

A German perspective of the new Swedish public pension system

by Peggy Letzner and Ortrun Tippelmann

Sweden recently reformed its public pension system by replacing the former defined-benefit system with a “notional defined-contribution system” (NDC). The new system has a strong focus on financial sustainability. It emphasizes the principle of equivalence, includes the increasing life expectancy of the Swedish population into the calculation of pensions and establishes a so-called “automatic balancing mechanism”. Hence political agreements concerning possible adjustment measures in the future will become unnecessary. However, all financial risks are approached at the expense of the level of pension benefits. The comparatively high pension level projected for future decades is above all due to the existence of large buffer funds. Taken together, whatever the systematic choices of each retirement system may be, there is no golden path out of the dependency from economic and demographic developments.

I. Sweden’s NDC system

a. Pension reform 1999

Sweden’s pension system has undergone a fundamental transformation with its 1999 pension reform. The public earnings related old-age pension scheme is now built on two separate parts: a pay-as-you-go scheme (PAYG), the so-called “Inkomstpension” and a fully funded so-called “premium pension” scheme. The contribution rate altogether amounts to 18,5 percent of covered earnings whereby 2,5 percent are directly paid into the new funded system which offers life annuities based on insurance principles. One main goal of the 1999 pension reform was to maintain a fixed contribution rate of 16 percent for the PAYG system in the future. Pension contributions paid in each year by and on behalf of an



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insured are recorded in his or her “pension account” even though the payments in the PAYG branch of the system are effectively used for paying out the current pensions. In this regard this PAYG branch is in fact mimicking a funded defined-contribution scheme with “notional” return rate. The pension from the *Inkomstpension* is calculated by dividing the pension account balance (the sum of contributions paid in and the return of indexation) by an “annuitization divisor”. This divisor takes into account the increasing average life span for men and women. So effectively, Sweden with its 1999 reform shifted from a defined-benefit system to a strictly contribution-defined system.

Redistributive elements such as pension credits for the unemployed or for parents whilst bringing-up their child in its first four years as well as the minimum pension level “guaranteed pension” are financed out of the general tax-budget. Disability benefits belong now to the health care system. Certain survivors benefits are as well paid out of the general tax-budget. The political choice to give overall priority to a fixed contribution rate consequently has great impact on the respective individual pension benefits. Several instruments have therefore been provided in the new Swedish pension system to ensure an automatic adjustment, so that the contribution rate does not rise above the fixed maximum percentage.

b. Evaluation by the European Commission

The European Commission has assessed the new Swedish public pension system within the Open Method of Coordination (OMC). It thereby pointed out that the Swedish pension system currently meets the challenge of long-term financial sustainability and added: “Actuarial neutrality will allow individuals to plan their working life in such a way as to obtain an adequate pension and, thus, offers

strong incentives for increased labour-market participation of older workers.”¹ So, the European Commission in its evaluation featured the reformed public pension system as a “best practice” in the comparative process of OMC between the European Member States.

2. The features to achieve financial sustainability in PAYG systems

a. Equivalence of contributions and pension benefits

In the old Swedish public pension system – separated into universal basic pension and an earning-related ATP pension and still partly in force for a long transition period – the individual pension benefit was only weakly connected to the contribution payments made over working-life time. The ATP pension was particularly generous to people who worked only up to a maximum of 30 years before retirement. Pensions were calculated based on “the 15 best years” of income within a total period of 30 years. The new Swedish old-age pension system now is based on life time contributions. Contributions are accumulated on individual accounts while redistributive elements were either eliminated or shifted into general tax-budget. Hence, old-age pension provisions now follow a strictly actuarial calculation. Equivalence of contributions and pension benefits were strengthened by introducing the pension calculation method of dividing the pension account balances by the annuitization divisor (specific for each cohort).

The German statutory pension scheme covers all three biometrical risks, such as old-age, invalidity and death (survivors). Therefore not all parts of the contributions create individual old-age pension rights. Germany followed the principle of equivalence between contributions and pension benefits since 1957. The so-called “Adenauer’sche pension reform” introduced the direct link between the

amount of available income earned during working life, representing the acquired standard of living, and the subsequent amount of pension. However, because of the inherent flexibility of the contribution rate with a clear tendency towards rising overall payment levels, there is no direct equivalence such as in the NDC system but only a so-called “participation-equivalence”.

