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**Dismantling the Earnings-Related Social
Pension Scheme
– Germany Beyond a Crossroad –**

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Summary

A paradigm shift in pension policy decided by the German red-green coalition government will affect the level and structure of pension benefits as well as the mix of old-age security arrangements remarkably. The paper starts with a brief outline of the pension schemes as they were designed before the recent decisions and with some remarks on the reasons for recent reform debates. Then, the major measures of the 2001 Pension Reform are described. The focus of the paper is on the effects of the reform for (personal) income distribution and the institutional design. A partial shift from (mandatory) public (PAYGO financed) pensions to (voluntary) private (capital funded) pensions and from expenditure-oriented revenue policy to revenue-oriented expenditure policy will reduce the benefit level in the statutory pension insurance. A large number of contributors will – even after many years of paying contributions – receive only benefits below the social assistance level. It can be expected that this development will transform the present earnings-related statutory pension scheme, which has a strong contribution-benefit link and is aiming at income-smoothing over the life cycle, into a basic, highly redistributive pension scheme aiming mainly at avoiding poverty. Income inequality in old age is expected to increase as a result of the new strategy in pension policy.

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1. Introduction

Present pension policy in Germany as it is realised by the red-green coalition government, which has been in power since autumn 1998, is characterised by a paradigm shift. Over time, this will affect old-age security arrangements in Germany remarkably – the role of different institutions as well as income in old age in particular. The paper starts with a brief outline of the pension schemes in Germany as they were designed in 1989 (based on the fundamental pension reform of 1957 introducing a dynamic earnings-related pension). The focus will be mainly on the statutory (social) pension insurance which is quantitatively by far the most important part of pension provision in Germany, covering most of the employees and even part of self-employed persons (2.). Subsequently, a few remarks will illustrate the reasons for the pension reform debate in recent years (3.) and the approach finally adopted by the new federal government (2001 pension reform). In order to fully understand the paradigm shift, it is useful to compare it to the approach existing before (4.). Some consequences of the strategy implemented by the reform measures are outlined, before the most recent proposals by a commission – which was appointed by the federal government – are described (5.). These proposals pursue the strategy on which the 2001 Reform was based (6.). Finally, some first lessons, implications and major effects resulting from this new approach are outlined, focusing on changes of the pension landscape in Germany and its effects on income distribution in particular (7.).

Germany's pension system is facing many challenges from the national and international level. There are not only structural changes in demography, household composition, in the economy and in particular in the employment system, but also home-made problems as a result of political decisions. Since a long time, public pension schemes have been an instrument for labour market policy (early retirement options) increasing expenditure and contribution rate. The new possibility for employees to opt out with part of their earnings from contribution payment by using a special type of earnings conversion reduces contribution revenue and requires *ceteris paribus* a higher contribution rate. It has also to be taken into account that the German unification also necessitated a higher contribution rate. Regarding the international environment, in particular decisions from the European level are influential, such as decisions by the European Court of Justice, but especially political decisions like the introduction of the Maastricht stability criteria which put public budgets under pressure. The new "open method of coordination" – agreements on common objectives and in particular common indicators which may be a basis for a process of (informal) benchmarking – can become highly influential for decisions on national pension policy, the level of expenditure as well as the design of the schemes.

2. An outline of the German pension arrangements

In Germany, three tiers (often labelled as “pillars”) of old-age security have been existing since a long time. There are mandatory basic pension schemes for different groups of the population as first tier, supplementary occupational schemes as second tier and additional private voluntary arrangements for old-age provision as third tier.

Regarding the *first tier*, *statutory social pension insurance* is the dominating element. It is also the most important part of the whole German pension system. It covers in principle all blue- and white-collar workers (including miners) but also some groups of self-employed. It is financed on a pay-as-you-go (PAYGO) basis. The dominating source of revenue is from contributions paid in equal parts by employees and employers. But there is also revenue from the federal public budget.¹ This scheme is in the centre of the political debate. Also a major element of the paradigm shift of the “2001 reform” is focused on this scheme.

Supplementary occupational pension schemes are the *second tier* of the German pension system. In the *private sector* they are in general voluntary with a great variety in the design of pensions. Only about 50 per cent of all employees are covered and coverage is very unequal according to the branch and size of the firm. Pensions are mainly defined benefit and mainly employer-financed. Occupational schemes in the private sector are based on capital funding.²

During the nineties a decline in occupational pension arrangements took place, by giving less favourable conditions for new employees or by closing schemes for newly hired employees. It can be assumed that – among other reasons – (employer-financed) occupational pensions have lost their importance as an instrument of attracting qualified labour because of the labour market conditions (high unemployment). Collective agreements were an exception in the private sector up to the “2001 reform”,³ quite in contrast for example to the Netherlands. After the “2001 reform” this is in a process of change.

Occupational pension schemes for wage and salary earners in the *public sector* are based on collective agreements in contrast to the private sector. The supplementary pensions in the public sector were fully integrated with the statutory insurance pensions, that means that a reduction in social insurance pension will be compensated by higher supplementary pensions – if the collective agreement is not changed. From both types of pensions, wage and salary earners in the public sector shall receive a pension benefit that is targeted at the level of civil servants’ pensions, a final salary scheme. After the “2001 reform” trade unions and public employers agreed upon a new collective contract that will abolish this integrated approach: It will separate the supplementary pension from the development of the first tier schemes – i.e.

¹ The rules for miners as well as for self-employed differ from the general rules relevant for employees. Civil servants have a separate scheme, financed from public budgets.

² For a detailed description of occupational schemes in particular see Schmähl (1997); see also Deutsche Bundesbank (2001).

³ This has existed in the building industry and for employed journalists.

from the development of civil servants' pensions as well as statutory pension insurance.⁴ It will also be changed from defined benefit to defined contribution.

As *third tier* there exists a great variety of *voluntary* and capital funded additional types of saving for old age, some with risk pooling (life insurance), others without such insurance elements, some types are tax-privileged. Empirically it is very difficult to identify which part of the saving of households is for old age.

