Report of the German Social Advisory Council on the Federal Government's 2004 Pension Insurance Report

Contents

I. Introduction

1: In accordance with its statutory duty (section 155, Social Code, Part VI), the German Social Advisory Council (GSAC) comments on the Federal Government's 2004 Pension Insurance Report. This statement addresses firstly those parts of the report that refer to future development, i.e. projections over the medium-term and the model calculations for the next 15-year period. In addition, elements of family policy and the development of the rate of return in the statutory pension insurance as well as the law on the reorganisation of the statutory pension insurance (*Gesetz zur Organisationsreform der Gesetzlichen Rentenversicherung*) are addressed.

2: The GSAC makes its comments based on its access to the calculation results and to information on underlying assumptions as well as to the text of the 2004 draft report on the pension insurance scheme. The GSAC was also able to approach the Federal Ministry of Health and Social Security for additional information and explanation where necessary.

3: Despite a comparatively strong increase — albeit export-driven — in economic activity, income from contributions to the pension insurance was low with the result that the financial position of the pension insurance scheme remained tight. Here one should note that the growth in contribution income was considerably below that of the nominal gross domestic product, for which the German Council of Economic Experts forecast up to 1.8% growth in this year. The weakening of the contribution basis linked with this development is due to the fact that fewer people in the labour force were insured and the associated increase in wages subject to social insurance contributions was below average.

4: In both 2003 and 2004 the total number of people in the labour force liable for social insurance contributions declined. The percentage of compulsory members of the Statutory Pension Insurance Scheme out of the entire workforce fell from 83 percent at the beginning of the 1990s to 79 percent in 2002. More and more workers chose to become self-employed or opted for a "mini-job", the latter means that social insurance contributions are reduced. Moreover, the structure of those compulsorily insured has changed. The number of insured receiving unemployment benefit and unemployment assistance has increased from 3.18 million 2000 to 4.05 million in 2003, the number of compulsorily insured has risen accordingly.

5: In comparison to the nominal gross domestic product, wages subject to social insurance contribution showed only a below average increase in the assessment basis. This is due to the continuing difficult economic situation, which had the effect of dampening down wage development.

6: The unfavourable financial situation led to legislative measures being taken at the end of last year. Of particular note here were the decision that pensioners pay full contributions to the Social Long-Term Care Insurance instead of the half contribution that was levied up to March 2004; the lowering of the target value of the fluctuation reserve within the remit of setting the contribution rate; and the omission of the pension adjustment in this year, although it had a weaker than expected effect.[1] It was due to the continuing difficult financial situation within the pension insurance system that these consolidation measures were necessary. An added indication was the fact that this year the previous contribution rate of 19.5 per cent could be

[1] See report of the GSAC on the 2003 pension insurance report, BT-Drucksache 15/2144

sustained. The GSAC will comment further on this point in its analysis of the medium-term financial development.

7: The German Bundestag finally passed the "Act to Secure the Sustainable Financial Basis of the Statutory Pension Insurance (Pension Insurance Sustainability Act)" (*Gesetz zur Sicherung der nachhaltigen Finanzierungsgrundlagen der Gesetzlichen Rentenversicherung (RV-Nachhaltigkeitsgesetz)*)[2] on June 11, 2004. In connection with this, other measures to supplement and enhance further development of the 2001 pension reform were passed, of which the following must be discussed: in the Pension Insurance Sustainability Act the decision to supplement the current pension adjustment formula by a sustainability factor is particularly relevant. This modified adjustment formula will be put into effect for the first time the following year. Given this, the GSAC regards it as pertinent to attempt to estimate the long-term intergenerational distribution effects of the sustainability factor.

8: The 2004 Pension Insurance Report describes – as every year – the current and future financial position of the Statutory Pension Insurance Scheme. It includes an outline of predicted financial trends for the next five calendar years (including the present year) on the basis of the Federal Government's current assessment of medium-term economic trends as well as on long-term model calculations. The latter comprise the financial development to the year 2018 using nine model calculations generated through taking three assumptions regarding wage trends combined with three employment scenarios. Thereby the corresponding required contribution rates and also the income and expenditures following the middle wage variant are given.

---

[2] Gesetz zur Sicherung der nachhaltigen Finanzierungsgrundlagen der Gesetzlichen Rentenversicherung (RV-Nachhaltigkeitsgesetz), BGBl. I S. 1791

9: These projections are made on the basis of the relevant law. They also take into account measures that have a financial bearing on the Pension Insurance Scheme which are still in the legislative process. This applies to the measures stated in the law on the reorganisation of the Statutory Pension Insurance that have a financial bearing.

10: The sale of shares in the housing society GAGFAH[3] had both a bearing on liquidity and on the financial position of the pension insurance. This share was a non-liquid part of the fluctuation reserve held by the Federal Insurance Fund for Salaried Employees (*BfA*). The liquidity of the pension insurance has considerably improved with the sale of the GAGFAH. The liquid means of the statutory pension insurance has almost doubled as it can now make use of the full fluctuation reserve in the short term. The increased liquidity after the sale meant that it could avoid either prematurely drawing some instalments from the federal subsidy or claiming other kinds of liquidity subsidies.

11: Following the financial integration of the German Statutory Pension Scheme for both former East and West Germany, the results are described jointly for the pension insurance scheme in both parts of the Federal Republic of Germany. However, the medium-term calculations regarding income and expenditure for east and west federal states are described separately as in the previous year's report.

II. Statement on the medium-range projections until 2008

12: Assumptions made by the inter-ministerial "National Economic Projections" team from October, 25, 2004 for 2004 and 2005 as well as those made by participating federal ministries on October 19, 2004 for the

[3] GAGFAH stands for "Gemeinnützige Aktien-Gesellschaft für Angestellten-Heimstätten" which is a non-profit making public limited company for employees' homesteads.

years 2006 to 2008 form the basis of these projections.

13: As in the previous years, the GSAC emphasises that the basic economic assumptions for the pension insurance report are over optimistic. In particular, the expectations regarding economic growth are extremely ambitious. While the German Council of Economic Experts has projected an economic growth rate of 1.4 percent and the majority of the Economic Research Institutes in their joint annual report projected a growth rate of 1.5 percent, the 2004 pension insurance report takes as its basis a growth rate of 1.7 percent for the following year.

14: Moreover, the assumed 1.6 percent growth rate in the gross wage and salary sum as defined in the national accountings (*VGR*) made by the federal government is higher than the 1.3 percent estimated by the economic research institutes. As regards the wage development allowed for in the pension insurance report, the expected change in the gross wage and salary sum is reduced by 0.4 percent. This is because income liable for insurance contributions has increased at a lesser rate than the gross wage- and salary sum in the previous years.

15: The pension insurance report's assumed 0.8 percent increase for 2005 and 2.0 percent for 2006 to 2008 in wages and salaries liable for contributions seem optimistic. This is particularly true when set against the fact that economic growth without adjusting the calculation for the number of actual working days in 2005 is likely to be lower than in 2004, and given the continuing difficult macroeconomic situation in coming years. The problems arising from this can be estimated if one assumes a €160m decline in contribution income if there is a 0.1 percentage point decrease in the assumed wage sum liable to contribution.

16: Against the background of the collective labour agreements concluded this year, which focused on the long-term aim of preserving jobs by means of minimal wage increases or wage sacrifices, the GSAC regards the assumptions about the development of the gross wage and salary sum as very ambitious. Concerns in reference to this grew when taking into account the fact that difference between actual and collective wages has been shrinking for some time. Given this background, the GSAC intends to take lower wage growth rates for the years until 2008 as basic assumptions.

17: Moreover, the introduction of the so-called unemployment benefit II which was agreed on in the context of the Hartz-IV legislation will have an impact on the contribution income in the statutory pension scheme. The statutory pension insurance scheme receives a lump sum of €78 for every recipient of unemployment benefit II. The overall effect on the contribution income of the statutory pension remains difficult to estimate. On the one hand, the statutory pension system receives additional contributions for each recipient of unemployment benefit II who was previously classed as a recipient of welfare benefits (*Sozialhilfe).* In addition it receives for each recipient of unemployment assistance whose assistance was below €400 a higher contribution than before because of the change to a flat rate contribution. But on the other hand, contributions paid by former recipients of unemployment assistance have been reduced to a lump-sum contribution or in case of those insured who are ineligible for unemployment benefit II, are no longer made**.**

18: According to the assumptions made in the 2004 pension insurance report, the introduction of unemployment benefit II will lead to a slightly higher additional contribution income in the statutory pension system amounting to €300m per annum. This is composed of two different cash flows. In June 2004 for the 2.2 million recipients of unemployment assistance an average contribution to the Statutory Pension Scheme of €100 per month was paid which correlates to an annual total contribution equal to €2.7 million. These contributions cease to apply from January 1st, 2005. Due to the introduction of unemployment benefit II, a contribution of €78 per month for approximately 3.2 million claimants has been paid out (for the first time). This leads to contribution income of €3bn and therefore to additional contributions of €300 millions per annum.

19: A change in the contribution rates to health insurance has an effect on the health insurance contribution paid by the pension insurance funds that corresponds to the employers' share. When the contribution rates fall, the pension insurance's contribution to the health insurance is reduced. A one-percentage point decrease in the contribution rate to health insurance produces a 0.1 percentage point reduction in the pension insurance contribution. A 0.1 percentage point decrease in the average contribution to health insurance leads to an approximate €100m per annum reduction in expenditure in the statutory pension system due to a decrease in subsidies.

20: In the following year the expenditure of the statutory pension system will be under less strain because of the anticipated contribution rate development in the statutory health insurance. Given the current financial situation of the health insurance it is not certain to what extent the contribution rate can be reduced. The pension insurance report assumed an average contribution rate to the health insurance of 13.7 percent for the states of former West Germany and 13.5 percent for the states of former East Germany when calculating the financial status of the statutory pension system in 2005. This assumption implies a reduction of the current contribution rate by 0.5 percentage points.

21: The introduction of a special contribution to the statutory health insurance on July 1, 2005 will have a declining effect on the contribution rate. The special contribution amounting to 0.9 percentage points has to be paid only by the insured and reduces the health insurance contribution by the same level. As the pension insurance and individual pensioners jointly finance health insurance contributions, the pension insurance scheme's outgoings paid to the pensioners' health insurance are reduced by 0.45 contribution rate points. At the same time the pensioners are burdened with the corresponding amount.

22: Given this, the GSAC points out that because of the increase in pensioners' total contribution to the statutory health insurance fund from July 1, 2005 and the concomitant non-adjustment of the actual pension value, the amount paid out to the individual pensioner is reduced.

23: Since April 1, 2004, pensioners are liable to pay the total contribution to the long-term care insurance themselves. This will result in a credit to the statutory pension system of €1.3bn in 2004 and €1.7bn in subsequent years.

24: In the medium term calculations it is assumed that in 2005 — as was the case in 2004 — no positive adjustment of the pensions will occur. This is due to the overcompensation of the positive effect of the relevant gross wages combined with the negative effects resulting from the modifications to the share paid into personal pension plans (*Altersvorsorgeanteil*) and the sustainability factor. The relevant law stipulates a "zero" rather than negative adjustment of the pension value.

25: On the basis of these assumptions and the current law as described above, the medium term prognosis in the pension insurance report gives a contribution rate of 19.5 percent, unchanged until 2008. The sustainability reserve fund (the former fluctuation reserve fund) declines in 2005 to the statutory minimum value of 0.2 of one month's expenditure and increases in subsequent years up to 2008 to 0.46 of one month's expenditure.

