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# **International capital flows: The case of The Netherlands and Germany in an ageing world**



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## **Abstract**

This paper explores what the effects of population ageing are for international capital flows and how certain countries can export their problems associated with ageing through the capital market. We looked explicitly at Germany and The Netherlands because their pension systems differ in the way they are financed.

With an in depth look at the German pension system and the recent reforms, this paper employs an overlapping generations model of Adema (2008) on the situation of The Netherlands and Germany to look at whether such a mechanism might work. A conclusion is that spillover effects because of population ageing in Germany are to be expected in The Netherlands and may be strengthened by the fact that their pension systems differ in their funding. This can be a big threat to the affordability of the Dutch pension arrangement because it works on top of the more common financing problems associated with population ageing.

**Keywords:** *International spillover effects, population ageing, Riester reform, Germany, The Netherlands, affordability Dutch pension system.*

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## Table of contents

Abstract.....	1
Table of contents.....	2
Preface.....	3
Introduction .....	4
Population ageing .....	8
German retirement insurance .....	13
Origin and early history .....	13
Bismarckian system .....	15
From 1972 until the 2001 reform.....	17
German Riester reform of 2001 .....	20
Rürup Commission.....	24
“Bundeszusschuss” and other considerations .....	26
International capital flows and pension systems .....	30
General theory .....	30
Different types of pension system .....	36
International spillovers and pension reform .....	38
Pension reform in a model of Pareto efficiency.....	41
Applicability .....	47
Acceptance of Riester reform.....	47
Effects of Riester reform .....	50
Conclusion .....	56
Appendix A: interviews.....	59
Bibliography .....	74

## **Preface**

This paper is the concluding part of the master programme Economics and Social Sciences at the Utrecht School of Economics with the objective of obtaining the title of Master of Science (Magister Scientiæ).

This paper is a, mostly descriptive, paper on the possibilities of international spillover effects in the case of population ageing. It is a descriptive paper because it aims to look at how theoretical models might work in a real world situation.

Most of the research and some of the writing was done at the Embassy of the Kingdom of The Netherlands in Berlin during an internship in the summer of 2008. I am grateful for the opportunities and support I received during my stay, next to the very enjoyable work atmosphere and wonderful colleagues. In particular, I would like to thank my external supervisor Carola van Rijnsoever for her support.

In addition, I would like to thank my supervisor dr. Jan Reijnders for his work and support and the amount of freedom he provided in determining the setup and methods used in this paper. Finally, I would like to thank my referee dr. Bas van Groezen for his work and Jord de Boer, MSc. for his text revision work.

Felix Zwart, BSc.

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## Introduction

In this paper I would like to examine the international spillover effects of an ageing population through the capital market in the case of two countries that have a different kind of pension system. In particular I want to look at The Netherlands and Germany, both fitting this description.

The Netherlands has a mixed system with a pay-as-you-go (PAYGO)<sup>1</sup> defined benefit<sup>2</sup> basic pension (AOW<sup>3</sup>) that is usually supplemented with a mandatory funded pension system and an optional private pension. It is usually stated that the Dutch pension system consists of three pillars. This is often referred to as the “cappuccino-model<sup>4</sup>”.

On the contrary, the German system operates, ignoring recent reforms which will not be fully effective for quite some years, almost exclusively on a PAYGO (first pillar) basis, with a defined benefit of around 70 percent of the last earned wage.

	First pillar	Second pillar	Third pillar
Greece	98	1.5	0.5
France	97	1.5	1.5
Spain	97	1.5	1.5
Italy	96	2	2
Austria	95	3	2
Germany	94	4	2
Denmark	76	20	4
Sweden	75	20	5
Netherlands	56	37	7

**Table 1** Composition of pension arrangements in Europe (Adema 2008).

Both The Netherlands and Germany face the challenge of an ageing population. Not to say The Netherlands is without problems in the foreseeable future, especially Germany

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<sup>1</sup> PAYGO is an unfunded system in which current contributors to the system pay the benefits for the current recipients. No reserves are accumulated in a pure PAYGO system, and all contributions are paid out in the same period. Opposite a PAYGO system is a funded system, where contributions are accumulated and paid out later together with the interest on it.

<sup>2</sup> In a defined benefit system people know exactly what they will receive upon retirement. Therefore contributions are adjustable to compensate for e.g. inflation. The opposite is a system of defined contributions where the benefits are adjustable.

<sup>3</sup> Algemene Ouderdoms Wet, introduced in an early form in 1947 and finalized in 1957.

<sup>4</sup> The coffee being the AOW (first pillar), the milk the occupational pension (second pillar) and the private insurance (third pillar) the cocoa.

seems vulnerable to the consequences of ageing because the PAYGO system places a huge burden on the future working population by increasing the dependency ratio. An increase in the dependency ratio means that more elderly become dependent on less working young. Also because birth rates in Germany are among the lowest in Europe, the population in Germany ages faster than that of The Netherlands.

The Dutch pension system seems to be less vulnerable to the consequences of population ageing because of the capital stocks its pension funds have accumulated (the public servants fund, ABP, is one of the largest pension funds in the world) amount to more than 500 bln. US dollars (OECD 2006)<sup>5</sup>.

A funded pension system has its own vulnerabilities when expected returns on investment are not met because of fluctuations in the economy. The pension fund then must adjust contributions or benefits, depending on circumstances. For instance in the 2008 credit-crunch several Dutch pension funds saw their liquidity drop significantly. Therefore they need to make adjustments, e.g. not correcting their benefits for inflation (NRC Handelsblad 23-10-2008). As of early 2009 almost all Dutch pension funds are forced to make adjustments to either their contributions or their benefits.

Changing a pension system to a mixed three pillar system however, like in The Netherlands, is an often recommended measure in the case of population ageing. This is because a mixed three pillar system spreads the risks associated with either a funded or a PAYGO pension scheme in the case of population ageing or possibly risky return on investments (Miles and Timmerman 1999; Sinn 2000; Natali and Rhodes 2008).

In the previous decades a vast literature has been created that analyses what the effects would be of population ageing on the international flows of capital between countries. Different countries age at different rates and there is a high degree of capital mobility around the world, especially in the European Union. Capital is assumed to flow to where its returns will be the highest, and because of ageing the need and the availability of capital changes. The results of these changing capital flows because of ageing have been documented extensively (e.g. Groezen 2003; Börsch-Supan, Ludwig et al. 2005).

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<sup>5</sup> The OECD database on Institutional investors' assets (2008) estimates the total worth of pension funds in The Netherlands at around 530 bln. US dollars for 2006/2007.

Capital flows between member states can have effects in both the exporting and the receiving country. These so-called "spillover effects" can alleviate some of the effects of ageing on particular pensions schemes and its associated risks, but may also pose new challenges.

In this paper I would like to focus on the spillover effects on the capital market between The Netherlands and Germany. There are good reasons for looking at the relationship between these two countries. First of all, Germany is, and always has been, the most important trade partner of The Netherlands. Furthermore, the economy of The Netherlands has always been very heavily dependent upon international trade. Therefore spillover effects are to be expected between Germany and The Netherlands. Secondly there is evidence from the literature that the fact that The Netherlands and Germany have different pension schemes may be an extra catalyst for spillover effects.

Of course the world is larger than just The Netherlands and Germany. Other (large) countries such as France, Japan and Italy will also experience rapid ageing in the future and they both employ mostly PAYGO schemes. However, Germany recently introduced adjustments to its pension scheme. These adjustments have the aim of transforming it into a three-pillar system. Because The Netherlands is so heavily economically interwoven with Germany, and the literature points towards the existence of spillover effects, I chose to focus upon Germany instead of these other countries.

Because Germany is an important player in the European Union, the way Germany responds to ageing and its consequences may set an example for other large countries to follow. Some of the actions taken by Germany may be unique to the country or the result of path dependency; however some may also apply to other countries. Therefore analyzing what may be the consequences of the German pension system adjustments may also apply to other EU member states.

The specific spillover effects between two countries that have different pension schemes have only recently been explored (Adema 2008). The aim of this paper is to explore the possibilities of spillover effects for The Netherlands from Germany.

Therefore my research question is:

*Are spillover effects because of population ageing expected and what can be the consequences of unilateral reforms in Germany for The Netherlands?*

First the introduction focuses on the issue of population ageing, followed by a discussion on the history and recent reforms of the German pension scheme. The subsequent chapter focuses on a model for international spillover effects for two countries with population ageing that have different pension systems.

The next step is to examine the possibility of these spillover effects for the situation of The Netherlands and Germany taking the recent reforms in Germany and population ageing in general in consideration. Finally the consequences of the fact that The Netherlands and Germany have such different pension schemes is thoroughly researched and discussed, as is the general applicability of the theoretical template for the real situation.

Some of the information in this paper was gathered by interviewing certain experts. Getting in contact with a few local experts was possible thanks to the Economic Department of the Embassy in Berlin. Interviewing these people has helped to focus the research of this paper. Next to that it brought aspects to the attention that would not have been noticed by merely studying the literature. The transliterations of these interviews are provided in the appendix for extra information.

## Population ageing

In an ageing society the average age of the population is gradually increasing. This is generally attributed to two causes. First, less children may be born and secondly an increase in average life-expectancy.

The increased life expectancy is generally explained by technological progress and economic development that allowed for better nourishment, sanitation, medical facilities and the decreased need for heavy physical labour.

There are numerous reasons why people choose to have fewer children nowadays than for instance sixty years ago. A common explanation is the introduction of more reliable birth-control methods in the 1960's. This allowed couples to plan their number of offspring better and additionally gave women more control over their lives. This may be the case and drops in fertility can clearly be associated with the introduction of these new methods<sup>6</sup>. Nevertheless there seems to be evidence that this is merely a common sense hypothesis regarding the lower birth-rates and that the new birth-control methods were only a more efficient way of limiting the number of offspring than other older methods.

Becker (1991) for instance argues that throughout history women tend to have fewer children once their social economic situation improves. When taking into account that people rely upon their children to take care of them in their old age, this is a viable argument. Poorer families also relied upon the income their children contributed to the family for their day to day survival. Combined with a high chance of children dying before reaching adulthood, it made perfect sense for people to have a lot of children.

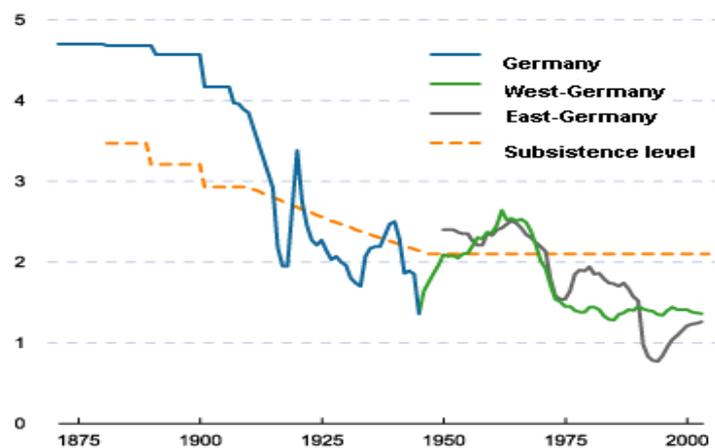
However the introduction of reliable pension schemes, the drop in child death and the general improvement in the standard of living have rendered these important reasons for having a lot of children moot. According to e.g. Becker (1991) a significant part of the drop in fertility can be explained this way. In addition, the increased rate of return to education raises the desire to provide children with formal and costly education. Coupled

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<sup>6</sup> As can be seen in figure 1 where there is a clear dip in fertility around the introduction of the birth control pill, the so-called 'pill-dip'.

with the increased education and labour participation of women (child birth is postponed or even forgone as to not jeopardize a career), people lower their fertility rates.

Seen in this light the post-war baby boom experienced in many countries is somewhat of an anomaly. For instance in Germany it can be seen that birth-rates have dropped constantly since at least 1875, only to be significantly different around the World Wars, and in the period of 1950 to around 1968 (ignoring the German Democratic Republic that maintained specific policies that encouraged having a lot of children, see for instance Kreyenfeld (2004)). Interesting to note is that after around 1910 the birth-rate has seldom been above the subsistence level<sup>7</sup>, even in the German Democratic Republic, as can be seen in figure 1.

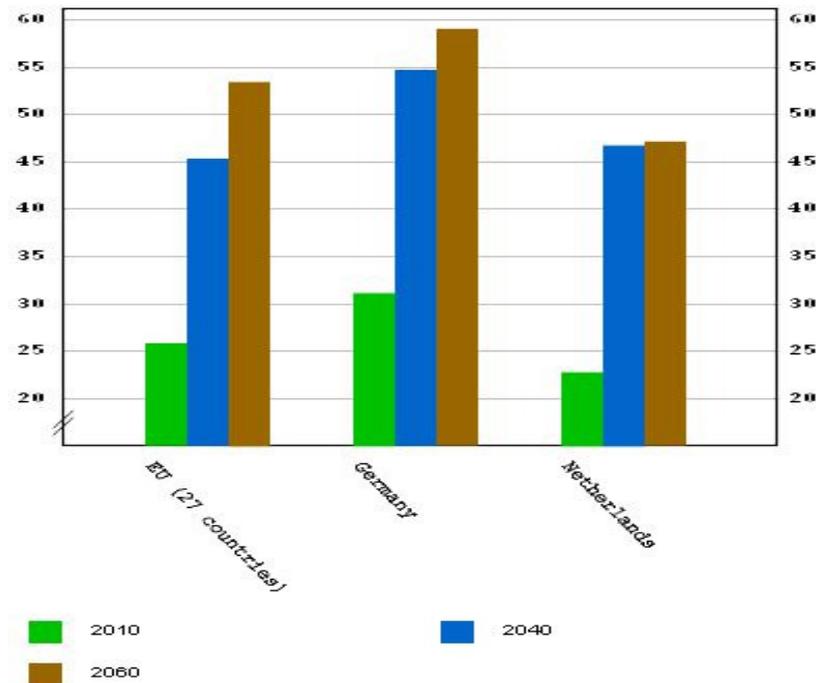


**Figure 1** German fertility rates 1875-2000 with number of children per woman on the Y-axis (Tivig and Hetze 2007).

The so-called post-war baby boom generation has not maintained the same birth-rate as their parents and are now approaching the retirement age. Birth rates in The Netherlands (around 1.7 children per woman, (Eurostat 2009)) are higher than those in Germany (around 1.3 children per woman, (Eurostat 2009)).

This also has consequences for the changes in the dependency ratio, as can be seen in figure 2.

<sup>7</sup> The subsistence level has been around 2.1 children per woman since around 1950. This is because the sex-ratio is not exactly 50-50 and because of other factors. Before around 1950 the subsistence level was at a much higher level because of early child death during e.g. birth.



**Figure 2** The projected number of persons aged 65 and over expressed as a percentage of the projected number of persons aged between 15 and 64 (Eurostat 2009).

This change in the dependency ratio means that a lower percentage of the population consists of working people and that a higher percentage of the population is retired/inactive. It is clear that this index is going to rise significantly in the upcoming years<sup>8</sup>.

This change in the dependency ratio presents a number of challenges. On the labour market for instance a lower supply of young workers may create labour shortages.

The further automation, immigrant labour, increasing labour participation of elderly and women or the moving of the production process to places where labour is still readily available might be a solution to this problem (Bennhold 2007).

