Public finances*

General government budget

2023 as a whole and outlook for 2024

Government finances continuing to recover in 2023 since temporary coronavirus response measures phased out; …

Government finances are continuing to recover further in 2023. This is a potentially surprising development given that there has been no let-up in burdens stemming from the energy crisis and weak economic growth. However, these factors are outweighed by the fact that budgetary burdens brought about by coronavirus response measures are now no longer a factor and that nominal gross domestic product (GDP) is continuing to see highly dynamic growth. Overall, the deficit ratio could be around 2%, compared with 2.5% last year. The debt ratio will also continue to decline on account of the strong dynamics in nominal GDP (denominator effect). By mid-2023, the debt ratio had already fallen markedly to 64.6% from around 66% at the end of 2022.

… other influences have a neutral effect on the deficit or increase it, taken in isolation

Now that coronavirus response measures have come to an end, their strain on the government budget is easing; the resulting relief is likely to amount to 1¼% of GDP. Such elapsing measures include, in particular, healthcare spending and business aid from central government, which raised the deficit considerably last year and play virtually no role in the current year. Other influences will have a neutral effect on the deficit or increase it when taken in isolation.

– Government expenditure on temporary assistance during the energy crisis could be slightly higher in 2023 than in 2022 (1½% of GDP). In the current year, energy price brakes constitute the largest spending items. Moreover, considerable shortfalls in revenue are occurring due to the fact that portions of the wages being paid out are inflation compensation bonuses that are exempt from social contributions. Last year, transfers made to gas trading companies, energy price allowances and emergency natural gas heating aid represented the largest outflows.

– The economic cycle is having only a slight impact on deficit developments. This is mainly due to the robust labour market: unemployment is rising fairly moderately, and employment is actually experiencing rather positive developments. In addition, gross wages and salaries are growing significantly. However, following a sharp rise last year, profit-related taxes are developing much more slowly than one would expect from the macroeconomic variables.

– Although permanent tax cuts will bring down revenue (in particular compensation for bracket creep in 2022), the additional receipts generated by progressive taxation in the current year and higher contribution rates to the health, long-term care and unemployment insurance schemes will be on a similar scale.

– On the expenditure side, interest expenditure is rising steeply and weighing on the budget (departing from a low starting level). This is mainly due to the elevated financing costs of inflation-linked securities. The higher interest rates are not yet making themselves felt to such a great extent; they are set to weigh on the budgets mainly via larger interest payments on follow-up financing. Some other government expenditure items are likely to increase more sharply, with a time lag, owing to high inflation.[1]

* The section entitled "General government budget" relates to data from the national accounts and the Maastricht debt ratio. This is followed by reporting on budgetary developments (government finance statistics) in the areas for which data are available for the third quarter of 2023.
1 For more information, see Deutsche Bundesbank (2022a), pp. 63 f.

Expiring crisis measures reduce deficit further in 2024, but expansionary stance in other areas

Developments next year will also depend on how central and state governments amend their plans following the ruling of the Federal Constitutional Court (see pp. 69 ff.). Irrespective of the ruling, however, the deficit is already expected to continue to decline due to decreased budgetary burdens arising from the energy price measures. As central government finances the lion's share of these measures, it also stands to benefit the most from the decline. However, central government is planning significant additional spending elsewhere, especially in the Armed Forces Fund. Moreover, high inflation is set to have a lagged impact on central, state and local government budgets. In particular, increased prices will be reflected considerably later in the state governments' personnel expenditure, a major spending item, than in revenue. The social security funds could again close the year with a surplus. Overall, their expenditure will probably rise dynamically. However, the reference variables for contributions are expected to see considerable growth, too. Moreover, the higher contribution rate for the long-term care insurance scheme since mid-2023 and the probable rise in contribution rates to the health insurance institutions will generate additional revenue.

Budgetary development of central, state and local government

Tax revenue

Third quarter of 2023

Solid trend in tax revenue – furthermore, strong growth due to phasing-out of 2022 temporary tax cuts

Tax revenue rose sharply by 12½% in the third quarter.[2] This increase is predominantly attributable to the fact that large temporary tax cuts from the previous year no longer apply (primarily the energy price allowance). Even without these temporary tax cuts from the previous year, though, tax revenue would probably have seen solid growth.

Strong growth in wage tax due to one-off effects

The phased-out temporary tax cuts of the previous year primarily concerned wage tax, where receipts surged by 30%. For example, in the third quarter of 2022, employees received the energy price allowance of €300 financed from wage tax revenue. Persons entitled to child benefits received a bonus child benefit payment. In addition, income tax cuts at mid-year 2022 were offset retroactively at that point in time. They thus reduced tax revenue disproportionately in the third quarter of the previous year. The resulting surge in revenue was dampened by significant permanent legislative changes that entered into force in 2023. The most important factor was that legislators adjusted the income tax rate to compensate for the high bracket creep of the previous year. Furthermore, additional one-off wage payments of up to a total of €3,000 will count as tax-exempt inflation compensation bonuses until the end of 2024. This year's tax cuts and the phased-out temporary tax cuts of the previous year are concealing a still positive underlying trend: even without these influences, income from wage tax would probably have risen significantly.

VAT sees additional revenue from "one-stop shop" procedure

Revenue from VAT rose dynamically (+7%). However, this rise was due not only to price effects but also to the retroactive recording of tax payments received in other EU countries. In line with the "one-stop shop" procedure for transactions conducted in Germany, these payments were reported centrally in the seller's country of registration. They were then transferred to the Federal Central Tax Office, which subsequently passed revenue on to the respective federal states.[3] Tax revenue from this procedure came to just over €2.8 billion and was particularly high in July. Adjusted for this, the growth in VAT would likely have stood at 3%.

2 Including EU shares in German tax revenue, but excluding receipts from local government taxes, which are not yet known for the quarter under review.
3 See also Federal Ministry of Finance (2023a), pp. 58 f.

Tax revenue

Type of tax	Q1 to Q3				Estimate for 2023[1]	Q3			
	2022	2023				2022	2023		
	€ billion		Year-on-year change € billion	%	Year-on-year change in %	€ billion		Year-on-year change € billion	%
Tax revenue, total[2]	593.4	608.5	+ 15.1	+ 2.5	+ 2.2	185.6	208.7	+ 23.2	+ 12.5
of which:									
Wage tax[3]	160.0	171.6	+ 11.6	+ 7.2	+ 4.7	43.4	56.4	+ 12.9	+ 29.8
Profit-related taxes	120.5	120.6	+ 0.2	+ 0.1	+ 0.1	39.0	42.5	+ 3.5	+ 9.0
Assessed income tax[4]	55.7	52.2	− 3.5	− 6.3	− 5.8	17.6	17.0	− 0.6	− 3.3
Corporation tax[5]	33.1	33.0	− 0.1	− 0.4	− 0.4	10.7	9.9	− 0.8	− 7.7
Non-assessed taxes on earnings	26.2	29.8	+ 3.6	+ 13.8	+ 12.7	9.4	13.4	+ 3.9	+ 41.8
Withholding tax on interest income and capital gains	5.4	5.7	+ 0.2	+ 3.9	+ 11.3	1.2	2.2	+ 1.0	+ 80.2
VAT[6]	212.5	216.9	+ 4.4	+ 2.1	+ 2.9	71.2	76.1	+ 4.9	+ 6.9
Other consumption-related taxes[7]	62.3	66.2	+ 3.9	+ 6.2	+ 5.4	20.0	22.9	+ 3.0	+ 14.8

Sources: Federal Ministry of Finance, Working Party on Tax Revenue Estimates and Bundesbank calculations. **1** According to official tax estimate of October 2023. **2** Comprises joint taxes as well as central government taxes and state government taxes. Including EU shares in German tax revenue, including customs duties, but excluding receipts from local government taxes. **3** Child benefits and subsidies for supplementary private pension plans deducted from revenue. **4** Employee refunds and research grants deducted from revenue. **5** Research grants deducted from revenue. **6** VAT and import VAT. **7** Taxes on energy, tobacco, insurance, motor vehicles, electricity, alcohol, air traffic, coffee, sparkling wine, intermediate products, alcopops, betting and lotteries, beer and fire protection.

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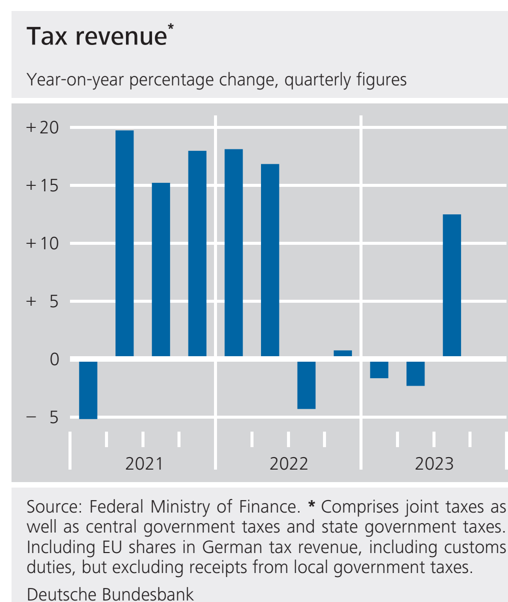
Tax estimate: significant revenue growth in 2024 and 2025 reduced due to foreseeable tax cuts not included in the tax estimate

Subdued tax growth in 2023 on account of sharp tax cuts

According to the latest official tax estimate, tax revenue will rise by 2½% on the year in 2023. Changes in tax legislation are expected to curb this expansion sharply on balance.[4] Particular factors weighing on revenue are compensation for the extensive bracket creep of the previous year, the reduced VAT rate on natural gas and district heating, the increase in child benefits and the exemption from tax of the inflation compensation bonuses. Compounding these factors is a strong decline in real estate acquisition tax. This is likely reflecting, in particular, the rise in financing costs that is resulting in decreased real estate purchases and falling prices. Profit-related taxes increase only slightly in the projection, an assessment that is based on the subdued cash developments over the course of the year to date. The fact that tax revenue is still climbing markedly overall is due, in particular, to the dynamic growth in nominal private consumption and gross wages and sal-

Tax revenue*

Year-on-year percentage change, quarterly figures



Source: Federal Ministry of Finance. * Comprises joint taxes as well as central government taxes and state government taxes. Including EU shares in German tax revenue, including customs duties, but excluding receipts from local government taxes.