26: The stability of the contribution rate until 2008 results from the intended development of the fluctuation reserve fund which is regulated by the Pension Insurance Sustainability Act to a sustainability reserve fund with a maximum volume of 1.5 of one month's expenditure. Under the adjustment rule set out in section 158, subsection 1, Social Code, Part VI, the given contribution rate has to be maintained so that the sustainability reserve fund does not fall below the minimum value of 0.2 of one month's expenditure or exceed the maximum value of 1.5 one month's expenditure forecast for the end of the following year.

27: The 2004 pension insurance report shows a deficit of €1.8 bn with a simultaneous reduction of the sustainability reserve fund to 0.2 of one month's expenditure for the year 2005 even though the assumptions regarding the relevant areas were overall very optimistic. If this forecast is wrong, there are no financial reserves remaining to compensate for a reduction in income. Therefore the GSAC fears liquidity problems in 2005 and is afraid that as a consequence the contribution rate of 19.5 percent for 2006 cannot be maintained.

28: The GSAC fears that the much-needed and sustainable 2001 and 2003 pension reforms will be discredited because of discussions in previous years about the contribution level and liquidity of the statutory pension system. In particular, if in the next year part of the federal subsidy is claimed early, or in the worst case a federal guarantee (*Bundesgarantie*) has to be claimed, public trust in the statutory pension system would further decline.

29: Because of the reduction in the minimum limit of the sustainability reserve fund, liquidity within one year increasingly became the focal point of discussions about the short-term financial position. In the GSAC's opinion it would be desirable to present the development of the statutory pension system's liquidity during the year in the context of the medium term in future pension insurance reports.
30: The GSAC also notes the lack of statements on the effect the sustainability factor will have on the pension adjustment in this year's pension insurance report. In particular, it should be specified whether the reduction based on the sustainability factor is to be fully applied. Moreover, it would be more comprehensible if the assumed development of the number of "equivalent pensioners" and "equivalent contributors" were specified.
31: Here it must be noted that the financial situation of the Pension Insurance Scheme is in effect determined by trends in former East Germany. There, the yearly expenditure is set to exceed income by between 13.2 and 14.1 bn €in the years 2004 to 2008. Of fundamental significance to this outcome are developments in employment levels since 1990: while the number of those employed stood at 8.6 million in 1990, only 5.4 million people will be employed this year.
32: In regard to the development of current pension values in former East and West Germany, the report takes as its premise a greater, albeit incremental, convergence in the mid-term period until 2008. But because the current pension value is not adjusted for 2004 and 2005 this convergence process has halted. Nevertheless, the ratio of the current pension value in the states of former East Germany to that in the states of former West Germany will increase to 88.2 percent.

33: If, in time, a faster convergence of current pension values between East and West is called for, it would entail not only a disassociation from actual wage developments but also considerable additional expenditure possibly over an extended period of time. For both these reasons it would, in the opinion of the GSAC, be better to leave the present situation as it is.

34: One should note here a stipulation set out in the Pension Insurance Sustainability Act that requires the level of pension adjustment for former East Germany to continue to follow the separate wage development but not fall below the pension adjustment in former West Germany. This goes against a petition made by the GSAC for separate pension adjustments in West and East.

35: Against the background of the development in Germany as a whole, it must be taken into account that average pension payments for those with a reduced earning capacity and old-age pensions in the former East Germany are 105 per cent for men and as high as 137 per cent for women compared to the value in former West Germany. The determining factor for this imbalance is foremost an on-average longer insurance period for pensioners in former East Germany and for women an historically far higher labour force participation rate in the states of former East Germany.

36: According to analysis by ‘The Federation of the German Pension Institutes’ (*Verband deutscher Rentenversicherungsträger*), up to December 31, 2003, the average insurance period in the states of former West Germany was 40.1 years for men and 26.2 years for women; in former East Germany by contrast it was 45.2 years for men and 36.1 years for women. Thus the average work history relevant to the pension insurance in former East Germany exceeds that in former West Germany by 5 years for men and 10 years for women.

37: However, when evaluating a particular income position one must allow for the fact that only limited conclusions about total income in old age can be drawn from the amount of the statutory pension paid. In 1999 the monthly net income in former West Germany was €1,997 for married couples. Single men had at their disposal €1,391 and single women over €1,115 per month. In contrast in former East Germany the net income for married couples was €1,783; for single men and women €1,178 and €1,035 respectively.

III. Statement on the 15-year projections until 2018

38: Presentation of the long-term financial trends until 2018 uses the same methodology as in previous years. Again nine variants taking wage rises of two, three and four per cent are computed, whereby one scenario with a lower and a higher employment trend is calculated. The calculations show how the pension system reacts to different wage and employment assumptions in the medium and long term.

39: In the version with the lower employment trend it is assumed that the number of workers and employees in the states of both former West and East Germany decreases by 0.1 million until 2018. The corresponding figures for the middle variant show a rise in the number of workers and employees in the states of former West Germany by 1.1 million and in the states of former East Germany by 0.1 million. The corresponding figures for the higher employment trend show an assumed rise in the numbers by 2.4 million (West) and 0.3 million (East).

40: For wage trends, growth rates of two, three and four per cent of the average gross wage are assumed. In the corresponding variants for former East Germany the yearly wage increase rates are set at 3.2 percent, 4.2 percent and 5.4 percent. This is based on the assumption that in former East Germany 100 percent of the relevant wage level of the corresponding variant for former West Germany is reached in the year 2030.

41: The GSAC once again points out that it regards the presentation of a continuous wage development amounting to four percent for former West Germany and 5.4 percent for former East Germany as not relevant. Even though the pension insurance report emphasises in its text component that the four-percent-variant of the projections has only a model character, the wrong signal could be sent.

42: Here it must be pointed out that limited comparisons can be made between the previous year's calculations and the calculations of the current report due to different assumptions about the economy being used.

43: The long-term projections serve as a means to test the influence of changes in the various assumptions made about future economic and demographic trends. In effect they clarify how the statutory pension system reacts (particularly in terms of contribution rate, pension level, federal subsidy) on the particular economic and demographic parameters (earned income, labour participation rate, etc.).

44: The GSAC has underlined on several occasions before and again emphasises here that the model calculations in the Pension Insurance Report by the Federal Government for the 15-year-period cannot be prognoses. Within limits the five-year projections, which also form the basis for

determining the contribution rate in the coming year, could serve this function.
45: Long-term model calculations can only assess the effect of different measures and/or possible economic trends. And therefore it is inadvisable to take a particular result from the nine variants of the 15-year-model calculations as the relevant one or the "most likely" outcome. In this context the GSAC points out that long-term targets are relevant only as factors for general trends.
46: Although the results of the long-term model calculations can only be illustrations, it is none the less important to demonstrate how sensitive the results are in regard to changes in contribution rates against changes in the underlying assumptions. In the 2004 Pension Insurance Report it is shown how the contribution rates, necessary to maintain the target value of the reserve fund in a corridor between 0.2 and 1.5 of one month's expenditure, change according to which assumptions are taken for growth rates of employment and wages.
47: A change in the wage trend from three percent to two percent causes the contribution rate to be higher by just under one-half percentage points in all employment variants. The reason for this is that a permanent reduction in the wage growth rate implies initially an increase in the pension level. It is not until the subsequent year that the pension adjustment is lower, and also that wages grow more slowly. The ratio of pensions to wages is only reduced insofar as the necessary contribution rate causes the pension adjustment to be lower. This effect does not compensate for a trend towards weaker wage development.
48: The assumed employment development has a stronger effect on the contribution rate. The range of required contribution rates between the

higher and lower employment variant reaches a maximum of 0.7 percentage points at the end of the projection's time span in 2018. An increase in the sum of the income liable to social security contributions resulting from higher employment would mean direct financial relief for the statutory pension insurance. The higher income received results in little additional pension expenditure since the adjustment conforms to per capita wages. Therefore the contribution rate can be fixed at an accordingly lower level.

49: To keep the contribution rate below 20 per cent until 2020 was and remains the stated aim of the Federal government. If this proves impossible, the federal government will have to submit proposals to the legislative bodies to ensure this target is attainable. The 2004 Pension Insurance Report shows a precision landing for the contribution rate of 20.0 per cent for the middle variant in 2018. The GSAC, however, draws critical attention to the fact that even small deviations in the assumptions can lead to contribution rate higher than 20.0 percent in 2018. Here it is pointed out again that the middle variant is based on the assumption of an average annual wage increase of 3 percent and an increase in employment of 1.2 million.

50: The GSAC points out that the 15-year model calculations do not cover the period in which the influence of the demographic burden will be at its strongest. Given current legislation, the moderate growth in the contribution rates stated in the model calculations is likely to become stronger outside this time frame.

51: Until 2020 the pension level before tax in the statutory pension insurance should not fall below 46.0 percent. Following the middle variant the pension level is 46.5 percent in the year 2018. This implies that the target for the middle scenario is attainable. It is not possible to come to any conclusions about the robustness of the results regarding changes in the growth rate of average wages as well as the employment development because the value for the pension level is only shown for the middle variant.

IV. On the sale of the Federal Insurance Fund for Salaried Employees' (BfA) share in the GAGFAH

52: The role of the financial reserve fund of the pension system, until this fluctuation reserve is transformed into a sustainability reserve fund, is to balance short-term income fluctuations, which are an unavoidable feature in the yearly cycle. The financial reserves in the pension system are the highest at the end of the year due to one-off payments (Christmas bonuses) then decrease continuously during the following year to reach a low point in October/November. The 20th Pension Adjustment Act of June 27, 1977, stipulated that the fluctuation reserve fund must be invested in liquid form in instruments whose remaining period to maturity or notice period do not exceed 12 months.

53: The thought behind the corresponding regulation has been effectively incorporated from 1996 onwards in an amendment of a regulation found in section 293, Social Code, Part VI concerning the handling of illiquid investments held by pension insurance funds. In this context the board of the Federal Insurance Fund for Salaried Employees decided unanimously on June 15, 2004 to accept the bid made by the Fortress investment company to acquire the shares in the GAGFAH that were held by the Federal Insurance Fund for Salaried Employees as part of the fluctuation reserve fund. The sale of the Insurance Fund for Salaried Employees' shares amounting to 99.87 percent of the entire stock was done through a structured bid via the auspices of the investment bank Sal. Oppenheim jr. & Cie.

54: The amount realised, including a deduction for the GAGFAH's liabilities, was €2,123m. The sale was approved by the Federal Ministry for Health and Social Security and by the Federal Cartel Office (*Bundeskartellamt*). The decision made by the Federal Insurance Fund for Salaried Employees meant that the highest offer would secure the bid. The income generated through this sale provides additional liquid means for the Federal Insurance Fund for Salaried Employees amounting to the sum specified above. The amount will also contribute to avoiding potential liquidity problems in 2004, which could have arisen because of the risk-structure compensation for all health insurance funds (*Krankenkassen*) undertaken by the Federal Insurance Fund for Salaried Employees and the corresponding payment dates.