In one year of contributions each insured person receives pension credits depending only on the individual income position in relation to the average earning income in the same year. Someone who earns exactly the average income therefore receives one “earning point” for his contributions, regardless to the level of the contribution rate.² The number of earning points and the value of one point at the time of retirement then determine the amount of the individual pension. Therefore the amount of pension benefits only depends on the individuals relative income position in each year of his working life but not on the absolute amount of contributions paid into the system. In this respect “participation equivalence” means that only the members of one birth cohort are treated equally. Besides the principle of equivalence there are also redistributive elements such as pension benefits for periods of unemployment, sickness, bringing-up children and other specific benefits, e.g. transfers because of the German reunification. As in Sweden, tax-paid federal subsidies pay for benefits not covered by contributions.

b. Indexation of pension credits and pension benefits

In Sweden, pension credits during the accumulation phase are indexed by the “income index”. The income index measures the growth in average income as a three year moving average. Changes in consumer prices during the three year period is deducted from the change in average income and the change in inflation the last year added. The indexation

of pension benefits in principle works in a similar manner. But in the calculation of the pension a real growth rate of wages of 1,6 percent is included which increases the initial pension. The pensions then are indexed to the nominal growth rate of wages minus 1,6 percent. So, if real average income increases by exactly 1,6 percent, the real value of pensions will be maintained.³

The aim to maintain a fixed contribution rate can conflict with the regular indexation of pension credits and pension benefits which follows the growth in average income. In case of certain demographic and economic developments a situation could arise where the indexation of pension liabilities could only be achieved by raising the contribution rate. In the pessimistic scenario of the Swedish National Social Insurance Board’s (RFV) projection of 2002, this could be the case from the beginning of 2012.⁴ In that case, the fixed contribution rate has been given priority over indexation. In order to keep the annual reduction in pension levels relative to the growth in average income very modest, the so-called “automatic balancing mechanism” would then be initiated 26 years before the buffer fund would be exhausted. Activation of balance mechanism means, that pension liabilities are then indexed according to the change in the balance index instead of the change in the income index. Indexation of pension credits and pension benefits will be then reduced. In the basic scenario however, the balancing mechanism will not be activated because of sufficient buffer funds assets.⁵ So Sweden does not count on this control mechanism with regard to the obvious future problems caused by the retirement of large birth cohorts. The existence of the buffer funds sets Sweden in the position to cope with it.

In Germany the benefit indexation formula is used each year to recalculate the current pension value which defines the value of one “earning point”. This pension value adjusts

benefits over time equally for all pensioners. After the introduction of the PAYG system in 1957 the adjustment followed the increase in average earnings of all employees. So at that time the contribution rate was the subordinated factor. However, since 1989 it is the overall aim of various pension reforms to stabilize public pension finances. With the 2001 pension reform, the government made a firm commitment to maintain the contribution rate to the statutory pension scheme at an appropriate level (20 percent until 2020 and 22 percent until 2030). The aim was to reduce pensions levels by a changed benefit indexation formula in order to limit the contribution rate which was legally fixed. In order to compensate for the reduction in pension levels, generous government-subsidises for voluntary private and company pension plans were introduced.

To ensure the stability of future contribution rates the 2004 pension reform added a so-called “sustainability factor” to the benefit indexation formula which now links benefits to economic and demographic developments. This sustainability factor has the effect of reducing the annual pension adjustment if the ratio of pensioners to contributors rises. Changes in this ratio reflect changes in life expectancy, in the evolution of the birth rate, the net balance of immigration and emigration and changes in the labour force participation rate.⁶ The effect of the ratio is weighted by a factor alpha. If alpha equals 1,0 every deterioration in the ratio between pensioners and contributors would fully curb the indexation. If it was 0,0 the ratio would have no influence on the indexation. In practice it has been fixed at 0,25 in order to keep the contribution rate below 20 percent until 2020 and 22 percent until 2030. Taken together, the 2004 pension reform has reinforced the shift in paradigm of the 2001 reform as the new benefit indexation formula describes German pension policy increasingly in an income-oriented manner.

c. Dealing with increasing life expectancy

In Germany as well as in Sweden the increase of life expectancy is one of the factors determining benefit calculations. This is done in a characteristic way for both respective systems. Sweden chose an individual approach by introducing the annuitization divisor in the pension calculation. So the calculation of an individual pension depends directly on the estimated life expectancy of the cohort the individual belongs to. If estimated life expectancy rises, members of successive cohorts will receive lower monthly pensions if they don't work longer. Whether they do this or not is a matter of individual choice as the way of calculating the pensions allows for a flexible beginning of the retirement (minimum 61 years). So the construction of the NDC system helps to avoid political controversies as there is no need for rising any “standard retirement age”. Once pensions are calculated at the age of 65 they will not be subject to recalculation due to unexpected increases in longevity. So the risk of an underestimated life expectancy of a cohort is not borne by this cohort but by the contributors. This effect may cause problems for financial sustainability of the Swedish system.

