Public finances*

General government budget

2016: declining surplus and …

The setting for Germany's public finances remains favourable this year. Although there has been mounting uncertainty since the Brexit vote, its short-term impact on the government budget appears to be marginal. The year 2016 looks set to end with another surplus, albeit one which is likely to be smaller than last year (2015: 0.6% of gross domestic product (GDP)). On the back of a favourable cyclical position and labour market situation, government budgets are also benefiting from further diminishing interest expenditure.[1] However, that advantage is likely to be outweighed by additional structural outlays in other areas. First, expenditure on refugees and other immigrants is rising on the year, particularly because in 2015 many refugees only arrived in autumn, which meant that the related expenditure only affected a few months. Second, the budgetary stance is expansionary this year in other fields, too. The tax and social contributions ratio is unlikely to change much, in part because the (limited) income tax cuts are partially offset by fiscal drag[2] and the health insurance institutions have, on average, raised their additional contribution rates distinctly. However, over and above the additional spending on immigration, expenditure is being increased in various areas, such as housing allowance, infrastructure and child day-care. Moreover, the social security funds' payments for healthcare, long-term care and pensions will also experience dynamic growth over the year as a whole. An additional burden is presented by calls on guarantees in connection with the spin-off of a portfolio belonging to HSH Nordbank.[3]

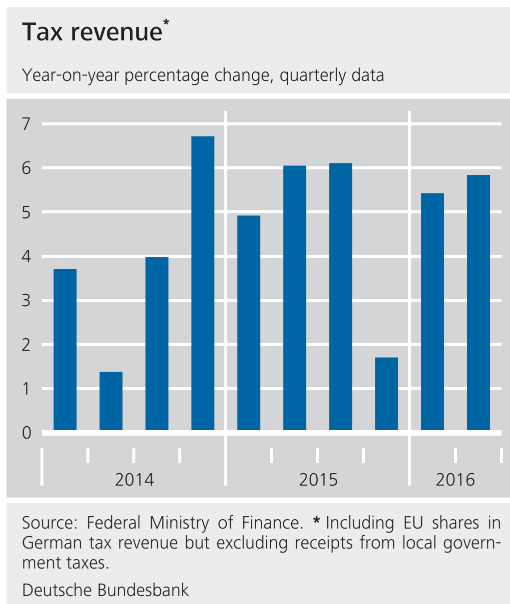
… further receding debt ratio

The debt ratio stood at 71.1% at the end of the first quarter of 2016. While this was barely down from the level at the end of 2015 (71.2%), the downward movement should basically accelerate. Thus the debt ratio frequently traces an erratic course in the short term. Amongst other things, central government raised funds through securities repurchase agreements (repos) on a relatively large scale in the first quarter, while money market deposits were increased (balance sheet extension). For the year as a whole, growth in nominal GDP in the ratio's denominator will significantly depress the debt ratio, and a surplus is on the cards. Furthermore, liabilities in connection with government support measures for the financial sector should continue decreasing, in spite of the burdens relating to HSH Nordbank.

Favourable medium-term outlook

The medium-term outlook for Germany's public finances remains sound.[4] Although expenditure connected with the influx of refugees cannot yet be gauged precisely, from today's perspective it appears to be manageable at up to ½% of GDP annually. Recent experiences underline the importance of creating safety cushions below the deficit ceilings that provide room for

* The section entitled "General government budget" relates to the national accounts and the Maastricht ratios. The subsequent more detailed reporting on the budgets of central, state and local government and of the social security funds is based on the figures as defined in the government finance statistics (which are generally in line with the budget accounts).
1 In the national accounts – unlike in the government finance statistics – premiums and discounts on the nominal value of bond issues are recorded on an accrual basis. A premium is thus recorded as negative interest expenditure spread over the life of the bond.
2 In this context, the term "fiscal drag" encompasses the total positive revenue effect of income tax bracket creep and the negative impact of the fact that specific excise duties are largely independent of prices.
3 Guarantees in the amount of €2½ billion are being called, impacting on state government deficits as defined in the national accounts.
4 For the medium term up to 2020, the Federal Ministry of Finance expects general government to post slight surpluses of ¼% of GDP and the debt ratio to drop below the 60% limit in the final year. The ceiling of 0.5% of GDP for the general government structural deficit would thus be adhered to including a certain safety margin. See Federal Ministry of Finance, Mittelfristige Finanzprojektion der Öffentlichen Haushalte, Monatsbericht, July 2016, pp 19-22. The Independent Advisory Board of the Stability Council also considers compliance with the limit to be achievable by some margin based on the current planning; see Independent Advisory Board of the Stability Council, Fifth statement, On compliance with the upper limit for the structural general government deficit pursuant to Section 51 (2) of the Budgetary Principles Act, 8 June 2016.



Tax revenue*

Year-on-year percentage change, quarterly data

Source: Federal Ministry of Finance. * Including EU shares in German tax revenue but excluding receipts from local government taxes.

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manoeuvre within the fiscal framework to cope with unexpectedly unfavourable developments. In view of the requirements set by the national debt brake, this suggests that policymakers should generally strive to generate moderate structural surpluses in the future as well.

Fiscal policy could enhance underlying conditions without impacting budget and …

Yet there are calls from some quarters for Germany to fully exhaust the budget limits in order to provide additional fiscal impetus to the economy. But given the German economy's ongoing buoyant momentum, there is no need for an additional stimulus; moreover, the effect of such a German stimulus package on other countries is likely to be negligible (see the box on pages 13 to 17). Nonetheless, it is important to seek to achieve improvements in the structure of the budget. To do so, it would be advisable to give greater prominence to growth-enhancing expenditure categories, exploit efficiency reserves and limit the burden of taxes and social contributions. In particular, policymakers should resist the temptation to use the present favourable situation to adopt new spending programmes that will place further *ex ante* strains on future budgets and necessitate additional countermeasures later on. This applies *inter alia* to the statutory pension insurance scheme, which already faces major challenges going forward (see the excursus on pages 68 to 77).

… use extra scope above safety margins to reduce taxes and social contributions

Positive shocks relating, amongst other things, to interest expenditure, have recently triggered in the main higher expenditure in other areas. It would therefore make sense in future, if additional budgetary leeway emerges over and above the desired safety margins, to reduce the burden of taxes and social contributions. The Federal Employment Agency, for instance, has accumulated relatively large reserves, which is a sensible precaution in the current favourable setting given the pronounced cyclicality of its budget. But since larger surpluses are expected in the coming years, thought could be given to lowering the contribution rate in order to dampen the continued build-up of its reserves. Another point to consider is that central, state and local government budgets are profiting from solid economic growth by way of clearly increasing tax receipts, while the tax ratio has meanwhile almost climbed back up to the relatively high level recorded in the year 2000. In view of this, it would be worth considering cutting income tax. One particular option would be to reduce the "solidarity surcharge". This add-on to various income taxes imposed by the Federal Government and linked to the existence of particular financing needs generates revenue of ½% of GDP, whereas the special-purpose grants to the east German federal states, which were given as the reason for introducing the surcharge, are now low in comparison and will have been phased out by the end of the decade.

Budgetary development of central, state and local government

Tax revenue

Year-on-year growth in tax revenue[5] in the second quarter of 2016 came to 6% (see the adjacent chart and the table on page 61). This increase was driven by a surge in profit-related

5 Including EU shares in German tax revenue but excluding receipts from local government taxes, which are not yet known for the quarter under review.

Tax revenue

Type of tax	H1				Estimate for 2016[1,2]	Q2			
	2015	2016				2015	2016		
	€ billion		Year-on-year change € billion	%	Year-on-year change %	€ billion		Year-on-year change € billion	%
Tax revenue, total[2]	300.1	317.0	+ 16.9	+ 5.6	+ 3.0	153.2	162.1	+ 8.9	+ 5.8
of which									
Wage tax	85.8	87.9	+ 2.1	+ 2.4	+ 3.3	44.3	45.3	+ 1.0	+ 2.4
Profit-related taxes[3]	50.1	57.4	+ 7.3	+ 14.5	+ 1.6	25.5	29.2	+ 3.7	+ 14.6
Assessed income tax	25.5	27.5	+ 2.1	+ 8.1	+ 6.2	12.3	12.9	+ 0.6	+ 5.0
Corporation tax	11.3	15.8	+ 4.5	+ 39.6	+ 5.3	5.9	7.3	+ 1.5	+ 25.3
Investment income tax[4]	13.4	14.1	+ 0.7	+ 5.4	− 9.6	7.3	8.9	+ 1.6	+ 22.2
Turnover taxes[5]	102.6	107.1	+ 4.5	+ 4.4	+ 4.6	50.8	52.7	+ 2.0	+ 3.8
Energy tax	14.2	14.5	+ 0.3	+ 1.9	+ 1.0	9.5	9.9	+ 0.3	+ 3.7
Tobacco tax	5.9	6.9	+ 1.0	+ 16.2	− 3.1	3.7	4.1	+ 0.5	+ 12.4

Sources: Federal Ministry of Finance and Bundesbank calculations. **1** According to official tax estimate of May 2016. **2** Including EU shares in German tax revenue but excluding receipts from local government taxes. **3** Employee refunds, homebuyers' grant and investment grant deducted from revenue. **4** Withholding tax on interest income and capital gains, non-assessed taxes on earnings. **5** Turnover tax and import turnover tax.