The borderline between the second and the third tier became more and more blurred over time because of using models of deferred compensation and especially earnings conversion financed only by employees but with the support of the employer, for example by negotiating group insurance contracts with a life insurer resulting in better conditions compared to individual contracts. Time saving accounts are used as well. Several collective agreements are tailored to maximise net labour income by avoiding tax and social insurance contributions on that part of labour income that is deferred for old age security. The "2001 reform" is extending the concept of earnings conversion by introducing a right to the employee for earnings conversion up to a certain amount and also introduces new possibilities for taking up subsidies for voluntary old age provision.

In Germany, at the end of the 90s of the last century about 80 per cent of all pension expenditure for old age, invalidity and survivors was PAYGO financed (around 68 per cent social insurance, 12 per cent civil servants' pension scheme). 10 per cent of all pension expenditure came from the second tier – occupational pensions – and as a rough estimate another 10 per cent from the third tier.⁵ It is an explicit goal of the "2001 reform" to change these ratios towards more capital funding.

Social pension insurance covers by far most of all gainfully employed persons in Germany: In 1999 nearly 93 per cent of those persons covered by mandatory first tier schemes are members of this scheme. Nearly 69 per cent of total pension expenditure was from this scheme. This was nearly 10.6 per cent of GDP.

It is not surprising that social insurance pensions is (at least on average) by far the most important source of (monetary) income in old age in Germany.

Germany had no general minimum pension. If household income is lower than a certain amount, means-tested social assistance can be claimed. Only less than 2 per cent of all elderly people received (at the end of 1998) social assistance. If those persons are added to this number who may be eligible for social assistance but do not claim this payment, then

⁴ Both schemes were relevant for the development of the supplementary pensions: From civil servants scheme the development of the target replacement rates and from statutory pension scheme the development of the benefit amount was decisive.

⁵ This is measured on the base of expenditure, not financing. In recent years there is an increase for example in life insurance premiums which may in the future change the weight between the different tiers. That this also is an explicit political objective will be discussed later.

even most pessimistic estimates state that no more than about four per cent of pensioners are living in “poverty” – i.e. their income is below the social assistance level.⁶

The “2001 pension reform” introduced two new elements into the German pension system. The first one is a *means-tested transfer payment in case of insufficient income for persons age 65 and older as well as for disabled persons*. The benefit amount, however, is calculated in the same way as the already mentioned means-tested social assistance. But there is one major difference: Children are not obliged to pay back the whole sum or part of it (as in the case of social assistance – depending on their own financial resources) if their parents claim this new means-tested benefit and if the own income of children does not exceed 100 000 EUR per year.

The second new element is a *subsidy for contributions for a private pension* that fulfils certain criteria in order to get a *certificate* which is a prerequisite for subsidies. This approach – subsidising private pensions – is labelled as the “heart” of the 2001 pension reform by the ruling coalition government (Social Democratic and Green Party).⁷

3. Major reasons of pension reform debate in Germany

In the eighties as well as in the years following German unification in the nineties, debates on further reform measures especially regarding the PAYGO financed social pension insurance and – to a minor extent also civil servants’ pensions – were based on projections showing an increasing future economic burden of social security: increasing expenditure, rising contribution rates and rising non-wage labour costs. The topic of labour costs became highly important in the public debate and mainly focused on assumed negative effects regarding competitiveness. This had two dimensions, a national one – competitiveness of the official sector compared to shadow work activities and by this expected negative incentive effects on the labour market – and one focused on international competitiveness of the German industry. Despite the fact whether and how far the assumed effects are empirically well-founded or not, the arguments were and are important in the political debate.

In the German public debate the future contribution rates in social pension insurance often are calculated according to the development of the old-age dependency ratio (number of persons above retirement age compared to number of persons in working age). Because old-age dependency ratio was expected to double until the year 2030, also a doubling of the contribution rates was often “forecasted”. This can be misleading, because for financing the

⁶ It can be expected that a high percentage of those people not claiming social assistance in old age would only receive a small additional social assistance payment. There is, however, the assumption, that not claiming social assistance in old age is mainly because of the fear that children have to pay back these transfers to the social assistance organization.

⁷ It has, however, to be mentioned that there exist already tax-privileged types of private saving and for occupational pensions. Official statements read as if the ‘2001 reform’ introduced such incentives for the first time.

pensioner ratio (number of pensioners compared to contributors) is decisive, which may develop differently, for example if labour force participation rates are changing. And also the effects of already implemented political decisions affecting revenue and expenditure of the pension scheme are neglected.

If we compare for example the projected contribution rates for the year 2030 that were officially calculated in 1989 and take into account the already decided changes in the statutory pension scheme before the “2001 pension reform“, we see that remarkable changes already took place over time. In 1989, it was projected that contribution rates for West Germany will rise to more than 36 per cent until 2030. That means a doubling of the contribution rate compared to the rate that existed at that time. In 2000 the projection being the basis for political decisions of the “2001 pension reform“ gave a different picture: an increase of the contribution rate up to “only“ 23.6 per cent in 2030 for West and East Germany (Schmähl 1998b: 261).

To evaluate such contribution rates it should be taken into consideration, among other things that German unification increased the overall contribution rate in pension insurance by about one percentage point. This situation will not change for a long time. And not only PAYGO but capital funded schemes as well will become more expensive in the process of demographic ageing, especially if life expectancy is increasing.

This past development and in particular the expected negative economic effects of population ageing stimulated the development of crisis scenarios. Here, an interaction of many economists, actors in the financial market, politicians and the mass media took place. Rolling back the Welfare State became a much recommended strategy to cope with future economic problems.⁸ Cutting back PAYGO financed expenditure was demanded and above all an increase in capital funding. The already mentioned present ratio of 80 per cent PAYGO financed pension expenditure and 20 per cent based on capital funding should be changed, for example to 60 : 40 as some economists proposed. This would make it necessary to reduce the level of public pension expenditure remarkably. Capital funding – some economists declared – is dominating PAYGO financing in nearly all aspects.⁹ Therefore, it was argued that such a shift towards funding would improve the well-being of the population – at least in the long run.

The public debate about the coming “demographic crisis” and nearly daily reports in the mass media prepared the ground for a major paradigm shift based on an informal coalition aiming at the same direction: reducing the public PAYGO financed scheme and substituting this by private capital funded elements. The actors involved have different motives: The minister of finance, who became a major actor in the pension policy arena, is particularly interested in reducing the burden for public budgets and public debt in line with the Maastricht

⁸ An analysis of economic consequences is given in Atkinson (1999).