On the contrary the collective approach in the German system spreads the costs of longevity among the pensioners and the contributors. Because the increasing life expectancy is one factor which determines the value of earning points increasing longevity affects both pensioners and contributors. Other than Sweden, Germany already includes its current pensioners in bearing the burden of longevity because of the influence of the sustainability factor. This approach takes into account, that the average life span already started to increase significantly during the last decades.

In both pension systems it will be necessary

to work longer in order to compensate for the losses in individual pension benefits. Compared to Germany, Sweden has the highest employment rate of older workers between 55 – 64 years old within the old European Member States reaching up to around 67 percent. Germany in this group has a rate of around 37 percent.⁷ It is still an open question whether or not the older employees will have the opportunity to work longer. If the labour market does not provide appropriate working possibilities for elderly persons they will not be able to compensate for evident cuts in pension benefits.

Last year in Germany there was a big public and political discussion concerning the question on whether to raise the standard retirement age from 65 to 67 years.⁸ Different pension experts voted for such a measure by introducing small graduations of one month per year. The full increase would thus have been staggered e.g. over 24 years from the beginning of 2011. However, the government in Germany did not decide in favour of this proposal but has postponed the decision to the year 2010. The political decision makers feared for the whole reform-package. Because of the current critical situation for older workers on the labour market the unions and the employers were strictly against this proposal. Moreover, the majority of the German population only saw this proposal as a fundamental cut in the individual pension benefits. But international comparisons especially with the Scandinavian countries show that the employment rate of older employees can indeed be altered, given suitable underlying conditions and corresponding policies such as lifelong learning and changing working conditions.⁹ One can say that this political discussion was a very good example for showing the practical problems of democratic decision making processes in contrast to automatic adjustment measures.

d. The partial replacement by funded private pension schemes

While Sweden implemented the premium pension into the obligatory public pension scheme, Germany strengthened the role of voluntary supplementary private and company pension plans with the 2001 pension reform. The new possibility of government-subsidised investment in private and company pension plans (“Riester-pension”) shall motivate the insured to engage in private savings for retirement on a voluntary basis. In Sweden and in Germany the pensions levels in the PAYG systems were cut in favour of additional funded pension schemes. So funded pensions shall replace PAYG pension to a certain extent in order to place the old-age provision on a more sustainable financial footing. The overall volumes are comparable: 2,5 percent of contribution base in Sweden and 1 percent in 2002 up to 4 percent maximum from the beginning of 2008 in Germany.

One important difference besides the feature of obligatory participation is the fact, that there is no nominal or real guaranteed rate of return in the premium pension system. In Germany however, at least the pay-out of the accumulated contributions in “Riester-pensions” have to be guaranteed.¹⁰

3. Some reflections on differences in the Swedish and German approaches

a. Sustainability and pension levels

a.a. Sustainability and NDC systems

One of the main advantages that are claimed for NDC systems is their financial sustainability. Financial sustainability is interpreted in a much broader sense than just a situation where future expenditure is equal to the revenues. This could be done by any PAYG system, e.g. by raising the contribution rate if the relation of pensioners to contributors rises. But here

sustainability implies more: “Sustainable refers to the financial soundness of a pension system and its capacity to be maintained over a foreseeable horizon under a broad set of reasonable assumptions.”¹¹ If a NDC system uses the growth rate of the contribution bill as notional interest rate and includes the expected length of retirement in the benefit calculation it will automatically respond to changes in longevity, fertility and employment by automatically providing lower benefits and therefore can keep the contribution rate constant.

