

PENSION POLICY IN GERMANY: MAJOR POSTWAR REFORMS AND RECENT DECISIONS¹

Winfried SCHMÄHL

1. INTRODUCTION

Germany has one of the oldest public pension schemes in the world. At the end of the 19th century a number of structural decisions were made that influence pension schemes even today. However, many changes have taken place over a period of development of more than one century. An adaptation of pension arrangements to changing conditions in the environment of pension schemes was and remains necessary; changes in demography, economy, household structures, and living conditions but also in political objectives and normative positions have taken place. Pension reform is a topic that has been debated world-wide for many years. One of the central questions is the role of the state in general as well as in pension policy. Especially "pay-as-you-go" (PAYGO) financed public schemes are under severe political pressure in many industrialized countries. Often a radical shift towards capital funding is proposed, which is largely linked to proposals for privatizing at least major parts of old-age security. It is not surprising that the insurance industry, banks, and investment funds are proposing to organize more old-age provisions via capital markets by using financial methods based on (pre-)funding. For a number of years many activities have been initiated by international organizations, especially the World Bank. In addition to these actors, ministries of finance have also become important players.

In Germany a broad-based reform debate has been underway for many years now. Several decisions have been made. The last of these decisions was made at the end of the year 2000 and in the first half of 2001. These decisions will have far-reaching consequences for pension policy in Germany. The transformation process that followed affects not only public pension schemes but also occupational pensions in the private and public sectors as well as additional private old-age provisions. There were and are many reasons to hold debates on reform in Germany. Most arguments are similar to those in other industrialized countries, i.e., demographic aging. A special focus of the public debate in Germany is on

¹ This paper was written at the end of December 2001. Some parts of the paper are based on SCHMÄHL (1999a).

the aging population, resulting from a low fertility rate (which for a long time has been only two-thirds of the amount necessary to keep the population constant over time) and a rising life expectancy. The decrease of mortality has now been placed in the center of the debate concerning demographic changes and its effects for pension policy (as well as health insurance and long-term care insurance). Present life expectancy data for the elderly in Japan are assumed to be "target values" for the further development of life expectancy over the next few decades in Germany. The (official) calculation of the development of pension expenditure is based on the assumption that by the year 2030 the life expectancy of men and women will increase to the level already currently existing in Japan.

There are other changes affecting pension schemes such as a changing structure of private households and intensified international competition (often labeled as "globalization"). Particularly the reduction of non-wage labor costs – and above all the employer's contributions to social insurance – are high on the agenda of politicians, employers, and industrial organizations.

Some challenges are different in their extent, such as the high unemployment rate, which in part is linked to a very specific challenge for Germany, the economic consequences of German unification. In addition, further steps for a closer European integration are taking place, which also affect pension policy. Here the latest developments consist of a new approach – labeled the "open method of coordination" which aims for an agreement on common goals of pension policy, common indicators, a process of (regular) national reports, and some "benchmarking". At the moment it is too early to say what effect the new developments will finally have on the structure of old-age security in Germany and the distribution of costs.

By placing political decisions and recent developments into a framework, some basic information concerning the structure of old-age protection arrangements in Germany will be given as well as some information concerning the design and major objectives of Germany's public pension scheme. Major pension reforms from 1957 to 1999 in West Germany (in unified Germany respectively) will be characterized in their basic elements in the following.² I will then discuss the latest decisions of 2000 and

² It is beyond the scope of this paper to deal with the different developments that took place after the Second World War in the German Democratic Republic, and the problems resulting from the different structures of pension schemes in East and West Germany in the process of integrating the population of East Germany after 1990 into the West German public pension scheme. For these issues see SCHMÄHL (1992a).

2001 and finish off by making some remarks on possible future developments.

At the center of this article is the statutory pension insurance (i.e., social insurance) because it is the major element of Germany's arrangements for social protection in general and in old age in particular. Changes in this scheme have direct or indirect effects on other elements of Germany's old-age security arrangements, i.e., the special pension scheme for civil servants, occupational pension schemes, and private provision. But there are also political decisions directly focused on these other elements. These will be discussed in the context of the pension reform measures of 2000 and 2001.

2. THE PRESENT STRUCTURE OF OLD-AGE PROTECTION IN GERMANY

As in many other countries, in Germany, a multi-pillar approach in pension policy (better characterized as multi-tiers or multi-layers) has been in place for many years.³ The first tier consists of several mandatory pension schemes. The most important element of the first tier as well as of all old-age protection arrangements in Germany is the statutory pension scheme (social insurance) for blue and white-collar workers. It is an earnings-related scheme from the defined benefit type (at least up to the year 2000). Pension calculation takes into account the whole career earnings. Pension claims are accumulated on individual accounts. Pensions are paid in cases of old age (some flexibility exists in retirement ages), disability, and death of the spouse (widow's as well as widowers' pensions and pensions to orphans). The scheme is mainly financed by contributions (from employees and employers in equal parts).

Several special schemes exist alongside social insurance, e.g., for civil servants. These are of the defined benefit type as well, but are calculated differently from social insurance pensions; civil servants' pensions are linked to their last income. This specific scheme can be interpreted as a mix of first and second (occupational) tier. Civil servants' pensions are tax-financed. Special schemes also exist for farmers and several other groups of professions (such as doctors, lawyers, and architects).

The second tier consists of supplementary occupational pension schemes in the private and public sector. While, in principle, all blue and white-collar workers of the public sector are covered by such an occupational scheme (based on collective agreement), only about 50% of employees in the private sector are covered by voluntary occupational pension

³ An overview is given in SCHMÄHL (1998a and 1998c).

schemes. Coverage is very unequally distributed according to size and branch of the firm.⁴

The third tier consists of many different types of private savings (and insurances) for old age. It is, however, difficult to give an exact amount of private old-age provision.

Social insurance for old age, disability, and widow(er)s is by far the most important scheme (a) in macroeconomic terms as well as (b) a source of income in old age for the majority of elderly in Germany.

Statutory pension insurance covers nearly 70% of all expenditure for old-age security in Germany. This is nearly 10% of GNP. More than 80% of the West German population is insured through this pension scheme; in East Germany the percentage is even higher.⁵ For the majority of retired people social insurance pensions are by far the most important source of income in their old age. Recent research, trying to analyze the pension claims for prospective retirees over the next twenty years, reveals that this will basically apply for this time frame as well. Therefore, it is not astonishing that the scientific and political debate was and remains predominantly focused on the social pension insurance.

In Germany – as compared to many other countries – the PAYGO financing in pension protection carries a very heavy weight in absolute and relative terms. A rough estimate shows that about 80% of financing is covered by PAYGO and 20% by funding (occupational pensions and private provision cover 10% each). It is not surprising that there are strong forces behind proposals to change this mix. In the year 2001 political decisions supported this by aiming to increase occupational and private pensions and to reduce public (PAYGO financed) pensions.

⁴ A detailed analysis of occupational pension schemes and the link to social insurance is given in SCHMÄHL (1997b).