However there are some labour intensive professions that are not easily moved or automated. The classic example in this case is that of a barber. He cannot cut more

<sup>8</sup> Note that it is already a lot higher than in the 1950's when most pension systems were designed.

people in the same time, has no automated scissors and people do not go to a low-wage country to get a haircut. Therefore the price of the service is not likely to go down because of technological progress or economics of scale. Instead it is more likely to go up, especially when the factor price of labour goes up because of population ageing. This principle is called the Baumol's law and applies to a lot of professions in for instance health-care, but also in education, law-enforcement and other service professions.

In the case of population ageing the demand for e.g. health care services is likely to rise. Together with technological progress that may enhance older people's lives, but is also very expensive, a labour shortage and rising demand may cause the health care expenses to explode in the coming decades (Bennhold 2007).

Increasing the labour participation of women and of people approaching retirement age seems to be one of the most viable solutions to a labour shortage in the services industry. Since life-expectancy is rising, it is not awkward to expect people to keep working at a higher age while still in good health (Tivig and Hetze 2007; Bakker, Oosterwijk et al. 2008).

Another problem may be the affordability of the pension arrangements. In the case of a PAYGO system, population ageing puts a higher pressure upon working generations in the case of population ageing when the contributions are kept at the same level. In the case of a funded system, the availability of capital changes and may change people's portfolio choices.

Proposed solutions to the problems of ageing in The Netherlands and the affordability of the pension system are generally sought within the current system by means of fine-tuning the existing arrangements. Often proposed measures are again increasing the labour participation of women and people above the age of 50. Shifting the retirement age gradually to e.g. 67 (heavily debated in early 2009) and the (partial) fiscalisation of the AOW<sup>9</sup> are also often discussed. In the summer of 2008 a plan was presented by the

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<sup>9</sup> To allow more foreign workers is also sometimes brought up as a solution to the affordability of the pension system. Several studies have shown that the amount of people that would have to enter the country in order to stabilize the pension system would have to be enormous. For instance Sinn (2000) and Börsch-

Bakker-committee<sup>10</sup> that outlines the current problems associated with ageing and makes a number of recommendations based upon the aforementioned measures.

Germany has already gradually shifted the retirement age to 67, and also wants to increase labour participation of people above 50 and women. But because Germany aims to transform the pension system into a multi-pillar system, the remainder of this paper will focus upon the German retirement system reforms and the shocks associated with such a transition.

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Supan (2002) show that for Germany alone this would run into the tens of millions of people. Of course this would solve the other problem of labour shortages but would present countless other problems.

<sup>10</sup> “Naar een toekomst die werkt”: Advies Commissie Arbeidsparticipatie (june, 2008)

## German retirement insurance

### *Origin and early history*

Germany has the oldest formal social security system in the world. The system as introduced by Chancellor Bismarck in 1889 (the "Gesetzliche Rentenversicherung", or GRV<sup>11</sup>) was a mandatory fully funded<sup>12</sup> retirement insurance. One of the aims of the programme was to increase worker dependency on the newly created unified German state and to diminish popular support for the liberal and socialist parties.

The mandatory retirement age was set at 70 years, but e.g. the male life expectancy at birth was less than 45 years in Prussia (Börsch-Supan and Wilke 2004). Only in 1916 was the retirement age lowered to the now familiar age of 65. It is safe to assume that although the pension scheme may have had psychological and political benefits, only very few people were able to enjoy the benefits of it.

The system was a fully funded one, but because of severe capital erosion during the Great Depression and World War II, it evolved into a PAYGO system during the 1950's and 60's. The main reform was made by the German Bundestag in 1957, after which remaining assets were finally sold off about ten years later (Börsch-Supan and Wilke 2004).

The choice for a PAYGO system was a very logical one at the time since the ratio working/retirees was very favourable to such a system. Because of for instance World War II there were few pensioners and because of the economic miracle ('Wirtschaftswunder') and baby boom massive employment and labour were available.

The pension scheme is considered a separate entity that is sponsored by the federal government and is not part of the budget. Therefore it is not possible to divert any possible surpluses to for instance the federal government debt. Something that is

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<sup>11</sup> The current German retirement insurance is still termed like this, even after many reforms.

<sup>12</sup> In a funded system contributions are accumulated and the benefits are paid out later (together with the interest).

possible with social security<sup>13</sup> in the United States (Meyering 2008). The German government does however guarantee the payment of pensions in the case of a shortage of funds<sup>14</sup>.

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<sup>13</sup> Social security as a term is something that is differently interpreted in the United States than in Europe. In the U.S. it specifically refers to old-age income insurance while in Europe the term encompasses the whole of government income transfers and e.g. government healthcare. When used, the term refers to the European usage.

<sup>14</sup> This rarely happens and would generate enormous controversy because the government would easily have to supply millions of Euro's. The government has all sorts of "tricks" to avoid such a situation, for instance by adjusting child-care or hospitalization benefits (Meyering, 2008).

## ***Bismarckian system***

The main aim of the system was, and in fact mostly still is, to extend the standard of living experienced before retirement. Therefore it is called retirement *insurance* instead of e.g. social security or old age safety net.

Because of its characteristic as insurance the system is not very redistributive. This means that people receive in retirement benefits approximately what they contributed during their working life. When received pension benefits are dependent upon previous contributions this is called Bismarckian, after the famous German chancellor. This also implies that there is only minor or no redistribution of income between the rich and poor of the same generation (intragenerational redistribution).

The advantage of a Bismarckian system is that there is only minor tax distortion and that in principle people do not view the contributions as taxes but as insurance premiums. This may help with the social acceptance of such a system.

The disadvantage is that the pension scheme is not very useful in poverty reduction since everybody receives what they paid for.

The opposite applies to a Beveridgian system, named after the influential British economist and former Member of Parliament who was important in shaping the British pension system. In such a system all people get the same basic pension, irrespective of paid contributions. This is a redistributive system since it transfers money from the higher income groups to the lower income groups.

We can see that the German retirement system has retained its Bismarckian factor even after many reforms in table 2.

	Beveridgian factor	Bismarckian factor
Italy	-	100
Spain	0.5	99.5
Austria	1	99
Finland	1.6	98.4
Germany	1.9	98.1
Portugal	4.2	95.8
France	6.5	93.5
Belgium	11.1	88.9
Luxembourg	13.8	86.2
Sweden	14.90	85.10
UK	89.5	10.5
Denmark	90	10
Ireland	100	-
Netherlands	100	-

**Table 2:** Redistribution within pension systems in 2003 (Adema 2008).

The Bismarckian numbers presented in table 2 represent how much of the received benefits upon retirement are dependent upon paid contributions. For instance the GRV benefit received by an employee of Siemens (German company) upon retirement is 98.1 percent dependent upon paid contributions<sup>15</sup>. The AOW benefit of an employee of Philips (Dutch company) is independent of paid contributions.

How the benefits are exactly calculated in Germany is explained later in this paper. This measure of redistribution is included to show the important characteristic of redistribution in a pension system.

<sup>15</sup> Contributions are bound to a maximum, the so-called ‘‘Beitragsbemessungsgrenze’’ or upper earnings limit. For 2009 the maximum income over which contributions had to be paid is € 64.800 per annum for West Germany and € 54.600 for East Germany. Monthly GRV benefits are therefore also bound to a maximum. However very few people reach this limit. There are different rates for East- and West Germany because even after almost twenty years of unification there are still sizeable income differences between east and west (Deutsche Rentenversicherung Bund).

### ***From 1972 until the 2001 reform***

The German public retirement insurance covers about 85 percent of the German workforce. Most of these people being employed in the private sector but in addition some semi-government employees. The self-employed, about 9 percent of the work force, are partially self-insured and partially participant in the public system. Civil servants cover about 7 percent of the work force and have their own insurance system. Until 1998 people earning below 15 percent of average monthly gross wage were not covered as well, this was about 5,6 percent of the working population. As said before, individual and occupational retirement insurances do exist but play a marginal role (Börsch-Supan and Wilke 2004).

About 70 percent of the German public retirement insurance is financed by contributions that work like a pay-roll tax, equally levied on both employers and employees. In 2003 total contributions were 19.5 percent of the first 5100 euro of monthly gross income. The contribution rate has been fairly constant since the 1970's, but the upper earnings limit has been used as a financing tool and increased much faster than inflation<sup>16</sup>. The other 30 percent of the retirement insurance budget is financed by earmarked taxes like the V.A.T. and the 'eco-tax' on fossil fuels (Börsch-Supan and Wilke 2004).

An important reform of the German PAYGO-system was made in 1972. This reform made the German system one of the most generous systems in the world because of its high replacement rate<sup>17</sup> and the indexation of the public pension to gross wages.

The 1972 reform was also generous because it offered the opportunity to retire anywhere between the age of 60 and 65 years without downward adjustments to the received benefits of the pension. The pension could be even further supplanted with disability benefits which were relatively easy to get. The system only allowed for retirement before the age of 65 before the 1972 reform in case of disability. However disabilities amounted to about 50 percent of all new retirement entries at the time. This may have to do with the fact that the German economy is heavily dependent upon

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<sup>16</sup> The "Beitragsbemessungsgrenze" increased from 2300 DM in 1973 to 5000 DM in 1983, which is far more than inflation (Deutsche Rentenversicherung Bund).

<sup>17</sup> This would be about 70% of pre-retirement net earning for a worker with a 45-year earnings history.

industry and workers may get disabled faster because of the heavy manual labour. But next to that the political consensus of the time was in favour of allowing a generation that had worked hard and suffered through the war to retire early with generous benefits<sup>18</sup>.

The 1972 reform indexed retirement benefits to the gross wages and therefore allowed pension benefits to grow faster than net wages and much faster than inflation (Börsch-Supan and Wilke 2004).

The total German GRV system contains several programmes, which in some cases can be cumulative. Old age pensions, disability pensions and survivor pensions are the most important.

The 1972 system distinguished between five types of old-age pensions, one being 'normal' retirement and the others early retirement. One feature was the possibility for flexible retirement from the age of 63 with full benefits and the possibility for women, unemployed and older disabled workers to retire at age 60 with full benefits. Figure 3 shows the various entrances to retirement up until 1995.

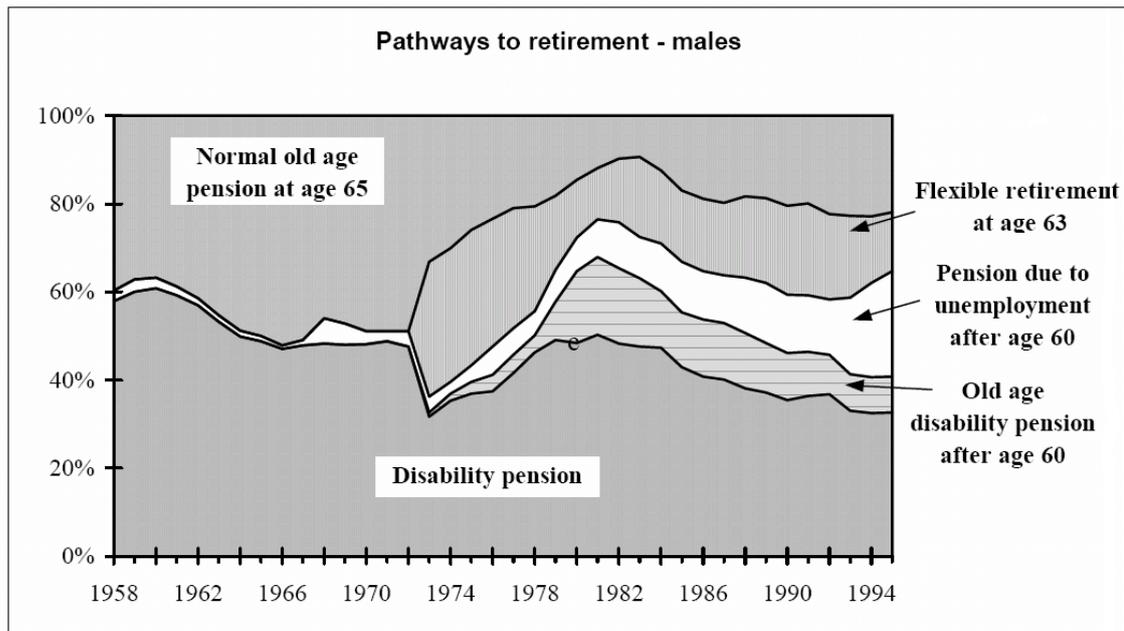
As can be seen in the graph, only a small percentage of the working chose to retire at the normal age of 65. This caused severe budgeting problems because shortages were being subsidised out of the general budget.

To combat these budgeting problems that would have gone out of control without intervention (Deml 2008), in 1992<sup>19</sup> an important reform of the pension system came into force.

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<sup>18</sup> Another reason was to give young people a better chance on the labour market. The sentiment was that due to increased productivity the labour market could do without a lot of the older workers (Schäfer, 2008).

<sup>19</sup> Börsch-Supan usually speaks in his articles of the 1992 reform but actually the German parliament approved the law in the afternoon of the 9<sup>th</sup> of November 1989. That evening the Berlin Wall came down, much to the surprise of everyone (Deml, 2008).



**Figure 3:** Pathways to retirements for males in Germany 1960-1995 (Börsch-Supan and Schnabel 1999).

In this important reform the pension was indexed to the net wages instead of gross wages. This first measure reduced benefits since taxes and other social insurance contributions (like unemployment insurance) have increased and thus reduced net relative to gross wages. This is an important mechanism with an ageing population since it implies an implicit mechanism of burden sharing between generations (Börsch-Supan and Wilke 2004).

Pensions were also made less actuarially fair (though still by far not fully actuarially fair) for some of those who chose to retire in the so-called 'window of opportunity' between the ages of 60 and 65. In the past people would get some sort of a bonus when they chose to retire within this window of opportunity. This bonus would be more than they would be entitled to based solely on their paid contributions. Would this be totally actuarially fair, retiring e.g. five years earlier would result in lower benefits proportional to the shorter work span. However all these changes will only be fully effective in 2017 and will reduce incentives for people to retire early (Börsch-Supan and Wilke 2004).

## ***German Riester reform of 2001***

In 2001 another pension reform act, named after the former minister of labour Walter Riester (SPD), the Riester reform, was put into law. This reform was a major overhaul of the German pension system and aims to transform the system into a truly multi-pillar system by partially substituting the PAYGO-system by a funded one.

The 2001 Riester reform aimed to achieve three main objectives:

- First of all it wanted to stabilize the retirement contribution rates people pay during their working life. Without reforms the process of ageing would lead to an explosion of the contribution rate for working generations. This in turn would lead to an increase of the non-wage labour costs and seriously hurt competitiveness in case wages were to go up accordingly. Otherwise it could seriously reduce purchasing power of working generations. The concrete aim of the Riester reform was to keep the contribution rate below 22 percent until 2020 and below 20 percent after 2030 and thereby limiting the intergenerational burden for the working generations.
- Secondly it wanted to secure the long-term stability of pension levels by reducing the pension benefits gradually from the current level of about 70 percent of average net earning to around 67-68 percent by the year 2030. The reform also specified that a fictitious 4 percent of gross earnings will now be invested in a newly funded supplementary private pension to achieve further long term stability. That is because this new supplementary private pension fund is a funded system and hence is not as vulnerable to the consequences of ageing as a PAYGO system. This way the long term stability of the GRV is enhanced by adding a (small) funded part.
- Thirdly the Riester reform aimed to enhance the spread of supplementary private pension savings. Although part of the pension savings are also to be invested in a compulsory fund, the aim is that people will further compensate their expected decrease in pension benefits with supplementary private pensions from either the second or the third pillar. These supplementary pension arrangements will be

subsidized by either direct tax benefits or by government subsidies. These are generally known in Germany as Riester products.

