MAX-PLANCK-INSTITUT FÜR SOZIALRECHT UND SOZIALPOLITIK
MAX PLANCK INSTITUTE FOR SOCIAL LAW AND SOCIAL POLICY

mea Munich Center for the Economics of Aging

# Take a chance on me - Can the Swedish premium pension serve as a role model for Germany's Riester scheme?

Marlene Haupt, Sebastian Kluth

01-2013

MEA DISCUSSION PAPERS

mea – Amalienstr. 33_D-80799 Munich_Phone +49 89 38602-355_Fax +49 89 38602-390_www.mea.mpisoc.mpg.de

**Alte Nummerierung: 266-13**

# Take a chance on me – Can the Swedish premium pension serve as a role model for Germany's Riester scheme?*

**Marlene Haupt**
Munich Center for the Economics of Aging (MEA)
at the Max Planck Institute for Social Law and Social Policy, Munich, E-Mail:
haupt@mea.mpisoc.mpg.de

**Sebastian Kluth**
Munich Center for the Economics of Aging (MEA)
at the Max Planck Institute for Social Law and Social Policy, Munich, E-Mail:
kluth@mea.mpisoc.mpg.de

January 20, 2013

* We thank Martin Gasche (MEA, Munich), Kornelia Hagen (DIW, Berlin), Tora Philp and Lars Billberg (Pensionsmyndigheten, Stockholm) and Marcela Cohen Birman (Swedish Social Insurance Inspectorate, Stockholm) for their helpful comments and discussions. We are grateful to Simon Angstmann for excellent research assistance. All remaining errors are our own.

**Abstract**

In the course of the ongoing debate regarding the critique of the German Riester pension the Swedish premium pension has often been referred to as a role model regarding potential amendments and reforms. The Swedish pension reform of 1998 has led to a reorganization towards a stratified scheme, consisting of a pay-as-you-go and a fully funded element. The mandatory implementation of the Swedish premium pension has proved to be the major difference in comparison to the voluntary German Riester pension. In addition, numerous differences between the two systems can be outlined, of which most are due to the differing methods of implementation in the country's old age provision system. This paper draws a comparison between the two systems with a special focus on the cost structure and evaluates the possibilities and limitations that arise from a complete adaptation of the Swedish premium pension (German premium pension) as well as a partial modification of the existing Riester scheme (Swedish-Riester). It becomes evident that costs are significantly lower in the Swedish system thanks to a rebate system and the centralization of administrative tasks within the Swedish Pensions Agency. However, despite systematic differences between the two schemes, the German Riester pension can particularly benefit from the Swedish premium pension with regard to transparent, coherent and consistent product information.

JEL Classification: D18, G23, H55

**Keywords:**
public-private pension mix, Riester scheme, transferability of social policies, international comparison

## 1. Introduction

The ten year anniversary of the German Riester pension triggered a series of papers that took stock of the reform as well as examining whether the state subsidized old age provision had met the social policy targets it was implemented to fulfill. The main criticism was that the products were considered to be expensive and insufficiently widespread. Further criticism was leveled against the high underlying life expectancy and the absence of standardized information that led to a lack of transparency and products that are hard to understand. When talking about necessary reforms of the Riester scheme the suggestions vary from small interventions, like the introduction of transparent and coherent information, to complete abolishment and transformation into a mandatory old age provision. As for potential reform role models, many turn to other countries. The Swedish system in particular is an example of a funded old age provision which is considered to be sustainable (Hagen and Reisch 2010, Hagen and Kleinlein 2011, Hahn and Neumann 2011, Wagner 2011). The OECD (2012) concludes that it is in principle advantageous to introduce a mandatory old age provision system or at least facilitate access to private pension schemes in order to close future pension gaps. In this context even Walter Riester (2012a, 2012b), the founder of the German Riester scheme, stated recently that the “true Riester pension” should be mandatory for everyone – like the Swedish system.

This raises the question - how does the Swedish funded old age provision work in detail and does it provide a suitable and unrestricted role model for Germany? This paper is structured as follows. Section two introduces the Swedish example of a fully funded pension scheme. Section three evaluates the institutional as well as conceptual differences with regard to the Riester pension. Section four conducts a meaningful cost comparison between the two countries. Finally, section five evaluates the possibilities and limits of a potential transfer of the Swedish model to Germany firstly as a complete adaption and secondly as an adaption of single elements only. Section six concludes.

# 2. The reform of the statutory pension system in Sweden

## 2.1. The old system and the reform process

Before the big pension reform of 1998, the first pillar of the Swedish pension system consisted of two tiers: On the one hand a universal flat rate basic pension *(folkpension)* which was means-independent and tax-financed representing a basic security for every resident. On the other hand an earnings-related defined benefit pay-as-you-go supplementary pension scheme (*allmän tilläggspension*) the amount of which was dependent on the individuals pensionable income[1] and years of insurance cover, transmitted into a point system (similar to earnings points in Germany). A full supplementary pension was received by those who had made at least 30 years of contributions or who had lived for at least 40 years in Sweden. To determine the individual pension benefits, the average points of the 15 best out of 30 years were used (15-30-rule). Pensions could be withdrawn upon reaching the age of 65, when using actuarial deductions or allowances between age 60 and 70 respectively. It was also possible to withdraw a partial pension to facilitate the gradual transition from work into retirement. In combination, the system of the basic and supplementary pension was able to provide a replacement rate equal to two-thirds of the gross income of the 15 highest income years (Wadensjö 1997, Anderson and Immergut 2006, Haupt and Sesselmeier 2011).

For almost all workers the statutory pension was supplemented by four collectively-negotiated voluntary occupational pension schemes. The main exceptions to this rule were the self-employed. Nevertheless, they could voluntarily join the private sectors' occupational pension schemes. Prior to the reform there was also the possibility to save privately for retirement, mostly by paying additional contributions to the occupational pension schemes or to collectively-negotiated contracts. Furthermore, there existed commitments based on the working contract. Additionally, individuals could also sign private pension schemes with insurance companies.

Although a pension commission appointed in 1984 could not agree on specific reform proposals, their final report released in 1990 made in particular the weaknesses of

[1] In the Swedish pension scheme, pensionable income includes earned income, income from self-employment and many state benefits. Non-pensionable income is capital income and social assistance benefits. In the old system, income was only pensionable up to a ceiling of 7.5 times the base amount *(prisbasbelopp)*. This ceiling was increased to 8.07 times the newly introduced income base amount *(inkomstbasbelopp)* in the reformed system. These base amounts are also used to calculate other social benefits.

the supplementary pension scheme clear, especially the weak link between contributions and benefits due to the generous 15-30-rule, as well as the system's weakened financial basis and its sensitivity to demographic and productivity changes.[2] Following this, a parliamentary working group was established to develop the general principles of a new pension system. They concluded their report in 1994. To work out remaining questions in detail, another commission for the implementation of the reformed system was established (implementation group). Because of extensive political negotiations in particular on the funded component and the pension adjustment mechanism, it took another four years until the Swedish parliament could hold a vote on the reform. Overall, the reform process lasted about 14 years, but finally found a firm parliamentary majority (257 in favor, 17 against and 16 abstentions), and has not been called into question since then (Andersson and Immergut 2006). Finally, on January 1, 1999, the reformed Swedish pension system came into force.

Within the reform, Sweden followed the multi-pillar model of the World Bank (1994) consisting of statutory, occupational and private pension schemes, but rather as a tier scheme where individual elements are built on each other and supplemented by a minimum safety element. For reasons of risk diversification, the system of universal and supplementary pension was replaced by a defined contribution system, consisting of a major pay-as-you-go component and a smaller funded element, supplemented by a means-tested guarantee pension *(garantipension)*. The retirement age was made even more flexible: When the beneficiary reaches age 61, benefits from the statutory pension scheme can be claimed. However, the means tested guarantee pension can only be claimed at the age of 65. Apart from that there is no further determination regulating the retirement age.

## 2.2. The realignment of the pay-as-you-go component

The main component of the current statutory pension system is a notional defined contribution earnings-related pension *(inkomstgrundad ålderspension)*. Here, 16 percent of the pensionable income is "accumulated" annually in an individual account. Since it is a pay-as-you-go system, where the current contributions finance the current pensions, this "accumulation" is not funded, but only notional. The

[2] For a detailed analysis of the need for reform see SOU (1990) and Könberg et al. (2006).

individual account balance grows both by annual contributions and an income index (determined by the growth in average income). When the systems liabilities exceed its assets, an automatic balancing mechanism is activated. Then, income indexation is suspended and pensions as well as pension balances are indexed by a change in the balance index. When the balance index reaches the level of the income index again, the balancing mechanism is deactivated and the pension system returns to indexation by income (Settergren 2001, Pensionsmyndigheten 2012b).[3] In contrast to the former pension system, the amount of the new pay-as-you-go pension depends on overall employment history, level of earnings and individual choice of retirement age. The actual amount of the annuity (monthly pension) is determined by the ratio of the accumulated account balance and an annuity divisor for the earnings-related pension[4] (dependent on the year of birth and age of retirement). Thus, each contributor can deal with the growing life expectancy individually by either working longer or accepting lower pension payments (Haupt and Sesselmeier 2012).

