

Government personnel expenditure: development and outlook

The German government currently employs around 4½ million staff. These employees provide public services, particularly in the areas of education, childcare, internal and external security, justice, and general administration. Annual personnel expenditure recently amounted to over €250 billion, thus accounting for roughly one-fifth of government expenditure. Growth in spending on current staff has distinctly trailed that of economic output since German reunification, chiefly as a result of staff reductions. However, this trend has tailed off in the past few years on account of somewhat stronger pay increases and recruitment of new staff, especially in the areas of education and childcare. By contrast, spending on recipients of civil servant pensions expanded substantially over the entire period owing to growth in their numbers.

Government staff numbers ultimately depend on the desired scale and the quality of the services that the government provides. The indications are of a slight increasing trend in the coming years – not least in connection with the large influx of refugees. Wage and salary developments in the public sector can probably be expected to more or less track the private sector, as in the past few years. Government pension payments will increase more steeply owing to the current age structure of civil servants, even if benefit cuts and a rising retirement age have a dampening effect. The broad base of civil servant pension reserves and funds formed are, in principle, a welcome development. In general, it appears desirable to already comprehensively include retirement provisions for civil servants in the budgets in order to reflect the full costs of current staff. Future budget relief would only be achieved, however, in the absence of any additional borrowing for this purpose. Going forward, a review of the pension rules and regulations for civil servants – including looking at raising the standard retirement age above 67, as for the statutory pension insurance scheme – is likely to remain on the agenda.

Of the various levels of government, state government is seeing the most significant staff costs, especially including the prospective increase in civil servant pension payments. In 2020, the debt brake, which requires a (structurally) balanced budget, will have fully entered into force for the federal states. Should any consolidation still be necessary before that date, spending on current staff and civil servant pension benefits, given their major weight, would represent a prime starting point. There is the option here of differentiating in greater measure between the federal states with respect to civil servant pay rates and potentially also negotiated wages, for example. Here, differences in pay could be justified by differences between states with regard to price levels.

Personnel expenditure second largest spending category

Overall development of personnel expenditure: an overview¹

Government personnel expenditure in Germany amounted to €255 billion last year (just over 8½% of gross domestic product (GDP)) according to the cash statistics. It thus constitutes the second largest spending category in the government budgets – recently accounting for around one-fifth of spending – after social transfers. Personnel expenditure in this context includes both spending on current staff and on pension benefits for retired civil servants as well as their surviving dependants (for information

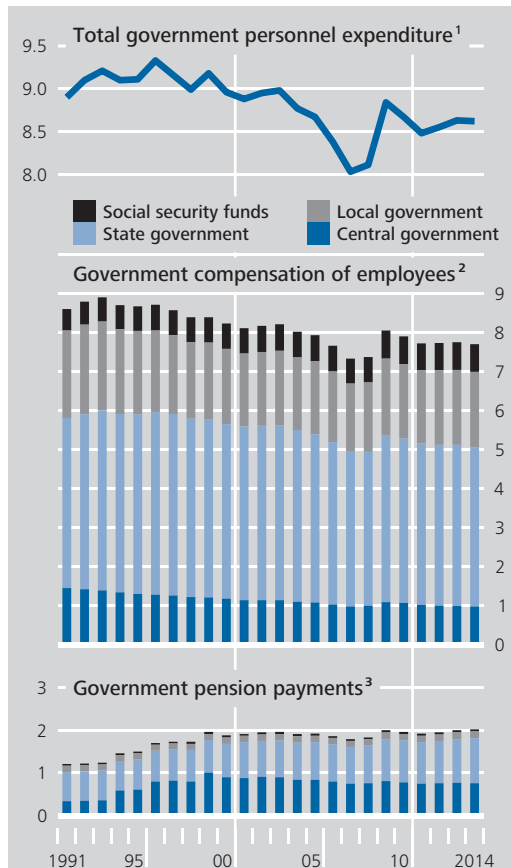
on the statistical base, see the box on pages 35 and 36).

Following German reunification, the expenditure on current staff recorded in the national accounts still made up nearly one-fifth of total government spending. After having been on the decline up until the end of the last decade, a certain resurgence in this share has been seen in recent years. Overall, at an annual average of just over 2%, growth in the compensation of employees recorded in the national accounts was weaker than that of (nominal) economic output, which rose by just over 2½%. This meant that the ratio to GDP, starting from its highest point of 9% in 1993, declined to just over 7% by 2007, and since then has risen slightly on balance to just over 7½% of late (see the adjacent chart and the table on page 38).²

Subdued trend in government expenditure on current staff ...

Government personnel expenditure by level of government and type of spending

As a percentage of GDP



By contrast, civil servant pension benefits have increased substantially over time. Given average annual growth of 5%, they rose in several waves from just over 1% of GDP in 1991 to 2% by 1999, and have remained in this range since then. It should be borne in mind that this increase was driven, in large part, by institutional shifts in the course of the restructuring and partial privatisation of the German railways and postal service (including Deutsche Telekom) in the 1990s. Central government took on the pension obligations for civil servants in this process.³ But developments at the level of state government, which recently once again accounted for a little more than half of general government pension payments for civil ser-

... while pension payments increasingly significant

Sources: Federal Statistical Office, Fachserie 18, Reihe 1.4 (national accounts) and Bundesbank calculations. **1** Compensation of employees and pension payments, adjusted for imputed social contributions. **2** Gross wages and salaries as well as employer's social contributions (including imputed social contributions). **3** Including healthcare payments for recipients of civil servant pensions.

1 For a more detailed analysis of the early years after German reunification, see Deutsche Bundesbank, Present and future financial burdens facing the central, regional and local authorities from expenditure on personnel, Monthly Report, August 1998, pp 59-79.

2 Viewed in relation to (cyclically-adjusted) trend GDP, the fluctuations in the ratio are dampened, especially during and after the economic crisis of 2008-09.

3 This is offset, on the other hand, by central government revenue from the stock market flotation and dividends of Deutsche Telekom and Deutsche Post. The assumption of Deutsche Bahn's pension obligations restricted its borrowing needs, for which central government was responsible anyway.