55: In the longer term — under the Pension Insurance Sustainability Act — it is planned that any surplus of income over expenditure goes towards the building up of the sustainability reserve fund and not — in the first instance, at least — be used to lower the contribution rate. The GSAC agrees with the federal government's view that the sustainability reserve fund should be reconceived as being not just for liquidity control during the year. The sustainability reserve fund can also have a – limited – role in stabilising the contribution rate of the pension insurance during the economic cycle. This includes allowing the sustainability reserve fund to be run down to a minimum during weak phases of the cycle. This is reflected in last year's lowering of the target value of the minimum sustainability reserve fund. To be able to stabilise the contribution rate in difficult phases, it is however necessary to replenish the sustainability reserve fund during upswings.

V. Measures in the framework of the Pension Insurance Sustainability Act

a. Introduction of a sustainability factor in the pension adjustment formula

56: The core element of the Pension Insurance Sustainability Act is the introduction of a sustainability factor in the pension adjustment formula currently in use. This sustainability factor is based on work undertaken by the "Commission for Financial Sustainability in the Social Security Systems" which presented its report in August of the previous year.

57: This states that changes in the ratio of pensioners and contribution payers should be reflected in and should to be taken into account when setting the pension adjustment. Therefore, changes that have a financial bearing on the pension insurance scheme can be taken into account when determining the annual adjustment rates: above all, the age structure of the population but also changes in employment levels.

58: The fundamental idea behind the sustainability factor is the decision to allow higher pension adjustments if the number of contribution payers proportional to the number of pensioners increases and, conversely, to reduce pension adjustments if the number of pensioners shows a more than proportionate increase.

59: The sustainability factor is not – as it is sometimes wrongly claimed – identical or even similar to the "demographic adjustment factor" which was introduced with the 1999 pension reform but was never implemented. The demographic adjustment factor was intended to reduce the pension adjustments in the event that the average post-retirement life expectancy increased. The sustainability factor, by contrast, is geared to changes in the ratio between contribution payers and pension recipients and thus, besides taking into account changes in the average life expectancy, embraces above all the net balance of immigration and emigration and changes in employment.

The pension adjustment formula that comes into effect for the first time in the next year is:

$$AR_t = AR_{t-1} \cdot \frac{BE_{t-1}}{BE_{t-2}} \cdot \frac{100\ vH - AVA_{t-1} - RVB_{t-1}}{100\ vH - AVA_{t-2} - RVB_{t-2}} * \left(\left(1 - \frac{RQ_{t-1}}{RQ_{1-2}}\right) * \alpha + 1\right)$$

with

- AR_t = new current pension value to be determined
- AR_{t-1} = current pension value in effect (West)
- BE_{t-1} = average gross wage earned during the last year (if t=current year)
- BE_{t-2} = average gross wage earned during the year before last; here changes in the gross wages (which are liable to contribution from 2006 onwards) per employed person on average income are taken into account, inclusive of recipients of unemployment benefits but excluding civil servants.
- RVB_{t-1} = last year's pension insurance contribution rate
- RVB_{t-2} = year before last's pension insurance contribution
- AVA_{t-1} = share paid into additional old-age provision scheme in the last year
- AVA_{t-2} = share paid into additional old-age provision scheme in the year before last
- RQ_{t-1} = pensioner quotient = equivalence pensioner/ equivalence contribution payer in the last year
- RQ_{t-2} = pensioner quotient = equivalence pensioner/ equivalence contribution payer in the year before the last year
- α = distribution weight

60: The ratio of contribution payers and pensioners within the formula is standardised with regards to the "equivalence pensioner": this standardisation is intended to avoid artificial inflation of pensioner numbers, which could happen with an increase in the number of low pensions that result from, for example, short insurance time periods. For this, the whole pool of pensioners is converted into “standard pensioners”, where each standard pensioner has 45 insured years on average income. Also the standardised number of contribution payers as the number of employed persons on average income is calculated. The standardisation makes the adjustment formula as far as possible immune from structural changes in the numbers of pensioners and contribution payers.

61: Finally the pensioner quotient is weighted with the factor α, which is determined by law at 0.25. This number results, taking the economic and demographic assumptions that form the basis of the model calculations, from the political assumption that the contribution rate to the statutory pension insurance scheme does not rise above 20 percent by 2020 and above 22 percent 2030. Since 2001 these numbers have been included in the law.

62: The sustainability factor develops a stabilising effect on the short term pension finances: whenever the number of equivalence contributors declines due to cyclical fluctuations, as in the current economic situation, the size of the next pension adjustment is lowered. Thus, any increase in the contribution rate can be avoided or at least kept low. Vice versa: whenever the number of contribution payers increases or e.g. an area-wide change from part-time to full-time work takes place, the amount of the pension adjustment is positively affected. As a result the pensioners participate in the effects of cyclical fluctuations by contributing to the stabilisation of the financing basis of the pension insurance scheme; they also participate in a positive economic development that is reflected by employment growth — not as previously only via higher rates of wage growth and their influence on the adjustment rates.

63: In 2005 a zero adjustment for pensioners is likely due to weak wage development in the current year. The pension reduction that results when allowing for the sustainability factor and the share paid into additional old-age provision scheme (*Altersvorsorgeanteil*) is avoided by the protection clause in section 68, subsection 6, Social Code, part VI. Under this, pensions can only be reduced in case of a negative wage development. The difference between wage- and pension development cannot be maintained when wages only increase very slowly. But the new pension adjustment formula to lower the increase in the contribution rate was intended to maintaining this difference. The result is a permanent higher pension level that in turn necessitates a higher contribution rate. And this results in the projected contribution rate trend being at risk. Until the year 2010, for example, average wage increases of up to 1.5 percent are required to allow the factors in the pension formula to have a full lowering effect on pension adjustment in this year.

64: Moreover, from this perspective long-term assumptions with regard to wage development acquire a new importance. The lower the annual growth rate is assumed to be, the higher the probability is that the protection clause has to apply. Furthermore, one must take into account the fact that in the future wages are unlikely to grow steadily; rather both upward and downward curves should be anticipated. For example, assuming growth rates moving around a mean value of 3 percent would result in the protection clause taking effect in the years of lower wage growth. But each time the protection clause is invoked it results in a positive base effect on the pension level. You cannot revert to the previous pension level; therefore a higher contribution rate is required. In the example here the contribution rate could considerably exceed the maximum limit, set by law at 22 percent until 2030.

65: Overall one can assume that the sustainability factor is more likely to shield the pension insurance system and the intended target for contribution rates from deviations in demographic forecasts, and labour market predictions in particular, than the demographic adjustment factor, which was introduced with the 1999 pension reform, but was never put into effect.

b. Pension level and state pension age

66: Due to the reorganisation of the taxation of pensions it is no longer possible to show a standardised net pension level. Therefore the pension level security clause previously enshrined in section 154, subsection 3, Social Code, part VI is cancelled in the Pension Insurance Sustainability Act.

67: The proposed cancellation of the security clause was criticised at a political level and a "substitute clause" was called for. Part of the criticism was that, and the GSAC concurred, with the cancellation the pension provision level's lower limit remains open.

68: One way of determining the pension level was to look at the "gross pension level". The gross pension level is the ratio of the gross standard pension and average gross wages. This was proposed by the "sustainability commission"[4] at the time of the discussions.

69: Finally the model of a "tax adjusted net pension level" was implemented. The standard pension (gross), reduced by the pensioner's social insurance contributions, e.g. the contributions to health and long-term care insurance that have to be paid by pensioners, is put into ratio with the average wage, reduced by the social insurance contributions paid by employees, e.g. their contribution to pension, health and long-term care insurance as well as the contribution made to the Federal Employment Office (*Bundesagentur für Arbeit*) and the average payments made into additional private provision for old-age. The tax burden can be set aside as regards pensioners' as well as employees' income — this differs from the definition of the net pension level —, but for social insurance contributions the burden is taken into account — this differs from the definition of the gross pension level.

[4] See Bundesministerium fur Gesundheit und soziale Sicherung (ed.), Nachhaltigkeit in der Finanzierung der Sozialen Sicherungssysteme, report of the commission (in German), Berlin 2003, p. 97 ff.

70: The target for a pre-tax limit for pension levels was set at a value of 46 percent for beyond the year 2020. The intended pre-tax pension level is 46 percent until the year 2020 and 43 percent until the year 2030. If the actual pension level falls below this value, new measures have to be proposed to the legislative bodies.

71: The GSAC welcomes the decision that a (net) total pension provision level for certain types of pensioners belonging to different pension cohorts (e.g. in 2020 or 2030) will form part of future Old-age Security Reports (*Alterssicherungsbericht*), documents that must be produced once every legislative period. As well as the benefits of the Statutory Pension Insurance Scheme, the benefits of personal and company pension plans and the tax burden for both pensioners and employees will be accounted for. Thus the actual net pension level that will be received is shown, but also the decrease in the pension level due to the reform is put into perspective.

72: It seems possible that in long-term model calculations the values for the pension level fall below the politically predetermined minimum values. If this is the case, the federal government is obliged to put measures to the legislative bodies that prevent such a situation and also do not exceed the upper limit for the contribution rate, which is likewise enshrined in the law. E.g. one such measure could be to increase the state pension age gradually from 65 to 67 years as has already been suggested by the Commission for Financial Sustainability in the Social Security Systems.

73: For this reason, from 2003 onwards an obligation to report to the legislative bodies about the employment situation of older employees was introduced as part of the Pension Insurance Sustainability Act. Furthermore, it has to be calculated whether the state pension age must be raised to slow long-term increases in the contribution as well as to comply with the minimum pension levels. And a report must be submitted on whether a raised state pension age can increase the pension level and lower the contribution rate respectively and how such a change can be implemented.

74: A positive effect from an increase in the state pension age on the pension level is generated by the sustainability factor in the pension adjustment formula: an increase in the state pension age influences the ratio of the numbers of equivalence contributors and equivalence pensioners which in turn affects the size of the pension adjustment.

75: In 2003 the actual average pension age was 62.9 years. It is important to distinguish from that the actual average pension age for recipients of pensions for reduced earning capacity. In 2003 this was 50.1 years. The actual average pension age of 60.7 years, which is used widely when discussing pension issues, includes the pensions on account of reduced earning capacity which are paid independently of a standard old-age pension. Thus this pension age of 60.7 years incorrectly reflects the real situation as regards the issue of early retirement.

76: According to information from the Federation of the German Pension Insurance Institutes currently 55 percent of those insured start retirement without a reduced pension. The increase in the state pension ages and the introduction of reductions induce many insured to retire later. Given this background, it is assumed in the long-term calculations that the average pension age will increase henceforth by one year. The increase from 60 to 63 in the minimum age to receive a state pension because of unemployment or on account of old-age part-time work in 2006 to 2008 in line with the Pension Insurance Sustainability Act is likely to boost this trend.

77: The majority of GSAC members favour an increase in the state pension age if — as is the intention — it is possible to raise employment rates among older people. As regards long-term considerations, those who share this opinion note that they regard a gradual increase in the general pension age from 65 to 67 as essential. It regrets that no decision has yet been made on this subject. But the GSAC is aware that while an increase in the state pension age is indeed necessary it is not a sufficient reason to produce a desired increase in employment rates among older people. For this to occur, there needs to be an improvement in the labour market situation as well as an increase in age-based jobs along-with a drive towards more training for older employees and workers.

VI. On family policy and pension insurance

78: In last year's report[5], the GSAC stated that it is against giving child-raising periods greater consideration in the pension law and thereby valuing child-raising periods to a greater extent through correspondingly higher contribution-financed benefits. That position is reiterated here as part of discussions that arose because of the differing treatment for the insured without children and insured with children in the new "Act to account for child-raising periods" (*Kinderberücksichtigungsgesetz*), which was introduced into the long-term care insurance scheme.