### 2.3. The introduction of a mandatory funded scheme

For many people, the introduction of a mandatory funded element within the first pillar represents the real innovation of the reform. The premium pension *(premiepension)* is a fully-funded defined contribution scheme where an additional 2.5 percent of pensionable income is placed in an individual investment account.[5] Through the introduction of the premium pension, elements of social and private law have been intertwined in the statutory pension system for the first time. On the one hand, the principle of compulsory insurance applies with corresponding social security regulations. On the other hand it created private law claims and the insured can freely decide on their fund portfolio. To administer contributions to the premium pension accounts and to make contracts with funds, a state agency, the Premium Pension Authority was established in 1998. However, in 2010, the duties of this

[3] Since 2010 the automatic balancing mechanism is activated and pensions and pension balances are therefore indexed by the balance index.

[4] The annuity divisor for the earnings-related pension considers demographic and economic developments. It assumes an interest rate of 1.6 percent in nominal terms, applies to women and men alike and is cohort-specific based on the average life expectancy at the earliest possible retirement age. Up to the age of 65, the divisor is adjusted for every insurant according to the latest statistics and remains constant thereafter.

[5] Initially, the commission proposed a contribution rate of 10 percent to be implemented in the funded scheme. In the political negotiation process the parties finally agreed on 2.5 percent. The Social Democrats were in favor of a full continuation of the pay-as-you-go system. However, other parties called for a greater proportion of the funded system.

agency were transferred to the newly established Swedish Pensions Agency *(Pensionsmyndigheten)*, which took over responsibility for all national pensions. The purpose of this reform was to simplify administration as well as to offer information and give advice to the consumer in one and the same place.

In the premium pension, the investment decision is basically taken by the insured. In accordance with their individual risk preferences they can individually choose up to five funds from a pool[6] of agency approved funds. As the system is mandatory, the contributions will be invested automatically in a default option, administered by a state agency (AP7), if the insured does not wish to make any active choice in selecting funds. With the introduction of the funded scheme, a public default fund, the Premium Savings Fund *(premiesparfonden)* was launched which was replaced by the fund AP7 Såfa by May 24, 2010. In fact AP7 Såfa, the national generation management option, does not exist as a separate fund. It is a mixture of an equity fund[7] *(AP7 Aktiefond)* and an interest fund[8] *(AP7 Räntefond)* managed by the agency that adjusts the individual risk according to the insured's age (generation fund).[9] The investment goal of AP7 Såfa is to achieve a performance that is at least as good as the average of the privately offered products (AP7 2012a). In addition to the default option, the agency offers three other portfolios as well as the equity and interest fund independently (Table 1).

[Table 1 about here]

Neither the default fund AP7 Såfa nor the three portfolios *(Försiktig, Balanserad and Offensiv)* can be combined with other funds. However, since 2010, the insured has the opportunity to select and leave AP7 Såfa at any time. In contrast, the equity and interest fund can be combined with the private industry funds.

[6] Shortly after the introduction of the premium pension individuals could already choose from 644 funds managed by 87 fund companies. Currently, 797 funds are authorized and managed by 99 fund companies. Of those funds, 72 percent are equity funds, 15 percent are interest funds and the remaining are generation and balanced funds (Riksförsäkringsverket 2003, Pensionsmyndigheten 2012b).

[7] The equity fund invests in a global portfolio of stocks. In 2012 the main investment regions were North America (49.6 percent), Europe (excluding Sweden) (32.3 percent) and Japan (7.5 percent).

[8] The interest fund invests in fixed-interest securities like government or corporate bonds. In 2012 the most important portfolio holdings were Svenska staten 1041 (19.6 percent), Swedbank Hypotek 166 (13.2 percent) and Nordea Hypotek 5526 (12.5 percent).

[9] See Appendix A for the age-adjusted portfolio of AP7 Såfa.

## 3. The differences between the Swedish premium pension and the Riester pension

The first difference lies in the **voluntariness** of both systems. In Sweden every insured person has to contribute towards the premium pension. It is not possible to opt-out of the system. In contrast, the purchase of a Riester contract in Germany is voluntary and the decision to enter into a contract is made individually. There is no legal compulsion in the German system.

The historically determined differences in the design of the two systems, national insurance in Sweden and employee insurance in Germany, yield to differences in **coverage**. The mandatory insurance in Sweden guarantees a complete coverage of the Swedish population who are of working age and receive pensionable income. In contrast, the German Riester scheme is only available for a limited group of people that are directly or indirectly eligible according to § 10 of the German income tax law (Einkommensteuergesetz (EStG)). Those who are not directly eligible are liberal professionals who are members of occupational chambers and compulsorily covered through occupational provision institutes *(berufsständische Versorgungswerke)*, the voluntarily insured and marginally employed persons that are exempt from the compulsory insurance as well as self-employed that are not subject to the statutory pension insurance scheme. Indirectly eligible is every spouse of a directly eligible person (§ 79 EStG). As a consequence an indirectly eligible stay at home husband or wife could purchase a Riester contract in Germany, but would not be covered by the premium pension in Sweden.

Due to its mandatory nature, the Swedish premium pension does not offer any **subsidies** because the state does not need to provide an incentive in order for individuals to enroll. In consequence of its politically deliberated voluntariness the Riester pension is subsidized over two instruments. On the one hand Riester savers receive a lump sum payment of 154 € as well as 185 € for every child eligible for child benefits born before 2008 and 300 € for every child born after 2008 respectively (§§ 84, 85 EStG). Furthermore, the contributions towards a Riester contract are tax deductible up to 2.100 € (§ 10a EStG). If the tax break exceeds the lump sum payments it is offset against the lump-sum subsidies and the contract holder benefits from the resulting difference (§ 10a EStG).

The wish to benefit from the returns of the capital market was a central argument in favor of a fully funded old age provision element. Nevertheless there are differences in the products that are available in the two pension schemes. In Sweden all contributions are invested in the capital market. If the insured does not make an investment decision, the money goes towards the default fund AP7 Såfa. The Riester pension in Germany provides additional investment possibilities. The Riester saver can invest in a Riester fund similar to the Swedish system. Furthermore, there is the possibility of a Riester pension insurance contract, a bank saving plan or an owner occupied housing contract *(Wohnriester)*.[10] All options in both countries serve to establish an additional old age provision pillar besides the public pay-as-you-go pension system. Both systems allow for individual investment decisions.

One crucial difference becomes evident when looking at **implementation** within the old age provision system. The Swedish premium pension is established within the public provision for old age. In contrast, the German Riester pension is mainly established within the private old age provision.[11] The contract is concluded with a private provider and the Riester saver is entitled to property claims under private law.

The fully funded components in both countries work with different **contribution rates**. In Sweden 2.5 percent of the pensionable income is paid into one's individual premium pension account. It is not possible to pay a lower or higher contribution rate. In Germany the maximum subsidized contribution rate is currently 4 percent of the relevant basis of assessment (*Bemessungsgrundlage*) (§ 86 EStG). If one sets these contribution rates in relation to the contribution rates of the pay-as-you-go element in both countries, 13.51 percent of the combined total contributions towards the individual old age provision is paid towards the premium pension in comparison to up to 16.95 percent paid towards a Riester scheme in Germany.[12]

In both countries contributions have only been paid to a certain **upper limit**. In general the implementation of the Swedish premium pension in the first pillar of old

[10] In a bank saving plan the contributions are booked to an individual account that underlies a certain interest rate, for example the current yield of German treasury bonds. Any owner occupied housing contract supports the acquisition of an owner occupied property under the terms of the German home ownership pension act (Eigenheimrentengesetz (EigRentG)). The investment is therefore underwritten by the property.

[11] Furthermore, there is the possibility to benefit from the Riester subsidies via an occupational pension plan.

[12] In Germany it is possible to pay a contribution that exceeds the subsidized 4 percent of the relevant basis of assessment. The analysis in this paper will be restricted to the subsidized part of individual contributions.

age provision leads to contributions of employees as well as employers. It is important to note that the contributions are not split equally between the two. The employee pays a contribution rate of 7 percent up to 8.07 times the income base amount. For the employers there is no upper limit and as a consequence they always have to pay their contribution of 10.21 percent of the wage bill. In Germany each Riester saver has to pay 4 percent of the relevant basis of assessment minus the lump sum subsidies, but at least 60 € p.a., in order to receive the maximum state subsidy. The absolute subsidized contribution amount for each contract holder is capped at 2.100 € minus the lump sum subsidies (§ 86 para. 1 EStG).

The contrasting methods of implementation in Sweden and Germany also lead to differences in **administration**. In Sweden the Swedish pension authority serves as the central execution and accounting agency for the premium pension and serves as the intermediary, more precisely a clearing house, between the insured and the fund providers who are responsible for all financial transactions. Additionally, the account management and the pension payment are carried out by the pension authority. Due to bulk investments the fund providers know the total investment sum but not the contributions of each single contributor. In contrast, in Germany sales and administration of all Riester contracts are enforced by the private providers. Merely the subsidy coordination is conducted centrally by the Central Benefits Authority for Old-Age Provision *(Zentrale Zulagenstelle für Altersvermögen)*.