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4 As a general rule, the tax estimate is based on the current legal situation; planned legislative changes are therefore not included. See p. 64.

aries. This reflects the high price increases. Inflation compensation bonuses aside, however, wages are still rising significantly. In addition, the phasing-out of the energy price allowances (paid out at the expense of tax revenue) is supporting tax growth.

Significant growth expected in 2024 – impact of legislative changes almost neutral

For 2024, the tax estimate projects revenue growth of 5%. The main reason for this is that nominal macroeconomic reference variables for tax revenue will increase significantly. Furthermore, fewer tax-exempt inflation compensation bonuses are expected to be paid out than in 2023. Legislative changes will have a broadly neutral impact on growth: although the income tax rate will also fall considerably in 2024 in order to compensate for bracket creep from 2023,[5] bracket creep in that year is likely to be far more than offset, and the tax rate will thus be lowered to a greater degree than envisaged in view of inflation in 2024. According to the projection, the reduced VAT rate on natural gas and district heating will return to its regular level at the end of March 2024. Not least, the accelerated write-offs of previous years will support growth, having dampened it up to 2023. As from 2024, correspondingly fewer write-offs will then be made, boosting growth.

Significant growth also projected for 2025 on the back of legislative changes

According to the tax estimate, revenue in 2025 will be up by 5½% – slightly more than in 2024. The growth of nominal aggregate tax reference variables, including bracket creep, will only result in a tax increase of 4%. However, this increase will be heightened by the fact that burdens resulting from legislative changes will be lower than in preceding years: it will no longer be possible to disburse wage components as tax-exempt inflation compensation bonuses, and accelerated write-offs from previous years will continue to bolster revenue. Last but not least, the standard VAT rate on natural gas and district heating will then apply again for the whole year.

Distinct revenue shortfalls envisaged due to planned legislative changes

Compared with this official tax estimate, however, planned legislative changes could slow growth. For example, from 2024, the planned Growth Opportunities Act will accelerate write-offs for enterprises again, in particular (see also the table on p. 65). Furthermore, the electricity tax for enterprises in the manufacturing sector is to be lowered. These two changes would reduce the growth rate in 2024 by ½ percentage point to 4.7%. Moreover, if legislators continue to compensate for bracket creep from 2025 onwards, growth in that year will fall more sharply than in 2024 – by 1 percentage point to 4½%. However, this is also due to the fact that revenue shortfalls will increase markedly on account of the Growth Opportunities Act. However, the final deliberations on the Federal Government's budget plan for 2024 have not yet been concluded (see also pp. 69 ff. for information on the Federal Constitutional Court's ruling, which still needs to be considered).

Growth of 3½% projected from 2026 onwards

Revenue is projected to rise by an average of 3½% over the period from 2026 to 2028, with the incorporated legislative changes no longer playing any major role. The growth is therefore a fairly direct reflection of the assumptions regarding macroeconomic developments and progressive taxation.

Estimate for 2023 and 2024 largely confirmed – slight upward revisions from 2025 onwards

Tax estimate from May largely confirmed

The new tax estimate largely confirms the figures for the current and coming year in the tax estimate from May. For one thing, cash receipts up to and including September 2023 were somewhat lower than had been expected in spring, particularly in the case of profit-related taxes. Furthermore, higher shortfalls are now anticipated from tax-free inflation compensation bonuses. By contrast, revised assumptions about nominal growth in the macroeconomic tax reference variables result in increasing additional revenue, taken in isolation. The estimated figures for 2025 onwards are markedly higher (+¼% of GDP). However, the elevated price increases that are now assumed mean

5 See Deutsche Bundesbank (2022b).

Official tax estimate figures and the Federal Government's macroeconomic projections

Item	2023	2024	2025	2026	2027	2028
Tax revenue[1]						
€ billion	916.1	964.1	1,017.1	1,054.5	1,088.3	1,124.0
% of GDP	22.2	22.4	22.8	23.0	23.1	23.3
Year-on-year change (%)	2.3	5.2	5.5	3.7	3.2	3.3
Revision compared with previous tax estimate (€ billion)	– 4.5	1.9	7.8	8.3	9.8	.
Memo item: Revenue shortfalls resulting from prospective tax relief (€ billion)						
Planned Growth Opportunities Act	.	– 1.4	– 7.9	– 10.2	– 7.8	– 4.3
Revenue shortfalls if bracket creep as from 2025 is compensated for in same manner as previously[2]	.	.	– 5.0	– 9.3	– 13.7	– 18.2
Real GDP growth (%)						
Autumn projection (October 2023)	– 0.4	1.3	1.5	0.6	0.6	0.6
Spring projection (April 2023)	0.4	1.6	0.8	0.8	0.8	.
Nominal GDP growth (%)						
Autumn projection (October 2023)	6.5	4.4	3.5	2.7	2.7	2.7
Spring projection (April 2023)	6.1	4.0	2.8	2.8	2.8	.

Sources: Working Party on Tax Revenue Estimates and Federal Ministry for Economic Affairs and Climate Action. **1** Including EU shares in German tax revenue, including customs duties, including receipts from local government taxes. **2** Since 2014, the income tax scale has been shifted year after year, usually in line with the estimated inflation of the previous year. The figures shown here are the revenue shortfalls that will result if this practice is continued. The calculations are roughly estimated and are based on the Federal Government's current autumn projection and wage tax receipts based on current tax estimates (according to the national accounts). The basic income tax allowance also shifts in line with the inflation rate of the previous year.
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that no additional budgetary leeway is likely to be provided.

Central government finances

Overview: central government including off-budget entities

Q3 2023: overall deficit down considerably

The central government deficit including off-budget entities[6] was considerably lower in the third quarter of 2023 than it was one year ago, falling by €26 billion to €8½ billion. The deficit in the core budget plummeted, while the surplus of the off-budget entities decreased somewhat.

2023 as a whole: very large deficit planned, but considerably more favourable outcome likely

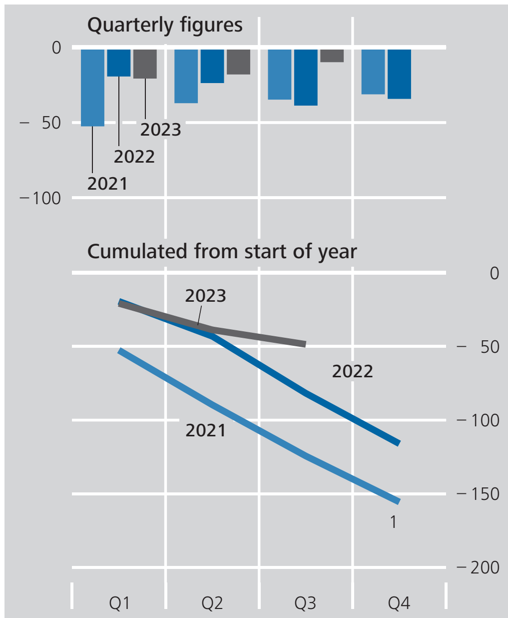
For the year as a whole, the budget plan (from the end of 2022) envisages a very large deficit of €232 billion, of which €146 billion is attributable to the off-budget entities.[7] In its October outlook for European budget surveillance, the Federal Government expects a significantly lower overall deficit of €157 billion,[8] citing reduced energy price support needs as the reason for this. However, the deficit calculation still appears to be rather cautious.

According to the draft budget for 2024 from late summer, central governments' total deficit should fall to €86 billion. With a deficit of €18

6 Central government off-budget entities that use the single-entry system and for which data for the reporting quarter are already available are included here (see pp. 68 f.). These comprise, in particular, (i) the Economic Stabilisation Fund for Energy Assistance (ESF-E), (ii) the off-budget entities formerly included in the debt brake up to 2021 and (iii) the Armed Forces Fund (see items 16, 17 and 20 in the table on p. 67). In addition, the reporting group for off-budget entities includes, above all, (iv) other funds shown in the central government budget's borrowing plan plus planned figures (for making provisions for repayment and for extending childcare, item 18, ibid.), as well as (v) entities without published planned figures (thus not counting towards the planned deficit), such as the precautionary funds for civil servants' pensions (item 19, ibid.). In particular, the bad bank FMSW, the fund for the disposal of nuclear energy waste, the motorway company and the development aid company GIZ are completely excluded.
7 See Deutsche Bundesbank (2023a), p. 69.
8 See Federal Ministry of Finance (2023b), p. 52.

Fiscal balance of central government budget*

€ billion



Source: Bundesbank calculations based on data from the Federal Ministry of Finance. * Excluding off-budget entities. Not adjusted for financial transactions or cyclical effects. **1** Excluding the transfer of €60 billion from the core budget to the Climate Fund, which the Federal Constitutional Court deemed unconstitutional in its ruling of 15 November 2023.

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Plans for 2024 not yet finalised following Federal Constitutional Court ruling

billion, the core budget made full use of the scope for borrowing afforded by the debt brake. In addition, a deficit of €68 billion was planned in special funds. Following the ruling of the Federal Constitutional Court (see the box on pp. 69 ff.), the plans are currently being revised. The final deliberations have not yet been concluded and the planned deficits for 2024 cannot therefore yet be quantified.