79: In addition to demanding greater consideration of child-rearing periods and following the so-called "care judgment"[6] of the Federal Constitutional Court, there have been numerous calls to graduate pension contributions or pension benefits according to the number of children raised. The Federal Constitutional Court considers it incompatible with Constitutional Law that

---

[5] The report of the GSAC on the Federal Governments 2003 pension insurance report (BT-Drucksache 15/2144).

[6] Judgment of 3rd, April 2001, *Aktenzeichen* (reference number) 1 BvR 1629/94

members of the social long-term care insurance scheme who raise children and thus pay not only a financial contribution but also a material, i.e. "generative" contribution to preserving the pay-as-you-go financed social insurance system are burdened with the same contribution rate to the long-term care insurance as members without children. The Court committed the legislative body to come up with a new regulation, compatible with the law, by 31 December 2004. As a result the "Act to account for child-raising periods" for the social long-term care insurance was passed. Essentially there were two ways to comply with the Federal Constitutional Court's judgment. Either part of the burden is removed for insured persons with children or those without children bear a burden. It was suggested that, to follow the first option, a bonus on top of child benefit (*Kindergeld*) was be an adequate response to the judgment.

80: The German Bundestag went for the second option, and on 1 October 2004 passed the "Act to account for child-raising periods" under which the contribution paid by members of the long-term care social insurance who are over 23 and childless are, from 1 January, 2005, increased by 0.25 percentage points ie their contribution is now 1.1 percent of their gross income instead of the previous 0.85 percent. The employer's share remains at 0.85. Childless recipients of unemployment benefit II and those members born before 1940 are excluded. With this new regulation a differentiation in contributions according to the number of children, which had been discussed, was not included.

81: The GSAC is critical of this way of implementing the care judgment. It means that the shared burden of raising children (*Familienlastenausgleich*), a task for society as a whole, is financed within the long-term care insurance by only a part of the society. In addition, the way childlessness is defined is seen as problematic. It is surely nonsensical to commit all members to paying higher contributions as long as they are childless. In particular, this means higher contributions at the start of their working lives for younger members of the social long-term care insurance because they have yet to have children. Ultimately, a person cannot be defined as childless until that person is beyond reproductive age. On principle an age limit has to be determined, which for women could be reasonably set at 45. This would mean that only the childless above this age are obliged to pay higher contributions. But a man can procreate and raise a child at an even higher age and therefore would make the generative contribution of the same size as a man who procreates at the age of 20.

82: Here it should be noted although the "generative contribution" can have an economic meaning, it does not mean that this term can be legally defined in the context of social insurance. It is the Social Code that defines contributions and benefits in a legal sense. Under current regulations it is not possible to deduce any legal implication from the notion of "generative contribution".[7]

83: In making the care judgment, the Federal Constitutional Court acted on the assumption that the legislative body will examine the implications of its judgement for other branches of the social insurance. Acting unanimously, the GSAC has already stated that it regards modifying the regulations in the Statutory Pension Insurance Scheme in the light of the judgement made by

---

[7] See in detail (in German): Hase, F. (2003), Sozialversicherung und Familie zwischen sozialem Ausgleich und staatlicher Verantwortung – Eine Untersuchung zu Möglichkeiten und Grenzen der Familienbegünstigung im Rahmen des Rentenversicherungsrechts, DRV-Schriften, volume 46, p. 67f.

the Federal Constitutional Court with regards to the long-term care insurance[8] as unnecessary. Here it again confirms this opinion.

84: It is not only for economic reasons that differentiating between those insured with children and those without as regards contributions to and benefits from the Statutory Pension Insurance Scheme is to be rejected. Such differentiation and the accompanying transfer of the “Act to account for child-raising periods” on to the Statutory Pension Insurance Scheme cannot be justified in legal terms as the long-term care insurance and the pension insurance are clearly different as regards the insurance principle and the regulations concerning children.[9]

85: An insurance against childlessness via the Statutory Pension Insurance Scheme is not a fault inherent in the system, rather an important step forward for national social security as it means that financial security in old-age is not dependent on biological happenstance.[10] Furthermore, measures connected with family policy do not only benefit the social security systems, but rather society as a whole. Therefore it is for society as a whole to deal with such tasks, and they should be financed accordingly.

[8] BT-Drucksache 14/6099

[9] See Hase, F. (2003), l.c., p.61 f.

[10] See (in German) Köhler-Rama, T. (2004), Halbe Rente für Kinderlose?, in: Die Angestelltenversicherung 8/04, Berlin

VII. The reform of the organisation of the Statutory Pension Insurance Scheme

86: The GSAC welcomes the passing of the “Act on the Reform of the Organisation of the Statutory Pension Insurance Scheme” (*Gesetz zur Organisationsreform der Gesetzlichen Rentenversicherung*) by the German Bundestag and Bundesrat (assembly of Länder), creating the means to the structure of the Statutory Pension Insurance Scheme to reflect a changing society and economy. The present structure of the pension insurance scheme is the result of historical circumstances. The organisational structure, mostly unaltered since its creation, along with the number of separate funds no longer meet the requirements of a modern and efficient administration. Therefore, a discussion about a thorough organisational reform of the Statutory Pension Insurance Scheme was begun more than a decade ago.

87: Since those involved in the process had conflicting interests, finding a compromise acceptable to all parties proved hard. While the federal states wanted the federal structures to be decentralised, the federal government favoured a stronger coordination of the pension insurance to further improve its cost effectiveness and efficiency. The “Act on the Reform of the Organisation of the Statutory Pension Insurance Scheme” which was passed is a compromise measure that aims to improve the cost effectiveness and efficiency of the Statutory Pension Insurance Scheme and afford long-term stability for pension insurance funds.

88: A crucial point of the organisational reform is that the differentiation between the insurance for wage earners and salary earners is abandoned. The pension insurance funds are merged as “German Pension Insurance”

(*Deutsche Rentenversicherung*), with the addition of a subtitle. The simplification of social security law is now carried into the organisational structure of the system and the out-of-date historical division of the insured into wage (blue-collar) and salary (white-collar) earners is abandoned. The new, simplified name marks to the outside world not only the organisational fresh start but also the unity of the pension insurance funds.

89: From 2005 responsibility for the insured is divided among the pension funds according to a quota system, with 55 percent within the remit of regional pension insurance funds, 40 percent in the German Pension Insurance Union (*Deutsche Rentenversicherung Bund)*, and 5 percent under the German Pension Insurance Miners-Railway-Sea, (*Deutsche Rentenversicherung Knappschaft-Bahn-See*). This halts the decline in membership of the regional insurance funds and the three smaller federal insurance funds. The fixed membership quotas provide permanent stability for all pension insurance funds.

90: Within five years of the reform being put into effect there should be a 10 percent reduction in administration and processing costs in comparison with the year 2004. This leads to annual savings of €350 million from 2010 onwards. In particular, the introduction of a bench-marking process should help take advantage of potential savings among the pension insurance funds and make such savings transparent. Continuing and systematic comparison within the different pension insurance funds should optimise the structures and processes on the principle of "learning from the best".

91: The number of the federal funds falls from four to two. As well as the merger of the Federal Insurance Fund for Salaried Employees' (BfA) with the Federation of the German Pension Institutes (VDR) to form the German Pension Insurance Union, the Federal Insurance Fund for Miners, the

Railway Insurance Fund and the Maritime Insurance Fund have merged into German Pension Insurance Miners-Railway-Sea. Furthermore, an amalgamation of 22 regional insurance funds is planned.

92: The control and coordination function at a federal level is assumed by the German Pension Insurance Union. There basic tasks as well as those that cut across different funds are concentrated, and the Union exercises a binding decision-making authority over the insurance funds. It is for the German Pension Insurance Union to oversee the organisation of effective and quality-driven competition between insurance funds. The merger will considerably reduce costs associated with coordination and adjustment as well as prevent tasks being duplicated by the funds.

93: The reorganisation of the way the pension insurance scheme is financed, simplifies transactions between employers and collecting agencies as well as the pension funds. This reduces the actual payment flows to a minimum. The German Pension Insurance Union assumes control of the financial resources and financial management of the existing system, while the pension funds retain their financial independence. For employers the differentiation between wage- and salary- earners as regards contribution collection is abolished.

94: The GSAC welcomes that finally, after long negotiations, the organisational reform was passed. In particular it welcomes the fact that the legislator’s aim to reorganise the pension insurance scheme to give it a modern and efficient organisational has been met. However, the GSAC sees the further amalgamation of the 22 regional insurance funds as far as is possible as a necessary step.

95: The GSAC supports the stated aim of a 10-percent reduction in administration and processing costs by 2010. However, the GSAC points out that savings can only be made if the legislative bodies do not pass any measures that require additional administration and processing costs.

96: The GSAC welcomes the decision that a clause making the budget subject to official approval intended to form part of the law on the organisational reform was excluded. Such a requirement would have disproportionately limited the rights of the self-administered pension funds and thus weakened the autonomy of the pension funds.

97: Political considerations were also crucial for determining the investment rules for the sustainability reserve fund. According to the law on organisational reform, the sustainability reserve fund that consists of a maximum half-month's expenditure is administered centrally by the German Pension Insurance Union. If the sustainability reserve fund exceeds that maximum for a longer period of time, it should be administered locally by the pension insurance funds. Besides the unclear formulation, this condition is also unsatisfactory from an economic point of view. On one hand, the pension insurance funds incur addition costs through having to keep expert knowledge on stand by. On the other hand, larger amounts of money can normally be invested with better conditions on the capital markets.

98: A further indicator demonstrating that political interests as well as economic factors were decisive in the planned reorganisation can be seen in the way the regional pension insurance funds were merged. After merging the regional pension funds must meet a minimum size as regards administration. This is to facilitate savings by synergies, grouping skills and streamlining structures. In the law on organisational reform this area is formulated as a stipulation, however no penalties for disregarding this measure were set down.

99: It would have been desirable, from the GSAC's point of view, had self-administration been strengthened as part of the framework of the law on organisational reform. As before, a merger between regional pension funds is only possible with the approval of the government of the federal state concerned. Under the fourth "Act on Amendment of the Social Code, Part VI" (*4. SGB VI-Änderungsgesetz*) mergers that affect more than one federal state require work to be distributed fairly between the federal states involved. This limits autonomy since decisions made by the funds' representatives assembly that significantly alter the distribution of workload has to be approved by the federal states. In addition, self-administration is effectively restricted, since binding decisions taken on the funds' own initiative to merge regional pension funds across federal states also have to be approved by the federal states concerned. Thus making full use of possible efficiency savings is considerably restricted if not completely impossible.

VIII. On the rate of return in the Statutory Pension Insurance Scheme

100: Foreseeable demographic changes – due to the fertility rate being below the replacement level and, happily, increasing life expectancy – will lead to a decrease in the number of contribution payers and initially to an increase in the number of pensioners. In the long-term the number of pensioners will decline more slowly than the number of the contribution payers. With a set pension level the contribution rate has to rise. For the insured, the effect is a deterioration of the ratio of contributions paid to pension received. The implicit rate of return of the Statutory Pension Insurance Scheme, i.e. the return made on contributions paid, will inevitably fall. In the short and medium term, this fall in returns is even greater if benefits under the pension insurance scheme are reduced, as was the case with the previous pension reform, which was intended to limit the rise of the contribution rate. In this case, a smaller rise in contribution rates is accompanied by decreasing pension levels.