Various statistics on personnel expenditure

Government expenditure on personnel is reported differently in the government finance statistics and the national accounts. In the government finance statistics, the analysis of developments is fundamentally made more difficult by the fact that, over time, the data were affected by a raft of privatisations and outsourcing of entities from government core budgets. The compensating changes in the reporting population were performed *en bloc* in the past, thus causing further breaks in the series. By contrast, the national accounts have been using a uniform definition of the government sector, including all off-budget entities, even over longer time periods. At the current end, however, the national accounts definition of general government fundamentally matches the reporting population of the government finance statistics. In this report, the description of developments is therefore based as a general rule on national accounts data, supplemented with more detailed information from the government finance statistics and the associated statistics on public service personnel.

The government finance statistics are based on standard single-entry fiscal budgets and build on the classification in the government budgetary planning system. The relevant main budget category 4 comprises not only the wages of salaried staff and pay of permanent civil servants (including all allowances depending on, for instance, the specific position and marital status) but also spending on old-age and surviving dependents' pensions of civil servants and soldiers (group 43) and financial assistance granted in the event of illness (reported separately for current and retired staff; group 44). Salaried employees' retirement pensions, by contrast, are covered by the statutory pension insurance scheme and supplementary pension funds. Contributions to these are part of the salaried employee remuneration reported in the general government budgets. The subsequent pension payments are then transfers by (general government) social security funds and the supple-

mentary pension funds (not recorded in the government sector). Transfers to the pension reserves for current and retired civil servants, established nationwide in 1999, are also typically classified in the budgets as personnel expenditure. The reserves, however, are counted in the government sector as off-budget entities. If this sector is presented as a (consolidated) whole, the financial relationships between core budgets and reserves, reported as personnel expenditure, are deducted, and only the civil servant pension payments are counted fully as pension expenditure (irrespective of whether reserves are tapped).

The national accounts, by contrast, are intended primarily to depict the circular flow of money. They not only record employee compensation from current employment (salaried employees and civil servants),¹ but also pension benefits, including healthcare payments for civil servants, as (monetary) social benefits. Since no contributions to the social security funds are paid for current civil servants while the national accounts are also designed to make the treatment of civil servants comparable with the statistical treatment of salaried staff, including with regard to value added, imputed (notional) social security contributions are added to the equation. This means that, for each respective level of government, imputed social contributions² are added to staff costs on the expenditure side; at the

¹ Remuneration, a measure of the value created, is added to GDP in the "production without concluded transactions at significant remuneration" item in the government sector.

² The respective contribution rate to the statutory pension insurance scheme and an add-on for additional claims in accordance with the contribution rate to the supplementary pension insurance scheme for salaried employees of central and state government are recognised. In addition, amounts according to the ratio between current healthcare payments for civil servants and paid remuneration are added on as the health insurance contribution. See N R ath, A Braakmann et al, Generalrevision der Volkswirtschaftlichen Gesamtrechnungen 2014 f ur den Zeitraum 1991 bis 2014, Federal Statistical Office, Wirtschaft und Statistik, September 2014, p 537.

same time, these are entered in the revenue side as imputed received social contributions. With regard to spending on current staff, this addition accounts for the major difference, in terms of figures, to the government finance statistics described above.

On the whole, compensation of employees in the national accounts is still generally lower than personnel expenditure reported in the government finance statistics as the latter include pension and healthcare payments to civil servants for the affected reporting population.³ The government finance statistics thus cover all payments occurring in a fiscal year caused by general government staff. In order to draw a comparable picture under the national accounts definition, too, this article will also present, alongside compensation of employees, the civil servant pension benefits (including the relevant healthcare payments) posted there as social transfers. To avoid overstating the actual total burden on government coffers, the imputed social contributions for

current civil servants are deducted when merging spending on current staff with pension payments.⁴

³ These actual pension payments exceeded the imputed government social contributions by a significant amount owing, not least, to the assumption of the burden of civil servant pensions from the corporate sector (railway and postal services).

⁴ To this extent, the procedure differs from the national accounts treatment, in which imputed social contributions increase total central government revenue and expenditure (similarly to employer contributions for salaried government staff).

vants, also reveal a pronounced increase in financial burdens.

Total burden currently only slightly lower than 1991

Overall, therefore, personnel-related expenses as a percentage of GDP have decreased only slightly since 1991 (by 0.3 percentage point), recently amounting to just over 8½%. The share of civil servant pension benefits in this expenditure item has risen by 10 percentage points to almost one-quarter.

Functions: education, public order and safety, and general public services entail high staff costs

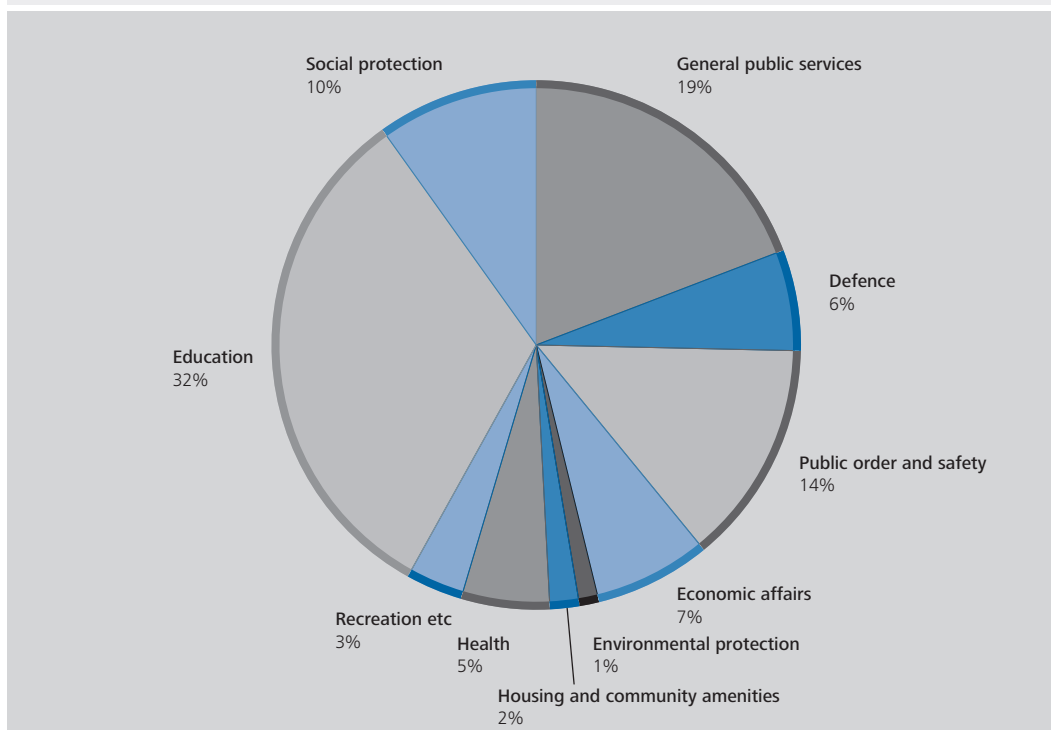
The distribution of the compensation of employees recorded in the national accounts across the various functions of government is very heterogeneous. Education involves a particularly high number of staff, and accounts for nearly one-third of this spending (see the chart on page 37). Primary and secondary education make up the largest portion of the costs. Other functions with a major weight are public order and safety (just under 14%) and, increasingly, general public services (just over 19%). Social protection accounts for 10%, with the area of