⁵ In East Germany occupational pensions in the private sector as well as life insurance expenditure have hardly been relevant up to now. This means that social pension insurance in East Germany is even more important as an element of old-age provision than in West Germany today. Some reasons for these differences are as follows: In the former socialist German Democratic Republic, social insurance covered nearly the entire population. There were, however, some special pension schemes (e.g., for military personnel). After the German unification schemes for special groups of the population were introduced only step by step, and the number of people of these groups (such as the self-employed or civil servants) increases only gradually over time.

3. A FEW HISTORICAL REMARKS ON MAIN ELEMENTS AND ON THE DESIGN OF GERMANY'S SOCIAL INSURANCE PENSION SCHEME

When we look back at Germany's social security pension reforms in the period after the Second World War, we must mention some of the major reforms as well as some of the major topics of discussion.⁶ The roots of the present social insurance pension scheme go back to the late 19th century when Bismarck was chancellor of the newly founded "German Reich". Financing was mainly based on employers and employees' contributions. However, a grant from the central public budget to pension insurance was introduced as an important element of financing (which was reflected in the pension formula as well).

Since then, social pension insurance in Germany has been based on the idea of *insurance*, i.e., inter-temporal redistribution and risk pooling, but also on *inter-personal redistribution*. The mix of different elements – namely, equivalence and inter-temporal redistribution on the one hand, and inter-personal redistribution over the life cycle on the other hand – was and remains a major topic of discussion. The organizational structure created in the founding period of the German social insurance has also remained intact up to the present.⁷

Bismarck's original idea for the pension scheme was, however, quite different from what was established in 1889. He originally aimed at a "tax-financed flat rate pension"; workers should become like "state pensioners". This idea – as a contrasting strategy to earnings-related pension insurance – is often discussed in Germany, especially when major reforms in pension insurance become necessary because of changing conditions in the economy, demography, and society.⁸

The method of financing – *pay-as-you-go (PAYGO) versus funding* – was also intensely discussed in the late 19th century, taking into account, e.g.,

⁶ An overview is given in SCHMÄHL (1999c).

⁷ Different agencies existed for blue-collar workers on a regional basis, while for white-collar workers one central agency was established in 1911. Due to the changes in the structure of employment, there are now fewer blue-collar workers. This shift to white-collar workers results only in a shift in pensioners of the two parts of the pension system after an extended time lag. Methods of fiscal equalization became necessary because financing as well as pension calculation are identical for both groups of insured employees. The fact that blue-collar pension agencies have fewer "clients" resulted in a discussion stimulated by the federal states (*Bundesländer*) to reorganize pension agencies, to strengthen agencies on the regional level, and to make cuts at the central agency (on the federal level).

⁸ An overview of this discussion is given in SCHMÄHL (1993a).

the effects on individual and national savings. And although public pension insurance in Germany was originally based in principle on full funding, this decreased over time because of inflation, war, economic crises, and by using accumulated funds for purposes other than pension financing.⁹

4. MAJOR PENSION REFORMS IN WEST GERMANY: 1957 UP TO 1999

4.1 *Introducing a dynamic pension in 1957*

The first major pension reform in postwar Germany took place in 1957 by introducing the so-called *dynamic pension*. This reform sought to link pension calculation as well as pension adjustment to the development of gross wages (earnings). A major shift in the method of financing towards PAY-GO was realized as well. Only a limited reserve, covering pension expenditure for one year, was required.¹⁰ This reserve requirement was later reduced to three months in 1969 and finally to one month only in 1992.¹¹

In the 1960s, there was already a discussion on the future development of the pension scheme, with a particular focus on the *aging* of the population. In order to cope with the expected financing problems it was proposed to accumulate, for example, some reserve by increasing the contribution rate to a higher level than necessary to balance the current budget, and to use these reserves later in order to avoid a steep increase in contribution rates – the image of “digging a tunnel into the pension mountain” was frequently used to illustrate this.¹² But in contrast, a reduction in reserve requirements was, in fact, politically decided.

4.2 *The Pension Reform of 1972: Flexible retirement age and increasing pension expenditure*

Especially in the early 1970s – based on optimistic projections of future economic development over the next decades – an enormous surplus in

⁹ MÖRSCHER (1990) describes the development over time.

¹⁰ At the end of a ten-year period a reserve to cover pension expenditure for one year was required.

¹¹ It was only recently that the *Bundestag* (Federal Parliament) decided to reduce the minimum reserve requirement from one month's expenditure to only 80% of this amount. It thereby avoided increasing the contribution rate in 2002.

¹² The focus, therefore, was not mainly on additional saving, investment, and economic growth, but on inter-temporal aspects of sharing the “burden” between generations.

the pension scheme was calculated for the future. This was in the years just before the first oil price crisis. Based on these calculations, a political race between all political parties in proposing alternatives for *increasing pension expenditure* occurred and resulted in several reform measures taking place in 1972. For example, the *flexibility of retirement ages* was introduced, allowing retirement before the former reference retirement age (for men, 63 instead of an age of 65 years)¹³ *without* introducing *actuarial* deductions from the pension. The possibility to retire at the age of 60 without deductions from the full pension already existed for women and the unemployed (meeting several requirements). Later, a further lowering of the retirement age was also decided for the disabled (see JACOBS and SCHMÄHL 1989). A few years later the oil price development shocked the economy and several ad hoc measures were taken to reduce pension expenditure.

4.3 The "1992 Pension Reform Act" (of 1989): Net pension adjustment and a self-regulating mechanism

Demographic scenarios showing a rapid change in the age structure of the population, and the consequences for public pension schemes were the main reason for a major pension reform that was decided on November 9, 1989 (the same day that the Berlin Wall was opened). Most elements of this Pension Reform Act were to be implemented in 1992 (which is why it is called the "1992 Pension Reform"). Nobody expected that the introduction would take place not only in West Germany but – following German unification – in East Germany as well. The reform measures were thus to influence the future development of the pension insurance in West Germany.

After several ad hoc interventions over the past 15 years one aim of the Pension Reform Act was to re-establish a set of clear regulations, a self-regulating mechanism to stabilize the financing development over time and to reduce the financing burden for the working population in future. The other aim was to maintain an appropriate level of pensions compared to earnings.

For a better understanding of the 1992 reform and more recent reform measures and debates, some basic information concerning the design of the social insurance pension scheme is given below. As already mentioned, social pension insurance in Germany is a mixture of a pure "insurance scheme" (aiming ex ante at inter-temporal redistribution plus

¹³ It became possible to retire at the age of 63, if 35 years of insurance were fulfilled.

risk pooling) and a “tax-transfer scheme” (aiming at inter-personal redistribution, also over the life cycle). The “insurance approach” dominates in Germany. The result is, for example, a (relatively) close link between individual contributions and later benefits, which is nevertheless modified by measures of inter-personal income redistribution (e.g., by crediting those years spent without gainful employment and without paying contributions during periods of schooling, illness, or child care).¹⁴ For many years now it has been a major political issue in Germany how benefits aiming for redistribution should be financed adequately. The results were higher transfers from the general public budget to social pension insurance – based on decisions of the “1992 Pension Reform” as well as on decisions made in 1997.

The German public pension scheme is earnings-related because:

- The individual pension benefit is linked to former earnings of the pensioner.
- The absolute amount of the individual pension at the time of retirement depends on the nation-wide average earnings close to the year of retirement.
- The development of the pension benefit during retirement is linked to the development of nation-wide average earnings.