### **Earnings points/pension value**

The benefits in the German pension system are in the first place proportional to life-time contributions. These contributions are in turn proportional to earning.

Each year earnings points (EP)<sup>20</sup> are added to a workers life-time contribution<sup>21</sup> and they reflect the relative earnings positions of those who receive benefits to the total German average earnings position every year. Half an EP corresponds to 50 percent of average German earnings and two EP to earnings twice as large as average German earnings. The EPs are then converted to monthly pension benefits by multiplying them with the 'current pension value' (PV)<sup>22</sup>.

This PV is indexed to annual changes in net wages and thus enables pensioners to also benefit from better economic conditions and to safeguard standards of living for them. Previously, before the Riester reform, this was done by adapting the contribution rate to the standard 70 percent replacement rate (Börsch-Supan and Wilke 2004).

The German law specified in the 1992 reform a mathematical formula for the calculation of the monthly value of the PV. The stability of this formula gave a sense of actuarial fairness, and people saw the contributions largely as an insurance premium (Börsch-Supan and Wilke 2004). However the formula has changed several times since 1992. The perception of random changes and the prospect of further reductions in the pension generosity have led to a great deal of dissatisfaction with the German pension system, in particular among younger workers. Surveys show that by 2001, contributions were largely perceived as taxes (Börsch-Supan and Wilke 2004).

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<sup>20</sup> *'Entgeltpunkte'*, one point corresponds to € 29.304 in 2006 (Deutsche Rentenversicherung Bund).

<sup>21</sup> This is largely a fictitious average number for people from the former German Democratic Republic (GDR) because they did not contribute in the past. Everybody from the GDR is in the GRV, including self-employed people e.g. lawyers and doctors (Meyering, 2008).

<sup>22</sup> *'Aktueller Rentenwert'*, for West Germany this is € 26,56 and for East Germany this is € 23,34 for 2008. There are different rates for East- and West Germany because even after almost twenty years of unification there are still sizeable income differences between east and west (Deutsche Rentenversicherung Bund).

From 2002 on, a complex new adjustment formula came into effect which relates changes in the pension value to lagged changes in gross income, which is modified by the actual contribution rate to public pensions and a fictitious contribution rate to the new obligatory private pension accounts, gradually increasing from 1 percent in 2003 to 4 percent in 2008 (Börsch-Supan and Wilke 2004).

The design of the formula shows the balance between the two contrasting aims of the 2001 Riester reform; first to keep the contribution rate below 20 percent until 2020 and 22<sup>23</sup> percent until 2030. The second aim was to keep the redefined standard replacement level above 67 percent until 2030 (Börsch-Supan and Wilke 2004).

The second component of the Riester reform is the introduction and promotion of supplementary funded private pensions, also called Riester products. The aim of this part of the reform is to offer incentives for people to take out supplementary private pension insurance which, in the long run, should compensate for the future cuts in the GRV PAYGO pensions. However there will be no legal obligation for people to invest in additional private schemes (Börsch-Supan and Wilke 2004).

### **Riester products**

The new pillar pensions can be either occupational or individual pensions. In either case, many restrictions apply. The main restriction is on payment plans. Since additional private pension schemes are intended to supplement or replace benefits from the PAYGO GRV scheme, the government decided that incentives will only be available when a payment guarantee is given for a life annuity payable from the date of retirement. An important condition is that the nominal contribution must be paid out in full. This means that the amount of money invested by a person in a Riester product must be received back during retirement. This however does not include inflation and therefore is not the same amount of money in real terms. The incentives given are either direct savings subsidies or tax-deductible special allowances (Börsch-Supan and Wilke 2004).

The savings subsidy applies to all wage earners and certain self-employed who pay personal contributions to a certified retirement pension scheme and is paid directly into

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<sup>23</sup> In the 1992 reform this would increase up to 26 percent (Deml, 2008)

the beneficiary's saving account. In order to qualify for the maximum subsidy the beneficiary must invest a specified percentage of his or her gross earnings (denoted as "saving rate"). This percentage increases in four steps until 2008 ("*Riester-Treppe*"). This percentage is applied to the actual earnings level, capped at the same place as the PAYGO contributions are (about 2 times average earnings). If less money is invested, the state subsidy is reduced accordingly (Börsch-Supan and Wilke 2004).

Certain qualifying retirement savings can also be deducted as "special allowances" from income taxes. This is usually more advantageous for workers with above average earnings (Börsch-Supan and Wilke 2004).

The 2001 Riester reform remained largely undecided on the role of occupational pensions versus individual accounts. Occupational pensions have played a minor role in Germany, particularly in comparison with other countries. Collective bargaining agreements have precedence over the right to convert salary into a pension scheme. This means that an employee covered by a binding collective agreement is only entitled to convert pay into pension if this is explicitly provided for in the terms of the collective agreement. This makes sure that employers and trade unions can impose their own rules on occupational pension plans and thus overrule other arrangements (Börsch-Supan and Wilke 2004).

## ***Rürup Commission***

The Riester reform measures of 2001 were thought to be insufficient to meet the contribution rate and pension level targets (Börsch-Supan and Berkel 2004). Therefore a new reform commission, the Rürup Commission named after its chairman, Bert Rürup, was established in November 2002. Its objectives were the same as those of the Riester reform: to stabilize contribution rates and at the same time providing appropriate future pension levels. This commission came into being in a year of unexpected high unemployment rates and a poor German economic performance. This made a reform easier as many voters came to see reforms in the pension system as essential to enhance future growth (Börsch-Supan and Berkel 2004).

The reform comprises two major elements plus several other measures. The first main element is a gradual increase of the normal retirement age from 65 to 67 years. This is accompanied with adjustments to the different early retirement ages. The second is a modification of the pension benefit indexation formula and is accompanied by a revision of the Riester pension regulations.

While the abovementioned main two elements directly served to achieve the desired stabilization of contribution rates, the accompanying measures kept the several pathways to retirement open and aimed to take away some of the criticism of the new second- and third-pillar pensions (Börsch-Supan and Berkel 2004).

The measure to increase the normal retirement age from 65 to 67 years is slow and gradual. Beginning in 2011 and increasing in monthly steps the age 67 will be reached in 2035. This increase corresponds to two-thirds of the projected increase in life expectancy at age 65 (Börsch-Supan and Berkel 2004). This means that the average life expectancy of every cohort is still a third higher than the increase in pensionable age. Therefore, on average, people will still be able to enjoy their pension longer than the previous cohort. The increase in retirement age is needed because the longer life span necessitates an increase in the active part of life and hence a longer contribution time (Börsch-Supan and Berkel 2004).

To prevent people from going into early retirement and disability pensions to compensate for the increase in the retirement age, the actuarial adjustments for disabled and long-term insured employees were adjusted. However this included exceptions for workers with exceptional physical wear and tear (Börsch-Supan and Berkel 2004).

The commission extended the Riester benefit indexation formula by a new factor, the so-called "sustainability factor". This factor reflects the development of the relative number of contributors to pensioners, the system dependency ratio. This sustainability factor directly connects pension adjustments to the crucial factors determining pension financing, this being the number of contributors and benefit recipients.

Adjustments in the first pillar pensions are meant to be adjusted by additional second and third pillar pensions. Shortly after the 2005 election the proposals of the Rürup Commission were put into law by the grand CDU/CSU and SPD coalition.

## ***“Bundeszuschuss” and other considerations***

In the previous chapter the basic setup and the most important reforms of the German retirement system were discussed. However this system is constantly adjusted in several ways. E.g. the criteria for the Riester products have been subject to almost yearly adjustments. This did not change their basic nature, but it does show that the system is clearly still moving.

There are several other peculiarities of Germany and the GRV that need to be understood to predict and conclude something about the future of the system.

What has not really been touched upon before in this paper is that almost a third of the GRV pension arrangement is being financed out of general taxes and henceforth the federal budget<sup>24</sup>. In turn this is almost a third of the federal budget (Meyering 2008).

The GRV has always been financed partly out of federal taxes, mainly to pay for extra expenses that were not covered by the PAYGO scheme, but were part of the GRV<sup>25</sup>. These extra expenses range from child-rearing costs<sup>26</sup>, compensation for unemployment and illness<sup>27</sup>, foreign retirees that Germany is obliged, by treaty, to provide an income<sup>28</sup>, special arrangements having to do with German unification<sup>29</sup> and compensation for victims<sup>30</sup> of the GDR, National Socialists, World War II, expulsion from former German territories etc. etc.<sup>31</sup>.

Especially the people who belonged to a German minority in Eastern Europe and were given permanent residence in Germany and a passport, the so-called Volksdeutsche, make a big appeal upon the GRV. Almost a third of the Bundeszuschuss is used for

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<sup>24</sup> The so-called “*Bundeszuschuss*”.

<sup>25</sup> ... “*Versicherungsfremde Leistungen*”.

<sup>26</sup> ... “*Kindererziehungszeit (KEZ)*”.

<sup>27</sup> ... “*Anrechnungszeit (AZ)*”.

<sup>28</sup> ... “*Fremdrenten und Vertragsrenten*”.

<sup>29</sup> ... “*Vereinigungsbedingte Leistungen*”.

<sup>30</sup> ... “*Ersatzzeiten*”.

<sup>31</sup> Including German nationals (“*Reichsdeutsche*”) and ethnic Germans (“*Volksdeutsche*”). These Volksdeutsche came, after the war and the fall of the Iron Curtain, from as far as Russia, and had often lived there for generations as a German minority.

them because they usually contributed very little if anything to the PAYGO scheme (Meyering 2008).

As said before, the Bundeszuschuss is financed out of the general federal budget. The GRV is not part of the federal budget and any possible surpluses cannot be diverted back to the federal budget. Only shortages of the GRV are backed by the federal government. The Bundeszuschuss is financed out of the general taxes, but there are also some specific taxes levied for it. The most well-known tax is the environmental tax<sup>32</sup>.

This rather strange tax is in effect since 1999. Its purpose is to tax environmentally unfriendly consumption<sup>33</sup>, but at the same time if it succeeds in this and people adjust their behaviour, the federal government is faced with a shortage on its GRV budget. This has been compared to shooting clay pigeons (the variant with two pigeons) and missing both (Schäfer 2008).

In 2004, 18.1 bln. Euro was collected with the Öko-steuer, of which 16 bln. Euro went to the GRV. The total Bundeszuschuss was about 78 bln. Euro for 2005. Without the contributions of the environmental tax, the PAYGO contributions would have been about 1.7 percent higher (Deutscher\_Bundestag 2005).

Because such a high percentage of the Öko-steuer is spent on the GRV, it seems like the ideal political tool to adjust the GRV. It allows politicians to fill possible gaps in the GRV without having to adapt the politically sensitive PAYGO part while at the same time they can claim to be taking measures to protect the environment. From a political point of view, both pigeons are shot down this way.

The Bundeszuschuss pays for extra expenses that are not covered by the PAYGO part; hence one could say they are part of the total German social security system instead of merely the GRV. The federal government could also spend that money on e.g. welfare<sup>34</sup> or infrastructure just the way it does with cigarette taxes (as The Netherlands does).

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<sup>32</sup> The so-called ‘‘Öko-steuer’’.

<sup>33</sup> It does this by e.g. taxing certain kinds of electricity production or cars with high CO<sub>2</sub> emission.

<sup>34</sup> The so-called ‘‘Sozialhilfe’’ that provides a minimum level of income for people who lack income of their own or have no entitlements to other benefits.

They do have some leeway to constantly adjust the Bundeszuschuss because the Versicherungsfremde Leistungen are very broadly defined (Pimpertz 2008). But, the view that politicians can fill gaps of the GRV with the Bundeszuschuss seems to be a bit exaggerated.

The fact that such a large part of the GRV is financed out of the federal budget does not seem to be the biggest concern of most. At least it does not increase labour costs directly because it is not a pay-roll tax (Schäfer 2008).

Keeping the PAYGO part healthy by increasing female labour participation and that of people above the age of 55, together with the recent reforms seems to be sufficient and can count on a broad consensus (Deml 2008; Meyering 2008; Pimpertz 2008; Schäfer 2008).

What does seem to be a growing problem is the increasing number of people who have not built up a full GRV pension. Because of long-term unemployment<sup>35</sup>, divorce or other circumstances a growing number of people receive a retirement benefit that is below the minimum income threshold and therefore live in poverty.

There are arrangements for income assistance for these groups, but it is expected that in the future more people will need to make an appeal on these arrangements. It depends on the situation whether this assistance should come from the GRV or the Sozialhilfe.

In the preceding text it is explained what the problem of population ageing actually is. The question then arose, what the causes and consequences are of a population that is ageing? Specifically how population ageing affects the affordability of pension arrangements. Subsequently we looked at the situation of the German retirement insurance. Its origin, reforms, how it is currently financed and other peculiarities were described. It must be added that even though this description is quite lengthy, for the sake of overview it is still a description in a nutshell. For even more detailed information about the German retirement insurance the reader is referred to the literature index at the end of this paper.

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<sup>35</sup> In e.g. certain heavy industries that were shut down in the former GDR but also in the old FDR.

The next chapter presents the model of international spillover effects through the capital market that this paper will use as a template for answering the research question of this paper. Subsequently, the real life applicability of this template is reviewed.

## International capital flows and pension systems

### *General theory*

In countries with extensive public PAYGO pension systems, e.g. Germany as well as France and Italy, a rise in the old-age dependency ratio will put an additional strain upon the current working generation. Because there are more recipients and fewer contributors this means that either the PAYGO contributions will have to increase or that pension benefits will have to fall. A third option would be to use general government funds to fill the gaps in the PAYGO system. For instance the Dutch AOW was for 1,2 bln. Euro financed out of additional funds in 2003, this is only a small percentage of the 21 bln. Euro that is yearly paid to Dutch retirees, but it is projected to rise substantially in the future when the rest of the financing does not change (van Eekelen and Olieman 2003).

Because government expenditure on pensions are already quite high (see Table 3) an often proposed measure is to shift the emphasis of the pension scheme from the first to the second pillar. This way the risks associated with both systems are spread out and the stability of the pension system is enhanced<sup>36</sup>.

Italy	14.2	Belgium	10.4
Austria	13.4	Luxembourg	10.0
France	12.8	Denmark	9.5
Germany	11.4	Spain	8.6
Portugal	11.1	Netherlands	7.7
Finland	10.7	UK	6.6
Sweden	10.6	Ireland	4.7

**Table 3:** Public expenditure on pensions as % of GDP in 2004 (Adema 2008)

<sup>36</sup> In a funded system a rise in the old-age dependency ratio will not give the same financing problems as a PAYGO system because people save for their own pensions. On the other hand; funded pensions are subject to changes in the rate of return on investments. However, ageing changes the rate of return on investments, and since everywhere around the world societies are ageing we can expect worldwide changes in the rates of return on investments which will also affect funded pension systems.

Cutler et. al. (1990) was among the first studies that showed that demographic changes in other countries have to be taken into account because of the fact that international capital mobility and markets are becoming more and more integrated. They argued that the consumption possibilities of consumers are narrowed in the case of population ageing because of a rise in the old-age dependency ratio. This means that the number of working people falls compared to the number of inactive elderly and the total output per capita falls<sup>37</sup>. This effect lowers consumption per capita and is called the dependency-ratio-effect.