families and children recording a considerable increase since 2007 as a result of the expanded provision of childcare. The distinct decrease in the area of defence (to just over 6%) is ultimately due to the downsizing of the Federal Armed Forces.

The division of functions in the German federal system is reflected in the distribution of expenditure across the levels of government. State government is responsible for especially staff-intensive areas: education, public order and safety, and a good portion of general public services. It incurs just over half of the expenses for current staff, despite a slight reduction in its share since the middle of the last decade. For local government, which accounts for a share of one-quarter, a marked decline up until the turn of the millennium was followed by a countermovement, resulting in just a slight decrease compared with 1991. Central government's share fell almost incessantly and significantly over the entire observa-

Levels of governments: state government dominates, but local government also has significant share

Government compensation of employees by function* in 2013



Sources: Federal Statistical Office and Bundesbank calculations. * Functions pursuant to COFOG (Classification of the Functions of Government).
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tion period, recently amounting to one-eighth. By contrast, the weight of the social security funds (especially the statutory health insurance scheme and the statutory unemployment insurance scheme) rose to just under one-tenth.

By international standards, the German government's spending on current staff is below-average. In relation to GDP, it is considerably lower than the comparable figures for the European Union and the United States, but on a similar level to Switzerland and higher than in Japan.⁴ These figures largely reflect differences in how the provision of public services is divided between the government and the private sector.⁵ The scale of public services provided therefore cannot be inferred from personnel expenditure alone, nor is it the subject of this article.

Spending on current staff fairly low by international standards, but comparability is limited

Determinants of spending on current staff

Government spending on current staff is influenced by the level of wages and salaries on the one hand, and by the scale and structure of the workforce on the other. Personnel expenditure is less affected by short-term cyclical factors than by structural developments. These include decisions on the scope of the services provided by government, but also factors that are not directly influenced by the government, such as demographic change, which can have repercussions for the range of education offered, for example.

Basic determinants

⁴ See the figures in the European Commission's AMECO database at: http://ec.europa.eu/economy_finance/ameco/

⁵ In France, for example, hospitals are included in the government sector and the staff costs they incur are accordingly booked to the government. By contrast, hospitals in Germany (including government-run hospitals) come under the corporate sector and payments by the statutory health insurance scheme are recorded as government social transfers in kind. In other countries, the healthcare sector is essentially more heavily privatised and privately funded.

Government personnel expenditure by level of government and type of spending (national accounts)

Item	1991	1995	2000	2005	2010	2011	2012	2013	2014	Change
	€ bn									% pa
Compensation of employees ¹	135.9	164.6	174.0	182.2	203.5	208.6	212.9	218.6	224.6	2.2
Central government	23.0	24.6	24.9	24.8	27.5	27.5	27.6	28.0	28.6	1.0
Core budget	21.9	23.4	23.5	23.0	24.5	24.1	24.1	24.3	24.7	0.5
Off-budget entities	1.1	1.3	1.4	1.8	3.0	3.4	3.5	3.7	3.9	5.6
State government	68.9	87.4	94.5	99.1	108.6	111.8	113.5	116.4	118.7	2.4
Local government	35.4	40.7	40.8	43.0	49.2	50.6	52.6	54.3	56.6	2.1
Social security funds	8.7	12.0	13.8	15.4	18.2	18.7	19.2	20.0	20.7	3.8
Pensions ²	19.1	28.4	39.6	44.0	50.6	51.7	53.8	56.1	58.9	5.0
Central government	5.3	11.5	19.0	19.3	20.2	20.2	21.0	21.6	22.1	6.4
Core budget	4.9	6.7	7.5	7.8	8.5	8.6	8.9	9.1	9.4	2.9
Off-budget entities	0.5	4.9	11.5	11.4	11.6	11.5	12.1	12.5	12.6	15.4
State government	10.7	13.5	16.6	20.3	25.2	26.2	27.2	28.6	30.7	4.7
Local government	2.4	2.7	3.1	3.4	4.0	4.1	4.2	4.4	4.7	3.0
Social security funds	0.6	0.8	1.0	1.0	1.3	1.3	1.4	1.4	1.4	3.6
Total (adjusted) ³	140.7	173.0	189.6	199.6	223.7	229.3	235.6	243.3	251.4	2.6
<i>Memo item</i> Total government spending	732.3	1,037.9	947.1	1,063.0	1,219.2	1,208.6	1,224.5	1,255.6	1,290.7	2.5
	As a percentage of GDP									Per-centage points
Compensation of employees	8.6	8.7	8.2	7.9	7.9	7.7	7.7	7.8	7.7	-0.9
Central government	1.5	1.3	1.2	1.1	1.1	1.0	1.0	1.0	1.0	-0.5
Core budget	1.4	1.2	1.1	1.0	0.9	0.9	0.9	0.9	0.8	-0.5
Off-budget entities	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
State government	4.4	4.6	4.5	4.3	4.2	4.1	4.1	4.1	4.1	-0.3
Local government	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	-0.3
Social security funds	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.2
Pensions	1.2	1.5	1.9	1.9	2.0	1.9	2.0	2.0	2.0	0.8
Central government	0.3	0.6	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.4
Core budget	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.0
Off-budget entities	0.0	0.3	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
State government	0.7	0.7	0.8	0.9	1.0	1.0	1.0	1.0	1.1	0.4
Local government	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.0
Social security funds	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Total (adjusted)	8.9	9.1	9.0	8.7	8.7	8.5	8.6	8.6	8.6	-0.3
<i>Memo item</i> Total government spending	46.4	54.7	44.7	46.2	47.3	44.7	44.4	44.5	44.3	-2.1