The contributor acquires a pension claim according to the *relative* amount of his gross earnings (= wages or salary). The individual gross earnings are compared to average gross earnings of all employees each year. This ratio gives the amount of the pension points (Earnings Points, EP) for one year. If, for example, individual gross earnings are equal to average gross earnings in one year, the result is one EP for this year. When claiming the pension, the sum of all EPs is taken (including EPs credited according to special regulations connected to child care, schooling or times of unemployment, for example).

To calculate the individual pension benefit the sum of individual EPs is multiplied by a factor (ARW, “Actual Pension Value”) representing the value (in Euro per month) of one EP in a specific year. ARW is the dynamic factor of the German pension formula, because it changes every year according to the growth rate of average earnings. With regard to the development of ARW over time, the 1992 Pension Reform Act introduced an important change, i.e., by linking ARW to the development of average

¹⁴ No general minimum pension exists. To avoid poverty in old age a means-tested social assistance assessment can be carried out. But less than 2% of all pensioners claim additional social assistance.

net earnings instead of average gross earnings as was done in principle in previous years since the 1957 pension reform.¹⁵

The rate of change of ARW is also the factor for adjusting all pensions calculated in former years. This also means that all pensioners who have the same sum of EP receive the same pension benefit, irrespective of the year of retirement.

It was possible to claim a pension before the "reference retirement age" of 65 years without reducing pension benefits because of the extended period for receiving the pension. This was an incentive to retire early.¹⁶ Since the introduction of "flexible retirement age" in 1972 a radical reduction of the participation rate of the male labor force has taken place (e.g., for men at the age of 63 from 67% in 1972 to about 20% within less than 20 years). Although incentives in the pension scheme are not the only reason for this development, there are, however, clear indications that this was a major influencing factor.

The 1992 Reform Act also aimed to postpone the age of retirement. After a drawn out period of controversial discussions it was decided that as of the beginning of the year 2001 some deductions from the pension should be introduced step by step over a period of more than ten years, if retirement takes place before the age of 65. The age of 62 should become the earliest retirement age for starting an old-age pension, and would apply equally to both men and women. The deductions were decided to be 3.6% (below an actuarial fair rate) per year of earlier retirement. Disability pensions, however, should not be burdened by a deduction. It was obvious that the regulations for claiming disability pensions would have to be changed in the future in order to avoid disability pensions becoming part of a loophole for early retirement.¹⁷

¹⁵ Net earnings are defined as gross earnings minus income tax on earnings and employee's part of social insurance contributions to statutory pension insurance, health insurance, and unemployment insurance.

¹⁶ Retirement age, however, is not identical with an exit of older workers from the labor force. Several other possibilities exist to end official gainful employment without claiming an old-age pension, i.e., a disability pension (the number of disability pensions is to a certain degree also linked to the labor market conditions) and several pre-retirement agreements. A detailed discussion of possibilities as well as of the changes decided upon in the "1992 Reform Act" is given in SCHMÄHL (1992b) and in SCHMÄHL, GEORGE and OSWALD (1995).

¹⁹ The introduction of a partial pension was another new element. This possibility for a phased retirement has until now enjoyed little success mainly because of the unfavorable labor market conditions, as well as other possibilities to leave the labor force early. Only a negligible number of pensioners claimed such a partial pension. It is possible to claim either one-third, one half, or two-thirds

Another element of the 1992 reform package was a new formula for federal grants aiming to stabilize the relative amount of the federal grant at about 20% of pension expenditure. In addition to the development of average gross earnings, the formula for calculating the federal grant now also includes the development of the contribution rate to social pension insurance.

The changes of the adjustment procedure and the new formula for federal grants are elements of a self-regulating mechanism for the pension insurance scheme.¹⁸ This seems to be an important decision from a political as well as an economic point of view. For example, since 1992 no parliamentary decision about the pension adjustment rate or the contribution rate has been necessary. This is done automatically by the government according to clearly defined statistical data of the Federal Statistics Office. However, such regulations only exist for as long as the *Bundestag* (Federal Parliament) does not change them.

A political objective concerning the level of pensions compared to earnings was decided upon in the 1992 Reform Act. For a so-called standard pension with 45 Earnings Points the pension should be about 70% of present average net earnings of all employees.¹⁹ Because pension adjustment rates are linked to the increase of average net earnings, the individual net pension level (individual net pension compared to average net earnings) remains constant over time.

The 1992 Pension Reform Act was based on broad political consensus among the governing coalition parties and the major opposition party in the German parliament as well as among employers' organizations and trade unions.²⁰ This consensus was in line with the experience of former major changes in pension policy in Germany. The search for solutions on a broader political basis in this area with a long-term perspective could be interpreted as being an element of "political culture" in Germany. Contrary to some other countries, the biggest political parties (Christian

of the pension and supplement earnings from part-time employment. VIEBROK (1997) analyzes in a very differentiated manner the labor supply effects of the German social security scheme, theoretically (taking into account the institutional arrangements), as well as simulating effects based on a dynamic programming approach.

¹⁸ For a more detailed analysis, see SCHMÄHL (1993a).

¹⁹ For employees with lower pension claims this percentage is lower and vice versa. For example, for a pension based on 40 EP the target pension level is $40/45 \cdot 0.7$ (= 62.2%) instead of 70%.

²⁰ The "social partners" – unions and employers' organizations – also work together in the self-administration bodies of social insurance.

Democrats and Social Democrats) were both in favor of the “social state”²¹, and shared many basic values.

4.4 1996: Breaking the trend of early retirement

For many years there was a broad consensus among employers, trade unions, and governments that the reduction of unemployment through an early retirement of older workers from the labor force would be a socially acceptable measure, because this would give younger people a better chance to enter the labor force. A low youth unemployment rate in Germany compared to many other European countries seemed to confirm this. This consensus soon broke down. Since the summer of 1995 a political discussion has emerged that sought to reduce early exits and associated costs, particularly for unemployment insurance and social pension insurance, although unemployment remained at a high level.²² The effect on contribution rates and therefore on non-wage labor costs was especially regarded as being a negative factor in times of intensified international economic competition.

In February 1996 the federal government decided upon measures to stop the growing number of early retirees claiming an old-age pension at the age of 60 following a phase of unemployment. The phase-in of the deductions from the full pension (3.6% per year) started already in 1997 (and not in 2001) and will be much quicker compared to the regulations of the 1992 Act. For pensions after periods of unemployment (age 60) the reference retirement age was increased within three years (until the end of 1999) by three years; thereafter for all types of old-age pensions²³ within the following two years up to the age of 65. For the specific female retirement age (at 60), this process (after strong resistance by several

²¹ The term “social state” (*Sozialstaat*) is used in Germany instead of “welfare state”; *Wohlfahrtsstaat* is the German literal translation. “Wohlfahrtsstaat” has a different meaning in German compared to “Sozialstaat”.