Central government budget (core budget): third quarter and 2023 as a whole

Core budget in Q3: increased tax revenue and declining expenditure brought deficit down very sharply

In the core budget, the deficit fell very sharply to €10 billion in the third quarter, compared with almost €39 billion in the same quarter of 2022. Bolstered by tax receipts, revenue surged by 19% (+€17 billion). Total expenditure saw a steep decline of 9% (-€12 billion), with the phased-out transfers to the Climate Fund accounting for €6 billion of this decline. Pandemic-related burdens also expired, primarily payments made to the social security funds (-€5 billion) and to enterprises (-€3½ billion).

Central government budget for 2023 could close much more favourably than planned

The deficit in the core budget could be significantly lower this year than estimated in the budget (€86 billion). Revenue from the EU off-budget entity for pandemic relief (NGEU) is set to result in losses relative to the budget plan. Just under €11 billion had been planned in, but only €4 billion has been requested thus far.[9] However, the latest tax estimate anticipates additional revenue of €3 billion compared with the budget plan (taking into account the precautionary estimates for changes in tax legislation). On the expenditure side, €10 billion is earmarked for a generational capital fund. As a decision on the legal framework for this is still pending, it is not yet certain that these funds will actually be paid out. After the third quarter, further relief appears possible, not least in the areas of operating expenses, personnel[10] and some grant items. Interest expenditure, on the other hand, could reach its high projected level. For instance, the Federal Ministry of Finance is tap issuing long-dated bonds with coupons well below the market rate in order to achieve the intended circulation volume. The government books the discounts to the issue price and the redemption amount immediately and in full. This is now placing a heavy strain on reported interest expenditure, making it more likely to fluctuate quite sharply.[11]

Deficit target would have to be significantly undershot to comply with debt brake

In order to comply with the debt brake limit in the core budget, the deficit would have to remain €9 billion below the budgeted figure, according to the latest projection from autumn (excluding changes in financial transactions or higher withdrawals from reserves). This is due to the way in which central government calculates the cyclical effects it deducts from the debt brake when implementing the budget.

9 See Federal Ministry of Finance (2023c).
10 The €3 billion in provisions exceeds the approved remuneration adjustments.
11 For information on a proposed recording method that would solve these problems, see Deutsche Bundesbank (2021a).

Key central government budget data*

€ billion

Item		Actual 2022	Target 2023	Draft 2024 As at 18 Aug. 2023	Draft 2024 As at 17 Nov. 2023
1.	Expenditure of central government budget (CGB)[1]	480.7	476.3	445.7	
	of which:				
1.a	Investment	46.2	71.5	54.2	
1.b	Global spending increases/cuts	–	– 6.9	– 9.7	
2.	Revenue of CGB[1,2]	364.7	389.9	427.7	
	of which:				
2.a	Tax revenue[3]	337.2	358.1	375.3	
2.b	Global revenue increases/shortfalls	–	– 4.9	1.4	
3.	Fiscal balance (2.-1.)	– 116.0	– 86.4	– 18.0	
4.	Coin seigniorage of CGB	0.1	0.2	0.1	
5.	Transfer to (–)/withdrawal from reserves (+) in CGB	0.5	40.5	1.4	
6.	Net borrowing (–)/repayment (+) of CGB (3.+4.+5.)	– 115.4	– 45.6	– 16.6	
7.	Cyclical component in the budget procedure[4]	– 1.8	– 15.3	– 2.4	– 7.7
8.	Balance of financial transactions of CGB	– 4.1	– 17.7	– 0.6	
9.	Structural net borrowing (–)/repayment (+) (6.-7.-8.)	– 109.5	– 12.6	– 13.5	
10.	Amount exceeding limit in CGB (13.-9.)	97.0	–	–	
11.	Amount exceeding limit incl. Economic Stabilisation Fund for Energy Assistance (ESF-E) (10.-15.)	276.4	–	–	
12.	Memo item: Amount exceeding limit with balance of off-budget entities (10.-16a.-17.)	101.7	127.3	51.5	
13.	Standard upper limit: Structural net borrowing (0.35% of GDP)[5]	– 12.5	– 12.6	– 13.5	
14.	Structural balance of CGB (3.-7.-8.)	– 110.1	– 53.4	– 15.0	
14.a	As before, with estimate of potential output acc. to 2023 autumn forecast	– 111.2	– 57.5	– 9.7	
15.	Structural net borrowing of ESF-E	– 179.4			
16.	Deficit of ESF-E	– 30.2	– 121.2	– 13.9	
16.a	Deficit of ESF-E excluding financial transactions	– 9.7	– 106.0	– 13.9	
16.b	ESF funds remaining thereafter	169.8	48.6	34.7	
17.	Balance of special funds (SFs) relevant to the debt brake prior to 2022[6]	4.9	– 21.4	– 37.6	
17.a	Climate and Transformation Fund	5.3	– 14.1	– 29.2	
17.b	2013 Flood Relief Fund	– 0.2	– 0.2	– 0.2	
17.c	Fund to Promote Municipal Investment	– 0.7	– 1.0	– 0.9	
17.d	Digitalisation Fund	2.1	– 2.7	– 4.2	
17.e	Fund for Primary School-Age Childcare Provision	– 0.1	– 0.4	– 0.4	
17.f	2021 Flood Relief Fund	– 1.6	– 3.0	– 2.7	
18.	Balance of SFs for making provisions for repayment and for extending childcare	4.4	5.5	3.0	
19.	Balance of other SFs without own constitutional rules[7]	– 9.9			
20.	Balance of Armed Forces Fund	–	– 8.4	– 19.2	
20.a	Borrowing authorisation remaining thereafter	100.0	91.6	72.4	
21.	Balance of CGB and SFs (3.+16.+17.+18.+19.+20.)	– 146.8	– 231.7	– 85.7	
22.	Reserves of SFs for 16. and 17.	286.9	144.4	92.9	
23.	Central government assets in civil servants' pension reserves and pension fund[8]	26.3			
24.	Level of general reserves	48.2	7.7	6.3	
25.	Balance on control account	47.7	47.7	47.7	
26.	Total outstanding repayment amount including Armed Forces Fund (from 11. and 20.)	538.0	546.4	565.6	
27.	Total outstanding repayment amount from NGEU grants[e,9]	30	38	61	

* Sources: Federal Ministry of Finance and Bundesbank calculations. Data prior to the ruling of the Federal Constitutional Court of 15 November 2023. For methodological notes, see Deutsche Bundesbank (2016). **1** Excluding transfers to/withdrawals from reserves and including net tax revenue (see footnote 3). **2** Excluding coin seigniorage. **3** After deduction of supplementary central government transfers, shares of energy tax revenue, compensation under the 2009 reform of motor vehicle tax and budgetary recovery assistance to federal states. **4** For 2022 according to the September 2023 figures, for 2023 according to the budget plan, and for the years thereafter according to the 2023 spring and autumn forecasts. **5** Based on GDP in the year before the (comprehensive) budget is prepared. **6** Budgeted figures for 2023 and 2024 (August) from borrowing plan. **7** Entities with quarterly data, but excluding data on results in borrowing plan. Above all, ESF (excluding ESF-E) and pension provisions. **8** Market values according to central government balance sheet for 2022. Continuous inflows; withdrawals from the fund planned from 2030, from reserves from 2032. **9** NGEU budgeted figures and estimates, each multiplied by Germany's share of 25½% in EU gross national income.

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What is significant is that price inflation is stronger than planned, meaning that nominal GDP will rise more strongly in the new projection than was assumed when the budget was being drawn up. This stronger increase will reduce the cyclical burden considered (item 7 in the table on p. 67). Accordingly, the debt brake borrowing ceiling is more ambitious, as the government is allowed to take out fewer loans labelled as cyclical borrowing. If the debt brake limit cannot be complied with once the budget is implemented, the excess will be recorded in the control account as a debit entry. Thus far, there have only been credit entries in the control account, with a balance of almost €48 billion being built up between 2016 and 2019 (item 25 in the table on p. 67). The escape clause was in force from 2020 to 2022. Net borrowing above the limit was therefore compatible with the debt brake, but tied to a specific repayment plan.

Draft central government budget for 2024

Summer draft budget: core budget deficit expected to fall very significantly

In its draft budget from the summer ("Draft 2024" column, "As at 18 Aug. 2023" in the table on p. 67), the Federal Government cut net borrowing sharply to €17 billion relative to the 2023 budget plan. At the same time, far fewer funds were scheduled to be withdrawn from the reserve (item 5, ibid.), with the result that the deficit in the 2024 core budget (item 3, ibid.) should decline even more strongly than net borrowing. However, sharply rising deficits were planned in the Climate Fund and the Federal Armed Forces Fund (items 17.a and 20, ibid.).[12]

Final deliberations postponed following Federal Constitutional Court ruling

The Bundestag's Budget Committee intended to finalise its draft budget in mid-November. However, following the Federal Constitutional Court's recent ruling on the second supplementary central government budget for 2021 (for more on this, see the box on pp. 69 ff.), the final deliberations were postponed beyond the date that this Monthly Report went to press.

Off-budget entities: third quarter and outlook for 2023 as a whole

Surplus due to return flows from corporate loans and revenue from emission allowances; energy price support only slightly significant

Central government's off-budget entities[13] posted a surplus of €1½ billion in the third quarter of 2023 (see the chart on p. 72). In the same quarter of the previous year – prior to the launch of the credit-financed energy assistance branch of the Economic Stabilisation Fund (ESF-E) – this had amounted to €4 billion.

– The ESF-E's deficit remained at €3 billion in the third quarter. Once again, owing to the lack of data, the deficits of the ESF-E cannot be attributed to individual assistance programmes. In arithmetical terms, the deficit corresponds to the payments made by central government to stabilise grid fees. According to this, the energy price brakes less the (apparently small-scale) skimming of extraordinary revenues earned by electricity producers no longer strained the ESF-E. The rest of the ESF recorded a higher surplus from repayments of loans to enterprises. This improvement almost offset the deficit in the ESF-E.