A second effect is that a fall in fertility will decrease the labour force because the population growth decreases. In a standard growth model this means that less investment is needed to equip each worker with the required capital stock. This is when the technological progress as a constant<sup>38</sup> is taken as a constant. This is the so-called capital-thickening-effect which reduces the need for savings and increases consumption per capita. Cutler (1990) then uses a Ramsey growth model<sup>39</sup> and finds that for the United States it would be beneficial to decrease savings and increase consumption in the upcoming years of ageing. That is because the beneficial capital-thickening effect is larger than the dependency-ratio-effect. Because the United States is one of the OECD nations that ages the least, Cutler (1990) suggests that the beneficial effects would be even larger in other OECD countries.

According to Adema (2008) the problem with the analysis of Cutler (1990) is that a Ramsey growth model assumes that individuals live infinitely long and there is no distinction between generations. This means that the effects of ageing on intergenerational redistribution and savings effects are not taken into account. Additionally an increase of life-expectancy can not be studied. These are all basic characteristics of a PAYGO pension scheme. Therefore it limits the possibilities to analyze a PAYGO scheme with the approach of Cutler (1990).

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<sup>37</sup> Output per active person may rise because of productivity gains caused by e.g. technological progress. Nevertheless, because of ageing, total output per person drops in this case.

<sup>38</sup> We assume that technological progress is fairly constant, so no sudden improvements that rapidly change productivity.

<sup>39</sup> The Ramsey growth model is a neo-classical model of economic growth named after economist and mathematician Frank P. Ramsey. The more familiar Solow growth model is similar to the Ramsey growth model, but does not include an endogenous saving rate (The New Palgrave Dictionary of Economics Online, 2009)

## Overlapping generations model

A good and simple way of modelling a PAYGO pension scheme is the two-period overlapping-generations model (OLG<sup>40</sup>) developed by Samuelson (1958) and Diamond (1965). In this model every person lives for two periods, people work in the first and are retired in the second. Because usually both a young and an old generation are alive at the same time, there is a transfer of capital between these generations.

Steady state<sup>41</sup> per capita consumption is maximised when the real rate of interest<sup>42</sup> ( $r$ ) is equal to the growth rate of the economy, which equals population growth rate ( $n$ ) in the case of no technological progress. This is often called the Golden Rule point.

In the case of dynamic inefficiency, consumers save too much. In this case there is too much capital accumulation and  $r < n$ . In this situation welfare of all generations may be increased by lowering the capital stock. This substitution of private saving by consumption can be achieved by introducing a PAYGO system (Aaron 1966).

In the opposite case where  $r > n$  and the economy is dynamically efficient, it is not possible to increase long-run welfare without hurting some current or future generations. A PAYGO pension scheme will, in the case of dynamic efficiency, benefit short-term welfare but will reduce long-term welfare as PAYGO pension schemes reduce capital stocks. According to Adema (2008), it is presently often assumed that modern western economies are close to dynamic efficiency. Therefore it is a safe assumption to make.

Buiter (1981) and Persson (1985) extended the OLG to include an open economy and with two countries. The time preference study of Buiter showed that consumers in a country with a high time preference consume relatively more when they are young and save less. That means that the capital-labour ratio in such a country is relatively low under autarky. Therefore, the opposite holds for a country with a low time preference. In the case where these two countries have an integrated commodity and capital market, then international trade, borrowing and lending equal are equal to the capital-labour ratio

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<sup>40</sup> Or an n-OLG model when referring to  $n$  generations.

<sup>41</sup> The steady state is a condition of an economy in which output per worker and capital per worker does not change over time. This is because the rate of new capital production from invested savings equals the rate of existing capital depreciation. Exogenous growth models show that economies will naturally tend to such a steady-state (The New Palgrave Dictionary of Economics Online, 2009).

<sup>42</sup> Real in this case means compensated for inflation.

in both countries. The capital-labour ratio will get higher in the high time preference country and lower in the low time preference country and will change welfare in both countries since wages and interest rates are affected. The long run welfare effects depend upon the economy being dynamically efficient or not.

Buiter (1981) showed that both countries do not necessarily have to benefit from such integration. It could be the case for instance that both economies are dynamically efficient under autarky and remain that under openness. According to Buiter (1981) the long run welfare effects will be positive in the high-time-preference country. That is because the economy is now closer to the Golden Rule point. There is less capital underaccumulation and a higher capital-labour ratio because of the openness of the economy that allows capital or labour to flow to either country.

Next to that the high-time-preference country is now a net borrower after integration of its economy with the other country. With that it benefits from the lower interest rates that result from the higher capital-labour ratio.

The effects for the low-time-preference country can run in two directions. On the one hand because the country is a net lender under an open economy it gains from the lower capital-labour ratio because this leads to a higher interest rate. On the other hand a lower capital-labour ratio has negative utility effects under dynamic efficiency. That is because international trade and financial mobility do not expand the consumption possibilities of consumers and there are no potential gains from specialisation because only one commodity is produced (Adema 2008).

Persson (1985) investigated which effects an increase in public debt in an open economy might have for the intergenerational welfare redistribution. In a closed economy with overlapping generations a government debt reduces steady state welfare in the case of dynamic efficiency because capital is crowded out and taxes have to be increased<sup>43</sup>. The contribution of Persson (1985) was that the negative welfare effects are less in a small open economy. In such a case the capital-labour ratio is exogenous and future generations only bear the higher tax burden caused by the public debt. The

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<sup>43</sup> That is when we assume that the government does not invest (e.g. build infrastructure) and only consumes their debt.

capital-labour ratio is exogenous to (at least) the small open economy because the size of its economy is too small to significantly influence the capital-labour ratio, but because of the openness of its economy can export/import either its capital or labour<sup>44</sup>.

When it concerns two large countries that have (with their debt policy) a global influence on labour and capital prices (e.g. the United States or Germany) the long-term welfare effects become unclear. That is because there is the extra effect of terms-of-trade<sup>45</sup> that reinforces the changes in the capital-labour ratio and higher taxes. When a country is a net borrower on the international capital market it is affected negatively by the higher interest rates that are caused by a lowering of the capital-labour ratio. When a country is a net lender it benefits from the higher interest rate and the two negative effects are lowered. It can even be the case that when the terms-of-trade effect is large enough, government debt may even increase welfare in the long run.

The models of Persson (1985) and Buiters (1981) do not include pensions. Breyer and Wildasin (1993) look at the steady state welfare effects of unfunded pension schemes in a large open economy. They assume that there is only one country big enough to affect world interest rate and all the others treat the interest rate as exogenous. The findings of Breyer and Wildasin (1993) are similar to those of Persson (1985) and Buiters (1981) because an increase in the size of the PAYGO scheme can be compared to an increase in government debt. A higher PAYGO pension lowers savings and crowds out the capital stock, just like government debt, and the world interest rate will rise. Breyer and Wildasin (1993) show that a large open economy that is on the way to the Golden Rule Point and is a net lender on the international capital market can increase its steady state welfare by introducing or increasing a PAYGO pension scheme because of the increase in the world interest rate. On the other hand the country that is a net borrower would experience negative long run welfare effects if the other country chooses to increase its PAYGO pension scheme (Adema 2008).

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<sup>44</sup> Such a mechanism is also often seen in global interest rates. A small country has less to say about the interest policy of its large neighbour and has to take the interest level its neighbour sets as exogenous.

<sup>45</sup> Terms-of-trade refers to the relative prices of a country's export to import; "If a country exports 50 dollars worth of product in exchange for 100 dollars worth of imported product, that country's terms-of-trade are  $50/100 = 0.5$ . The terms-of-trade for the other country must be the reciprocal ( $100/50 = 2$ ). When this number is falling, the country is said to have deteriorating terms-of-trade" (The New Palgrave Dictionary of Economics Online, 2009).

Casarico (2001) analyzes the same situation except that this study takes two countries that are different in the degree of funding of their pension systems. One country relies on a PAYGO pension scheme and the other relies on a fully-funded pension scheme. This difference would mean that their capital-labour ratios would differ when both are closed economies. The PAYGO country will have a lower per capita capital stock than the funded country and therefore capital will flow to the PAYGO country from the funded country when both countries have an integrated capital market. These capital flows can be compared to the ones used by Buitier (1981) except that they do not involve time preference but capital flow from pensions. The PAYGO country can be compared to the high-time-preference country and so people in this country are better off in the long-run.

In recent years a large number of papers have been published that extended the basic OLG model in larger and more complicated models involving multiple generations. For instance Attanasio et. al. (2006), Börsch-Supan et. al. (2005), Brooks (2003), Domeij and Flodén (2006) and Fehr et. al. (2005) all present large multi-country overlapping-generations models to study the effects of ageing. A defined benefit PAYGO scheme means higher PAYGO contributions which will decrease savings rates.

Initially rapidly ageing countries will export capital, while less ageing economies will be capital importers. This is reversed as soon as the baby-boom generation dissaves during retirement and countries most affected by ageing will be capital importers (Adema 2008). And there is no guarantee that technological progress can continue at the same rate or keep up with the lowering of the labour supply. Some authors show that international capital flows induced by differently ageing countries will change over time (Brooks 2003; Börsch-Supan, Ludwig et al. 2005).

## ***Different types of pension system***

Adema (2008) follows the same approach as the simpler model of Casarico (2001) but focuses on the international spillover effects of population ageing pension system reform when two countries already have an integrated capital market but use different pension arrangements. Here we will use the model of Adema (2008) to look at the relationship between The Netherlands and Germany and their respective pension systems.

First of all Adema (2008) presents a model that only focuses on the effects ageing has on two countries with ageing populations. One country has an extensive funded system and the other an extensive PAYGO system. The model analyses how the funded system is affected by changes in the PAYGO system of the other country. In this first model countries are faced with a symmetric ageing shock, that is both countries are facing the same proportion of their population becoming inactive compared to their active members. This is caused by an increase in longevity and a decrease in fertility. It is also assumed that the PAYGO country keeps its PAYGO pension system balanced. This means that either contributions or benefits will have to be adjusted to keep the budget balanced. In this model the utility effects are derived in case each country adopts a different pension scheme (PAYGO as opposed to a funded system) as compared to both countries adopting the same system.

A variant of the model used by Adema (2008) looks at what happens when a country uses the often proposed measure of switching, wholly or partially, to a funded system from a PAYGO system. Other models that include time introduce uncertainty about investment options in the case of population ageing.

When returning to the research question of this paper, and assessing the applicability of these models to the situation of The Netherlands and Germany, a number of assumptions made in the models of Adema (2008) must be looked at.

An important assumption of some of Adema's variant models is that the government does not reform its pension system but instead relies on government debt to finance population ageing. Another important assumption is that there is a closed economy. Both are clearly not the case in Germany. Government debt was not expected to increase,

and the government even made a point out of not making any new debt two years from now<sup>46</sup>. Furthermore, Germany surely is not a closed economy. Of course the current economic crisis may change the debt situation, but decisions to increase government debt during the financial crisis have different motives than population ageing. Therefore the model variant from Adema (2008) is used where one country reforms its PAYGO pension system and the other does not<sup>47</sup>.

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<sup>46</sup> This was the case in the summer of 2008. The events of the credit-crunch in late 2008 make the future very uncertain in this respect.

<sup>47</sup> In this model variant debt also plays a role in compensating certain generations. However this is still the most appropriate model variant because the government does not solely rely upon new debt to finance its pension system.

## ***International spillovers and pension reform***

The first model variant of Adema (2008) in analyzing the effects of a pension reform in a country with a PAYGO system is that the collection of the contributions is not distorting the economy.

Verbon (1989) and Breyer (1993) have shown that in such case the PAYGO system is Pareto efficient. That means that in the case of a reform, certain generations benefit and certain others lose. Consequently, the reform policy choice depends upon the question which generation is allowed to gain and how much another generation should be compensated. The choice would thus be whether the working generations should benefit by lowering contributions or the retired generations by increasing benefits.

If the reform in the PAYGO country implies an increase in the capital-labour ratio, it is generally the future generation that benefits. That is because the PAYGO country is a borrower on the international capital market, and therefore benefits from the lower interest rate corresponds with an increase in the capital-labour ratio and higher wages (Adema 2008).

For the funded country an increase in the capital-labour ratio does not necessarily mean any welfare gain for a future generation in that country. However choices made in the PAYGO reforming country, can spill over to this country in a common capital market (Adema 2008).

This is especially the case when the reforming country makes the decision that future generations will profit from the reform. In this case the future generations in the non-reforming funded country will gain as well. But this future, long term benefit may come at the cost of a lower utility in the short run. That is because due to the rising capital-labour ratio the increase in wages for initial generations is relatively lower compared to the decrease in the interest rate (Adema 2008).

The second model variant of Adema (2008) is that there is an excess burden in tax collection. The idea is that if the contribution rate is decreased, there are net welfare gains that make it possible to compensate the retirees for the loss of their benefits.

When a Pareto-improving policy is implemented in the two-country model of Adema (2008) there are long-run gains in the PAYGO country that are transferred to the funded country. Even when in the reforming PAYGO country the policy is shaped in such a way that every generation is compensated in both the short- and the long-run, in the funded country some generations might lose in the short run.

That is because in the open capital market the additional savings that emerge during the transition policy in the PAYGO country will lower the interest rate. The working generations that are alive in the funded country when the PAYGO country starts reforming will especially notice this since they are not compensated for the negative utility effects of the lower interest rate.

When a PAYGO public pension scheme is (partially) replaced by a funded pension system, it essentially means that certain pension claims or promises to the current retirees are no longer honoured. One can see this as imposing a lump-sum tax on the current retired generations as to decrease the size of the government debt. Diamond (1965) and Persson (1985) have analyzed the reverse policy option where a lump-sum tax decrease is granted to the retired generations and paid for by a government debt increase.

Some of the effects of Adema (2008) are comparable to those of Persson (1985). E.g. the spillover effects of reforming a Pareto-efficient PAYGO scheme without compensation for the first generations in retirees are comparable to those of a decrease in government debt since they both lead to a decrease in the interest rate on the international capital market.

Adema (2008) corrects for the fact that the two countries in the model may differ in size. That is because in previous studies (e.g. Steigum and Raffelhüschen 1994) it has been shown that spill-over effects can be relatively minor when the change in debt in one country is small compared to the total capital stock in the common capital market. In this way the analysis can be applied to the case where a group of smaller countries or a large country switches from a PAYGO to a more funded system, e.g. Germany and The Netherlands.

Reforms in Germany will presumably lead to sizeable changes in the capital stock in the long-run and therefore have important consequences for the country that are already employing a funded system and thus being dependent upon the interest rate. The Netherlands is especially vulnerable since it is a smaller economy compared to Germany, and moreover because it is such an exception in Europe with its funded system.

The next section shows the model used by Adema (2008) and some intuitive results. After that different reform scenarios are discussed under the assumption that the PAYGO scheme is Pareto efficient as well as some possible consequences to the capital-labour ratio.

A two-period overlapping-generations model of an open economy is used by Adema (2008) where the world consists of two countries, like in Buiter (1981) and Persson (1985). Country P has a PAYGO scheme and country F employs a funded scheme. A constant population size and dynamic efficiency in both countries are assumed. The countries do have different population sizes, whereas the countries do not have any other differences.

## ***Pension reform in a model of Pareto efficiency***

As a starting point the government in country P runs a balanced PAYGO pension system where the taxes of the young ( $\tau^p_t$ ) are used to finance the pension benefits of the elderly ( $z^p_t$ ). Adema (2008) distinguishes between the cases where the PAYGO system is efficient and the case where the PAYGO scheme leads to distortions in the economy. In the latter case the PAYGO tax implies an excess burden.

The excess burden arises because the individual link between pension benefits and contributions is broken because the pension system is also used for intragenerational redistribution. Fenge (1995) and Brunner (1996) have proven that when such a link exists within a pension system, the system is Pareto efficient, even when contributions are a proportional tax on labour income as is the case in Germany.