101: In comparison with other countries, the Statutory Pension Insurance in Germany is characterised by a high degree of contribution equivalence (*Beitragsäquivalenz*) in terms of the link between the level of pension to be paid and the amount of income contributed. Since the contribution rate is not constant but has to be adjusted according to cyclical fluctuations and new regulations, and given that it has the tendency to rise because of the demographic pattern, the "price" of the earning points which measure the pension entitlement earned during a contribution year varies. Full contribution equivalence as regards the relationship between the pension entitlement to the contributions made is therefore not given. Rather the term "participatory equivalence" (*Teilhabeäquivalenz*) has come to be used when describing the guarantee of the relative income position. What is still a relatively strong relationship between contributions and benefits in the pension insurance scheme involves positive economic incentives since each contribution payment associated with a wage increase leads to a bigger pension in the future. And vice versa, each deviation from the equivalence principle leads to distortions on the labour market as the contributions are then seen as tax.

102: The Statutory Pension Insurance Scheme is always compared with other types of old-age provision. If the rate of return in the Statutory Pension Insurance Scheme turns out to be lower than that in a private capital-funded pension, the obligatory contribution is likely to be regarded as a tax amounting to the difference in the rates of return. Therefore it has to be taken into account that such a comparison of the rates of return should always include a comparison of the risks for the insured so that properly comparable insurance schemes are measured against each other. The Statutory Pension Insurance Scheme offers not only protection against the risk of longevity, but also protection for surviving dependents, protection in case of invalidity and benefits for rehabilitation.

103: The question of the rate of return in the Statutory Pension Insurance Scheme has not only an economic but also a legal dimension. Thus under the *"Űbermassverbot",* which is part of the Constitutional Law, any clear disproportionate difference between contributions and pension benefit is forbidden.[11] Here the decisive factor is not an individual pension, rather a typical pension development. It must also be taken into account that contributions do not only finance the old-age security but also insure against invalidity in particular. If the implicit rate of return in the Statutory Pension Insurance Scheme becomes negative for a typical insured person, the question of whether the old-age security system conforms with constitutional law as well as the guarantee of having the right to a pension is subject to legal judgment.

[11] See for details (in German) Papier, Hans-Jürgen, Verfassungsrechtliche Vorgaben für die Alterssicherung, in: Jörg-E. Cramer, Wolfgang Förster und Franz Ruland (Hrsg.): Handbuch zur Altersversorgung, Frankfurt am Main 1998, S. 872.

a. Ways of measuring implicit rates of return

104: The rate of return in the Statutory Pension Insurance Scheme can be presented as the internal rate of return of a cash flow made up of incoming payments (contributions) and outgoing payments (pensions).[12] The internal rate of return is the discounting rate that equalises the present values of contributions and pensions. The present values are required to make payments made at different points in time comparable.

105: The rate of return of the Statutory Pension Insurance Scheme is an index that is as often calculated as criticised. Of particular concern here are the pensions for surviving dependents, the heavily reductions for accounted periods (*Anrechnungszeiten*) for time spent in higher education and the enhanced pension benefits given for periods of military service and for child-rearing. Other measures are also open to discussion such as the increase in the federal subsidy financed by the ecological tax, which allows the contribution rate to be fixed at a lower level without affecting the pension level.

106: The decline in the contribution burden of the insured has to be financed through other means – not least through the ecological tax that is paid by both contributors and pensioners. The increase in the rate of return is paid for by higher taxes elsewhere. This also applies to benefits that are not intrinsic to the pension insurance. These are financed either via the federal subsidy with taxes or via higher contribution rates. An individual increase in

---

[12] See for dedails (in German), Eitenmüller, Stefan, Die Rentabilität der Gesetzlichen Rentenversicherung - Kapitalmarktanaloge Renditeberechnungen für die nahe und die ferne Zukunft, in: Deutsche Rentenversicherung, 12/1996, S. 784-798.

the rate of return always requires that others do not claim but rather co-finance this benefit.

107: It is comparatively easy to calculate the ex-post rates of return with the actual payment flows. But only after the end of the pensioner's biography, i.e. following the death of the particular insured person one can calculate the ex-post rate of return for a single insured person or cohorts of insured people. In contrast, the calculation of ex-ante rates of return is based on assumptions about the future development of contribution rate and pension level. In addition, the rate of return to be anticipated depends fundamentally on average life expectancy but also on the probability of a person experiencing a period of reduced earnings capacity or a pension being paid out to surviving dependents. To simplify, rates of return for the lifetime of a typical insured person are calculated, for example for the standard pensioner. The standard pensioner has 45 insured years on average income, retires at the state pension age of 65 without reductions and receives the pension corresponding to his or her life expectancy. Below calculations for certain types of insured people's biographies are presented.

108: Rates of return can be calculated in nominal or real terms, i.e. adjusted according to increased living costs. The high nominal wage increases in the 1970s in particular were accompanied by above average inflation rates. The contributions paid during the 1960s were devaluated in the sense that their nominal value seems to be very low from today's point of view whereas the nominal pension generated through these contributions seems to be quite high. Although the nominal rate of return allows for a more plausible comparison with alternative private old-age provision products, the real rate of return should always be specified. The real rate of return is an unbiased picture of the development of the rate of return especially when comparing different time periods.

109: In addition, rates of return can be shown pre and post tax. Through this the calculations become not only considerably more complex but also more dependent on individual factors. This is especially true given the change to a system of deferred taxation that was decided upon in summer 2004. Thus the tax burden in the contribution and pension phase is essentially determined through the application of the progressive income tax tariff on the corresponding total income. For these reasons only the gross rates of return are shown in the following (see graph 1, appendix). In the long run, i.e. following the complete change to deferred taxation – which in principle benefits the taxpayer more – the rate of return after tax is likely to be higher.

110: Before calculating the rates of return one has to clarify the weight given to the contributions and how the other income of the pension insurance scheme, in particular federal subsidies, are to be treated. On the benefit side, the Statutory Pension Insurance Scheme includes together with the old-age pension extra benefits financed by contributions such as the insurance against the risk of reduced earnings capacity, in particular, as well as measures to assist rehabilitation. Given this, it makes sense to assign this part of the contributions to the other benefit types, not to the old-age provision. For calculating the rates of return here, only 80 percent of the contributions are assigned to the primary task of old-age provision, in accordance with the literature[13].

[13] See (in German) Ohsmann, Sabine, Ulrich Stolz, Entwicklung der Rendite in der Gesetzlichen Rentenversicherung – Betrachtungen zur Rendite der aktuellen und künftigen Altersrenten, in: Die Angestelltenversicherung, 2/2004, S. 57.

111: In calculating the rate of return, federal subsidies are not accounted for. This means that the "standard cases" analysed here receive only benefits that are fully financed fully by their individual contributions.

112: The reunification of Germany necessitated higher contribution rates to the Statutory Pension Insurance Scheme. Therefore the rate of return turns out to be lower for the relevant contributors.

b. Calculations on the rate of return in the Statutory Pension Insurance Scheme

113: The following calculations are based on the current law, ie with reference to the Pension Insurance Sustainability Act in particular. The calculations are valid for West Germany. The development of the contribution rate and the gross pension level until the year 2030 is taken from projections made by the Federal Ministry for Health and Social Security. For discounting, a nominal interest rate of 4 percent and for the average wages per Insurance Scheme member a long-term annual growth rate of 3 percent was assumed; 1.5 percent was assumed for the rate of inflation. Payment flows from the past are accrued to 2040; future payments are discounted. The share paid by the employer and the share paid by the employee was accounted for to reach the total contribution.

114: A male insured person born in 1939 who retires in 2004 at the age of 65 has as the earner of an average income over 45 contribution years, paid for example, €102 389 in contributions (see table 1, appendix). From today's point of view this corresponds to a present value of €203 700. The gross pension benefits including the pension insurance scheme's subsidy to the health insurance[14] amounts to €276 151 when assuming a future life expectancy of 16.38 years for a West-German 65-year-old man. Discounting this sum by 4 percent results in a present value of €204 082. This corresponds to an internal rate of return of 4.01 percent In other words the present values of contributions and pension payments correspond exactly (€203 980 each) if one takes the internal rate of return of 4.01 percent as a discounting rate. In real terms, the rate of return for this person is 1.75 percent.

115: Without the introduction of the sustainability factor and the transfer of the full contribution burden of the long-term care insurance on to pensioners the result would have produced a slightly higher nominal (real) rate of return of 4.02 percent (1.77 percent) for this person. This insured person retiring in 2004 is affected by the reduction of the pension level but does not enjoy the lower contribution rate.

116: A nominal rate of return of about 4 percent, which currently appears to be still achievable – in view of the actual interest level on the capital market – seems high. But it is based on past contribution wage-growth rates that cannot be continued in the future. Interestingly, an investment at the capital market, especially in the 1970s, would have generated an apparently favourable nominal rate of return. Had the contributions not been paid into the Statutory Pension Insurance Scheme but, for example, into a private pension insurance scheme, a nominal (real) rate of return of 5.50 percent (3.07 percent) could have been achieved.[15]

---

[14] The long-term care insurance contribution component which is paid by the pension insurance has been omitted since April 1st, 2004. The special contribution amounting to 0.9 percent paid by the insured from July 1st, 2005 to the health insurance is calculated against benefits.

[15] The interest rate of the contributions to the Statutory Pension Insurance Scheme is the current yield of the domestic bearer bond, a reduction amounting to 10 percent of the corresponding contributions, a reduction in the payment period amounting to half percentage point of the assumed gross return (4 percent).

117: A male insurance scheme member who retires in 2004 aged 60 accepting reductions of 3.6 percent per year performs considerably worse with a nominal rate of return of 3.68 percent. But it is not possible to deduce from this that the reductions are determined at too high a level. To calculate whether that is the case, one has to consider insurance scheme members from the same birth cohort. The relevant people would then face the choice of either retiring in 2004 at the age of 60 or continuing to work to 2008, only retiring in 2009 at the age of 65. Comparing these two, it appears that the rate of return for the person who retires early turns out to be slightly higher. If the insurance scheme member who is 60 today were to defer his retirement by five years he could count on a rate of return of merely 3.59 percent. The person who is 65 in 2009 has indeed a higher life expectancy than the person who is 65 years of age in 2004 (16.38 years). But this effect of inherently increasing the rate of return is more than compensated for by the declining pension level for insurance scheme members who are due to retire later.

118: For the period of pension payment the rate of return is increasing, given a set contribution payment. For women, the rate of return turns out to be half a percentage point higher since future life expectancy is about 4 years longer for women than for men. Adding a pension for dependents in case of a man (here: 60 percent of the husband's pension without taking into account the widow's own income for 5 years) results in a rate of return that is higher than that for a single person and is almost as high as that for women.

119: On one hand, the high nominal rates of return of the current retirement cohort can be attributed to low contribution rates of just 14 percent until 1967. Only in 1973 was the 18 percent benchmark reached. On the other hand, the 1970s in particular were characterised by exceptionally high nominal wage growth rates. Because it is unlikely that this situation will be repeated, the rate of return of the Statutory Pension Insurance Scheme has to decline for this reason alone. Today and in the future it requires a higher than proportional contribution payment to acquire one earning point because of the increased contribution rate. Moreover, the wage bill is likely to grow at a much slower rate as a consequence of slower rate of demographic development.