⁹ For example Neumann (1998). See also Siebert (1998). For a detailed description of the coming ‘crisis’ because of the population ageing see Wissenschaftlicher Beirat (1998), which is an Advisory Group of Scientists for the Federal Ministry of Economics. For a discussion of these findings see Schmähl (1998a).

convergence criteria. Lower contribution rate also means lower federal grant to social pension insurance, because part of the grant is linked also to the development of the contribution rate of the pension scheme.

Many mainstream economists are arguing in favour of only minimum protection which should mainly be for interpersonal redistributive purposes. This purpose is also supported by those who recommend more interpersonal redistribution (often labelled as “solidarity“) in pension policy instead of a close contribution-benefit link. Employers’ organisations are in favour of a reduction of the PAYGO public scheme because of lower contribution rates. And – of course – the actors of the financial market like banks, pension funds, insurance companies are highly interested in a reduction of the benefit level in public PAYGO schemes. The total sum of pension money is increasing in an ageing population and makes this field more attractive for companies. It is argued that the rate of return of funded schemes would by far exceed the low rate of return of the PAYGO scheme.¹⁰

Many, especially younger persons were convinced by the argument that only by saving in capital funded schemes one is doing something for oneself, while contributing to a PAYGO scheme is paying for others (the present pensioners). Although this is a highly biased argument, in particular if the PAYGO scheme has a strong contribution-benefit link, it was an argument that influenced the view of many persons regarding the need for a reform that (at least) reduces the PAYGO scheme and gives the opportunity for more capital funding.

The political debate was finally framed by the new government which came into power in autumn 1998 in such a way, that a contribution rate of about 24 per cent in 2030 in social pension insurance would be unbearable and would burden the “younger generations“ too much.¹¹ “Intergenerational equity” as well as “sustainability” became widely used catch-words in the political debate. The development of the contribution rate became the decisive indicator. Therefore, cuts in the pension level were regarded as unavoidable. To compensate such cuts additional private saving is necessary for living in old age. The “stick“ was the cut in public pension level and the “carrot“ was a subsidy for private pension saving (“government gives you a gift“). This looked especially attractive during the boom period of the stock markets.

¹⁰ Advocates of a remarkable shift towards funding do not focus so much – as in former times – on the argument of higher saving rate, increased investment and positive for economic growth – arguments which are intensely debated and often questionable. The debate is instead primarily framed towards rate of return. These calculations often are based on highly optimistic assumptions and are not very transparent, neglecting costs in general as well as transition costs when substituting PAYGO by capital funding. These calculations are only for capital funded old-age pensions, while in the social (statutory) pension insurance also disability pensions and expenditure for rehabilitation are covered which reduces the rate of return. Regarding the biased discussion concerning financing methods see Schmähl (2000).

¹¹ For more information regarding the framing of the public debate, especially focusing on intergenerational aspects see Schmähl (2001b).

4. A paradigm shift by the 2001 pension reform

4.1 The main elements of the existing scheme

On November 9, 1989 (just the same day as the Berlin Wall was opened) a pension reform act was decided in parliament. It was a further development of the scheme that was implemented by the major pension reform act of 1957: The introduction of a dynamic, earnings-related pension scheme, linking pension calculation and regular pension adjustment to gross earnings. The 1989 reform measures already tried to cope with the challenges of demographic ageing by using several instruments to reduce the growth rate of pension expenditure, e.g. by linking pension adjustment to the development of average *net* earnings. But these measures were based on a clear distributional objective and the idea of constructing the social pension insurance scheme according to a self-regulating mechanism.¹² Linking the development of individual pensions to the development of the growth rate of average *net* earnings, was an important instrument to realise an explicit distributional objective: Pensioners with a specific amount of pension claims (a certain number of Earnings Points) always should be entitled to a pension benefit equivalent to a specific percentage of actual average net earnings of all employees. This should not only be realized at the time of retirement but also during the whole phase of receiving a pension benefit. Therefore, a constant net pension level (pension compared to net average earnings) was aimed at and realized by adjusting individual pension benefits to the growth rate of net average earnings. This underlines the character of the social pension insurance as a defined benefit scheme.

The pension scheme was constructed according to the idea of an “expenditure-oriented revenue policy”: The contribution rate was the dependent variable as well as the grant from the federal budget to pension policy. Federal grant was linked not only – as before – to the development of earnings but also to the development of the contribution rate in pension insurance. Contribution rate and federal grant would be calculated in such a way that they are sufficient to finance the pension expenditure that are expected according to demographic, economic and other assumptions. An increase in the contribution rate as well as in other direct burden of the employees, however, would also reduce the increase of pensions via the net adjustment formula.¹³

¹² For a detailed discussion see Schmähl (1993).

¹³ The new adjustment formula was an important instrument in reducing the future development of pension expenditure. In addition it was also decided to introduce a deduction from the full pension in case of early retirement, which did not exist before and gave remarkable incentives to early retirement and by this increased the contribution rate of the PAYGO scheme. This was to be phased in, beginning in 2001, during a period of more than 10 years. The full percentage of the deduction is 3.6 per cent per year of retiring before the reference retirement age (this will be age 65). In the future age 62 will be the earliest retirement age (for old-age pensions), equal for men and women. 3.6 per cent as reduction per year was and is too low to eliminate the incentive for early retirement. In 1996 – among other measures – it was decided to start the phasing in of these

Trying to characterise the social pension insurance, it has to be underlined that it is income-related with a high degree of intertemporal income redistribution over the life cycle (i.e. a relatively close contribution-benefit link). The whole insurance period is taken into account for calculating pensions. Individual pension claims of the insured person from earnings or other activities are accumulated within an *individual account* managed by social insurance pension administration. Income and consumption smoothing over the life cycle is the main distributional objective of the statutory pension scheme and not primarily avoiding poverty.

For pensioners – at least for those with a longer insurance record – the pension shall be sufficient to maintain to a certain specified percentage during retirement the level of living that was financed before retirement from earnings.