Sinn (2000) argues that improving the Pareto efficiency of a pension system by introducing a funded element is not possible in Germany. That is because the country has had a PAYGO system since 1957 where benefits are proportional to contributions (up to a certain maximum that only very few people reach) (Deutsche Rentenversicherung Bund, 2009). We assume therefore that the German pension system is Pareto-efficient (i.e. taxes are non-distortionary).

We therefore assume that there is a trade-off between the utility of different generations in implementing the reform. Adema (2008) considers three types of reforms.

- In the first reform the government of the PAYGO country does not compensate the retirees.
- In the second reform the current retirees are fully compensated by the government by creating government debt. The extra tax needed to pay for the extra interest obligations is in this case levied upon the pensioners.
- The third reform is similar to the second except for this case where the tax for the extra interest obligations is levied upon the working generation.

For each of the cases considered, Adema (2008) is able to calculate analytically the effects of a pension reform on the capital stock of both countries.

It is politically unrealistic that a country will reform its pension system without compensating the current retirees. The mere nature of a PAYGO scheme implies that an intergenerational debt is built up. When a sudden reform abolishes the PAYGO scheme, this debt is defaulted upon. It is unlikely that this will happen. Because people regard their pension as a right since they also paid for the previous generations' pension. Next to that people feel some altruism towards other generations<sup>48</sup>. Therefore only the second and third options are considered.

It is probably also more realistic to assume that the current old are compensated by the government in such a way that individuals have time to adjust their behaviour to the smaller PAYGO system. Therefore Adema (2008) assumes that while contributions to the PAYGO scheme fall permanently at  $t=0$ , the benefits are kept not changed in that period. This is again communicated one period before the reform actually takes place (at  $t=-1$ ). The government also announces that at  $t=1$  pension benefits will fall just as much as the contributions, so that the PAYGO system is balanced again from then on. Since taxes are lower compared to the benefits during one period ( $t=0$ ), there will be government debt in country P at  $t=1$ . The moment that contributions and benefits are equal again ( $t=1$ ), the government introduces an extra tax on either the future retirees or the current working ( $\tau_t^p$ ) to pay interest on its debt, such that debt per worker is stabilized from then on.

When  $\tau_t^p$  is levied on the future retirees from  $t=1$  on, starting at  $t=1$  there is no generation that gains or loses from the pension reform. That is because savings in the PAYGO country increase just as much as government debt increases. What has happened is that the implicit debt inherent to the PAYGO system has been made explicit. See for example Verbon (1989), Breyer (1993) and Homburg (1990).

- *"In case the old at the time of the reform are fully compensated and the tax to finance the debt is levied on the future elderly, the capital-labour ratio remains constant over time" (Adema 2008).*

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<sup>48</sup> Another factor may be that because of population ageing retirees/elderly are becoming more and more important as a voter bloc and may block reform legislation. E.g. Sinn (2000) states that the demographic "tipping point" in Germany will be reached around 2015. After that the elderly will be in majority.

Because of the fact that constant capital-labour ratio consumption and utility do not change, this also means that there are no international spillover effects for the funded country (Adema 2008).

Instead of imposing  $\tau_t^p$  on the future retired, the government can also choose to levy the tax upon the working people, starting at  $t=1$ . This means the first young generation under the reform, born at  $t=0$ , does not have to pay the debt tax (Adema 2008).

Like the future young generations, they also get the lower PAYGO tax, but, unlike the future young generations, they do not have to contribute to the compensation the elderly at  $t=0$  receive. The young generation at  $t=0$ , will thus get an overall gain. In this case the following is the result:

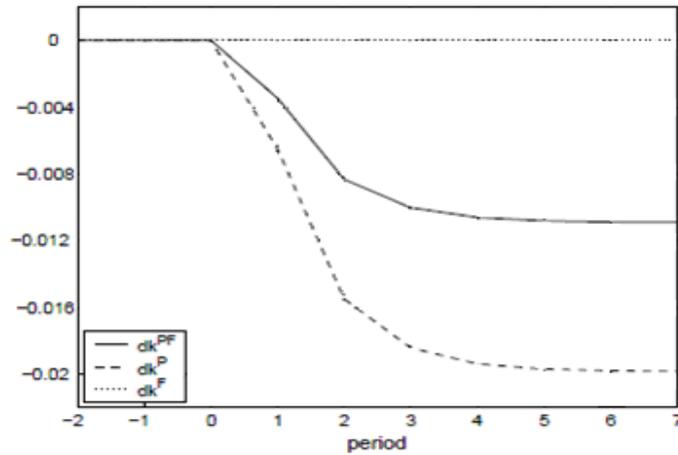
- *“In case there is full compensation for the elderly at the time of the reform and the debt tax is levied upon the future workers, the capital-labour ratio will start decreasing in the period after the reform in country P. This in turn leads to capital flows from country F to country P” (Adema 2008)*

The intuition for this result is that the first young generation under the reform consumes part of its gain in the first period, and saves part of it. As the gain this generation receives equals the created debt, the increase in savings at  $t=0$  is lower than the created debt. This means that the public debt crowds out part of the capital stock. Future working generations receive the lower PAYGO tax, but also pay a debt tax  $\tau_t^p$ . They receive a lower capital-labour ratio than previous, which leads to lower wages. Therefore savings are lower and, as a result, the capital-labour ratio continues to decline.

Because the country with the PAYGO scheme can finance part of its government debt with savings of the funded country F, the capital-labour ratio falls more than when country P does not have an integrated capital market with country F. This can be seen in Figure 3<sup>49</sup>.

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<sup>49</sup> The graph is based on simulations with logarithmic utility functions and countries of equal size ( $n=1$ ). It is further assumed that half of the PAYGO system is privatised from  $t=1$  onwards and that both the contributions and the benefits fall by 50% permanently. One period is 30 years. In the steady state the capital-labour ratio drops by about 17% in the open economy case (Adema, 2008).

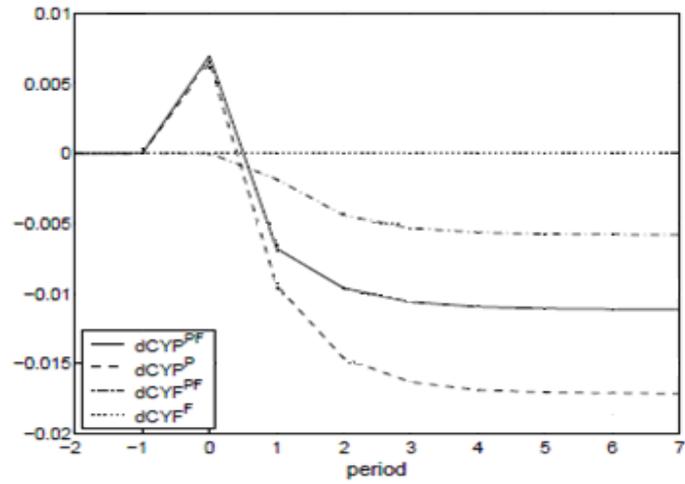


**Figure 3** Change in capital-labour ratio in country F and P. The uninterrupted line represents the situation of an open economy and the dotted lines that of a closed economy (Adema 2008)

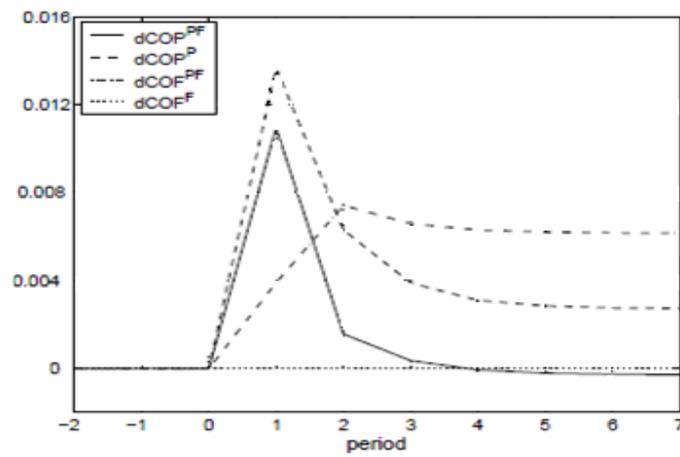
The main findings of Adema (2008) in the case that the retirees are fully compensated at the time of the reform and tax to finance the extra debt is levied upon the future young are:

- *“The pension reform in country P leads to less consumption possibilities for the young in country F, while the elderly in country F gain” (Adema 2008).*
- *“In the period after the reform both the elderly and the working people in the funded country gain from the pension reform in the PAYGO country. In the long run, however, people in the funded country experience negative spillover effects” (Adema 2008).*

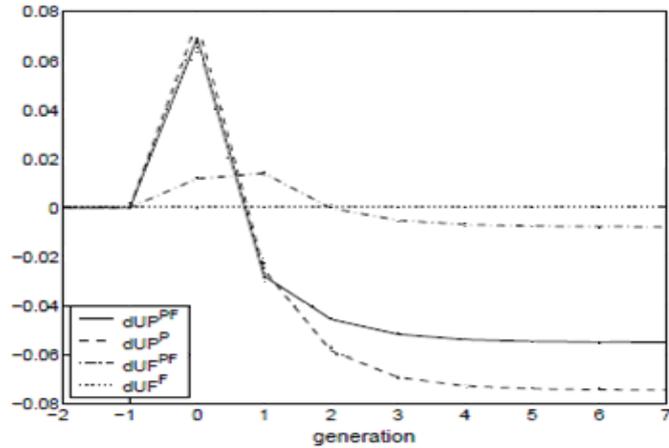
Therefore, having a common capital market with country F protects the generations living in country P to some extent, because part of the burden of this reform policy is transmitted to country F through the capital market. This is illustrated with the following figures where changes in the consumption possibilities and utility are expressed as functions of changes in the capital-labour ratio.



**Figure 4** Change in consumption possibilities for the young in the funded and the PAYGO country per period. The uninterrupted line represents the situation of an open economy and the dotted lines of a closed economy in either the funded or the PAYGO country (Adema 2008)



**Figure 5** Change in consumption possibilities for the old in the funded and the PAYGO country per period. The uninterrupted line represents the situation of an open economy and the dotted lines that of a closed economy in either the funded or the PAYGO country (Adema 2008)



**Figure 6** Change in utility for the funded and the PAYGO country per generation. The uninterupted line represents the situation of an open economy and the dotted lines that of a closed economy in either the funded or the PAYGO country (Adema 2008)

Of course these graphs are only simulations but they do show that there is an obvious policy conclusion stemming from the model which yields that in a common market like the European Union important pension scheme changes cannot be taken without considering effects for non-reforming (funded) countries.

The next chapter covers the way how the recent Riester reforms in Germany have worked out until now. Some results are shown that indicate the possibility for international spillover effects. The usefulness of the template will also be discussed.

## **Applicability**

### ***Acceptance of Riester reform***

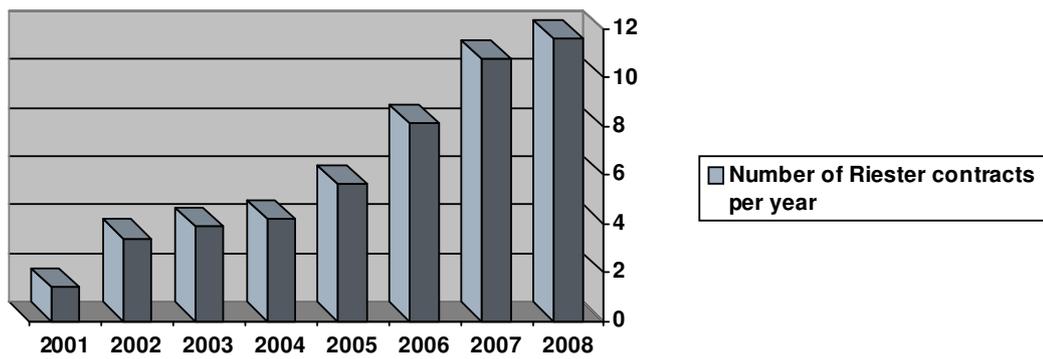
It was previously seen that in theory there are negative spillover effects for the non-reforming funded country. The next question would then be how the recent pension scheme reform in Germany compares to the model.

As explained, the PAYGO contributions in Germany have been set at a maximum for working generations, and the future benefits out of the PAYGO system will be significantly lower for future generations.

The objective of the government is that cuts in the PAYGO system will be compensated by the fact that people choose to invest in the so-called Riester products.

These Riester products first became available following the pension reform in 2001. Initially acceptance of these new products seemed to be slow. Out of the 37 million people who are eligible for the products (Corneo, Keese et al. 2007), only about 4 million purchased the products in 2004 (Boksem and Kuhr 2008). This seems to have been partly because of the competition with traditional life-insurance products for which there was still a preferential tax treatment (Börsch-Supan, Reil-Held et al. 2007).

However, acceptance of the Riester products rose especially in 2005. In this year the preferential tax treatment for the traditional life insurance ended and several simplifications were made to the Riester products (Börsch-Supan, Reil-Held et al. 2007).



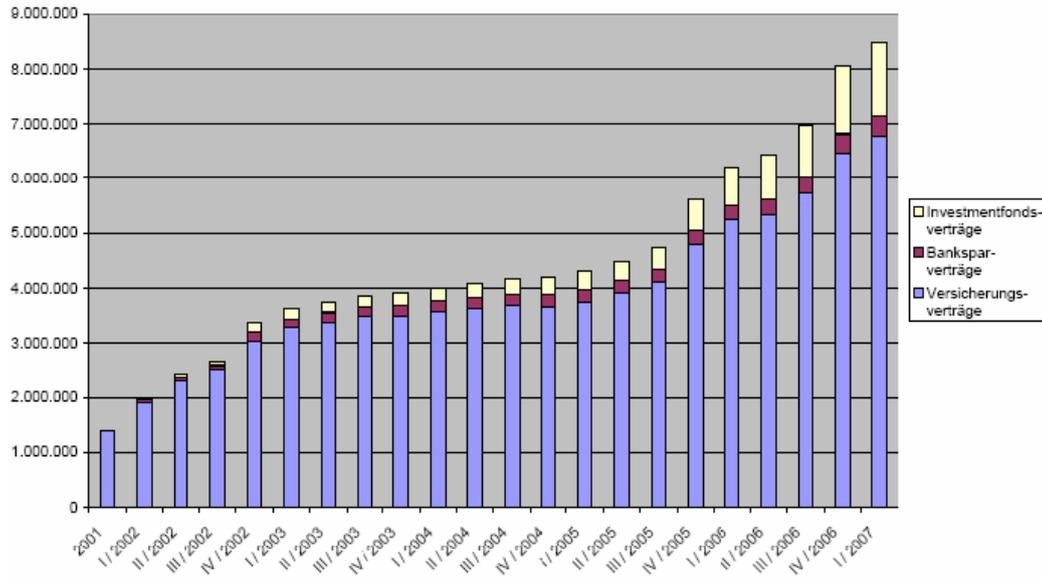
**Figure 7** Number of Riester contracts in millions per annum (Boksem and Kuhr 2008)

As can be seen in figure 9 this trend continued after 2005 and in 2008 already 11 million people had purchased Riester products (Boksem and Kuhr 2008)<sup>50</sup>. Interesting is that next to an increase in demand for Riester products, the demand for non-Riester pension products also increased. Probably this is due to an increasing number of people who seek pension arrangements, but are not eligible for the Riester products.