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Dynamic increase in tax revenue in Q2 due to sharp rise in taxes on earnings

taxes (+14½%), particularly in non-assessed taxes on earnings (+56½%, mainly investment income tax on dividends). This can probably be ascribed largely to earlier dividend distribution dates than last year, which means that a counterswing should be expected as the year progresses. Though revenue growth in assessed taxes on earnings slowed after the first quarter of 2016, it was still strong. By contrast, receipts from withholding tax on interest income and capital gains continued their steep decline. Although developments in gross wages and salaries remain positive, wage tax receipts saw dampened growth (+2½%), reflecting increases in the basic income tax allowance and the child tax allowance, and in child benefit, which is deducted from revenue, as well as additional tax relief. At 4%, the rise in turnover tax receipts was in line with expectations for growth in the (nominal) macroeconomic reference variables (private consumption, private housing construction and parts of government spending). Revenue from tobacco tax was still rising strongly in the second quarter (+12½%). However, this one-off effect in connection with the entry into force of the Regulation Governing the Implementation of the Tobacco Products Directive *(Verordnung zur Umsetzung der Richtlinie über Tabakerzeugnisse)* on 20 May 2016 is likely to be offset by lower revenue over the rest of the year.

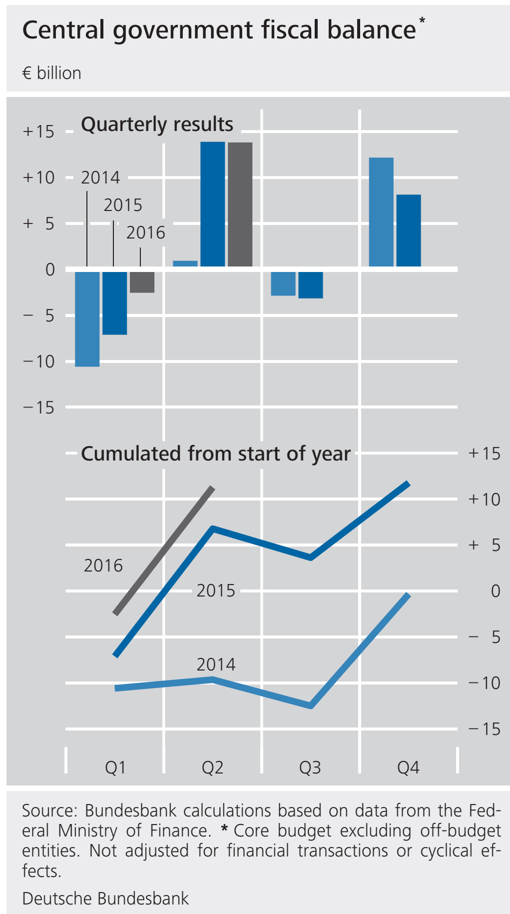
Dampening effects expected in H2

According to the official tax estimate from May, tax revenue (including local government taxes) is expected to expand only moderately (by 2½%) in 2016 as a whole. This is due mainly to factoring in sizeable tax refunds owing to past court rulings.[6] Growth will also be constrained by legislative changes, however, particularly the

6 These mainly affected profit-related taxes. For information on the rulings included, see Deutsche Bundesbank, Monthly Report, May 2016, p 67. Unlike the cash flows described here, the impact of these court rulings is recorded in the national accounts as increasing expenditure and is recognised at the time each ruling is announced (ie in previous years). Consequently, tax revenue as recorded in the national accounts will register a much bigger rise.

Central government fiscal balance*

€ billion



Source: Bundesbank calculations based on data from the Federal Ministry of Finance. * Core budget excluding off-budget entities. Not adjusted for financial transactions or cyclical effects.

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income tax relief mentioned previously. Revenue growth in the first half of 2016 was significantly better than forecast. Even though a certain slowdown is currently expected for the rest of the year – above and beyond the expected effects of the court rulings – the May tax estimate could thus be surpassed.

Central government budget

Surplus still high in Q2 despite dropout of frequency auction windfall

Central government generated a large surplus of €14 billion in the second quarter, as it had done one year previously. Revenue rose by a moderate 1% on balance (€1 billion). Tax receipts saw renewed dynamic growth of 6½% (€5 billion), a large part of which (€2 billion) was again attributable to smaller transfers to the EU budget, which are deducted from tax revenue. However, other revenue fell by €4 billion, as one year earlier central government had received substantial proceeds from the mobile phone frequency auction. Overall expenditure rose in parallel with revenue. Once again, higher payments to the social security funds (primarily the statutory pension insurance scheme and, following the expiry of the reduced transfers, to the health fund) placed a strain on the budget, as did transfers to the rest of the world and for military procurements. This was offset by another considerable drop in interest expenditure of €1½ billion, which was due to higher premiums on new bond issuance. In the budget accounts – unlike in the national accounts on which the European fiscal rules are based – these premiums are not spread evenly over the entire term of the newly issued debt instruments but instead are recognised in full immediately as lowering expenditure.[7] Both economic logic and prudent budget management suggest that it would make sense to change over from recording such payments in the budget on a cash flow to an accrual basis.

H1 buoyant, slump in H2 unlikely

In the first half of 2016, the central government surplus rose by €4½ billion on the year to €11½ billion. For the year as a whole, however, a deficit of €6½ billion is projected, amounting to a deterioration of €18 billion. Yet given the favourable figures so far, such a steep slump in the second half of the year is not discernible at present. On the one hand, transfers to the EU budget are likely to be higher than last year and the refunds relating to court rulings that were anticipated in the May tax estimate will probably have a greater impact. In addition, €2 billion will be transferred to state government as an "immigrant integration payment" agreed in July. On the other hand, positive baseline effects will result from the non-recurrence of the combined €5 billion transfer to the Fund to promote municipal investment and the Energy and climate fund made in the second half of 2015 and of the temporary ceding of turnover tax receipts to state government in the face of the sharp influx of refugees. In addition, central

7 On balance, interest expenditure as recorded in the budget actually generated positive revenue of almost €1 billion.

government has not yet claimed its planned substantial reimbursement from the Flood relief fund (€1½ billion).

Outturn well above target, surplus expected

The much better-than-envisaged performance is also evidenced in a comparison with the budget estimates. First, additional tax revenue (€2 billion) is likely based on the May estimate. Second, other revenue will be boosted by several favourable factors such as a somewhat higher Bundesbank profit and an unexpected contribution refund by the supplementary pension scheme of central and state government (*Versorgungsanstalt des Bundes und der Länder,* or VBL). Third, given the persistently low yield level, savings of more than €5 billion should be made on the estimated interest expenditure. All things considered, the refugee reserve built up from the 2015 budget surplus is thus unlikely to be half depleted as planned, but instead will probably be stocked up considerably thanks to a budget surplus. After including the forecast near-neutral cyclical component and the deficits of the off-budget entities, which will probably be slightly smaller than estimated (€5½ billion), the central government budget would thus safely comply with the debt brake limit for the structural balance of -0.35% of GDP (-€10 billion).

Counting reserves towards structural balance inconsistent with debt brake rules

Under the Federal Government's current approach, additional transfers to the refugee reserve are recorded in the context of the debt brake as worsening the structural balance and future withdrawals from the fund as improving it. However, the EU rules are geared to the fiscal balance, which disregards changes in reserves and financial transactions.[8] In a consistent approach under the debt brake framework, therefore, changes in reserves should be excluded from the structural balance. Otherwise, there is the risk that, in the event of large withdrawals from reserves, the budget limit under the EU rules will not be safeguarded by the national debt brake – even though this is the debt brake's basic aim.[9]

Draft budget for 2017 again contains no new net borrowing, but scheduled depletion of the refugee reserve

The draft budget for 2017, which was approved by the Federal Cabinet at the beginning of July, again contains no new net borrowing. Spending is predicted to rise by 3½% (€12 billion) compared with the 2016 budget plan. If the marked savings on interest expenditure are stripped out, the increase amounts to no less than 5%. Higher budget appropriations come, in particular, from the Ministry of Labour and Social Affairs for the statutory pension insurance scheme and – as a consequence of the recent mass immigration – for benefits under the means-tested basic allowance. The budgets of the defence, transport and construction ministries, too, are being raised distinctly. On the revenue side, additional tax receipts of €13½ billion are projected compared with the target figure for 2016. Other revenue is down on balance – evidently because of precautionary budgetary items, eg for the rule on the *per capita* payment to state government for refugees, which has not yet been finalised and hence is not specified in the budget. A withdrawal of €6½ billion from the refugee reserve is envisaged (and, based on the budget target figure for 2016 and the planning for 2017, the reserve would thus be exhausted at the end of 2017). After also deducting coin seigniorage, the draft budget contains a calculated deficit of €7 billion.

Debt brake ceiling clearly undershot only if withdrawal from reserve is counted

To calculate the structural balance relevant under the debt brake, the Federal Ministry of Finance starts from the planned net borrowing of €0 and deducts both a €½ billion revenue surplus from financial transactions and a cyclical strain of €1 billion (see the table on page 64).

8 For information on the concepts relating to the debt brake, see Deutsche Bundesbank, Key central government budget data in connection with the debt brake, Monthly Report, February 2016, pp 68-69.
9 If transfers to reserves were not counted towards the structural balance under the debt brake as an expense, the balance would be better. The control account would thus be credited accordingly. While (under the Federal Government's accounting practice) reserves can be used to plug future shortfalls at the budget preparation stage, this is explicitly ruled out when crediting the control account introduced along with the debt brake. A credit balance on the control account can only be used to offset shortfalls at the budget implementation stage.

