire earlier, as will also be the case if the nature of work is changed so that the productivity of older personnel decreases in relation to that of younger people.

Beyond the limit to the willingness of employers to retain older employees with low productivity at prevailing wage levels, it may be warranted for society to subsidize those with lower productivity. Inflexibility in the relationship between the earnings of labour at different ages, where the relationship does not reflect differences in productivity, is an example of what is termed a market imperfection in economics. Owing to the imperfection, society's resources are used suboptimally from the standpoint of the economy as a whole. In practice, though, it is difficult to determine who should be subsidized. Also, the subsidy would have to be financed in some way, by taxes, for example, and this financing in itself could give rise to new imperfections in the form of so-called "tax wedges".

How Can the Retirement Age Be Raised?

To raise the retirement age beyond the currently conventional one of 65, using further financial incentives, is easier said than done. In the reformed income-related pension system, the retirement age has been abolished, in principle, and reasonable financial incentives to postpone retirement are already provided.

But tradition lives on in the rules of certain negotiated pensions and in labour market legislation – the law on employment security (LAS), which in practice governs the "retirement age," applies only until age 67 (previously age 65).

Certain provisions of the national pension system limit downward flexibility, primarily for individuals with lower incomes. The guaranteed pension, for those with a low income-related pension, cannot be drawn before age 65. The same is true of the housing supplement for individuals with low incomes.

The 65-year limits of this type may be one reason why 65 is considered the normal retirement age. The explanation for these limits is that the benefits concerned are also paid to people who have never earned any money of their own and never paid any taxes and contributions. Without an age limitation, these benefits would provide general income support to people who do not work, a kind of “citizen’s wage”. The amounts are set at what is considered a minimum living standard for an old-age pensioner and are thus justifiable on grounds of social policy. Younger individuals with difficulty in supporting themselves are referred to the benefits provided by other systems, such as sickness compensation, labour-market compensation and income support.

Raising the “guaranteed-pension age” could be taken as a general signal that people should continue working longer. But it is those of modest means whose freedom of choice is likely to be restricted. For earners of high incomes, the guaranteed-pension age does not affect their decision when to retire. Moreover, in higher income brackets, negotiated pension arrangements with employers often provide supplementary or alternative benefits in case of early retirement. A low-income earner, on the other hand, may find it hard to live on an old-age pension drawn from an early age without additional income in the form of a guaranteed pension and a housing supplement. In many cases, retirement before age 65 is feasible only if working capacity is limited by ill health, in which case the individual is entitled to sickness compensation. Increasing the minimum age for the guaranteed pension would subject the sickness-compensation system to additional cost pressure, as the upper age limit for the latter benefit would reasonably have to be increased to the same extent.

Your pension accounts

Changes in your accounts in 2008, SEK	Inkomstpension	Premium pension
Balance, December 31, 2007	639 035	51 747
Pension credit recorded for 2007	+ 28 956	+ 5 016
Inheritance gain	+ 1 987	+ 110
Charge for administrative costs	- 156	- 73
Change in value	+ 40 140	- 17 690
Balance, December 31, 2008 **	689 622	38 860 *

* Includes change in value of funds and interest on pension credit for 2007.

** The difference between the closing balance and the total above is due partly to changes in tax assessment and to the fact that some individuals have drawn a pension during the year.

Your national pension balance

Total balance of your accounts:

SEK 728 482

The Orange Envelope of Mr./Ms. Average Svensson

All pension accounts

Changes during 2008, SEK *	Inkomstpension	Premium pension
Balance, December 31, 2007	3 860 545 000 000	310 711 000 000
Pension credit recorded for 2007	+ 174 932 000 000	+ 30 118 000
Inheritance gain	+ 12 001 000 000	+ 663 000 000
Charge for administrative costs	- 942 000 000	- 437 000 000
Change in value	+ 242 496 000 000	- 106 217 000 000
Balance, December 31, 2008 ***	4 166 149 000 000	233 333 000 000 **

* Rounded off to the nearest million.

** Includes change in value of funds and interest on pension credit for 2007.

*** The difference between the closing balance and the total above is due partly to changes in tax assessment and to the fact that some individuals have drawn a pension during the year.

Our national pension

Total of all orange envelopes:

SEK 4 399 482 000 000

Total of All Envelopes

Returadress: Försäkringskassan, Gemensam Service, 831 99 Östersund

Försäkringskassan 2008-09-10

When read out loud, the total of all Orange Envelopes is as follows: four trillion, three hundred ninety-nine billion, four hundred eighty-two million Swedish kronor. The total amounts of the inkomstpension are found in Note 14, Table A, where the change in the pension liability to the economically active is reported. The corresponding amount for the premium pension is found in the income statement for the premium pension.

Pension Liability to the Economically Active

The **inkomstpension liability to the economically active** consists of the sum of each birth cohort's pension balances as of December 31, 2008, with the addition of total estimated pension credit for 2008. For further information, see Note 14, Table A, and Appendix B, Section 4.

The **ATP liability to the economically active** is calculated with the pension model of the Swedish Social Insurance Agency (SSIA). The ATP of each birth cohort is calculated in the year when the cohort reaches age 65. The estimated annual pension is multiplied by the economic annuity divisor for the birth cohort, and the present value of the product is determined. For further information, see Note 14, Table B, and Appendix B, Section 4.

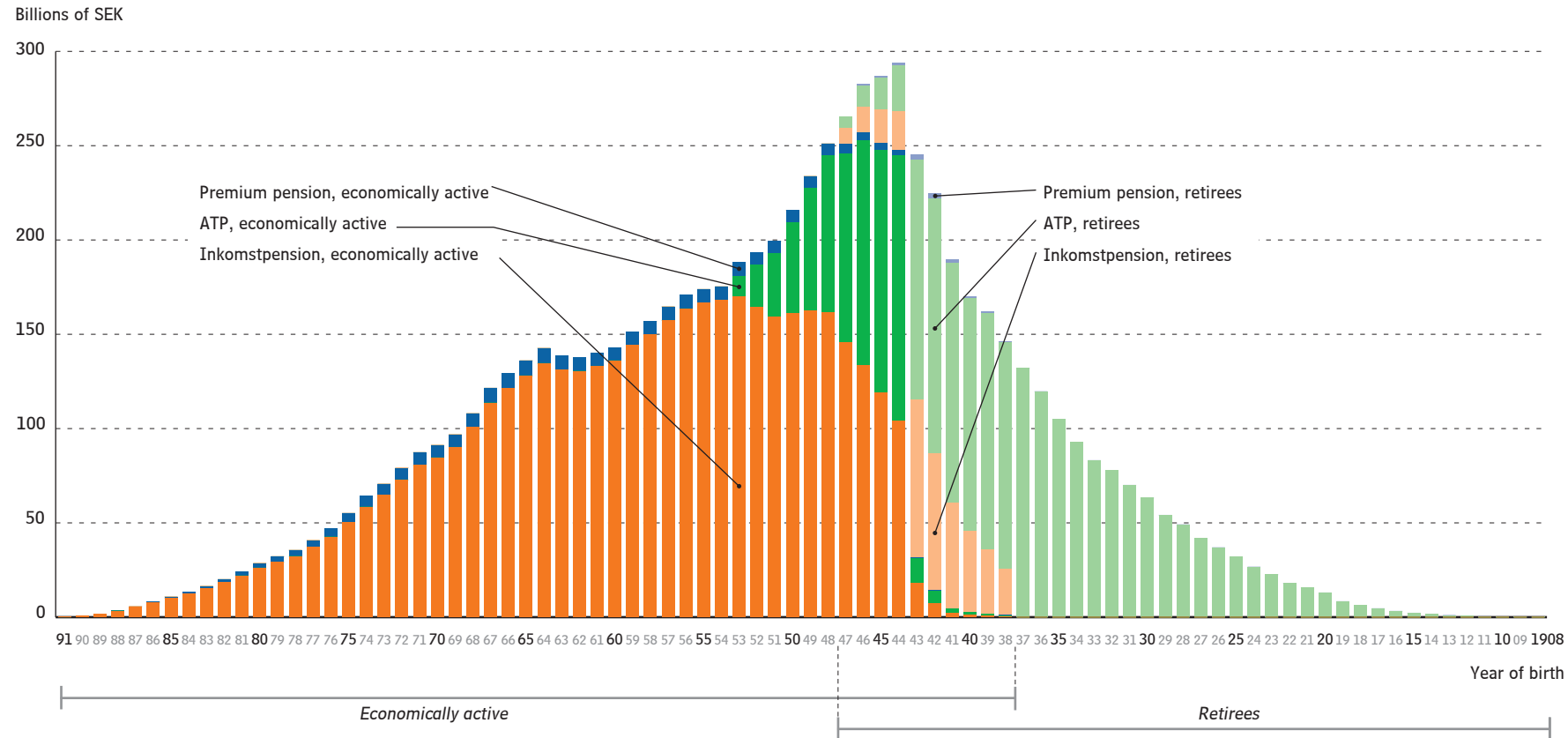
The **premium pension liability to the economically active** consists of the aggregate fund assets of the respective birth cohorts as of December 31, 2008.

Pension Credit Earned

Data on **income and pension credit** are taken from SSIA records of earnings and refer to average amounts for all insured persons with positive pension credit earned in 2007. For the total pension credit earned in 2007, see the respective income statements and balance sheets for the inkomstpension and the premium pension.

Income refers to income from employment and other earned income, as well as transfer payments. Income is shown before deduction of the individual pension contribution and for persons with incomes exceeding the threshold for pension credit (42.3 percent of one price-related base amount).

Total Pension Liability as of December 31, 2008

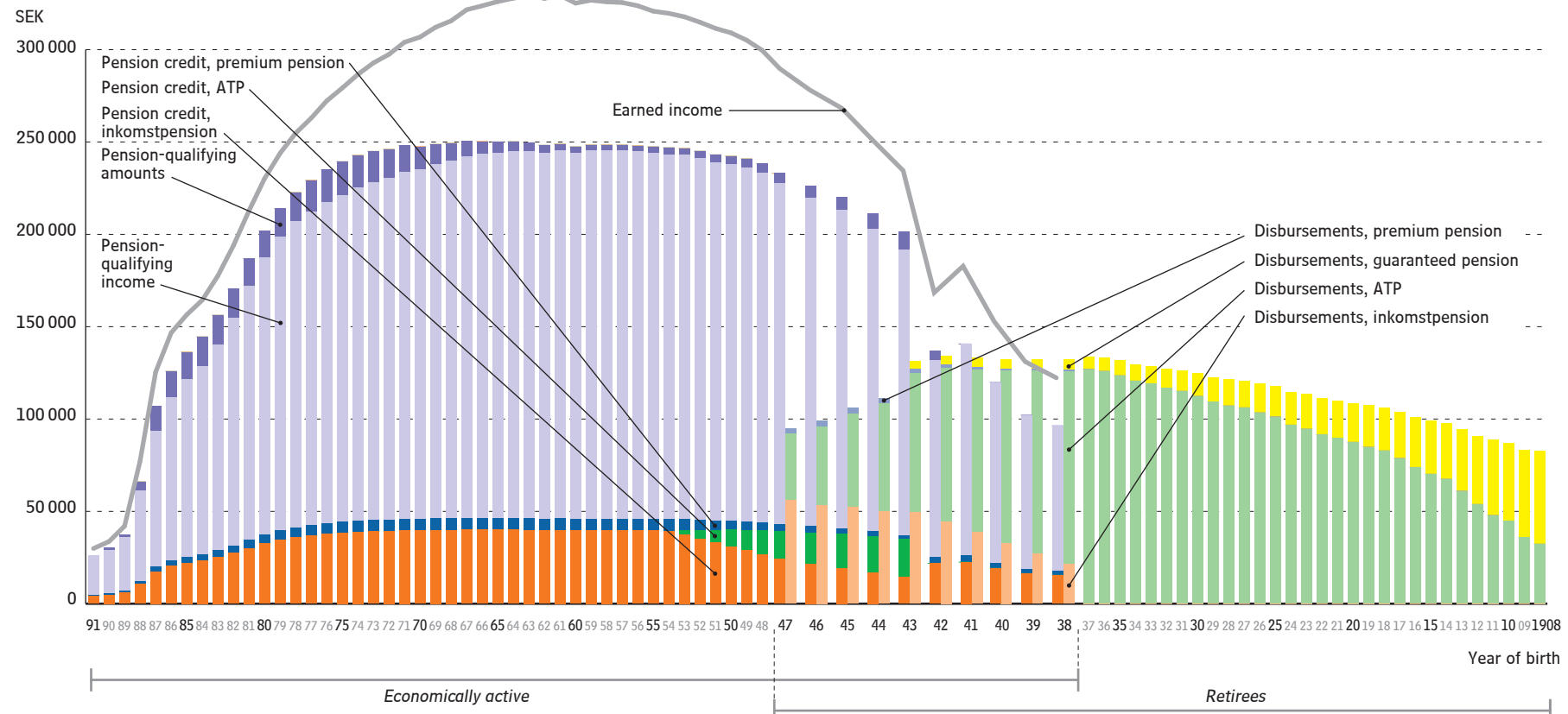


Pension Liability to Retirees

The **pension liability to retirees** is calculated in the same way for the ATP and the inkomstpension. The sum of pension disbursements to each birth cohort in December 2008 is multiplied by 12, and that annual amount is multiplied by a three-year average of the economic annuity divisor. For further information, see Note 14, Table C, and Appendix B, Section 4.

The **premium pension liability to retirees** is estimated from aggregate pension disbursements to the respective birth cohorts in December 2008, multiplied by 12 and by annuity divisors for the premium pension.

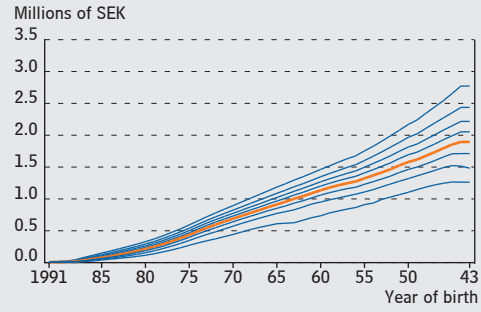
Average Pension Credit Earned and Pension Disbursed



Pension Disbursements

Data on **pension disbursements** are taken from SSIA records of disbursements and refer to average amounts for all retirees receiving a pension disbursement in 2008. For total disbursements of the inkomstpension and the premium pension, see Note 2.

Pension Liability to Persons Aged 17-65

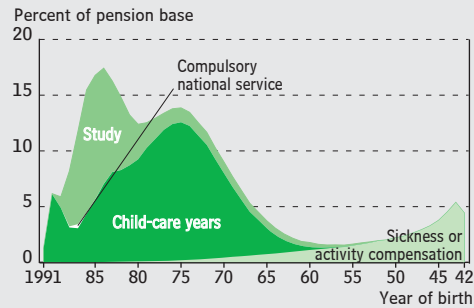


The red curve represents the median, which is the central value in the scale of values arranged from lowest to highest. The other curves indicate the values for the 20th-90th percentiles; i.e. the upper curve represents the value of the pension asset* exceeded by 10 percent of the insured, and the lower curve represents the value of the pension asset not reached by 20 percent of the insured.

The median pension asset for a woman aged 43.9 with pension credit is approximately SEK 935 000. At that age, about 10 percent have a pension asset above SEK 1 213 000, and some 20 percent have a pension asset below SEK 615 000.

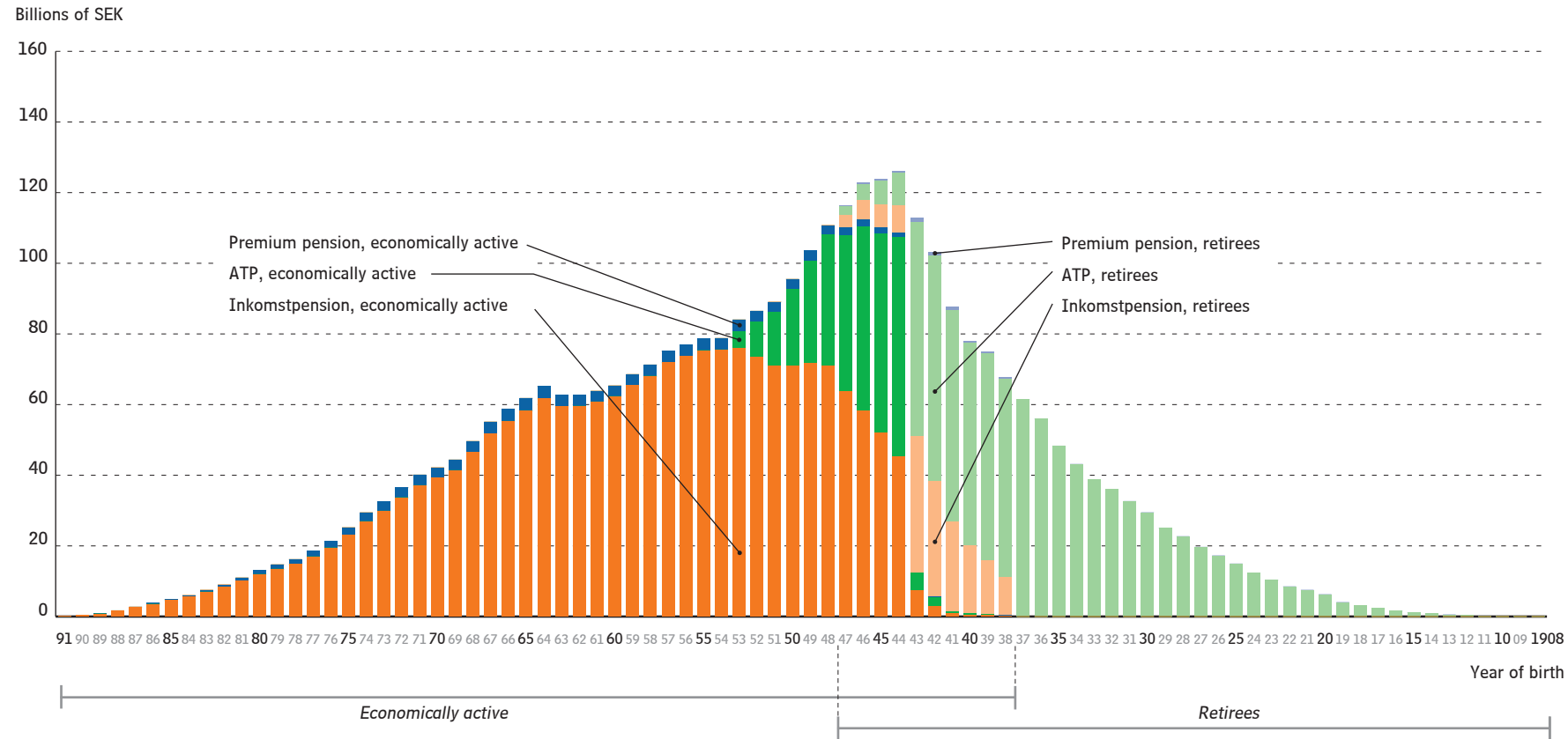
* The pension balances of individuals equal the pension liability of the system.