Additional differences exist regarding the **pay-out rules**. In both countries the insured receive an annuity when they claim their pension. In Sweden the pay-out in form of an annuity is compulsory and can be requested after the age of 61, a lump-sum payment is not possible. The insurant has to choose between a fixed (guaranteed) or a variable annuity, in doing so drawing a premium pension does not depend on drawing a pension out of the pay-as-you-go system (Könberg et al. 2006). It is also possible to claim a partial premium pension. The calculation of the individual premium pension is similar to the calculation of the public pay-as-you-go pension. The current balance of the individual premium pension account is divided through an annuity divisor for the premium pension.[13] If the insurant opts for a guaranteed annuity all funds are sold by the pension authority and the calculated annuity is paid monthly. The annual pension increase is linked to the performance of the capital

[13] Note that there is not only one annuity divisor in the Swedish pension system, but one for the pay-as-you-go pension and one for the premium pension.

stock of the pension authority. If the insurant opts for a dynamic annuity the pension authority only partially sells the individual fund capital to satisfy the annuity payments for the following year. In detail the individual funds are sold on a monthly basis, however the premium pension is determined on an annual basis. In Germany the pay-out phase starts at the earliest at 60 or at 62 for contracts that were concluded after 2011. The insurant can choose to receive a lump-sum payment of a maximum of 30 percent of his accumulated capital and the remaining assets are converted into an annuity. In contrast to the Swedish premium pension it is not possible to draw a partial Riester pension. It is also important to note that in both countries all pension payments are fully taxable during the pay-out phase.

A crucial difference from the individual perspective has to do with **risk mitigation and return opportunities**. In Sweden every individual bears the capital market risk of their investment personally and to the full extent. Turbulence in the capital markets directly affect the personal pension benefits, a risk mitigation element does not exist. In case of a recession, accompanied with a plunge in stock prices, the insurant often has only the option to opt for a variable annuity in the hope that the stock market will go up again in the near future. In contrast, every Riester contract underlies a contribution guarantee. Every provider has to ensure a minimum pension pay-out that is at least equal to the individual contributions plus the state subsidies (§ 1 para. 1 Nr. 3 Pension Provision Agreements Certification Act (Altersvorsorgeverträge-Zertifizierungsgesetz (AltZertG))). Therefore, every Riester saver also bears the capital market risk, but this risk has a lower limit due to the contribution guarantee. As guarantees do not come for free, a contribution guarantee lowers the expected return of a Riester contract. Furthermore, the different product types that count as a Riester contract lead to a different risk-return structure. For example, a Riester bank saving plan has a lower risk compared to a Riester fund saving plan, but on the other hand can also be expected to have on average a lower return.

Besides the pension volume, the pay-out duration is an important parameter. The Swedish premium pension as well as the German Riester pension insure against the individual **longevity risk**. Every premium pension recipient is entitled to receive an annuity until their death. As a consequence the annuity payments can exceed the value of the personal premium pension account, particularly for men and women who live long lives. The Swedish Pensions Agency is instructed to make a calculation that provides sustainability to the degree that lifelong payments can be guaranteed.

However, the pension authority has the right to amend pension payments for future and current retirees in the case of an unexpectedly sharp increase or decline in mortality rates.[14] The agency works independently, however in the case of financial difficulties the Swedish state is expected to secure pension payments.[15] In Germany every Riester saver gets a guaranteed lifelong annuity (§ 1 para. 1 Nr. 4 AltZertG), whereby the longevity risk remains with the private provider.[16] In contrast to the Swedish Pensions Agency, a Riester provider is not able to lower its pension payments to those who are already drawing a pension on the grounds that there has been an unexpected change in overall mortality trends. However, in the case of future retirees mortality tables can be amended.

The calculation of the longevity risk is thereby crucially dependent on the **underlying life expectancy**. In this context, one has to consider that both countries have to offer unisex-conditions, which means that the underlying life expectancy is derived from a mixed calculation between the average life expectancy for men and women.[17] In Sweden the underlying life expectancy is derived from the cohort life tables of Statistics Sweden (*statistiska centralbyrån*) that represent the average life expectancy of the total Swedish population. In contrast the life expectancies underlying a Riester contract are derived from special cohort life tables of the German Association of Actuaries *(Deutsche Aktuarvereinigung)* that are meant to represent only those that hold a private old age provision contract. The weighting factors of the average life expectancy of men and women vary over the different Riester providers. In general it holds that the higher the weighting factor of the female life expectancy the higher the underlying unisex life expectancy. Overall, the implied life expectancies are considerably higher when compared to the life expectancy for the overall population. The use of special life tables stems from the fact that the Riester scheme is voluntary. This voluntary nature is expected to cause a selection effect. The providers assume that people with high life expectancy are more likely to

[14] For this purpose the Swedish pension authority normally updates their life tables every three years according to the latest mortality trends.

[15] Note that the state will only intervene in very drastic situations. Even during the current financial crisis the Swedish Pensions Agency was operating independently.

[16] This also holds for Riester bank or fund saving plans where the insurant receives a guaranteed annuity after the age of 85. In order to provide that, the insurance company has to build up reserves out of the individual capital stock of every insurant and then convert these reserves into a lifelong annuity when the insurant turns 85.

[17] See European directive 2004/113/EG section 14.

purchase a Riester contract and therefore the overall underlying life expectancy for the calculation of their contracts has to be adjusted upwards.

From the consumers point of view the **bequest possibilities** play an important role because they cover surviving dependents financially. In the Swedish premium pension one can buy a survivor pension once the premium pension is drawn and certain criteria are met. The premium pension level is adapted according to the age of the insured and his or her partner. If the primary insurant dies, the dependent will continue to receive a lifelong annuity. In Germany the bequest possibilities vary between the three different phases of a Riester contract. If a Riester saver dies within the accumulation phase the spouse can transfer the capital, including all subsidies, to their own Riester contract within two years (§ 93 para. 1(c) EStG). Children and other dependents only inherit the contributed capital minus all subsidies after costs. If the Riester saver dies in the pay-out phase but before the age of 85 the bequest possibilities depend on the contract type. Capital from a bank or fund saving plan is inherited by the dependent, but all subsidies have to be paid back. For classical pension insurance it depends on the terms and conditions of the contract. It is possible to agree on a guaranteed pay-out period. If the insurant dies before receiving a pension for the guaranteed period his dependents will receive the pension for the remaining time. If the Riester saver dies after the age of 85 there will be no bequest possibilities.

Next, the **transparency** of both pension systems has to be compared. The Swedish pension authority provides the insured population with an annual information statement, the so called orange envelope, which gives them an update about their entitlement under the public pension system. More precisely it clarifies their expected benefits from the public pay-as-you-go pension as well as the premium pension. The aim is to inform the individual about the potential need to engage in supplemental old age provision. Furthermore, detailed information is provided by the Swedish Pensions Agency’s website. Due to the differences in the implementation of the Riester pension and the premium pension within the pension system, information in Germany is provided through various sources and is therefore less standardized in comparison to Sweden. The German insurant only receives information regarding his public pension benefits via the information letter from the German pension authority *(Deutsche Rentenversicherung)*. The duty to supply information regarding a Riester contract lies with the respective provider. The information requirements vary before and during the accumulation phase (§ 7 para. 1-6 AltZertG). Before the conclusion of a contract the provider has to clarify the amount and the timely distribution of the acquisition fee and the administration costs. During the accumulation phase the provider has to inform the customer annually about the usage of the paid contribution, the capital accrued over time, the pro-rata deductions due to acquisition fees and provision, the administration costs for the capital accrued or the granted loan as well as the revenues earned (§ 7 para. 4 AltZertG). Despite these information requirements the cost structure remains complex due to the different cost components besides administration costs. The information regarding the premium pension in Sweden are considerably less complicated and therefore easier to understand.

Finally, a crucial difference is the **cost structure** of the two pensions. Due to the mandatory nature of the premium pension there are no acquisition expenses in Sweden. Furthermore, if an insurant wants to change the personal fund composition this can be done free of any costs. The only costs are the annual administration costs charged by the Swedish Pensions Agency and the fund management fees charged by the fund manager that vary according to the portfolio structure that determines the administrative effort. Both cost elements are charged as a percentage of the individual account balance. The administration costs have significantly declined from 0.30 percent since the introduction of the premium pension in 2002 to 0.11 percent in 2011. There is also an absolute upper limit for the administration costs that is currently 110 SEK p.a. (Pensionsmyndigheten 2012c). The pension authority expects these expenses to decline even further down to 0.03 percent by around 2020 due to a grow in the funded capital (Pensionsmyndigheten 2011). The average annual fund management fees in 2011, weighted according to the investment sum, were 0.30 percent of the current account surplus. Similarly to the administration cost the fund management fees have declined from 0.44 percent in 2002 down to 0.30 percent in 2011. The reason for this decline lies in the so called rebate system that the Swedish pension authority enforced on every fund that wants to participate in the system. The basic idea of the rebate system is that a fund has to grant a reduction in fund management fees as it attracts more capital through the premium pension.[18] The accumulated costs for the individual depend on administration costs, fund management fees, the accumulation duration, the expected annual wage growth and

[18] See Appendix B for a detailed description of the Swedish rebate system.

the expected annual return on capital. For Riester contracts the total costs are made up by different cost components that vary depending on the contract type and provider. When concluding a contract the consumer usually has to pay an acquisition fee as well as a commission that need to be spread over a minimum of the first five years of the accumulation phase as long as they are not deducted as a percentage from the old age provision contributions (§ 1 para. 1 Nr. 8 AltZertG). If the insurant wants to switch to another Riester contract, in contrast to Sweden, he has to pay a fee. Additionally and similarly to Sweden a Riester saver has to pay annual administration fees that vary a great deal according to the contract type and provider. Thus far, and due to the complex cost structure, not much is known about the accumulated costs of a Riester contract. Any cost comparison between different Riester contracts is difficult because of the different contract types but also because of the different cost declarations of the providers (Oehler 2009, Kleinlein 2011). In order to shed some light on the question of overall costs, chapter 4 is going to conduct a cost comparison between the Swedish default AP7 Såfa and fund based Riester products. At the end of this chapter table 2 summarizes the characteristics and differences of the two schemes.