²² A widely used measure for pre-retirement was and remains laying off older workers and supplementing their unemployment benefit with a payment from the employer so that the net income of the now unemployed person stays nearly the same as in the period of employment. After a period of unemployment, the old-age pension can be claimed at the age of 60. There was a sharp increase in those who took up this type of pension. In 1994 about 20% of all male pensioners claiming a pension took this path to obtain the old-age pension; in East Germany this percentage was even much higher with more than 40% doing so. This measure was used particularly by big companies.

²³ This means that the existing “flexible” pension, which can be claimed from age 63, will be “burdened” by deductions.

organizations) started in the year 2000 and the reference retirement age will become 65 at the end of 2004.²⁴

For those wishing to claim a pension at the age of 60, an additional possibility was created beside unemployment, “part-time employment” for older workers after the age of 55, which – under special conditions – is supplemented by benefits from unemployment insurance. However, there is a lack of part-time jobs, especially for men.²⁵ Therefore, in reality, this “part-time” employment means full employment for half of the period, and employment with zero working hours thereafter.²⁶

Another starting point for reducing pension expenditure in the future was the reduction of the number of years of schooling that is credited without paying contributions.

The reduction of credited years of schooling as well as the introduction of deductions from the full pension in case of early retirement can be interpreted as elements of an underlying strategy to strengthen the contribution-benefit link – a strategy the government seems to have become convinced of in the past years, especially as a counteraction to proposals for shifting public pension policy to a flat-rate approach.²⁷

4.5 The 1997 reform measures (the “1999 Pension Reform Act”)

Although in 1996 the financial outlook of social pension insurance hardly differed from that in November 1989 in the long-term perspective, when the “1992 Pension Reform Act” was decided, discussions about its future development were re-introduced into the political arena in the summer of 1996.²⁸ Several politicians and leading members of employers’ organiza-

²⁴ According to the 1996 decisions, old-age pension could be claimed at the earliest at age 60, however with a deduction from the full pension of 18% (5 · 3.6%).

²⁵ This is also the main reason why the “partial pension” introduced in 1992 has not become an effective instrument. For example, in 1994 only 0.15% of all new pensions were partial pensions.

²⁶ For a detailed discussion of early retirement, see GATTER and SCHMÄHL (1996).

²⁷ For a detailed discussion of arguments in favor of such a strategy aiming at a closer contribution-benefit link, see, e.g., SCHMÄHL (1985).

²⁸ In 1989 it was calculated that the contribution rate would be about 27% in 2030 (including the 1992 reform measures), while in 1996 (taking into account the additional decisions up to 1996) the contribution rate was expected to become 25.5%. It should be taken into account when looking at these contribution rates that the rate is about one percentage point higher because of transfers from West to East Germany, about two percentage points are used to finance redistributive measures (instead of financing by taxes), and at least one percentage point is due to the fact that the pension scheme was used as an instrument of labor market policy.

tions argued that more has to be done to avoid the consequences of the “demographic time bomb” and the expected increase in contribution rates. The role of the mass media as the reinforcing agent in the process of agenda-setting has increased during the past years.

While the development of calculated contribution rates based on assumptions of demographic and economic development was not new, the climate had obviously changed. Some of the elements behind this new discussion on social policy, and not only on pension policy, include having to cope with the economic and social consequences of German unification – a process that, in contrast to earlier more optimistic political statements, lasted longer than expected –, high unemployment, the political will to meet the Maastricht convergence criteria leading to policies of retrenchment in several fields, backed by mainstream economic supporters of a supply side strategy and industrial interest groups. The climate between the federal government and employers’ organizations on the one hand, and labor unions on the other became chilly especially after the government (and the majority in parliament) decided to change regulations for continued wage payments in case of illness of employees – a highly sensitive topic for trade unions because the existing regulation was the result of a severe strike in the past.

Mass media (especially newspapers and television) pushed the topic of a “collapse” of the pension scheme; banks and insurance companies argued along the same lines. As so often in periods of turbulence, radical proposals for abolishing the social pension scheme and introducing flat-rate pensions or, at least, drastically reducing the pension level were published. Although the common argument was to give people more space for “self-reliance”, these proposals were nevertheless blatantly linked to the self-interests of many advocates for radical changes from the business community.

At the beginning of this debate the government reacted in a very passive way, promising that “pensions are secure”. However, in the summer of 1996, because of the growing public debate, the federal government decided to appoint a commission of experts (chaired by the Federal Minister for Labor) to propose additional measures for a new pension reform. At the same time another commission (chaired by the Federal Minister for Finance) was to develop proposals for a major income tax reform.²⁹ Both projects were to be realized toward the end of 1997 at the latest, i.e., near the end of the government’s legislative period (the next

²⁹ In addition, the Christian Democratic (and Christian Social) Parties also established party commissions.

parliamentary election was scheduled for September 1998).³⁰ While the government had a majority in the *Bundestag*, the second chamber, the *Bundesrat* (representing the federal states, the “Bundesländer”), was dominated by the Social Democratic Party.³¹

The debate in the commissions and among the public concentrated on two main areas:

- Possibilities for a further reduction in the development of pension expenditure, aiming above all at a reduction of the financing burden for “future generations”.
- A “fair” distribution of “burden” in financing of current pension expenditure, taking into consideration the different distributional targets (inter-temporal versus inter-personal redistribution), and especially aiming to reduce non-wage labor costs because of labor market reasons.

The proposals of the expert commission aimed to maintain the concept of an earnings and contribution-based (defined benefit) pension scheme, while the concept of tax-financed flat-rate pensions was rejected. This was also backed by the majority in the political decision-making process. The main instruments to realize the above-mentioned goals – as proposed by the commissions in principle (EXPERT COMMISSION 1997) and finally politically decided – were as follows:

In addition to already introduced changes in *retirement ages* for old-age pensions, deductions from the full pension were decided for *disability* pensions as well. This was linked to some changes for old-age pensions once more; starting in 2012, the youngest age that an old-age pension can be claimed, shall be the age of 62 years, but only for those who have 35 years of insurance. The deductions would be $3 \cdot 3.6\%$ from the full pension. This 10.8% should also be effective for disability pensions in general.³²

³⁰ There was scarcely any direct contact or coordination between the two reform commissions, as well as between the two reform projects, although some direct links of tax policy and pension policy do exist. For a discussion of this issue, see SCHMÄHL (1998b).

³¹ It is not possible to enter into detail here of how laws are passed in Germany. But in every case the *Bundesländer* are affected, they have to approve the law, too. Even in all other cases, a complicated, time-consuming process is necessary if there are different majorities in *Bundestag* and *Bundesrat*.

³² There are some other technical changes not discussed here, as well as changes for pensions for disabled people.

Additional pension expenditure, however, would result from higher *crediting years for child care*, a measure that, in general, is an element of family policy (resulting in inter-personal redistribution that should be financed from general public revenue and not from earnings-based contribution payments. This will be discussed below).