Pension Qualifying Amounts

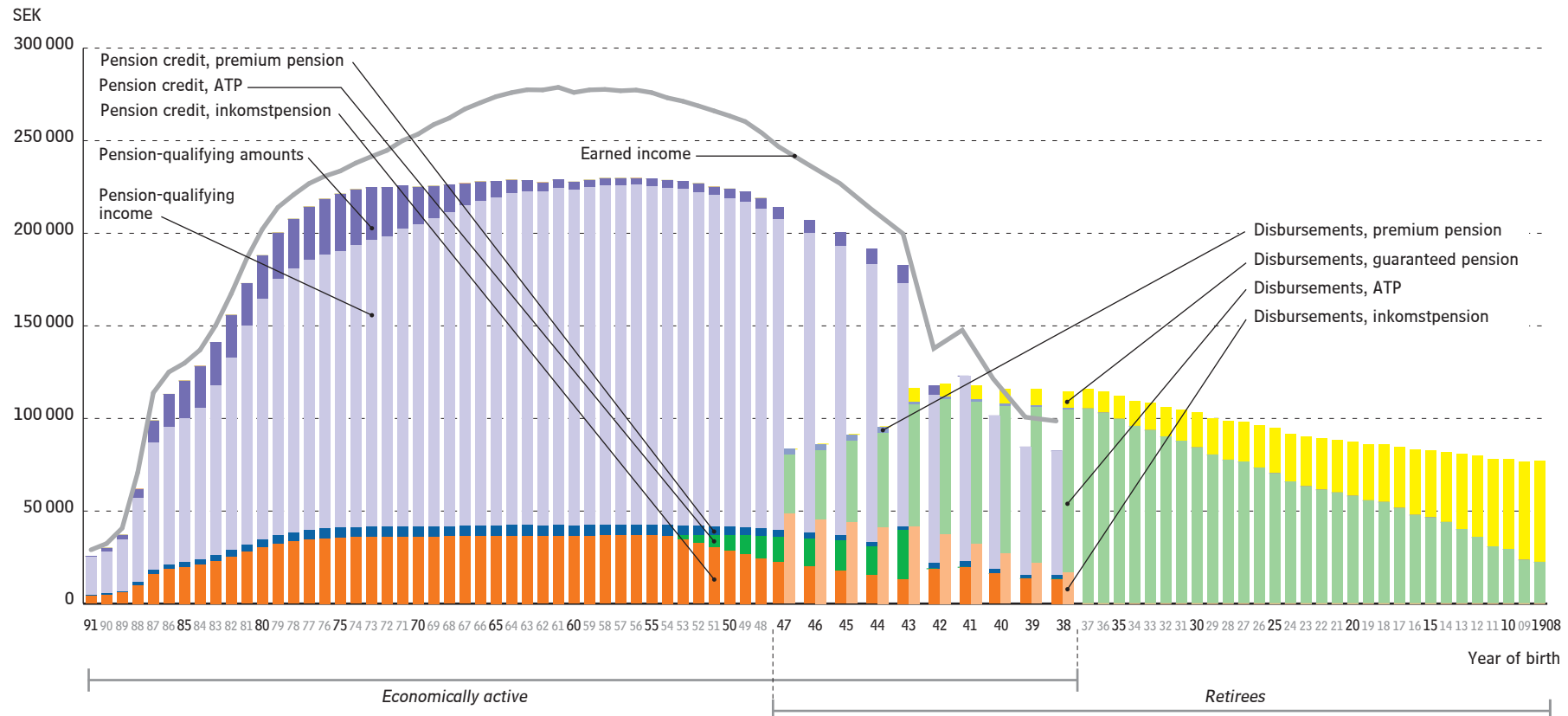


Pension credit is granted for pension-qualifying amounts in particular phases of individuals' lives, such as years with small children or of compulsory national service. In pay-in year 2007, pension-qualifying amounts constituted 6.4 percent of the pension base for women. The largest portion of this share, 3.9 percent, consisted of amounts for years with small children.

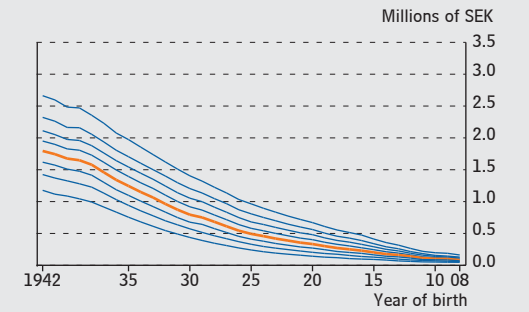
Total Pension Liability as of December 31, 2008, Women



Average Pension Credit Earned and Pension Disbursed, Women

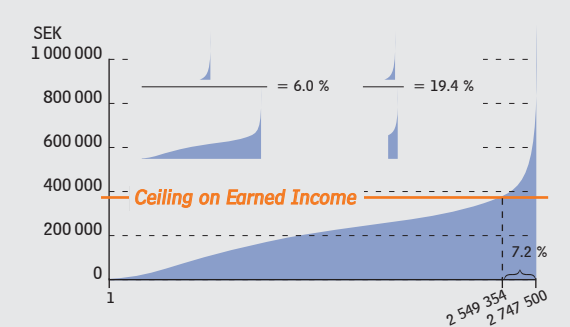


Pension Liability to Persons Aged 66 and above



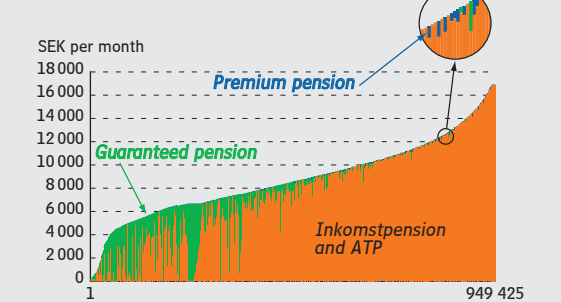
For 10 percent of retired women, the pension asset exceeds SEK 2 662 000 at age 66. The median at that age is SEK 1 795 000, and for 20 percent the pension asset is less than SEK 1 177 000. For a pensioner 75.7 years of age, the corresponding amounts decrease to SEK 1 680 000, 1 014 000 and 579 000.

Earned Income



The national pension is based on earned income up to a ceiling of 8.07 income-related base amounts. In the diagram women's earnings in 2007 are presented in order of size.

Guaranteed Pension

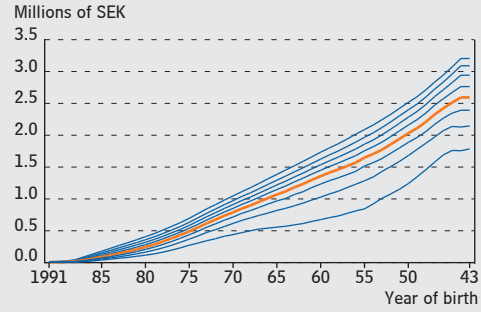


In the diagram, disbursements of the national pension in December, 2008, for female pensioners born in 1943 or earlier are presented in order of size (949 425 disbursements).

About 63 percent of female pensioners receive some guaranteed pension. In total, the guaranteed pension represents roughly 15 percent of pension disbursements to female retirees.

The widow's pension is not included in the diagram. Had it been included, pensions would have been substantially higher, particularly the lowest ones.

Pension Liability to Persons Aged 17-65

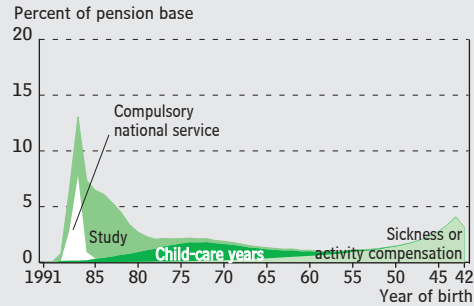


The red curve represents the median, which is the central value in the scale of values arranged from lowest to highest. The other curves indicate the values for the 20th-90th percentiles; i.e. the upper curve represents the value of the pension asset* exceeded by 10 percent of the insured, and the lower curve represents the value of the pension asset not reached by 20 percent of the insured.

The median pension asset for a man aged 43.9 with pension credit is approximately SEK 1 094 000. At that age, about 10 percent have a pension asset above SEK 1 420 000, and some 20 percent have a pension asset below SEK 564 000.

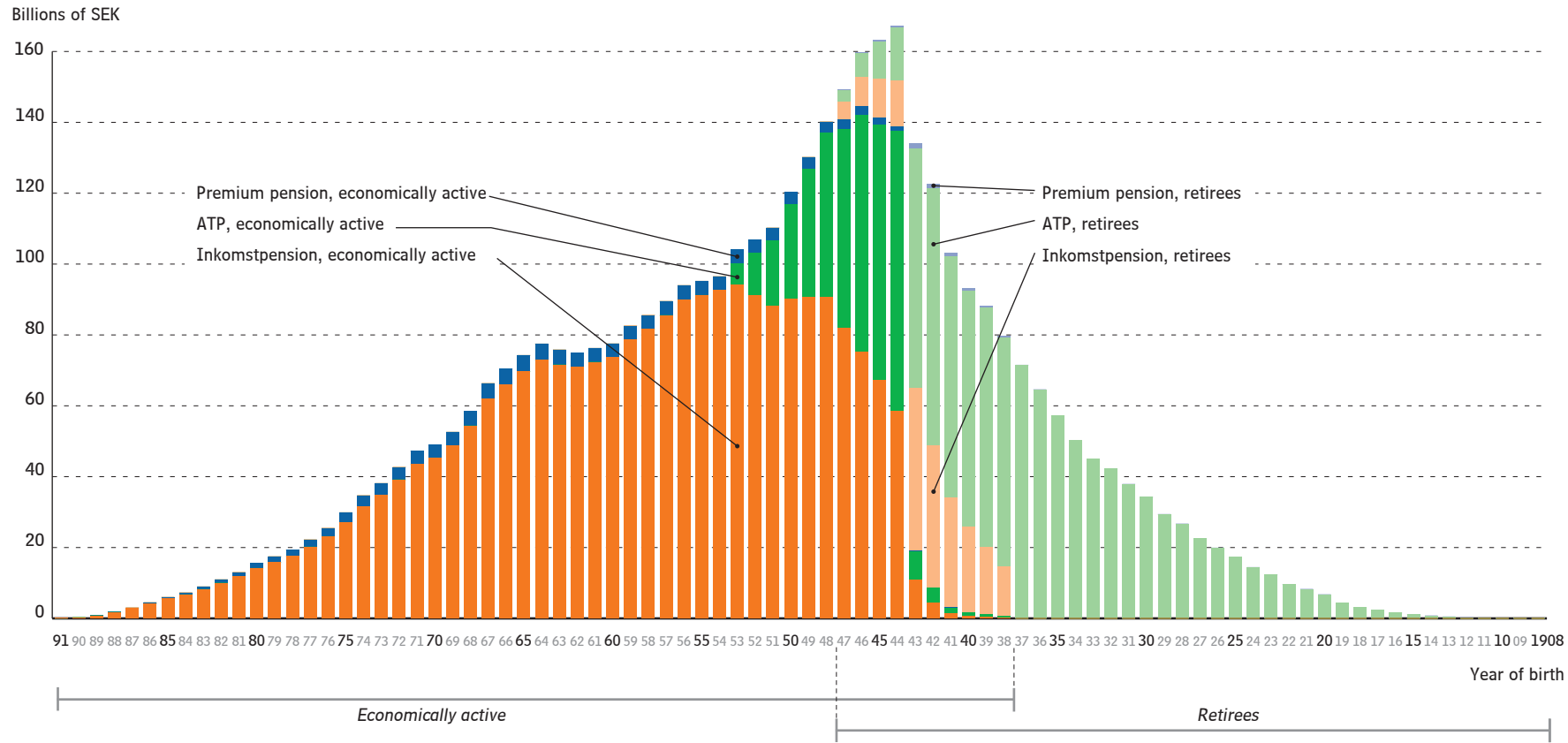
* The pension balances of individuals equal the pension liability of the system.

Pension Qualifying Amounts

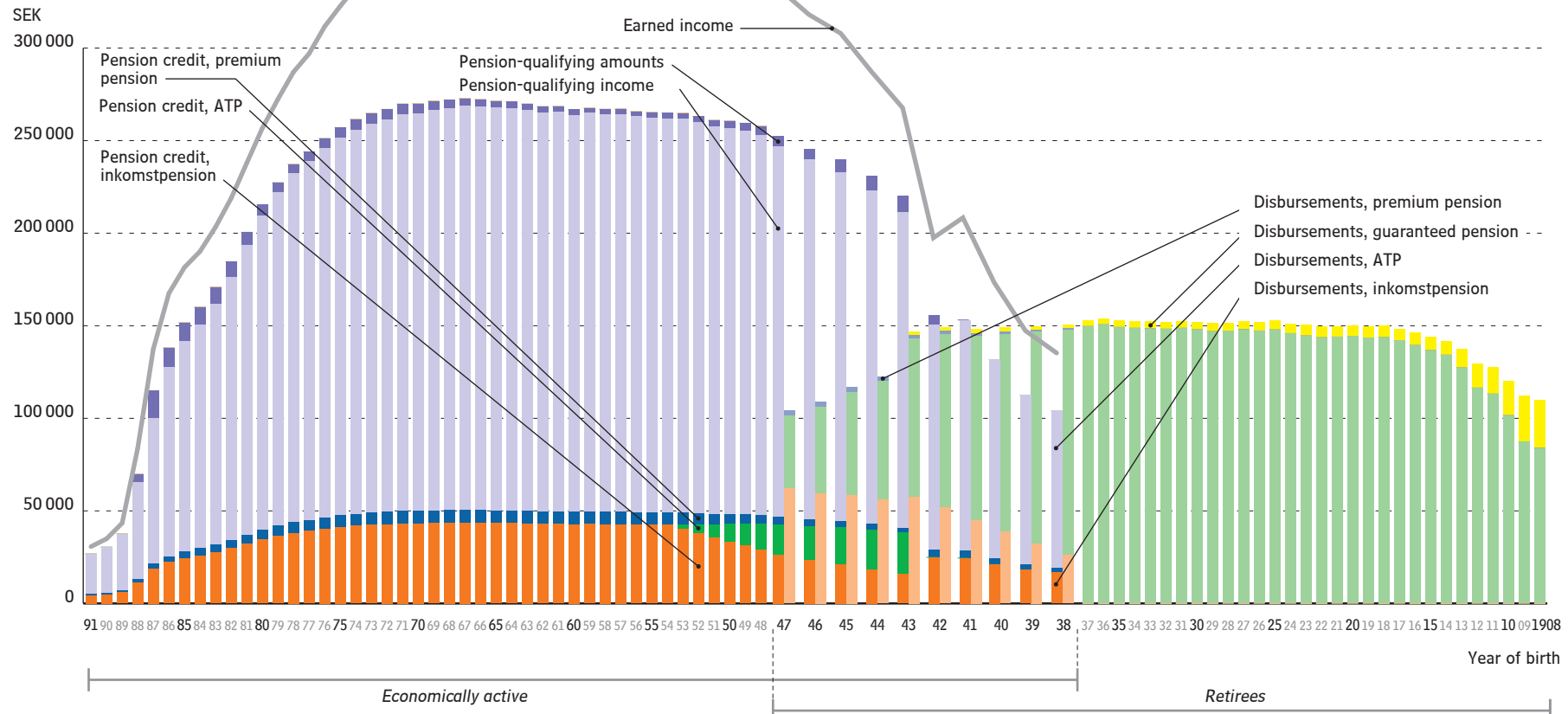


Pension credit is granted for pension-qualifying amounts in particular phases of individuals' lives, such as years with small children or of compulsory national service. In pay-in year 2007, pension-qualifying amounts constituted 2.1 percent of the pension base for men. The largest portion of this share, 0.8 percent, consisted of amounts for sickness or activity compensation.

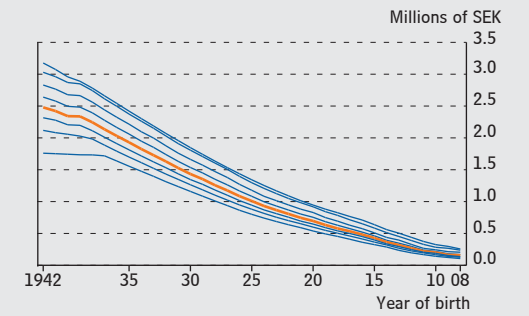
Total Pension Liability as of December 31, 2008, Men



Average Pension Credit Earned and Pension Disbursed, Men

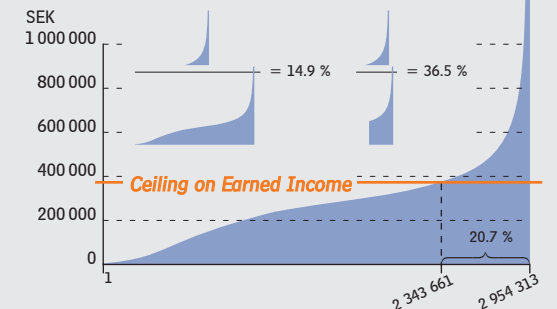


Pension Liability to Persons Aged 66 and above



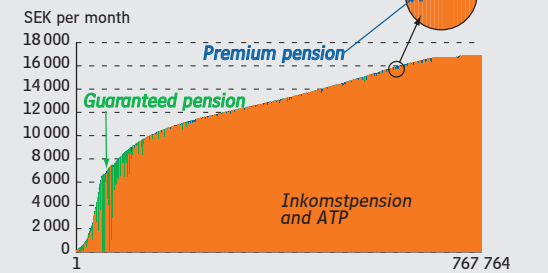
For 10 percent of retired men, the pension asset exceeds SEK 3 176 000 at age 66. The median at that age is SEK 2 479 000, and for 20 percent the pension asset is less than SEK 1 760 000. For a pensioner 75.7 years of age, the corresponding amounts decrease to SEK 2 128 000, 1 679 000 and 1 354 000.

Earned Income



The national pension is based on earned income up to a ceiling of 8.07 income-related base amounts. In the diagram men's earnings in 2007 are presented in order of size.

Guaranteed Pension



In the diagram, disbursements of the national pension in December, 2008, for male pensioners born in 1943 or earlier are presented in order of size (767 764 disbursements).

About 18 percent of male pensioners receive some guaranteed pension. In total, the guaranteed pension represents roughly 2 percent of pension disbursements to male retirees.