[Table 2 about here]

## 4. A meaningful cost comparison

In the following chapter we will compare the costs of the default product in the Swedish premium pension with the costs of different Riester fund contracts. The analysis is done for the accumulation phase only, meaning that it accounts for all costs up until the pension is drawn. The reason fund based Riester contracts were chosen is that, if one wants to perform a meaningful cost comparison between the two systems the products need to have a similar investment structure and strategy. In Sweden the default fund AP7 Såfa can be considered the most important product with a market share of 44.11 percent of all insured and 26.60 percent of the invested capital. The AP7 Såfa works as a generation fund, meaning that it shifts the investments from risky (equity funds) to less risky (interest funds) assets when the insurant gets older. In Germany fund based contracts are the second most popular investment form within the Riester scheme.[19] In 2012 around 3 million people were subscribed to Riester fund contract. Competition and concentration of market shares vary across the different Riester products. On the market for the most popular Riester type, the classic Riester pension insurance contracts, a great number of providers offer their products and market shares are not highly concentrated over just a few companies. In contrast, in the market for Riester fund contracts market shares are relatively concentrated over just a handful of providers. Our cost comparison focuses on three specific contracts of three providers, including the market leader the UniProfiRente issued by Union Investment[20] as well as the DWS RiesterRente Premium and the Deka-ZukunftsPlan Select. All three products regroup individual investments during the accumulation phase and are based on a mix of at least one equity and one interest fund.

[Table 3 about here]

Table 3 shows the different fund based products that enter our cost comparison. In Sweden there are only proportional annual costs expressed as a percentage of the total balance. The fund managers, both of the equity and interest fund, charge an annual management fee (FM) and the Swedish Pensions Agency charges an annual administration fee. The cost structure of the three Riester products investigated in this paper are more complex. In the case of the UniProfiRente and the Deka-ZukunftsPlan Select the insurant has to pay the fund manager an annual fee that is referred to as the total expense ratio (TER). Furthermore, on each contribution and subsidy that is invested into a fund the provider charges a one-off initial sale charge *(Ausgabeaufschlag)*. Another minor cost element is the annual lump sum account fee. In the case of the DWS RiesterRente Premium no initial sale charge has to be paid but instead the consumer has to pay an acquisition and distribution fee that varies from 5 percent on subsidy payments to 5.5 percent for individual contribution. It is important to note, that the predicted acquisition and distribution fees for the sum of individual contributions over the whole accumulation phase are allocated over minimum the first five contribution years (§ 1 para. 1 Nr. 8 AltZertG). This regulation

[19] Market shares of different Riester forms at the end of the third quarter 2012: 69.90 percent pension insurance contracts, 19.02 percent fund contracts, 6.15 percent owner occupied housing contracts and 4.93 percent bank saving plans (BMAS 2012).
[20] The UniProfiRente had a market share of 64 percent on the market of fund based Riester contracts as per October 31, 2012.

reduces the expected return, because higher costs at the beginning have a higher relative importance due to the compound interest effect.

In Sweden the assets are shifted step by step from the equity towards the interest fund when the insurant gets older. In Germany the portfolio composition of the Riester fund product depends not only on the age but also on the climate in the capital market. At the beginning of the accumulation phase the Riester saver is usually only invested in the equity fund, then a couple of years before the Riester pension will be drawn the portfolio is shifted gradually towards the interest fund that guarantees steadier returns on a lower level (compared to the equity fund). However, in the case of a sharp downturn in the stock market the money can also be shifted earlier from equity to interest funds because the provider has to ensure the premium guarantee that underpins every Riester contract. With regard to the costs for the individual, table 3 shows that in both countries the equity funds are more expensive compared to the interest funds. This holds for the fund management fee in the Swedish default as well as for the total expense ratio and the initial sale charge that the consumers have to pay when investing into a fund based Riester contract. Therefore, the total costs of a contract are dependent on the portfolio regrouping strategy over the entire accumulation phase. The longer the portfolio is mainly invested in equity funds the higher the overall costs. From the consumers perspective costs are relevant because costs lower the return of their investment, however in the end only the return after costs matters. Therefore, high costs are not necessarily disadvantageous for the consumer if they guarantee higher net returns. In our cost analysis we account for this fact by comparing the costs that would result if all providers, including the Swedish default, would invest and regroup according to the strategy of UniProfiRente, the market leader in Germany. In other words, we make sure that in our calculations all products are always equally invested in equity and interest funds and that one product cannot achieve lower costs simply by investing mainly in less cost intensive interest funds that can be expected to achieve lower returns.[21] We chose an investment strategy from the Riester scheme as our base scenario because the Swedish portfolio structure, where the participants are permanently invested in the equity fund even after drawing their pension, seems

[21] Naturally performance can still vary across the different products, even with a comparable ratio between equity and interest funds. However, if one looks at the investment structure of the different funds in the same category (equity or interest fund) they can be expected to produce similar performances.

unrealistic for a Riester product in Germany due to the premium guarantee. This guarantee implicitly forbids a Riester provider from adopting the relatively more risky regrouping strategy of the Swedish premium pension, because he has to ensure financial sustainability in order to pay back, at least in nominal terms, all contributions and subsidies.

Our comparison is based on a medium skilled worker with a starting gross salary of 30.000 €.[22] Further, we assume a contribution period of 40 years and an annual wage growth of 2.5 percent.[23] Regarding the underlying fund return we calculate using two scenarios. In the scenario “high capital returns” we assume an annual return on the equity funds of 8 percent and an annual return of 5 percent on interest funds. In the scenario “low capital returns” we assume an annual return of 5 percent on equity and 2 percent on interest funds.[24] For each contract two cost figures are calculated, total costs[25] and the reduction in yield.[26]

[Table 4 about here]

Table 4 shows the result for the three Riester contracts and the Swedish default. It becomes evident that there is a huge cost advantage in the Swedish system. In the Swedish default AP7 Såfa total costs are only around 6 percent in both scenarios compared to total costs between 27.85 and 40.97 percent for the three Riester contracts. In terms of the reduction in yield our hypothetical Swedish saver achieves an annual return that is only marginally lower (between 0.15 and 0.17 percent) compared to a world without any costs. For our three Riester contracts the reduction in yield shows much higher values between 0.83 and 1.36 percent. One should note that due to the compound interest effect, costs are actually increasing with higher returns on capital. As mentioned earlier from the consumer’s perspective only the net return matters. However, the differences between the two scenarios are relatively

[22] For the cost analysis the starting salary is only of minor importance because the majority of all relevant costs are expressed in relative terms. Only in the case for the Riester contracts the account fees are lump sum costs. Nevertheless the presence of lump sum costs makes it necessary to make some assumption about the starting salary.

[23] The calculation assumes that the current contribution limit of 2.100 € minus the lump sum payments will be raised in the future in such a way that it does not affect the medium earner in our calculation.

[24] The first scenario is derived from historic performances of the last decades. However, given the current returns on the capital marked it seems appropriate to expand the analysis using more pessimistic assumptions in the second scenario.

[25] The cost figure total costs refers to the ratio between the balance of an account with the costs actually charged and the balance of an account without any costs. $Total\ costs = 1 - \frac{balance\ with\ costs}{balance\ with\ zero\ costs}$

[26] The reduction in yield expresses by how much the costs lower the annual return of a given contract.

small and the position of the different contracts in our cost ranking remains unchanged. In other words, the cost advantages and disadvantages for the consumer are independent of the performance of the capital markets. Furthermore, the table demonstrates how different cost figures can convey a very different impression whether costs can be considered high or low. For example if the headline would be “total costs almost 41 percent”, individuals would probably perceive such a contract as expensive. In contrast if the message is framed as “reduction in yield only 1.36 percent” most consumers probably think they are faced with a rather cheap contract, even though one is talking about the same product.