– The Climate Fund recorded a reduced surplus owing to the absence of the central government grant. Revenue from emission allowances offset most of the burdens.

Deficits in off-budget entities remain considerably below planned figure in 2023

For 2023 as a whole, the deficit in off-budget entities will be considerably lower than planned at the end of 2022 (€146 billion), with all three of the major special funds (the ESF-E, the Climate Fund and the Armed Forces Fund) seeing more favourable developments. All in all, the deficit of central government's off-budget entities could be somewhat lower than in the previous year (€31 billion).[14]

12 For more information, see Deutsche Bundesbank (2023b).
13 According to data from the Federal Ministry of Finance, i.e. excluding bad banks and other entities that use commercial double-entry bookkeeping.
14 See footnote 6 on p. 65 for the off-budget entities included in this section.

Federal Constitutional Court issues ruling on debt brake

Overview

In mid-November 2023, the Federal Constitutional Court issued a far-reaching ruling on the debt brake enshrined in Germany's Basic Law. The ruling concerns central government's second supplementary budget for 2021. However, it also establishes general principles and thus has a wider impact on central and state government finances. The ruling underscores the objective of the debt brake, namely to limit government debt, and precludes a loose interpretation of the constitutional requirements. It is now up to fiscal policymakers to adjust their plans with this in mind, in part with a view to eliminating uncertainties.

The ruling strengthens the binding effect of the debt brake. To ensure that debt is curbed in line with the constitutional provisions, the Court has issued clear rules on the use of the escape clause. These state that legislators may not use the escape clause to prefund future budgets. Yet this does not mean that measures currently planned in this context have to be scrapped. However, it will be necessary to either reprioritise on the expenditure side or make adjustments on the revenue side to balance government expenditure and revenue.

Ultimately, only binding fiscal rules can safeguard sound government finances. Fiscal rules should not be bypassed. This does not preclude a stability-oriented reform of the rules. There would be a case for moderately expanding the regular borrowing framework if the debt ratio is below the Maastricht reference value of 60%. This requires a majority large enough to amend the constitution and must be in line with the rules of the fiscal compact.

Ruling on second supplementary budget for 2021 with clarifications on debt brake

Specifically, the Court declared central government's second supplementary budget for 2021 unconstitutional. This judgement directly reduces the scope for deficit within the Climate and Transformation Fund (Climate Fund) by €60 billion. In addition, the Court revisited, in particular, the definition of the debt brake escape clause in Germany's Basic Law. According to this clause, the legislator may issue emergency borrowing authorisations only if a link between the crisis situation and the debt-financed measures is established. Moreover, the government may use the borrowing entitlements only in the year for which the legislator has identified a crisis situation. In principle, this also applies if the funds have been transferred to special funds.[1]

The Court has underscored the need to draw up budgets for one year at a time (annuality of budgeting), limit the use of budgetary authorisations to the respective year (annuality of entitlements) and book items reaching maturity in that year. It noted that the annual borrowing limit imposed under the debt brake also includes those central government special funds that do not have their own borrowing authorisation. This was the case prior to the changeover applying as of the 2021 annual accounts. Since then, central government has been including transfers from the core budget to a special fund in its calculations for the borrowing limit; deficits to arise in this special fund in later years are then not

1 The Bundesbank has already drawn attention to this issue (see Deutsche Bundesbank (2021b), p. 38), going on to explain that using emergency borrowing too widely considerably weakens the binding effect of the debt brake; see Deutsche Bundesbank (2023c), p. 39.

taken into account in the debt brake.[2] It would appear that this practice now also needs to change.

The ruling and clarifications on the debt brake in the Basic Law are far-reaching. Both central government and numerous federal states have extensive reserves from emergency borrowing and plan to use the reserves to fund measures (see below). Although the Court ruling directly concerned only the topping up of the Climate Fund via the second supplementary budget for 2021, other cases will probably also need to be addressed. Just how the plans will be adjusted was still the subject of intense debate as this report went to press. To avoid legal risks in the financing of government projects, it is advisable to take note of the Court's clear indications outlining the intention of the debt brake. This will also create planning certainty for both citizens and firms.

Impact on central government

The Court ruling initially has a direct impact on central government's plans for the Climate Fund, immediately undoing the €60 billion transfer of borrowing authorisations booked to reserves. This leaves the Climate Fund with a formal reserve of just €31 billion, predominantly stemming from authorisations for emergency borrowing.

Central government has also used the escape clause to top up reserves of other special funds and has already planned how to spend the amounts. Particular mention should be made of borrowing authorisations of €200 billion, which central government assigned to the Economic Stabilisation Fund for Energy (ESF-E) in 2022 via the escape clause. By the end of 2022, just over €30 billion of this amount had been used for expenditure and the remainder was booked to the reserve. A large structural deficit of €106 billion is planned for the ESF-E this year, especially for the energy price brakes (see item 16.a in the table on p. 67), which is budgeted to be financed from the reserve. Actual expenditure on the measures in the ESF-E is likely to be much lower. In order to limit legal uncertainties, it would be appropriate to adjust the plans for 2023 in a timely manner. In the original plans, there was economic justification for using emergency borrowing in 2023. The energy crisis had a strong impact at the turn of the year and the outlook was extremely uncertain.

For the coming year, central government has so far envisaged a deficit of €29 billion for the Climate Fund. Further large deficits were planned for the following years. This would have depleted the Climate Fund's reserve, which had been formed via the escape clause. As soon as the ruling was issued, central government immediately postponed the budget plan for this major fund.

According to the current status of plans, further deficits were envisaged in 2024 in the ESF-E (€14 billion) as well as in the Digitalisation Fund, Flood Relief Fund, Fund to Promote Municipal Investment and the Fund for Primary School-Age Childcare Provision (€8½ billion together; items 17.b to 17.f in the table). The deficits are set to be offset using reserve funds. With the exception of the 2013 Flood Relief Fund and the Fund to Promote Municipal Investment, the reserves can be attributed to emergency borrowing from previous years.

Irrespective of this, it must be clarified how central government's plans, including for the special funds, comply with the borrowing limit of 0.35% of gross domestic product. The Court has made it clear that the core budget and off-budget entities (including those that do not have their own borrowing authorisations) must be considered

2 For more information, see Deutsche Bundesbank (2022c).

in a consolidated manner. As the plans stood in August 2023 (including the Climate Fund), these entities (items 16.a and 17 in the table) recorded additional deficits of €52 billion.

By contrast, the Armed Forces Fund, which is scheduled to run a deficit of €19 billion in 2024 (item 20 in the table), is not affected by the ruling: this fund is specifically enshrined in the Basic Law together with its own scope for borrowing, and explicit rules state that it is not subject to the debt brake.

Possible consequences for the federal states

The ruling is also expected to have an impact on the federal states. Many federal states are planning to use reserves from previous years' emergency borrowing. There is no official overview of the amount of reserves that the individual states have formed from emergency borrowing. The Bundesbank has employed makeshift calculations in this area, most recently to record new reserves from emergency borrowing for 2022.[3] Some federal states are planning to build up additional reserves from emergency borrowing this year and next year, too. Adding these plans to the Bundesbank's makeshift calculations suggests that the total amount of reserves financed via emergency borrowing could be in the order of €30 billion.

Apply the debt brake more strictly

The ruling concerns the government's scope for borrowing, not individual measures. It is the requirement to strictly limit the timeframe for emergency borrowing, which the Court deemed particularly important, that is significant in practical terms. In those areas where the scope for borrowing is reduced, the government must set clear priorities: it is essential to clarify which expenditure takes priority and, given the limited scope for borrowing, which levies have to be raised. CO_2 certificates are one climate policy instrument that can be used to explicitly address climate change targets and, at the same time, bring in revenue.

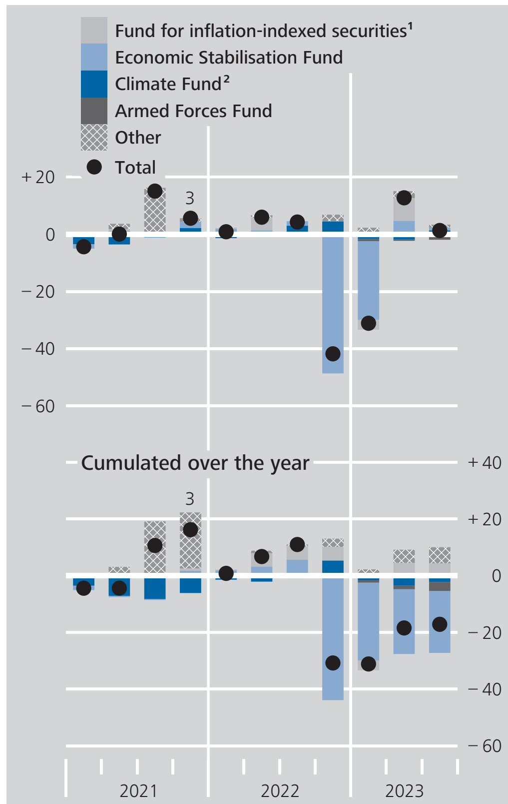
It is not yet possible to say exactly how central and state government will respond to the ruling. However, the ruling demonstrates that the debt brake will have to be applied more stringently going forward. To this end, effective fiscal rules in Europe and Germany are essential to support a stability-oriented monetary policy. The aim must be to ensure that the rules reliably limit deficits and debt and sufficiently safeguard sound government finances, thus shielding monetary policy from fiscal pressure. However, fiscal policymakers should have a vested interest here, too, as sound government finances ensure that the government remains able to act, not least in times of crisis.