ORANGE REPORT 2008 in 7 Minutes

Plummeting stock markets in the wake of the global financial crisis have left their impact on the pension system. The balance ratio, which measures the financial status of the inkomstpension system, has dropped below 1.0000, and the rate of return in the premium pension system has been negative.

This section summarizes the financial position and development of the two earnings-related components of the national pension system – the inkomstpension and the premium pension – in 2008.

Inkomstpension

The inkomstpension system is a pay-as-you-go system. Pension contributions received are used to pay the pension disbursements of the same year. Surpluses or deficits arising from differences between pension contributions received and pensions disbursed are absorbed by the buffer fund.

If the pension system is to be stable in the long run, it is important that assets be in parity with liabilities.

The assets of the system are the value of future pension contributions, referred to as the contribution asset, and the buffer fund. The contribution asset is calculated through multiplication of pension contributions paid in, by the average time that one Swedish krona (SEK 1) remains in the system – turnover duration.

The pension liability consists partly of the liability to the economically active and partly of the liability to retirees. The pension liability to the economically active is the total of the bottom lines in the pension account statements in all Orange Envelopes. The pension liability to retirees is the sum of the expected pension disbursements to today's retirees for the rest of their lives. The pension liability changes primarily through annual indexation of pensions and the balances of pension accounts. Indexation is determined by the change in average income in Sweden.

The result (net income/-loss) of the pension system for the year is the difference between the change in system assets and the change in the pension liability.

The result is affected by numerous macroeconomic and demographic factors. Normally the principal factor in the short run is growth in employment, but the effects of stock and bond markets on the buffer fund is also significant, particularly in case of major changes as in the current financial crisis. In the long run, demographic factors matter most.

The balance ratio is a measure of the financial position of the system and is calculated as system assets divided by the pension liability. If the balance ratio is less than 1.0000, i. e. if the liabilities of the pension system exceed the assets, so-called balancing is activated to ensure the long-term balance of the system. Balancing is a part of indexation and means that indexation of pensions and pension balances is reduced. The pension liability is then revalued at a slower rate, and the pension system is strengthened financially. The rate of indexation remains lower until the system has regained financial balance. Any surpluses arising after balancing has been activated are used directly to increase indexation to the extent possible and thus to restore the value of pensions.

Change in Assets in 2008. In 2008 the buffer fund, i. e. the First–Fourth and Sixth National Pension Funds, decreased by SEK 191 billion, or 21.3 percent. The negative return on the buffer fund was SEK 194 billion. Pension contributions exceeded fund expenses, pension disbursements and costs of administration, by a positive contribution of SEK 3 billion.

The contribution asset increased by SEK 361 billion, or 5.9 percent. Higher pension contributions added SEK 395 billion to the contribution asset, an increase

of 6.5 percent. At the same time, however, the contribution asset was reduced by SEK 33 billion through a decrease of roughly two months in turnover duration.

In total, the assets of the inkomstpension system increased by SEK 170 billion, or 2.4 percent.

Change in the Pension Liability in 2008. The pension liability rose by SEK 431 billion, or 6.2 percent. Indexation accounted for SEK 385 billion, or 5.5 percentage points, of the increase. The liability to retirees has been affected by a change in life expectancy. Compared to 2007, the average payout duration of pensions (economic life expectancy) increased by an average of 27 days, adding SEK 27 billion to the pension liability. New pension credit earned and ATP points, including certain adjustments, exceeded the year’s pension disbursements, increasing the pension liability by SEK 18 billion.

Result for 2008. The result of the inkomstpension system in 2008 was a net loss: SEK –261 billion. With the year’s negative change in capital, results brought forward dropped from SEK 18 billion in 2007 to SEK –243 billion. The principal reason for the year’s negative result is the decrease in the assets of the National Pension Funds. Another factor affecting the outcome is that the contribution asset increased more slowly than the pension liability because of shorter turnover duration.

Financial Position as of December 31, 2008. As of December 31, 2008, assets were 3.28 percent less than the pension liability. The balance ratio of the system for 2010 is thus 0.9672.

Seven-Year Review							
Billions of SEK							
	2008	2007	2006	2005	2004	2003	2002
Buffer fund	707	898	858	769	646	577	488
Contribution asset	6 477	6 116	5 945	5 712	5 607	5 465	5 301
Total assets	7 184	7 014	6 803	6 490	6 253	6 042	5 789
Pension liability	7 428	6 996	6 703	6 461	6 244	5 984	5 729
Results brought forward	–243	18	100	28	9	58	60
Balance ratio	0.9672	1.0026	1.0149	1.0044	1.0014	1.0097	1.0105

Right after the balance ratio was first determined, it followed a declining trend for several years. In 2005 and 2006 the balance ratio increased, but has since decreased. In 2008 the balance ratio was calculated to drop below 1.0000 for the first time. The new ratio is determined by the financial position of the system as of December 31, 2008, and will affect indexation as of December 31, 2009.

The sensitivity analysis in the table shows the effect on the balance ratio if one base is changed while all other bases are assumed to remain the same.

How Is the Balance Ratio Affected by Changes in the Bases for Its Calculation?

Type of base	Change in base	Change in balance ratio
Contribution base	+1 %	+0.9 %
Average income*	+1 %	-0.6 %
Return on fund	+10 percentage points	+1.3 %
Retirement age	+1 year	+1.9 %
Age for entering labour market	-1 year	+1.3 %

* All of the increase is in incomes above the ceiling on pension-qualifying earnings. No smoothed values have been used in the calculation.

Premium Pension

The premium pension system is a funded system where pension savers themselves choose the funds in which their premium pension moneys will be invested. The premium pension is disbursed from the proceeds of selling off accumulated capital. The assets of the system consist of investments by pension savers in funds. With fund insurance, the pension liability to the economically active and to retirees is linked primarily to the value of fund shares. Changes in the value of fund shares result in direct and equal changes in the system assets of pension savers. With conventional insurance, the pension liability is the value of the remaining guaranteed disbursements. That value is calculated on assumptions about future return, life expectancy and operating expenses.

The pension credit earned by pension savers is invested in December. The fund holdings of pensioners are increased by the new pension credit before the annual recalculation of pensions to be disbursed, with a consequent effect on pension disbursements for coming years.

Change in Assets in 2008. Premium pension assets decreased during the year by SEK 77 billion. Assets were increased by SEK 30 billion for new pension credit but decreased by SEK 1 billion because of pension disbursements and by SEK 106 billion

attributable to losses in value. The rate of return during the year was -34.5 percent. The capital-weighted annual return of the premium pension system has averaged -0.8 percent since the system received its first contribution revenue in 1995.

Change in the Pension Liability in 2008. The pension liability decreased by SEK 77 billion in 2008. The change in the pension liability was due to new pension credit earned, to a negative result in capital management and to disbursement of pensions. The rebate rate averaged 2.2 percent in 2008.

Result for 2008. The result for the year was a net loss: SEK -100 million. In addition to net revenue of SEK 139 million from fund operations, the result was affected by SEK -105 million from conventional insurance, by SEK -68 million from trade in fund shares via trade inventory and by net interest of SEK -66 million. Of the deterioration in the result for conventional insurance, changes in actuarial provisions accounted for about SEK 272 million. Most of the year's discrepancy in conventional insurance is due to the development of financial markets. The negative result for the year reduces the consolidation fund in accumulated results brought forward; the fund amounts to SEK 247 (180) million. The moneys in the consolidation fund are distributed to pension savers as a rebate in connection with pension disbursement.

Seven-Year Review

Millions of SEK

	2008	2007	2006	2005	2004	2003	2002
Fund insurance	231 600	309 423	268 708	192 770	125 024	94 124	59 416
Conventional insurance	1 733	1 288	739	307	94	31	4
Total insurance assets	233 333	310 711	269 447	193 077	125 118	94 155	59 420
Pension liability	233 082	310 326	269 447	193 077	125 120	94 157	59 422
Result for the year	-100	318	56	57	48	-109	-365

The value of pension savers' premium pension assets as of December 31, 2008, was SEK 233 333 million.

The Income-Related Old-Age Pension System, Income Statement and Balance Sheet

For references to notes, see the respective income statements and balance sheets of the inkomstpension and premium pension systems.

Inkomstpension and premium pension

Income Statement, millions of SEK

Change in fund assets	2008	2007	Change
Pension contributions	233 258	218 496	14 762
Pension disbursements	-200 014	-186 109	-13 905
Return on funded capital	-300 253	51 815	-352 068
Administrative costs	-1 820	-2 085	265
Total	-268 829	82 117	-350 946
Change in contribution asset			
Value of change in contribution revenue	394 833	192 905	201 928
Value of change in turnover duration	-33 452	-21 573	-11 879
Total	361 381	171 332	190 049
Change in pension liability*			
New pension credit and ATP points	-247 798	-222 142	-25 656
Pension disbursements	199 990	186 076	13 914
Indexation/change in value	-279 161	-282 353	3 192
Value of change in life expectancy	-27 044	-17 391	-9 653
Inheritance gains arising	11 319	10 679	640
Inheritance gains distributed	-12 664	-11 687	-977
Deduction for administrative costs	1 379	2 080	-701
Total	-353 979	-334 738	-19 241
Net income/-loss for the year	-261 427	-81 289	-180 138

* A negative item (-) increases the pension liability, and a positive item () decreases it, by the amount shown.

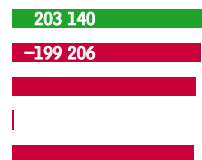
Balance Sheet, millions of SEK

Assets	12/31 2008	12/31 2007	Change
Fund assets	707 087	898 472	-191 385
Insurance assets	233 333	310 711	-77 378
Other assets	29 462	29 798	-336
Contribution asset	6 477 351	6 115 970	361 381
Total assets	7 447 233	7 354 951	92 282
Liabilities and results brought forward			
Opening results brought forward	16 782	98 090	-81 308
Net income/-loss for the year	-261 427	-81 289	-180 138
Closing results brought forward	-244 645	16 801	-261 446
Pension liability	7 660 889	7 306 810	354 079
Other liabilities	30 989	31 340	-351
Total liabilities and results brought forward	7 447 233	7 354 951	92 282

Inkomstpension, Income Statement and Balance Sheet

SEK 100 billion

|+++++++|



Income Statement, millions of SEK

	Note	2008	2007	Change
Change in fund assets				
Pension contributions	1	203 140	190 416	12 724
Pension disbursements	2	-199 206	-185 653	-13 553
Return on funded capital	3	-193 931	37 544	-231 475
Administrative costs	4	-1 388	-1 772	384
Total		-191 385	40 535	-231 920
Change in contribution asset				
Value of change in contribution revenue	5	394 833	192 905	201 928
Value of change in turnover duration	6	-33 452	-21 573	-11 879
Total		361 381	171 332	190 049
Change in pension liability*				
New pension credit and ATP points	7	-217 680	-194 062	23 618
Pension disbursements	2	199 182	185 620	13 562
Indexation	8	-385 378	-268 334	-117 044
Value of change in life expectancy	9	-27 044	-17 391	-9 653
Inheritance gains arising	10	10 656	10 129	527
Inheritance gains distributed	10	-12 001	-11 137	-864
Deduction for administrative costs	11	942	1 701	-759
Total		-431 323	-293 474	-137 849
Net income/-loss for the year		-261 327	-81 607	-179 720

* A negative item (-) increases the pension liability, and a positive item () decreases it, by the amount shown.

SEK 1000 billion

|+++++++|



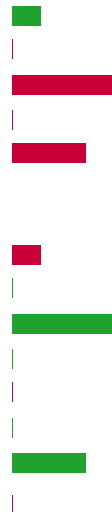
Balance Sheet, millions of SEK

Assets	Note	12/31 2008	12/31 2007	Change
Fund assets	12	707 087	898 472	-191 385
Contribution asset	13	6 477 351	6 115 970	361 381
Total assets		7 184 438	7 014 442	169 996
Liabilities and results brought forward				
Opening results brought forward		17 958	99 565	-81 607
Net income/-loss for the year		-261 327	-81 607	-179 720
Closing results brought forward		-243 369	17 958	-261 327
Pension liability	14	7 427 807	6 996 484	431 323
Total liabilities and results brought forward		7 184 438	7 014 442	169 996

Premium Pension, Income Statement and Balance Sheet

SEK 100 billion

|+++++++|



Income Statement, millions of SEK

	Note	2008	2007	Change
Change in fund assets				
Pension contributions	1	30 118	28 080	2 038
Pension disbursements	15	-808	-456	-352
Return on funded capital	16	-106 322	14 271	-120 593
Administrative costs	17	-432	-313	-119
Total		-77 444	41 582	-119 026
Change in pension liability*				
New pension credit	18	-30 118	-28 080	-2 038
Pension disbursements	15	808	456	352
Change in value	19	106 217	-14 019	120 236
Inheritance gains arising	20	663	550	113
Inheritance gains distributed	20	-663	-550	-113
Deduction for administrative costs	21	437	379	58
Total		77 344	-41 264	118 608
Net income/-loss for the year		-100	318	-418

* A negative item (-) increases the pension liability, and a positive item () decreases it, by the amount shown.

SEK 1000 billion

|+++++++|



Balance Sheet, millions of SEK

	Note	12/31 2008	12/31 2007	Change
Assets				
Insurance assets	22	233 333	310 711	-77 378
Other assets	23	29 462	29 798	-336
Total assets		262 795	340 509	-77 714
Liabilities and results brought forward				
Opening results brought forward	24	-1 176	-1 475	299
Net income/-loss for the year		-100	318	-418
Closing results brought forward	24	-1 276	-1 157	-119
Pension liability	25	233 082	310 326	-77 244
Other liabilities	26	30 989	31 340	-351
Total liabilities		264 071	341 666	-77 595
Total liabilities and results brought forward		262 795	340 509	-77 714

Accounting Principles

To a large degree, the assets and liabilities of the inkomstpension are valued solely on the basis of events and transactions that are verifiable at the time of valuation. The calculation of the so-called contribution asset follows principles developed especially for a primarily unfunded pension system.

Regulations and Guidelines

The Annual Report of the Pension System has been prepared in accordance with Chapter 15, § 20 of the Earnings Related Old Age Pension Act (1998:674).

The income-related old-age pension system includes the benefits provided by the inkomstpension, the ATP and the premium pension.²³

The inkomstpension and the ATP are examples of benefits in a pay-as-you-go pension system. In such systems, contributions are not funded, but in principle are used directly to finance pension disbursements. The National Pension Funds are buffer funds that absorb differences between the inflow of contributions and the outflow of pensions. As elsewhere in the accounts, the term "inkomstpension" is used here in reference to the entire pay-as-you-go system; in other words, it often applies to the ATP as well. According to the Earnings Related Old Age Pension Act (1998:674), the reported assets of the pay-as-you-go system consist of the contribution asset and the value of the assets of the First–Fourth and Sixth National Pension Funds. Formulas for calculating the contribution asset and the pension liability of the inkomstpension system are provided in the Regulations for Calculation of the Balance Ratio (2002:780). These formulas are also found in Appendix B.

The premium pension system is a fully funded pension system where contributions are invested and the accumulated capital is sold off to pay pensions.

According to the Regulations for the Annual Report (2002:135), the Report is to include a projection of the assumed long-term development of the pension system. See the section "Three Scenarios for the Future of the Pension System".

The accounting principles of the National Pension Funds are set forth in their annual reports and they are therefore not described in this Report. The annual report of each national pension fund is available on the home page of the respective fund: www.ap1.se, www.ap2.se, www.ap3.se, www.ap4.se and www.ap6.se. As the annual report of the PPM describes the accounting principles used for the premium pension, these are only presented in summary form in this Report. For further information, see www.ppm.nu.

Where Do the Figures Come From?

The accounting for the inkomstpension system is based on data from the records of the Swedish Social Insurance Agency on pension credit earned and pension disbursements.

In the accounting for the pension system, the data for the First–Fourth and Sixth National Pension Funds have been taken primarily from the annual reports of each fund. The buffer funds prepare their own reports according to the Law on National Pension Funds (2000:192). On the basis of current provisions for comparable financial companies, the funds have also developed common principles for accounting and valuation.

²³ The guaranteed pension, which is part of the national pension system, is not based on earnings and is therefore not included in the accounts.

In the accounting for the pension system, the data for the premium pension are presented largely in accordance with the PPM Annual Report. The PPM prepares its annual report pursuant to the Law on Annual Reports of Insurance Companies (1995:1560) and to the regulations and general guidelines of the Swedish Financial Supervision Authority (Finansinspektionens författningssamling FFFS) on annual reports of insurance companies. Certain items have been adjusted, simplified or combined in order to make the presentation more comparable with that of the inkomstpension.

Principles for Valuation of Assets and Liabilities

In general, the assets and liabilities of the inkomstpension system are valued only on the basis of events and transactions that are verifiable at the time of valuation. For example, the assumption that contribution revenue normally changes at the rate of economic growth is not considered in the calculation of the contribution asset. Nor does the valuation of the pension liability take into account the assumption that pension disbursements, because of factors like indexation, will change in the future. The reason why assets and liabilities are valued without regard to future factors is that the financial position of the system is determined exclusively by the relationship of assets to liabilities, that is, the so-called balance ratio.

In the design of the inkomstpension, there is a strong link between the development of system assets and the development of system liabilities, although in cases where the balance ratio exceeds one (1.0000), assets and liabilities will develop at slightly different rates over time. When the balance ratio is less than one (1.000), the provisions for balancing establish in principle an absolute link between the respective rates of change in liabilities and assets.²⁴

In the valuation of the assets and liabilities of the inkomstpension system, it is assumed that these will change at the same rate after each valuation. To put it another way, it is assumed in the method of valuation that the future internal rate of return of the system will be the same as the future change in the pension liability, even though this outcome is certain only if balancing has been activated. When balancing has not been activated, the internal rate of return may be either greater or less than the change in the value of the pension liability.

The valuation of the contribution flow and of the pension liability is based almost exclusively on conditions prevailing at the time of valuation. This is not due to any belief that all these factors will remain totally constant; rather, the accounting is designed not to include changed conditions until these are reflected in the events and transactions on which the accounts are based.

Valuation of Inkomstpension Assets

The basis for valuation of the contribution asset is the size of the pension liability that the contribution revenue for the accounting year – i.e. paid-in pension contributions – could finance if the conditions prevailing at the time of valuation remained constant. The relevant determinants, in addition to the rules of the pension system, are economic and demographic. The economic determinants are the average pension-qualifying income of each annual birth cohort and the sum of these incomes. The demographic determinants relate to mortality at different ages. The relevant rules for the pension system are those that govern the calculation and the indexation of the inkomstpension, define the contribution and pension base and determine the contribution in percent. The contribution asset is calculated in principle by multiplication of the contribution revenue for the accounting year by the turnover duration for the same year.²⁵ Turnover duration expresses the expected average length of time between the payment of a monetary unit of contribution into the sys-

²⁴ In the method for calculating turnover duration, there is an implicit assumption that the size of the economically active population will remain constant. If the population decreases, there is thus a risk that the accounts will (slightly) overstate the system's assets in relation to its liabilities. It is reasonable, however, to assume that the population will cease declining at some point. If so, the underestimate, and the possible deficit in the buffer fund that may result, will be temporary. The buffer fund will in time return to a level of at least SEK zero.