Sources: Federal Statistical Office and Bundesbank calculations. 1 Gross wages and salaries as well as employer's social contributions (including imputed social contributions). 2 Including healthcare payments for recipients of civil servant pensions. 3 Adjusted for imputed social contributions.

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Development of pay rates

Negotiated pay rates largely standardised across Germany

Adjustments to the remuneration of both salaried employees and civil servants were standardised across Germany until after the year 2000. Nonetheless, there was a catching-up process in the east German states after reunification, which was already virtually completed in the last decade with the full harmonisation of current pay rates.⁶ While civil servants' pay rates are adjusted through legislation, the increases in earnings of salaried employees are negotiated in collective wage agreements. Since the middle of the last decade, a new public sector wage agreement (*Tarifvertrag für den öffent-*

lichen Dienst or TVöD) has applied to central government employees and, with minor modifications, to local government employees, too. The federal states concluded their own collective wage agreement (*Tarifvertrag für den Öffentlichen Dienst der Länder*, or TV-L) in parallel. However, there is no legal obligation for negotiated rates of pay to be uniformly regulated across the federal states. Hesse has different rules, for example, and Berlin also withdrew from the wage agreement temporarily. As a

⁶ The federal states' collective wage agreement of spring 2015 included an agreement to furthermore harmonise special payments by 2019.

result, the main differences in negotiated rates of pay exist, in principle, between central and local government on the one hand, and the state governments on the other. A comparison for 2015 reveals, almost consistently, a certain pay advantage (of up to 4% in central government) for employees subject to the TVöD.⁷

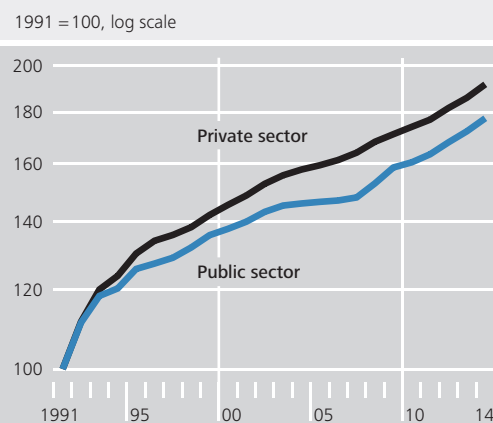
Considerable leeway for states to set civil servant pay rates since 2006 federal structure reform

The setting of civil servant pay rates was made flexible in 2003. For instance, because of considerable budget difficulties in some cases, it was decided that special payments (such as holiday pay and Christmas bonuses) should be set by individual state governments. Since the 2006 federal structure reform, the remuneration of civil servants at central government level has developed entirely separately from that of civil servants in individual state governments (including their local authorities).⁸ For the individual state governments, in particular, the weight of these payments thus provides opportunities to markedly influence their respective budgetary situations. In doing so, however, the provisions of the German Basic Law (Article 33 (5)) must be upheld. In particular, this includes the principle of appropriate support for civil servants (*Alimentationsprinzip*), which requires civil servant pay to be commensurate with the typical scope of responsibilities, taking into account general economic and financial developments. Attempts to achieve greater budget consolidation by making significantly lower adjustments to higher salary grades were, in some cases, legally overruled.⁹ The Federal Constitutional Court has meanwhile stipulated a catalogue of criteria for reviewing rules and regulations on civil servant pay in a ruling on judges' remuneration¹⁰ (see the box on pages 40 to 43). The German legislators nonetheless largely retain extensive discretionary scope.

Development of public-sector negotiated rates of pay relatively moderate overall, ...

Overall, the income reported in the wage and salary statistics for civil servants and salaried employees in the public sector has risen since 1991 – amid major fluctuations at times – by an annual average of 2½% on an hourly basis.¹¹ The corresponding increases in the private sec-

Negotiated pay rates* in the public and private sectors



* Negotiated basic rates of pay including ancillary agreements (or comparable rules for civil servants), on an hourly basis.
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tor were higher, at just under 3% (see the chart above).¹² In the 1990s, the annual average increases in the public sector were still almost 4%. They then amounted to 1% until the end of 2007, which, however, also reflected increases in weekly working hours for many state governments and central government. The

⁷ With respect to regular working hours, there are certain differences both between levels of government and between individual federal states. For a comparison of wages between the TVöD and TV-L, see: <http://oeffentlicherdienst.info>

⁸ This also applies to the career classes, working hours and retirement age of civil servants. Only the status-related rules and regulations for civil servants are still standardised across Germany.

⁹ See the ruling of the Constitutional Court for the Federal State of North Rhine-Westphalia dated 1 July 2014 (VerfGH 21/13) at <http://www.vgh.nrw.de>

¹⁰ See the ruling of the Federal Constitutional Court dated 5 May 2015 (2 BvL 17/09 inter alia) at <http://www.bundesverfassungsgericht.de>

¹¹ Structural shifts not captured here (between the pay grades) additionally have an impact on the development of the average negotiated rates of pay, which are a determining factor in personnel expenditure.