In figure 8 it can also be seen that more different types of Riester products are purchased. In the beginning mainly insurance products were purchased, but starting in about 2004 more and more investment products were bought.

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<sup>50</sup> Important to note is that in accordance with its policy aim is that the Riester products seem to reach a broad spectrum of the German population. Women, low-income people and people from the former GDR states are proportionally represented in the scheme (Corneo, Keese et al. 2007). However for the low-income group, these investments in Riester products would otherwise have been put on a savings account (Corneo, Keese et al. 2007). So at least for this income group, there may merely be a difference in portfolio choices instead of capital accumulation.



**Figure 8** Number of Riester products bought per quarter. Yellow: investment products, red: savings products, purple: insurance products (Börsch-Supan, Reil-Held et al. 2007).

Especially the growth of the purchase of investment funds is interesting. Investment funds may yield higher profits but that also means that there is more risk involved in these products. This form of capital is more likely to invest abroad because often returns on capital are higher there. Think of China for instance but also closer to home in the European Union.

## ***Effects of Riester reform***

The effect of the Riester reform on the German capital stock has been projected by Börsch-Supan, Heiss et al. (2003). Although this publication is from just after the Riester reform and thus does not fully incorporate recent events, it is still very useful since it makes calculations based on rather conservative assumptions.

Fehr and Habermann (2008) analyzed the long-run welfare effects of the Riester reform more recently but do not explicitly mention the option of international capital flows and focus upon the macroeconomic and welfare consequences for the economy. Fehr and Habermann (2008) put an emphasis upon the drop of accidental bequests (e.g. inheritances) that may be the result of the pension reform and hurt future generations. They predict a long-run decrease in the capital stock of about 2 percentage points and a long-run decrease in wages of 0,6 percentage points. This main finding concerning the aggregate capital stock is in line with Börsch-Supan, Heiss et al. (2003) albeit less severe. Furthermore Fehr and Habermann (2008) do not include the reduction of the PAYGO part of the GRV in their model that will probably strengthen their results. Börsch-Supan, Heiss et al. (2003) do include this next to the option of international capital flows and therefore seem more fit to use in this paper despite its relative old age.

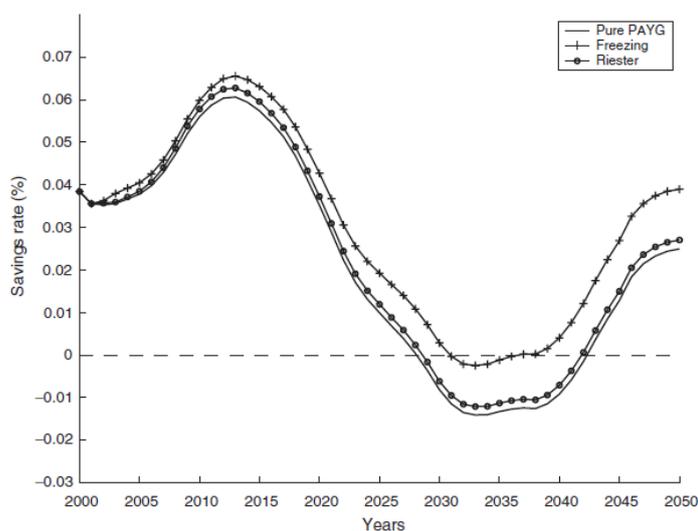
Börsch-Supan, Heis et al. (2003) estimates the effects on the aggregate capital stock and the return on capital using three different scenarios. The first would be to disregard the Riester reform and continue with the old PAYGO scheme, and thus the projected exploding contribution rates. The second would be to totally freeze the contribution rates of the present PAYGO system and thereby forcing people to save privately. The third alternative is the Riester reform where people save with government backed products.

The main finding of Börsch-Supan, Heiss et al. (2003) is that there is a future decrease in the rate of return on capital caused by ageing in Germany. Once the baby-boom generation retires and starts to consume their accumulated retirement savings, the simulations of Börsch-Supan, Heiss et al. (2003) show that there is a decrease in the aggregate savings rate of about 9,2 percentage points and a corresponding decrease in

the return to capital of about 0,7 percentage points in 2050<sup>51</sup>. This is only the direct effect of ageing in Germany.

According to the simulations Börsch-Supan, Heiss et al. (2003) the additional capital market effects of the Riestert reform are only marginal, especially when compared to the option of freezing the current PAYGO contribution rates.

In figure 9 it can be seen that according to Börsch-Supan, Heiss et al. (2003) the projected aggregate savings rate drops significantly due to ageing. At the peak of the ageing problem in the year 2038 the savings rate is projected to be around 2 percentage points under the old PAYGO system. Savings under the freezing reform option would be substantially higher. The Riestert reform only marginally changes a household's optimal savings behaviour.

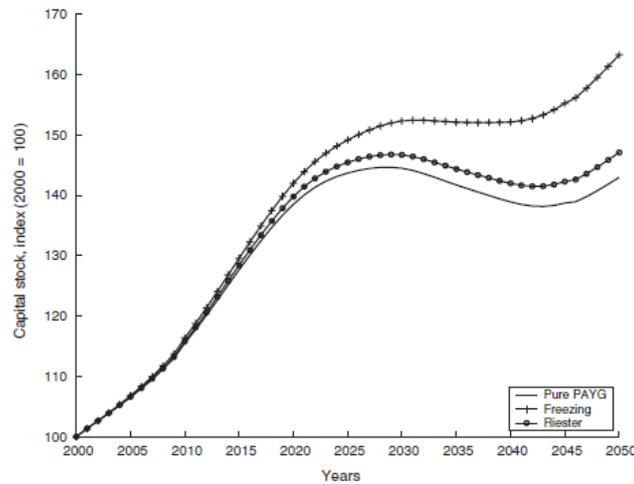


**Figure 9** Projections of the aggregate saving rate under alternative pension systems (Börsch-Supan, Heiss et al. 2003).

Figure 10 shows the effect of this change in saving behaviour on the aggregate capital stock of the economy. It shows that the capital stock decreases between the years 2030 and 2045 under all pension system variants. But the size of this decline is only small.

<sup>51</sup> Although this is not a negligible number, it does contradict other far more pessimistic projections. For instance the “asset market meltdown hypothesis” predicts that baby boomers’ large savings will drive asset market booms that will eventually collapse because of the boomers’ large dissavings once in retirement (Poterba, 2001).

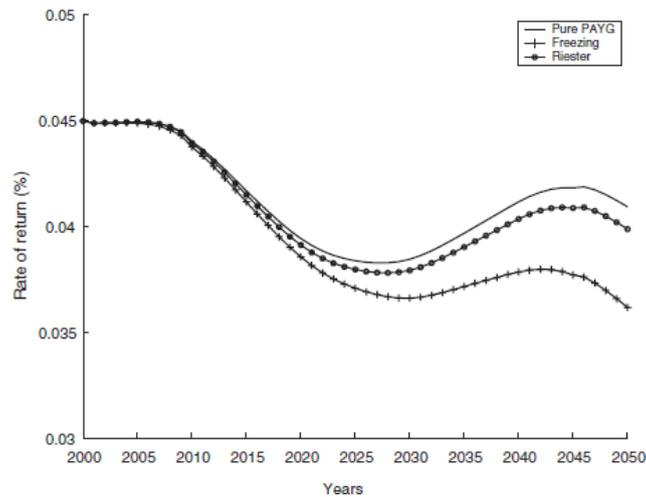
And as soon as the projected old-age dependency ratio becomes roughly stable, the effect of technological progress takes over from the demographic effects and the capital stock increases again. The projected maximum decrease of the capital stock between 2030 and 2043 is about 5.5 percentage points under the pure PAYG pension system. It can be concluded from figure 10 that this is significantly lower under the Riester reform (Börsch-Supan, Heiss et al. 2003).



**Figure 10** Projections of the aggregate capital stock under alternative pension systems (Börsch-Supan, Heiss et al. 2003).

The value in the year 2050 under the Riester reform represents about 4 percentage points of the capital stock in the year 2000. It is approximately equal to today's value of life insurance savings and occupational pensions (Börsch-Supan, Heiss et al. 2003).

In figure 11 the effects of ageing to the capital-labour ratio according to Börsch-Supan, Heiss et al. (2003) is shown. The decrease in the return to capital due to population ageing is estimated to be around 0,7 percentage points from the year 2000 to 2028. The additional decrease in the rate of return due to the Riester reform is only marginal. Only the radical option of freezing the current PAYGO contributions would lead to an additional 0,5 percentage points additional decrease (Börsch-Supan, Heiss et al. 2003).



**Figure 11** Projections of the rate of return to capital under alternative pension systems (Börsch-Supan, Heiss et al. 2003).

Börsch-Supan, Heiss et al. (2003) note that these result estimates are based upon a closed-economy model and that international capital mobility will further reduce the decrease on the rate of return on capital. International diversification will diversify the demographic shock according to Börsch-Supan, Heiss et al. (2003).

With this remark by Börsch-Supan, Heiss et al. (2003) we arrive at the contents of the previous chapter and the general theme of this paper namely the international spillover effects of pension reform for The Netherlands.

In the previous chapter it was explained there may be international spillover effects through the capital market because of population ageing and in the specific case that there are two countries with different pension systems.

When looking at The Netherlands and Germany in this respect, and taking into account the results of Börsch-Supan, Heiss et al. (2003) it seems that there are international spillover effects to be expected just from the effects of population ageing because the drops in the returns on capital can be compensated by international capital mobility.

However the world of the theoretical template of this paper is only made up of two countries, e.g. The Netherlands and Germany. Of course this is not the case and the

world consists of more countries. An investor that seeks to diversify his portfolio to spread risks may want to buy equities in distant countries whose business cycles or demographic expectations in this case, do not resemble that of their own country.

But e.g. Portes and Rey (2005) have shown that this is often not the case. According to them there is a considerable "home bias" in equity investments. This seems odd since equities are considered to be "weightless", they do not carry transport costs like goods and are thought to move freely in the international capital market.

According to Portes and Rey (2005) international capital markets are not frictionless and equities are not weightless. Information asymmetries or familiarity effects caused by geographic distance and cultural predispositions influence investment decisions significantly and lead to a home bias in equity investment.

With this home bias in mind, we can thus assume that The Netherlands will experience the international spillover effects of ageing in Germany. Especially because not many other countries have such a large funded part in their pension system in Europe as The Netherlands has. This home bias effect is also obvious when we look at the already tight economic integration of The Netherlands with Germany.

When looking at the results of Börsch-Supan, Heiss et al. (2003), the effects of the international spillover effects may not be huge, especially because not all of the effects will hit The Netherlands alone but also other countries, but are probably not negligible. Moreover, these spillover effects come on top of the ageing problems The Netherlands has for itself.

When looking at the model of the previous chapter concerning two countries with different pension systems, it is assumed that the government would use extra taxes to finance the reforms of the PAYGO system and to pay for compensation of older generations. In the case of Germany a large part of the GRV is paid out of the general taxes. This is expected to continue for several years despite the stabilisation of the PAYGO part of the GRV in the form of the Riester reform. In case these taxes keep increasing to finance the Bundeszuschuss, an assumption of the previous chapter may become reality. In that case extra spillover effects are to be expected. On the other

hand, prior to the economic crisis starting at the end of 2008 the German federal government had very serious plans to not make any new debts. This seemed a very reasonable policy aim at the time.

The German government has in a way reformed its PAYGO pension scheme without directly compensating people. People are expected to compensate their expected loss in PAYGO benefits with the funded Riester products. When all goes well, people can do this with the return on their Riester investments.

However the government does have a large implicit debt because of the Riester reform. All of the Riester products are backed by the government. And when returns on these investments are really bad, the institution that sold the Riester product is obliged, by the government, to pay at least the nominal value back. Half a year ago this might have seemed theoretical, but the current economic crisis brings this scenario a lot closer. Riester products are primarily sold by banks and insurance companies. When, because of population ageing and disappointing returns on investments, these institutions are not able to fulfil this obligation, the government may need to step in. Again this may seem theoretical, but the massive government aid programmes for banks and the bankruptcy of some banks in late 2008 and early 2009 show that what might have seemed far fetched is indeed very plausible. This may be especially the case because we enter a new era of age distribution that our society has not seen before. The prospect that other European countries like France and Italy may also experience changes to the aggregate capital stock could be extra threatening to The Netherlands.

## Conclusion

This paper tried to show that there may be negative consequences of population ageing in one country for another country with respect to the affordability of the pension scheme. The Netherlands and Germany are in this respect a good example because they differ in the way their pensions are primarily paid but are also heavily economically integrated.

Both countries experience population ageing, although Germany experiences it a bit more severe, and will feel its consequences in the coming years. However, because both countries have different types of pension schemes (funded or PAYGO) they will have different difficulties regarding the affordability of their scheme. In Germany they tried to tackle these problems by means of the Riester reform of 2001 that sought to stabilize the PAYGO part of the German retirement insurance while at the same time created a funded pillar.

Nevertheless we have also seen that it is possible to export problems relating to the affordability of a PAYGO pension system in an ageing society through the capital markets. In the two-world model that is used as a template in this paper it can be seen that in this case a country with a funded retirement system can be hurt when its PAYGO neighbour reforms its pension system because of population ageing.

With an in-depth look at the German pension system and the recent reforms, we can see that there is valid ground to suspect international capital flows in the coming years. That is because of the decrease on the return to capital in Germany that is the result of population ageing. This decrease on the return to capital caused by a different capital-labour ratio that population ageing brings, can be exported through the capital market. This is even very likely to happen in this age of capital mobility.

In a two-country world, this would clearly affect the funded country, in this case The Netherlands. But the world is of course not a two-world model and investors are more likely to invest in places with different business cycles or demographic expectations in this case since liquidity is weightless and can move to (almost) anywhere in the world without much additional costs. However there is evidence of "home-bias" in equity

investment decisions. This means that investors like to place their investments close to home. When we take this into account, it might not be so strange to expect international capital flows from Germany to The Netherlands.

However one criterium needed in one of the models as shown in this paper is not clearly met. One of the model variants assumes that the reforming government would indebted itself to compensate generations that would lose because of the reforms. In the case of Germany this does not really seem to be the case when we take the Riester reform into account.

There is however the fact that because of the German Riester reform the German government indebted itself implicitly. That is because of guarantees given on the Riester retirement insurance products; the most important guarantee is that the nominal contribution is always received back as a benefit. These Riester products are meant to compensate the loss in the PAYGO pension arrangement and are sold by mostly banks and insurance companies.

When all goes well and the returns to these investments are going well, the German government reformed its pension system in a cheap way. That is because the compensation for certain generations is paid by citizens themselves through these Riester products. However when not all goes well and expected returns on investment are not met, like in late 2008 and 2009 with the credit-crunch, the government may face huge new debts because of its guarantees on the Riester products. In this case the mechanisms described earlier that predicts international spillover effects in case the government indebted itself might kick in.

The actual size of these spillover effects is unfortunately outside the scope of this paper. Given the decrease in the returns to capital and the acceptance of the Riester products it is of course possible to make estimates, but this would include many unknowns (e.g. the future returns of the stock market). Therefore it is probably better to alert policy makers on the possibilities of these spillover effects in the future. Especially when we take into account that next to Germany also France and Italy are experiencing population ageing and employ PAYGO pension systems, it would be wise to put this on the agenda of Dutch policymakers since it can have dire consequences for the affordability of the

Dutch pension system. Perhaps that in a European context something can be done to compensate e.g. The Netherlands.