Summing up the main objectives and characteristics of the social insurance pension scheme as realized by decisions in 1989 (“1992 pension reform”) and based on the 1957 reform are

- an explicit distributional objective: an individual pension should be a fixed percentage of average net earnings (the percentage depending on the accumulated sum of pension claims);
- a defined benefit scheme;
- a constant pension level over time by linking the development of pensions to the development of average net earnings;
- financing (by social insurance contributions and federal grant) as a dependent variable, a strategy that can be labelled as “expenditure-oriented revenue policy“;
- occupational pensions as a supplement to social insurance pensions. Financing by employers is dominating, pension are mainly of the defined benefit type. Occupational pensions in the private sector are voluntary.
- Voluntary private saving for old age (for example by life insurance contracts) was an additional means for old-age protection.

4.2 The “2001 pension reform“ – a new strategy and major instruments used

The “2001 reform“ changed several of the above mentioned characteristics:

A “revenue oriented expenditure policy“ in social pension insurance was established by declaring the development of the contribution rate to be the dominating objective and not a certain pension level. The benefit level becomes the dependent variable.

Employees now have a right of earnings conversion. Collective agreements are favoured. Instead of financing by the employer, financing by employees will be dominating.

deductions already in 1997 (and not in 2001) and to do this not during a period of ten but of only five years. See for details Schmähl (1999b).

Subsidised private saving becomes an explicit substitute to social pensions.¹⁴ This is realised by a direct link of contribution rates for private pensions to the formula for adjusting social insurance pensions aiming at a reduction of the level of public pensions.

Capital funding shall substitute PAYGO financing partially.

A major instrument to reduce the benefit level in social pension insurance was a reformulation of the pension (adjustment) formula. Beside this, changes in disability pensions and widow(er)s' pensions were decided.¹⁵

4.2.1 Changing the pension adjustment formula to reduce the benefit level in general

Changing the formula for adjusting pensions affects all pensioners, those who claimed a pension in the past as well as those who will claim it for the first time. It affects insurance pensions (retirement and disability) as well as survivors' pensions (for widow(er)s and orphans' pensions).¹⁶ The basic structure of the social insurance pension formula is as follows:

The calculation of the individual (insurance) pension (P^i) is based on two elements:

(a) the sum of individual *Earnings Points* (EP^i) the insured person accumulates during his/her whole life. In case of covered employment the Earnings Point in one year is the ratio of individual gross wages (W^i) to average gross wages of all employees (W^a): W^i/W^a . If $W^i = W^a$ then EP in this year is one. There is also a crediting of Earnings Points for activities like child caring, caring for frail elderly, in case of unemployment¹⁷ and for non-contributory periods like schooling. At time of retirement the sum of Earnings Points of the whole insurance period are accumulated and multiplied by the second factor,

(b) the *actual pension value* (VEP) which gives the amount in DM (now in Euro) per month for one EP .¹⁸

$$P_t^i = \left(\sum_{s=1}^n EP_s^i \right) \cdot VEP_t \quad (1)$$

n = number of years of insurance

If the pension is claimed before the reference retirement age for the full pension, a deduction from the full pension becomes effective (3.6 per cent per year).

¹⁴ Although the government officially always labels it as supplementary or additional.

¹⁵ A detailed analysis is given in Schmähl (2001a, 2003a).

¹⁶ The last-mentioned two types of pensions are based on the insurance pensions of the late insured person.

¹⁷ Here other institutions are paying the contribution.

¹⁸ In German this is called „aktueller Rentenwert“ (abbreviated *ARW*). I use here *VEP* as „value of one Earnings Point“.

The growth rate of *VEP* is the rate for adjusting those pensions which were calculated in former years. Therefore, all pensioners with the same sum of *EP* have an identical pension benefit irrespective of the year of retirement.

For a so-called “standard pension“ with $EP = 45$, the target value of the pension according to the rules implemented in 1992 is 0.7 multiplied by average net earnings. A lower (higher) number of *EP* gives proportional lower (higher) pension benefit.¹⁹ The 1992 reform linked the growth rate of *VEP* (pension adjustment rate) to the growth rate of average *net* earnings.²⁰ Therefore – as already mentioned – the ratio of (individual) pension to net average earnings remains constant over time for all pensioners.

$$VEP_t = VEP_{t-1} \cdot \frac{W_{t-1}^{an}}{W_{t-2}^{an}} \quad (2)$$

W^{an} = average net wage

The new government abolished in 2001 the link of *VEP* to net average earnings. The main reason were the effects of a change in the strategy of tax policy on the financing of social pension insurance by reducing income tax and shifting the tax burden more towards more indirect taxes (VAT and ecological tax): The growth rate of net earnings compared to gross earnings increases. Because of the net adjustment formula this increases also the pension adjustment rate, pension expenditure and the need for additional revenue.

The new pension adjustment formula is now no longer based on the development of average *net* earnings but only on average *gross* earnings (like in the 1957 pension reform in principle) and the contribution rate of only social pension insurance.²¹ In addition government decided to introduce beside these two elements another factor, a fictitious contribution rate for saving in private pensions.

¹⁹ It has to be mentioned, that this pension level is not the replacement rate, because the pension is based on the average of relative earnings over the whole earnings span and not linked to last earnings. Only in case of an identity of last earnings of the employee and his/her average relative earnings position over the insurance period, this also gives an information about the replacement rate.

²⁰ This, however, is a simplified version. Since pensioners pay themselves contributions to health and long-term care insurance the effect of these contribution payments had to be eliminated in the pension adjustment formula. For a detailed discussion of the net adjustment formula see Schmähl (2001b).

²¹ These two elements of the pension formula had already been proposed by the author for about 20 years. The main idea of this proposal was, that the pension formula should only take into account such factors, which are direct elements of the social insurance pension scheme, gross earnings and the contribution rate to social pension insurance. If pensions become more costly (for example because of demographic ageing) this will not only burden employees (and employers) by a higher contribution rate but pensioners as well by a reduction in the pension adjustment rate. In 1999, this formula was introduced again into the public debate by the Social Advisory Council of the German government on pension policy. The author was chairing the Social Advisory Council (from 1986-2000). The government finally adopted this proposal, but added an additional element. For a detailed analysis of the net adjustment formula and the changes decided as well as the “history” of the new formula see Schmähl (1999a).

$$VEP_t = VEP_{t-1} \cdot \frac{W_{t-1}^a}{W_{t-2}^a} \cdot \frac{1 - c_{t-1}^{pub} - c_{t-1}^{priv}}{1 - c_{t-2}^{pub} - c_{t-2}^{priv}} \quad (3)$$

c = contribution rate

pub = public pension scheme

$priv$ = private pensions

The transparency of the formula in its original version became diluted by this additional element (c^{priv}) and will be open to manipulation. One reason is that the additional factor is independent of the empirical saving rate of contributors for private pensions. The factor is determined by the government as a certain percentage. This percentage can be changed, independent of the saving for private pensions of the employees. An increase in the percentage will reduce the pension adjustment rate.