120: For men the implicit rate of return in the Statutory Pension Insurance Scheme of 4 percent for the birth cohort 1940 is likely to decline considerably to 2 ¾ percent for the birth cohorts after 2000 despite increasing life expectancies[16] (see graph 2). A similar marked decline from 4 ½ percent to 3 ¼ percent is also expected for women. In real terms the decline turns out to be weaker especially since the rates of return for cohorts approaching retirement are affected to a relatively large extent by the high nominal wage increases during the 1970s.[17]

121: In these calculations the rates of return also remain positive in the future. On the whole the levels of rates of return depend mainly on assumptions made about the wage growth rate. Higher wage increases can better compensate for the decline in the size of the labour force. In comparison with the rate of return for the current cohort entering retirement, a rate that is to a large extent derived from past figures, the decline would be

[16] The calculations account for an increase in the post-retirement life expectancy of men aged 65 from 16.4 today to 19.0 by 2040. For women an increase from 18.2 to 23.2 years is assumed.

[17] The stabilisation of the rate of return curves from the birth cohort 2010 onwards is attributed to the fact that the calculations are based on a stabilisation of the contribution rate and the pension level from the year 2050 onwards. This seems a plausible scenario assuming a then largely constant ratio of pensioners to contributors, an assumption which is also supported by the 10th coordinated population projection made by the Federal Statistical Office.

less marked. With a nominal 4 percent growth rate for the average wages liable to contributions, the rate of return would show virtually no decrease. However, more noticeable decreases become evident if the calculations are based on a 2 ½ percent growth in wages instead of the relatively high wage growth rate of 3 percent, which is historically quite high**.** A negative nominal rate of return could be expected if the average nominal wages were to show no growth in the future. But even then the rate of return for women would remain slightly positive.

122: As well as wage development, the rates of return are determined by the element of the contribution that covers other risks (reduced earnings capacity, rehabilitation, etc.). But an exact determination of this share is not possible. There are indications that the share of the contribution that accounts for old-age security is more than 80 percent. If one were to assume not just 80 percent but, for example 90 percent as the contribution to old-age security leaving only 10 percent for other risks, then the rate of return in all variants is half a percentage point lower. The high level of sensitivity surrounding the absolute pension level in regard to such assumptions should always be considered in public discussion of the subject.

123: The progression of the return curves can also be used as an indicator for the appropriateness of a reduction of 3.6 percent per year of early retirement. Comparing the retiring cohorts of those born from 1945 onwards at the age of 60 and 65 gives the result of almost identical rates of return in the future as well (see graph 3). The reductions contribute considerably to an equalisation of the rates of return. If the reductions turn out to be lower, someone who retires early could achieve a considerably higher rate of return – and vice versa. Furthermore, it appears that for women the difference in the rate of return is somewhat higher at the expense of a woman who retires early. This is a consequence of women's higher life expectancy. The same reductions have an impact over a longer time period and therefore have a stronger affect.

124: With regards to changes in statutory measures, the rates of return are more robust than the pension levels. Comparing the return curves with and without the effect of the sustainability factor and the shift of the full contribution to the long-term care insurance on to pensioners results in a decline in the medium and long term of the internal rate of return because of the reform. The birth cohorts between 1950 and 1980 suffer the highest loss in the rate of return in the Statutory Pension Insurance Scheme. These cohorts suffer losses in their pension claims mainly due to lower annual pension adjustments. Unlike those born later, they enjoy the lower contribution rate – in comparison to the situation without the reform measures analysed here – for only a relatively short time. As the pension level is only gradually reduced because of lower annual pension adjustments, those born earlier receive relatively high pensions and suffer relatively little loss in the rate of return. In the long term, the current reform has almost no impact on the rate of return.

125: With the assumed stabilisation of the population structure after 2050, the sustainability factor is unlikely to have a dampening effect on the pension adjustment. By then, under old as well as under new law, only the fundamental influencing factor on the rate of return in the pay-as-you-go system will have an effect, namely the growth rate of the wage sum. In graph 4 each upper curve shows the rate of return of the corresponding birth cohort without either the sustainability factor or the shift of the full contribution to the long-term care insurance on to pensioners.

126: Decreases in the rate of return because of the reform are roughly identical for men and women in nominal as well as real terms. They amount to about 0.17 percentage points or 17 base points (see graph 5)

c. Calculations on the rate of return for the old-age provision as a whole

127: The comparison of the rate of return so far does not take into account that, as a consequence of the pension reform, the weight in the system of old-age provision has shifted in favour of its capital-funded parts. To the extent that the capital-funded old-age provision is linked to a higher rate of return, it is increasingly likely that paid contributions as a whole yield a higher return.

128: One way of measuring this change in ratio mix in implicit rates of return concentrates on the model assumption that the relevant members of the insurance scheme invest the savings generated by the reform in additional instruments of capital-funded old-age provision.[18] The status-quo scenario as well as the reform scenario (with the sustainability factor and transfer of the full contribution to long-term care insurance on to pensioners) is based on the assumption that those affected take out a full "Riester-Pension", i.e. until 2008 they invest an additional 0.5 percent annually and from 2009 onwards they invest 4 percent of their gross salary in a private pension plan. Therefore, in the reform scenario the additional annual contributions to a private pension plan amounting to the difference between the contribution rate in the Statutory Pension Insurance Scheme with and without reform must be added.

[18] The GSAC has already used this method. See GSAC's special report on the pension reform

129: For future wage developments until 2008, the assumptions made by the estimation-working group for the medium-term projections within the pension insurance report were taken. For the period after that a nominal wage growth rate of 3 percent per year was assumed. The nominal interest rate was fixed at 4 percent. [19] However, the effective interest of the private pension amounts to only about 3.55 percent. This takes into account the fact that only a rate of return below the interest rate at the capital market can be expected from private pension insurance schemes.

130: The real total rates of return calculated on this basis show that with the shift from the pay-as-you-go system to the capital funded system a higher total rate of return can be achieved in the long term compared with what would pertain if the old pension law was still in effect. Even if the general decline of the internal rate of return cannot be stopped, a levelling off is apparent in the curve of the total rate of return. Graphs 6 and 7 show the rates of return in nominal terms as an average for men and for women. With this, the birth cohorts from the mid-1990s achieve an advantage in the net return. In contrast, older cohorts must suffer a loss. This appears justified insofar as the level of the rate of return none the less turns out to be higher than the level for future generations.

131: The results of such a comparison are very sensitive as regards differences between assumed wage growth rates and interest rates. The higher the assumed capital-market interest rate or the lower the wage growth

[19] In fact the rate of return in the capital funded old-age provision is unlikely to stay constant in the future. As property prices come under pressure due to demographic changes, the interest rate achievable in the capital market will decline. The extent to which this will happen is debatable. In any case capital funding offers the possibility to invest internationally and is thus less dependant on the development of national population. See on this topic (in German): Börsch-Supan, Axel, Alexander Ludwig und Mathias Sommer, Demographie und Kapitalmärkte – Die Auswirkungen der Bevölkerungsalterung auf Aktien-, Renten und Immobilienvermögen, Deutsches Institut für Altersvorsorge (Hrsg.), Köln 2003.

is set, the higher the advantage of the capital funded old-age provision compared with the pay-as-you-go financed pension insurance is. The younger birth cohorts profit correspondingly earlier or later from the shift towards the capital-funded system. In contrast, the advantage associated with this shift declines if the private provision turns out to be less profitable or the Statutory Pension Insurance Scheme turns out to be more profitable as a consequence of higher wage growth.

132: Men and women are affected to a different degree by the new regulations in the Pension Insurance Sustainability Act. For men, the return disadvantages are less for older cohorts and the advantages for future cohorts are higher as compared to women (see graph 8). This difference is based on the fact that the rate of return in the Statutory Pension Insurance Scheme is lower for men than for women because of their, on average, shorter life expectancy. In contrast, the private old-age provision used here as a comparison offers both genders the same rate of return. This means that women receive a lower monthly pension over a longer time span than men. Therefore, the relative improvement achievable as regards the rate of return is higher for men when adding more elements of capital funded old-age provision.

133: With the “Retirement Income Act” (*Alterseinkünftegesetz*) passed in summer 2004, a unisex tariff was determined as a requirement for the subsidy linked with the “Riester-Pension” (Section 1, subsection 1, Act on Certification of old-age provision contracts, *Altersvorsorgeverträge-Zertifizierungsgesetz*). In the special case of the Riester-Pensions, the relatively better position for men as described above can no longer arise. For all other private provision plans this preferential position is, for the time being, still the case.

d. Assessment of the development of the rate of return

134: The examples given of calculations for the expected development of the rate of return in old-age provision suggest that in general the implicit rate of return in the Statutory Pension Insurance Scheme remains positive in the foreseeable future. There is, therefore, no reason to question the future of a pay-as-you-go pension scheme in principle.[20] Admittedly, the rates of return will show a noticeable decline. The level of the rate of return would turn out to be considerably lower and the return loss clearly higher if the calculations were made with a wage growth rate below 3 percent. The development of the rates of return for different birth cohorts in the pay-as-you-go system can be interpreted as a measure for the intergenerational redistribution at the expenses of future generations and as a measure for intergenerational unequal treatment through the system of the Statutory Pension. On its own, the decline in the rates of return due to the reform for the current working population and pensioners already produces more even intergenerational distribution. The current generation has to bear the burden but not future generations.

135: Taking into account possible and necessary additional private pensions, future generations are likely to enjoy an advantage due to the previous reform measures brought into effect. This is due to the higher rate of return in the capital-funded system. The decline in the benefit volume in the pay-as-you-go financed pension insurance reduces the implicit tax of this old-age security system in the long run, not its implicit rate of return, since the

---

[20] See report 2004/2005 of the German Council of Economic Experts (in German), Jahresgutachten 2004/5 des Sachverständigenrats zur Begutachtung der gesamtwirtschaftlichen Entwicklung „Erfolge im Ausland - Herausforderungen im Inland", p. 302 ff.

insured have to invest a smaller part of their income in this form of old-age provision.

136: In the transitional phase, each shift from a pay-as-you-go to a capital-funded system is linked with an excess burden for the elderly. The declining development of the rates of return may justify this. But the question of intergenerational justice regarding distribution is more complex and cannot be lessened on this indicator alone. A gain in efficiency in terms of improvements for some without deteriorations for others cannot be expected from just a shift in the means of financing pensions since the advantages for young are just enough to balance out the disadvantages for older generations. Each pension reform implies a decision about the distribution of the burden between the generations, a decision that, in the final analysis, has to be made at a political level.

IX. Conclusions

137: The 2004 Pension Insurance Report concludes that next year and in the medium term until 2008 the contribution rate in the pension insurance scheme stays constant. In addition, it is assumed that the sustainability reserve fund will have been built up from 2006 onwards. It is the GSAC's opinion that the calculations are based on very optimistic assumptions as regards future economic development.

138: Through the start taken towards the establishment of an additional capital funded old-age provision in the 2001 pension reform and the pension policy in previous years the groundwork has been laid for the long-term stabilisation of old-age security provision.