This is one of the first papers specifically addressing the case of The Netherlands and Germany in the respect of population ageing and international capital flows. Hopefully this will prompt more research on the implications of one-sided policy reforms in an international world and alert policymakers.

## Appendix A: interviews<sup>52</sup>

**Jörg Deml, medewerker van Elke Ferner (SPD)**

**27 augustus 2008**

*Onlangs is er een rapport verschenen (FTD, 26/8) van de DIA waarin gezegd wordt dat de rendementen op de Riester-Rente te laag zijn, wat vindt u daarvan?*

- De DIA is een instituut dat grotendeels gefinancierd wordt door Allianz. Ze nemen allerlei andere voorzieningen en verzekeringen uit de Riester-Rente niet mee en zo komen ze aan een laag rendement. Ik zou geen waarde hechten aan dit rapport.

*Ziet u moeilijkheden in de politieke situatie om toekomstige hervormingen van de pensioenregeling door te voeren? Bijvoorbeeld de opkomst van Die Linke en de noodzaak tot drie-partijen coalities?*

- Hervormingen van de pensioenvoorzieningen zijn altijd in een brede consensus genomen in Duitsland (derde lezing van de '1991 hervorming' was op 9 november 1989, de dag dat de muur viel). Van conservatief naar sociaaldemocraat. De hervorming van Blüm, in de jaren 90, was eigenlijk de eerste keer dat er politieke controverse ontstond over een pensioenstelselherziening. De opkomst van Die Linke en een drie-partijen coalitie kan dit nog verder bemoeilijken aangezien deze partij terug wil naar een systeem dat alleen gebaseerd is op een omslagstelsel. De FDP wil juist de GRV afbouwen en meer investeren in de tweede en derde zuil maar deze partij. De grote partijen CDU/CSU en SPD zitten hier tussenin.
- De hervorming in 2005 van de geleidelijke verhoging van de pensioenleeftijd naar 67 heeft ons zelfs in de fractie nogal verbaasd. Müntefering kondigde kort daarvoor nog aan dat het niet zou gebeuren, maar opeens was het doorgevoerd. Overigens moet niet teveel gewicht daaraan gehangen worden. De verhoging van de pensioenleeftijd naar 67 betreft vooralsnog 0,5% van het totale budget en heeft dus eigenlijk geen financiële gevolgen voor het

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<sup>52</sup> Interviews were conducted in German but transliterated in Dutch except for the interview with Prof. Dr. Pimpertz that was conducted per email. These are the original transliterations.

systeem. De maatregel is eigenlijk meer symbolisch. Veel belangrijker is het om de participatie van mensen jonger dan 65 te verhogen.

*Wanneer Duitsland zijn pensioenstelsel veranderd, zoals met de Riester-hervorming in 2001, kan dat gevolgen hebben voor andere landen. Met de Riester-hervorming gaat Duitsland geleidelijk naar een drie-zuilen pensioensysteem. Door de toestroom van meer kapitaal van deze nieuwe grote pensioenfondsen kunnen bijvoorbeeld de rendementen van bestaande pensioenfondsen dalen. Nederland zou hierdoor getroffen kunnen worden. Is de rol van het buitenland meegenomen in de besluitvorming van de Riester-hervorming? Of denkt u dat er een rol kan zijn voor de EU bij pensioenstelselherziening?*

- De zorgen die je uit zijn zeer terecht. Jouw voorbeeld of de macht van op winst beluste aandeelhouders, wisselkoersrisico's, mensenrechten wanneer buiten de EU geïnvesteerd moet worden zijn allemaal niet of nauwelijks meegenomen in de besluitvorming. Dat bevreest me nogal moet ik zeggen. Volgens mij komt dat doordat veel van de Riester-hervorming besloten is tijdens de New-Economy boom en men niet dacht aan dalende aandelenkoersen en verwachtte dat de productiviteit eeuwig door zou groeien.
- In de EU kennen we eigenlijk alleen de open method of coordination. Dat wil zeggen dat we via benchmarking en 'naming and shaming' van best-practice praktijken van verschillende landen goed beleid willen bevorderen. Maar hier is het ook bij gebleven en bezwaren zoals we net noemden zijn eigenlijk ook niet ter sprake gekomen. Wat nogmaals heel verontrustend is want als landen als Frankrijk, Italië en Duitsland opeens besluiten om gigantische pensioenfondsen op te zetten, dan zal dat zeker gevolgen hebben voor de financiële wereld en natuurlijk de Nederlandse rendementen van pensioenfondsen. Wel moet gezegd worden dat Nederland, samen met Zweden en Zwitserland, wel een land is waar vaak naar wordt gekeken als het gaat om het pensioenstelsel. Als grote nadeel van het Nederlandse systeem wordt het grote aantal mensen in de WAO gezien.
- In de Riester-regeling is opgenomen dat iedereen minimaal zijn nominale inleg terugkrijgt (dus zonder inflatiecorrectie). Dat betekent dat iemand die een ton heeft afgedragen, met 2 procent inflatie per jaar na 30 jaar maar de helft van de het reële bedrag terugkrijgt. Toen men deze clausule toevoegde

heeft men er eigenlijk nooit aan gedacht dat dat ook nodig zou zijn, maar als je op de langere termijn kijkt is het maar goed dat we deze (magere) garantie hebben.

- Ook omdat je niet graag wil gokken met iemands pensioengeld, kun je niet te agressief beleggen. Daarom zul je moeten zoeken naar investeringen met weinig risico. Helaas leveren die ook weinig rendement op. Dan zul je naar buiten de EU moeten, China bijvoorbeeld, maar daar kleven ook nadelen aan. Hierover is ook weinig nagedacht.

*Zijn de hervormingen die tot nu toe genomen zijn voldoende om de vergrijzing het hoofd te bieden en om de betaalbaarheid van de GRV te garanderen?*

- Dat is iets dat vaststaat. In de Riester regelgeving is opgenomen dat de bijdrage niet boven de 22 procent uit mag komen. Met de 1991 hervorming was dat nog 26 procent. Zoals het er nu naar uit ziet zullen we zeker onder de 22 procent blijven met de huidige regeling. Het is ook niet zo dat we door middel van bijvoorbeeld de Öko-steuer 'gaten' in de begroting dempen aangezien van tevoren deze belasting duidelijk in de begroting wordt opgenomen en vaststaat. De GRV zoals hij nu bestaat is dus zeker gegarandeerd.
- Wat wel een punt van zorg is, is de ontwikkeling van de armoede onder ouderen. Vooral in bepaalde delen van Duitsland waar industrieën verdwenen zijn neemt vanaf 2010/2015 het aantal mensen met aanzienlijke gaten in hun bijdrage verleden toe. Hierdoor neemt ook het verschil tussen mensen toe in wat men ontvangt van de GRV (de spanwijdte). Op dit moment zijn ongeveer 2,3 procent van alle gepensioneerden als arm te typeren en dan voornamelijk vanwege onwetendheid over aanvullende inkomenssubsidies of uit schaamte deze aan te vragen. Ook echtscheiding kan ertoe leiden dat men op latere leeftijd minder inkomen heeft. Het is niet precies in te schatten hoeveel de armoede zal toenemen maar dat hij zal toenemen staat vast en daarover maken we ons ook zorgen. Het draagvlak voor de GRV kan ook afnemen als blijkt dat men na jarenlang afdragen eigenlijk net zoveel of minder krijgt dan wanneer men een beroep doet op de bijstand.

*Ziet u de omvorming van het Duitse pensioenstelsel van een omslagstelsel naar een gemengd stelsel als een positieve ontwikkeling?*

Aangezien het Duitse stelsel nu ook al geen herverdeling van inkomen kent, ben ik niet per se bang dat het nieuwe systeem meer ongelijkheid zal brengen. Mensen met meer geld kunnen weliswaar meer investeren in private pensioenfondsen, maar ook meer verliezen en ze moeten leven met de onzekerheid van rendementen. De SPD staat echter pal voor een sterke basisvoorziening in de vorm van de GRV. Helaas zijn er echter teveel onbekenden om te zeggen hoe het Duitse pensioensysteem er over twintig jaar uit zal zien en daarom kan ik ook niet echt zeggen of ik het nu een positieve danwel negatieve ontwikkeling vind.

**Matthias Schäfer**  
**Konrad Adenauer Stiftung**  
**9 september 2008**  
**16:00 – 17:15**

*Hoe bezieet u de Riester hervorming uit 2001, de verhoging van de pensioenleeftijd in 2005 en toekomstige hervormingen?*

Twee zaken waren de grondredenen waarom in 2001 de hervorming is doorgevoerd. Ten eerste was er de zwakke arbeidsparticipatie die het omslagstelsel onder druk zette. Tegenwoordig hebben we nog steeds een redelijk hoge werkloosheid, rond de 7,7 procent, maar dat is het laagste cijfers sinds begin jaren 90. Maar daarnaast was vooral de arbeidsparticipatie van ouderen door vroegtijdige pensionering erg laag. De vroegtijdige pensionering was destijds ingevoerd om jongeren meer kansen te geven op de arbeidsmarkt en met de gedachte dat door de gestegen productiviteit we die oudere werknemers niet meer zo nodig hadden. De regeling was zelfs zo voordelig dat je meer uitgekeerd kreeg dat je in de loop der tijd had ingelegd. Ten tweede raakte men er toch van bewust dat door de demografische ontwikkelingen, een laag geboortecijfer gecombineerd met langere levensverwachting, het dekkingsgat, oftewel de intergenerationele schuld, te groot zou worden.

In de komende vijf jaar zullen in Duitsland de eerste gevolgen van de vergrijzing voelbaar worden. Bijvoorbeeld op deze afdeling gaan er behoorlijk wat mensen met pensioen die maar gedeeltelijk vervangen gaan worden.

Wat betreft het huidige systeem zie ik vooral het probleem van de armoede onder gepensioneerden opkomen. Dit zijn mensen in de minimumloonsector die door bijvoorbeeld deeltijdwerk, maar ook door langdurige werkloosheid geen volledige GRV (AOW) opgebouwd hebben. Ik voorzie ook een acceptatieprobleem bij deze mensen voor de GRV aangezien het aannemelijk is voor deze groep mensen die nu jong zijn dat ze nooit terug zullen krijgen uit de GRV wat ze betaald hebben. Wil je daar iets aan doen dan helpt een hervorming van het omslagstelsel niet maar zou je naar een sociale minimumuitkering toe moeten die aangevuld kan worden met een pensioen uit de

tweede of derde zuil. Het model zoals ze dat in Zweden en vooral Zwitserland wordt daarin vaak aangehaald.

De hervorming zal dan ook verder moeten gaan. Nu is het zo dat vanaf 2012 men later dan 65 met pensioen gaat en in 2025 met 67. Voor mezelf reken ik er echter mee dat ik niet met 67 maar met 70 met pensioen zal gaan. Een uitbouw van de tweede zuil, die in Duitsland nu nog miniem is zou ik ook voorstaan. Bijvoorbeeld door werknemers een aandeel te geven in de onderneming en zo dus kunnen profiteren van de winst van een onderneming. Ook zouden we kunnen profiteren van de rendementen die nu in Azië behaald worden. Overigens wil ik nog zeggen dat ik de sociale gevolgen van de vergrijzing niet zo zwart inschat als sommige anderen. Ik vrees er niet zo voor dat de dynamiek van de samenleving verloren zal gaan.

Trouwens wordt op dit moment ongeveer een derde van de totale GRV betaald uit algemene belastingmiddelen, bijvoorbeeld de Ökosteuer. Eigenlijk zou je dit ook al kunnen zien als een tweede zuil. Die Ökosteuer is natuurlijk een raar instrument omdat het pretendeert voor de verbetering van het milieu is, maar zou de belasting effectief zijn dan wordt de overheid met een tekort geconfronteerd. In die zin is het kleiduiven schieten en je mist beide duiven. Wat het natuurlijk wel gedaan heeft is de factor arbeid iets goedkoper gemaakt en daardoor de concurrentiepositie van Duitsland geen schade aangedaan.

*Ziet u een rol voor de EU met betrekking tot pensioenhervorming?*

Op dit moment heeft de EU geen zeggenschap over sociale zaken. Echter in de Lissabon-doelstellingen is wel opgenomen dat de arbeidsparticipatie verhoogd moet worden. Via benchmarking en best-practice praktijken kan de EU wel een rol spelen in onze hervormingen aangezien iedereen in de EU ongeveer dezelfde demografische problemen kent en ook dezelfde gevolgen voor de globalisering. In Europese wetgeving zie ik niet zoveel heil, maar we kunnen wel veel van elkaar leren bijvoorbeeld met betrekking tot hoe we met oudere werknemers omgaan.

*Gepensioneerden zijn natuurlijk een belangrijke groep van kiezers. Ziet u hierin gevaren voor de hervormingen?*

Op dit moment zijn er zo'n 22 mln. gepensioneerden in Duitsland. Dat is ongeveer een derde van de kiesgerechtigde bevolking. Daarmee zijn ze natuurlijk een kiezersgroep om rekening mee te houden. Ook is deze groep vrij geëngageerd in de politiek. Vooral conservatieve partijen, zoals de CDU/CSU, kunnen te lijden hebben wanneer deze groepen gedesillusioneerd raken. Er bestaat dus het risico dat om deze groep kiezers te behouden vooral de conservatie partijen geen ingrepen doet in de pensioenvoorziening. Echter geloof ik dat dit toch een groep kiezers is die vatbaar is voor argumenten en dus niet puur egoïstisch handelt. Ook kennen alle regelingen ruime overgangstijden gelden ze vaag niet met terugwerkende kracht. Ik erken dus het probleem, ik denk alleen dat het wel meevalt.

*De Duitse regering is op dit moment van plan om vanaf 2011 geen nieuwe schulden te maken. Denkt u dat dit houdbaar is?*

De deelstaten en andere lagere overheden maken op dit moment al geen nieuwe schulden meer. Het zou erg mooi zijn als het de Bondsregering lukt dit ook te doen, vooral met het oog op noodzakelijke investeringen in de infrastructuur en de andere delen van de publieke sector, bijvoorbeeld ouderenverzorging.

Op dit moment wordt een derde van de GRV uit de algemene middelen betaald. En van het Bondshuishoudsboekje gaat een derde naar de GRV toe. De conjunctuur is natuurlijk zeer bepalend voor deze inkomsten. Vastgelegd is in de Riester-hervorming dat de omslag bijdrage niet boven de 23 procent komt. Bij een economische neergang zullen dus extra belastingen geheven moeten worden of extra schulden gemaakt moeten worden.

De deelstaten, waarvan sommige (de stadsstaten, Saarland, Schleswig-Holstein) nauwelijks levensvatbaar zijn, zouden het liefste reserves op moeten bouwen om te kunnen gebruiken in tijden van economische neergang. Sommige deelstaten lukt dat en investering in bijvoorbeeld onderwijs. Maar het incentive om dit te doen ontbreekt eigenlijk omdat bij een tekort er altijd de federale overheid of de andere deelstaten is om een tekort op te lossen. Deelstaten die een overschot hebben raken dat dan weer kwijt

aan het oplossen van tekorten van andere deelstaten. De hervorming van de federalistische structuur die op stapel staat zou hier een oplossing voor moeten bieden.

*Denkt u dat het waarschijnlijk is dat Duitsland meer invloed zou willen op het beleid van de ECB om bijvoorbeeld de inflatie in haar voordeel te beïnvloeden?*

Dat voorzie ik eigenlijk niet. De traditie van de oude Deutsche Bundesbank is erg sterk en er is toch sterk de overtuiging dat de politiek zich niet dient te bemoeien met het monetaire beleid. In Frankrijk bijvoorbeeld heeft men een andere traditie, dus daar zou het kunnen (voorstel Frankrijk tot meer inzage ECB beraadslagingen, red.).