Central government's medium-term fiscal planning for 2016 to 2020 and structural net borrowing under the debt brake

€ billion

Item	Actual 2014	Actual 2015	Target 2016	Draft 2017	Fiscal plan 2018	2019	2020
Expenditure[1]	295.9	311.4	316.9	328.7	331.1	343.3	349.3
of which							
Investment[2]	24.9	29.6	31.5	33.3	34.5	35.1	30.8
Revenue[1, 3]	295.9	311.4	316.9	328.7	331.1	343.3	349.3
of which							
Tax revenue[1]	270.8	281.7	288.1	301.8	315.5	327.9	339.4
Net borrowing (–)/repayment (+)	0	0	0	0	0	0	0
Transfers to (–)/withdrawals from (+) reserves	0	– 12.1	6.1	6.7	0	0	0
Fiscal balance[4]	– 0.3	11.8	– 6.4	– 7.0	– 0.3	– 0.3	– 0.3
Cyclical component[5]	– 5.9	– 1.4	– 1.2	– 1.0	– 0.7	– 0.0	0.0
Balance of financial transactions[6]	– 2.4	1.9	0.1	0.5	.	.	.
Balance of relevant off-budget entities							
Energy and climate fund	– 0.1	1.9	– 0.4	– 1.2	.	.	.
Relief fund (2013 flood)	– 0.7	– 0.9	– 3.5	– 1.5	.	.	.
Fund to promote municipal investment	–	3.5	– 1.5	– 0.8	.	.	.
Structural net borrowing (–)/repayment (+)[7]	7.5	3.9	– 4.3	– 2.9	.	.	.
Structural fiscal balance[7]	7.2	15.8	– 10.7	– 9.9	.	.	.
Memo item							
Ceiling	– 26.6	– 18.6	– 10.2	– 10.6	– 11.0	– 11.3	– 11.7

1 After deduction of supplementary central government grants, shares of energy tax revenue, compensation under the 2009 reform of motor vehicle tax and consolidation assistance to Federal states from 2011. **2** Excluding shares in the ESM. **3** Including coin seigniorage. **4** Corresponds to the difference between the revenue and expenditure of the core budget as defined in the government finance statistics and equals net borrowing (–)/repayment (+) less transfers to (–)/withdrawals from (+) reserves and less coin seigniorage. **5** Data for 2014 and 2015 taken from the 2015 budgetary account. Data for 2016 to 2020 according to Federal Government's 2016 spring forecast. **6** According to the definition of the relevant fiscal year. **7** Meaning of structural: plus the balance of relevant off-budget entities less the cyclical component and less the balance of financial transactions.

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Given the high utilisation of production capacity and low unemployment level, however, there seems to be no reason to assume a negative cyclical effect (see page 49). Rather, the Bundesbank estimates that there will be a positive cyclical impact on the budget, making its structural position appear less favourable.[10] The structural balance under the debt brake also incorporates the deficits expected for the off-budget entities Flood relief fund, Fund to promote municipal investment, and Energy and climate fund, which come to a combined total of €3½ billion. Hence, there is a marked safety margin of €7½ billion below the debt brake ceiling of €10½ billion. If, however, the withdrawal from the refugee reserve is excluded from the calculation in keeping with the EU rules, as described above, there would be hardly any safety margin.

Estimates are cautious, however

On balance, however, a more favourable outturn than estimated seems attainable for 2017, too. The anticipated brighter 2016 budget outturn should partly provide a better starting point for 2017. This should outweigh the foreseeable additional strains, notably caused by the agreement reached between central and state government in the intervening period on a flat immigrant integration payment of €2 billion. Looking at the refugee reserve, it would be advisable to use any amounts that are not needed to pay down debt by the end of 2017 at the latest. By that time it should be possible to relatively accurately gauge future expenditures on refugees,[11] and these should then be financed out of regular budget income streams. The practice of maintaining the reserve for unexpected developments should then be discon-

10 For information on the Eurosystem cyclical adjustment approach used here, see Deutsche Bundesbank, A disaggregated framework for analysing public finances: Germany's fiscal track record between 2000 and 2005, Monthly Report, March 2006, pp 61-76.
11 In view of the negotiations with state government about cost-sharing for refugee-related expenses, the figure of €19 billion specified in the Federal draft budget documents seems equally as excessive as the state governments' budgeted figure of €21 billion.

tinued. Moreover, dissolving the reserve could also prevent future conflict with the European fiscal rules, as described above.

Fiscal plan to 2020 retains balanced budgets, but more ambitious target advisable

The medium-term fiscal plan to 2020 continues the balanced budget policy. In order to achieve this, a global expenditure cut of €5 billion is envisaged in 2018.[12] This would have to be factored into the next budget draft preparation, which will commence before the benchmark figures are adopted in March 2017, an election year. This implies that no budgetary leeway will be available in 2018. While a better-than-expected budget performance in 2017 could again have a positive knock-on effect on 2018, the flat immigrant integration payment of €2 billion promised to state governments immediately after the Cabinet's budget meeting already poses an additional burden, and it would still be prudent to regain a greater safety margin below the debt brake limit in the medium term. This could allow central government to better tackle the demographic challenges that are gradually emerging or resurgent funding costs in future.

Improvement and surplus for off-budget entities in Q2, …

A second-quarter surplus of €2 billion is reported for central government's off-budget entities covered by the Federal Ministry of Finance's quarterly overviews (excluding bad banks and other entities keeping commercial accounts), following a slight deficit one year earlier. This improvement owed much to privatisation proceeds booked by the Financial Market Stabilisation Fund in connection with last year's flotation of Deutsche Pfandbriefbank, the successor to Hypo Real Estate. The off-budget entities will face additional burdens in the second half of 2016 compared with the same period last year, notably stemming from central government's wish to reclaim €1½ billion from the Flood relief fund as well as the dropout of central government's special transfers of €3½ billion to the Fund to promote municipal investment and €1½ billion to the Energy and climate fund. Additional factors with a negative year-on-year impact on the full-year result include the extra payment of €2 billion already recorded in the first quarter for the redemption of a ten-year inflation-linked Federal bond[13] and the transfer of the €1½ billion bank levy, recorded as income in 2015, to Europe's new Single Resolution Board. For the year as a whole, the Federal Ministry of Finance predicts in its July *Monthly Report* that the relevant off-budget entities will post a deficit of €3½ billion, after generating a surplus of €9 billion in 2015.

… but clear deterioration and deficit expected for year as a whole

State government budgets[14]

Somewhat higher surplus in 2016 Q2 on back of further surging tax revenue growth

In the monthly cash statistics, state government core budgets registered a surplus of €4½ billion in the second quarter, compared with just over €3 billion a year earlier. Revenue expanded significantly by 6½% (€5½ billion), driven by further buoyant tax revenue growth (+9% or €5½ billion). Expenditure climbed by a total of 5% (€4 billion). Very sharp rises were recorded not only in other operating expenditure (+22% or €1½ billion) but also in transfers to other levels of government (primarily local authorities, up by a total of 7½% or €1½ billion), both presumably under the impact of the extra spending necessitated to support refugees and other immigrants. Alongside wage and salary increases, another significant rise in the number of retired civil servants made a marked contribution to growth in personnel expenditure (+3½% or €1 billion).

Slight dip expected in 2016 fiscal outturn followed by persistent surpluses

Following the May tax estimate – which takes account of marked shortfalls that will occur in the second half of the year owing to court rulings – a significantly slower pace of growth in tax revenue is projected for 2016 as a whole, (+3½%, excluding the local government tax

12 This amount is already somewhat lower than the agreed benchmark figures after the May tax estimate had shown additional revenue of €2½ billion for each of the three years covered by the fiscal plan.
13 The Federal budget finances the additionally accruing indexing costs via simultaneous transfers to a special fund.
14 The development of local government finances in the first quarter of 2016 was analysed in a short article in the Bundesbank's July 2016 Monthly Report. These are the most recent data available.

receipts of the city-states Berlin, Bremen and Hamburg). Although the rise in refugee-related expenditure is likely to decelerate significantly in the second half of 2016, the result for the year as a whole would thus be worse than in 2015 (surplus of €3 billion). However, the actual outturn will probably be far better than the budgeted figures, which envisage a total deficit of €10½ billion, whereas the Federal Ministry of Finance's July forecast for 2016 (which takes account of financial support recently pledged by central government such as the flat-rate immigrant integration payment) projects only a small deficit of €½ billion. From 2017 onwards, the state government core budgets viewed as a whole are expected to post persistent surpluses, which seems quite plausible.