¹² Besides negotiated rates of pay, the private sector makes greater use of performance-related bonus payments as well as individual additional rates (for shift work, public holiday work, etc) that are not recorded in the wage and salary statistics. Adjustments to these are reflected in actual earnings. The difference between the rates of change in negotiated rates of pay and actual earnings – known as wage drift – is presented in percentage points. Wage drift increased distinctly in individual years, but in the observation period as a whole it had only a moderate (dampening) influence on the development of actual earnings. In addition, collective wage agreements can contain supplementary agreements on occupational pension schemes, for example, which are not reflected here.

Personnel expenditure in the individual federal states

A breakdown of personnel expenditure by individual federal state has to be based on government finance statistics because the national accounts do not contain this type of data. In this box, potential differences in the distribution of functions between state government (which already includes the local authority level for the city states) and local authorities are taken into account by including local government data. Over time, outsourcing of government entities to off-budget entities has also taken place on a large scale. However, at the current end, in the cash statistics published by the Federal Statistical Office, these entities are included in the general government sector as soon as the relevant criteria are fulfilled, which means that government personnel expenditure for 2014 should be captured in full.¹ Nonetheless, it must be borne in mind that the volume of services procured from the private sector rather than performed by the public sector's own staff can vary. For instance, the proportion of children's day care centres run by private providers varies between the federal states, meaning that similar services can be provided with lower personnel expenditure (but with higher grants to the private providers). However, this is less likely to be the case for education, internal security and general public administration – areas which are particularly important for state government, which means that considering total personnel expenditure by federal state is indeed justified.

According to the data for 2014, consolidated personnel expenditure (at state and local government level) in Germany as a whole amounted to just under €2,400 per inhabitant, of which 77% was spent on current staff, 18½% on pensions² and 4½% on

healthcare payments. At around €3,000, the highest spending was recorded by the city states of Hamburg and Bremen, followed by Berlin, Hesse and the Saarland, while figures for the east German states apart from Saxony were slightly below average and spending levels for Schleswig-Holstein were as much as one-tenth lower than the average.³ However, reducing above-average spending, for example in Bremen, is hampered by the fact that almost half the additional expenditure takes place in the less flexible area of pensions. Hamburg and the Saarland also recorded particularly high expenditure in this area, while the average figures for the east German states (even factoring in reimbursements for former employees with entitlements to special pension provisions or supplementary pension schemes) were one-third lower than the national average. Personnel expenditure (as defined here) as a share of overall expenditure amounted to 40% on average, which makes it clear that staff costs are particularly important where budget consolidation is required.

Differences in personnel expenditure are mainly due to the number of current staff and recipients of civil servant pensions as well as variations in the pay rates. A com-

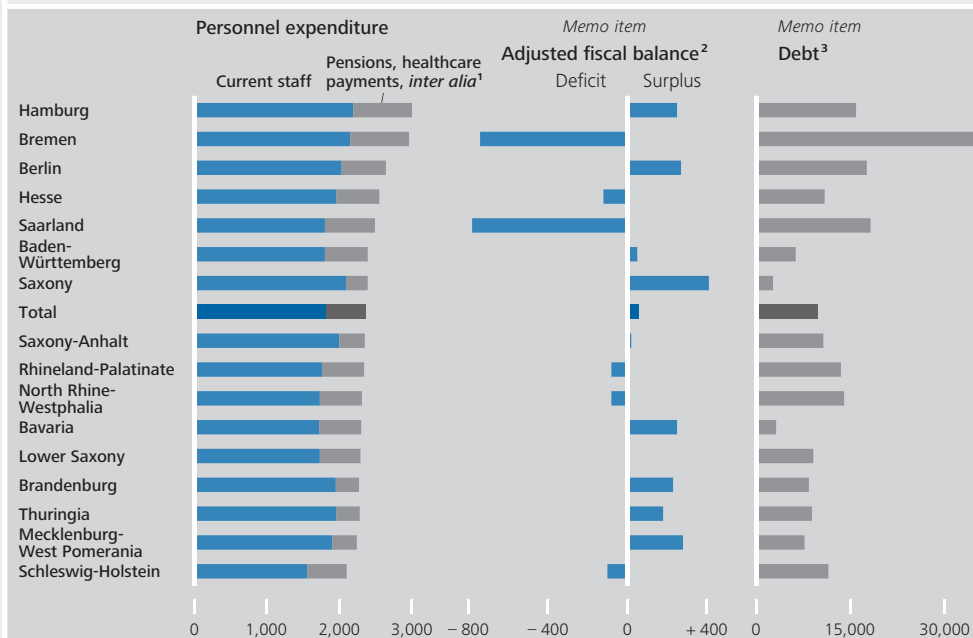
¹ Data for the earlier years cannot be compared because the reporting sample for the cash statistics changed from reporting year to reporting year.

² Including the reimbursements of the east German states and Berlin for pension payments to their former employees with entitlements to special pension provisions or supplementary pension schemes.

³ The significance of above-average personnel expenditure becomes clearer if the cost savings that could be achieved if spending was at an average level are compared with the "consolidation gap" (the fiscal deficit adjusted for financial transactions and consolidation assistance) in 2014. This gap would almost be fully closed in Hesse; even in Bremen, it would still be closed by four-fifths.

Personnel expenditure by federal state in 2014¹⁾

€ per inhabitant



Sources: Federal Statistical Office and Bundesbank calculations. * State and local government. **1** Pension payments together with reimbursements of the eastern German states and Berlin for pension payments to their former employees with entitlements to special pension provisions or supplementary pension schemes. **2** Adjusted for financial transactions and consolidation assistance. **3** Credit market debt, cash advances and debt to other government sectors.