De situatie rond het stabiliteitspact zoals een paar jaar geleden zou zich wel kunnen herhalen. Destijds verweet men Duitsland maar onbeperkt geld uit te geven aan sociale zaken, maar de rest van de EU met de gevolgen op te zadelen.

**Pimpertz, Dr. Jochen [Pimpertz@iwkoeln.de]**

**3 september 2008 9:54**

**Nationale und internationale Sozialpolitik**

**Institut der deutschen Wirtschaft Köln**

*1) Sind die Riester-Reform von 2001 und die Erhöhung des Rentenalters auf 67 Jahre im Jahr 2005 zureichend, um die GRV zu finanzieren? Und sehen Sie keine Probleme darin, das ein großer Teil aus z.B. der Ökosteuer, finanziert wird?*

1) Zu dem reformpaket der letzten Jahre gehören neben Riester-Reform und Erhöhung des Rentenalters bis 2029 sicherlich noch zwei zentrale Maßnahmen: Der Übergang zur nachgelagerten Besteuerung, der die während der Erwerbsphase geleisteten Beiträge auch zur privaten Vorsorge in einem weit größeren Umfang als bisher bei der Einkommenssteuer anrechenbar macht. Und die Einführung des Nachhaltigkeitsfaktors, der die Veränderung des Alterslastquotienten in der umlagefinanzierten Rentenversicherung zumindest zum Teil berücksichtigt.

All diese Neuerungen führen tendenziell dazu, dass die jährliche Rentenanpassung etwas hinter der Entwicklung der beitragspflichtigen Arbeitsentgelte zurück bleibt. Somit sinkt nicht nur das Versorgungsniveau in der gesetzlichen Rentenversicherung (gemessen an den durchschnittlichen Arbeitsverdiensten), damit wird auch der demographisch bedingte Ausgabenanstieg und damit die zu erwartende Steigerung der Beitragslasten gedämpft.

Ob diese Maßnahmen hinreichend sind, lässt sich nur vor dem Hintergrund einer geeigneten Referenz beurteilen. Eine Referenz ist die Auswirkung auf die intergenerative Lastverteilung, die bei einer umlagefinanzierten Alterssicherung und einer unvermeidbaren Alterung der Bevölkerung angelegt ist. Üblicherweise wird das Ausmaß dieser intergenerativen Lastverschiebung auf die Schultern nachwachsender Generationen über die Methode der Generationenbilanzierung als Tragfähigkeitslücke ausgewiesen. Und zuverlässigen Berechnungen von Prof. Dr. Raffelhüschen zufolge (für die Stiftung Marktwirtschaft, Frankfurt) haben die bisherigen Reformen tatsächlich zu einer Reduktion dieser Tragfähigkeitslücke geführt, und zwar um mehr als zwei Drittel von 134,4 % auf 46,2 % eines jährlichen BIP. Deshalb kann man wohl zu Recht behaupten, dass die Reformen in die richtige Richtung zielen und einen großen Beitrag geleistet haben. Ob diese allerdings ausreichen werden, um die Finanzierung nachhaltig

zu sichern, hängt auch maßgeblich von der tatsächlichen Entwicklung von Beschäftigung und Einkommen der Mitglieder ab. Der Gesetzgeber kann hier vor allem über das Rentenzugangsalter nachsteuern, sollte sich in naher Zukunft abzeichnen, dass die gesetzlichen Beitragssatzziele nicht zu halten sind.

Gleichwohl gibt es einen Einwand: Die Politik selber ist immer wieder versucht, von dem eingeschlagenen Reformpfad abzuweichen. Nicht nur die Anhebung der Regelaltersgrenze steht in der Diskussion, es kommt auch wesentlich darauf an, dass Möglichkeiten zur Frühverrentung eingeschränkt werden. Problematisch ist auch, dass Sozialpolitiker immer wieder versucht sind, die jährliche Rentenanpassung abweichend von der gesetzlichen Regel zu beeinflussen, um den Rentnern als potenzielle Wähler besondere Wohltaten zukommen zu lassen. Dies ist zuletzt in diesem Jahr geschehen und wird die Rentenkassen bis zum Jahr 2014 mit zusätzlichen Lasten konfrontieren, die ein schnelles Absenken des Beitragssatzes verhindern. Deshalb sehe ich die Probleme in der gesetzlichen Rentenversicherung Deutschlands derzeit weniger in dem eingeschlagenen Reformpfad, als vielmehr in der Versuchung für die politischen Akteure, kurzfristig von den Reformen abzuweichen, ohne die langfristigen Folgen zu berücksichtigen.

Was die Steuerfinanzierung angeht, so ist die Ökosteuernur ein Teil des Bundeszuschusses an die Rentenversicherung. Insgesamt fließen etwas weniger als ein Drittel der jährlichen Ausgaben der Rentenversicherung aus Steuermitteln. Begründet wird dies mit versicherungsfremden Aufgaben, die die Rentenkassen übernehmen. Diese stellen gesamtgesellschaftliche Aufgaben dar, die korrekter Weise auch von allen Steuerzahlern finanziert werden sollen. Dazu gehören neben der Kriegsopferversorgung oder dem Lastenausgleich auch die Übernahme von zusätzlichen Rentenansprüchen, die in der ehemaligen DDR in den heute nicht mehr existierenden Zusatzversorgungssystemen angesammelt wurden. Die meisten Autoren rechnen auch die Hinterbliebenenversorgung den versicherungsfremden Leistungen zu. Je nach Abgrenzung dieser Aufgaben deckt der Bundeszuschuss aus Steuermitteln mehr oder minder exakt dieses zusätzliche Ausgabenvolumen. Die Schwierigkeit besteht allerdings darin, dass der Gesetzgeber versäumt hat, diesen Katalog versicherungsfremder Leistungen exakt zu definieren, so dass für die Politik Gestaltungsspielraum bleibt, den Steuerzuschuss aus- oder abzubauen.

*2) In der Deutsche Rentenversicherung wird die zweite und dritte Säule immer wichtiger. Wie betrachten Sie das? Ist das eine gute Entwicklung? Auch in Europäischer Perspektive? Z.b. die Niederländischen Renditen und damit unsere Rentenversicherung können sinken wenn Deutschland auch große Kapitalfonds errichtet.*

2) Ich beginne mit dem letzten Teil der Frage und glaube nicht, dass die größte der Kapitalfonds ein Problem darstellen, nimmt sich das Volumen im Kontext international vernetzter Kapitalmärkte doch immer noch bescheiden aus, so dass auch mit dem zusätzlich zu erwartenden Kapital die Finanzmärkte weder verzerrt noch die Preisbildung dort gravierend beeinflusst werden könnte.

Die Stärkung der betrieblichen und privaten Altersvorsorge halte ich für den richtigen Weg, auch die Tatsache, dass dies in Deutschland freiwillig und nicht obligatorisch erfolgt. Die Freiwilligkeit ist meines Erachtens zu rechtfertigen, weil auch bei sinkendem Versorgungsniveau in der gesetzlichen Rentenversicherung grundsätzlich die umlagefinanzierte Rente bei einer vollständigen Erwerbsbiographie ausreicht, um eine Rente oberhalb der sozialen Mindestsicherung zu erzielen. Hinzu kommt eine Hinterbliebenenrente, die jenen Singles ein ergänzendes Alterseinkommen ermöglicht, die zum Beispiel aufgrund der familiären Arbeitsteilung während der Erwerbsphase längere Lücken aufweisen oder nur Teilzeit gearbeitet haben.

Mit den Reformen des letzten Jahrzehnts wurde in Deutschland ein Paradigmenwechsel vollzogen. Die gesetzliche Rentenversicherung ist nicht länger alleinige Sicherung des Lebensstandards im Alter. Erst mit der ergänzenden privaten und betrieblichen Altersvorsorge ist die Lebensstandardssicherung möglich - vorausgesetzt, der Ruheständler verfügt nicht über weiteres Vermögen. Diese Steuerung hat zwei Vorteile: a) Zum einen erlaubt dies, die Belastungen in der umlagefinanzierten gesetzlichen Altersvorsorge zu reduzieren, die ja aufgrund der Bevölkerungsalterung vor gravierenden Mehrbelastungen in der Zukunft steht. b) Außerdem spricht für diesen Reformpfad ein Argument, dass aus der Portfolio-Theorie stammt. Unter Risikogesichtspunkten ist eine Diversifizierung der Risiken sinnvoll. So wäre die Alterssicherung in einem ausschließlich kapitalgedeckten System auch davon abhängig, ob zu der Zeit der Kapitalisierung die Finanzmärkte eine Hausse oder Baisse durchleben. Andererseits ist das Umlagesystem stark abhängig von Beschäftigungs- und Einkommensentwicklung. Sind beide Elemente in der Alterssicherung vertreten, können aus individueller Sicht Alterssicherungsrisiken besser diversifiziert werden.

Gleiches gilt entsprechend für die Gestaltung des Systems als Ganzes.

*3) Sind Sie der Meinung, dass es erstrebenswert wäre dass die EU Länder ihre Rentenreformen stärker koordinieren?*

3) Dazu vertrete ich eine Außenseitermeinung insofern, dass ich zwar die Anerkennung und Übertragbarkeit von erworbenen Ansprüchen innerhalb der EU als sinnvoll erachte, um die Freizügigkeit der Arbeitnehmer nicht zu behindern. Gleichwohl sind die Systeme in den einzelnen Mitgliedsstaaten sehr heterogen. Dies bezieht sich nicht nur auf die unterschiedlichen Grundentscheidungen, also z. B. Bismarck- oder Beveridge-System. Die Alterssicherungssysteme fügen sich mit ihren Spezifik auch in sehr unterschiedliche Gefüge von sozialer Mindestsicherung und steuerlicher Anreizgestaltung ein. Eine Harmonisierung allein mit Blick auf die gesetzliche Altersvorsorge birgt daher die Gefahr, dass es zu Brüchen bzw. Ungereimtheiten mit den jeweiligen Systemen der sozialen Mindestsicherung und Einkommensbesteuerung kommen kann. Wollte man eine Harmonisierung durchsetzen, müssten also auch die steuer- und transferrechtlichen Fragen behandelt und im Zweifel angeglichen werden. Ich halte aber die Vielfalt der Systeme für sinnvoll, geben sie uns doch stets zur Aufgabe, das eigene System weiterzuentwickeln und mit Blick auf unsere Nachbarn zu verbessern. Dieser Anreiz könnte in einem harmonisierten System versiegen.

*4) Das Deutsche Institut für Altersvorsorge hat letzte Woche einen Rapport veröffentlicht, (<http://www.dia-vorsorge.de/pm000068c.htm>) in dem es heißt, die Renditen auf die Riester Rente seien unzureichend. Was halten Sie davon?*

4) Die Studie des DIA hat in Deutschland vor allem mit einer Aussage für Furore gesorgt: Die Autoren weisen nach, dass der Kapitalmarkt eine höhere Verzinsung offeriert als die umlagefinanzierte Rente. Ich halte diese Erkenntnis für wenig zielführend, denn selbst wenn ich das Ergebnis nicht in Zweifel ziehen möchte, suggeriert die Studie eine Wahl zwischen beiden Systemen. Doch dies ist in einer gesetzlichen Versicherung mit Versicherungspflicht überhaupt nicht angelegt. Ein Austritt aus dem Umlageverfahren ist auch gar nicht möglich, müssen die bisher erworbenen Ansprüche Älterer schließlich doch bedient werden. Insoweit halte ich die Studie nicht für hilfreich in der derzeitigen Diskussion. Es überrascht im Übrigen auch

nicht, wenn bei günstiger Finanzmarktentwicklung, die in der Vergangenheit auch stark durch die Liberalisierung der Kapitalmärkte gepusht wurde, dort eine höhere Rendite möglich wird als in der "sicheren" umlagefinanzierten Vorsorge. Wie bei jeder Geldanlage ist aber zu beachten, dass der Renditechance auf der einen Seite auch ein höheres Risiko auf der anderen Seite gegenüber steht und die Kapitalmarktverzinsung für die Zukunft nicht garantiert ist. Darüber hinaus gewährt das gesetzliche System zusätzliche Sicherungsansprüche, für die der Kapitalmarkt zum Teil keine oder wie bei der Hinterbliebenenversorgung nur teure Lösungen anbietet.

Was ihre Frage angeht, ob die Renditen der Riester-Produkte unzureichend seien, etwa im Vergleich zu anderen, ungeforderten Sparformen, so liegt dies wohl auch an den restriktiven Bestimmungen, die Gesetzgeber für eine Förderung erlassen hat. Man kann sicherlich diskutieren, ob die Einschränkungen der privaten Vorsorge, die für eine steuerliche Förderung in Kauf genommen werden müssen, sinnvoll sind. Hier wären zahlreiche Öffnungen wünschenswert. Gleichwohl muss man sich auch darüber im Klaren sein, dass damit gewisse Zusagen an den Sparer mit höherer Unsicherheit behaftet sind.

**Gerhard Meyering**

**Bundesministerium für Arbeit und Soziales**

**17 september 2008**

Swankungsreserve/nachhaltigkeitsrückgabe = reserve van de GRV, ongeveer 0,2%.  
Wordt per maand berekend. Is een maximum aan verbonden.

De Bondsregering garandeert de betaling van de GRV. Het is enkele malen voorgekomen dat er een maand was dat er een tekort dreigde. Bij een tekort van een paar procent gaat het dan om miljoenenbedragen. Wanneer de bond zou moeten bijspringen zou dat een politiek schandaal zijn. Via zogenaamde trucs kan de Bondregering dit voorkomen. Dat kan via middelen van bijvoorbeeld de verpleging of kinderregelingen. (Zoek naar Bundesgarantie, anspruchnahme).

Volksduitsers doen ook een grote aanspraak op de GRV, zijn bijna een derde van de uitgaven.

De liquiditeit van de GRV heeft zich de laatste paar jaren verbeterd.

Probleem van de GRV is niet zozeer de veroudering als wel de arbeidsdeelname:

- In het verleden teveel werklozen
- Demografie is meer iets voor de lange termijn
- Arbeidsdeelname vrouwen is belangrijk. Vroeger namen ze zelden deel.
- Duitse hereniging
- Arbeidsdeelname boven 55 jaar oude mensen is te laag
- Rentenabschläge
- Door de verbeterde conjunctuur vragen bedrijven nu zelfs gepensioneerden om terug te komen

Banken en verzekeraars beweren vaak dat de tijd dat iemand rente ontvangt verdubbeld is in de laatste paar jaren, maar dit komt ook door de vroege pensionering, niet alleen door de langere levensverwachting.

Iedereen in Oost-Duitsland zit in de GRV. Ook bijvoorbeeld artsen en advocaten. Daardoor is hun gemiddelde rente ook hoger.

Entpunkte, voor de Oost-Duitsers zijn daarvoor fictieve punten gepakt.

Riestertreppen dempen eigenlijk het niveau van de rente-uitgaven omdat iemand bij meer inkomen ook meer moet gaan inleggen.

Omdat de inleg per persoon zo verschilt, verschilt ook de ontvangen rente. Voorstellen van bijvoorbeeld Die Linke om de minimumrenten te verhogen zouden juist bijvoorbeeld de miljonairsvrouw kunnen treffen.

ECB heeft een eigen pensioenregeling. Kun je je geld uit de GRV halen en dat daar inleggen. Erg controversieel. Opzoeken.

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