Bremen invokes exemption clause, repayment in distant future

Citing the cost shock caused by the influx of immigrants and refugees, the city-state of Bremen, in its budgetary legislation[15] for 2016 and 2017, invoked the exemption clause to its debt brake rules, which had already entered into force. In each of those years, the additional borrowing amounts to around 5% of the state's total expenditure in 2015. The repayment schedules (which must be produced if the exemption clause is invoked) envisage an initial five years – including the budget year – without any repayments, after which equal amounts totalling only around ¼% of the 2015 expenditure are to be paid off over the following 25 years. Given such lengthy repayment schedules, there is a danger that the exemption clause will be invoked again in other instances before the first debts are paid off, with unambitious repayment conditions attached to these exceptions, too. This could result in a *de facto* failure to achieve the objective of limiting the state's debt level. The Stability Council has scrutinised the budget plans and, at its June meeting, already deemed Bremen's planned consolidation measures for 2016 to be inadequate, requiring the state to remedy this within a short space of time. All in all, it is important for Bremen to take further consolidation measures to significantly close its budgetary gap vis-à-vis the average fiscal position of the federal states.[16]

States need greater individual financial responsibility

No agreement has yet been reached on the reform of the current financial arrangements within the German federal system, which is due to be implemented in 2020. Central government rejected the compromise negotiated at the end of 2015 among the federal states. The primary aim of that proposal seemed to be to engineer a much more lucrative outcome for all of the states versus the *status quo* by channelling substantial additional central government transfers (nearly €10 billion) to the state government tier and then apportioning them to the individual states according to criteria which, in some cases, have very little economic justification and are ultimately political in nature. Before any more central government funds are transferred to state government there is a pressing need to markedly strengthen the states' individual responsibility for their budgets, not least by making a transparent connection between additional spending and the tax funding this incurs. For this and other reasons, there is much to be said for introducing state-specific add-ons or discounts on income tax.[17] This would also create a stronger incentive to first exploit further potential for improving cost effectiveness. At the same time, giving states the option to levy such add-ons would make it easier for them to comply with the debt brake rules.

15 Only the budgets for Bremen's state government and the municipality of Bremen had been finalised at that time. The budget for the municipality of Bremerhaven had not yet been adopted. As this municipality accounts for a smaller share of the total state budget, however, the figures cited in this section will probably require little amendment.
16 This is true irrespective of the state's comparatively good track record in budget implementation up to mid-2016, which should allow Bremen to meet the consolidation requirements without any further readjustments and thus refrain from using the additional borrowing authorisations.
17 See Deutsche Bundesbank, The reform of financial relations in the German federal system, Monthly Report, September 2014, pp 33-52.

Social security funds[18]

Statutory pension insurance scheme

Surplus grew markedly in 2016 Q2

The statutory pension insurance scheme posted a second-quarter surplus of €1 billion, which – as in the first quarter – constituted an improvement of €½ billion on the year. Revenue grew strongly (by 4%), largely as a result of ongoing favourable wage and employment developments. Given that the pension increase in mid-2015 (2.1% in western Germany, 2½% in eastern Germany) had been dampened by a special factor,[19] expenditure growth was somewhat weaker, at 3%.

Large pension rise accelerates expenditure growth

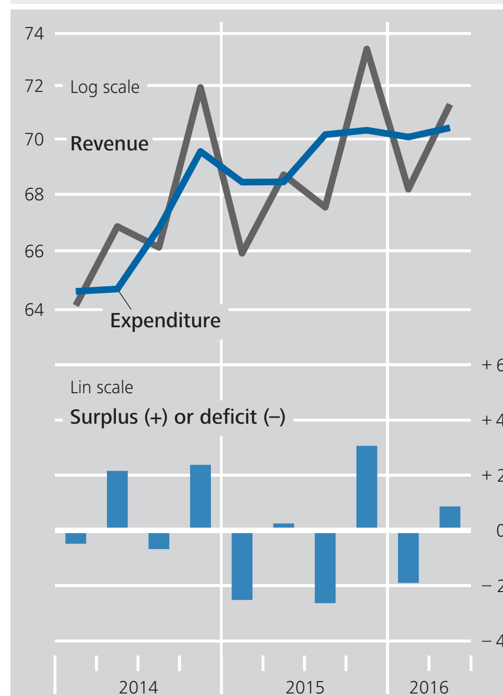
In 2016, by contrast, the mid-year pension increase was very large (4.25% in the western states and 5.95% in the eastern states).[20] Consequently, expenditure growth is set to be significantly faster in the second half of the year, while the rise in revenue will probably be comparatively steady. The deficit for the year as a whole is therefore likely to be higher than in 2015 (€1½ billion). The scheme's reserves will be depleted this year and, given the likely trend towards rising deficits, more so subsequently. Nonetheless, the current pension estimate contained in central government's three-year fiscal plan projects that the contribution rate will remain stable up to and including 2020, without the financial reserves falling beneath the floor of 0.2 times the scheme's monthly expenditure.

Pension level relatively stable up to 2020, while statutory retirement age rises further

Up to the end of the decade, the pension-to-earnings ratio[21] is also likely to remain relatively stable, at over 47%. Subsequently, however, as the "baby boomers" retire and life expectancy continues to increase, Germany is set to see a more sustained rise in the pensioner ratio and, consequently, a fall in the pension-to-earnings ratio. To curtail this development whilst limiting the contributions burden, the option of a further rise in the statutory retirement age beyond 2029 should not be ruled out (see the excursus on pages 68 to 77).

Finances of the German statutory pension insurance scheme

€ billion, quarterly data



Source: German statutory pension insurance scheme (Deutsche Rentenversicherung Bund).
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Federal Employment Agency

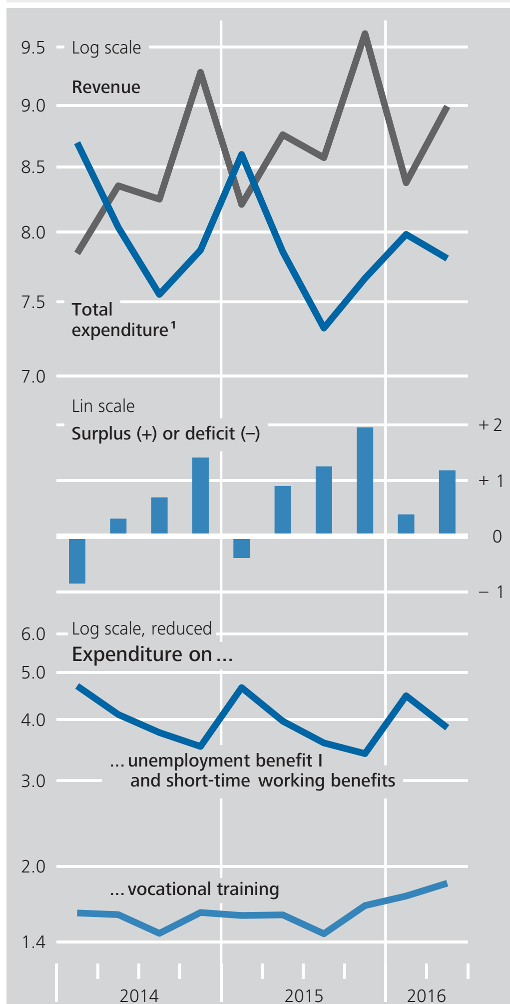
Finances continued to improve in Q2

The Federal Employment Agency posted a surplus of €1 billion (excluding the civil servants' pension fund)[22] in the second quarter of 2016,

18 The financial development of the public long-term care and statutory health insurance schemes in the first quarter of 2016 was analysed in the short articles of the June and July Monthly Reports. These are the most recent data available.
19 A statistical break caused by a change in the national accounts methodology in 2014 reduced the 2015 pension increase by 1 percentage point.
20 This year's pension increase was particularly large because both significant wage growth and last year's contribution rate cut (from 18.9% to 18.7%) pushed up the annual pension adjustment. In addition, the decline in the pensioner ratio (ratio of "equivalent pensioners" to "equivalent contribution payers") has resulted in stronger growth in pensions via the sustainability factor. The aforementioned special factor likewise played a role.
21 The pension-to-earnings ratio in the statutory pension insurance scheme is the ratio of the standard pension (given average earnings over 45 contribution years) to average pay (before tax and less social contributions in both cases).
22 The figures that follow likewise refer to the agency's core budget (excluding the civil servants' pension fund).

Finances of the Federal Employment Agency

€ billion, quarterly data



Source: Federal Employment Agency. **1** Including transfers to the civil servants' pension fund.
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which constituted a further improvement of just under €½ billion on the year. Revenue growth was moderate, at only 2½%. The main factor countering the clear rise in contribution receipts (+3½%) was a fall in revenue from insolvency benefit contributions (the level of which was cut at the beginning of the year). Total expenditure remained almost unchanged (-½%). The decline in spending on unemployment benefit I (insurance-related benefit) continued (-3%) as unemployment remained low. Expenditure was also dampened by the discontinuation of the publicly subsidised phased retirement scheme. By contrast, outlays on active labour market policy measures soared further (+16%), probably mainly as a result of training measures connected with the influx of refugees.

Significant surplus likely for year as a whole and …

Looking at 2016 as a whole, this positive trend is likely to broadly continue. As things stand, the agency's surplus is set to rise (from just over €3½ billion in 2015), once again leaving it substantially higher than in the budget plan (€1.8 billion). Currently, the Federal Employment Agency's finances are benefiting from positive employment and wage developments on the revenue side and the favourable labour market situation, with low unemployment among contribution payers, on the expenditure side. But the healthy state of the agency's finances should not be exploited by funding non-insurance-related benefits with contribution receipts. Instead, societal tasks, such as integrating the influx of immigrants into the labour market, should be financed out of general tax revenue.

… contribution rate cut worth considering in view of growing reserves

As the favourable labour market conditions are currently expected to continue in the longer term, it would be better to consider cutting the contribution rate in order to lighten the burden on contribution payers and curtail further growth in the reserves.