²⁵ The method of calculating turnover duration is described in Equation 3, Appendix B.

tem and the disbursement of the corresponding pension credit in the form of a pension. Thus, turnover duration reflects the difference in age between the average contributor and the average pensioner that would result if economic, demographic and legal conditions were constant.

To state that the valuation of the contribution inflow is derived through multiplication of the year's inflow by turnover duration is equivalent to holding that this value is based on a supposedly permanent inflow of contributions, with the inflow each year equal to the contributions of the preceding year, discounted at a rate equal to one (1) divided by turnover duration. If turnover duration goes up, the rate of discount decreases and the value of the contribution flow increases. If turnover duration goes down, the rate of discount increases and the value of the contribution flow decreases.

To limit variation in the balance ratio – that is, to reduce fluctuation in the annual result of the pension system – the contribution flow used in the calculation of the contribution asset is smoothed. The method of smoothing is the same as in the calculation of the income index. Since the latter has a substantial impact on the development of the pension liability and thus on the denominator of the balance ratio, it is important that the contribution flow in the numerator of the balance ratio also follow the smoothing of the income index. To achieve this smoothing, the average contribution of the past three years is calculated, then indexed by the annual percentage change in the contribution flow for the last three years, after eliminating the change in consumer prices during the same period. Thereafter, the change in consumer prices in the latest year is added back. Moreover, and also to reduce the variation in the balance ratio, the median turnover duration for the latest three years is used in calculating the contribution asset.

The assets of the National Pension Funds are assessed at their so-called true value. This means that assets are valued preferably at their latest price paid, if any, on the last trading day of the year, otherwise at the latest price bid.

Valuation of Inkomstpension Liabilities

The inkomstpension liability to persons who have not yet begun to draw an old-age pension is valued as the sum of the pension balances of all insured persons. Income earned in the year covered by the accounts has not yet been confirmed at the time of the report. For this reason, an estimate of the inkomstpension credit earned in the year of the report is added to the sum of the pension balances of the insured. This added amount equals less than three percent of the total pension liability. The difference between estimated and confirmed pension credit is deducted in the accounts for the following year.²⁶

The pension liability to retirees is calculated through multiplication of pensions granted (annual amount) by the expected number of years for which the pension amount will be disbursed. The number of years is discounted in order to reflect the indexation of disbursed amounts by the increase in the income index less 1.6 percentage points. The expected number of pay-out years is calculated from measurements of the pay-out period of pension amounts according to Swedish Social Insurance Agency records, and is expressed in terms of so-called economic annuity divisors.²⁷ In economic annuity divisors, consideration is given to any correlation between size of pensions and pay-out period.

One accounting principle followed is that the report is based only on events or transactions occurring and recorded. Since credit for the ATP will be earned through 2017, this accounting principle cannot yet be fully applied. The reason is that the ATP liability to persons who have not yet begun to receive their pensions cannot be determined without making assumptions about future economic and demographic developments. According to the Regulation

²⁶ See Note 14, Table A.

²⁷ See Formula 4.3 in Appendix B.

(2002:135) for the Annual Report, the ATP liability for the economically active is therefore to be calculated on the basis of certain assumptions about future developments. That liability is to be calculated according to the principles set forth by the Government in Bill 2000/01:70 on Automatic Balancing in the Old Age Pension System. These principles provide that the liability to the economically active is to be calculated on the assumptions of the same life expectancy used in determining the inkomstpension liability and of two-percent annual growth in the income index.

On these conditions, the ATP liability as of December 31 of the year covered by the financial statements is calculated by estimating the ATP to be received at age 65 by each annual cohort. This amount is multiplied by the established annuity divisor of the accounting year for persons aged 65. The present value of this amount is then calculated through discounting it by the assumed annual change of two percent in the income index from the year when each birth cohort reaches age 65 until the year of the accounts. That amount is reduced by the similarly discounted value of each birth cohort's expected contribution inflow until its members reach age 64. Pension credit for income earned after that age is calculated entirely according to the provisions for the inkomstpension.

Valuation of Premium Pension Assets and Liabilities

Premium pension assets are reported at their true value, or accrued acquisition cost, according to the regulations and general guidelines of the Swedish Financial Supervisory Authority (FFFS 2006:17) on annual reports of insurance companies. Assets reported at their true value as of the balance sheet date are valued at their price on the last trading day of the year. In the valuation of assets reported at accrued acquisition cost, the difference between acquisition cost and redemption price is periodized as interest revenue for the time remaining to maturity.

Fund insurance assets consist of the investments of pension savers in funds and are valued at the redemption price for fund shares.

With fund insurance, the pension liability consists of fund insurance assets and of liquid assets not yet converted into fund shares.

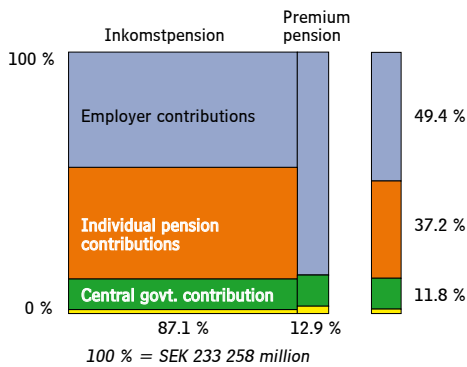
With conventional insurance, holdings are invested in various assets and reported at their true value.

The pension liability for conventional insurance is determined for each insurance policy as the capital value of the remaining guaranteed disbursements. The value is calculated on assumptions about future returns, life expectancy and operating expenses. The return represents a conservative assessment of the nominal rate of return for the period covered by the insurance. As from April 1, 2008, the method for valuation of the guaranteed commitment to the insured was changed in accordance with the new regulation FFFS 2008:6 of the Swedish Financial Supervisory Authority. The new regulation means that the return is determined by the market rate of interest on liquid treasury bills and government bonds at the time of valuation. The market rate of interest is chosen on the basis of the time to maturity for guaranteed disbursements. The valuation of the liability by the market means that provisions set aside for life insurance are affected by changes in interest rates, a change from the previous use of a fixed rate of return of 2.75 percent. Paid-in premiums are reported as lump-sum premiums, and they increase the guaranteed amount. As from April 1, 2007, the assumptions about life expectancy are based on the population forecast of Statistics Sweden for 2006. The cost of operations has been 0.1 percent since 2007. As the change entails the use of a different accounting principle, the numbers for comparison have been recalculated for 2007. The effect of the changes on the income statement and balance sheet are shown in Notes 24 and 25.

Notes and Comments

Notes 2–14 relate to the inkomstpension, Notes 15–26 to the premium pension. Note 1 applies to both parts of the income-related national pension system. All amounts are shown in millions of SEK.

Note 1 Pension Contributions



In the diagram final settlements etc. have been allocated between employer contributions and the central government old-age pension contribution.

Contributions to the National Pension

Contributions to:	Inkomstpension		Premium pension	
	2008	2007	2008	2007
Employer contributions on income up to ceiling	89 246	84 024	24 618	22 972
Self-employment contributions on income up to ceiling	3 041	2 802	841	764
Individual pension contributions	86 662	80 094	–	–
Central government old-age pension contribution	23 757	23 743	3 676	3 517
Final settlements etc.	434	–247	983	827
Total	203 140	190 416	30 118	28 080

As shown in the table above, there are several different types of contributions in the national pension system. Not all contribution revenue goes to the pension system; contributions for incomes above the so-called income ceiling of 8.07 income-related base amounts are transferred to the central government budget. These contributions, which are actually taxes, are not included in the table. Contributions to the old-age pension are paid by employers and self-employed persons, individual pension contributions by all economically active persons earning pension credit. In addition, from various appropriations in the central government budget, the central government pays old-age pension contributions for pension credit arising from certain transfer payments, such as those for sickness and unemployment cash benefits. The central government also pays a pension contribution for so-called pension-qualifying amounts, for years with small children and for study, for example.

Contribution revenue increased between 2007 and 2008 because of higher total earnings. Revenue from central government pension contributions was largely unchanged. Revenue from central government old-age pension contributions for sickness and activity compensation rose sharply between the two years, whereas revenue from central government old-age pension contributions for unemployment cash benefits etc. was down substantially.

More Detailed Accounting for Pension Contributions

Table A shows pension contributions recorded in 2008. Some of them refer to previous years. Employer contributions, for example, are recorded at least one month after payment of the corresponding wages and salaries.

Individual pension contributions are allocated entirely to the National Pension Funds. For employer contributions and self-employment contributions, there is a preliminary allocation by set percentages among the National Pension Funds, the premium pension system and the central government budget. The central government old-age pension contribution is preliminarily allocated by set percentages between the National Pension Funds and the premium pension system.

The share of the old-age pension contribution allocated to the central government budget is for the portion of income that exceeds the ceiling for pension-qualifying income. This ceiling is 8.07 income-related base amounts before deduction of the individual pension contribution and 7.5 after this deduction.²⁸ Since these contributions do not represent pension credit, they are in fact taxes.

²⁸ The income-related base amount for 2008 was SEK 48 000. This base amount multiplied by 8.07 was SEK 387 360; multiplied by 7.5, it was SEK 360 000.

Table A Pension Contributions by Type, 2008

Contributions to:	Inkomst-pension	Premium pension	Central govt. budget (tax)	Total	of which contrib. to national pension
Employer contributions	89 246	24 618	14 130	127 994	113 864
Self-employment contributions	3 041	841	480	4 362	3 882
Individual pension contributions	86 662	–	–	86 662	86 662
Central govt. old-age pension contribution	23 757	3 676	–	27 433	27 433
Total excluding settlements etc.*	202 706	29 135	14 610	246 451	231 841
Final settlements in 2008 for 2006	428	–764	336	0	–336
Collection loss, settlement	–389	–	–	–389	–389
Discrepancies between SSIA accounting and accounting of National Pension Funds and PPM, respectively	395	1 747	–	2 142	2 142
Total	203 140	30 118	14 946	248 204	233 258

* Contributions received by the SSIA in 2008 and transferred to the National Pension Funds, the premium pension system and the central government budget, respectively.

To ensure that the premium pension system has received contributions corresponding to the pension credit earned for a particular year and that the central government budget has received contributions for the portion of incomes above the contribution ceiling, the discrepancies are reconciled two years later. Thereafter, a settlement is made among the central government budget, the premium pension system and the National Pension Funds.

The discrepancy between the accounting of the Swedish Social Insurance Agency (SSIA) and that of the National Pension Funds (SEK 395 million) is due primarily to differences in regard to periodization. The explanation for the difference between the accounting of the SSIA and that of the PPM (SEK 1 747 million) is that the accounts refer to different years. The accounts of the PPM refer to contribution revenue for pension credit earned in 2007, whereas the accounts of the SSIA show contribution revenue received in 2008.

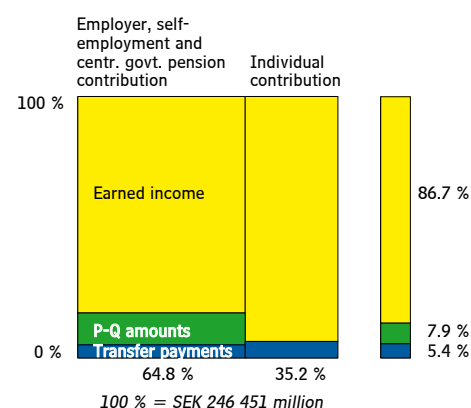
Table B Pension Contributions, Excluding Settlements etc. Allocated by Type of Contribution Base, 2008

	Employer, self-employment and centr. govt. pension contributions	Individual pension contributions	Total
Earned income*	132 356	81 190	213 546
Transfer payments, see Table C	7 931	5 472	13 403
Pension-qualifying amounts, see Table D	19 502	–	19 502
Total	159 789	86 662	246 451

* Including sickness pay and self-employment income, excluding transfer payments.

The allocation of individual pension contributions between the two types of contribution base is estimated and is not shown in the accounting systems.

The individual pension contribution is 7 percent of the sum of earned income and pension-qualifying transfer payments such as sickness cash benefits, but not including sickness and activity compensation. The individual pension



contribution is assessed only on the portion of such income below the ceiling of 8.07 income-related base amounts.

The pension contribution paid by employers and self-employed persons on earned income, and by the central government on the above-mentioned transfer payments, is 10.21 percent. The central-government pension contribution on sickness and activity compensation and on so-called pension-qualifying amounts, which are not subject to the individual pension contribution, is 18.5 percent.

The allocation in Table B refers to the contributions received by the SSIA in 2008.

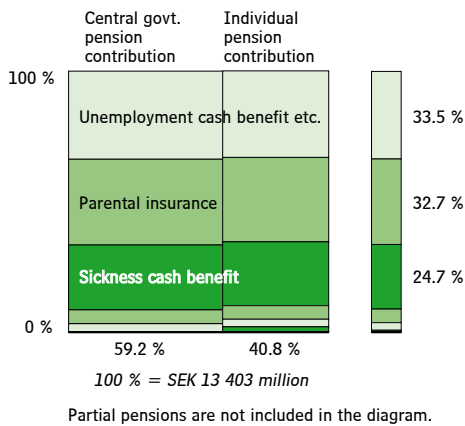


Table C Pension Contributions for Transfer Payments, 2008

	Cent. govt. pension contrib.	Individual pension contrib.	Total
Sickness cash benefit	1 974	1 334	3 308
Rehabilitation benefit	-25	96	71
Allowance for care of close relatives	7	5	12
Work injury compensation, etc.	418	282	700
Parental insurance	2 613	1 765	4 378
Care allowance	236	159	395
Unemployment cash benefit etc.	2 680	1 810	4 490
Educational allowance	27	18	45
Artists' Board	0	2	2
Allowance to disease carriers	1	1	2
Total	7 931	5 472	13 403

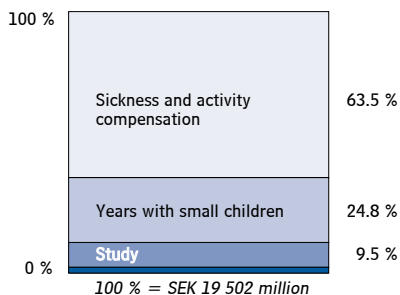
The allocation of individual pension contributions among the different types of transfer payments is estimated and is not shown in the accounting systems.

Table D Pension Contributions for Sickness/Activity Compensation and Pension Qualifying Amounts, 2008

Sickness and activity compensation*	12 387
Amounts credited for years with small children	4 833
Amounts credited for study**	1 850
Amounts credited for compulsory national service**	432
Total	19 502

* Amount refers to contributions for disbursements of both pension-qualifying benefits and pension-qualifying amounts. In both cases the contribution is 18.5 percent.

** A minor portion of amounts credited for study and for compulsory national service consists of pension-qualifying income.



Note 2 Pension Disbursements etc.

	2008	2007
ATP	177 350	170 491
Inkomstpension	21 832	15 129
Total pension disbursements	199 182	185 620
Transfers to European Communities	24	33
Total	199 206	185 653

In 2008 a total of SEK 199 182 million in pensions was disbursed from the National Pension Funds, thus reducing the pension liability to retired persons.

According to the Act (2002:125) on Transfer of Pension Credit to and from the European Communities (EC), the value of pension credit for EC officials can be transferred from the National Pension Funds and the premium pension system to the service pension system of the EC. In 2008

the sum of SEK 24 million was thus transferred from the National Pension Funds, reducing the pension liability to the economically active. In total, the National Pension Funds were charged with SEK 199 206 million as a result of pension disbursements or transfer of pension credit.

Note 3 Return on Funded Capital

National Pension Fund:	First	Second	Third	Fourth	Sixth	Other*	2008 Total	2007 Total
Stocks and shares	-64 017	-58 317	-50 381	-52 574	-3 268	-93	-228 650	29 162
<i>of which:</i>								
<i>Dividends received</i>	4 204	4 230	3 666	3 454	224	24	15 802	13 837
<i>Gain/-loss, listed and unlisted stocks and shares, net</i>	-68 221	-62 547	-54 047	-56 028	-3 492	-117	-244 452	15 325
Bonds and other interest-bearing securities	5 077	5 468	3 428	6 111	235	2	20 321	17 845
<i>of which:</i>								
<i>Net interest</i>	4 140	3 746	3 162	3 693	242	2	14 985	15 686
<i>Gain/-loss, interest-bearing assets, net</i>	937	1 722	266	2 418	-7	-	5 336	2 159
Other investments	11 212	-1 879	2 476	3 162	-75	-	14 896	-8 917
<i>of which:</i>								
<i>Gain/-loss, derivatives, net</i>	699	-3 923	-361	-2 226	143	-	-5 668	-8 064
<i>Net foreign-exchange gain/-loss</i>	10 513	2 044	2 837	5 388	-218	-	20 564	-853
Costs of commissions	-139	-171	-143	-44	0	-1	-498	-546
Total	-47 867	-54 899	-44 620	-43 345	-3 108	-92	-193 931	37 544

* Special administration of the Fourth National Pension Fund.

Sources: Annual Reports of the First, Second, Third, Fourth, and Sixth National Pension Funds for 2007 and 2008.

The item of Gain/-loss, derivatives, net now includes all derivatives; for this reason, there has been an adjustment of net interest under Bonds and other interest-bearing securities,

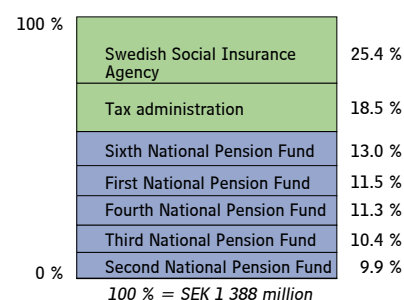
The item of Costs of commissions consists of non-result-based charges. Result-based charges, brokerage fees and other expenses have reduced the return earned (see the section Costs of the Old-Age Pension System).

Note 4 Costs of Administration

	2008	2007
Swedish Social Insurance Agency	257	514
Tax administration and other agencies*	353	287
Total costs of insurance administration	610	801
First National Pension Fund	180	164
Second National Pension Fund	159	133
Third National Pension Fund	137	137
Fourth National Pension Fund	157	139
Sixth National Pension Fund**	144	397
Fourth National Pension Fund, special administration	1	1
Total costs, fund administration	778	971
Total	1 388	1 772

* Includes Enforcement Service and the National Institute of Economic Research (NIER).