Traditional PAYG systems do not meet this claim insofar as they can adapt their benefit according to the rate of wage growth. This was also the case for the German system prior to the last reforms. Discretionary interventions (e.g. establishing a new benefit indexation formula) were needed to balance the system due to a missing direct link between the calculation of benefits and the changes in employment and the demographic situation. The German statutory pension system after the 2004 pension reform took up some of the elements typical for NDC systems but still kept some of the elements of traditional PAYG systems. The contribution rate is not fixed but intended to rise to a maximum limit of 20 percent until 2020 and 22 percent until 2030. It is allowed to rise in order to spread the burden among pensioners and contributors. In order not to exceed these contribution rates, a direct link has now been introduced between the adjustment of benefits and the changes in demographic and economic conditions through the introduction of the sustainability factor into the benefit indexation. On the other hand these changes will not entirely determine the adjustment since they are weighted with the factor α (0,25). In the case that the economic and demographic conditions develop differently than presumed there has to be a discretionary adaptation of the factor α . In addition, although there is an indexation formula the yearly adjustment of pensions ac-

ording to this formula still has to pass parliament.

b.b. The practice of NDC in Sweden

The Swedish pension system fulfils the demands of financial sustainability in the above described way for the most part. Sweden chose the rate of wage growth per capita as notional rate of interest. When the work force decreases the average income growth can be higher than the growth rate of the total wage bill. Then benefits and pension rights will grow faster than the contribution base from which benefits are paid. The system will be balanced by using the buffer funds or in the worst case the automatic balancing mechanism will rebalance the system. There will not be any need for a political decision to be taken prior to activating the automatic balancing mechanism because its activation follows predefined rules. An imbalance might nevertheless occur since the calculation of the pensions takes into account the life expectancy of the cohort. But if the longevity of the cohort later turns out to be higher than expected pensions will not be recalculated. In such a case the pension level would be too high so that the buffer funds or the balancing mechanism would to rebalance the system.

If financial sustainability of a PAYG system is defined as an automatic response to changes in demographic and economic developments while maintaining a fixed contribution rate, the Swedish system as a carefully designed NDC system surely meets these demands. But still a NDC system is a PAYG system. That means that automatic adaptations to deterioration in demographic and employment conditions while keeping a fixed contribution rate must automatically result in lower benefits if there are no buffer funds. Consequently NDC systems do not define any level of pensions. The question is whether the meaning of financial sustainability of a pension system can be defined without the main

objectives of a pension system: providing adequate pension level? Leaving the future pension level out of consideration would mean to ignore the main goal of each pension system. What adequacy means needs to be answered by each society.

c.c. The projected pension levels in Sweden

Projections of the RFV base scenario in 2002¹² show that the comparatively high average pension level of the *Inkomstpension* (and ATP pensions) at 65 years of age will decline, from currently 69 percent for the birth cohort born in 1938 to 50 percent for the one born in 1965 down to around 45 percent for the cohort born after 1975.¹³ Thereby, the average pension level is defined as the ratio of the average pension at 65 after 30 or more years of earning pension credits in percentage of average income in Sweden (excluding the income of individuals with less than 30 years of earnings). A good third of the reduction of the average pension level for the earnings related pensions (retire in 2030) will be due to the expected increase of the average life span. The cohort born in 1965 will therefore need for instance to work until the age of 66 and 4 months (instead of 65) in order to neutralize the effect on pension from increasing in life expectancy.¹⁴

With the foreseen return rate in the premium pension system (3,25 percent after costs of administration assumed), the pension level of the whole public pension system could reach a maximum of 58 percent for those cohorts born in 1965 and around 55 percent for the ones after 1975. However it has to be emphasised that it is quite uncertain whether the development of capital market will in the end manage to fulfil these expectations. In this respect especially the recent developments in 2002 and 2003 lead to a rather pessimistic view for the overall return rate.¹⁵ The design of the guaranteed pension being built on a

price-related indexation leads to some further doubts concerning the future development of an adequate pension level. In case of a positive growth of the average earnings income, the guaranteed pension as a partition of the total pension will decrease due to the price indexation. So in effect, the lowest pensions will decrease relative to the average income. For this reason the European Commission warned, a rising income gap between on the one hand wage earners and pensioners with earning-related pensions above the guaranteed level and on the other hand pensioners who are only entitled to the guaranteed pension could lead to increased relative poverty risks particularly for women, who on average still earn less than men and in the future will not be covered anymore through survivor's benefits.¹⁶