Excursus: longer-term pension developments

Pension discussions

Pensions are once again the subject of growing debate in Germany. As the statutory pension insurance scheme currently remains in good financial shape, it would appear that the onerous demographic changes that gave rise to earlier reforms and are continuing unabated[23] are, to some extent, taking a back seat. However, adjustments in a pay-as-you-go pension scheme cannot be avoided in an ageing society in which birth rates are falling and life expectancy is rising. In particular, younger generations would face a sharp contribution rate hike if

23 See Deutsche Bundesbank, Outlook for Germany's statutory pension insurance scheme, Monthly Report, April 2008, pp 47-72.

adjustments were not made elsewhere. In this context, the other critical factors affecting pension insurance are the pension level and the period over which a pension is drawn.

Earlier reforms in response to demographic trends

Against this background, decisions were made over the course of the last decade to scale back annual pension adjustments and gradually raise the statutory retirement age from 65 to 67 years. Up to 2030, the pension contribution rate increase should therefore be limited to no more than 22% and the pension level guaranteed under the statutory pension insurance scheme[24] maintained at a minimum of 43%. Additionally, the government-subsidised Riester pension plan – a new form of funded pension scheme – was introduced. The aim was to increase insured persons' awareness of the need for supplementary private pension provision and establish what would, in this regard, be an improved, voluntary retirement saving option as a counterbalance to the declining pension level provided under the statutory pension insurance scheme.[25]

Official projections end in 2030, but demographic pressure will persist thereafter

Despite the recent large-scale extension of benefits (mothers' pension and full pension at 63 without actuarial deductions), the contribution rate and statutory pension level caps could be maintained up to 2030[26] – especially if favourable employment developments continue. To date, however, official projections do not extend beyond 2030. In the light of demographic trends, the statutory pension insurance scheme will come under even greater pressure from 2030 on. This excursus looks at selected aspects of the current discussion in greater detail.

Old-age provision underestimated in official projections

Rising retirement age stabilises ratio of pension-drawing periods to contribution periods and …

In view of rising life expectancy, raising the statutory retirement age by two years by 2029 serves as a significant starting point in preventing the period over which insured persons draw pensions from growing longer and longer while the period over which they make contributions remains unchanged.[27] In the absence of such a measure, the ratio of pension expenditure to contribution payments would continue to climb, resulting in a correspondingly higher contribution rate being required to fund pensions.

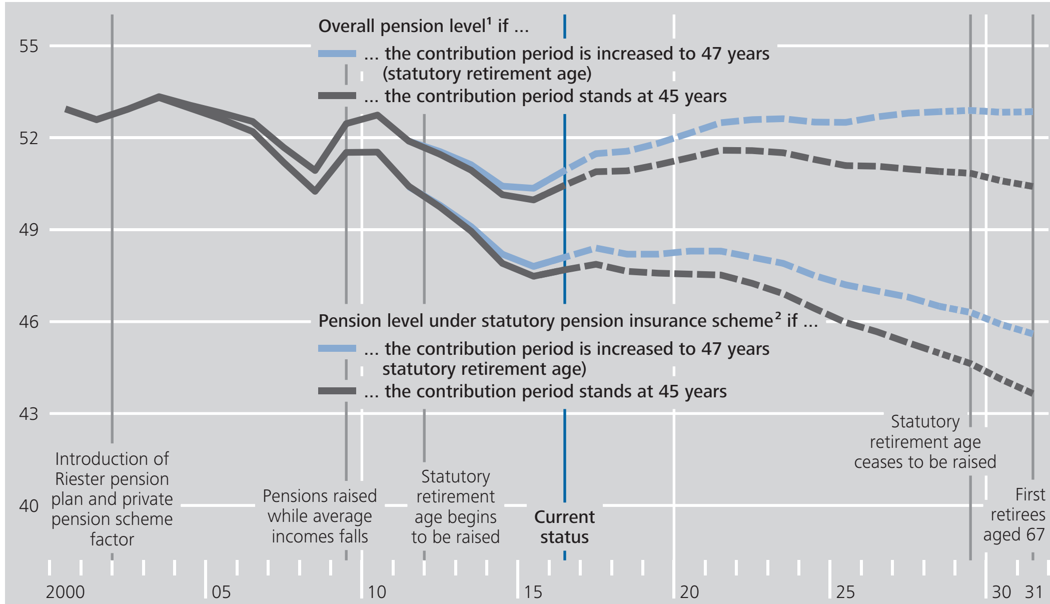
… supports pension level under statutory pension insurance scheme

The decision was also made to reduce the level of pensions provided under the statutory pension insurance scheme. The calculations performed by the Federal Government in this regard show changes in standard pensions that recipients are entitled to draw after 45 uninterrupted years of contributions (on an average income),[28] meaning that they ignore the raising of the statutory retirement age to 67 and, by extension, the intended increase in the number of years worked by employees. From the perspective of individual pensioners, however, longer contribution periods equate to additional pension benefits. Assuming a correspondingly longer period of employment, the

24 Ratio of an annual average standard pension less contributions to the health and long-term care insurance schemes to average annual income less social contributions, before the deduction of taxes in each case (section 154 of the Sixth Book of the Social Security Code (Sozialgesetzbuch VI)).
25 In addition, the subsidisation of company pension schemes, in particular, was expanded through tax privileges and the right to deferred compensation was introduced. It was also decided to switch to the downstream taxation of pensions provided under the statutory pension insurance scheme.
26 See Federal Ministry of Labour and Social Affairs, Pension Insurance Report 2015, November 2015.
27 This measure will first take full effect for the 1964 cohort – ie individuals who will not reach retirement age until 2031, at 67, instead of in 2029, at 65.
28 For the official projections, see Federal Ministry of Labour and Social Affairs, Pension Insurance Report 2015. While it is possible to draw a comparison over time by focusing on one standard insured person, it would make sense in the light of the statutory retirement age being raised to increase a standard pensioner's number of contribution years, as the explicit objective is to extend the working life. It goes without saying that no two insured persons have the same employment history, with the employment situation over time playing an especially important role here. The calculations carried out by the Federal Ministry of Labour and Social Affairs are subject to applicable social welfare legislation. Future rises in the contribution rate for the public long-term care insurance scheme, which are to be shouldered by pension recipients alone rather than by employed persons, would have a negative impact on the ratio. Tax aspects are likewise factored out.

Pension level up to 2031 showing variations according to retirement age*

As a percentage of average income



Sources: Federal Ministry of Labour and Social Affairs, pension insurance report 2015, November 2015 and Bundesbank calculations. The data cited for the period up to 2029 and for 45 contribution years were taken from the pension insurance report. * If there are no changes in the assumptions, the case depicted shows that contribution and saving periods are extended in parallel with the rise in the statutory retirement age. Thus when the retirement age is raised, different years of birth are compared for each year. Its increase up to the age of 67 is to be achieved by 2029. This means that a person turning 65 in 2029 will have to work an additional two years, ie until 2031, for the first time. For 2031, the figure therefore shows the pension levels both of a person aged 65 (grey) and of a person aged 67 (blue) in that year. **1** Total amount of pension accumulated through the statutory pension insurance scheme and earnings from the Riester pension plan. **2** Standard pension in relation to average income, less social security contributions and before tax in each case.

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pension level provided under the statutory pension insurance scheme when an employee retires would not fall from currently just under 48% to 44½% in 2029; instead, it would only drop half as sharply to 46½% (see the chart above).[29]

Private provision …

The level of financial security that is deemed sufficient or appropriate under the statutory pension insurance scheme is ultimately for policymakers to decide: the higher the level, the higher the contribution rate and/or statutory retirement age must be; the lower the level, the greater the individual's reliance on private provision to secure his or her aspired standard of living. When the Riester pension plan was launched in 2002, the objective was to make it easier – especially for low-paid recipients – to attain their aspired standard of living by offering subsidies. The Riester pension plan was originally intended to make it possible to broadly offset the envisaged reform-driven reduction in the level of benefits paid out by the statutory pension insurance scheme.

… bolsters pension level as retirement age rises

In this respect, the Pension Insurance Report assumes an annual saving component of 4% of average income[30] and envisages an annual nominal return of 4%. Furthermore, the annual

29 The pension level figures (for the statutory pension insurance scheme and overall) presented here refer to the point in time at which an insured person retires (eg if, in 2029, an insured person retiring at the age of 65 receives a pension level under the statutory pension insurance scheme of 44½% and a pension level of 46½% at the age of 66 years and eight months, this means that the contribution periods for a calendar year are linked to different birth cohorts). The further scaling-back of annual pension adjustments compared to average wage growth over the pension-drawing phase can be inferred in qualitative terms for the corresponding period from the evolution of the pension level under the statutory pension insurance scheme over time, assuming 45 years of contributions.
30 Major assumptions are payments into a certified private pension plan from the age of 21 (entry into the labour market) or from the introduction of the Riester subsidy until the insured person turns 65 including the Riester subsidy (as of 2008: 4% of income; previously: graduation from 1% in 2002 to 2% from 2004 and 3% from 2006).

contribution amount is cut by a lump sum of 10% every year.[31] However, these calculations on supplementary funded private pension schemes also ignore the rise in the statutory retirement age. The saving period prior to retirement is thus longer and the capital stock is then annuitised over a shorter period of time. Both factors result in a higher monthly Riester pension payout. Thanks to this effect, monthly overall pension payments from the statutory pension insurance scheme coupled with the Riester pension plan therefore rise to an additional extent as a consequence of postponing retirement. While, according to the Federal Government's calculations, the level is set to remain broadly unchanged at the current level of just over 50% up to 2029, a perceptibly higher level of 53% is reached on the assumption that contribution and saving periods are extended in parallel with the gradual rise in the statutory retirement age (for scenarios based on more cautious return assumptions, see pages 74 and 75).[32] In 2031, when individuals first reach the new statutory retirement age of 67, the gap between the total pension level at 67 and at 65 will be around 2½ percentage points.