** Change in accounting principles for the Sixth National Pension Fund beginning with 2008.



For the First–Fourth National Pension Funds, only internal administrative costs are reported. External costs of administration and custodial fees are referred to as costs of commissions and are reported as negative revenue (see Note 3). The costs of administration for the Sixth National Pension Fund also include certain external costs of administration. For all funds, result-based charges, transaction costs etc. have reduced the return shown in Note 3 (see the section Costs of the Old-Age Pension System).

Owing to phase-in provisions applicable until 2020, only a portion of administrative costs (74 percent in 2008, see Note 11) is charged to the pension balances of the insured. Each fund finances its own costs of administration by withdrawals from itself.

Note 5 Value of Change in Contribution Revenue

	2008	2007
Smoothed contribution revenue 2008	203 918	–
Smoothed contribution revenue 2007	–191 521	191 521
Smoothed contribution revenue 2006	–	–185 491
Change in smoothed contribution revenue	12 397	6 030
(Smoothed turnover duration 2008 + smoothed turnover duration 2007)/2	x 31.84909	–
(Smoothed turnover duration 2007 + smoothed turnover duration 2006)/2	–	x 31.99090
Value of change in contribution revenue	394 833	192 905

Duration in years.

Table A Basis for Calculating Smoothed Value of Contribution Revenue

	2008	2007	2006	2005
Pension contributions	203 140	190 416	183 624	179 552
Smoothed contribution revenue	203 918	191 521	185 491	178 116
CPI, June	302.45	289.95	284.68	280.45

The method of calculating smoothed contribution revenue is described in Appendix B, Section 1.

Note 6 Value of Change in Turnover Duration

	2008	2007
Smoothed turnover duration 2008	31.76449	–
Smoothed turnover duration 2007	–31.93368	31.93368
Smoothed turnover duration 2006	–	–32.04812
Change in smoothed turnover duration	–0.16919	–0.11444
(Smoothed contribution revenue 2008 + smoothed contribution revenue 2007)/2	x 197 720	–
(Smoothed contribution revenue 2007 + smoothed contribution revenue 2006)/2	–	x 188 506
Value of change in turnover duration	–33 452	–21 573

Duration in years.

Table A Basis for Calculating Smoothed Turnover Duration

	2008	2007	2006	2005
Pay-in duration	–	21.07097	21.09395	21.26565
Pay-out duration	–	10.69352	10.66803	10.66803
Turnover duration	–	31.76449	31.76198	31.93368
Smoothed turnover duration	31.76449	31.93368	32.04812	32.11771

Duration in years.

Smoothed turnover duration is the median turnover duration for the latest three years. The method of calculating turnover duration is described in Appendix B, Section 3. Since pay-in duration cannot be calculated until all pension credit has been confirmed, the most recent year for which turnover duration can be determined is the year immediately prior to the accounting year.

Note 7 New Pension Credit and ATP Points

	2008	2007
Estimated inkomstpension credit earned	184 861	179 769
Estimated value of ATP points earned	1 446	6 123
Adjustment amount, new pension credit, see Table A	-1 264	706
Adjustment amount, new ATP points, see Table B	32 637	7 464
Total	217 680	194 062

The items of New Pension Credit and ATP points have been adjusted upward by certain other amounts that have affected the size of the pension liability. These adjustment amounts are explained in the tables below.

Table A Adjustment Amount, New Pension Credit, 2008

Confirmed inkomstpension credit earned in 2007	174 932
Estimated inkomstpension credit earned in 2007	-179 769
Adjustments affecting pension balances, etc.	-1 703
Change in amounts disbursed	5 276
Total	-1 264

Since the tax assessment for the year of the financial statements has not been completed when the statements are prepared, the amount of pension credit earned during that year can only be estimated. In the Annual Report of the Pension System for 2007, pension credit earned during the year was estimated at SEK 179 769 million. After the tax assessment for 2007 had been finalized, the actual value proved to be SEK 174 932 million.

The adjustment amount of SEK -1 703 million represents adjustments, tax-assessment changes etc. affecting the size of pension balances; see Note 14, Table A. The pension liability to retirees has been changed by SEK 5 276 million because of changes in pension disbursements other than indexation (see Note 14, Table C).

Table B Adjustment Amount, New ATP Points, 2008

Effect of difference between assumed value for 2008 and estimate for 2007, etc.	12 786
Value of other paid-in pension contributions for ATP*	12 195
Change in amounts disbursed	7 656
Total	32 637

* Excluding value of ATP points.

The ATP liability to the economically active – that is, to individuals who have not yet begun drawing a pension – is estimated in the pension model of the SSIA. The procedure is described in Note 14.

The ATP liability to retirees has changed by SEK 7 656 million because of changes in pension amounts other than indexation (see Note 14, Table C).

Of ATP points earned in 2008, only a minor portion will have impact on future pensions. The portion expected to contribute to higher pensions has been reported as the estimated value of ATP points earned (SEK 1 446 million). However, all contributions to the ATP pension add to the estimated pension liability. The last year in which ATP points may be earned is 2017. This means that pension contributions, except for administratively caused discrepancies, will not be as great as pension credit earned until 2018.²⁹

²⁹ Contributions relating to the ATP in 2008 totalled SEK 13.6 billion whereas the value of new ATP points for that year was only SEK 1.4 billion. Thus, contributions exceeded the value of ATP points earned by SEK 12.2 billion. The explanation for this difference is that in the ATP system, pension credit is often earned relatively early in working life. Individuals aged 55 who are already past their 15 best pay-in years (and who have worked for at least 30 years) cannot increase their ATP pension at all, even if they keep working and paying contributions until age 65. This situation illustrates one of the disincentives of the ATP system for older members of the work force to contribute to the labour supply.

Note 8 Indexation

	2008			2007		
	Active	Re-tired	Total	Active	Re-tired	Total
Inkomstpension	242 496	11 500	253 996	165 770	5 675	171 445
ATP	54 329	77 053	131 382	42 624	54 265	96 889
Total	296 825	88 553	385 378	208 394	59 940	268 334

³⁰ For individuals who draw ATP benefits before reaching age 65, the pension liability is indexed by the change in the price-related base amount until they turn 65.

The pension liability grows by the increase in the income index.³⁰ The value of indexation refers to the indexation affecting the pension liability as of December 31, 2008. The pension liability to the economically active as of December 31, 2008, earned a return equal to the change in the income index, between 2008 and 2009, or 6.2 percent. The pension liability to retirees as of the same date earned a return equal to the change in the income index at the end of the previous year, i. e., 2007, which was 4.5 percent.

Note 9 Value of the Change in Life Expectancy

	2008			2007		
	Active	Re-tired	Total	Active	Re-tired	Total
Inkomstpension	–	3 071	3 071	–	1 576	1 576
ATP	6 600	17 373	23 973	5 307	10 508	15 815
Total	6 600	20 444	27 044	5 307	12 084	17 391

As used here, the term "life expectancy" refers to the assumed payout duration of an average pension, or so-called economic life expectancy, which is expressed in terms of an economic annuity divisor. In the calculation of these divisors, consideration is given to a growth norm of 1.6 percent. The method of calculating economic annuity divisors is shown in Appendix B, Section 4.

A higher economic life expectancy will increase the ATP liability, both to the economically active and to retirees. In the inkomstpension system, only the liability to retirees will increase if life expectancy goes up.

The value of the change in life expectancy is the difference between the pension liability calculated with the economic annuity divisor used in the year of the financial statements, and the pension liability calculated with the economic annuity divisors used in the previous year.

Note 10 Inheritance Gains, Arising and Distributed

Year of birth	2008		2007	
	Inheritance gains arising	Inheritance gains distributed	Inheritance gains arising	Inheritance gains distributed
1948 or earlier	4 205	5 459	3 952	4 861
1948 or later	6 451	6 542	6 177	6 276
Total	10 656	12 001	10 129	11 137

The pension balances of deceased persons (inheritance gains arising) are distributed to the survivors of the same age. The distribution is made as a percentage increase in pension balances according to an inheritance gain factor.

Until the year when a birth cohort reaches age 60, the inheritance gains distributed are those actually arising. The inheritance gain factor is thus determined by the total pension balances of decedent persons of the same age. The inheritance gains from persons dying before their 60th year in 2007

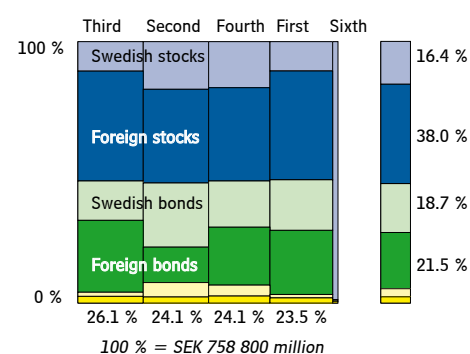
(born in 1948 or thereafter) were distributed to the respective birth cohorts in 2008. The difference between inheritance gains arising and inheritance gains distributed is explainable in part by the annual adjustment of pension balances for changes in tax assessments.

Beginning with the year when a birth cohort reaches age 60, the inheritance gains distributed are not those actually arising, but those expected to arise. Inheritance gain factors are estimated on the basis of the mortality observed by Statistics Sweden for an earlier period. Partly because this mortality will not be exactly the same as actual mortality in the year concerned, there is a discrepancy between inheritance gains arising and inheritance gains distributed. For those dying in their 60th year or at an older age in 2008 (born in 1948 or earlier), the inheritance gains are distributed in the same year.

Note 11 Deduction for Costs of Administration

Costs of administration are financed by a percentage deduction from the pension balances of the insured. In order to avoid charging a disproportionately high cost to younger birth cohorts during the period when the ATP is being phased out, this administrative cost deduction is being introduced in steps. In 2008, 74 percent of administrative costs were financed by a deduction from pension balances. This deduction will increase by two percentage points each year and thus will not cover 100 percent of administrative costs until 2021.

The calculation of the administrative cost factor is based on budgeted costs of administration, including those of the National Pension Funds, for the current year and the pension balances for the preceding year (see Appendix A). The difference between the monetary amount of the deduction made and the cost subsequently confirmed is considered in the calculation of the administrative cost factor for the following year. The administrative cost deduction is calculated as pension balances multiplied by the administrative cost factor. The deduction in 2008 was 0.0226 percent and totalled SEK 942 (1 701) million.



The diagram shows the assets of the National Pension Funds.

Note 12 Fund Assets

National Pension Fund:	First	Second	Third	Fourth	Sixth	Other*	2008 Total	2007 Total
Stocks and shares	94 165	98 962	105 536	97 459	16 440	–	412 562	532 864
of which: Swedish	20 002	33 374	22 343	32 205	16 440	–	124 364	167 911
Foreign	74 163	65 588	83 193	65 254	–	–	288 198	364 953
Bonds and other interest-bearing assets	78 174	69 713	84 304	72 841	92	–	305 124	348 809
of which: Swedish issuers	34 463	44 932	29 830	32 344	92	–	141 661	146 550
Foreign issuers	43 711	24 781	54 474	40 497	–	–	163 463	202 259
Derivatives	2 340	10 112	3 117	7 636	–	–	23 205	15 500
Other assets	3 528	4 260	5 081	4 924	114	2	17 909	21 792
Total assets	178 207	183 047	198 038	182 860	16 646	2	758 800	918 965
Liabilities	–6 580	–9 709	–17 014	–18 134	–276	0	–51 713	–20 493
of which: Derivatives	–5 460	–9 497	–15 696	–14 148	–	–	–44 801	–8 380
Others	–1 120	–212	–1 318	–3 986	–276	–	–6 912	–12 113
Total	171 627	173 338	181 024	164 726	16 370	2	707 087	898 472

* Special administration of the Fourth National Pension Fund.

Other assets include cash and bank balances, prepaid expenses and accrued revenue etc. Liabilities, aside from derivative instruments, include other liabilities, prepaid revenue and accrued expenses.

Note 13 Contribution Asset

	2008	2007
Smoothed contribution revenue	203 918	191 521
Smoothed turnover duration	x 31.76449	x 31.93368
Contribution asset	6 477 351	6 115 970

Duration in years.

See Notes 5–6 and Appendix B for the values and formulas used in calculating smoothed contribution revenue and turnover duration.

Note 14 Pension Liability

	2008			2007		
	Active	Re-tired	Total	Active	Re-tired	Total
Inkomstpension	4 351 010	375 414	4 726 424	4 040 314	266 875	4 307 189
ATP	805 674	1 895 709	2 701 383	869 255	1 820 040	2 689 295
Total	5 156 684	2 271 123	7 427 807	4 909 569	2 086 915	6 996 484

The pension liability to retirees for the ATP and the inkomstpension is calculated in the same manner for both. The first step is to add up the pension disbursements to each birth cohort in December and to multiply the total by 12 to obtain a theoretical annual amount. The annual amount is then multiplied by the economic life expectancy for each birth cohort; the product is the pension liability to that cohort. The sum of the pension liabilities to all birth cohorts is the total liability to retirees. Economic life expectancy is expressed as an economic annuity divisor. The inkomstpension liability to the economically active consists of the total pension balances of all insured persons in this category as of December 31, 2008, with the addition of the estimated pension credit earned in 2008. The method of calculating the pension liability to the economically active and to retirees, as well as the economic annuity divisors, is shown in Appendix B, Section 4.

The ATP liability to the economically active cannot be calculated directly from the data in the records of pension credit earned, but is estimated in the SSIA pension model. The estimate is made for the birth cohorts whose pensions will be calculated partly by the rules of the ATP system (those born no later than 1953) and who have not reached age 65.

In order to determine the ATP liability, an estimate is made of the ATP of the respective birth cohorts in the year when they reach 65. The estimated annual amount for each cohort is multiplied by the economic annuity divisor for 65-year-olds in the year of the accounts. To obtain the present value of the estimated pension liability, the liability is reduced by the cohort's expected future contributions to the system and discounted by the expected future increase in the income index. In the calculation it is assumed that the income index will increase by 2 percent annually. The ATP liability to the economically active will gradually diminish and will in principle be gone entirely by 2018.

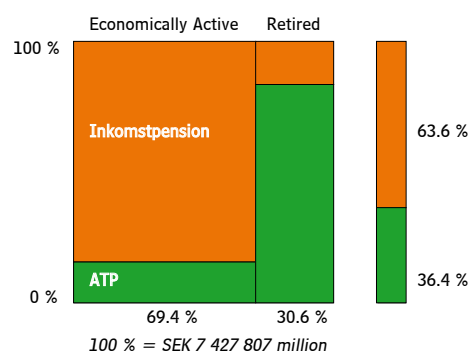


Table A Analysis of the Change in Inkomstpension Liability to the Economically Active, 2008

Inkomstpension liability to the economically active, December 31, 2007	4 040 314
of which estimated inkomstpension credit earned in 2007	-179 769
Pension balance, December 31, 2007	3 860 545
Inheritance gains arising from persons dying before age 60*	-6 451
Adjustments affecting pension balances**	-219
Opening pension balance, 2008	3 853 875
Changes in tax assessments etc. affecting pension balances	-1 484
Confirmed inkomstpension credit earned in 2007	174 932
Distributed inheritance gains from persons dying at or after age 60	5 459
Distributed inheritance gains from persons dying before age 60	6 542
Indexation	242 496
Deduction for administrative costs	-942
Pensions drawn	-111 260
Pensions revoked	736
Inheritance gains arising, persons dying at or after age 60	-4 205
Pension balances as of December 31, 2008	4 166 149
Estimated inkomstpension credit earned in 2008	184 861
Inkomstpension liability to the economically active as of December 31, 2008	4 351 010

* Distributed in 2008.

** Transfers to the European Communities (see Note 2), adjustments for deceased persons, sealed cases, etc.

Table B Analysis of the Change in ATP Liability to the Economically Active, 2008

ATP liability to the economically active, December 31, 2007	869 255
Effect of difference between assumption for 2008 and estimate in 2007 etc.	12 786
Opening ATP liability, 2008	882 041
Indexation	54 329
Estimated value of paid-in contributions for the ATP, 2008	1 446
Pensions drawn	-150 937
Value of other paid-in contributions for the ATP	12 195
Value of change in life expectancy	6 600
ATP liability to the economically active, December 31, 2008	805 674

Table C Analysis of the Change in Pension Liability to Retirees, ATP and Inkomstpension, 2008

	Inkomst- pension	ATP	Total
Pension liability to retirees, December 31, 2007	266 875	1 820 040	2 086 915
Additional liability to the economically active	110 524 *	150 937 **	261 461
Change in amounts disbursed	5 276	7 656	12 932
Pensions disbursed ***	-21 832	-177 350	-199 182
Indexation	11 500	77 053	88 553
Value of change in life expectancy	3 071	17 373	20 444
Pension liability to retirees, December 31, 2008	375 414	1 895 709	2 271 123

* Net of Pensions drawn and Pensions revoked, see Table A.

** See Table B.

*** See Note 2.

The liability to retirees is increased by indexation and a higher life expectancy, and it is decreased by disbursements made during the year. Pension amounts can change because of new pension credit earned, changes in marital status (applies to the ATP), changes in taxation etc. Such changes in liability are reported as changes in disbursements. The liability to retirees also increases with the approval of new pensions; this increase in the pension liability is accompanied by a corresponding reduction in the pension liability to the economically active.

Notes and Comments Relating to the Premium Pension

Note 15 Pension Disbursements

	2008	2007
Pension disbursements from fund insurance	734	405
Pension disbursements from conventional insurance	73	50
Total pension disbursements	807	455
Transferred to European Communities	1	1
Total	808	456

At the time of retirement, a pension saver has the option of retaining her/his accumulated balance in fund insurance; the amount of the pension will then depend on the rate of return of the funds chosen by the saver. The other option is to switch to conventional insurance, either on retirement or later. With conventional insurance, the pension is disbursed as a nominal guaranteed monthly amount. If PPM management of conventional insurance capital achieves a return higher than the guaranteed rate, pension savers will receive a rebate in the form of a monthly supplement, which may vary from year to year. Such supplements totalled SEK 19 (5.3) million in 2008; this is not shown here, but in Note 24.

According to the Act (2002:125) on Transfer of Pension Credit to and from the European Communities (EC), the value of pension credit for EC officials can be transferred from the National Pension Funds and the premium pension system to the service pension system of the EC. In 2008 the sum of SEK 1 million was transferred from the premium pension system.

Note 16 Return on Funded Capital

	Fund insurance	Conventional insurance	2008 Total	2007 Total
Stocks and shares	-109 690	-151	-109 841	14 001
<i>of which: Direct return</i>	4 829	7	4 836	3 543
<i>Realized and unrealized capital gains</i>	-114 519	-158	-114 677	10 458
Bonds and other interest-bearing securities	839	131	970	70
<i>of which: Direct return (net interest)</i>	23	-	23	18
<i>Realized and unrealized capital gains</i>	816	131	947	52
Net foreign-exchange gain/-loss	2 654	-	2 654	-52
Subtotal, return	-106 197	-20	-106 217	14 019
Change, conventional insurance*	-	-105	-105	252
Total	-106 197	-125	-106 322	14 271

* Recalculated by SEK 95 million for 2007 because of change in accounting principle: see Note 25.