In summary, the organizational structure, namely the clearing house model, enables the premium pension system to work in a much more cost efficient manner than the German Riester pension. Expressed in numbers, the Swedish insurant who invests in the default can expect to achieve an annual return on their investment that is roughly one percent higher compared to the Riester savers that invest in a fund based product.[27]

## 5. The transferability to Germany

The “Swedish Pension Model” is often mentioned when certain features of the Riester pension are criticized. In this context the Swedish premium pension is considered to be particularly advantageous with regard to cost structure, underlying life expectancy and transparency. A closer inspection reveals that most of these “advantages” are based upon the overall pension system in Sweden and cannot be copied by the Riester pension without restrictions. As a consequence one has to ask the question to what extent the Swedish model of the premium pension can be entirely transferred to Germany and what the consequences of such a transfer would be. An alternative approach analyses to what extent potential problems in the Riester system can be resolved by a partial adoption of the premium pension system. In other words, is it helpful to refer to the premium pension when dealing with flaws in the Riester pension or are the advantages of the premium pension ultimately only

[27] On top of the cost advantage during the accumulation phase a Swedish insurant can expect a higher pension payment per Euro of his account balance at retirement due to the fact that the Swedish Pensions Agency calculates with lower life expectancies compared to the Riester providers in Germany.

based upon the superior Swedish pension system and can therefore not be partially adopted?

### 5.1. A System change: The “German premium pension”

A one-to-one adoption of the Swedish fully funded old age provision element is generally conceivable. The “German premium pension” would be a mandatory old age provision that includes the total labor force. The central administration of the default product and the individual accounts, as well as the insurance against the individual longevity risk, could be ensured through the German pension authority.

The German old age provision system is designed as employee insurance and not as labor force insurance. The latter guarantees a more extensive cover also for groups like marginally employed, self-employed, civil servants and freelancers that are thus far not automatically covered by German public pension scheme. Therefore a complete adaptation would not suit the “inhomogeneous” German system as described above. Apart from that, one can think of numerous hurdles regarding the introduction of a “German premium pension” that go beyond the systematic problem. In order to manage the new premium pension additional administration structures have to be established to enable the responsible authority to be an appropriate negotiating partner with the fund companies. Furthermore, one would need to create a standard product. The implementation of all these necessities would not be possible without sufficient preparation time. With reference to the Swedish model, a complete adaptation would probably lower the overall costs of the premium pension. This system-related advantage would be generated due to better bargaining power of a centralized authority and also due to the fact that a German premium pension would not include a premium guarantee.

Existing Riester contracts would probably stay untouched after the implementation of a new system due to the legal bond between customer and provider, albeit other solutions would be conceivable. In the course of a consistent paradigm shift the old Riester contracts would not be subsidized anymore and would therefore be on par with a purely private old age provision contract for the remaining accumulation phase. Nevertheless, every Riester saver could still benefit from the subsidies that were already paid towards a contract through the compound interest effect. On the other hand, people now still holding a Riester contract would be burdened with increased contributions as they would have to contribute to the new mandatory system as well as their old Riester contract. From a consumers point of view a suspension of their contract would be particularly disadvantageous if the contract was purchased recently because this would mean that the acquisition fee as well as the commission would carry a negative weight and would be expected to drastically lower the return.

Apart from the problems already mentioned above there are various additional legal and organizational problems. Against this background the implementation of a “German premium pension” seems fairly undesirable. It is also questionable whether a new system would lead to a better acceptance of the German old age provision system within the population. Instead it seems more practical to analyze to what extent partial elements of the Swedish system can be adopted by the Riester pension without a complete adaptation and introduction of a “German premium pension”.

### 5.2. A partial adoption: The Swedish-Riester

At first glance a partial adoption of certain elements of the Swedish premium pension seems extremely desirable because it promises to overcome existing flaws within the Riester system. The next section aims to evaluate to what extent the main points of criticism can be eliminated by a partial adoption of the Swedish premium pension (Sweden-Riester).

One criticism is that even after 10 years the **coverage rate** of the Riester pension is only 40 percent and therefore more than half of all eligible persons still do not possess a Riester contract and therefore cannot benefit from the state subsidies. The comparison with the Swedish system is not very fruitful as in Sweden the premium pension is a mandatory insurance which by definition leads to a coverage rate of 100 percent. A partial implementation of the Swedish model in order to increase the coverage rate in Germany is therefore only possible if Germany would be willing to make the Riester pension mandatory.

The implementation of a **mandatory system** would lead to numerous difficulties. According to the Swedish model all individuals that are part of the pay-as-you-go statutory pension insurance but thus far do not possess a Riester contract would be transferred into a state administered standard Riester plan. However, the problem that arises with this course of action is that contributors to statutory pension insurance are not necessarily congruent with the people directly and indirectly eligible for a Riester contract. An indirectly eligible stay at home husband or wife could, for example, freely choose whether he or she wants to buy a Riester contract, whereas an employee subject to social insurance contribution would automatically be included in the mandatory Riester system. Furthermore, there are additional problems regarding justification and implementation that are not addressed further here.

In addition one could consider transferring the **longevity risk** of a Riester contract directly to the pension authority. When drawing a Riester pension the individual account would be sold by the provider and the money would be transferred to the pension authority. The authority would administer the capital as well as calculating and paying cohort specific lifelong annuities. The activity of the Riester provider would be limited to the administration and investment of all contributions during the accumulation phase. Consequently Riester providers would no longer act as insurers which seems strange considering that Riester insurance contracts are among the main contract type within the Riester scheme. The bundling of the longevity risk at one center reduces the risk variance and enables a calculation with a lower risk buffer. The annuities themselves do not primarily depend on the risk buffer but on underlying life expectancy. These underlying life expectancies are not automatically reduced through a risk transfer towards the pension authority.

This highlights another controversial aspect of the Riester scheme. As already mentioned in chapter 3, the providers use special life tables when calculating a Riester annuity. These **life tables** are often criticized not only because they lead to relatively high life expectancy predictions, but also because these life expectancy predictions have gone up significantly since the introduction of Riester contracts in 2001 (Hagen and Kleinlein 2011). The advantage of the Swedish system is that it calculates and works on the basis of lower life expectancies which results in higher annuity payments. However, the ability to use lower life expectancy predictions stems from the mandatory nature of the Swedish scheme combined with the right to continuously update the underlying life tables according to the latest mortality trends. The premium pension insures the total population in Sweden and the longevity risk is concentrated at one central government agency. This prevents any risk selection outside or inside the insurant pool and allows the calculation to be made using the ordinary cohort life tables for the entire population. The Swedish Pensions Agency wants to ensure that the payout profiles are realistic and not unnecessarily conservative (Pensionsmyndigheten 2011). Furthermore, there is no need for particularly large safety buffers to prepare for the eventuality of an unexpectedly high increase in overall life expectancy because the pension authority updates the annuity divisors for the premium pension once every three years. In other words, if there is a particularly large decrease in mortality rates all annuity divisors are increased, which results in lower pension payments. This updating process affects not only future but also current retirees. The underlying life expectancy of a Riester contract appears indeed very optimistic, but a reduction down to the average life expectancy of the German population is also not possible due to potential selection effects caused by the voluntary nature of the Riester contract and the need for a conservative calculation by a private provider because there is no possibility to account for an unexpected drop in mortality rates once the Riester pension is drawn. One way in which the underlying life expectancies in Germany could be lowered is by adapting the German calculation to resemble the Swedish updating procedure. The first order life tables of the German Association of Actuaries, which are used for the annuity calculation of every Riester contract, explicitly incorporate a loading charge for potential predictive errors. In case no predictive errors materialize the providers realize risk profits of which they have to return at least 75 percent in the form of annually allocated profit shares (§ 4 para. 4 Minimum Transfer Directive (Mindestzuführungsverordnung (MindZufVO))). From an individual perspective this can lead to intergenerational redistribution, e.g. providers might realize mortality and risk profits at the expense of the first Riester generation and then redistribute a certain share of these profits to the second Riester generation. If the providers were given the right to continuously update their life tables they could abolish the loading charge for predictive errors. As a result the providers would be able to pay higher annuities, but might lower the annuity payment over time due to updates in mortality trends. Further, it would mitigate the problem of intergenerational redistribution as mentioned above. In the Swedish case the updating process is carried out by the Swedish Pensions Agency on the basis of updated life tables that are calculated by Statistics Sweden. Similarly, in Germany the updating process would need to be conducted by an independent authority that guarantees a transparent calculation of the corresponding life tables.

One of the main hopes when analyzing the Swedish premium pension model is that this analysis might offer a means by which the **total costs** of a Riester contract may be lowered. However, this reference to the premium pension is only partially useful.

In the mandatory system there are no commission or acquisition fees payable. In addition, the reduction in market players allows for additional cost advantages with regard to market supply and demand. Furthermore, the overall costs are relatively modest because the Swedish pension authority enforces a rebate system on all participating funds that keep the fund management fees low for the insured. On the supply side the funds benefit from economies of scale through the relatively large investment sums and the fact that the pension authority takes care of a lot of the administration tasks. The overall costs tend to be lower in the Swedish system, however relatively expensive funds are offered in both countries. For the insurant ultimately only the net return on their contracts matter, that means the gross return minus all costs. Any cost comparison should therefore only look at similar products that have a comparable investment structure and therefore comparable overall costs (see chapter 4). The aim to achieve lower costs is also addressed in the current pension reform plans. Critiques from various consumer organizations as well as new scientific research has resulted in a plan to create an upper cost limit for Riester contracts, for example limiting switching fees to a maximum of 150 €.