Rising financial pressure set to persist beyond 2030

Longer-term projections reveal ongoing impact of demographic changes

However, demographic changes will continue beyond 2030 – and the uncertainty surrounding these changes is, of course, greater. That being said, longer-term projections showing how pension policy variables will be adjusted from the present perspective to safeguard the financial sustainability of the statutory pension insurance scheme would provide not only policymakers but also younger cohorts, in particular, with an improved basis for planning.

Raising retirement age in response to rising life expectancy stabilises relative pension-drawing period

While insured persons who retired in 1960 at the age of 65 had a remaining life expectancy of around 13½ years, this figure stood at an average of 19 years for men and women in 2011. The relative pension-drawing period[33] rose sharply in this period from 30% to 42% (see the chart on page 72). By gradually raising the statutory retirement age from 65 to 67, this could now be stabilised at more or less the current level until 2031, when individuals first reach the statutory retirement age of 67. In the absence of further adjustments, however, a significant increase would have to be expected in subsequent years. The relative pension-drawing period could, on the other hand, largely be stabilised – albeit at a historically high level – if the statutory retirement age were raised in additional stages from 2030 by an average of three-quarters of a month every year to 69 years in 2060.[34] In fact, it is not until 2064 that individuals would first retire at the age of 69 (ie the 1995 cohort). This would also prevent

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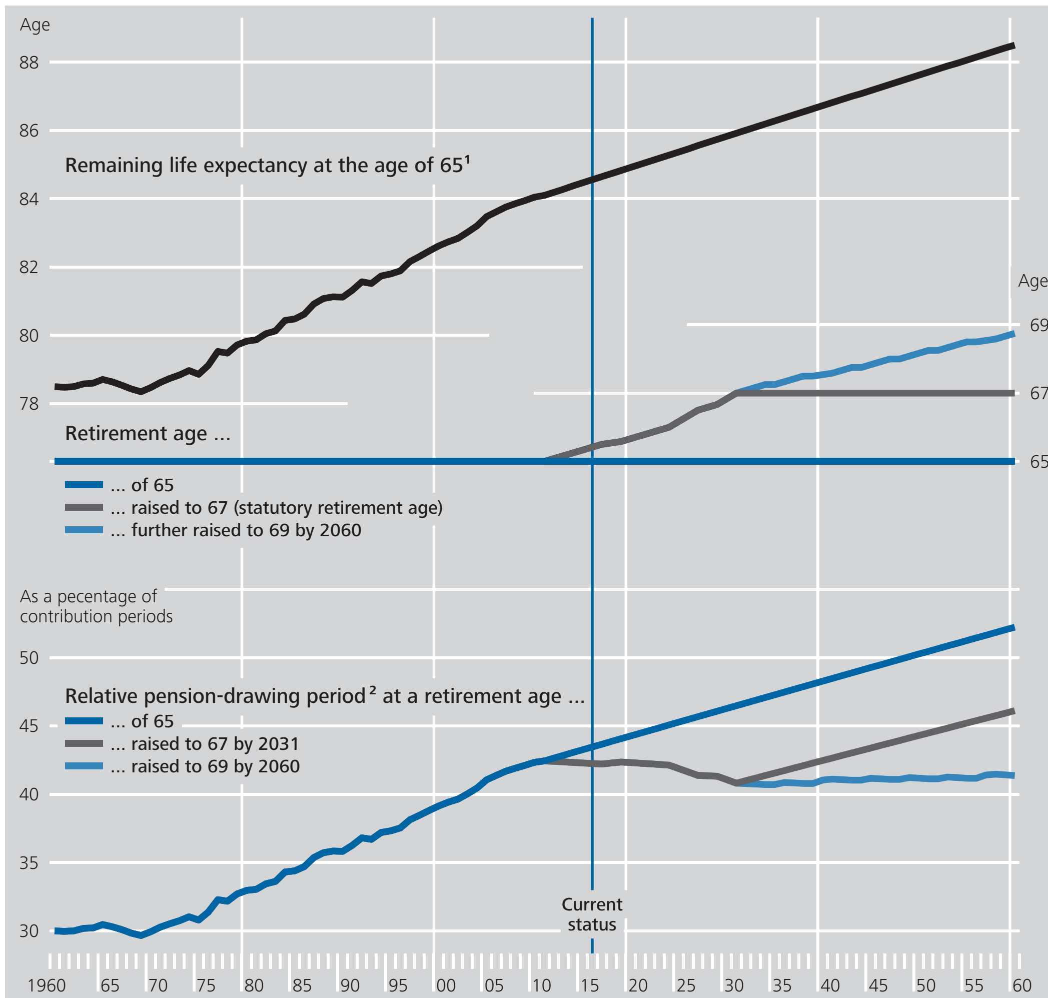
31 In addition to the administration and contract costs incurred solely in connection with the capital investment, this covers the capital guarantee. However, no costs during the pension phase, particularly to cover the uncertain lifetime, are taken into account. As a result of these costs, the return in the saving period is reduced by around ½ percentage point and, particularly when taking this into account including the pension period, the costs considered here are probably lower than the actual average of products available on the market. See M Gasche et al (2013), Die Kosten der Riester-Rente im Vergleich, MEA Discussion Paper 04-2013. However, the cost of Riester products is frequently criticised as being too high. Providing greater transparency in the form of product information sheets ought to make it easier in future for consumers to identify cost-effective pension plans.
32 As a general rule, these are also standardised calculations. For example, the rise in an individual's retirement age may differ from the rise in the statutory retirement age. Furthermore, it should be noted, inter alia, that other income or assets, such as a company pension plan, life insurance, savings or non-subsidised residential property, are not taken into account. Conversely, in some cases, less is saved than in the standardised scenario.
33 The relative pension-drawing period describes the ratio of pension-drawing periods (defined here as life expectancy from retirement age) to previous contribution periods (defined here as retirement age minus 20 years).
34 The data are based on further life expectancy in variant 2 of the 13th coordinated population projection (continued trend paired with higher immigration). See Federal Statistical Office (2015), Germany's population by 2060. Results of the 13th coordinated population projection. In this context, the exception enabling the long-term insured to retire early on a full pension without actuarial deductions (currently after 43 years of contributions; rising to 45 years of contributions by 2029) – which is irreconcilable with the principle of equivalence – would also warrant scrutiny: at the very least, it would make sense for the required contribution periods to be raised in line with the statutory retirement age.

Life expectancy, retirement age and pension-drawing period



Sources: Federal Statistical Office, Germany's population by 2060. Results of the 13th coordinated population projection, Wiesbaden, 2015 (variant 2, continued trend based on higher immigration), and Bundesbank calculations. **1** Unweighted average between men and women. **2** This describes the ratio of pension-drawing periods (defined here as life expectancy from retirement age) to previous contribution periods (defined here as retirement age minus 20 years).
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the pensioner ratio from climbing, in turn triggering a drop in the level of pensions.[35]

Further need for adjustments as baby boomers enter retirement

Demographic shifts are not solely the result of increasing life expectancy. There is a need for additional adjustments once the last of the baby boom generation enters retirement, which is expected by the middle of 2030, followed by smaller cohorts in subsequent years as (all other things being equal) the ratio of pensioners to contribution payers will rise noticeably. The resulting increase in the pensioner ratio – especially by 2035 – means that in the present framework, the pension level under the statutory pension insurance scheme is set to drop (and contribution rates to rise). However, the ever increasing share of the subsidised funded pension scheme, owing to longer savings periods, may prop up the overall pension level at the same time.

35 Pension adjustments are subject to the "sustainability factor", which is designed to limit envisaged contribution rate increases. This sustainability factor decreases (increases) the pension adjustment in the event of rising (falling) pension ratios, ie the number of "equivalent pensioners" (pension expenditure divided by the standard pension paid out) relative to the number of "equivalent contribution payers" (contribution receipts divided by the pension contribution of the average earner).