The debt brake defines the regular borrowing framework more narrowly than the EU rules. On the whole, its regular borrowing limit has been considerably strengthened again and it would seem in keeping with stability policy to moderately shift its anchor and thus expand the borrowing limit somewhat. The debt ratio could also be stabilised below the reference value of 60% even if deficits were to rise moderately. This would enable investment, in particular, to be taken into account, too. The Bundesbank made proposals for a stability-oriented reform last year.[4] While changes require a broad consensus and a majority in the Bundestag and the Bundesrat that is large enough to amend the constitution, this is the right way to address concerns that the debt brake is too restrictive. By contrast, attempts to water down the debt brake during budget execution are not appropriate. This, in particular, has been made clear by the Court ruling.

3 See Deutsche Bundesbank (2023c).
4 See Deutsche Bundesbank (2022d).

Fiscal balances of central government's off-budget entities*

€ billion, quarterly figures



Source: Bundesbank calculations based on data from the Federal Ministry of Finance. * Only entities using a single-entry accounting system, i.e. excluding, in particular, the bad bank FMS Wertmanagement and, until the end of 2022, also SoFFin, which uses a single-entry accounting system and whose deficits refinanced the bad bank's debts. **1** Precautionary fund for final payments of inflation-indexed Federal securities. **2** Climate and Transformation Fund; up to 2022, Energy and Climate Fund. **3** Excluding the transfer of €60 billion from the core budget to the Climate Fund, which the Federal Constitutional Court deemed unconstitutional in its ruling of 15 November 2023.

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– After three quarters, the ESF-E recorded a deficit of €32 billion; it is set to record only around one-third of the projected €121 billion deficit for the year as a whole.

– The deficit of the Climate Fund up to the end of September amounts to €2 billion, whereas the economic plan budgeted in €14 billion for 2023. A large portion of the planned revenue from emission allowances is still outstanding. Moreover, there has been no significant increase in spending pressures thus far, either.

– The outflow from the Armed Forces Fund has accelerated recently. Nevertheless, with a deficit of €3 billion up to the end of September, the planned deficit of €8½ billion appears rather generous.

– The deficit pressure has also remained within limits for the smaller special funds, with the 2021 Flood Assistance Fund accounting for only €1 billion thus far (target in borrowing plan: €3 billion) and a little under €½ billion attributable to the Digitalisation Fund (target: just over €2½ billion) to date.[15]

– The special funds, for which the central government budget does not report any planned figures, have so far recorded net surpluses (ESF excluding ESF-E: €10 billion; pension funds: €2½ billion).

Plans for 2024

Government plans from summer envisage high deficit for off-budget entities

In the summer, the Federal Government provided more specific plans, at least for the three major special funds.

– The deficit in the Armed Forces Fund was set to rise substantially to €19 billion, not least by outsourcing the majority of procurement expenditure from the core budget. This constituted a revision of the original concept of strictly reserving the special fund for larger additional purchases.

– For the Climate Fund, the plans envisaged a sharply increased deficit of €29 billion, with the Fund not only taking on expenditure in the area of microelectronics from the core budget but also, in 2024 and beyond, financing extensive spending on the railway network and support for chip manufacturers. Furthermore, the plans specified that the Cli-

15 With the planned dissolution of the fund, the central government budget is set to receive a substantially higher amount from the fund's reserve accordingly. However, these funds ultimately stem from emergency borrowing during the coronavirus pandemic. It would therefore be logical to use the fund's reserve to repay emergency borrowing.

mate Fund would pay out large subsidies to compensate for the fact that the EEG levy on the price of electricity was revoked in mid-2022.

- With regard to the ESF-E, the Government intended to extend the price brakes until April 2024, as planned in autumn 2022, earmarking €14 billion for this purpose, including the associated interest burden.

- In addition, the Government announced that it would dissolve the Digitalisation Fund and transfer the remaining reserves to the central government budget. This relief for the core budget meant that, conversely, the Fund was set to record a further deficit of €4 billion.

Plans not yet finalised following court ruling

Following the Federal Constitutional Court ruling (see the box on pp. 69 ff. for information), the Bundestag's Budget Committee postponed its final deliberations. It remains to be seen how large the adjustments to the plans from the summer will be.

State government budgets[16]

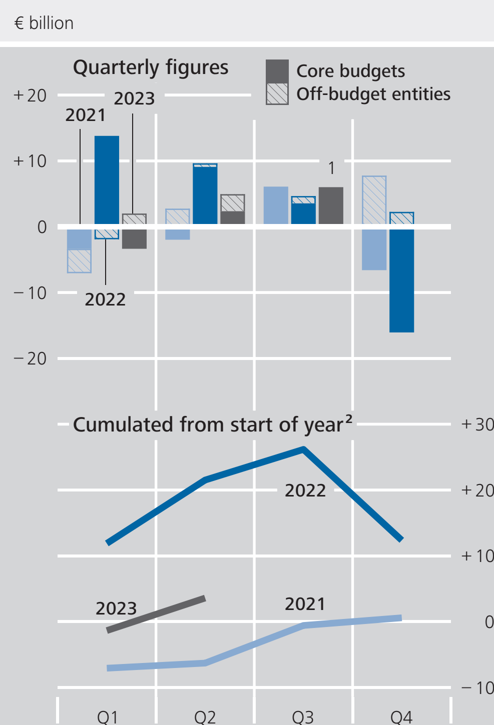
Core budgets in Q3 2023

Surplus in Q3 ultimately unchanged from previous year

State government core budgets recorded a surplus in the third quarter of 2023, as they had a year earlier. At €6 billion, it was €2 billion higher than in the third quarter of 2022 owing to a one-off effect. Revenue rose by 3½% on the year thanks to tax receipts. By contrast, revenue from public administrations saw a decline. Central government allocated lower funds for transfers to enterprises in response to the coronavirus pandemic. However, in Lower Saxony, a sum of €2 billion was directed from the coronavirus special fund to the core budget, which it then used to repay emergency loans and thus improve its balance by the amount received. At 2%, expenditure rose at a weaker pace than revenue. Nonetheless, personnel expenditure grew significantly, at 5½%. Some

State government fiscal balance

€ billion



Sources: Federal Statistical Office and Bundesbank calculations. **1** Figure calculated using monthly cash statistics from the Federal Ministry of Finance; quarterly data are not yet available. **2** Core budgets and off-budget entities together.
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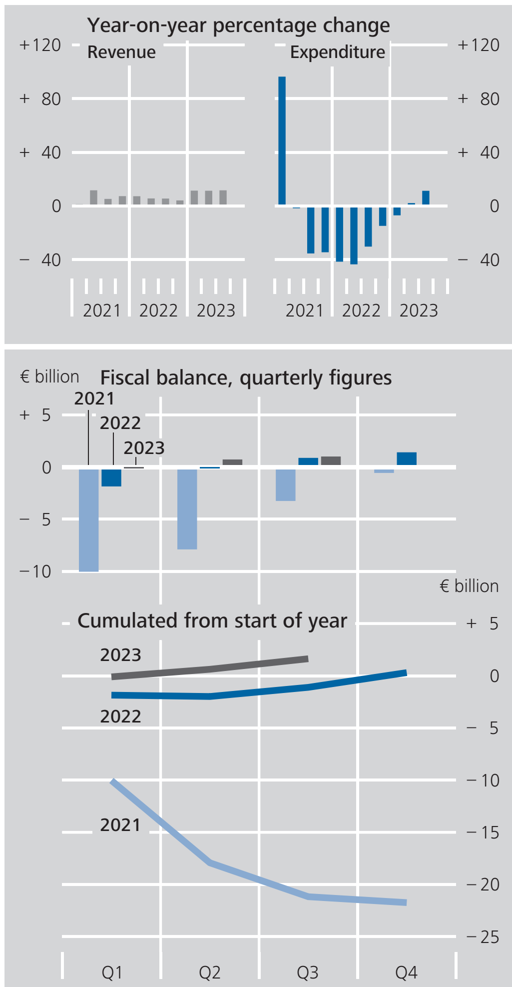
state governments had already made substantial adjustments to civil servants' pay in the summer.

Core budgets and off-budget entities in 2023

Core budgets and off-budget entities in 2023 as a whole: balance deteriorating considerably from large surplus

The core budgets and off-budget entities of the state governments combined saw a considerable deterioration in their balance in the first half of 2023. At €3½ billion, the surplus was €18 billion lower than in the first half of 2022. A deficit appears possible for 2023 as a whole, following the large surplus recorded for the previous year (2022: +€12½ billion). The tax estimate projects a slight decline in state government tax revenue for this year. This is due, in particular, to the sharp fall in revenue from real estate acquisition tax, which accrues to the

16 For the reporting quarter, the quarterly data on state governments are based on the monthly cash statistics for the core budgets. Information on off-budget entities is so far only available until mid-year.



Source: Federal Employment Agency. * Including transfers to the civil servants' pension fund and before payment of central government grants.
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federal states. Transfers from central government are also on the decline. By contrast, expenditure is rising. This is due in part to the lagged reflection of inflation in higher expenditure. In addition, there were plans to spend funds originally set aside by state governments as part of their crisis management strategy. Revenue and expenditure are increasing particularly in off-budget entities because local public transport companies have been allocated to the general government sector since the second quarter of 2023.[17]

Ruling of the Federal Constitutional Court also significant for state governments

Federal Constitutional Court ruling with implications for state governments

Many federal states formed reserves from emergency loans.[18] These are earmarked for financing projects in future years. The Federal Constitutional Court's ruling on the debt brake escape clause suggests that it would also be advisable for state governments to adjust any comparable plans (for more details, see pp. 69 ff.).

Social security funds

Federal Employment Agency

Q3 2023

Federal Employment Agency: surplus in Q3 – balance unchanged year on year

The Federal Employment Agency posted a surplus of €1 billion in the third quarter of 2023.[19] Its balance thus remained broadly unchanged on the year. Revenue and expenditure both rose substantially. The growth in contribution receipts was somewhat stronger still, at 14%. Of this, around 9 percentage points were attributable to the contribution rate rising by 0.2 percentage point to 2.6% at the beginning of the year. By contrast, other revenue was dampened by the fall in the insolvency benefit contribution rate by one-third to 0.06%. Revenue increased by 12% overall.