It is important to realise that there is now a direct link between the “determined” contribution rate for private pensions (as announced by the government) and the benefit level of public pensions. The new factor is introduced stepwise starting in 2002 and shall be four percentage points in 2008. In the period of increasing this factor, the development of VEP – and by this the adjustment rate for public pensions – will be reduced in eight steps of about 0.5 percentage points each. By this instrument the benefit level will be reduced for all present and future pensioners. This clearly underlines the character of the new (subsidised) private pensions as a *partial substitute* for public pensions. However, present pensioners as well as those employees near retirement age cannot compensate for the loss in public pensions by additional private saving for old age.²²

Without going into details one can say that by the new formula it was intended to reduce the “standard pension level” (pension based on 45 Earnings Points) from 70 per cent to 64 per cent compared to average net earnings.²³

²² A short remark seems interesting regarding the original version of the paradigm shift government had in mind. Proposals published in May 2000 show this more clearly. For future pensioners the PAYGO financed public pension should be reduced by half of the amount of the private pension which employees in principle could realise if they were saving four per cent of their earnings. The younger the employee is, the more time he/she has to save for old age. Therefore, the reduction of the public pension is the higher the younger the employee is. That means that the contributors receive different pensions in case of an identical sum of Earnings Points depending on the age of the pensioner. The reduction of the public pension takes place irrespective of the fact whether and how much the employee was saving in addition for a private pension. This approach would have changed the social pension insurance into a system of partial income testing based on the assumed possible amount of a private pension. The factor burdening future cohorts was eliminated during the reform debate and substituted by the above mentioned additional factor (fictitious contribution rate for private pensions) integrated into the pension formula now affecting all pensioners.

²³ Officially government redefined net earnings by considering the voluntary private contribution like a mandatory levy which reduces net earnings. Government finally decided that the standard pension shall not fall below this percentage. This was a compromise especially with trade unions. Originally government planned to reduce the pension level much more, as already mentioned.

Such a reduction of the public pension level will result in a conflict with the design of the pension scheme and its underlying concept: On one hand there shall be a close contribution-benefit link in social pension insurance. The new government also underlines this. But on the other hand, the general reduction of the pension level may have the effect that even after long periods of paying contributions the individual pension benefit is no higher than a full (means-tested) social assistance benefit. This may undermine the willingness to contribute and the acceptance of this mandatory scheme that is based on earnings-related contributions.

This possible development will be illustrated by some figures. The public debate was focused on the “standard pension” only (respectively on the net standard pension level). Regarding the reduction in the standard pension level one has to take into account that

- (1) the standard pension is always based on 45 Earnings Points, independent of any changes in pension law which may affect the individual number of Earnings Points a contributor is able to accumulate;
- (2) about 50 per cent of all male pensioners and even about 95 per cent of female pensioners have less than 45 Earnings Points (i.e. a pension below the standard pension). The distribution of pension benefits therefore matters a lot.

A further aspect relevant in judging the meaning of figures for pension levels is the following: The full pension without deduction will only be paid when claiming the pension at reference retirement age, i.e. (in the near future) age 65. Starting in 2012, the earliest retirement age will be 62, equal for men and women. Early retirement reduces the pension by 3.6 per cent per year. Retiring at age 62 therefore reduces the pension benefit by 10.8 per cent. Disability pensions as well are calculated as if the pension is claimed three years before the reference retirement age.

An additional information is relevant: A full social assistance benefit is about 40 per cent of net average earnings today. If we assume that the relative amount of the social assistance level will remain constant also in the future, we can calculate for example how many Earnings Points are necessary to receive a pension just as high as social assistance (a) in case the standard pension level is 70 per cent of average net earnings or (b) 64 per cent.

It is obvious that if the pension level is reduced, a higher number of Earnings Points is needed to receive a pension just as high as social assistance:

- (a) If the standard pension level is 70 per cent, a pensioner needs about 26 Earnings Points if he retires at age 65.
- (b) In case of a standard pension level of 64 per cent about 28 Earnings Points are necessary. If retirement is at age 62, nearly 32 Earnings Points are needed.

One should bear in mind that a certain number of Earnings Points can be the result of quite different combinations of numbers of years of insurance and the relative level of earnings a contributor gained on average during his working life (i.e. the Earnings Point). For example, if the standard pension level is 64 per cent, an employee with an earnings position of 70 per cent on average over the lifetime (i.e. 30 per cent below the average earner) needs already

40 years of insurance for a pension as high as social assistance – if retirement is at age 65. An earnings position of 70 per cent is most often realised by women.

Not to be misunderstood: Even if the social insurance pension is below social assistance this does not necessarily mean that the pensioner is eligible for social assistance, because this depends on the total income of the pensioner and his spouse. But the result of such a development in public pension benefits might be a conflict with realising a strong contribution-benefit link of the public pension scheme. Such a close link will reduce negative effects on labour supply, reduces the “tax wedge”²⁴, reduces attempts to avoid the contribution payment and gives public support to such a pension scheme. If, however, less and less pensioners receive a pension that is clearly higher than social assistance, this will erode the base for supporting such a mandatory scheme and will undermine its legitimacy and the willingness to contribute to such a scheme.

Beside the general reduction of social insurance pensions in case of old age as well as of disability, there were additional measures to reduce benefits regarding *disability pensions*²⁵ and *widows'/widowers' pension* as well as the pension claims of (especially) long-term unemployed persons. These measures are affecting certain groups of the population in addition to the general reduction of the benefit level realised by the new pension formula. Up to now there is no differentiated analysis available showing the distributional effects of all these measures (also in a life cycle context). But all measures are aiming at the same goal, reducing public pension expenditure and by this also the contribution rate (and in particular employer's contributions) necessary to balance the budget as well as the payments from the federal budget (federal grant) compared to a development without these measures.