The most important aspect of a partial adaptation is certainly to increase transparency. The clear investment possibilities within the premium pension are not caused by limited range of products. Despite approximately 800 funds[28] holding licenses to offer premium pension investment opportunities, for the consumer it remains possible to compare and understand the different funds due to the provision of many sources of information. First of all, the Swedish pension authority offers a systemized online fund brochure *(Fondkatalogen för din premiepension)* providing the following information for every fund registered within the premium pension system: Fund type (stocks, bonds, hybrid or generation funds), fund number, fund and company name, a short product description (two to three lines provided by the company), fund costs (gross and net), risk classification (ordered on a traffic light scale in five colors from green to red), last year's performance, average performance over the last five years, rating and a reference if ethnic and ecological criteria are

[28] The premium pension portfolio allows for a combination of up to 5 different funds which in turn leads to a possible $\binom{797}{1}+\binom{797}{2}+\binom{797}{3}+\binom{797}{4}+\binom{797}{5}$ combinations for the insurant. In other words over 2.6 Trillion choices.

considered. The same information is offered on the website of the Swedish Pensions Authority while also giving financial advice.[29]

Moreover, the orange envelope provides the Swedish insurant with annual information regarding his fund performance, fund costs and fund distribution within the portfolio. The statement also provides the performance and costs for the average insurant, which are intended to serve as a reference point. In Sweden, multi-pillar information on pension entitlements is available via the website Min Pension, a public-private-partnership established to offer a complete picture of accrued pension entitlements. Moreover, there is the opportunity to perform individual pension projections. New functionalities are constantly evolved and implemented on the website. A growing number of companies are providing Min Pension with the relevant data.[30]

It is well known that Germany has to improve the transparency of its products which currently number over 5000. The current pension reform tries to tackle this issue via the introduction of sample and individualized product fact sheets based on the work of Westerheide et al. (2010). Thanks to the work of Tiffe et al. (2012) the German ministry of finance is currently evaluating and refining a first draft regarding the linguistic implementation and the design of such product information letters. A comprehensive information system, addressing all three pillars of old age provision, is certainly desirable for the German work force but, due to the contrasting implementation of the Riester scheme within the existing German old age provision structures, in reality this may be hard to accomplish. Nevertheless, further effort in this field would be worthwhile in order to strengthen consumer sovereignty given the diverse range of suppliers and complex decision making process they are faced with.

It should be noted that the partial implementation of an organization similar to that found in Sweden (or Norway) is already part of the public discussion in Germany. For some time, the Consumer Commission of Baden-Württemberg *(Verbraucherkommission Baden-Württemberg)* and the Federation of German Consumer Organisations *(Verbraucherzentrale Bundesverband)* have advocated the

[29] On the website it is for example pointed out that when selecting funds, the individual should consider the level of risk and examine fund fees. On the individual “Pension Pages” the insured can also see where his or her money is invested. Further, individuals can also select and switch funds, monitor the current performance of their funds and read their annual statement online.

[30] Up to now, Min Pension has more than 1.6 million registered users. In 2011, users logged in on the website about 3.1 million times and performed about 4.5 million individual pension projections (Min Pension 2012).

introduction of a publically managed Riester pension product *(Vorsorgekonto)* as an additional product option. They propose that this product should be managed by a non-profit institution that is accountable solely to the interests of its contributors. This would allow for a simple, cost-effective and transparent old-age saving scheme. In order to achieve this acquisition and distribution costs must not accrue. Management and administrative costs would be limited to what is strictly necessary. Administrative costs could be aligned with those of the German pension authority which amount to 1.4 percent in 2011.[31] The insured would receive individual information on an annual basis. General information concerning the publically managed product should be accessible for everyone (Billen and Gatschke 2012, Oelmann and Scherfling 2012).

## 6. Conclusion

This paper reveals the complex differences when comparing the Swedish premium pension with the German Riester pension. At first glance the premium pension offers several advantages. It appears to be cheaper thanks to a simpler cost structure, centralized administration and a rebate system. The annuities are calculated using much lower underlying life expectancies thanks to the mandatory nature and a constant updating process with respect to the annuity divisor. The coverage is broader (labor force insurance in Sweden versus employee insurance in Germany) and the products are more transparent and easier to understand. However, it becomes evident that Germany is unable to benefit from most of these advantages by implementing only partial reforms because these benefits are closely linked to the mandatory nature and other Sweden-specific features of the premium pension. The focus on a complete system change towards a mandatory element in order to improve the existing Riester scheme is less constructive. The existing Riester system cannot quickly be changed into a supposed better scheme without serious legal and administrative restrictions.

However, the Riester criticism might be justified in many cases and Germany could benefit to some extent from the Swedish example without a complete system change. The German consumer could make a better informed decision if the products were more transparent due to clear information standards set by the government.

[31] Costs are defined as administrative costs divided by total expenses of the German pension authority. Costs in 2010: 3464 million €/ 244710 million € = 1.4 percent (Deutsche Rentenversicherung 2012).

Furthermore, it would be worthwhile to create a comprehensive old age provision information system, including not only the public but also the occupational and private elements of individuals' old age provision. Therefore, Germany could particularly benefit from the Swedish fully funded old age provision by paying close attention to their supply of standardized, transparent and coherent product information.

**References**

Anderson, K. M. and Immergut, E. M., 2006. Sweden: After Social Democratic Hegemony. In: E. M. Immergut, K. Anderson and I. Schulze, eds. *The Handbook of West European Pension Politics.* Oxford: Oxford University Press, pp. 349-395.

AP7, 2012a. *Årsredovisning 2011.* Available at: http://www.ap7.se/PageFiles/92/2011/AP7%20%C3%A5rsredovisning%202011.pdf [Accessed December 19, 2012].

AP7 2012b*. Informationsbroschyr 2012-06-19.* Available at: http://www.ap7.se/PageFiles/90/AP7%20Infobroschyr%20juni%202012.pdf [Accessed December 19, 2012].

Billen, G. and Gatschke, L., 2012. Vorschläge zur Verbesserung der kapitalgedeckten Altersvorsorge aus verbraucherpolitischer Sicht. *Vierteljahrshefte zur Wirtschaftsforschung*, 81(2), pp. 237-243.

Bundesministerium für Arbeit und Soziales (BMAS), 2012. *Entwicklung der privaten Altersvorsorge.* Available at: <http://www.bmas.de/SharedDocs/Downloads/DE/Thema-Rente/riesterrente-III-Quartal-2012.pdf?__blob=publicationFile> [Accessed December 19, 2012].

Deutsche Rentenversicherung, 2012. *Aktuelle Daten 2013.* Available at: <http://www.deutsche-rentenversicherung.de/cae/servlet/contentblob/238644/publicationFile/52076/aktuelle_daten_2013.pdf> [Accessed December 19, 2012].

Hagen, K. and Kleinlein, A., 2011. Zehn Jahre Riester-Rente: Kein Grund zum Feiern. *Wochenbericht des DIW Berlin,* 78 (47), pp. 3-14.

Hagen, K. and Reisch, L. A., 2010. Riesterrente: Politik ohne Marktbeobachtung. *Wochenbericht des DIW Berlin,* 77 (8), pp. 2-14.

Hahn, C. and Neumann, D., 2011. Verbraucherschutz bei Riesterverträgen – Probleme und Lösungsvorschläge. *Soziale Sicherheit*, 60 (12), pp. 421-425.

Haupt, M. and Sesselmeier, W., 2011. *Eine Analyse der Altersvorsorgeinformationen in Schweden. Projektbericht für das Forschungsnetzwerk Alterssicherung (FNA) der Deutschen Rentenversicherung*. Available at: <http://www.fna-

rv.de/SharedDocs/Downloads/DE/FNA/Projektberichte/Projektbericht%202011-04.html?nn=12348> [Accessed December 19, 2012].

Haupt, M. and Sesselmeier, W., 2012. Altersvorsorgeinformationen in Schweden – ein Vorbild für Deutschland? *Deutsche Rentenversicherung,* 67 (2), pp. 82-96.

Kleinlein, A., 2011. *Zehn Jahre „Riester-Rente“ Bestandsaufnahme und Effizienzanalyse. Expertise im Auftrag der Abteilung Wirtschafts- und Sozialpolitik der Friedrich-Ebert-Stiftung*. Available at: <http://library.fes.de/pdf-files/wiso/08471.pdf> [Accessed December 19, 2012].

Könberg, B., Edward, P. and Sundén, A., 2006. The NDC Reform in Sweden: The 1994 Legislation to the Present. In: R. Holzmann and E. Palmer, eds. *Pension Reform: Issues and Prospects for Non-Financial Defined Contribution (NDC) Schemes.* Washington D.C.: World Bank, pp. 449-466.

Min Pension, 2012. *Nya rekord för minpension.se.* Available at: <https://www.minpension.se/OmOss/VisaPressmeddelande.aspx?PressMeddelandeId=-1835604352&year=2012> [Accessed January 04, 2013].

OECD, 2012. *OECD Pensions Outlook 2012.* Paris: OECD Publishing.