Substantial expenditure growth

Expenditure also grew substantially by 11%, or €1 billion. This was in spite of the dampening effect of sharply declining expenditure on short-time work. However, spending on unemployment benefit saw a steep rise of 16%, or €½ billion. This was mainly due to an increase in the number of recipients. Expenditure on active labour market policy grew by 10%. In

17 Local transport companies are the responsibility of state governments in some cases and of local governments in others. See also Deutsche Bundesbank (2023d), pp. 8 f. for information on the statistical reclassification.
18 See Deutsche Bundesbank (2023c), pp. 39 ff.
19 In the core budget, i.e. excluding the civil servants' pension fund. Transfers to the fund lower the core budget balance.

addition, transfers were made to the civil servants' pension fund again, after being temporarily suspended during the pandemic.

2023 as a whole

Significant surplus on the cards for 2023 as a whole

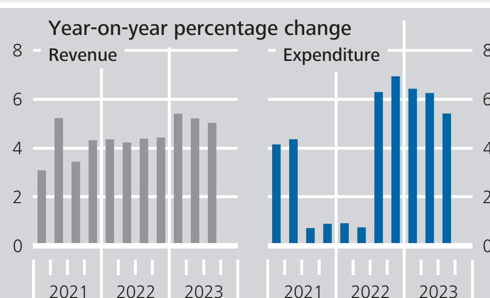
The Federal Employment Agency is expected to record a significant surplus for the year as a whole, following a small surplus in 2022. At €3 billion, this could be almost twice as high as envisaged in the budget plan.[20] For the first three quarters, the Federal Employment Agency recorded a surplus of €1½ billion (previous year: -€1 billion). As with the statutory pension insurance scheme, a surplus is usually expected in the final quarter owing to contributions paid on seasonal bonuses.

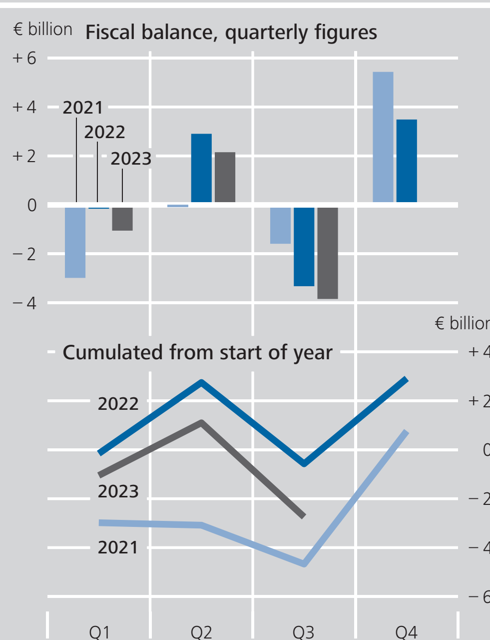
Outlook for 2024

Rising surplus foreseeable for 2024

The Federal Employment Agency's finances are expected to improve further next year. According to the Federal Government's macroeconomic assumptions in its autumn projection, revenue will continue to grow strongly. By contrast, expenditure is likely to rise more slowly. Although the Federal Government expects unemployment to increase slightly, in previous years, expenditure on active labour market policy has often remained well below the appropriations. The Federal Employment Agency's final balance is therefore likely to be better than originally planned once again.

Finances of the German statutory pension insurance scheme*





Source: German statutory pension insurance scheme (Deutsche Rentenversicherung Bund). * Preliminary quarterly figures. The final annual figures differ from the total of the reported quarterly figures as the latter are not revised.
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Pension insurance scheme

Q3 2023

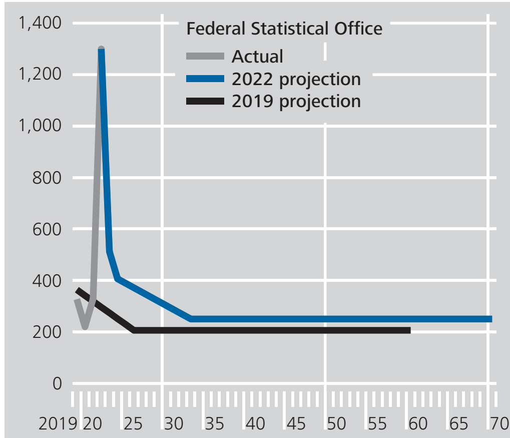
Finances of the pension insurance scheme unchanged in Q3 2023

In the third quarter, the finances of the statutory pension insurance scheme were unchanged on the previous year. As usual, a deficit was recorded in the third quarter. This year, it amounted to €4 billion. However, it was around €½ billion higher than in the third quarter of 2022, when the balance was improved by back-payments of central government grants. Total revenue rose by 5%. Contribution receipts grew somewhat more strongly (5½%), although social contribution-exempt inflation compensation bonuses actually had a marked dampening effect. Expenditure increased in line with contribution receipts. Pensions rose by just over 4½% on average across Germany.[21] The number of pensions saw only moderate

20 The repayment of a €½ billion loan to central government is assessed as an appropriation of the annual net profit and is not included in the balance. The Federal Employment Agency needed the loan in 2022 because a deficit of €½ billion had been incurred in the (contribution-funded) core budget (excluding the pay-as-you-go areas of insolvency benefit and winter construction).
21 For more information on the pension increase, see Deutsche Bundesbank (2023e), p. 66.

Net migration

Thousands of people



Sources: Federal Statistical Office (2019, 2022).
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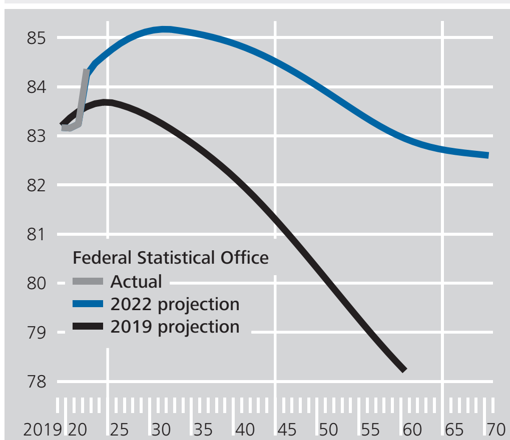
Population size

Millions of people



Sources: Federal Statistical Office (2019, 2022).
Deutsche Bundesbank

growth. In addition, higher supplementary contribution rates to the statutory health insurance scheme are placing a strain on the pension insurance scheme. The pension insurance scheme and pensioners contribute in equal parts to the financing of these supplementary contributions.

2023 as a whole

2023 as a whole: another surplus appears likely

For 2023 as a whole, the statutory pension insurance scheme could once again close with a surplus (2022: +€3½ billion). This could amount to around €1½ billion. At the end of the third quarter, the statutory pension insurance scheme still had a deficit of just over €2½ billion. The pension insurance scheme usually records high contribution receipts in the fourth quarter, primarily as a result of contributions on seasonal bonuses. A large surplus is therefore likely in the final quarter. Social contribution-exempt inflation compensation bonuses will probably have little impact on this. The surplus in the final quarter is likely to be higher this year than in the same quarter of 2022. This is due to the fact that there are no longer any retroactive payments of basic pension top-ups due this year (still almost €1 billion at the end of 2022).

Balance significantly better than expected

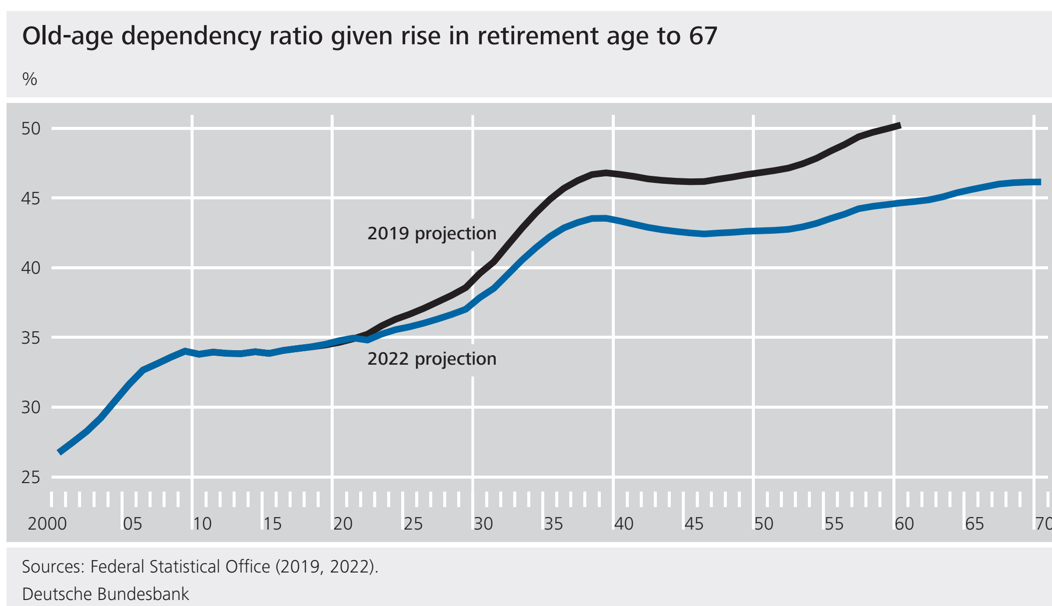
The pension insurance scheme will thus close the year with a significantly better balance than was expected in the pension insurance report in autumn 2022, when the Federal Government still expected a deficit of €1 billion. The improvement in the balance is due to the fact that the contribution base is growing much more strongly than was assumed at that time. The sustainability reserve could rise to almost €45 billion. This would amount to just under 1.7 times the scheme's monthly expenditure and would therefore be well above the statutory minimum of 0.2 times its monthly expenditure.