d.d. The index of adequate pension levels in Germany

In Germany, the legislation and the pension experts were aware of the risk concerning pensions levels due to a strict contribution rate policy. The aim of the pension reforms since 2001 was to balance the goals for the contribution rate development with a minimum so-called "standard pension level".¹⁷ The index of an adequate pension level – so-called "Rentenniveausicherungsklausel" – was enacted with the 2001 pension reform in 2002 (§ 154 (3) SGB VI). It established an obligation for political action to be taken in case that the standard pension level in a 15-years-precaculation falls below 67 percent. Due to intervention mainly by the unions and the German pension insurance institutes this control mechanism was maintained even after introducing the new reform measures in 2004.¹⁸ Starting from a newly defined gross standard pension level¹⁹ of 52 percent in 2005 the government now has to propose measures in case that projections preview a standard pension level of below 46 percent in 2020 and below 43 percent in 2030. These figures show

the serious cuts in pensions. The government is hence obliged by law to stabilize at least these pension levels. In addition, from the beginning of 2008 the government is requested to explain to parliament regularly, which reform measures would be feasible in order to keep the average pension level at 46 percent even after 2020. In fact the law points out that all reform measures except raising the contribution rate are to be named (§ 154 (4) SGB VI). Especially raising the legal pension age will then need to be discussed again.

b. Different meanings of “generational fairness”

It is difficult to characterise the idea of “generational fairness” that is underlying a model of old-age pension systems as it usually represents only one part of a total social security system and therefore should be viewed in this context. However there seem to be different views on what generational fairness should comprise for the underlying models of the Swedish and the German pension systems. In the Swedish system in principle “fair” is interpreted as “same rates of return for all generations”, so that generational fairness would mean “having a constant ratio of present value of pension benefits over present value of contributions for all birth cohorts”.²⁰

The fixed contribution rate in the Swedish pension system means that the part of the wage bill that is available for the consumption of the pensioners will remain constant over time. That means there will be a smaller part of the wage bill for each pensioner by a relatively growing number of pensioners. An increase in the relative number of pensioners can be due to increasing life expectancy, which is not totally balanced by an increase in the length of working life. Then the lower benefits in one period are compensated by a longer duration of benefits being received. An increase in the relative number of pensioners can also be due to variations in the size of the

birth cohorts. This will typically be the case once the baby boom generation will retire. In this case also the wage bill that is available for the consumption of the pensioners will remain constant over time for an increased relative number of pensioners.

In the first case when the increased number of pensioners results from higher life expectancy, fairness of generations in the sense of equivalence of the relation of contributions and benefits for all generations will be maintained. The lower benefits in one period are compensated for by a longer duration of benefit receiving. In the second case, however, it will depend on the buffer fund sufficing to bridge the situation. Then contributions would be complemented by payments of the buffer fund to allow for unabridged benefit payments. If the buffer funds will not suffice the automatic balancing mechanism will be activated.²¹ This would mean a recalculation of benefits and pension rights. Succeeding smaller birth cohorts may later return onto the old path of indexation. Therefore the burden has to be borne mainly by the larger birth cohorts. It is doubtful whether this still can be qualified as “fair” in the sense of the underlying concept.

In contrast, the German system emphasises the necessity of spreading these burdens between the generations by allowing a moderate increase of the contribution rate in the future. The concept of fairness does not count on an entirely equal treatment of all successive generations to come. It is seen as fair to divide the burden of sizable birth cohorts that enter retirement between pensioners and contributors insofar as the succeeding generations are born into a wealthier society and this compensates for a decrease in the rates of return. To say it with Schmähl: “Would anyone of the younger generation like to live in the future with higher rates of return but on the income level of say the year 1960?”²² Insofar it is fair if the younger generation has to pass on a larger part

of their income to pensioners so that pensioners can participate from the overall increased wealth. On the other hand it should be acceptable that a generation of pensioners cannot expect the same level of pension as the preceding generation of pensioners while economic and demographic determinants seriously deteriorate. To view generational fairness only from a perspective of the contribution rate and the rate of return would mean not to take into account changes in society and societal values.²³ A moderate increase in contribution rates therefore is sensed as justifiable in order to meet the aim of the statutory pension insurance system to generate adequate pensions.

c. Information campaign

Neither the current Swedish public pension system nor the German statutory pension scheme provides foreseeable individual pension benefits. Individual pensions benefit depends on the individual life course and labour participation. In addition, each PAYG system as any funded pension system fights with uncertainties concerning the future economic and demographic developments and resulting uncertainties in indexation and the rate of return. Indexation is the main factor for future pensions levels because of the very long period of contribution payments and pensions disbursements. In order to give the insured at least an idea of their projected future pensions benefits, regular information is needed. Especially because of the cuts in pensions levels in the PAYG systems, individual supplement old-age provision will be necessary in order to reach a living standard after retirement close to the one acquired during working life. These developments thus place an increasing responsibility on the individuals to plan for their retirement themselves.