4.2.2 Effects of the “2001 reform” on the development of contribution rates

The new rules in the social insurance pension scheme have, however, only a modest effect on the development of the contribution rate in social insurance up to the year 2030. The political objective is that the contribution rate shall not exceed 20 per cent in 2020 and 22 per cent in 2030. According to official projections, the necessary contribution rate in 2010 or 2020 would be, however, only one percentage point and in 2030 1.6 percentage points higher according to the “old” rules and the higher benefit level.

Overview 1

Contribution rates for old-age pensions with and without the “2001 pension reform”			
	contribution rates social pension insurance (in per cent)	expected additional contribution rate for private pension	“total contribution rate” (in per cent)
24	Compared to direct levies without benefits based on the idea of reciprocity (some equivalence); see Schmähl (1998c).		
25	For details see Achenbach et al. (2002) and Viehmann (2003).		

year	without Pension Reform Act 2001	with Pension Reform Act 2001			share of	
					employer	employee
2001	19.1	19.1	–	19.1	9.55	9.55
2002	19.2	19.1	1	20.1	9.55	10.55
2003	19.1	18.8	1	19.8	9.40	10.40
2004	19.2	18.9	2	20.9	9.45	11.45
2005	19.1	18.7	2	20.7	9.35	11.35
2010	19.5	18.5	4	22.5	9.25	13.25
2020	20.6	19.6	4	23.6	9.80	13.80
2030	23.6	22.0	4	26.0	11.00	15.00

Source: Bundestags-Drucksache 14/5146.

Regarding the payment of contributions by employers compared to those of employees there will be a shift from equal divide because employees do not only have to pay the employee's part of the contribution to social pension insurance²⁶ but in addition the full contribution rate for *private* pensions. The government expects this contribution rate to be paid by employees if they want to fill the gap in the benefit level that results from the reduction in public pensions. Even at the beginning, the sum of the two contribution rates is higher compared to the "old law". For example, in 2010 and 2030 the contribution rate in old-age insurance will be three percentage points above the rate compared to the former conditions (i.e. without these reform measures).²⁷ While a contribution rate of about 24 per cent was declared by the government to be too high (and being an indicator for a "demographic crisis"), a total of 26 (!) per cent now became politically acceptable.

But even the reduction of employer's contribution²⁸ is only very moderate: eleven per cent instead of twelve per cent in 2030. That means that the effect on non-wage labour costs is marginal. Although the burden for employees will be reduced by subsidies if there is saving for private pensions in certain forms, the partial substitution of public by private pensions will impose an *additional burden* on private households for a long time. This is part of the well-known *transition costs* when shifting from PAYGO to capital funding.

²⁶ That is half of the contribution rate.

²⁷ Taking into account the subsidies or tax incentives in case of saving in specific types for old age the direct burden is lowered especially for low-income households compared to the rates mentioned. But these subsidies have to be financed, too, and can burden (above all if financed by indirect taxation) also these households. This will be discussed below.

²⁸ The question of shifting employer's contributions backwards to employees or forward into prices is not discussed here as well as the question whether trade unions will try to compensate increases in the private pension contributions in the process of wage negotiations.

In general, there are no very convincing *economic* arguments in favour of the reform measures, if looking at the officially mentioned objectives, for example the effects of contribution rates. It was mainly a political reaction to expectations created in the public debate by several actors. Therefore, it seems to be above all a *political* project. But the reform will have several economic effects, for example on personal income distribution. This will be discussed after having outlined the most recent further proposals.

5. The “2001 reform strategy” will be continued

Only 2 years after the decision on the “most important reform of the century” – as it was labelled by supporters – the government established a new ad hoc commission to work out proposals for a “sustainable development” in social security. Because economic conditions, in particular on the labour market, did not develop as expected, the contribution target (20 per cent in 2020) runs the risk of not being reached. This as well as short-term financial problems – the possibility of a higher contribution rate in pension insurance which would also increase the federal grant (a problem for the minister of finance, who even could not fulfil the requirements of the Maastricht criteria) – again stimulated a reform discussion. In particular, the Green Party favoured a new commission which should deal with demographic consequences for social security. However, there had been an intensified research on this topic since many years, e.g. by an Enquête-Commission of the Federal German Parliament (Bundestag), which published a final report²⁹ in spring 2002 after 10 years of work – work that was obviously little recognised by those politicians who now made political pressure to take up the topic again in the new commission.

Now, the proposals of the commission have been published, including several measures to reduce expenditure and to distribute additional financial burden between present and future contributors and pensioners. One of the measures is to increase the retirement age for receiving the full pension (from age 65 to 67) as well as the earliest age of retirement by two years (from age 62 to 64) gradually over a period of more than 20 years (one month extra per calendar year). By this measure it shall be reacted to increasing life expectancy.³⁰

In addition, another new factor is included into the pension (adjustment) formula. This factor shall reflect changes in the ratio of pensioners to contributors (pensioner ratio, *PR*). Such changes can result from demographic as well as labour market development but also from political decisions, e.g. by a change in coverage in social pension insurance.

Before looking at the new formula and the results of the proposed measures, it has to be underlined that demographic changes as well as labour market development now enter the calculation of pensions by three channels:

²⁹ Enquête-Kommission (2002). Prior to the final report, two interim reports were already published.

³⁰ For a general discussion on life expectancy and retirement ages as well as a concrete proposal see Schmähl and Viebrok (2000).

- (a) the contribution rate
- (b) the increase in retirement ages
- (c) the new factor (called “sustainability factor”) to be implemented into the pension formula

This additional factor reads as follows

$$\left(1 - \frac{PR_{t-1}}{PR_{t-2}}\right) \cdot a + 1 \quad (4)$$

PR = Pensioner Ratio³¹

a is a factor to be chosen in such a way that the contribution target (for example, 20 per cent in 2020 and 22 per cent in 2030) is reached.

This clearly underlines the fact that the contribution target, and not a benefit level, is decisive and that the “sustainability factor” as such is formulated in this way only to give people a feeling of a justification as regards content. The factor could in principle also be formulated by every other variable (such as the number of storks), because the numerical value of a shall realise the contribution target³² in the calculation for the financial development of the pension scheme.