Pension level under statutory pension insurance scheme significantly higher as retirement age increases

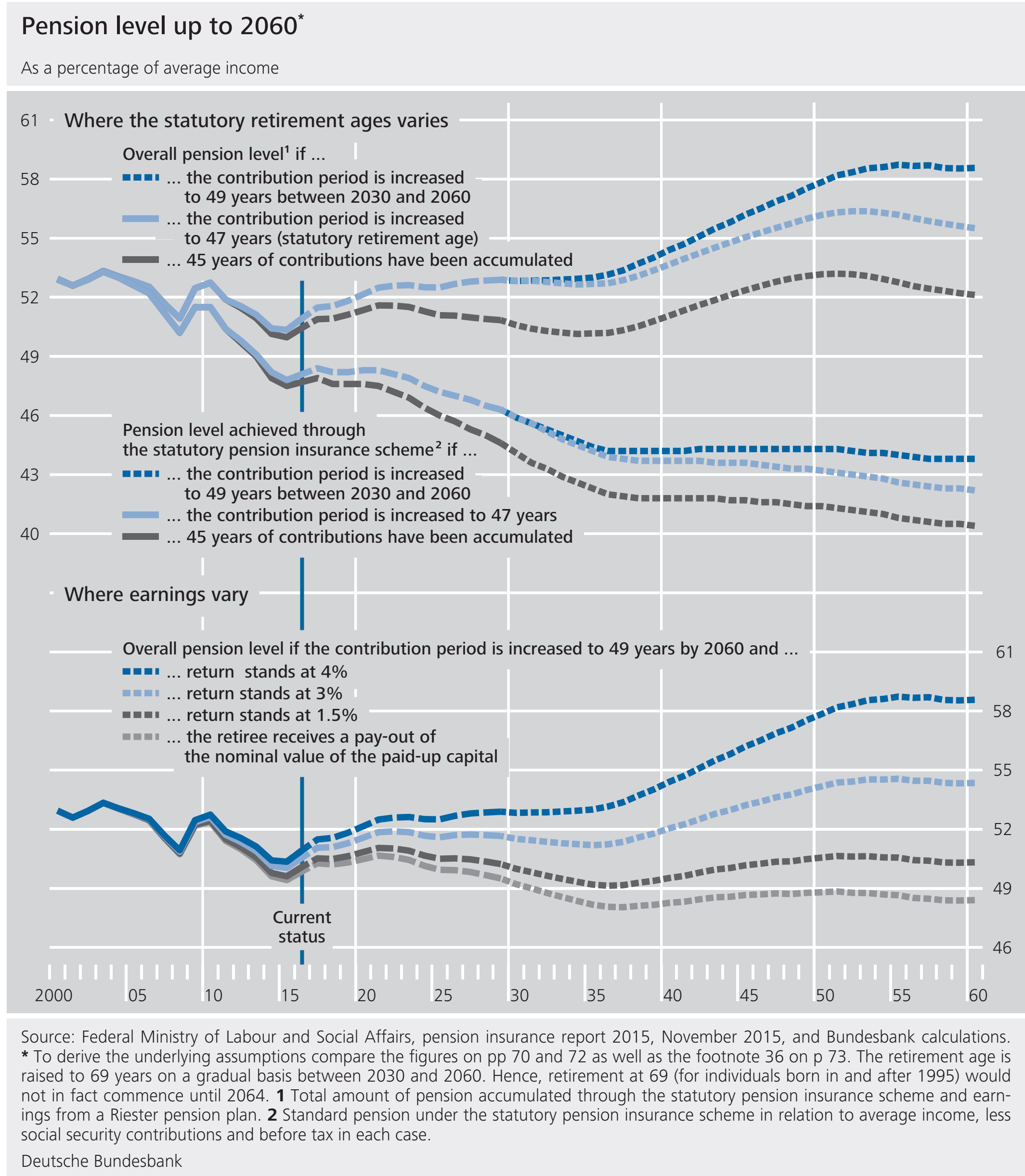
To estimate the impact of these factors on the pension level, the Pension Insurance Report's forecast is extrapolated schematically up to 2060 below (see the chart on page 74).[36] In the simulations, the pension level under the statutory pension insurance scheme falls to around 40½% by 2060 provided that the contribution and saving period remains limited to 45 years – as in the Pension Insurance Report. In the case of an extension to 47 years, in line with the decision to increase the statutory retirement age, the pension level under the statutory pension insurance scheme is around 2 percentage points higher and therefore just over 42% in 2060 once the last stage in the increase has been reached. If it is further assumed that the relative pension-drawing period will largely be kept constant even after 2031 and that the working phase is successively increased by a further two years to 49 contribution years by 2060, the pension level under the statutory pension insurance scheme would stabilise at roughly 44% from around 2035.

Overall pension level is much higher

The growth of the overall pension level differs fundamentally, however, from the sole consideration of statutory pension insurance scheme payments, owing to the increasing importance of funded pensions.[37] Thus, under the assumptions made with regard to returns and savings volumes, the overall pension level for the period starting from 2030 after 45 contribution years would already be consistently above the current value of around 50%. Though the number of baby boomers entering retirement up to the mid-2030s will have a dampening effect on the statutory pension insurance scheme level, the higher number of years of contributing into the Riester pension plan following its introduction in 2002 will translate into a significant increase in the overall pension level, particularly in the time that follows. If the relative pension-drawing period is further stabilised by the retirement age continuing to rise past 67, persons born since the beginning of the 1980s, for whom payment into a subsidised private pension scheme is assumed, will even reach an overall pension level of around 58½%. On the other hand, if the retirement age is not increased past 67, the overall pension level would fall again slightly from around 2050 owing to increasing life expectancy.

36 As more differentiated calculations with the German Federal Government's more comprehensive dataset and model or the statutory pension insurance scheme are not available, a simplified simulation was carried out. The scenario outlined here assumes that from 2030, per capita wages (where the employment level is falling on account of demographic changes) will rise nominally by 3% each year and that the return will be 4%. The corresponding assumptions are thus extrapolated from the Pension Insurance Report unchanged, see Federal Ministry of Labour and Social Affairs (2015), op cit. With an expected inflation rate below but close to 2%, this implies an annual average real wage and economic growth of just under 1% and a real return of 2%. To calculate the pension adjustments, the pensioner ratio is approximated using the demographic old-age dependency ratio (defined as the ratio of people who are 65 and over to people between 20 and 65 years old) from the 13th coordinated population projection (variant 2: birth rate constant at 1.4 children per woman, increasing life expectancy, long-term net immigration of 200,000 people per year). If the additional increase in the retirement age leads to longer working periods, pension levels in this case would be somewhat too low as a result. Furthermore, between 2030 and 2035 it is assumed that there will initially be a greater increase in the contribution rate on account of baby boomers entering retirement followed by a much weaker increase, from 21.8% in 2030 to 22.8% by 2035, then to just over 24% in 2060. A similar scale for the increase in contributions by 2060 is also given in the report by the Ageing Working Group 2015, see European Commission (2015), 2015 Ageing Report. Should the insured persons respond to a further increase in the standard retirement age by extending their employment period, the hike in contribution rates will probably be attenuated. In the case of a similar increase in the retirement age from 67 to 69, a dampening effect of ½ percentage point is calculated, see Bach et al (2014), Wirkungen von Rentenreformen auf Rentenbeitrag und Rentenniveau sowie Beschäftigungseffekte der Rentenbeitragsänderung, DIW Berlin und MEA, Berlin, München. However, this would not have a significant effect on the results given here. With regard to the Riester pension plan, a cost ratio of 10%, which is assumed in official calculations, is used.

37 In the scenarios, those born in and after 1982 are the first to save in the Riester pension plan for their entire employment period. For those who were born in and after 1988 and turn 67 in 2055, the maximum payment of 4% of income over the entire employment period is taken into account for the first time. These calculations based on the Pension Insurance Report are only an example of the potential pension level based on the intentions of central government legislators. Despite extensive government allowances, which account for the greater part of pension insurance, not least in the case of persons with low income and families with children, a significant proportion of persons in the statutory pension insurance scheme do not have a Riester contract. However, many insured persons have probably (alternatively or in addition) chosen other forms of saving or provision, such as their company pension scheme, life insurance, other financial assets or residential property.



Pension level up to 2060*

As a percentage of average income

Source: Federal Ministry of Labour and Social Affairs, pension insurance report 2015, November 2015, and Bundesbank calculations. ***** To derive the underlying assumptions compare the figures on pp 70 and 72 as well as the footnote 36 on p 73. The retirement age is raised to 69 years on a gradual basis between 2030 and 2060. Hence, retirement at 69 (for individuals born in and after 1995) would not in fact commence until 2064. **1** Total amount of pension accumulated through the statutory pension insurance scheme and earnings from a Riester pension plan. **2** Standard pension under the statutory pension insurance scheme in relation to average income, less social security contributions and before tax in each case.

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Influence of different returns

Returns in Pension Insurance Report considered too high in some cases

The German Federal Government's Pension Insurance Report assumes a nominal return of 4% when setting the overall pension level. This return was also used as a basis in the calculations presented previously. In many cases, this value has frequently been criticised as being too high given that interest rates have fallen considerably in recent years. To illustrate the implications of different return assumptions, different scenarios were calculated where the case of a further increase in the statutory retirement age by 2060 to around 69 years old is taken as a baseline.

Scenarios with more cautious assumptions and …

First, an alternative interest rate of 3% is assumed. The nominal interest rate would then roughly match the average nominal wage growth per capita and would thus be slightly higher than nominal gross domestic product (GDP) growth with a medium to long-term annual potential growth of just under 1% and inflation of just under 2%. Another scenario assumes a significantly lower nominal return of 1½% as an example. With inflation at just under 2% – in line with the Eurosystem's definition of price stability – this implies a real interest rate that would be negative over a very long period and would be markedly below the

real growth rate assumed here.[38] This would be an unusual estimate[39] and is probably an extremely cautious one. Finally, the third scenario assumes that the capital guarantee of the Riester pension plan applies, ie the average nominal return after deducting costs is 0%.[40] However, this would appear to be unrealistically low when combined with the unchanged assumption of nominal macroeconomic (wage) growth rates of around 3% over the entire period.

… effects on the overall pension level

The overall pension level would naturally be lower if there are lower returns from private pension schemes (see the chart on page 74). In the case of a very low interest rate of 1½% over 50 years, it would initially fall slightly to around 49% in 2035 but would subsequently return to its current value of just over 50%. Even if only the capital paid in and the government allowances were paid out (capital protection scenario), the overall pension level could be stabilised at 48½% from around 2035. A 3% return would give a very stable overall pension level of just over 51% by 2035, which would then increase to 54½% by 2053 and would subsequently remain fairly constant at this level.