Outlook for 2024

2024: finances largely unchanged

Based on the Federal Government's autumn projection, the finances of the statutory pension insurance scheme are unlikely to change much at all next year. Another surplus, as is projected, would lead to a further rise in the sustainability reserve. Contribution receipts will probably continue to grow strongly. As earnings rose sharply last year, central government funds, which are largely tied to them, are also likely to increase by around 5% in 2024. However, the Federal Government is planning to cut these funds by €½ billion on an ad hoc basis in order to ease the burden on the central government budget. Growth in pension expenditure could be similarly strong to that in 2023 (just under 5½%).

Old-age dependency ratio given rise in retirement age to 67



Sources: Federal Statistical Office (2019, 2022).
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Longer-term outlook

Despite more favourable assumptions, pressures on pension finances remain high

In the future, demographic developments will place considerable pressures on the finances of the statutory pension insurance scheme. The population assumptions of the Federal Statistical Office, which were adjusted at the end of 2022, suggest that the ratio of older to younger persons is rising less sharply,[22] somewhat reducing the likely financing burdens on the statutory pension insurance scheme. However, the Bundesbank's updated simulations show that financial pressures remain high.[23]

Updated assumptions on life expectancy and migration

The now more favourable outlook is largely due to the changes in assumptions about mortality and migration.

- Assumed life expectancy is lower than in the previous projection. The Federal Statistical Office now puts the remaining life expectancy of 65 year-olds at 22¼ years in 2060. That is around ¾ year lower than in the last population projection in 2019.

- Net migration is expected to be higher, especially until the beginning of the 2030s. However, it remains elevated in the longer run, too. Viewed in isolation, migration thus more or less compensates for the dampening effect of low birth rates. The population is even projected to rise further for a time, before falling back to the level recorded at the beginning of 2020 (see the chart on p. 76).

Old-age dependency ratio still rising sharply but less than previously expected

The new assumptions also envisage a sharp rise in the old-age dependency ratio. Nonetheless, it is lower than previously expected. The old-age dependency ratio is the ratio of older persons to those of working age.[24] It is currently 35%, meaning that there are 35 persons of retirement age for every 100 persons of working age. By 2070, the old-age dependency ratio will rise to around 46% (see the chart above).

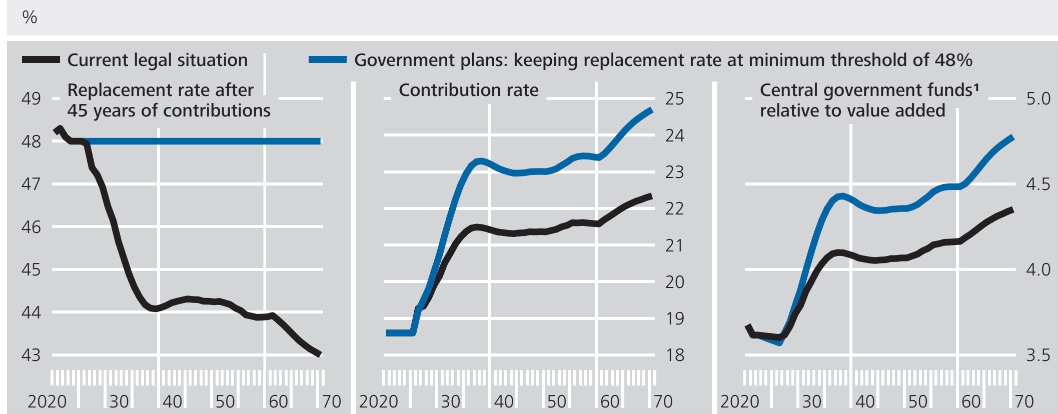
Crucial to pension insurance scheme's finances: labour market integration of immigrants

In addition to the old-age dependency ratio, the structural characteristics (age, gender and average income or pension level) of contribution payers and pensioners are key factors in the development of the statutory pension insurance scheme's finances. With regard to mi-

22 See Federal Statistical Office (2022).
23 See Deutsche Bundesbank (2019, 2022e) and Schön (2020) for more information on the demographic burdens facing the pension insurance scheme, and on the simulations. Answers to frequently asked questions on the reports can be found in Deutsche Bundesbank (2023f).
24 The assumed working lifespan extends from the age of 20 up to the current retirement age. The old-age dependency ratio is calculated based on the assumptions of the second (middle) variant of the population projection. The second variant was also used for the other two demographic factors: birth rate and life expectancy.

Simulation: current legal situation and government plans

%



1 To better capture the scale of the additional financing needs, these are expressed in percentage points of the standard VAT rate (see Deutsche Bundesbank (2019, 2022e)). In the current legal situation, the additional financing needs in the central government budget up to 2070 are around 2 percentage points as things stand. With a minimum threshold for the replacement rate, the financing needs rise to the equivalent of 3 percentage points of the standard VAT rate.

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gration, relevant factors include the age of immigrants and emigrants, how they integrate into the labour market and the amount that they earn there.[25] Taken in isolation, the entry of immigrants into the labour market has a positive pre-financing effect on the pay-as-you-go pension system: it increases contribution receipts and makes more funds available to finance current pensions. However, it also generates new pension entitlements, which will have to be financed in the future.

Simulations for (i) the current legal situation, (ii) government plans and (iii) a continued rise in the retirement age

More favourable outlook, but financing pressures remain high

The new assumptions provide a more favourable financial outlook for the statutory pension insurance scheme. Yet financing pressures remain high, as the simulations show (see the chart above).

(i) Current legal situation: contribution rate and central government funds rise; replacement rate falls

In the current legal situation, the thresholds safeguarding a minimum replacement rate of 48% and a maximum contribution rate of 20% will expire in 2025. The demographic burdens are then distributed relatively broadly across the three variables replacement rate, contribution rate and central government funds. Irrespective of the thresholds, the statutory retirement age continues rising until the beginning of the 2030s, up to 67. Simulation (i) shows a fall in the replacement rate from 48% to 44% by 2040, and a further decline to 43% by 2070. Accordingly, the contribution rate rises by 3 percentage points to 21½% by 2040 (2070: 22½%). Central government funds also increase significantly relative to value added. They are largely tied to the contribution rate, as well as to the average wage.

(ii) Minimum threshold for replacement rate causes contribution rate and central government funds to rise more sharply again

In its coalition agreement, the Federal Government[26] stipulated that the replacement rate of 48% should be safeguarded on a permanent basis. However, no draft legislation to this effect has yet been issued. Simulation (ii) looks at these plans. Taken in isolation, the constant

25 Simulations of pension finances are based, amongst other things, on assumptions regarding the age-specific labour force participation of immigrants and emigrants. Taken in isolation, the pension insurance scheme benefits from the assumed relatively youthful age structure of immigrants: the vast majority of immigrants are of younger working age. In the Bundesbank's pension model, the income and age profile for the labour force participation of immigrants corresponds to that of persons already resident in Germany. If, for example, the labour force participation of immigrants is (initially) lower, the dampening effect on the contribution rate is also weaker. The age-specific labour force participation of labour market-oriented immigrants, e.g. from other EU countries, is generally broadly the same as for the domestic population. Labour force participation is lower for immigrants from non-EU countries (a high percentage of whom are refugees). This is probably due not least to temporary employment bans and the considerably more involved process of labour market integration.
26 See Federal Government of Germany (2021).

The plan to introduce a generational capital fund to ease pressures on the pension scheme's finances

The Federal Government of Germany is planning to introduce a new scheme known as the "generational capital fund" in order to reduce the funding pressures resulting from demographic change.[1] No specific decisions have been made yet in this regard. In essence, the Federal Government intends to build up debt-financed capital stock, which should then generate a return that is higher than the financing costs of the additional central government debt. The resulting net income would be paid into the statutory pension insurance scheme as additional central government grants from the mid-2030s onwards. The higher these additional grants are, the lower the rise in the contribution rate, and thus the resulting increase in regular central government funds, will be. A lower contribution rate also ultimately leads to higher pension payments as a result of the pension adjustment formula: a reduction in the contribution burden is effectively passed on to pensioners with the next annual adjustment. Pensions then rise more significantly.

The generational capital fund differs fundamentally from many capital-based pension funds in other countries in that it will be financed mainly through new debt. These countries finance their capital-funded pension components mostly from contributions or from existing state assets. In Sweden, for example, insured persons make their own contributions to accumulate individual entitlements in a capital market-based fund. Norway has the world's largest sovereign wealth fund in relation to national GDP (330%), financed by the country's oil and gas revenues.[2]

Long-term positive equity risk premium plausible, considerable uncertainty over time

In principle, it is plausible to assume that the generational capital fund can achieve positive net returns in the long term. This assumption is supported by theoretical considerations and the results seen in past decades. For example, expectations for returns on the equity market are generally higher than the interest rate expectations for risk-free Bunds (Federal bonds). This is because equities carry higher risk and their returns fluctuate to a greater extent. Studies show that, on average, equity portfolios have generated a higher return (equity risk premium) than government bonds over long investment periods.[3] Simple calculations show that in the period from 1969 to 2022, an investment strategy in a global equity portfolio, assuming annual rolling refinancing via German government bonds, generated a return advantage averaging 1.9% annually for financing via ten-year government bonds and 3.1% annually for financing via one-year government bonds.[4] The reason for the differences in returns is the higher government bond yields associated with longer maturities. The historically achievable equity risk premium is sensitive to the respective investment period and

1 For more information, see Federal Ministry of Finance (2023d) and Federal Government (2021).
2 For a broader overview of sovereign wealth funds, see Federal Ministry of Labour and Social Affairs (2022).
3 See Damodaran (2023) and Dimson et al. (2023). A comparison of countries shows that the equity risk premium was between 1.8% and 6.3% in the period from 1900 to 2017. The equity risk premium tends to fall over time.
4 See Damodaran (2023). Difference between the geometric average of the MSCI World share yield (performance index less withholding tax, in euro) and the average current yield of one-year and ten-year German government bonds.

starting point.[5] For example, the equity risk premium fluctuated between -2.1% and 8.3% over a rolling investment period of 15 years between 1969 and 2022.[6]

Ultimately, the level of the future equity risk premium cannot be quantified reliably, as it is uncertain and depends on many factors. For example, it is difficult to estimate the extent to which long-term trends such as digitalisation, decarbonisation or a fragmentation of global trade will influence the risk-return ratio of equities compared to German government bonds in the future.