The effects of the measures proposed by the government’s commission on the pension level exceed by far the decreasing effect of the 2001 reform: If these measures are implemented, in 2030 the standard pensioner (45 Earnings Points) retiring at age 65 would no more have a pension of 64 per cent of average net earnings, but only a pension of 54 per cent.

This means, for example, that an average earner needs 34 years of insurance to receive a pension just as high as means-tested social assistance (respectively the amount of the new means-tested basic benefit).

The effect becomes more obvious, when we assume that a pension of the present benefit level (70 per cent for the standard pensioner) of about €1.200 would be calculated according to the proposed rules. Then this pension benefit of the standard pensioner (45 Earnings Points) would only be €925.

But one has to take into consideration as well that there are additional proposals to burden pensioners higher in health care as well as in long-term care and that a change in taxation of pension benefits will take place. Then a (net) pension benefit of €800 instead of €1.200 seems to be a realistic assumption, i.e. a reduction of the (net) benefit level of about one third.

This illustrates even more the fact that in the future a high percentage of pensioners, after long periods of contributing to the scheme, could expect to receive only a pension that is little

³¹ Already in the 1980s several ways to include e.g. demographic and labour market development into the pension formula were discussed, among other things the introduction of the pensioner ratio; see Schmähl (1985).

³² Meanwhile, another commission established by the Christian opposition parties (CDU/CSU) proposed an identical factor.

different to (or even lower than) means-tested social assistance (which can be claimed without any prior provision). Whether pensioners will become claimants of social assistance, depends on their total income (as well as on the income of the household in which they live). But there will be no further acceptance of a mandatory pension scheme that claims to link contribution payments to benefit level. It will be a creeping strategy to replace an earnings-related pension scheme by a scheme providing only minimum benefits, financed in fact by tax revenue and being highly interpersonal redistributive. This would be a development bringing Germany's public pension benefit back to its origins, where it started in the late 19th century: a pension mainly to avoid poverty in old age. It sounds strange that this should be a strategy to "modernise" the German pension scheme.

6. Some first lessons, implications and effects of the "2001 pension reform" and the strategy behind this reform approach

Decisions and instruments used in the context of the recent German pension policy are aiming at a *partial* shift from

- (mandatory) public to (voluntary) private pension provision,
- in the social pension scheme from expenditure-oriented revenue policy to revenue-oriented expenditure policy,
- defined benefit to defined contribution schemes in general and in particular the occupational pension arrangements,
- PAYGO financing to capital funding.

This is realised by reducing the benefit level in public schemes (social insurance and civil servants) and improving possibilities for private saving for old age on individual private accounts and via the firm. The state strengthens its role as regulator in private arrangements and channels some additional tax money (transfers or tax expenditure) into the private market to stimulate saving for old age.

Although private pensions as a substitute for public pensions are voluntary at present, the topic of *mandating* private (or occupational) pensions will be on the political agenda at least in case of a low participation rate of employees in the new possibilities for saving (in certified pension products or in using the possibilities via collective agreements) and/or in case the benefit level in public pensions will be reduced even more than as a consequence of the 2001 reform. At present, such a further decreasing benefit level can be expected. Mandating may be based on industry-wide collective agreements (quasi-mandating like in the Netherlands) or mandating by law (like in Switzerland). A combination of low mandatory public PAYGO

financed pensions and *mandatory* private funded elements already exists in many countries.³³

A further pressure towards reducing public PAYGO pensions can be expected from the European level. One influencing factor are the Maastricht stability criteria and the demand for reducing public debt as well as to balance the public budgets. Arguments for this are the sustainability of fiscal policy in general and of pension policy in particular as well as the goal of intergenerational equity. The main instrument to realise this is seen in reducing PAYGO financing.

Another influencing factor coming from the European level and also linked to the above mentioned aspects may result from the ongoing process of implementing an “open method of co-ordination” in pension policy for EU member states by deciding on common goals in pension policy and on a set of indicators being the base for benchmarking pension policy of the member states. This benchmarking will depend on the decision which indicators will be chosen as relevant. Taking into account the important role of the ministers of finance in the EU, it may happen that for example indicators like the percentage of public pension of GDP will become decisive in the process of evaluating different pension arrangements in the member countries. It is obvious that the ministers of finance are particularly looking at the “burden” for public households, not as much at the “burden” for private households if there is a shift from public budgets to private households and by this from PAYGO to capital funding in private forms. The decision on the set of indicators will be decisive on how the pension arrangements in the member countries will be evaluated. This process has not been finished yet, but it may become a highly important factor in the national pension debate and may influence the mix of pension schemes on the national level.³⁴

While Germany today still is a country with an *earnings-related* public pension scheme as 1st tier (by income smoothing over the life cycle and therefore aiming at much more than only at avoiding poverty in old age) and with *voluntary* funded pensions (for example as a 2nd tier of supplementary occupational pensions), it may be not unrealistic to assume that a shift towards primarily avoiding poverty in the 1st tier and towards mandating in the 2nd tier may take place – a pattern to be seen in some other countries like the Netherlands or Switzerland. The development in these countries often is mentioned in Germany as attractive models for pension policy especially by those actors aiming at an extended capital funded part of pensions.³⁵

³³ For examples see Schmähl (1991). Meanwhile also some former socialist countries established such a combination of mandatory schemes or are in the process of realising it. This is in line with a strategy the World Bank is proposing world-wide (World Bank, 1994), meanwhile with some modifications depending on country-specific circumstances.

³⁴ For more aspects concerning this process see Schmähl (2002).

³⁵ For example the basic tier (AHV) in Switzerland often is mentioned because it covers the whole population and is highly redistributive because of earnings-related financing but only little difference between lowest and highest pension (100 per cent). It is neglected that the aim of avoiding poverty is realized much less by the AHV compared to the earnings-related social

If a development takes place as mentioned just as a possibility, then the development process in Germany would be quite the opposite direction as in many other countries where a low and insufficient 1st tier is supplemented by a mandatory 2nd tier. Germany would then reduce its 1st tier, which will become insufficient. To realise a sufficient replacement level in old age a mandatory 2nd tier would be added.