The return earned includes realized and unrealized foreign-exchange gains and losses after deduction of fund management costs. The average fund management cost after deduction of rebates is 0.30 percent of average capital.

Note 17 Costs of Administration

	2008	2007
Operating expenses	299	267
Financial items, net	133	46
Total	432	313

Financial items, net, refer primarily to borrowing expenses, gain/-loss on trade inventories and interest revenue (net). Costs of fund management are paid directly from insurance assets and thus are not included in PPM operating expenses. Total costs of administration in 2008 were SEK 437 (318) million, of which SEK 5 (5) million are included in Change, conventional insurance, in Note 16. A presentation of the respective gross and net reported costs of the pension system is provided in the section Costs of the Old-Age Pension System.

Note 18 New Pension Credit

	2008	2007
Confirmed premium pension credit earned in 2007	30 118	–
Confirmed premium pension credit earned in 2006	–	28 080
Total	30 118	28 080

In the premium pension system, the equivalent of contribution revenue is new pension credit, including interest for the period when contribution moneys are managed by the PPM before being invested in the funds chosen by the insured. Also included are changes in pension credit earned in previous years and distributed rebates of fund management charges.

Note 19 Change in Value

The pension liability was changed by the return on premium pension funds totalling SEK –106 217 (14 019) million; see Note 16.

Note 20 Inheritance Gains Arising, Inheritance Gains Distributed

Inheritance gains arising and distributed are analogous to decedents' capital. Inheritance gains are distributed once a year; in addition, a minor portion is distributed during the course of the year in connection with changeovers from fund insurance to conventional insurance. In 2008 inheritance gains distributed were SEK 663 (550) million; this amount was determined by the sum of the capital released by deaths in calendar year 2007. Inheritance gains distributed include SEK 7 (12) million in connection with changeovers from fund insurance to conventional insurance. This item also includes reductions in premium pension credit when premium pensions are transferred between spouses. In calendar year 2008, a total of 7 789 (7 632) persons transferred an aggregate amount of SEK 49 (45) million between spouses or registered partners.

Note 21 Deduction for Costs of Administration

The amount of SEK 437 (379) million is for fees deducted by the PPM to finance its costs of administration. In 2008, the principle for fee deduction has been changed. Previously the fee deducted consisted only of a percentage, but now there is also a ceiling of SEK 110 on the fee. For 2008, the fee was 0.16 percent of the account balances of pension savers. During the build-up phase and until 2018, the PPM will be financed by a combination of fees deducted, interest-bearing overdrafts for working capital needs and borrowing within authorized limits from the National Debt Office. The amount of the fee deducted was based on the cost level forecast for 2008.

Note 22 Insurance Assets

	Fund insurance	Conventional insurance	2008 Total	2007 Total
Stocks and shares	205 997	452	206 449	295 255
Bonds and other interest-bearing securities	24 647	1 278	25 925	14 377
Trade in progress and inheritance gains arising	956	3	959	1 079
Total	231 600	1 733	233 333	310 711

Inheritance gains arising for 2008 total SEK 647 (656) million, of which fund insurance accounts for SEK 636 (648) million and conventional insurance for SEK 10 (8) million; these gains will be distributed to pension savers in 2009.

As of December 31, 2008, the number of premium pension savers totalled 6 004 438, of whom 5 933 991 had invested their savings in fund insurance and 70 447 in conventional insurance. The number of premium pension savers receiving pension disbursements was 555 187.

Note 23 Other Assets

	2008	2007
Temporarily managed preliminary contributions	28 180	27 817
PPM's administrative inventory of fund shares (trading inventory)	29	155
Other assets	1 253	1 826
Total	29 462	29 798

The temporary management of preliminary contributions is for pay-in year 2008.

The PPM's administrative inventory of fund shares is used to facilitate trade in fund shares by reducing the number of trading transactions with fund managers.

Other assets include intangible assets, cash and bank balances, receivables, prepaid expenses and accrued revenue, as well as fixtures and other long-term assets.

Note 24 Change in Results Brought Forward

	Fund insurance	Conventional insurance	2008 Total	2007 Total
Opening results brought forward:				
Consolidation fund	-1 528	180	-1 348	-1 565
Effect of change in accounting principle*	-	191	191	95
Recalculated opening results brought forward	-1 528	371	-1 157	-1 470
Rebate paid from consolidation fund**	-	-19	-19	-5
Net income/-loss for the period	5	-105	-100	318
Total results brought forward	-1 523	247	-1 276	-1 157

* The change concerns the accounting principle for calculation of the pension liability for conventional insurance; see Note 25.

** The rebate paid in 2007 is included in the item Opening results brought forward in the balance sheet.

The PPM reports negative results brought forward for its overall operations. The solvency provisions in the Insurance Businesses Act do not apply to the PPM; through 2018 negative results brought forward (accumulated deficits) will be financed by overdrafts with the National Debt Office. It is expected that by 2018 a balance between assets and liabilities will be achieved. Conventional insurance reports a negative result that is charged to the consolidation fund under Results brought forward. The amounts in the consolidation fund are distributed to pension savers as a refund in connection with pension disbursements.

Note 25 Pension Liability

	2008	2007
Pension liability, fund insurance	231 601	309 417
Pension liability, conventional insurance	1 481	909
Total	233 082	310 326

The pension liability is a liability to economically active and to retired pension savers. The item of Pension liability, fund insurance, is linked primarily to fund shares and is affected by the development of the market value of the funds chosen. Fund holdings are valued at the price quoted on the closing day of the accounts and correspond to value of the insurance assets in Note 22.

The item of Pension liability, conventional insurance, is calculated for each pension saver choosing this form of insurance and is the capital value of the remaining guaranteed disbursements. The value is calculated on assumptions about future return, life expectancy and operating expenses. Information on the calculation of economic annuity divisors is found in Appendix A.

In the calculation of Pension liability, conventional insurance, the method of valuation for the guaranteed commitments to the insured was changed as from April 1, 2008. The change in calculation method involves the adoption of a different accounting principle and also affects recalculation of the comparison numbers used for 2007. The change reduces the pension liability and increases the item of Results brought forward by SEK 191 million for 2008; see Note 24. The recalculation for 2007 has affected Note 16, Change, conventional insurance, by SEK 95 million, and the change in results brought forward; see Note 24.

Table A Analysis of the Change in Pension Liability, Fund Insurance, 2008

Pension liability, fund insurance, December 31, 2007	309 417
Confirmed premium pension credit earned in 2007*	29 554
Inheritance gains distributed**	-654
Change in value	-106 197
Deduction for costs of administration	-437
Decrease in liability because of pensions withdrawn, 2008	-734
Inheritance gains arising	654
Other	-1
Premium pension capital as of December 31, 2008	231 602
Adjustment affecting premium pension capital***	-1
Pension liability, fund insurance, December 31, 2008	231 601

* Includes -7 in tax assessment changes and changes in pension credit.

** Inheritance gains, capital released in 2007, distributed in 2008.

*** Transfers to European Communities, etc.

Table B Analysis of the Change in Pension Liability, Conventional Insurance, 2008

Pension liability, conventional insurance, December 31, 2007	1 100
Change of accounting principle	-191
Opening pension balance 2008	909
Confirmed premium pension credit earned in 2007*	564
Inheritance gains distributed**	-9
Change in value	-20
Decrease in liability because of pensions drawn, 2008	-73
Other	5
Change in pension liability***	105
Premium pension capital as of December 31, 2008	1 481
Pension liability, conventional insurance, December 31, 2008	1 481

* Includes 0 in tax assessment changes and changes in pension credit.

** Inheritance gains, capital released in 2007, distributed in 2008.

*** Change in pension liability includes -5 in costs of administration and +10 in inheritance gains arising, 2008; see Note 24, Change in Results Brought Forward.

As from 2007, results brought forward are excluded from the calculation of the pension liability. The pension liability is changed by new pension credit earned, changes in the extent of pension withdrawal, changes in tax assessment, changes in value of assets, costs of administration, pension disbursements and estimates of future mortality for the insured.

Note 26 Other Liabilities

	2008	2007
Liability relating to preliminary contributions	28 179	26 313
Other liabilities	2 810	5 027
Total	30 989	31 340

Liabilities relating to preliminary contributions consist of unconfirmed pension credit for pay-in year 2008 and correspond to the assets invested under temporary management; see Note 23.

Other liabilities consist of fund trading in progress, accounts payable to suppliers, borrowings from the National Debt Office, accrued management fees, accrued expenses and prepaid revenue.

BDOBDO Nordic Stockholm AB
Authorized public accountants**AUDIT REPORT****on the****ANNUAL REPORT OF THE SWEDISH PENSION SYSTEM****To the Swedish Social Insurance Agency:**

We have audited the Annual Report of the Swedish Pension System for 2008. In accordance with the Regulations on Annual Reporting of the Financial Position and Development of the Earnings Related Old Age Pension System (2002:135), the Swedish Social Insurance Agency is required to provide this Annual Report. The Director General of the Swedish Social Insurance Agency is responsible for preparing the Annual Report and for its conformity with the Earnings Related Old Age Pension Act (1998:674). Our responsibility is to express an opinion on the Annual Report based on our audit.

We conducted our audit in accordance with generally accepted auditing standards in Sweden. Those standards require that we plan and perform the audit so as to establish with reasonable certainty that the Annual Report is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Annual Report. An audit also involves assessing the accounting principles used and their application by the Director General as well as significant estimates made by the Director General when preparing the Annual Report, and evaluating the overall presentation of the Annual Report.

Our audit covers the income statements and balance sheets of the inkomstpension, premium pension and income-related old-age pension as well as notes and comments, accounting principles and other explanatory information. Our audit has not involved reviewing the principles of the national public pension or reviewing projections or other information outside the scope of our audit.

We believe that our audit provides a reasonable basis for our opinion as set forth below:

The Annual Report has been prepared in accordance with the Earnings Related Old Age Pension Act (1998:674), with the Regulations on Annual Reporting of the Financial Position and Development of the Earnings Related Old Age Pension System (2002:135) and otherwise with what is described in the Annual Report under the heading of Accounting Principles. The balance ratio shown in the Annual Report has been calculated in conformity with the Regulations for Calculation of the Balance Ratio (2002:780).

Stockholm, 12th March 2009

Ulf H Davéus
Authorized Public Accountant

Ove Olsson
Authorized Public Accountant

* For amounts and values, see Aktuella belopp at www.forsakringskassan.se and at www.ppm.nu.

Appendix A. Calculation Factors*

The Earnings Related Old Age Pension Act, or LIP, (1998:674), requires the Swedish Social Insurance Agency to calculate the income index. In addition, the Agency is obligated by the Regulations for the Earnings Related Old Age Pension (1998:1340) to calculate and confirm factors for inheritance gains, administrative costs and annuity divisors.

According to the LIP, the PPM is to operate on the same principles as insurance businesses. These principles, as interpreted by the PPM, govern the calculation of the rebate rate, inheritance gains and annuity divisors for the premium pension. Further, the PPM is to calculate the fee that will finance its operations.

Income Index

The development of average income is shown by the change in the income index. Here, income refers to pension-qualifying income without limitation by the ceiling, but after deduction of the individual pension contribution.

Income Index(t) =

$$\left(\frac{u(t-1)}{u(t-4)} \times \frac{CPI(t-4)}{CPI(t-1)} \right)^{\frac{1}{3}} \times \frac{CPI(t-1)}{CPI(t-2)} \times k \times \text{Income Index}(t-1)$$

$$u(t) = \frac{Y(t)}{N(t)}$$

where

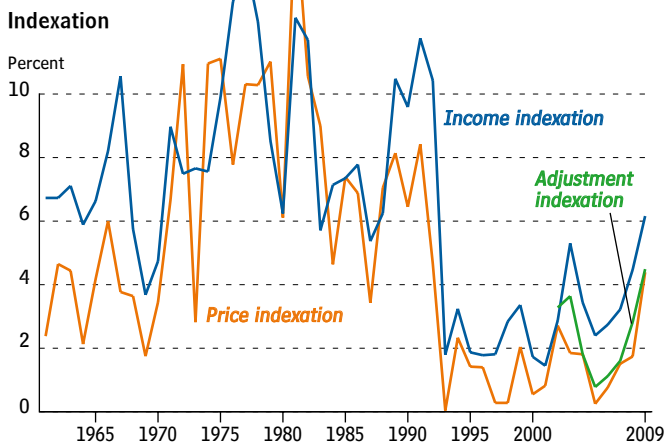
t = calendar year

$CPI(t)$ = consumer price index for June of year t

k = adjustment factor for error in estimation of $u(t-2)$ and $u(t-3)$

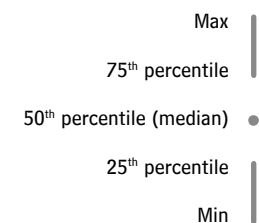
$Y(t)$ = total pension-qualifying income without limitation by the ceiling, persons aged 16–64 in year t , after deduction of the individual pension contribution

$N(t)$ = number of persons aged 16–64 with pension-qualifying income in year t



The change in the index consists of two parts. The first is the average annual change in average income for the latest three-year period, excluding inflation; the second is inflation for the latest 12-month period ending in June. Pension-qualifying income is not known until after the final tax assessment, i.e. in December of the year following the income year. This means that the income for the two most recent years is based on estimates. Errors in estimates are corrected in the indices for subsequent years. Inflation for the three-year period is excluded, and the inflation for the most recent year is restored, to permit more rapid adjustment of pensions to changes in the inflation rate than would have resulted with a "pure" three-year moving average for the development of income.

The change in the income index between year $t-1$ and year t affects the pension liability to retirees in year t via adjustment indexation of inkomstpension and ATP disbursements (see Note 8 and Note 14, Table C). The change in the income index between years t and $t+1$ affects the inkomstpension liability to the economically active in year t via income indexation of pension balances (see Note 8 and Note 14, Table A).



Balance Index

When balancing is activated, the balance index is used instead of the income index.

$$\text{Balance index}(t) = I(t) \times BR(t)$$

$$\text{Balance index}(t+1) =$$

$$\text{Balance index}(t) \times \left(I(t+1) / I(t) \right) \times BR(t+1) = I(t+1) \times BR(t) \times BR(t+1)$$

where

$I(t)$ = income index, year t

$BR(t)$ = balance ratio, year t

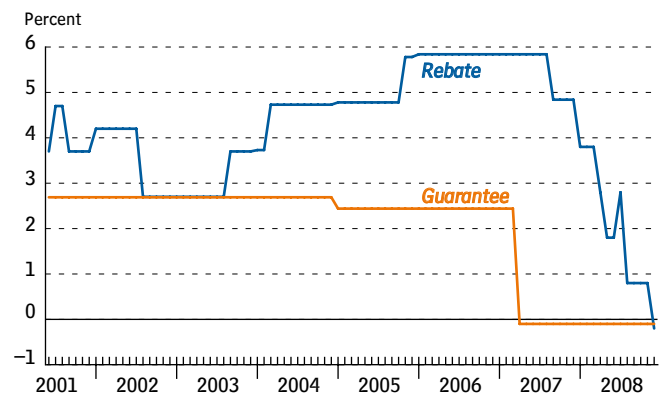
At the end of year $t-1$, indexation takes place via multiplication of pensions by the ratio between the balance index for year t and the income index for year $t-1$ divided by 1.016, and of pension balances by the ratio between the balance index for year t and the income index for year $t-1$. At the end of year t , there is analogous indexation of the ratio between the balance index for year $t+1$ and the balance index for year t . Indexation by the balance index ceases when the product of the balance indices is ≥ 1 , that is, when the balance index reaches the level of the income index.

Rate of Rebate

If an individual elects to draw her/his premium pension in the form of conventional insurance, the amount disbursed is recalculated each year. It may be higher than the guaranteed amount if the conventional life insurance operation achieves a better result than was assumed when the guaranteed amount was calculated. The result of the conventional insurance operation is reflected in the rate of rebate used to increase the value of conventional insurance.

The rate of rebate does not affect the pension liability, as the latter is calculated on the basis of the guaranteed amount.

Rate of Rebate and Guarantee



Inheritance Gain Factors for the Inkomstpension

The pension balances of deceased persons are credited to the survivors in the same age group in the form of inheritance gains. For the economically active, this is done through multiplying the pension balances of the survivors by an inheritance gain factor for the inkomstpension.

$$\text{Inheritance Gain Factor}_i(t) = 1 + \frac{\sum_{j=2}^{17} PBd_{j-1}(t-1)}{\sum_{j=2}^{17} PB_{j-1}(t-1)} \quad \text{for } i = 2, 3, \dots, 17$$

$$\text{Inheritance Gain Factor}_i(t) = 1 + \frac{PBd_{i-1}(t-1)}{PB_{i-1}(t-1)} \quad \text{for } i = 18, 19, \dots, 60$$

$$\text{Inheritance Gain Factor}_i(t) = \frac{(L_{i-1}(t) + L_i(t))}{(L_i(t) + L_{i+1}(t))} \quad \text{for } i = 60, 61, \dots$$

where

i = age at end of year t

$PBd_{i-1}(t-1)$ = total pension balances in year $t-1$ for persons dying in year $t-1$ in age group $i-1$

$PB_{i-1}(t-1)$ = total pension balances in year $t-1$ for survivors in year $t-1$ in age group $i-1$

$L_i(t)$ = number of survivors in year t out of 100 000 born in age group i , according to the life span data of Statistics Sweden for the five-year period immediately preceding the year when the insured reaches age 60 for $i = 60-64$ and age 64 for $i = 65$ or older

For persons 60 years old or less, the inheritance gain factor is calculated as the sum of the pension balances of the deceased divided by the sum of the pension balances

for the survivors in the same age group. For the group aged 2-17 years, a common inheritance gain factor is calculated. Because there is some delay in information on persons dying during the year, the distribution of inheritance gains to persons aged 60 or less is made with a time lag of one year. For older persons, inheritance gain factors are calculated on the basis of life-expectancy statistics from Statistics Sweden. The distribution of inheritance gains to older persons is made in the year of death.