The most important change concerning expenditure was the decision to introduce a so-called “*demographic factor*” as an element of the formula for calculating and adjusting (all) pensions. The main argument was as follows. With increasing life expectancy, a reduction in the pension level becomes necessary, if the contribution rate shall not increase. The solution proposed by the majority in the government’s expert commission – and later decided by the Federal Parliament – was a compromise:

The development of ARW should be linked in addition to the rate of change of average net earnings³³ to one half of the development of (further) life expectancy of people aged 65, but with a time lag of eight years. The parameters of this formula were chosen in such a way that – in combination with other assumptions determining the financing of the pension scheme – the so-called standard pension level should be reduced from today’s rate of 70% to 64%, until the year 2030.³⁴ How quickly such a reduction of the standard pension level could take place according to this formula depends in reality on other factors, such as the development of life expectancy.

The parliamentary decision to include such a factor – aiming to reduce the pension level – could, at least in the long run, have some very negative effects. Some arguments to explain this include:

- (1) Transparency of the pension formula is reduced, it becomes less understandable for the insured.³⁵ This may lower the acceptance of the scheme.

³³ Which reflects the increase in life expectancy as far as this increases the contribution rate of the pension scheme.

³⁴ If a pensioner has 40 EP instead of 45 EP (standard pension) the present pension level is $40/45 \cdot 0.7 = 0.62$ and would decrease according to these plans to $40/45 \cdot 0.64 = 0.53$ for the full pension when claiming the pension at reference retirement age (i.e., in the future at age 65).

³⁵ In my view, it would be preferable not to make pension insurance directly dependent on the development of other variables (like the different contribution rates to social insurance and income tax), but on the contrary, to limit the number of these variables. This would link ARW only to the growth rate of average gross earnings and the contribution rate to pension insurance. This is discussed in SCHMÄHL (1997a).

- (2) The introduction of the additional factor is a (first) step to break the link of pension development and earnings development. This earnings-linked pension development has been a cornerstone of the German public pension scheme since 1957 (and in principle it exists in the specific pension scheme for civil servants as well).
- (3) The pension level becomes a variable; a specific number of Earnings Points no longer provides the insured person with information about the relative amount of the pension compared to average net earnings. Planning for own additional old-age provisions becomes more complicated.
- (4) The reduction in the pension level has remarkable consequences for the income of the insured.
- (5) The general reduction of the pension level can have the effect that a great number of employees even after extended periods of paying contributions to the scheme only receive a pension that is scarcely higher than social assistance. This could undermine legitimacy and acceptance of the mandatory contributory scheme.

The last two points shall be illustrated by some numerical information. Based on the regulations for calculating and adjusting pensions as decided in 1989 and explained above, the “standard pension” (45 EP) is about 70% of average net earnings (of all employees). Compared to this, a full claim for social assistance (if no other income exists) amounts to 40% of average net earnings. A contributor who was an “average earner” needs 26 years of insurance to receive a pension equal to this social assistance level. Somebody who only earned two-thirds of average earnings will need 40 years of insurance. If the pension level is reduced generally, as the additional factor in the pension formula aims for, more years of insurance are required for a pension that is as high or even above the social assistance level.

Therefore, it will be decisive in the future how many EPs workers can accumulate during their working life. Here one has to take into consideration the following facts:

- (a) Today, about 50% of male and 95% of female old-age pensioners have less than 45 EP.
- (b) Future working live (and development of earnings) may be less stable than in the past. This may reduce the possibility to accumulate pension claims (EPs).
- (c) There are already changes in regulations for pension calculation that do not affect the (fictitious) standard pension (which is always based on 45 EP) but the individual EPs (an example is the reduction in years credited for schooling).

(d) In the future a “full” pension without deductions will be paid at age 65. Those who retire earlier (e.g., at age 62) will have a reduction of 10.8% in their pension amount.

Assuming a standard pension level of 64% (45 EP at age 65), even the standard pensioner has a pension level of only 57.1% (of average net earnings) when claiming the pension already at age 62. If a pensioner has 40 EP (instead of 45), his pension level is less than 51% (while the social assistance level is 40%).

In the long run, such a development could undermine the legitimacy of a scheme obliging employees to pay (high) contributions for an extended time without creating pensions that are remarkably higher than social assistance.

However, alternatives exist for a general reduction in the pension level to cope with the consequences of an increasing life expectancy, i.e., an extension of retirement ages. The reference retirement age could be linked to changes in life expectancy, while the pension formula itself remains constant (proposed in SCHMÄHL 1997a). Such an increase in retirement ages could start, e.g., at around 2010/2015, in a period when labor market projections show a change in labor market conditions because of demographic developments, etc. (resulting in a remarkable reduction in labor supply). This would show workers very clearly that they have to make a decision. To work longer and have the same pension level as today for about the same length of retirement or to receive the pension for a longer time but at a reduced level (because of the deductions from the full pension).

Due to its majority in parliament, the government was able to realize changes which affected the expenditure side of the social insurance budget. The opposition parties were strongly against making changes to disability pensions and introducing the new factor into the pension formula. They promised that these reform measures would be cancelled if there was a change in government after the 1998 elections took place, which in fact then happened (see below).

To avoid higher contribution rates in the pension scheme under unfavorable political conditions as well as to reduce the contribution rate and thereby (non-wage) labor costs, the government planned to allocate more money from the federal budget to the pension scheme in order to cover some of the expenditure aiming at (inter-personal) redistribution, but which was still financed by contribution revenue. An increase to the value added tax required the agreement of the second chamber, the *Bundesrat*, where the opposition party had the majority.³⁶ Although all

³⁶ Revenue of value added tax is allocated to the *Bundesländer*, as well as to the federal level.

political parties were in favor of such a change in the structure of financing (including employers' organizations and trade unions)³⁷, it was only after a process of many months that the opposition agreed to increase value added tax.³⁸ The revenue of one percentage point of value added tax was then allocated as an additional federal grant to the pension scheme.

4.6 Decisions in pension policy after the election to the German Federal Parliament in September 1998 up to the end of 1999

The coalition government of Christian Democrats and the Liberal Party was replaced after the federal elections in September 1998 by a coalition of Social Democrats and the Green Party. As announced and proposed by the Social Democrats prior to the election, they sought to abolish some of the measures that had been decided by the former governing coalition. However, the Green Party was, in principle, in favor of a general reduction of the pension level in combination with greater redistribution within the scheme. The Green Party's arguments are particularly focused on the "younger generations", and they seek to lower their contribution "burden", and give them more opportunities for private capital funded pension claims. Therefore, at the beginning the new coalition only agreed upon a suspension of two major elements of the "1999 Pension Reform Act", i.e., the so-called "demographic factor" of the pension formula and new regulations for disability pensions. But to replace these elements decisions had to be taken until the end of 2000, otherwise the old regulations would be implemented. Some decisions were taken very quickly by the new government, namely to increase the transfers from the federal budget to cover expenditure for redistributive measures within the pension insurance, resulting from German unification as well as from crediting Earnings Points for child care. For the latter, contributions will be paid in the future by the federal budget to pension insurance to cover these pension claims. This is in line with already existing regulations. For example, during periods of unemployment the unemployment insurance pays contributions to the pension scheme as well as to the new long-

³⁷ A detailed discussion of the financing structure, its effects, and the arguments for change is given in SCHMÄHL (1998d).