139: Given that the long term calculations reveal contradictions between targets for the contribution rate and pension level, the need for further action in the future is anticipated, and thus reform. The GSAC will participate in discussions about the further development of the pension insurance scheme.
140: The calculations on the rate of return for contributions show that it will stay positive in the future. Moreover, the much-needed private old-age provision is likely to contribute to a stabilisation of the development of the total rate of return. Although the basic tendency of the calculation results are not open to doubt, it must be admitted that, depending on the assumptions made, they vary considerably.
141: The GSAC believes that for the pension insurance's long-term stability and in order to recover the trust of current and future contributors to the Statutory Pension Insurance Scheme as the central system of old-age security in Germany it is necessary to reach a broad political consensus – as in 1989 when passing the Act on the 1992 Pension Reform – for measures regarding further adjustment of the pension insurance to changing demographic, economic and social conditions.

Berlin, November 25th, 2004

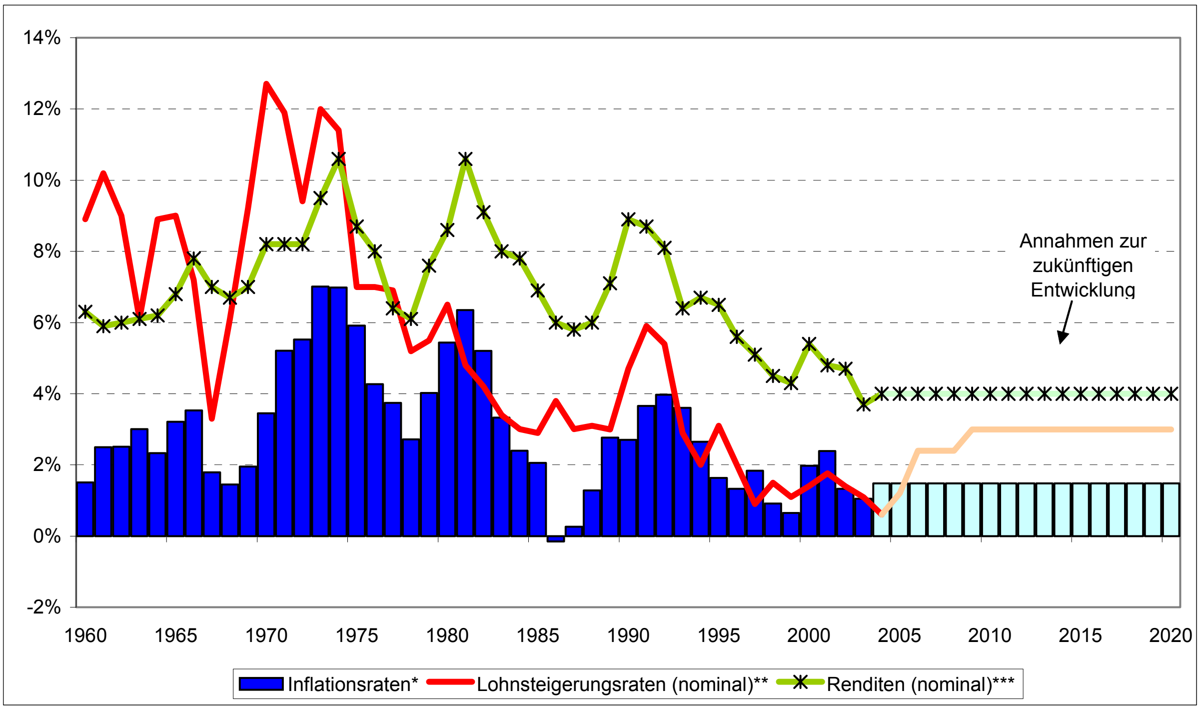
University Professor Dr. Dr. h.c. Bert Rürup

Appendix – Tables and graphs

Table 1: Results of the calculations on the rates of return for men and women

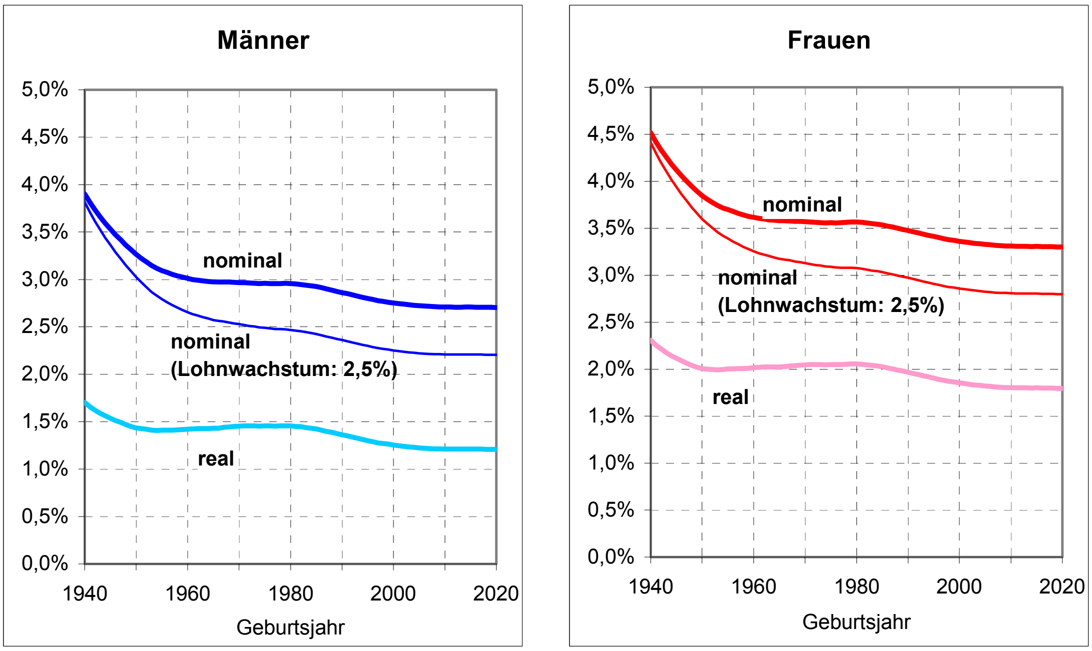
	Mann, ohne Hinterbliebenenrente			Mann, mit Hinterbliebenen-rente		Frau, ohne Hinterbliebenen-rente		Frau, mit Hinterbliebenen-rente	
Renteneintritt im Alter von ...	**65**	**60**	**65**	**60**	**65**	**60**	**65**	**60**	**65**
Renteneintritt im Jahr ...	**2004**	**2004**	**2009**	**2004**	**2009**	**2004**	**2009**	**2004**	**2009**
Summe Beiträge	102.389	100.789	124.387	100.789	124.387	100.789	124.387	100.789	124.387
Barwert Beiträge	203.700	193.382	215.197	193.382	215.197	193.382	215.197	193.382	215.197
Summe Renten	276.151	258.790	320.971	310.864	395.408	329.300	409.503	386.547	490.580
Barwert Renten	204.082	177.434	191.991	199.299	221.058	207.501	227.423	227.893	254.803
Rendite nominal	4,01%	3,68%	3,59%	4,11%	4,09%	4,25%	4,19%	4,55%	4,54%
... ohne Nachhaltigkeitsfaktor	4,02%	3,70%	3,64%	4,14%	4,15%	4,29%	4,24%	4,60%	4,61%
Rendite real	1,75%	1,55%	1,56%	1,98%	2,05%	2,12%	2,14%	2,46%	2,49%
... ohne Nachhaltigkeitsfaktor	1,77%	1,58%	1,60%	2,01%	2,10%	2,16%	2,20%	2,47%	2,56%

Graph 1: Development of the average wages and salaries, the capital market interest rate and the inflation rate since 1960



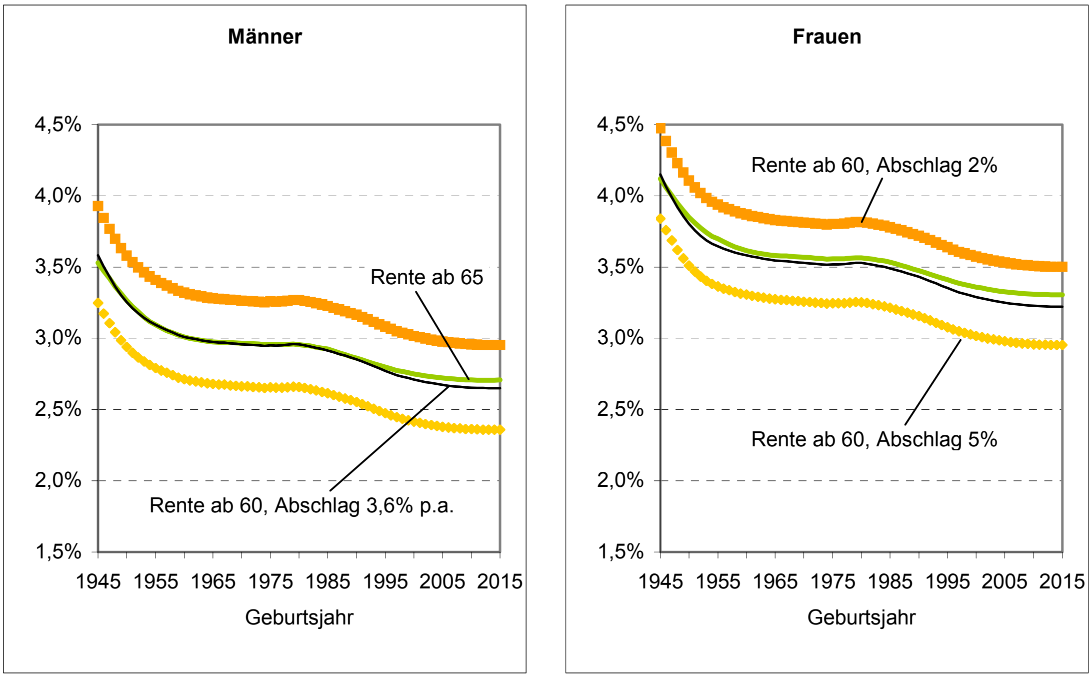
* Preisindex für die Lebenshaltung aller privaten Haushalte, bis 1990: Westdeutschland, ab 1991: Deutschland insgesamt.
** Veränderungsraten des Durchschnittsentgelts lt. SGB VI, Anlage 1.
*** Umlaufrendite inländischer Inhaberschuldverschreibungen insgesamt.
Quelle: Monatsbericht der Deutschen Bundesbank.

Graph 2: Development of the rates of return in the Statutory Pension Insurance Scheme for men and women

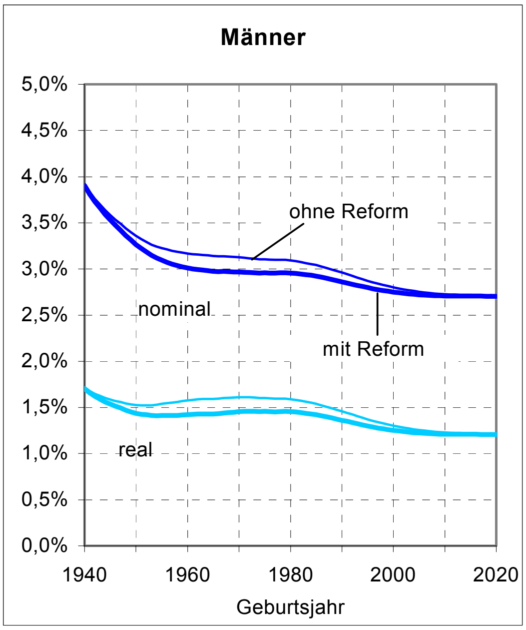


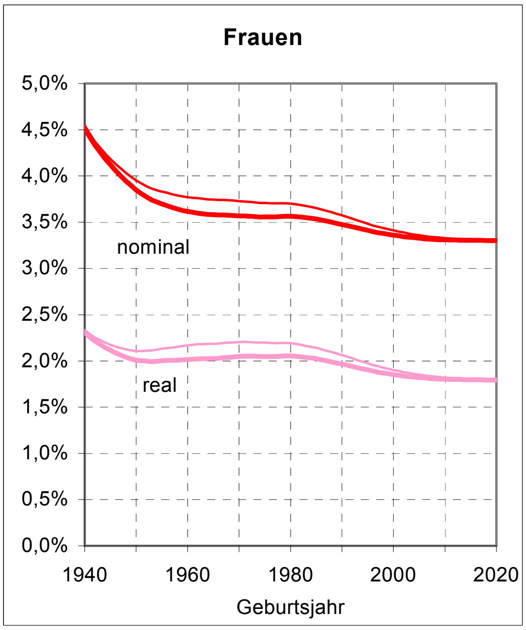
* Renteneintritt nach 45 Versicherungsjahren nach Vollendung des 65. Lebensjahres.