Conclusions

Long-term projections the benchmark for policymakers and insured persons

In view of Germany's dwindling population, not all the parameters of the pay-as-you-go pension system can be kept stable. Over the past decade, this has led to the introduction of a range of measures constituting a compromise approach made up of a higher contribution rate, later retirement and a diminishing (relative) pension level. The previously stated calculations underline the challenges lying ahead for the statutory pension insurance scheme beyond the current planning horizon, which covers the period up to 2030. Confidence in the pension insurance scheme could be strengthened and uncertainty about financial security in old age reduced if there was greater clarity regarding the design of long-term adjustment rules governing the statutory pension insurance scheme's parameters, these being the retirement age, the pension level and the contribution rate as they stand today.[41] In order to produce meaningful reference variables in good time, also for gauging supplementary private pension requirements, and thus to enable greater planning certainty, it would be immensely helpful to have official projections that extend beyond 2030.[42] Alternative scenarios could be used to illustrate the evolution of positive and negative deviations from expectations.

Transfers aimed at fighting poverty currently means-tested and funded by tax revenue

The first point of interest here is the extent to which the statutory pension insurance scheme is likely to be able to sustain living standards. To safeguard the financial stability of the scheme and the pension levels of those insured under

38 General inflation is set to have an equal influence on nominal interest rates and wages in the long term and therefore should not have a decisive effect on pension levels, which are stated as ratios. Generally, the interest rate-wage differential is a relevant factor in the simulation results.
39 The Federal Government's sustainability report assumes real GDP growth of around 1% and a real interest rate of 3% as a starting point, see Federal Ministry of Finance, Vierter Bericht zur Tragfähigkeit der öffentlichen Finanzen, February 2016. The European Commission's sustainability report also assumes another positive interest-growth differential in the long term, see Fiscal Sustainability Report 2015, Institutional Paper, 18 January 2016.
40 At the time of payout, a Riester contract guarantees at least the contributions paid into the scheme, including government promotion measures.
41 As an additional step, the tax-financed Federal grant could, in principle, be adjusted as well. Such a move could easily be justified as a means of facilitating the reimbursement of non-insurance-related benefits. However, this would represent an extraneous way of financing the regular pensions of equivalent pensioners and is therefore disregarded here as a potential means of financing pensions. Moreover, talk of expanding the pool of persons insured under the statutory pension insurance scheme offers no lasting solution to the longer-term adjustment needs that have arisen from demographic change. New contributors to the scheme might temporarily bolster the finances of the scheme for as long as they pay into the system, but this positive effect would be countered by the long-term additional demand placed on the system by these individuals once they retire. Assuming the demographic characteristics of new insured persons were no different from those of persons currently insured under the scheme, the problem would remain unresolved in the long term.
42 See also Demographic change and the long-term sustainability of public finances in Germany, Monthly Report, July 2009, p 43, as well as the corresponding proposals presented by the Federal Government's Social Advisory Council (see Gutachten des Sozialbeirats zum Rentenversicherungsbericht 2004 (Bundestags-Drucksache 18/6870, item 27 ff).

the scheme, it is particularly important to support a high employment level through favourable macroeconomic conditions, thus enabling relatively continuous working lives. The principle of equivalence is a significant feature of Germany's contribution-funded statutory pension insurance scheme, and one of its effects is to limit distortions arising from pension insurance contributions, especially any which impact the labour market. Under the existing social insurance system, the pan-societal task of combatting poverty is not generally funded by income from the insurance scheme itself but by the central, state and local government budgets, which are tax-funded. The corresponding transfers, which are specifically targeted at reducing poverty, are paid out subject to an individual means test and take account of any additional income or assets the recipient may have.

Hike in contribution rate already in the pipeline can be minimised by adjusting other pension parameters, too

Aside from forecasting future pension levels, the projections are meant to outline the manner in which the contribution rate and statutory retirement age as parameters should be adjusted if pension funding is to be maintained. In principle, a higher contribution rate can be used to finance a higher pension level once an individual reaches retirement age. However, this would increase the load borne by contribution payers and, viewed in broader terms, a heavy and rising burden of contributions puts a drag on economic activity, which is ultimately the funding base for the pay-as-you-go system.[43] This is all the more so given that, owing to Germany's demographic developments, contribution rates are set to increase not just for the statutory pension insurance scheme but also for the statutory health and public long-term care insurance schemes. Moreover, central, state and local government budgets will have to contend with heavier demographically-induced burdens (including Federal grants to the statutory pension insurance scheme which increase in size in line with the contribution rate, or the pension burden), thus intensifying the pressure to raise the tax burden. Given that the burden presented by taxes and social security contributions is already fairly high, and in view of the general macroeconomic circumstances, it makes sense to keep up efforts to at least minimise the envisaged hike in the pension contribution rate due to the ageing of society by adjusting the other parameters at the same time.

Raising the retirement age to 69 by 2060 could stabilise the relative pension-drawing period and noticeably shore up pension levels

If there is to be a rise in the pension level under the statutory pension insurance scheme compared with its currently expected level and if, parallel to this, a higher-than-anticipated increase in the contribution rate is to be avoided, action needs to be taken with regard to the statutory retirement age. By further raising the statutory minimum age for claiming a pension, for example in line with rising life expectancy, the ratio of the pension-drawing period to years worked, which at a level of more than 40% has already reached an all-time-high, could be kept stable beyond 2029. Such a move would effectively increase the statutory retirement age to around 69 by 2060. At the same time, the resulting higher level of employment would boost economic growth as well as the wage bill upon which the pay-as-you-go system and other government budget funding both rest, provided the ratio of persons in work to persons claiming a pension does not narrow too sharply. One of several factors suggesting there is scope for increasing the number of years worked is the fair probability that longer lives will be accompanied by better health. Irrespective of this aspect, there are limits to how far an elderly person's active working life can be lengthened, and at some point this option may no longer be possible. That being said, today's statutory pension insurance scheme already offers individuals opportunities to take early retirement in the event of invalidity.

43 This is to be assumed not least because of the compulsory nature of pension contributions. Even so, in accordance with the principle of equivalence that is broadly applied in both the statutory pension and unemployment insurance schemes, contributions to these schemes are likely to be perceived as less akin to a tax than regular taxes or contributions made to the statutory health and public long-term care insurance schemes.

Further need for adjustments as the baby boomers enter retirement

Even if the standardised ratio of the pension-drawing period to the number of contribution years were stabilised by raising the retirement age to 69 years, a further considerable hike in the contribution rate to around 24% remains on the cards. Furthermore, the pension level under the statutory pension insurance scheme would go down from its current level of around 48% to roughly 44% (compared with a decline to around 42% if no further hike occurs).[44] The decisive factor here is that the retirement of the last baby-boom cohorts up until roughly the mid-2030s, as outlined earlier, will significantly worsen the ratio of wage and salary earners to pensioners, thus making it necessary to compensate under the existing rules through a combination of higher contribution rates and lower pension levels. If the retirement age were to factor in rising life expectancy, as has been recommended, the statutory pension insurance scheme would, however, ensure a more or less constant pensioner ratio and hence a relatively stable pension level going forward, even if the birth rate remained low and the size of the population therefore waned. Conversely, if the envisaged large increase in the contribution rate is to be reduced again and/or a higher pension level is to be achieved under the statutory pension insurance scheme, the statutory retirement age would have to rise more sharply over time.

Need to take account of later retirement and private asset formation when discussing pension levels

When discussing the development of the standardised pension level provided by the statutory pension insurance scheme, it is important to bear in mind that there is a tendency to understate this figure if, as in the Pension Insurance Report, the approved increase in the statutory retirement age is omitted. Moreover, the overall pension level should go up compared with its current level if private pension arrangements are made to the extent envisaged by the Riester pension plan.[45] And even if much lower returns are assumed than those stated in the Pension Insurance Report, the overall pension level will still stabilise. Even if the currently very low interest rates were to continue for some years to come their level would be qualified by the investment horizon for pension schemes of up to around half a century. As recent discussions on the matter have indicated, it would be very helpful if the government's promotion of private pension provision could be made simpler and more transparent. In this regard, the information given on the respective costs and anticipated payouts (especially for Riester and company pension plans) could be improved in order to give those contributing to the schemes a simplified overview of their potential overall pension level, seen from the present perspective.

All in all, the good financial shape in which the statutory pension insurance scheme currently finds itself, coupled with the official projections which only go up to 2029, should not blind us to the fact that further adjustments are unavoidable if the financial sustainability of the scheme is to be ensured. In this context, longer working lives should not be taboo, but instead considered as a key factor.

44 To give individual insured persons a greater degree of personal flexibility in setting a pension level that suits their wishes, additional rules could be drawn up that would make it easier for employees to retire at a personally defined retirement age somewhere above the regular statutory retirement age. In such a scenario, however, account would have to be taken of their ability to plan ahead.

45 The calculations made here are based on the standardised procedure applied in the Pension Insurance Report, which uses variables that often spark public debate. This debate is focused on the premise that the government-backed Riester pension plan constitutes an additional pillar of private pension provision. At present, there is a long way to go before all of those eligible to sign up for a Riester pension plan actually do so to the extent described here and, in many instances, people's pension arrangements are not confined to this model alone, instead encompassing or being supplemented by a variety of other investment forms as well.