³⁸ The reason why they agreed was mainly due to the unfavorable labor market situation (especially a downward development in the number of contributors and a slowdown of contribution revenue), otherwise the contribution rate in 1998 would have had to be increased from 20.3% to 21%.

term care insurance for care providers (see SCHMÄHL and ROTHGANG 1996).³⁹

The additional payments from the federal budget made it possible to reduce the contribution rate from 20.3% (in 1998) to 19.5% (in April 1999). The money is from an energy tax (on gasoline and electricity). This became the third source for financing federal grant to pension insurance beside the general federal grant from general revenue, and the additional federal grant from the revenue of one percentage point of the VAT. However, the development of these three elements of federal grant is linked to different assessment bases: The general federal grant is linked to an increase of average gross earnings, the additional federal grant is linked to the revenue of one percentage point of VAT, and the supplement to the additional federal grant is linked to the revenue of the energy tax (ecological tax), but only up to the year 2003. Then it will be linked to the growth rate of the sum of gross earnings. This tripartite federal grant is not easy to calculate because of the different assessment bases. In my view, transparency would be increased by having only one assessment base.

Additional decisions aimed to increase the number of contributors to the pension scheme, i.e., by covering new types of self-employment⁴⁰ as well as employees with earnings below a lower contribution limit. The existence of such a limit (about one-seventh of average gross earnings) without paying contributions gives an incentive for employers to offer such jobs as well as for employees to accept them (in addition to perhaps another job which is covered by social insurance).⁴¹

The new government, similar to its predecessor, tried to reduce contribution rates, which are based on labor income. A reduction of labor costs remained an important objective.

A reduction in income tax, which the new government decided, would increase pension expenditure via the net pension adjustment formula because of the link between pension adjustment to the development of (average) net earnings of employees. This ran against the objective of

³⁹ This is an approach, which – from my point of view – could result in a clear general regulation. Pension claims are only granted if an adequate contribution payment exists (from gainful employment or from other public budgets, which are responsible for the specific task). This would make the contribution-benefit link in social pension insurance closer than it already is and may increase acceptance for the scheme.

⁴⁰ Resulting, e.g., from the outsourcing of activities from companies.

⁴¹ If the contribution-benefit link of the social pension insurance is very close, then the attractiveness of not being covered will be reduced as well as the “tax wedge” – compared to the difference of labor costs and net earnings of employees (for a detailed discussion, see SCHMÄHL 1998d).

reducing non-wage labor costs. Therefore, the government decided to increase pensions (originally) for two years only (2000 and 2001) in accordance with the increase of a consumer price index (for living costs) and not in accordance with the growth rate of average net earnings.⁴²

A new debate about the appropriate pension adjustment formula followed. In the process of the discussions the federal government's Social Advisory Council proposed a much simpler adjustment formula, taking up a proposal that had been made also by the author in the 1980s. According to this proposal only the development of average gross earnings and the contribution rate to pension insurance should be taken into account (SCHMÄHL 1999d).⁴³ The idea behind this is that only those elements that are directly linked to pension issues as well as to financing pension insurance should be used within the adjustment formula. The government rejected this proposal at the time and announced that it would re-implement a net adjustment formula.

5. CENTRAL ELEMENTS OF THE REFORM MEASURES OF 2001 AND THE DOMINATING OBJECTIVES BEHIND⁴⁴

The objective of limiting the increase in the contribution rate became a central issue for governmental pension policy. Up to the year 2020 the contribution rate to pension insurance should not be higher than 20%, and in the year 2030 it should not exceed 22%. By taking into account existing regulations, the contribution rate was calculated at around 24% for the year 2030. According to official statements, this burden was characterized as being far too high.

Therefore, several instruments were used to realize the target contribution rates (20 or 22%). Only a few of the elements can be mentioned here.⁴⁵ In addition to measures to reduce public pension expenditure, and thus the necessary contribution rate, incentives for private (including occupational) pensions, tax (and transfer) were given.⁴⁶ These incentives are increased step by step.

⁴² In fact, it was only for the year 2000.

⁴³ While pensioners themselves have to pay an individual contribution to health insurance, as well as to long-term care insurance, the difference to the net adjustment formula is that income tax on earnings and the contribution rate to unemployment insurance are not taken into account when calculating the adjustment rate.

⁴⁴ A detailed analysis is given in SCHMÄHL (2000b, 2000d).

⁴⁵ Changes in disability pensions are not discussed here.

⁴⁶ Originally such incentives for occupational pensions were not on the agenda of the government. Trade unions pushed this element.

The pension adjustment formula became a central element of the government's strategy which now took up the proposal for a formula that no longer included income tax burden on earnings. But apart from the two elements mentioned above – average gross earnings and the contribution rate to pension insurance – an additional element was included. This factor is defined as a voluntary contribution rate for (different types of tax privileged and licensed) private old-age provision. This contribution rate is fixed by the government, and increases from 1 to 4% of earnings in four steps. It is not known whether and how many households will save with these new (tax-privileged) types of private old-age provision. Nevertheless, it is assumed that all those who are eligible will contribute the full amount. This is a virtual factor in the pension formula. The effect is that due to the increase of this factor (from one to four percentage points of earnings) the growth rate of the assessment base for the pension adjustment is reduced. This lowers the increase of pension expenditure. But it also lowers the benefit level for the present pensioners as well as for all future pensioners. This additional (and arbitrary) factor in the pension formula is a lever for reducing public pensions. It is unknown whether the (virtual or fictitious) rate will remain constant at 4% in the future.

The effect of this new pension formula is, for example, a net pension level for the "standard pension" (45 Earnings Points) of about 64% in 2030 instead of 70%. This is the target value that the old government also aimed for. However, the reduction will take place even quicker now.

The arguments still remain the same with regard to the valuation of such a reduction of the benefit level which were mentioned above. When we take into account changing economic activity over the life cycle, interruptions within the earnings career, etc., together with the reduced benefit level, it can be expected that, even after an extended period of contributing to this public scheme, a majority of the contributors will only receive a pension that is below or not much above the level of a (full) social assistance benefit. It is quite another question whether these pensioners will need a social assistance benefit because this depends on total (household) income. But the acceptance of such a mandatory public pension scheme – which is at least today characterized by a close contribution-benefit link – depends on the willingness to contribute to such a scheme. Putting it another way, a mandatory public pension scheme with a close contribution-benefit link will not be sustainable if the benefits fall below a certain level. It can be assumed that the mandatory scheme will then be increasingly used for inter-personal redistribution purposes, which finally requires tax financing.

However, Germany's pension policy may already be beyond the crossroads.⁴⁷

The effect of the new measures on the financing of the public pension scheme is not a convincing argument for these measures because instead of 24% now 22% are calculated for the year 2030, but adding 4% – if we follow the argument of the government that additional private saving is necessary to compensate for the benefit reduction in the public scheme – in total this means a contribution rate of 26%.

However, there is a shift towards more direct financing of the employees because the private pension is solely financed by employees. In 2030 the employers' part of contributions will be reduced from 12% to 11% according to official calculations, while the employee has to contribute 15% instead of 12%.

In addition, there is a shift from a defined benefit towards a defined contribution – as a tendency in the public scheme and, in fact, in private provision. This will also require higher contributions of women compared to men because of higher female life expectancy.