Oehler, A., 2009. *Alles „Riester“? Die Umsetzung der Förderidee in der Praxis. Gutachten im Auftrag des Verbraucherzentrale Bundesverbandes e.V*. Available at: <http://www.vzbv.de/mediapics/altersvorsorge_gutachen_oehler_12_2009.pdf> [Accessed December 19, 2012].

Oelmann, A. and Scherfling, R., 2012. Riester-Rente – Reformen und ein staatliches Basisprodukt sind dringend erforderlich. *Vierteljahrshefte zur Wirtschaftsforschung*, 81(2), pp. 245-253.

Pensionsmyndigheten, 2011. *Orange Report. Annual Report of the Swedish Pension System.* Available at: <http://secure.pensionsmyndigheten.se/download/18.21baed1013b2db4d4b07b51/OR+engelsk+2010.pdf> [Accessed December 19, 2012].

Pensionsmyndigheten, 2012a. *Fonder och fondsparande. Årsstatistik 2011*. Available at: <http://www.pensionsmyndigheten.se/FondArsstatistik2011.html> [Accessed December 19, 2012].

Pensionsmyndigheten, 2012b. *Orange Rapport. Pensionssystemets Årsredovisning.* Available at: <http://secure.pensionsmyndigheten.se/download/18.21baed1013b2db4d4b0af2f/OrangeRapport_2011.pdf> [Accessed December 19, 2012].

Pensionsmyndigheten, 2012c. *Avgifter och skatter.* Available at: <http://www.pensionsmyndigheten.se/AvgifterOchSkatter.html> [Accessed December 19, 2012].

Pensionsmyndigheten, 2013. *General Terms and Conditions for co-operation between the Swedish Pensions Agency and Fund Managers.* Available at: http://www.pensionsmyndigheten.se/download/18.21baed1013b2db4d4b0e5a9/General+Terms+and+Conditions+2013-01-01.pdf [Accessed December 19, 2012].

Riester, W., 2012a. Herr Riester, was ist bloß aus Ihrer Rente geworden? Handelsblatt, [online] 15 August. Available at: <http://www.handelsblatt.com/finanzen/vorsorge-versicherung/ratgeber-hintergrund/ex-minister-im-interview-herr-riester-was-ist-bloss-aus-ihrer-rente-geworden/6995732.html> [Accessed December 19, 2012].

Riester, W., 2012b. Die Riester-Rente: Was wollte der Gesetzgeber, wo besteht Änderungsbedarf? Eine Antwort auf die Kritik des DIW. *Vierteljahrshefte zur Wirtschaftsforschung*, 81(2), pp. 43-53.

Riksförsäkringsverket, 2003. *Pensionssystemets Årsredovisning 2002*. Available at: <http://www.forsakringskassan.se/wps/wcm/connect/7fa7d414-f238-44ad-b0b5-a1b903f6de4c/orange_rapport_2002.pdf?MOD=AJPERES> [Accessed December 19, 2012].

SCB, 2012. *Statistisk årsbok för Sverige 2012*. Available at: <http://www.scb.se/statistik/_publikationer/OV0904_2012A01_BR_00_A01BR1201.pdf> [Accessed December 19, 2012].

Settergren, O., 2001. The Automatic Balance Mechanism of the Swedish Pension System: A Non-technical Introduction. *Wirtschaftspolitische Blätter*, 48 (4), pp. 339-349.

SOU, 1990. *Allmän pension. Huvudbetänkande av pensionsberedningen. 1990:76*.

Ter Laak, J. 2011. *Does the Swedish premium pension provide the right incentives to its stakeholders?* Master Thesis. Stockholm School of Economics.Available at: <http://arc.hhs.se/download.aspx?MediumId=1411> [Accessed December 19, 2012].

Tiffe, A. Feigl, M., Fritze, J., Götz, V., Grunert, C., Jaroszek, L. and Rohn, I., 2012. *Ausgestaltung eines Produktinformationsblatts für zertifizierte Altersvorsorge- und Basisrentenverträge. Projekt im Auftrag des Bundesministeriums für Finanzen.* Available at: <http://www.bundesfinanzministerium.de/Content/DE/Pressemitteilungen/Finanzpolitik/2012/01/20120112-PM02-Anlage2.pdf?__blob=publicationFile&v=2> [Accessed December 19, 2012].

Wadensjö, E., 1997. The Welfare Mix in Pension Provisions in Sweden. In: M. Rein and E. Wadensjö, eds. *Enterprise and the Welfare State.* Cheltenham: Edward Elgar, pp. 266-308.

Wagner, G. G., 2011. Gut gemeint, aber nicht gut gemacht. Kommentar. *Wochenbericht des DIW Berlin.,* 78 (47), p. 24.

Westerheide, P., Feigl, M., Jaroszek, L., Leinert, J. and Tiffe, A., 2010. *Transparenz von privaten Riester- und Basisrentenprodukten. Projekt im Auftrag des Bundesministeriums für Finanzen.* Available at: <http://ftp.zew.de/pub/zew-docs/gutachten/ZEWAltersvorsorge2010.pdf> [Accessed December 19, 2012].

World Bank, 1994. *Averting the Old Age Crisis. Policies to Protect the Old and Promote Growth.* Oxford: Oxford University Press.

**Table 1: Fund products in Sweden (offered by the state)**

| Product offered by the state authority (AP7) | Age | Portfolio share of AP7 equity fund (%) | Portfolio share of AP7 interest fund (%) | Costs (%) | Return in 2011 (%) | Number of participants | Percentage of overall participants | Fund capital (in billion SEK) | Percentage of overall fund capital | Combination with other funds possible |
|---|---|---|---|---|---|---|---|---|---|---|
| AP7 Såfa | ≤55 | 100 | 0 | 0.12-0.15 | -10.5 | 2,764,852 | 44.11 | 104.57 | 26.60 | no |
| | 56 to 74 | 36 to 97 | 3 to 64 | | | | | | | |
| | ≥75 | 33 | 67 | | | | | | | |
| AP7 Försiktig | | 33 | 67 | 0.12 | -1.5 | 2,741 | 0.04 | 0.22 | 0.06 | no |
| AP7 Balanserad | | 50 | 50 | 0.13 | -4.0 | 3,286 | 0.05 | 0.27 | 0.07 | no |
| AP7 Offensiv | | 75 | 25 | 0.14 | -7.7 | 3,355 | 0.05 | 0.24 | 0.24 | no |
| AP7 equity fund | | 100 | 0 | 0.15 | -11.5 | 4,894 | 0.08 | 0.15 | 0.04 | yes |
| AP7 interest fund | | 0 | 100 | 0.09 | 3.4 | 1,357 | 0.02 | 0.06 | 0.02 | yes |

Source: Own calculations for 2011 based on AP7 (2012a), Pensionsmyndigheten (2012a) and SCB (2012).

**Table 2: Comparison between the Swedish premium pension and the German Riester pension**

| | Swedish Premium Pension | German Riester Pension |
|---|---|---|
| **Mandatory** | Yes | No |
| **Coverage** | Total labor force | Limited |
| **State subsidy** | No | Yes |
| **Products** | Funds | Funds, pension insurance, bank savings plan and owner-occupied housing |
| **Implementation** | Public pension system | Occupational and private pension system |
| **Contribution rate** | 2.5 percent | 0 to 4 percent |
| **Contribution limit** | maximum 7 percent of 8.07 times the income base amount for employees, no limit for employers | Minimum 60 EUR and maximum 2100 EUR minus lump-sum subsidies |
| **Administration** | Centralized through Swedish Pensions Agency | Decentralized through providers |
| **Pay-Out rules** | Minimum age of 61, fixed or variable annuity, partial pension draw possible | Minimum age of 60/62, maximum lump-sum payment of 30 percent, partial pension draw not possible |
| **Risk mitigation** | No, the individual insured bears the capital market risk | Capital market risk is born by the individual insured, but lower limit through premium guarantee |
| **Longevity risk** | Insured | Insured |
| **Underlying life expectancy** | Represent overall population | Represent insured population |
| **Bequest options** | Survivor pension can be bought | Partially, depending on contract type and time of death |
| **Transparency** | Annual statement (orange envelope), fund brochure, websites | Annual information by provider but complex cost structure |
| **Costs** | Administration costs, Fund management fees | Acquisition and distribution (provision) costs, administration costs, switching fees |

Source: Own research.

**Table 3: Overview fund based products**

| Provider | Product | Equity fund fees | | Interest fund fees | | General fees p.a. |
|---|---|---|---|---|---|---|
| | | Fees p.a. | lump sum fees | Fees p.a. | lump sum fees | |
| Swedish Pensions Agency | AP7 Såfa | 0.15 % FM | - | 0.09 % FM | - | 0.11 % administration |
| | | | | | | |
| Union Investment | UniProfiRente | 1.33 % TER | 5 % initial sale charge | 0.69 % TER | 3 % initial sale charge | 10 € account fee |
| Deka Investmentfonds | Deka-ZukunftsPlan Select | 1.45 % TER | 5.26 % initial sale charge | 0.89 % TER | 3 % initial sale charge | 10 € account fee |
| DWS | DWS RiesterRente Premium | 1.50 % TER | 5.5% (5 %) acquisition and distribution fees on own contribution (subsidies) | 0.60 % TER | 5.5 % (5%) acquisition and distribution fees on own contribution (subsidies) | 18 € account fee |

Source: Own Research.