The net returns on the generational capital fund will depend on the portfolio selected. The aforementioned yield advantages relate to broadly diversified international equity investments; this history is not relevant for other investment objectives. For example, government agencies could impose investment guidelines that define other, secondary economic policy objectives in which returns might not be the sole focus. This would run counter to the purpose of the generational capital fund, which is to ease the financial burden on the pension insurance scheme to the greatest degree possible. Norway, for example, requires its sovereign wealth fund to make investments exclusively outside Norway in order to prevent national economic policy objectives from influencing investment decisions.[7]

In addition to the return on equity, the net returns on the generational capital fund depend on government financing conditions. This makes confidence in sound public finances more important, as the generational capital fund model would become less attractive if the creditworthiness of the state fell and risk premia reduced or eliminated the positive difference in returns. Credible and binding budget rules can contribute to confidence in sound public finances. However, the generational capital fund, in and of itself, increases national debt. The higher the national debt, the greater the subsequent rise in interest expenditure.[8]

Although the equity risk premium is likely to be positive on a long-term average, it may also be temporarily negative over time. The length of a phase with negative equity risk premia depends primarily on the macroeconomic environment. Negative net income and some capital losses would then also be possible. The overall structure and, in particular, the distribution policy should take this into account. It should be borne in mind that the investment horizon is relatively short, with the first withdrawal planned in just over a decade, making risk smoothing more difficult in the early disbursement phase.

Buffers could be created in order to enable special grants to be paid to the pension insurance scheme as steadily as possible and to minimise risks to central government finances as far as possible. The fund could then draw on this buffer in the event of unfavourable net returns on the generational capital fund. In order to create a buffer, the distributions from the fund to the pension insurance scheme would initially need to be set conservatively. Precautions would have to be taken in the event that the buffer is exhausted. If distributions were then to continue, the value of the fund could fall below the amount of debt incurred by central government in this context. In any

5 In addition, the development of the EUR/USD exchange rate is also relevant for the equity risk premium, as the MSCI World (net index) is denominated in US dollars.
6 The return on the MSCI World (performance index less withholding tax, in euro) was consistently positive over an investment period of 15 years, averaging between 1.8% and 14.6% p.a.
7 For more information, see Freudenberg (2017).
8 Administrative costs also play a significant role in the net return. They may be lower for capital stock managed by the state than for profit-oriented private fund offerings. However, with relatively standardised investment products, the administrative costs and therefore the margins in a competitive private market are also likely to be relatively limited.

event, in such a case it would make sense to count further disbursements towards the debt brake applicable to the central government budget. It would also have to be assessed whether the recent ruling by the Federal Constitutional Court has an impact on how the generational capital fund is to be taken into account under the debt brake rules (for information on the ruling, see pp. 69 ff.).

The generational capital fund is intended to ease the financial burden on the pension insurance scheme in the long term and apparently not to pursue any other economic policy objectives. In order to ensure that the generational capital fund remains bound to this purpose, its fundamental features should be enshrined institutionally. Writing these into the Basic Law would provide relatively strong protection. Future amendments would then require a broad parliamentary majority.[9]

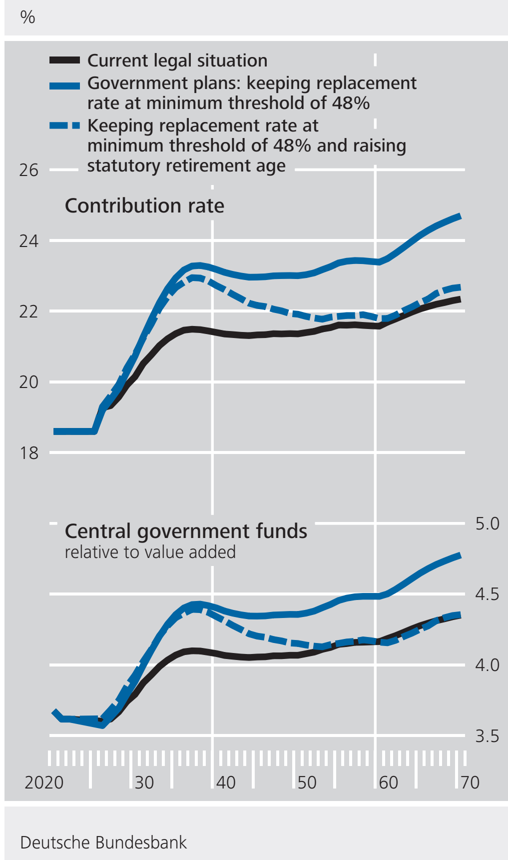
Funding contribution to pension insurance scheme probably limited

Discussions are underway about the possibility of endowing a capital stock with around €180 billion by the mid-2030s; the fund would then probably be equivalent to 3% of nominal GDP. The 2023 central government budget envisages an initial allocation of €10 billion to the generational capital fund. According to earlier press reports,[10] a further €12 billion could flow into the fund each year from 2024, which will be dynamically adjusted by 3%. In addition, central government shares worth €15 billion will apparently be transferred to the generational capital fund.[11]

Overall, the planned generational capital fund is unlikely to relieve much of the demographic funding pressure on the pension insurance scheme: the Bundesbank's simulations show that, in the current legal situation, the contribution rate is set to rise by just under 3 percentage points by 2035. Under the government's plan (minimum threshold of 48%), it increases even more, by almost 4½ percentage points. However, the generational capital fund is only expected to ease the burden on pension insurance scheme finances as from the mid-2030s. It would alleviate the financial pressures relating to the retirement of the baby boomers just after the contribution rates have already risen sharply. If the equity risk premium were in the range of 1% to 5%, the contribution rate could be reduced by between 0.1 percentage point and ½ percentage point (with the planned fund volume and corresponding distributions).[12]

Overall, the generational capital fund offers opportunities for the pension insurance scheme, but also entails risks. Four parameters remain crucial for pension insurance scheme finances: overall pension level, retirement age, contribution rate and central government funds. Positive macroeconomic developments in Germany will remain the key factor in the real value of pension benefits.

9 For example, Saxony has enshrined its Provident Fund for Pension Obligations in its state constitution (Article 95(7)).
10 See Frankfurter Allgemeine Zeitung (2023) and Specht (2023). No further allocations were budgeted in the Federal Government's medium-term financial plan from the summer. The final deliberations on the 2024 central government budget have not yet been concluded.
11 However, this means that the central government budget will permanently forego the resulting income.
12 In its 2022 report, the Social Advisory Council calculated that with a net return of 2%, capital stock of around €850 billion would be required to reduce the contribution rate by 1 percentage point from the mid-2030s (see Deutscher Bundestag (2022)). By contrast, the German Council of Economic Experts recently estimated a net return of 5% for the generational capital fund. According to their report, capital stock of €450 billion would be required to reduce the contribution rate by 1 percentage point (see German Council of Economic Experts (2023)).



– and thus permanently higher – replacement rate would significantly increase financing pressures: here, the contribution rate rises by just under 2 percentage points versus the current legal situation to almost 23½% in 2040. By 2070, the contribution rate rises to almost 25%. As central government funds are largely tied to the contribution rate, they likewise grow more strongly.

(iii) Life expectancy-linked retirement age and threshold significantly dampen financing pressures

Simulation (iii) includes the elements in (ii) and also links the statutory retirement age after 2031 to the assumed life expectancy. The starting point is the simulation outlined above with a minimum threshold of 48% for the replacement rate.[27] The rising retirement age significantly reduces the financial pressures caused by the threshold, especially from the end of the 2030s. In line with the higher net migration, the simulation also assumes that the larger population of working age has a positive macroeconomic impact: additional employment broadens the contribution base and increases value added. Combined with a lower number of pensions, this reduces financial pressures. This effect gradually increases, gathering momentum primarily in the 2040s. As a result, the contribution rate and central government funds tend to follow the trajectory seen in the current legal situation (i.e. the trajectory observed in Simulation (i)). However, the contribution rate in 2070 is still around 4 percentage points higher than it is today.

Much less unfavourable results given new demographic assumptions

Although there are still strong pressures on pension finances based on the updated population projection, these are lower than in previous simulations: (i) in the current legal situation, the replacement rate in 2070 is now around 2½ percentage points higher than in the previous Bundesbank simulation. The contribution rate in 2070 is 2½ percentage points lower. (ii) In a scenario with a permanent minimum threshold of 48%, the easing of finances is even greater, as the threshold has less pressure to absorb. The contribution rate in 2070 is then around 4½ percentage points lower than in previous simulations, although it is still just under 25%. (iii) Given the combination of a minimum threshold and a retirement age that rises after 2031, the contribution rate is now just over 4 percentage points lower than before.

Generational capital fund unlikely to play a key part in reducing foreseeable financial pressures

The Federal Government is planning to introduce a new scheme known as the "generational capital fund" to lower demographic financing pressures from the mid-2030s onwards. As things stand, however, this is unlikely to play a key part in reducing the pressures on the contribution rate (for more information on the generational capital fund, see pp. 79 ff.).

27 For more information, see Deutsche Bundesbank (2019, 2022e). The retirement age rises in such a way that the average ratio of pension years to contribution years remains broadly stable from 2031 onwards. In its latest report, the German Council of Economic Experts recommended linking the retirement age to life expectancy. The 2:1 rule proposed in that document results in a somewhat lower retirement age in 2070 (see German Council of Economic Experts (2023), pp. 313-317).

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