The difference between both systems is that Sweden partly replaced its PAYG system by a mandatory funded system, while Germany

chose the way of subsidised voluntary private and company pension provisions. In Sweden an exemplary information campaign acquainted the insured with their account balances the rate of return and other benefit projections in the public pension scheme – premium pension included. These information are sent out yearly. The Swedish insured received in addition explanations about the way the new pension system works. Information about occupational pension schemes are given out by the providers of these pension schemes. There is an initiative that wants to combine the information of all providers in one hand.²⁴

In Germany the insured receives information concerning the statutory, the private and company pension schemes separately by each scheme. As in Sweden, however, a joint information initiative of the pension insurance institutes and providers of private and company pension plans has is in discussion in order to provide comparable information. The aim is at least to streamline the information of the providers with the ones in the so-called “pension information” of the statutory pension scheme.²⁵ This is specifically done so that the insured can evaluate their need for a voluntarily additional private and company pension provision.

4. Concluding remarks

The new Swedish public pension system is characterised by a remarkable political stability because of its inherent political consensus. This consensus was prolonged into the future decades by introducing automatic adjustment measures such as the annuitization divisor and the automatic balance mechanism. The effect of these automatisms is that adaptation of pension benefits will be done without any further political discussions. With regard to possible short term imbalances of the system, e.g. cyclical fluctuations, it may well be reasonable to avoid principle political debates. In

the German context, for this purpose it would be helpful to replenish the so-called fluctuation reserves (“Schwankungsreserve“). In the long run however, cultural changes and changes in societal values can not be taken into account by an automatic adjustment mechanism.

Considering the demographic development, without any buffer funds a fixed contribution rate necessarily leads to serious cuts for the level of future pension benefits. The political priority of a fixed contribution rate is due to the debate of curbing the growth of non-wage labour costs. But should we not ask for adequate pensions today and in the future? Assuming a real economic growth in the long run, a wealthier society could bear a moderately increasing contribution rate. This would allow to distribute the costs of aging between economically active persons and pensioners. At the same time the real income level of the active persons would still be superior to the one of preceding generations. The idea of “once and for all” cutting off the pension debate by introducing automatic adjustment measures is more than tempting. However, in our view the political discussion process should all the more still be an essential tool in order to adapt the public pension system to a changing society.

References

- Barr, Nicholas (2004), Notional defined contribution pensions: What they can do, and what they can't, *Scandinavian Insurance Quarterly*, 3/2004, pp. 1-12.
- Börsch-Supan, Axel (2003), What are NDC Pension Systems? What Do They Bring to Reform Strategies?, Mannheim Research Institute for the Economics of Aging, Universität Mannheim, Discussion Paper 42-2003.
- Bruno-Latocha, Gesa and Tippelmann, Ortrun (2004), Änderungen bei betrieblicher und privater Altersvorsorge durch das Altersseinkünftegesetz, *Deutsche Rentenversicherung*, 6-7/2004, p. 393-409.
- Bundesministerium für Gesundheit und Soziale Sicherung (BMGS) (Federal Ministry of Health and Social Security) (2003), summary, Achieving financial sustainability for the social security systems. Report by the Commission.
- Bundesministerium für Gesundheit und Soziale Sicherung (BMGS) (2003), Nachhaltigkeit in der Finanzierung der sozialen Sicherungssysteme. Bericht der Kommission.
- Council of the European Union (2003), Joint report by the Commission and the Council on adequate and sustainable pensions, Brussels, 10 March 2003, 7165/03.
- Hain, Winfried and Lohmann, Albert and Lübke, Eckhard (2004), Veränderungen bei der Rentenanpassung durch das RV-Nachhaltigkeitsgesetz“, *Deutsche Rentenversicherung*, 6-7/2004, pp. 333-349.
- Holzmann, Robert (2003), Towards a Reformed and Coordinated Pension System in Europe: Rationale and Potential Structure, paper prepared for the Swedish Social Security Fund – World Bank Conference on NDC plans, Stockholm, September 29-30, 2003.
- Letzner, Peggy and Tippelmann, Ortrun (2003), Die Reform der Alterssicherung in Schweden – Finanzielle Nachhaltigkeit zu groß geschrieben?, *Deutsche Rentenversicherung*, 8/2003, pp.501-515.
- National Social Insurance Board, RFV, The Swedish Pension System, *Annual Report 2001 and 2002*, Stockholm.
- National Strategy Report on the Future of Pension Systems – Sweden (2002), downloadable from http://www.europa.eu.int/comm/employment_social/soc-prot/pensions/index_de.htm
- Palmer, Edward (2002), Policy approaches to promote private and occupational old-age provision in Sweden, Bertelsmann Stiftung Vorsorgestudien 6, available for download at: www.vorsorgestudien.de
- Reimann, Axel (2004), Das RV-Nachhaltigkeitsgesetz – Gesamtwirkungen und Bewertung, *Deutsche Rentenversicherung*, 6-7/2004, pp. 318-332.
- Ruland, Franz (2003 a), Solidarprinzip und Eigenverantwortung, *Mitteilungen der bayrischen Landesversicherungsanstalten*, 5/2003, pp. 227-234.