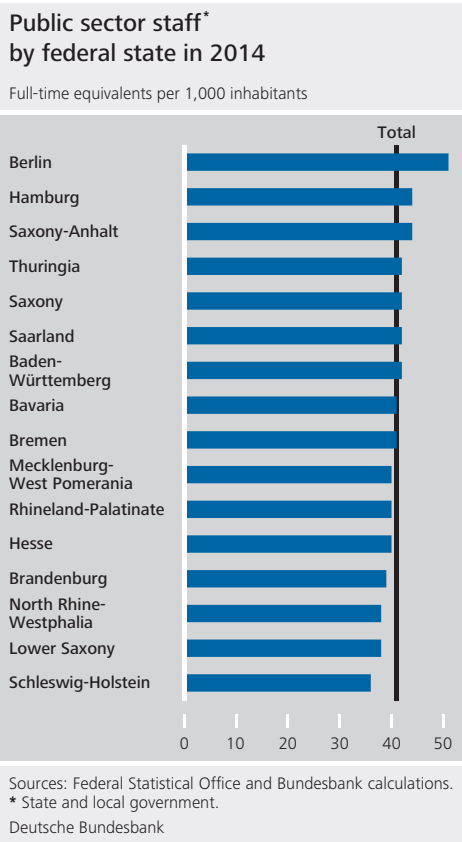
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parison of public-sector staff in the individual federal states is distorted by differences in the weight of part-time employment⁴. It therefore seems more appropriate to use full-time equivalents (FTEs) from the statistics on public service personnel in order to assess labour input.⁵ If state and local government figures are grouped together, resulting in a total value of 41 FTEs per 1,000 inhabitants for Germany as a whole, the highest staffing levels are found in Berlin (51), followed quite some way behind by Hamburg and Saxony-Anhalt (44). By contrast, the lowest level is found in Schleswig-Holstein (36). In terms of staffing structure, it is clear that in western Germany, particularly in the city states of Bremen and Hamburg, the proportion of civil servants to total salaried staff is over 40%, while in eastern Germany, the ratios are much lower (just one-quarter in Saxony and Mecklenburg-West Pomerania).

For salaried employees, the fact that collective wage agreements are mostly uniform throughout Germany (except for state employees in Hesse and limitations concerning Berlin) means that there are hardly any differences between the federal states. By contrast, adjustments of civil servants' pay rates, and therefore ultimately also the remuneration levels of civil servants employed in state and local government, have varied considerably since the 2006 federal structure reform. The standard working week for most civil servants is 40 hours. It is only longer in Hesse (42 hours) as well as in Baden-Württemberg, North Rhine-Westphalia,

⁴ Staffing figures for the state and local government levels as a whole overstate the total number of hours worked adjusted for part-time employment by just over 15%. Even so, the values range from 10-11% in Berlin and the east German states to just over 19% in Baden-Württemberg.

⁵ The differences in the number of standard weekly working hours in the individual federal states only slightly impair the informative value of the FTEs.



Schleswig-Holstein and for central government (41 hours).

Depending on the pay grade, gross annual pay rates of civil servants (not adjusted for different standard weekly working hours) in Bavaria and Berlin, the federal states with the highest and lowest values respectively, varied by 10 to 15% in 2015.⁶ Recently, however, given the improvement in the budgetary situation, there have again been sharper pay adjustments in Berlin, while other federal states have planned certain reductions vis-à-vis their standard collective wage agreements for state government employees. In addition to Bavaria, civil servants' pay levels in Baden-Württemberg and Hesse are also much higher than the federal state average, but this result would be reversed if the significantly longer standard working hours were taken into account. A zero-pay round was announced in these federal states for 2015, too. A correction for

standard working hours of this type would also result in a consistently higher than average level in Mecklenburg-West Pomerania and Thuringia. As well as in Berlin, with a few limitations especially for low pay grades, remuneration is lower than average in Brandenburg, the Saarland, Rhineland-Palatinate and Bremen, in particular.⁷

In its ruling of May 2015 on the remuneration of judges, the Federal Constitutional Court established the legal boundaries for differences in civil servant pay rates between the federal states and for a potential decoupling of these rates from other significant factors in this context.⁸ Five parameters and critical threshold values for each parameter were established. As a general rule, for the principle of appropriate support for civil servants (*Alimentationsprinzip*) to be violated, the thresholds of at least the majority of these criteria must be exceeded.⁹ All things considered, against this

⁶ See DGB (2015), *Besoldungsreport 2015*, March 2015. Figures are based on the basic salary of the final level of the pay grade, including the general job-based allowance or structural allowance and special payments, but excluding the family allowance. Pay adjustments agreed at the time for 2015 are taken into account in Berlin, Mecklenburg-West Pomerania, Lower Saxony and Rhineland-Palatinate.

⁷ Of course, when making such comparisons, it must be remembered that similar activities may be assigned to a different average pay grade for individual federal states.

⁸ See press release No 27/2015 of the Federal Constitutional Court, reference number 2 BVL 17/09, inter alia, available at <http://www.bundesverfassungsgericht.de>

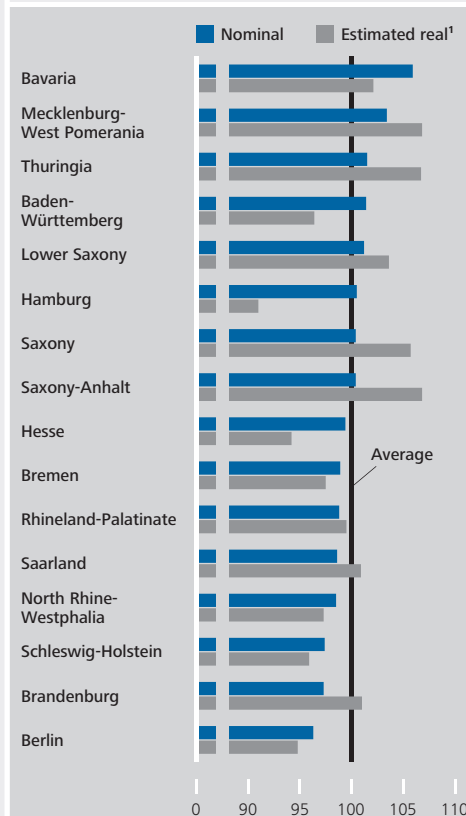
⁹ The criteria take into account developments in the civil servants' pay rates over the last 15 years in relation to increases in public-sector collective pay rates for salaried employees, nominal wage developments in the relevant geographic area and consumer price increases. If the index value of the benchmark did not fall 5% short of its final level during this period, the threshold values are not deemed to have been exceeded. In addition, over a period of ten years, the difference between the pay grade in question and other pay grades offered by the same public sector employer should not have shrunk by more than 10%. There is only considered to be a significant difference vis-à-vis other public sector employers in Germany if the average reference value for central government or other federal states in terms of gross annual pay rates of civil servants is undershot by more than 10%.

backdrop, there is usually still likely to be room for manoeuvre if consolidation is required.