Inheritance gains arising after retirement are implicitly taken into account in the annuity divisor, through redistribution from individuals who die earlier to those who live longer. For the purpose of distributing inheritance gains by the same principle for both the economically active and retirees in the same birth cohort, the method of allocation is changed from age 60 on. The change of method is made in the year when the individual turns 60 in order to avoid delay in the allocation of inheritance gains for the year prior to retirement for persons who begin drawing their pensions at age 61. In the year when

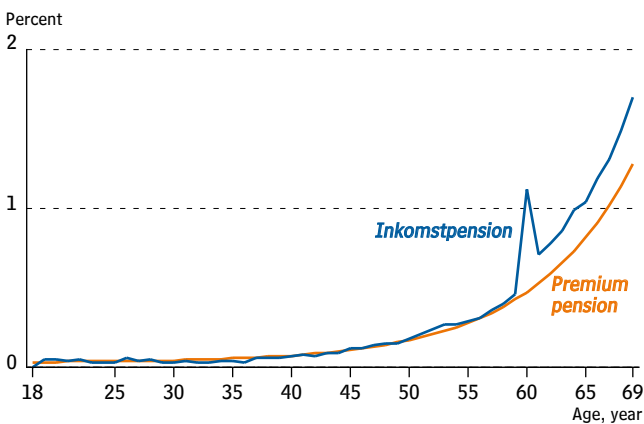
an insured turns 60, he or she is credited with double inheritance gains because of the two different procedures.

The impact of inheritance gains on the pension liability is limited, for it means that the pension balances of deceased persons are redistributed to the survivors. There is, however, an effect on the inkomstpension liability to the economically active because of the difference between inheritance gains arising and inheritance gains distributed; this effect is reported in Note 10. For the group dying before their 60th year, the difference is due to tax assessment changes between the time when inheritance gain factors are calculated and the time when the gains are distributed, and to late information on persons dying. For the group dying in their 60th year or thereafter, the reasons are differences between estimated and actual mortality, and possible variations in mortality depending on the insured's level of income, i.e. the effect due to the shorter average life spans, for each gender, of persons with low incomes compared to persons with high incomes.

Inheritance Gain factors for the Premium Pension

In the premium pension system, inheritance gains are calculated as a percentage of the premium pension capital of the survivors. The percentage corresponds to the one-year risk of death, i.e. the probability of dying within one year. For both the economically active and retirees, inheritance gains for the premium pension are currently distributed once a year. As with the inkomstpension, inheritance

Inheritance Gains



The inheritance gain factor for the inkomstpension for 60-year-olds is shown in the diagram as the two inheritance gain factors multiplied by each other. In the actual distribution of inheritance gains, however, the two different inheritance gains factors are applied to different bases.

gains arising after retirement are included in the annuity divisor and are allocated through distribution of actual gains. If the insured elects a survivor benefit, the inheritance gain will be much smaller, as it is then based on the probability that the longer-surviving party, whether the primary insured or the co-insured, will die within one year of the first party.

The risk of death in year t is calculated by Makeham's formula (see p. 83). The values of a , b and c in the formula are determined by the relationship between the capital of pension savers dying in year $t-1$ and the capital of the surviving pension savers in the same year, calculated for each age group. The pension capital used to determine the inheritance gain in year t corresponds to the balance of the premium pension account as of December 31 in year $t-1$. The amounts of the inheritance gains are adjusted by a factor that equalizes the total amount distributed in year t and the capital of pension savers dying in year $t-1$.

The inheritance gains for the premium pension do not affect the pension liability over time, as death capital is offset by inheritance gains distributed.

Administrative Cost Factor, Inkomstpension

The costs of administering the inkomstpension system reduce the pension balances of the economically active. The amount of the deduction from pension balances is recalculated annually through multiplication of pension balances by an administrative-cost factor.

Administrative cost factor(t) =

$$1 - \left[(B(t) \times A(t) - C(t-1) + F(t-1) \times A(t-1)) / PB(t-1) \right]$$

where

$B(t)$ = budgeted costs of administration, year t

$A(t)$ = proportion charged to pension balances, year t

$C(t-1)$ = amount of reduction in pension balances, year $t-1$

$F(t-1)$ = actual costs of administration, year $t-1$

$PB(t-1)$ = total pension balances, year $t-1$

The administrative-cost factor is calculated on the basis of a certain proportion, A , of budgeted costs for year t . Until the year 2021, the proportion charged to pension balances will be less than 100 percent (see Note 11). Moreover, there is an adjustment for the administrative costs of year $t-1$. The amount of the adjustment is the difference between actual administrative costs in $t-1$ and the deduction from pension balances in the same year.

The administrative-cost factor affects the inkomstpension liability to the economically active via the deduction from pension balances (see Note 14, Table A). The difference between total costs of administration (see Note 4) and the deduction from pension balances puts a strain on the balance ratio.

Charge for Costs of Administration, Premium Pension

The costs of administration for the premium pension system are not to exceed 0.3 percent of the aggregate balances of the premium pension accounts of pension savers. The charge, which is deducted from premium pension accounts once a year, is intended to cover the total operating costs of the PPM, including interest and other financial expenses.

Administrative costs affect the capital of the premium pension system; through the deduction from pension balances, they also affect the premium pension liability by the same amount (see Notes 17 and 21).

Annuity Divisors for the Inkomstpension

The annuity divisors for the inkomstpension are used for recalculation of pension balances as annual disbursements and are a measure of life expectancy at retirement, with interest of 1.6 percent (the norm) credited to pensions in advance.

Annuity Divisors_{*i*} =

$$\frac{1}{12L_i} \sum_{k=i}^r \sum_{X=0}^{11} \left(L_k + (L_{k+1} - L_k) \frac{X}{12} \right) (1.016)^{-(k-i)} (1.016)^{-X/12} \text{ for } i = 61, 62, \dots, r$$

where

- $k-i$ = number of years of retirement ($k=i, i+1, i+2$ etc.)
- X = months (0, 1, ... 11)
- L_i = number of survivors in age group i per 100 000 born, according to the life span statistics of Statistics Sweden. These statistics are for the five-year period immediately preceding the year when the insured reached age 60 in the case of pension withdrawal before age 65, and age 64 in the case of withdrawal thereafter

For persons who have begun drawing their old-age pensions before age 65, the amount disbursed is recalculated, in accordance with recalculated annuity divisors, at the start of the year when the individual turns 65. The reason for the recalculation is the change in the underlying statistical data for the latest life expectancy statistics available in the individual's 65th year. With the continuing increase in life expectancy, the recalculated annuity divisors have so far been higher than before, resulting in reduction of future monthly pensions. The consequent marginal decrease in the inkomstpension liability to retirees is a component of the "Change in Amounts Disbursed" in Note 14, Table C.

After age 65, there is no further recalculation of annuity divisors. The increase in the pension liability of the system resulting from the fixed annuity divisors puts strain on the balance ratio when life expectancy is increasing.

Withdrawal of an old-age pension involves a transfer of pension liability from the economically active to retirees. The actual recalculation of pension balances as annual disbursements results in a marginal change in the pension liability. The change arises because of the difference between annuity divisors and what we refer to as "economic annuity divisors" in this report. For a description of economic annuity divisors, see Appendix B, Section 4. The economic annuity divisors are used to calculate the pension liability to retirees.

Confirmed Annuity Divisors for the Inkomstpension*

	Age									
	61	62	63	64	65	66	67	68	69	70
1938	17.87	17.29	16.71	16.13	15.56	14.99	14.42	13.84	13.27	12.71
1939	17.94	17.36	16.78	16.19	15.62	15.04	14.47	13.89	13.32	12.76
1940	18.02	17.44	16.86	16.27	15.69	15.11	14.54	13.96	13.39	12.82
1941	18.14	17.56	16.98	16.39	15.81	15.23	14.65	14.08	13.50	12.94
1942	18.23	17.65	17.06	16.48	15.89	15.31	14.74	14.16	13.59	13.02
1943	18.33	17.75	17.16	16.58	15.99	15.41	14.84	14.26	13.68	13.11
1944	18.44	17.86	17.28	16.70	16.11	15.54	14.96	14.38	13.80	13.23

* The SSIA confirms annuity divisors each year up to age 80, but the table shows only the divisors up to age 70.

Annuity Divisors for the Premium Pension

To calculate the annual premium pension, the value of the premium pension account is divided by an annuity divisor for the premium pension. Unlike the inkomstpension, the annuity divisor for the premium pension is based on forecasts of life expectancy.

$$\text{Annuity Divisors}_x = \int_0^{\infty} e^{-\delta t} \frac{l(x+t)}{l(x)} dt$$

$$l(x) = e^{-\int_0^x \mu(t) dt}$$

$$\mu(x) = a + be^{cx}$$

where

x = exact age at time of retirement

The annuity divisors are calculated in continuous time and according to exact age at retirement, but in principle they are consistent with the formula for the annuity divisor for the inkomstpension.³¹ The survival function, $l(x)$, can be considered equivalent to the number L used in the calculation of the inkomstpension. The mortality function, $\mu(x)$, is the so-called Makeham's formula used for calculating the risk of death within one year. The values of a , b and c correspond to Statistics Sweden's forecast of remaining life expectancy in the years 2006–2050 for individuals born in 1943.³² In the calculation of the guaranteed amount in conventional insurance, use is made of Statistics Sweden's low-mortality alternative, reduced by a further 10 percent. By contrast, Statistics Sweden's main alternative is used for mortality in calculating the pension amounts to be paid out. The purpose is to ensure that the assumed payout profile is as realistic as possible and not unnecessarily conservative.

Since April 1, 2007, the interest credited in fund insurance, δ , has been 4.0 percent before the charge for costs of administration in fund insurance. From that date on, a premium pension paid out in the form of conventional insurance is calculated with an interest rate that is presently 2.3 percent, and the guaranteed amount with an interest rate of 0.0 percent. The interest rate used in calculating the guaranteed amount was previously much higher; see the diagram Rate of Rebate and Guarantee.

Since April 1, 2008, the actuarial provisions (FTA) are valued on the basis of the market rates of interest on liquid treasury bills and government bonds at the time of valuation. A charge of 0.1 percent is deducted from these interest rates in order to cover the PPM's costs.

For the premium pension in the form fund insurance, the pension liability is equal by definition to the value of all the assets, which in turn equals the aggregate value of all fund shares. For fund insurance, therefore, a change in annuity divisors has no effect on the pension liability. In the case of conventional insurance, the pension liability is equal to the actuarial provisions (FTA) and is calculated by multiplying every guaranteed amount by an annuity divisor. The annuity divisor is determined in the same way as pension amounts. In the calculation of FTA, however, separate mortality assumptions are used for women and men. The FTA increase if a lower mortality rate or interest rate is assumed.

³¹ The formula applies in cases where one life is insured, i.e. where there is no survivor coverage.

³² Persons born in 1943 constitute the birth cohort closest to age 65 during 2007–2009. Current values: $a=0.0082$, $b=0.0000001$, $c=0.1576$, $\delta=3.8221$ percent, equivalent to an annual interest rate of 3.8961 percent. For $x>97$, $\mu(x)$ merges with a straight line with a slope of 0.001.

Appendix A. Calculation Factors

Annuity Divisors for Annual Amount (Fund Insurance)

Without survivor benefit

Age	61	62	63	64	65	66	67	68	69	70
	14.72	14.42	14.11	13.79	13.46	13.12	12.77	12.40	12.03	11.65

With survivor benefit

Age, co-insured	Age, primary insured									
	61	62	63	64	65	66	67	68	69	70
55	18.05	17.95	17.85	17.75	17.66	17.57	17.49	17.41	17.33	17.25
60	17.26	17.13	16.99	16.86	16.73	16.61	16.49	16.38	16.28	16.18
65	16.55	16.36	16.18	16.00	15.83	15.66	15.50	15.34	15.19	15.05
70	15.95	15.73	15.50	15.27	15.05	14.82	14.60	14.39	14.18	13.97

Annuity Divisors for Annual Amount (Conventional Insurance)

Without survivor benefit

Age	61	62	63	64	65	66	67	68	69	70
	17.75	17.30	16.85	16.38	15.91	15.42	14.93	14.43	13.93	13.41

With survivor benefit

Age, co-insured	Age, primary insured									
	61	62	63	64	65	66	67	68	69	70
55	22.62	22.46	22.30	22.15	22.01	21.88	21.75	21.63	21.52	21.41
60	21.30	21.08	20.87	20.67	20.47	20.29	20.12	19.96	19.80	19.66
65	20.18	19.89	19.61	19.33	19.07	18.82	18.58	18.35	18.13	17.93
70	19.31	18.96	18.61	18.26	17.93	17.60	17.28	16.97	16.67	16.38

Annuity Divisors for Guaranteed Annual Amount (Conventional Insurance)

Without survivor benefit

Age	61	62	63	64	65	66	67	68	69	70
	26.91	26.05	25.21	24.36	23.53	22.70	21.88	21.07	20.27	19.48

With survivor benefit

Age, co-insured	Age, primary insured									
	61	62	63	64	65	66	67	68	69	70
55	36.48	36.14	35.82	35.53	32.25	34.99	34.75	34.52	34.31	34.12
60	33.68	33.24	32.82	32.43	32.06	31.71	31.38	31.08	30.79	30.53
65	31.48	30.93	30.40	29.90	29.42	28.97	28.54	28.13	27.75	27.40
70	29.86	29.21	28.59	27.98	27.40	26.84	26.30	25.79	25.30	24.84

Appendix B. Mathematical Description of the Balance Ratio

Excerpts from Regulation 2002:780 on the Calculation of the Balance Ratio*

* Some editing has been done to simplify the presentation

Pursuant to Chapter 1, §§ 5 a and 5 b of the Earnings Related Old Age Pension Act (1998:674), the Swedish Social Insurance Agency is to calculate the balance ratio for each year in accordance with the following formula.

1. Balance ratio, BR ,

$$BR(t+2) = \frac{CA(t) + F(t)}{S(t)} \quad (1.0)$$

$$CA(t) = \bar{C}(t) \times \bar{T}(t) \quad (1.1)$$

$$\bar{C}(t) = \frac{C(t) + C(t-1) + C(t-2)}{3} \times \left(\frac{C(t)}{C(t-3)} \times \frac{CPI(t-3)}{CPI(t)} \right)^{\frac{1}{3}} \times \left(\frac{CPI(t)}{CPI(t-1)} \right) \quad (1.2)$$

$$\bar{T}(t) = \text{median} [T(t-1), T(t-2), T(t-3)] \quad (1.3)$$

where

- t = calendar year if the variable refers to flows, end of calendar year if the variable refers to stocks
- $CA(t)$ = contribution asset, year t
- $F(t)$ = buffer fund, the aggregate market value of the assets of the First–Fourth and Sixth National Pension Funds in year t . By market value is meant the value which in accordance with Ch. 6, § 3 of the National Pension Funds Act (2000:192) and Ch.4, § 2 of the Sixth National Pension Fund Act (200:193) is to be shown in the annual reports of these funds.
- $S(t)$ = pension liability, year t
- $\bar{C}(t)$ = smoothed contribution revenue to the pay-as-you-go system, year t
- $\bar{T}(t)$ = smoothed turnover duration, year t
- $C(t)$ = contributions to the pay-as-you-go system, year t
- $T(t)$ = turnover duration, year t
- $CPI(t)$ = consumer-price index for June, year t

2. The average retirement age, \bar{R} , is calculated as

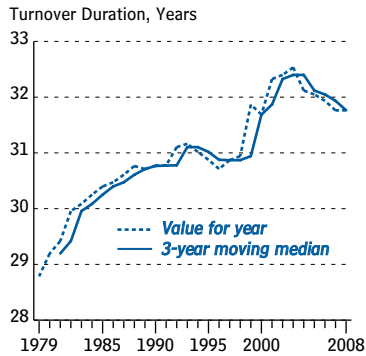
$$\bar{R}(t) = \frac{\sum_{i=61}^{R^*(t)} P_i^*(t) \times G_i(t) \times i}{\sum_{i=61}^{R^*(t)} P_i^*(t) \times G_i(t)}, \bar{R} \text{ rounded off to nearest whole number} \quad (2.0)$$

where

- i = age at year-end
- $R^*(t)$ = the oldest age group for which pensions have been granted in year t
- $P_i^*(t)$ = the total of pensions granted monthly in year t to persons in age group i
- $G_i(t)$ = annuity divisor in year t for age group i

3. Turnover duration, T ,

$$T(t) = ID(t) + OD(t) \tag{3.0}$$



	Change measured percent	Change in percent with 3-year moving median
3	0	
2	0	4
1	148	148
0	002222244455568	0000022223445668
-0	22455556	0234559
-1	3	
1	148	to be read as three annual changes of 1.1, 1.4 and 1.8 percent, respectively

3.1 Pay-in duration, ID ,

$$ID(t) = \frac{\sum_{i=16}^{\bar{R}(t)-1} \bar{E}_i(t) \times L_i(t) \times (\bar{R}(t) - i - 0.5)}{\sum_{i=16}^{\bar{R}(t)-1} \bar{E}_i(t) \times L_i(t)} \tag{3.1.1}$$

$$\bar{E}_i(t) = \frac{\frac{E_i(t)}{N_i(t)} + \frac{E_{i+1}(t)}{N_{i+1}(t)}}{2} \text{ for } i = 16, 17, \dots, \bar{R}(t)-2 \tag{3.1.2}$$

$$\bar{E}_{\bar{R}(t)-1}(t) = \frac{E_{\bar{R}(t)-1}(t)}{N_{\bar{R}(t)-1}(t)} \tag{3.1.3}$$

$$L_i(t) = L_{i-1}(t) \times h_i(t) \text{ for } i = 17, 18, \dots, \bar{R}(t)-1 \text{ where } L_{16}(t) = 1 \tag{3.1.4}$$

$$h_i(t) = \frac{N_i(t)}{N_{i-1}(t-1)} \text{ for } i = 17, 18, \dots, \bar{R}(t)-1 \tag{3.1.5}$$

where

$E_i(t)$ = the sum of 16 percent of pension qualifying-income calculated in accordance with Ch. 2 of the Earnings Related Old Age Pension Act (1998:674) and 16 percent of the imputed pension-qualifying income calculated in accordance with Ch. 3 of said act in pay-in year t age group i for individuals who have not been registered as deceased

$N_i(t)$ = number of individuals in age group i who at any time through pay-in-year t have been credited with pension-qualifying income or pension-qualifying amounts and have not been registered as deceased

$L_i(t)$ = proportion of persons in age group i in year t

$h_i(t)$ = change in proportion of persons in age group i in year t

3.2 Pay-out duration, OD ,

$$OD(t) = \frac{\sum_{i=\bar{R}(t)}^{R(t)} 1.016^{-(i-\bar{R}(t)+0.5)} \times L_i^*(t) \times (i-\bar{R}(t) + 0.5)}{\sum_{i=\bar{R}(t)}^{R(t)} 1.016^{-(i-\bar{R}(t)+0.5)} \times L_i^*(t)} \quad (3.2.1)$$

$$L_i^*(t) = L_{i-1}^*(t) \times he_i(t) \text{ where } L_{60}^*(t) = 1 \quad (3.2.2)$$

$$he_i(t) = \frac{P_i(t)}{P_i(t) + Pd_i(t) + 2 \times Pd_i^*(t)} \text{ for } i = 61, 62, \dots, R(t) \quad (3.2.3)$$

where

- $R(t)$ = the oldest age group receiving a pension in year t
- $P_i(t)$ = total pension disbursements in December of year t to age group i
- $Pd_i(t)$ = total of the last monthly pension disbursements to persons in age group i who received pensions in December of year $t-1$ but not in December of year t
- $Pd_i^*(t)$ = total of the last monthly pension disbursements to persons in age group i who were granted pensions in year t and did not receive a pension payment in December of year t
- $L_i^*(t)$ = proportion of remaining disbursements to age group i in year t
- $he_i(t)$ = change in pension disbursements due to deaths in year t , age group i

4. The pension liability, D ,

$$D(t) = AD(t) + DD(t) \quad (4.0)$$

$$AD(t) = K(t) + E(t) + ATP(t) \quad (4.1)$$

$$DD(t) = \sum_{i=61}^{R(t)} P_i(t) \times 12 \times \left(\frac{Ge_i(t) + Ge_i(t-1) + Ge_i(t-2)}{3} \right) \quad (4.2)$$

$$Ge_i(t) = \frac{\sum_{j=i}^{R(t)} \frac{1}{2} \times (L_j^*(t) + L_{j+1}^*(t)) \times 1.016^{i-j-1}}{L_i^*(t)} \text{ for } i = 61, 62, \dots, R(t) \text{ where } L_{R(t)+1}^* = 0 \quad (4.3)$$

where

- $AD(t)$ = pension liability in year t in regard to pension commitment for which disbursement has not commenced (pension liability to the economically active)
- $DD(t)$ = pension liability in year t in regard to pensions being disbursed to retired persons in the pay-as-you-go system
- $K(t)$ = total of pension balances in year t according to Ch. 5, § 2 of the Earnings Related Old Age Pension Act (1998:674)
- $E(t)$ = estimated pension credit for the inkomstpension earned in year t according to Ch. 4, §§ 2-6 of said act
- $ATP(t)$ = estimated value of the ATP in year t for persons who have not yet begun to receive this pension
- $Ge_i(t)$ = economic annuity divisor for age group i in year t

* For amounts and values, see
Aktuella belopp at
www.forsakringskassan.se
and at www.ppm.nu.