- Ruland, Franz (2003 b), in: Sozialrechtshandbuch, 3. Auflage, Baden-Baden 2003, p. 971-981.
- Scherman, Karl-Gustav (2003), The Swedish pension reform: A good model for other countries?, *Scandinavian Insurance Quarterly*, 4/2003, pp. 304-318.
- Schmähl, Winfried (2004), Anmerkungen zu "Generationengerechtigkeit" und Alterssicherung aus ökonomischer Perspektive, *Deutsche Rentenversicherung – Schriften*, Band 51, pp. 74-84.
- Sundén, Annika (2003), How much do people need to know about their pensions and what do they know?, draft prepared for Conference on NDC Pensions, Sandhamn, Sweden, September 29-30, 2003.

Notes

- ¹ Council of the European Union (2003), p. 175
- ² Ruland (2003 b), p. 973.
- ³ RFV (2001), p. 36.
- ⁴ RFV (2002), p. 41.
- ⁵ RFV (2002), p. 39.
- ⁶ BMGS (2003), summary, p. 7.
- ⁷ Council of the European Union (2003), p. 46.
- ⁸ Germany has a standard retirement age of 65. Benefits are reduced by 3,6 percent for each year of earlier retirement (minimum 63 years) which is regarded as actuarially correct by the German statutory pension system. Benefits are increased by 6 percent for each year of later retirement.
- ⁹ BMGS (2003), summary, p. 5.
- ¹⁰ The latest developments in "Riester-pensions" see Bruno-Latocha/Tippelmann (2004).
- ¹¹ Holzmann (2003), p.12.
- ¹² RFV (2002), p.43.
- ¹³ Projections in the annual report of RFV 2001 were even more pessimistic. Projected average pension level declined to 45 percent for cohort born in 1985 down to around 40 percent for the cohort born after 1975. Differences between the years 2001 and 2002 were explained by RFV by a new calculation model with an somewhat different base for the income simulation for the future.
- ¹⁴ See table RFV (2002), p. 42.
- ¹⁵ PPM-Annual statistic 2003 shows that from the beginning in 2000 until the end of 2002 the losses in the premium pension accounts amounted to 37 percent on average. Until 2003 the losses were reduced to 31 percent on average.
- ¹⁶ Council of the European Union (2003), p. 174.
- ¹⁷ An insured person who earned 45 years long exactly average income ("standard pensioner") will receive the so-called "standard pension". The "standard pension level" is the relation of net standard pension and net average income of all insured.
- ¹⁸ Reimann (2004), p. 323.
- ¹⁹ Because of the new legislation of pension taxation enacted in 2005 the index needed to be changed from net calculation into a kind of gross calculation. In focus is now the standard pension level without taxation but taking into account the contributions in social insurance as health care and social long-term care insurance.
- ²⁰ See Scherman (2003), p. 311.
- ²¹ According to Scherman (2003) p.306 the risk of this mechanism being activated in the future was estimated around 30 percent by the turn of 2002/2003.
- ²² Schmähl (2004), p. 78; translated by the authors.
- ²³ Ruland (2003 a), p. 234.
- ²⁴ Sundén (2003), p.10.
- ²⁵ Until now, the German statutory pension system has sent out "pension information"-letters about the accumulated earning points and about benefit projections to certain age groups. From the beginning of 2005 each insured older than 27 and insured for at least 5 years will receive this yearly information letter.