When comparing civil servants' pay rates across the individual federal states, it must also be remembered that there are sometimes considerable differences in regional price levels. Factoring in such differences changes the order in which the federal states are ranked in terms of remuneration of civil servants.¹⁰ In this case, the approximated real pay rates are highest in the east German states of Mecklenburg-West Pomerania, Saxony-Anhalt and Thuringia and lowest in Hamburg, followed by Berlin. In a ruling from 2007, in view of the circumstances at the time, the Federal Constitutional Court found that there was no obligation to grant supplementary allowances to compensate for the higher cost of living in urban centres, pointing out that life in such areas was particularly attractive.¹¹ However, this does not mean that there cannot be differences in remuneration. In fact, such differences could be especially appropriate where regional prices vary. Given the growing disparity between housing costs, particularly in rural and urban areas, it would seem logical to consider providing for certain nominal differences, and perhaps ultimately also mirroring developments in the relevant regional private-sector wage levels more closely, even if there is no constitutional obligation to do so. With regard to the need to comply with the debt brake in 2020, most of the east German states, in particular, are likely to have to make considerable further efforts to reduce spending in the face of the gradual abolition of the special supplementary central government grants.¹² Owing to the differences in purchasing power, in this context, the remuneration levels of civil servants, just like those of salaried employees, seem to be an appropriate starting point.

Annual gross civil servants' pay rates by federal state in 2015*

As a percentage of the average



Sources: DGB, Besoldungsreport 2015, March 2015. For the regional price index: J Zimmer (2016), op cit, and Bundesbank calculations. * State and local government. Basic salary of final level for pay grade A13, incl general job-based/structural allowance and special payments, based on a 40-hour week. ¹ Approximately price-adjusted using a federal-state-specific consumer price index based on the most recently available data (2008).

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¹⁰ See J Zimmer (2016), The German Fiscal Equalisation System: Taking Account of Differences in Governmental Purchasing Powers, Mimeo, based on data from R Kawka, S Beißwenger, G Costa, H Kemmerling, S Müller, T Pütz, H Schmidt, S Schmidt and M Trimborn (2009), Regionaler Preisindex, Berichte, Volume 30, Bundesinstitut für Bau-, Stadt- und Raumforschung. More recent price indices for the years after 2008 are not available. Because these data were collected on a disaggregated basis for individual local governments, in the study, price indices specific to each federal state were calculated as population-weighted average price indices of the local governments and set in relation to the mean value of the federal states.

¹¹ See press release No 25/2007 of the Federal Constitutional Court, reference number 2 BvR 556/04, available at <http://www.bundesverfassungsgericht.de>

¹² See the second statement by the Advisory Board of the Stability Council of 8 December 2014, as well as the background information, published as I Deubel, J Hamker, D Rumpf and D Stegarescu, *Schuldenbremse 2020: große Unterschiede beim Konsolidierungsbedarf der Länder*, Wirtschaftsdienst, March 2015, pp 200-207.

adjustments were subsequently somewhat steeper again, at an annual average of 2½%. The lower increases, especially in times of high unemployment, must be viewed in connection with budget strains, which are also stronger at such times. In recent years, some of the adjustments in the public sector contained absolute increases (in euro) for all pay grades, and there were also delayed adjustments for higher pay grades. As a result, the spread between pay rates has narrowed.

... given somewhat higher social contribution rates on balance

Besides gross earnings, the contribution rates to the social security funds constitute another significant factor in the development of expenditure on salaried employees, as employer contributions are added to the total wage bill when calculating the compensation of employees. Until 1998, these contribution rates rose by just over 2½ percentage points, with the public long-term care insurance scheme – established in 1995 – alone accounting for roughly one-third of this. Since 1998, the contribution rates to the statutory pension insurance scheme have been lowered – initially not least by increasing central government grants financed by tax funds. By contrast, the contribution rates to the statutory health insurance scheme continued to place a growing burden on employers, even though an additional contribution rate of 0.9% to be paid solely by employees was introduced in 2005. In particular, however, the relief provided by falling unemployment insurance contributions ultimately resulted in an overall decline in the employer contribution rates of almost 2 percentage points on balance compared with the 1998 figures. All in all, therefore, the direct impact of changes in social contributions on the development of personnel expenditure since reunification was very limited. In addition, however, contributions to supplementary pension schemes for salaried employees in the public sector also have an impact; although these have risen distinctly overall, no sufficiently differentiated data on them is published as yet.¹³ Imputed social contributions for civil servants have pushed up the growth rate of total government compensation of employ-

ees since 1991 by just under ¼ percentage point on an annual average.¹⁴

Development of staffing levels

The number of government staff decreased in the period between reunification and 2013 by 13½% on balance (or just over ½% on an annual average), shrinking from just over 5 million staff to 4½ million of late (see the chart on page 45 and the table on page on 46). The reduction in staff numbers is even more marked if the increasing level of part-time employment in the public sector is also factored in; this recently stood at almost one-third.¹⁵ The over-

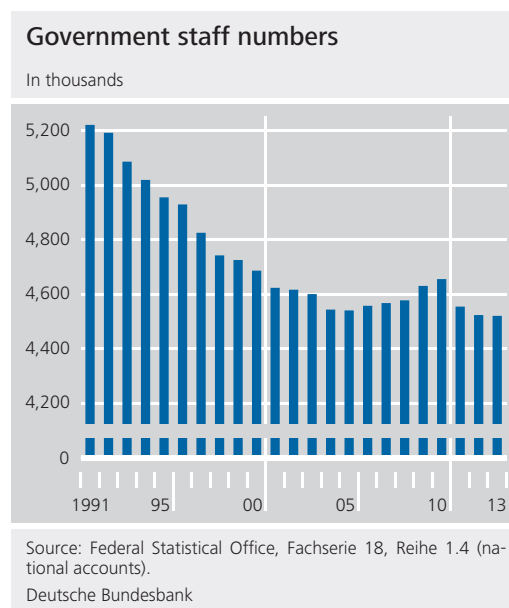
Marked decline overall in government workforce