Graph 3: **Development** of the nominal rates of return on early retirement in comparison with retirement at state pension age

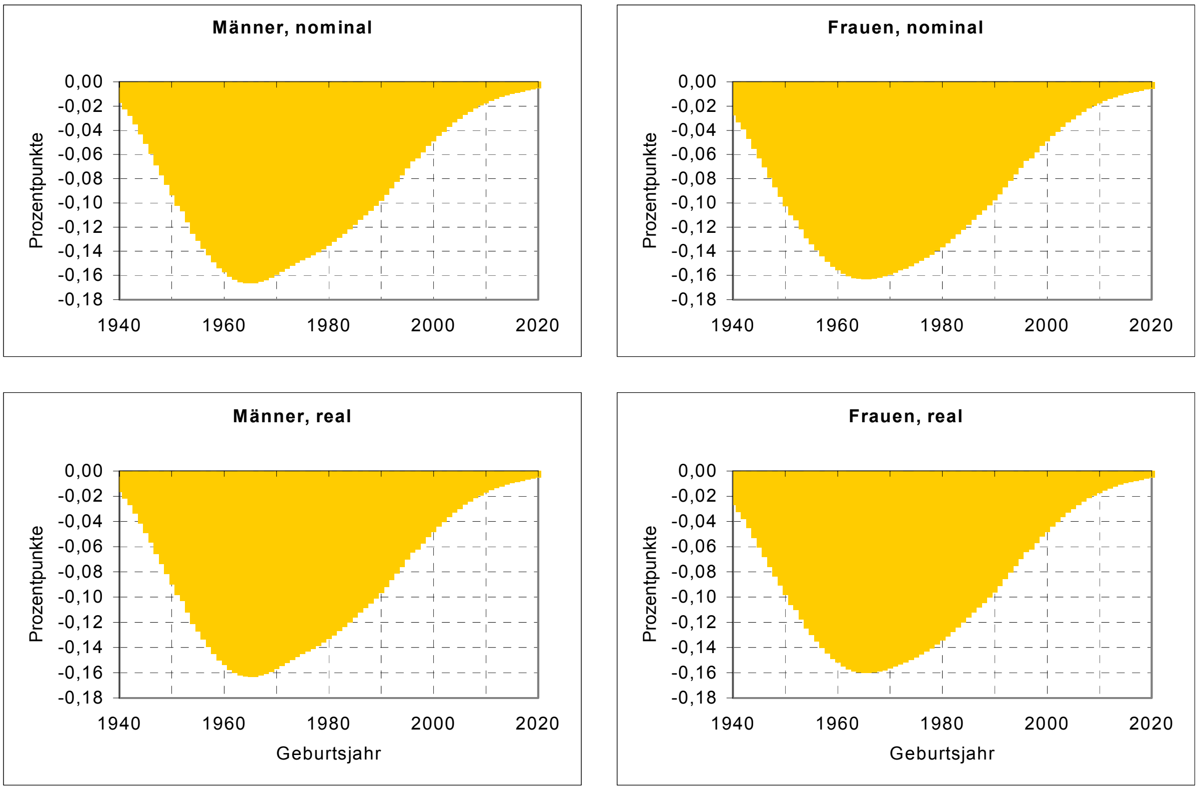


Graph 4: Development of the rates of return in the Statutory Pension Insurance Scheme with and without reform measures



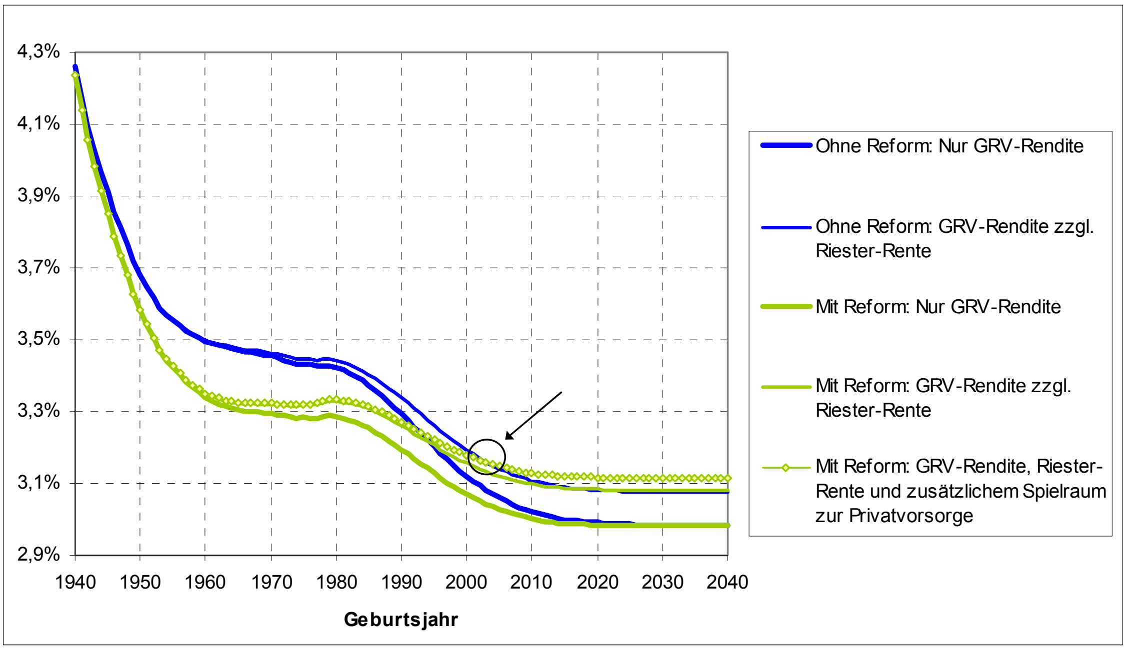


Graph 5: Changes in the implicit rates of return as a consequence of the Pension Insurance Sustainability Act



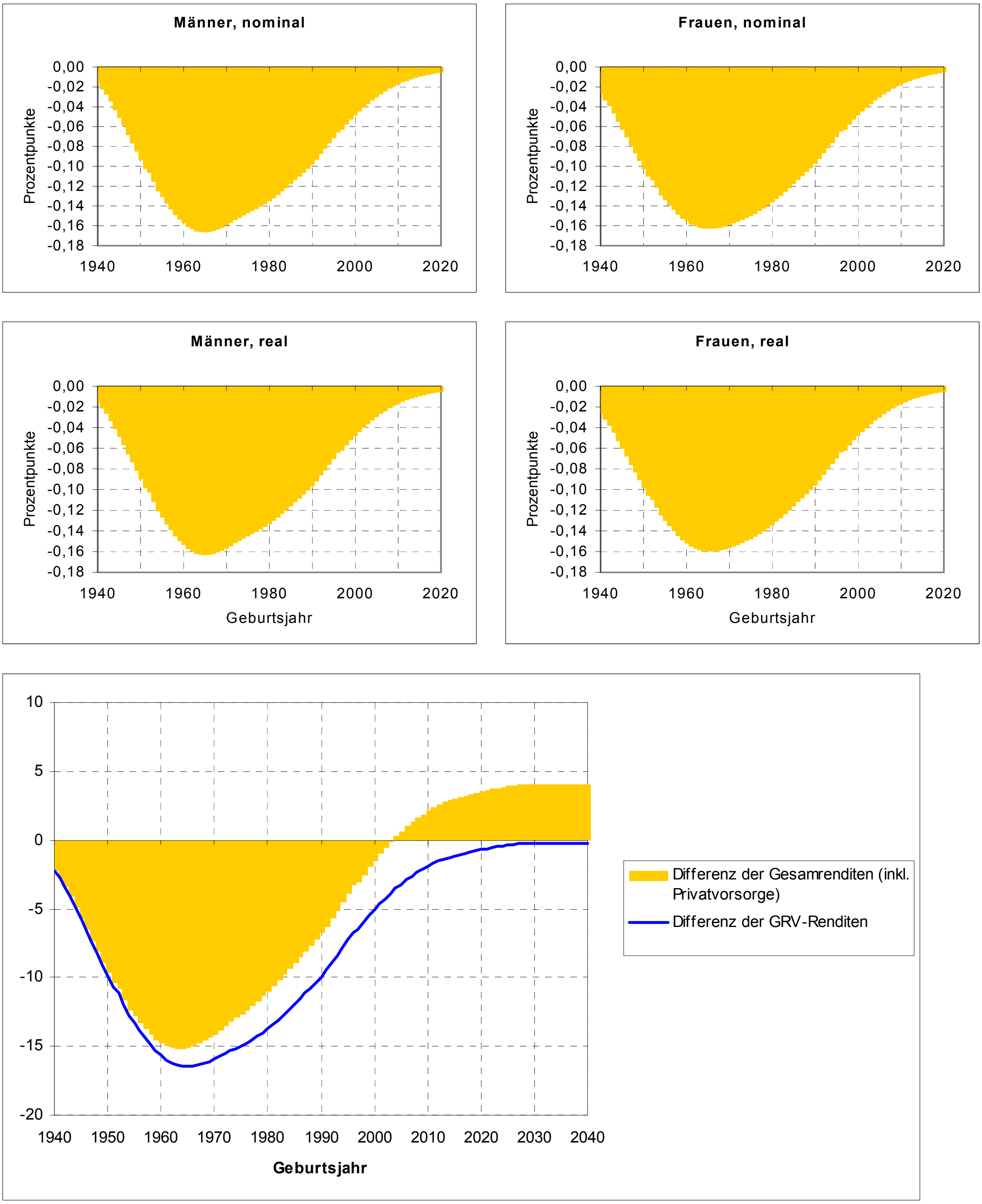
Graph 6: Real rates of return of pensions (men and women) – with and without measures of the Pension Insurance Sustainability

Act



4,3%
4,1%
3,9%
3,7%
3,5%
3,3%
3,1%
2,9%
1940
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
Geburtsjahr
Ohne Reform: Nur GRV-Rendite
Ohne Reform: GRV-Rendite zzgl. Riester-Rente
Mit Reform: Nur GRV-Rendite
Mit Reform: GRV-Rendite zzgl. Riester-Rente
Mit Reform: GRV-Rendite, Riester-Rente und zusätzlichem Spielraum zur Privatvorsorge

Graph 7: Changes in the real rates of return (men and women) as a consequence of the Pension Insurance Sustainability Act



Graph 8: Changes in the real rates of return for men and women