List of Terms

in Swedish

actuarial provisions

försäkringstekniska avsättningar

provisions set aside to guarantee the commitment of the insurer in conventional insurance. The corresponding assets must therefore be invested conservatively to make certain that the insured will receive their benefits during retirement.

adjustment indexation*

följsamhetsindexering

recalculation of pensions by the change in the income index, reduced by interest of 1.6 percent credited in the annuity divisor. Note that there is no adjustment index, only adjustment indexation. If the income index for year t is designated by $I(t)$, the adjustment indexation is calculated as follows:

Adjustment indexation (at the end of year $t-1$) = $[I(t)/I(t-1)] / 1.016$

annuity divisor*

delningstal

a number that reflects remaining life expectancy at retirement, taking into account the imputed interest credited to the pension to be paid.

In the calculation of the annual inkomstpension and the premium pension, the individual's pension balance and premium pension capital, respectively, are divided by an annuity divisor at the time of retirement (see Appendix A).

Economic annuity divisors are used in the calculation of the pension liability (see Appendix B).

ATP

tilläggs pension

corresponds to the former ATP and folkpension and is paid to all persons born before 1938. Persons born between 1938 and 1953 receive a certain number of twentieths of their income-related pension as ATP and the remaining number of twentieths as inkomstpension and premium pension. The respective number of twentieths depends on the year of birth. The ATP system was a defined-benefit pension system. The ATP portion of the ATP is equivalent to 60 percent of the average pension points for the 15 years with the most pension points; the folkpension portion is equal to 96 percent of one price-related base amount for single pensioners and 78.5 percent for married pensioners. To receive a full pension, an individual must have at least 30 years of pension-qualifying income.

balance index

balansindex

when balancing is activated, pension balances and pensions are indexed by the change in a balance index instead of the income index. Changes in the balance index are dependent on the change in the income index and on the size of the balance ratio.

balance ratio

balanstal

the assets of the pay-as-you-go system, that is, the contribution asset and the buffer fund, divided by the pension liability of the system. The balance ratio can be considered equivalent to the solvency ratio in a funded system. Unlike the solvency ratio, however, the balance ratio provides no information on the amount of funded assets in relation to the pension liability.

balancing

balansering

a method of ensuring via indexation of the pension liability for the inkomstpension (pension balances and pensions paid) that the disbursements of the insurance system will not exceed its revenue. Balancing is activated if the balance ratio drops below 1.0000, that is, if the pension liability exceeds the assets of the system. In that case, the pension liability is compounded at a rate approximately equal to the system's internal rate of return.

buffer fund

buffertfond

absorbs interperiod discrepancies between pension contributions and pension expenditure in a pay-as-you-go system. The primary purpose of the buffer fund is to stabilize pension disbursements and/or pension contributions in relation to economic and demographic variations. The buffer fund of the national public pension system consists of five different funds: the First–Fourth and Sixth National Pension Funds.

ceiling on contributions

avgiftstak

8.07 income-related base amounts. The individual pension contribution and the central government pension contribution are paid on incomes up to this ceiling; the old-age pension contribution is paid on all earned income, but the contribution on the portion of income above the ceiling is not paid to the pension system, but to the central government.

ceiling on pension-qualifying income*

intjänandetak

7.5 income-related base amounts. The maximum income – after deduction of the individual pension contribution – for which pension credit is earned.

central government old-age pension contribution

statlig ålderspensionsavgift

a pension contribution paid by the central government. The contribution is 10.21 percent of pension-qualifying social-insurance benefits, except for sickness and activity compensation. For sickness and activity compensation and so-called pension qualifying amounts, the contribution is 18.5 percent.

- charge for costs of administration*** administrationsavgift
a charge to cover costs of management and operations. Pension balances are reduced by the administrative costs of the inkomstpension and ATP pension systems. This charge is deducted from pension balances as a percentage based on an administrative cost factor. For the premium pension, the charge for costs of administration is taken as a percentage deduction from the premium pension capital of the insured (see Appendix A).
- compounding** förräntning
in this report, synonymous with indexation.
- contribution asset** avgiftstillgång
the value of the inflow of contributions to the inkomstpension. It is calculated through multiplication of smoothed annual contribution revenue by smoothed turnover duration.
- contribution base** avgiftsunderlag
the income and other amounts on which pension contributions are paid. The contribution base consists primarily of earned income, but also of social-insurance benefits such as sickness cash benefits and unemployment cash benefits, as well as pension-qualifying amounts.
- contribution revenue** avgiftsinkomst
the total pension contributions paid to the pay-as-you-go system in one year. In the calculation of the contribution asset, smoothed contribution revenue is used.
- conventional insurance** traditionell försäkring
pension insurance where the insurer guarantees that the insured will receive a specified nominal pension amount dependent on the pension balance of the insured. With conventional insurance, the insured have no say in the management of their pension balances. Thus, the level of investment risk is determined by the insurer, who also bears this risk.
- defined-benefit pension system** förmånsbestämt pensionssystem
a pension system in which the insurer bears the financial risk deriving from the variability over time in the mortality rate and in the rate of return on the assets of the system. In a public pension system, the insurer is the taxpayers, which means that contributions/taxes to the system may vary. The value of a pension is set in advance in terms of a certain amount or level, such as final earnings or average income.
- defined-contribution pension system** avgiftsbestämt pensionssystem
a pension system in which pension credit in monetary terms accrues by the same amount as the pension contribution paid by or for the individual. In a defined-contribution pension system, the insured bears the financial risk deriving from the variability over time in the mortality rate and in the rate of return on the assets of the system. This means that the value of a pension may vary.

- fund** fond
 a legal entity operated by a fund management company. The fund management company invests in securities in which investors in turn can buy shares.
- fund asset** fondtillgång
 the value of the assets at the end of the confirmation year.
- fund insurance** fondförsäkring
 pension insurance with no guaranteed pension amount. Through their choice of funds, the insured decide how to invest their saving and bear the risk associated with the development of their pension balances.
- fund strength** fondstyrka
 the monetary amount of the buffer fund at the end of a given year divided by the pension disbursements for the same year. It is a measure of the size of the buffer fund in relation to the flow of pension payments.
- funded system** fonderat system
 a pension system in which premiums paid in are set aside and invested until the time of pension withdrawal. The premium pension system is an example of a funded system.
- guarantee rule/guaranteed supplement** garantiregel/garantitillägg
 a provision guaranteeing that individuals born between 1938 and 1953 will receive a pension at least equivalent to that which they had earned in the ATP system through 1994.
- guaranteed pension** garantipension
 provides basic income security for retired individuals who have had little or no income. The guaranteed pension is a supplement to the income-related pension.
- income index** inkomstindex
 the change in the income index shows the development of the average income. The measure of income used here is pension-qualifying income, without limitation by the ceiling, but after deduction of the individual pension contribution.
 The change in the index is calculated as the average change in real income for the latest three-year period, with the addition of inflation in the latest 12-month period ending with June (see Appendix A).
- income-related base amount*** inkomstbasbelopp
 the base amount which is recalculated each year according to the change in the income index. The income-related base amount is used primarily to calculate the ceilings on contributions and pension-qualifying income.

income-related old-age pension

[inkomstgrundad ålderspension](#)

the inkomstpension and ATP plus the premium pension, sometimes also referred to as the earnings-related old-age pension.

indexation*

[indexering](#)

recalculation of pension balances by the change in the income index, or balance index, and the recalculation of pensions by adjustment indexation.

individual pension contribution

[allmän pensionsavgift](#)

the portion of the pension contribution, 7 percent of income up to the ceiling for contributions, paid by the insured together with tax withheld.

inheritance gain*

[arvsvinst](#)

the pension balances, or premium-pension capital, of deceased persons, which are “inherited” by the surviving insured (see Appendix A).

inkomstpension

[inkomstpension](#)

the portion of the income-related old-age pension linked to 16 percent of the pension base. The term inkomstpension sometimes includes the ATP.

Here the term is also used to designate the inkomstpension subsystem of the national public pension system. Like the premium pension system, the inkomstpension scheme is a defined-contribution pension system.

internal rate of return

[internränta](#)

in this report, compounding of the pension liability so that it increases at the same rate as the assets of the system. The internal rate of return is determined by the change in the contribution revenue of the system and the change in the extent to which these contributions can finance the pension liability – in other words, the change in turnover duration – and by the return on the buffer fund, as well as the cost (gain) due to changes in life expectancy. If balancing is activated, the pension liability is compounded at a rate approximating the internal rate of return of the pay-as-you-go system.

National Pension Funds

[AP-fonderna](#)

legally and administratively, the buffer fund of Sweden’s pay-as-you-go pension system consists of five different funds: the First, Second, Third, Fourth and Sixth National Pension Funds. Pension contributions are apportioned equally to the First–Fourth National Pension Funds, which also contribute equally to the payment of pensions. The Sixth National Pension Fund receives no pension contributions and pays no pensions. From the standpoint of the pay-as-you-go system, the five buffer funds may be viewed in some respects as a single fund.

national public pension

den allmänna pensionen

Sweden's national pension system. The system comprises the inkomstpension, the premium pension and the guaranteed pension. The inkomstpension may also include the ATP.

old-age pension contribution

ålderspensionsavgift

paid by employers as an employer contribution and by self-employed persons as an individual pension contribution. The contribution rate for the old-age pension is 10.21 percent of total earnings; however, the contribution on the portion of income above the ceiling for contributions is not paid to the pension system, but to the central government.

pay-as-you-go pension systems

fördelningssystem

systems which do not require that the pension liability be matched by a certain amount of funded assets. A pay-as-you-go system is often described as a system where contribution revenue is used directly to finance pension disbursements. However, this description is not totally accurate in the case of a pay-as-you-go system with a buffer fund.

pay-in duration

intjänandetid

reflects the difference in number of years between the expected average age of earning pension credit and the expected average age of retirement.

pay-out duration

utbetalningstid

reflects the difference in number of years between the expected average age of retirement and the expected average age of pension recipients.

pension balance

pensionsbehållning

the total confirmed pension credit for the inkomstpension, recalculated annually by the income index (or the balance index), inheritance gains and the charge for costs of administration.

pension base

pensionsunderlag

the total of an individual's pension-qualifying income and pension-qualifying amounts, but only up to the ceiling on pension-qualifying income.

pension contribution

pensionsavgift

see individual pension contribution, old-age pension contribution and central-government old-age pension contribution.

pension credit

pensionsrätt

an individual's pension credit is 18.5 percent of her/his total pension base and equal to her/his total contribution to the pension system. Individuals born in 1954 or thereafter are credited with 16 percent of their pension base for the inkomstpension and with 2.5 percent of their pension base for the premium pension. Pension credit increases the individual's pension balance and premium-pension capital.

pension level

pensionsnivå

in this report, the average pension in relation to the average pension-qualifying income for persons aged 16–64.

pension liability

pensionsskuld

in this report, the financial commitment of the pension system at the end of each year. For the inkomstpension, the pension liability to the economically active is calculated as the sum of the pension balances of all individuals. The pension liability to retirees is calculated by multiplying the annual pension amount of each birth cohort by the economic annuity divisor for that cohort. Through 2017 the pension liability will also be calculated for the ATP credit earned by the economically active. With fund insurance, the pension liability for the premium pension is calculated as the total value of all fund shares; with conventional insurance, the pension liability is calculated as each guaranteed amount multiplied by an annuity divisor.

pension points

pensionspoäng

the measure of pension credit used in calculating the ATP. Pension points may be earned by persons up to age 64 and born before 1954. Pension points are calculated as follows:

$$\text{Pension points} = \frac{PQI - HPBA}{HPBA}$$

where

PQI = pension-qualifying income

HPBA = the higher price-related base amount

pension-qualifying amounts

pensionsgrundande belopp

a basis for pension credit not related to actual earned income. Pension-qualifying amounts may be credited for sickness or activity compensation, years with small children, study and compulsory national service.

pension-qualifying income

pensionsgrundande inkomst

the income which together with pension-qualifying amounts is used to calculate the pension credit of the insured. In principle, pension-qualifying income consists of annual income (earnings, sickness cash benefits, parental cash benefits, unemployment cash benefits, etc.) reduced by the individual pension contribution. Beginning in 2003, annual income must exceed 42.3 percent of one price-related base amount to qualify for pension credit. Pension credit is granted only on income up to the ceiling on pension-qualifying income.

premium pension

premiepension

the portion of the earnings-related old-age pension designed as a funded system. The pension credit earned for the premium pension is 2.5 percent of the pension base and is invested in securities funds chosen by the insured individual. The premium pension may be withdrawn as fund insurance or as a guaranteed nominal monthly benefit from a conventional insurance policy. Like the inkomstpension system, the premium pension system is a defined-contribution system.

price-related base amount*

prisbasbelopp

an amount used in the national pension system for purposes that include calculating the guaranteed pension and in the tax system for determining the basic deduction, currently equivalent to 42.3 percent of one price-related base amount for the year in which the income reported was earned. The price-related base amount is adjusted each year by the change in the Consumer Price Index (for June). In addition there is a higher price-related based amount. It is used to calculate pension points and also follows changes in the Consumer Price Index.

return

avkastning

income that results from an investment. For shares of stock, the return may consist of a dividend and the change in the market price. In this report, the concept refers to the direct return plus the change in value of the buffer fund and the premium-pension funds.

turnover duration

omsättningstid

reflects the expected time from the earning of pension credit until the disbursement of inkomstpension. Turnover duration is the sum of pay-in duration and pay-out duration. Turnover duration is used for valuation of the contribution inflow. Turnover duration depends on the rules governing the earning of pension credit and the disbursement of pensions and on the patterns of labour force participation and mortality in each age group.

Further information on social security in Sweden is available at the SSIA website,
www.forsakringskassan.se.

Information on the premium pension system can be found at www.ppm.nu.

For information on the National Pension Funds, please see the websites of the respective funds:
www.ap1.se, www.ap2.se, www.ap3.se, www.ap4.se and www.ap6.se.

Published by the Swedish Social Insurance Agency (SSIA)

Editor: Annika Sundén

Project Managers: Gudrun Ehnsson and Lena Larsson

Adaptation and analyses of data: Atosa Anvarizadeh, Serge de Gosson de Varennes, Gudrun Ehnsson,
Stefan Granbom, Nils Holmgren, Bo Larsson, Boguslaw D. Mikula.

Also participating in the preparation of the report: Andrzej Dudziuk, Hans Karlsson, Hans Olsson,
and from the PPM: Lars Billberg, Sara Borgström, Claes Jonsson, Kristina Kamp, Karin Leth,
Isabel Odemark, Gerd Wallström.

Special Feature: Hans Olsson

Graphic production: Kristina Malm

Photo: Hans Alm (cover) and Bror Karlsson (page 1)

Translation: Richard Wathen

Printed by: Davidsons Tryckeri AB, Sweden, 2009

Swedish Social Insurance Agency

Head Office

SE-103 51 Stockholm

Telephone: +46-8-786 90 00

E-mail: huvudkontoret@forsakringskassan.se

ISSN 1654-4900

ISBN 978-91-7500-357-3

THE ORANGE REPORT – WHAT IS IT?

The Orange Report is the annual report of the Swedish pension system. The report describes the financial position, the development during the year and the future for the portion of the legislated pension system that provides a pension based on contributions paid in, as well as factors like the return on those contributions – in other words, the inkomst-pension and the premium pension. The report also covers the legacy of the ATP. The authorities responsible for managing this pension system are the Swedish Social Insurance Agency (SSIA), the Premium Pension Authority (PPM) and the National Pension Funds. The Swedish National Tax Board also plays an important part, in collecting contributions and in other ways.

Annual contributions and premiums paid for national, occupational and private pensions add up to SEK 350 billion – total earnings in Sweden were SEK 1 237 billion. This means that we set aside the equivalent of 28 percent of our wages and salaries for various pensions.

The table and the diagrams show the distribution of premiums paid in, capital managed and pensions disbursed among the national pension, occupational pensions and private pensions.

To simplify, the Orange Report covers 62, 41 and 73 percent, respectively, of all pensions in Sweden. Thus, this report is appropriate reading both for those who wish to review the development of the national pension system and for those who would like to stay current more generally on pension-related issues in Sweden.

Orange Report and Sweden's Pensions in 2007

Billions of SEK

	Paid-in premiums	Capital managed Dec. 31	Disbursements	
● National pension	218	1 209 *	186 **	Orange Report
● Occupational pensions	119	1 295	49 ***	
● Private pension insurance	13	410	19	
Total	350	2 914	254	

* Contribution asset not included.

** Includes only income-related pensions. Aside from these, there are disbursements of the guaranteed pension (SEK 20 billion), widow's pension (SEK 15 billion), housing supplements to pensioners and income support for the elderly (SEK 8 billion) provided by the central government.

*** Refers to old-age pension.