Regarding *occupational pension* arrangements they already have become an important element in *collective bargaining* after the 2001 reform.³⁶ For a long time trade unions hardly were interested in occupational pensions. Now they have discovered this as a new field for activity in a period of diminishing influence of trade unions. This new interest of trade unions in collectively agreed occupational pension arrangements may be also based on expectations regarding the influence on investment decisions of new industry-wide pension funds.

It can be expected that financing of occupational pensions in the future will mainly be by employees instead of employers as it was the case to a high percentage in the past. Only if labour market conditions improve considerably, occupational pension schemes as an instrument of personnel policy may become interesting for employees again. The trend towards defined contribution schemes will shift risks from employers to employees.

The new strategy in pension policy in Germany will have a lot of important effects regarding social policy and income distribution. Whether the shift towards funded private pensions of the defined contribution type will result in adequate pensions in old age, remains an open question and is depending on many influencing factors. For the effects on personal income distribution it is relevant among other things who is able to save and to take up subsidies and what investment decisions will be made. Those who can afford to save can profit from fiscal incentives. The possibility to use even different types of incentives combined requires, however, that income is high enough to make use of existing possibilities such as subsidised private pension and in addition contribution- and tax-free earnings conversion.

There are many effects regarding the distribution of income by the new German strategy in pension policy for different cohorts, for men and women, families with children and single households, as well as by income.³⁷ In principle, younger cohorts gain by the measures already implemented. However, the effect is very small, at maximum an increase in the rate of return by the 2001 reform of less than 0.2 percentage points, for example, for those born in 2010 and retiring (at age 65) in 2075.

Persons with high income gain by tax subsidies for private pensions because of the progressive income tax schedule. Subsidising private pensions favours persons with higher income. From a socio-political point of view, one could argue that if private pensions are subsidised, this should be focused on those in the low and middle income brackets. This

insurance pension in Germany. And it is often neglected, too, that occupational pensions are mandatory.

³⁶ This is discussed in Steinmeyer (2002).

³⁷ For a detailed discussion see Schmähl (2003b), Himmelreicher and Viebrok (2003).

becomes especially important when taking into consideration that persons with low income may not have enough money to save in these subsidised types of saving. There is even a remarkable percentage of German households (at present about nine per cent) that cannot even meet their financial liabilities (their obligations to pay back the accumulated debt although they already reduced their living conditions). If they have some money left, it will be preferable for them to reduce the debt instead of saving in subsidised forms for old age.

It is neglected in the present public discussion that these fiscal incentives have to be financed, too. If tax expenditure for incentives to save are financed mainly by indirect taxes (like VAT or tax on petrol etc.), all households, including households with low incomes, have to finance the incentives while not all households are able to profit from the subsidies. And also households with many children are burdened relatively high by indirect taxation.

Concerning the development of saving it is an open question whether and how much additional saving can be expected. Based on the experience of former attempts to stimulate saving³⁸ there are severe doubts that the new financial incentives will increase total saving. It can be expected that there will be a high percentage of substitution within different types of saving from non-subsidised to subsidised types or towards higher subsidies.³⁹

It can be expected that the distribution of income in old age becomes more diversified, income inequality in old age will increase. This can be the effect of different participation in private pension funds as well as in different amounts of saving, but also in different net rates of return.

The strategy towards substituting public pensions by private pensions has to be seen together with a tendency towards more interruptions in the working career, both resulting in a greater inequality of income in old age in the future. This will be more obvious if private pensions are voluntary (even in case of tax incentives), but will also take place in case of collective agreements (especially if there is no obligation for the employee to save for old age) and even in case of mandating private pensions by law: While today in Germany in case of illness, unemployment, caring for children or frail elderly the responsible institution pays a contribution to pension insurance for financing a pension claim, it is questionable whether this will also be done in case of private old-age security, because this would be against the political will to reduce contribution rates in social insurance. This tendency towards more income inequality in old age may be evaluated differently based on different value judgements, but should be recognised. In which way a society will react to this, will depend also on experiences and expectations developed over time.

In Germany, up to now there is no full recognition of the fact that the level of pension benefits (whether from public and/or from private and occupational schemes), which is looked upon as being necessary or adequate, depends also on the development in other sectors of social security, namely in health care and long-term care. In both sectors there are proposals to burden the elderly to a relatively greater extent compared to younger persons. This can be

³⁸ See Börsch-Supan and Essig (2002: 93).

³⁹ Bundesbank (2002) offers some reflections on this topic.

done by quite different instruments. In general, this will increase the (monetary) income necessary to finance one's living in old age.

And the general public also does not realise that a shift from PAYGO financing to private pension will increase for a long time the costs which private households have to bear in addition to the increasing costs for pension schemes in the process of demographic ageing, for example.

According to the present "Zeitgeist" and the remarkable influence of some actors on public pension policy, expectations were created that the increase of financial capital would be the decisive factor for coping with the challenges of an ageing population for social security, namely pensions, but health care and long-term care, as well. But for future economic development the question has to be put what will be the decisive factor for future economic development which is of central importance for achieving acceptance of increasing costs in social security (whether public or privately managed). Income growth can make it possible that although costs in social security are increasing, net (disposable) income increases as well. In a country like Germany, the most important factor for economic development may be human capital. If this is a realistic assumption, subsidising investment should be focused more on investment in human capital (including further training of the growing number of older workers) instead of subsidising financial capital. This will be an important precondition to realise a high growth rate of productivity.⁴⁰ This reallocation of spending from public budgets at present is not yet a topic in Germany, where politicians reacted with the recent pension reform to the demand of several actors from the financing industry as well as from many economists.

Germany's pension policy – as it emerges from the present decisions and from proposals for the near future – is not at a crossroad anymore, but has taken a step into a direction that may change Germany's pension arrangements fundamentally. The long-term costs seem not to be adequately realised in the public debate. During the last century, Germany introduced two important elements of pension policy – social insurance at the end of the 19th century and the dynamic earnings-related pension in the middle of the 20th century. In my view, it is doubtful whether the dismantling of the earnings-related pension scheme will prove to be a step into the right direction, if social security in old age as well as effects on income distribution and on incentives to contribute to pension schemes are seen as decisive factors for evaluating the new strategy in German pension policy.

⁴⁰ „... a country's economic growth is closely tied to the human capital of its population. Countries that invest heavily in educating their citizens are also those that tend to experience high economic growth following such investments.” Becker et al. (2003).

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