The rate of return was an important argument in the German public debate. However, the cohort-specific effect is only marginal. For all cohorts born before 1975 there will be a reduction in the (total) rate of return for public and private old-age provision and an increase for younger cohorts born 1975 or later. However, the difference in rate of return is at maximum 0.2 percentage points (at a retirement age of 65). This means that an increase according to these calculations can be expected for all cohorts retiring after the year 2040. The changes in the rates of return – beside all problems in calculating and evaluating such figures – are not really a convincing argument for the new pension policy strategy.

⁴⁷ There is not only a reduction of benefits for the insured person (in case of disability or retirement) but also for the surviving spouse (and orphans). Widow's and widower's pensions are linked to the pension of the former insured spouse. Widow(er)'s pensions were in general 60% of the pension of the insured person. But since 1985, own earnings (wages and salary) as well as own insurance pension of the surviving spouse were taken into account for calculating the benefit transferred to the widow(er). Now, the percentage has been reduced from 60 to 55%, and all types of income (for example income from assets) are included into the formula for calculating widow(er)'s pensions. But there is an additional bonus for those who raised children. There always was and will be a debate on the topic of family (care) and old-age security and how to take into account caring for children when calculating retirement benefits. An overview is given in HORSTMANN (1996).

Those who are already pensioners or near retirement will not have the opportunity to compensate for the reduction in benefits of the social pension insurance through private savings.

There are of course winners in this policy strategy – those who supply products on the financial market. In connection with additional capital funding of pension schemes, global problems will emerge, for example, if a growing number of elderly want to finance their standard of living during old-age from former savings and by reducing formerly accumulated assets. These problems were denied by many actors (including many academics) for a long time and were neglected in public debates. Now there seems to be a rethinking of this because the stock market development at the moment does not look as favorable as it did a few years ago. But shifting pension money from PAYGO to funding first of all means additional liquidity and not necessarily real capital investment. Liquidity may flow to stock exchange and increase equity prices for some time. But if the baby boomers need their money, the reverse effect may take place.⁴⁸

The remarks concerning capital funding should not be misunderstood. In principle there is no argument against mixing PAYGO and capital funding. However, what is necessary is an unbiased discussion, taking into account the possibilities, risks and costs, advantages and disadvantages in order to achieve a realistic view on the adequate mix⁴⁹ and the effects of the ways to realization.

6. NEGLECTED ASPECTS IN PRESENT PENSION POLICY – TOPICS OF FUTURE DISCUSSION

Beside the topic of taxing different types of provision for old age as well as income in old age from different sources (which is on the political agenda after a decision made by the Federal Constitutional Court in early 2002), the topic of retirement age needs careful consideration.

The pension reform of 2001 explicitly did not tackle the topic of retirement age. It was mentioned by politicians that it might become a topic for decision-making at around 2010. Although Germany today has a high unemployment rate, the retirement age should be on the political agenda. This means a decision should be made now to increase retire-

⁴⁸ These and other effects resulting from the strong tendency towards capital funding are discussed in SCHMÄHL (2000a: 195–208).

⁴⁹ Which will depend on country-specific conditions, and expected development for the future.

ment ages, but it should first become effective, for example, at around 2010, when a change in labor supply can be expected due to demographic reasons. This would give employers and employees time to adapt their decisions to changing conditions.

For some years now I have been proposing to link the retirement age for taking up a full pension (i.e., without deduction) to the increase of (remaining) life expectancy at age of retirement.⁵⁰ This would mean that the ratio of years in employment to years in retirement could remain more or less constant, dividing additional years of life expectancy into working and retirement years. Today additional years (because of increasing life expectancy) are only “used” for a longer life spent in retirement.

After the reform measures were decided by the government as well as by employer’s organizations, the need for employing older workers was stressed. But this will require measures for improving the qualifications of older workers, for example, through further training and education. This will not be without costs. However, all other strategies in order to increase the labor supply will be accompanied by costs, too: increased migration needs measures for integration as well as improved qualifications; additional female labor supply requires more opportunities to combine work and family life (for example, by introducing all-day schools, which are an exception in Germany).

Human capital is of central importance for Germany’s economic development in the future. In light of a shrinking and aging potential labor supply, the increase of human capital is decisive. This will also require thought about the allocation of public expenditure. Today the trend is to subsidize the formation of financial capital. It must be questioned whether this is the right strategy in comparison to spending more (public) money for investment in human capital.

The tendency towards privatizing social security – in old age pension, but perhaps also in health insurance – places the distribution of income on the agenda, too.⁵¹ It can be assumed that there will be a greater diversity of income in old age. This will raise the question to which degree society is willing to accept inequality. In order to be better able to cope with challenges that result from changes in income distribution linked, for example, to a rapid aging of the population, a higher growth rate of income would be favorable. An increase in productivity is the source for a growth rate of income – and this particularly depends on the

⁵⁰ See SCHMÄHL (1997a, 1999b, 2000c, 2000e) as well as SCHMÄHL and VIEBROK (2000) for a discussion on measures to react to increasing life expectancy in PAYGO pension schemes.

⁵¹ Some aspects are outlined in VIEBROK and HIMMELREICHER (2001).

development of human capital. Education, training and further education during the working years are therefore of central importance and require more public attention. This will also be the main source for realizing an adequate standard of living for the growing number of retirees in the future.⁵²

REFERENCES

- EXPERT COMMISSION (1997): *Vorschläge der Kommission "Fortentwicklung der Rentenversicherung"*. Bonn: Bundesministerium für Arbeit und Sozialordnung.
- GATTER, Jutta and Winfried SCHMÄHL (1996): Vom Konsens zum Konflikt – Die Frühverrentung zwischen renten- und beschäftigungspolitischen Interessen. In: BREMER GESELLSCHAFT FÜR WIRTSCHAFTSFORSCHUNG: *Massenarbeitslosigkeit durch Politikversagen?* Frankfurt/M.: Peter Lang, pp. 183–204.
- HORSTMANN, Sabine (1996): *Kindererziehung und Alterssicherung*. Graf-schaft: Vektor.
- JACOBS, Klaus and Winfried SCHMÄHL (1989): The Process of Retirement in Germany: Trends, Public Discussion and Options for its Redefinition. In: SCHMÄHL, Winfried (ed.): *Redefining the Process of Retirement – An International Perspective*. Heidelberg: Springer, pp. 13–38.
- MÖRSCHER, Richard (1990): Die Finanzierungsverfahren in der Geschichte der gesetzlichen Rentenversicherung. In: *Deutsche Rentenversicherung* 9/10, pp. 619–661.
- SCHMÄHL, Winfried (ed.) (1985): *Versicherungsprinzip und soziale Sicherung*. Tübingen: C.H. Mohr.
- SCHMÄHL, Winfried (ed.) (1991): *The Future of Basic and Supplementary Pension Schemes in the European Community – 1992 and Beyond*. Baden-Baden: Nomos.
- SCHMÄHL, Winfried (1992a): Transformation and Integration of Public Pension Schemes – Lessons from the Process of the German Unification. In: PESTIEAU, Pierre (ed.): *Public Finance in a World of Transition. Public Finance (Supplement)* 47, pp. 34–56.
- SCHMÄHL, Winfried (1992b): Changing the Retirement Age in Germany. In: *The Geneva Papers on Risk and Insurance* 17, pp. 81–104.