**Table 4: Cost Comparison**

| Provider | Product | High Capital Returns | | Low Capital Returns | |
|---|---|---|---|---|---|
| | | Total costs | Reduction in yield | Total costs | Reduction in yield |
| Swedish Pensions Agency | AP7 Såfa | 6.44 % | 0.17 % | 5.57 % | 0.15 % |
| | | | | | |
| Union Investment | UniProfiRente | 31.28 % | 0.97 % | 27.85 % | 0.83 % |
| Deka Investmentfonds | Deka-ZukunftsPlan Select | 33.74 % | 1.07 % | 30.10 % | 0.91 % |
| DWS | DWS RiesterRente Premium | 40.97 % | 1.36 % | 34.01 % | 1.06 % |

Source: Own calculation.

## Appendix A

### Table 5: The age-adjusted portfolio of AP7 Såfa

| Age | AP7 Equity Fund (in percent) | AP7 Interest Fund (in percent) |
|---|---|---|
| ≤55 | 100 | 0 |
| 56 | 97 | 3 |
| 57 | 93 | 7 |
| 58 | 90 | 10 |
| 59 | 87 | 13 |
| 60 | 83 | 17 |
| 61 | 80 | 20 |
| 62 | 77 | 23 |
| 63 | 73 | 27 |
| 64 | 70 | 30 |
| 65 | 66 | 34 |
| 66 | 63 | 37 |
| 67 | 60 | 40 |
| 68 | 56 | 44 |
| 69 | 53 | 47 |
| 70 | 50 | 50 |
| 71 | 46 | 54 |
| 72 | 43 | 57 |
| 73 | 40 | 60 |
| 74 | 36 | 64 |
| ≥75 | 33 | 67 |

Source: AP7 2012b.

## Appendix B

### The Swedish rebate system

There are only two cost elements in the premium pension system, fund management fees charged directly by the respective fund and administration fees charged by the Swedish Pensions Agency. The Swedish Pensions Agency enforces a so called rebate system on each participating fund with the goal of keeping the fund management fees as low as possible for the insured.

The crucial element in the organizational structure of the Swedish premium pension system is the centralization and incorporation of general administrational tasks and services within the pension authority, e.g. individual account management, providing product information or regrouping of investments, that are normally conducted by the insurance and banking industry. In other words the pension authority serves as an intermediary, or more precisely a clearing house, between the individual and the fund manager. It is important to note that the agency does not attempt to be a neutral party but acts on behalf of the insured. Every premium pension saver has to pay for these services in the form of administration fees. As a consequence of this organizational structure fund managers only know the total sum that all insured want to invest in their funds. They do not have any information as to the identity of the pool of individuals that make up the investment. This organizational structure allows for economies of scale from the fund manager's perspective, because it can be expected that the management effort per Swedish kronor decreases with an increase in the overall investment volume. However, these benefits are not accrued fully by the fund because every fund manager who wants to participate in the premium pension system has to agree to the rebate system which guarantees the pension authority a reduction in fund management fees compared to ordinary retail investors.

Despite the fact that regulation of the rebate system has been subject to some changes in the past decade, the final rebate was always dependent on the total costs of the fund and the investment sum of the Swedish Pensions Agency. The latest regulation adds another dimension, namely the rebate also depends on the fund type.

**Reforms and current regulation**

The rebate system experienced important adjustments over the years. Table 6, 7 and 8 shows the regulation since the introduction in the year 2000 until now.

**Table 6: Rebate calculation 09/2000 until 04/2004**

| Interval | Fund Manager value of The Swedish Pensions Agency's holding (in million SEK) | Free cost withdrawal (in percent) | Discount level (in percent) |
|---|---|---|---|
| 1 | 0 – 70 | 0.40 | 25 |
| 2 | 70 – 300 | 0.35 | 65 |
| 3 | 300 – 500 | 0.30 | 85 |
| 4 | 500 – 3 000 | 0.25 | 95 |
| 5 | 3 000 – 7 000 | 0.15 | 95 |
| 6 | > 7 000 | 0.12 | 96 |

Source: Ter Laak (2011).

**Table 7: Rebate calculation 04/2004 until 04/2007**

| Interval | Fund Manager value of The Swedish Pensions Agency's holding (in million SEK) | Free cost withdrawal (in percent) | Discount level (in percent) |
|---|---|---|---|
| 1 | 0 – 70 | 0.40 | 25 |
| 2 | 70 – 300 | 0.35 | 65 |
| 3 | 300 – 500 | 0.30 | 85 |
| 4 | 500 – 1 000 | 0.25 | 90 |
| 5 | 1000 – 3 000 | 0.25 | 95 |
| 6 | 3 000 – 7 000 | 0.15 | 95 |
| 7 | > 7 000 | 0.12 | 96 |

Source: Ter Laak (2011).

**Table 8: Rebate calculation since 04/2007**

| Interval | Fund Manager value of The Swedish Pensions Agency's holding (in million SEK) | Free cost withdrawal Fixed-income funds (in percent) | Free cost withdrawal Other funds (in percent) | Discount level (in percent) |
|---|---|---|---|---|
| 1 | 0 – 1 000 | 0.1 | 0.15 | 65 |
| 2 | 1 000 – 5 000 | 0.1 | 0.15 | 75 |
| 3 | 5 000 – 10 000 | 0.1 | 0.15 | 85 |
| 4 | > 10 000 | 0.1 | 0.15 | 90 |

Source: Pensionsmyndigheten (2013).

The first two tables 6 and 7 show that between introduction in September 2000 and April 2007 rebates were only calculated according to the fund size (fund manager value of the Swedish Pensions Agency's holding (in million SEK)) and fund management costs. In each interval the fund is granted a free cost withdrawal allowance that decreased from interval to interval. In other words, the bigger funds had lower free cost withdrawals. If a fund exceeds its free cost withdrawal it has to grant a rebate on the difference between its management costs and the free allowance. This rebate is calculated by multiplying this difference by the discount level percentage which increases with every interval. Since the introduction up until April 2007 the discount level was 25 percent in the lowest interval, reaching 96 percent in the highest interval. As a consequence the relative rebates were increasing with the interval number because when a fund moved up an interval the free cost withdrawal percentage decreased and at the same time the discount level increased. The only difference during that period was that after April 2004 the Swedish Pension Agency introduced an additional interval that divided the former interval between 500 and 3000 million SEK into two new intervals (500 – 1000 and 1000 – 3000 million SEK).

In contrast, the current regulation (table 8) grants a cost allowance that now only varies according to the fund type but no longer depends on its size. Funds that invested their entire assets in fixed-income securities or liquid funds in the previous year are classified as "fixed-income funds" and if a fund differs from this investment structure it is classified under "other funds". The free cost allowance is 0.10 percent p.a. for the fixed income funds and 0.15 percent p.a. for all other funds. Furthermore, the number of intervals has been reduced and the increase in the discount level between the funds is now less pronounced (between 65 percent and 90 percent). In general, a rebate has only ever been paid if a fund's management fees exceed the cost allowance.

In all three schemes funds have to grant different discount levels that depend on their interval. The final rebate in percent is calculated by multiplying the difference between a fund's management fee and the cost allowance with the discount level at each interval. The absolute rebate in Swedish kronor is calculated by multiplying the fund volume with the rebate in percent. It is important to understand that this calculation is done separately for each interval. The overall rebate is an average of the calculated rebates in each interval weighted according to the intervals' share in the overall fund volume.[33] In a simplified example a fixed income fund with a volume of 1000 million SEK and annual management fees of 1.50 percent had to grant a rebate of 0.96 percent before April 2007[34] and 0.91 percent according to the current regulation.[35] The absolute rebate in Swedish kronor was therefore 9.9 million SEK (1000 SEK * 0.0099) before and 9.1 million SEK (1000 SEK * 0.0091) after April 2007.

Overall, regulation has changed in favor of relatively larger funds, because smaller funds no longer benefit from larger free cost withdrawals and the difference in discount levels between intervals has declined. The Swedish Pensions Agency wanted to limit the potential incentive for a fund manager to minimize the rebate payments by offering a variety of smaller funds. The rebates are calculated for each day the pension authority has a holding in the fund. At the end of each quarter the Swedish Pensions Agency calculates the rebates for the last quarter and bills all fund managers. The invoice has to be paid within 30 days.[36]

[33]For example, in the case of a fund with a total volume of 8000 million SEK the second interval (1000 – 5000 million SEK) has a share in the overall fund volume of 50 percent ((5000-1000)/8000). Therefore, the calculated rebate in the second interval would be weighted with the factor 0.5.

[34](1.50 %-0.40 %)*25 %*0.07+(1.50 %-0.35 %)*65 %*0.23+(1.50 %-0.30 %)*85 %*0.2+(1.50 %-0.25 %)*90 %*0.5=0.96 %.

[35](1.50 %-0.10 %)*65 %*1=0.91 %.

[36]For a more detailed description see Pensionsmyndigheten (2013): Appendix B to the General Terms and Conditions.