⁵² The author gives an extensive analysis of reform options within the German PAYGO financed pension scheme in SCHMÄHL (2001).

- SCHMÄHL, Winfried (1993a): Proposals for Flat-rate Public Pensions in the German Debate. In: BERGHMAN, Jos and Bea CANTILLON (ed.): *The European Face of Social Security*. Aldershot a.o.: Avebury, pp. 261–280.
- SCHMÄHL, Winfried (1993b): The “1992 Reform” of Public Pensions in Germany: Main Elements and Some Effects. In: *Journal of European Social Policy* 3, 1, pp. 39–51.
- SCHMÄHL, Winfried (1997a): Alterssicherung – Quo vadis? In: *Jahrbücher für Nationalökonomie und Statistik* 216, pp. 413–435.
- SCHMÄHL, Winfried (1997b): The Public-private Mix in Pension Provision in Germany: The Role of Employer-based Pension Arrangements and the Influence of Public Activities. In: REIN, Martin and Eskil WADENSJÖ (ed.): *Enterprise and the Welfare State*. Cheltenham: Elgar, pp. 99–148.
- SCHMÄHL, Winfried (1998a): Recent Developments of Pension Schemes in Germany: Present and Future Tasks in Conflict. In: *Labour* 12, pp. 143–168.
- SCHMÄHL, Winfried (1998b): Finanzpolitik und Rentenversicherung. In: GALLER, Heinz and Gert WAGNER (ed.): *Empirische Forschung und wirtschaftspolitische Beratung*. Frankfurt/M. and New York: Campus, pp. 448–468.
- SCHMÄHL, Winfried (1998c): Insights from Social Security Reform Abroad. In: ARNOLD, Douglas R., Michael J. GRAETZ and Alicia MUNNELL (ed.): *Framing the Social Security Debate: Values, Politics, and Economics*. Washington, D.C.: Brookings Institution Press, pp. 248–271 and 280–286.
- SCHMÄHL, Winfried (1998d): Financing Social Security in Germany: Proposals for Changing its Structure and Some Possible Effects. In: BLACK, Stanley W. (ed.): *Globalization, Technological Change, and Labor Markets*. Boston: Kluwer, pp. 179–208.
- SCHMÄHL, Winfried (1999a): Public Pension Reforms in Germany – Major Post-war Reforms and Recent Decisions. In: *Overseas Social Research* 126, Spring, Tōkyō, pp. 22–33.
- SCHMÄHL, Winfried (1999b): Wie sollte der Übergang vom Erwerbsleben in den Ruhestand rechtlich gestaltet werden? In: *Verhandlungen des 62. Deutschen Juristentages Bremen 1998*, Band II/1 Sitzungsberichte. München: C.H. Beck, pp. K 51–K 77.
- SCHMÄHL, Winfried (1999c): Rentenversicherung in der Bewährung: Von der Nachkriegszeit bis an die Schwelle zum neuen Jahrhundert. Stationen und Weichenstellungen. In: KAASE, Max and Günther SCHMID (ed.): *Eine lernende Demokratie, WZB-Jahrbuch*. Berlin: edition sigma, pp. 397–423.
- SCHMÄHL, Winfried (1999d): Die Nettoanpassung der Renten auf dem Prüfstand: Für eine Modifizierung der Nettoanpassung und für einen Übergang zu einer “lohn- und beitragsbezogenen” Anpassungs-

- formel – Gründe und Wirkungen. In: *Deutsche Rentenversicherung* 8–9, pp. 494–507.
- SCHMÄHL, Winfried (2000a): Pay-As-You-Go Versus Capital Funding: Towards a More Balanced View in Pension Policy – Some Concluding Remarks. In: HUGHES, Gerard and Jim STEWART (ed.): *Pensions in the European Union: Adapting to Economic and Social Change*. Boston: Kluwer, pp. 195–208.
- SCHMÄHL, Winfried (2000b): Alterssicherung in Deutschland: Weichenstellungen für die Zukunft – Konzeptionen, Maßnahmen und Wirkungen. In: LEIBFRIED, Stephan and Uwe WAGSCHAL (ed.): *Der deutsche Sozialstaat – Bilanzen – Reformen – Perspektiven*. Frankfurt/M. and New York: Campus, pp. 381–417.
- SCHMÄHL, Winfried (2000c): Increasing Life Expectancy, Retirement Age, and Pension Reform in the German Context. In: CARO, Francis G., Robert MORRIS and Jill R. NORTON (ed.): *Advancing Aging Policy as the 21st Century Begins*. Binghamton N.Y.: The Haworth Press, pp. 61–70.
- SCHMÄHL, Winfried (2000d): Perspektiven der Alterssicherungspolitik in Deutschland – Über Konzeptionen, Vorschläge und einen angestrebten Paradigmenwechsel. In: *Perspektiven der Wirtschaftspolitik* 1, 4, pp. 407–430.
- SCHMÄHL, Winfried (2000e): Steigende Lebenserwartung und soziale Sicherung. In: VON MAYDELL, Bernd, Takeshi SHIMOMURA and Kazuaki TEZUKA (ed.): *Entwicklungen der Systeme sozialer Sicherheit in Japan und Europa*. Berlin: Duncker & Humblot, pp. 95–125.
- SCHMÄHL, Winfried (2001): Umlagefinanzierte Rentenversicherung in Deutschland – Optionen und Konzepte sowie politische Entscheidungen als Einstieg in einen grundlegenden Transformationsprozeß. In: SCHMÄHL, Winfried and Volker ULRICH (ed.): *Soziale Sicherungssysteme und demographische Herausforderungen*. Tübingen: Mohr-Siebeck, pp. 123–204.
- SCHMÄHL, Winfried, Rainer GEORGE and Christiane OSWALD (1995): Gradual Retirement in Germany. In: DELSEN, Lei and Geneviève REDAY-MULVEY (ed.): *Gradual Retirement in the OECD Countries*. Aldershot: Dartmouth, pp. 69–93.
- SCHMÄHL, Winfried and Heinz ROTHGANG (1996): The Long-Term Costs of Long-Term Care Insurance in Germany. In: EISEN, Roland and Frank A. SLOAN (ed.): *Long-Term Care: Economic Issues and Political Solutions*. Boston: Kluwer, pp. 181–222.
- SCHMÄHL, Winfried and Holger VIEBROK (2000): Adjusting Pay-as-you-go Financed Pension Schemes to Increasing Life Expectancy. In: *Schmollers Jahrbuch, Zeitschrift für Wirtschafts- und Sozialwissenschaften* 120, 1, pp. 41–61.

- VIEBROK, Holger (1997): *Das Arbeitsangebot im Übergang von der Beschäftigung in den Ruhestand*. Frankfurt/M.: Peter Lang.
- VIEBROK, Holger and Ralf K. HIMMELREICHER (2001): Verteilungspolitische Aspekte vermehrter privater Altersvorsorge. *ZeS-Arbeitspapier* (Working Paper) 17/2001, University of Bremen, mimeo.