¹³ For the years 2002 to 2014, under the west German pay scale, employers participating in the supplementary pension scheme of central and state government (Versorgungsanstalt des Bundes und der Länder, or VBL) had to transfer 6.45% of eligible pay to the pay-as-you-go scheme. Under the east German pay scale, by contrast, this figure was recently only 1%, plus the 2% contribution collected here under the capital-funded pension scheme. An agreement was also made to levy restructuring charges. These amounted to an average of 2% under the west German pay scale (based on a benchmark payment carried forward from 2001) – with significant differences between employers – and 1% under the east German pay scale. VBL is not included in the government sector in the national accounts and is not bound by the relevant obligation to supply data for the government finance statistics. Greater transparency would be desirable in this area. In principle, the reforms implemented in this area over the last decade are likely to have averted the severe additional burden that was impending for government budgets. However, the rules and regulations now in place also imply considerably increasing burdens for public sector employers.

¹⁴ The capital-funded pension funds that have been widely set up over the last few years, and which, in principle, are to be built up from contributions calculated using actuarial methods while civil servants are actively employed, have no impact here. Transfers to these funds are consolidated as transactions between the government sector's core budgets and off-budget entities.

¹⁵ The data on the overall development since 1991 are based on the definition of the government sector used in the national accounts. By comparison, the statistics on public service personnel (which, besides the core budgets, notably include institutions established under public law – such as an ever large number of hospitals – but thus do not precisely align with the definition of the government sector as per the national accounts) provide more detailed data, which are only available in this form from the 2000 reporting year, however. According to these statistics, the 4.6 million public sector employees corresponded to 4 million full-time equivalents (FTEs) around mid-2014. This figure factors in part-time employees only using the ratio of their agreed working hours to the regular full-time hours. Compared with the 2000 reporting year, the reduction in the number of public sector employees was 4½%, but 7½% for FTEs.

all development in the government sector was attributable, in good part, to the reduction of relatively high staffing levels in the east German states, but also to the downsizing of the Federal Armed Forces.¹⁶ Developments have been stabilising since 2005, however, and staff levels have been seen to increase again to a certain degree, adjusted for the effects of suspending compulsory military service in 2011. This trend reversal is attributable, on the one hand, to additional jobs in primary, secondary and higher education as well as in childcare since 2007.¹⁷ On the other hand, staff reduction processes also gradually weakened in the east German states and in other areas.



Structural shifts: proportion of civil servants slightly higher and ...

Changes in the employment structure can also influence average wages and salaries.¹⁸ For example, when civil servants are employed rather than salaried employees in comparable pay grades, government budgets may make initial savings, as there are no social contributions to impact on the financial balance and expenditure on healthcare payments for current staff is relatively low. In the long term, at the latest, expenditure on civil servant pensions and healthcare payments will have an impact, however.¹⁹ For salaried employees, on the other hand, contributions have to be made to the social security funds and supplementary pension schemes. Pensions and health services are then paid for by these entities. At present, civil servants (including the soldiers on fixed-term and permanent contracts and judges counted here) constitute just under 40% of public sector employees (1.8 million persons). Over two-thirds of central government staff and over half of state government staff are civil servants, with school teachers and the police service being of particular significance for state government. The proportions of civil servants to total staff remain significantly lower in the east German states and Berlin (37% altogether) than in western Germany (59%). For local government and the social security funds, by contrast, salaried employees predominate, making up around nine-tenths (see the chart on page 47). Over time, the proportion of civil ser-

vants in the public sector has risen somewhat, as the decline in the number of salaried employees – despite reductions in the Federal Armed Forces, for example – has been offset by a slight increase in the number of civil servants overall.

Taken in isolation, shifting staff between career classes in the public sector led to a rise in wages and salaries. In particular, the Higher and Upper Intermediate Service classes expanded perceptibly as shares of overall public

... growing prominence of Higher and Upper Intermediate Service and rising average age

¹⁶ This is reflected far more sharply in the national accounts data – unlike in the statistics on public service personnel – because persons liable for military service are also included, besides soldiers on fixed-term and permanent contracts.

¹⁷ The underlying staffing level from the Federal Statistical Office's personnel statistics (the data of which draw on the reporting population of the government finance statistics for the respective reporting year) is likely to fall short of the actual level of staff-related spending, since privately run institutions or independently operated social institutions are increasingly taking on tasks in the areas of childcare, schools and higher education. Government grants ultimately cover the bulk of their staff costs.

¹⁸ The increase in part-time employment is not taken into account here. Although it formally decreases average wages and salaries, its actual impact is by way of the reduction in FTEs.

¹⁹ If adequate payments to pension funds are counted towards the budgetary leeway, this effect is immediately visible. With this in mind, the state of Hesse recognises significantly higher amounts to reflect the full costs incurred by state government when calculating cost rates for the working hours of civil servants, for example, than it does for salaried employees in comparable pay grades. See Staatsanzeiger für das Land Hessen, 21/2015, pp 574 ff.

Public sector staff by type of employment*

Item	2000	2005	2010	2011	2012	2013	2014	Change
	Staff in thousands ¹							% pa
Central ²	524	510	485	481	472	464	458	- 1.0
Employees	196	183	160	155	151	148	146	- 2.1
Civil servants	328	327	326	326	321	316	312	- 0.3
State	2,391	2,298	2,318	2,337	2,347	2,354	2,357	- 0.1
Employees	1,136	1,021	1,035	1,043	1,047	1,060	1,077	- 0.4
Civil servants	1,255	1,277	1,283	1,294	1,299	1,294	1,280	0.1
Local ³	1,572	1,373	1,355	1,367	1,386	1,406	1,428	- 0.7
Employees	1,393	1,189	1,169	1,181	1,200	1,220	1,242	- 0.8
Civil servants	179	184	186	186	186	186	186	0.3
Social security funds	349	367	383	374	371	371	371	0.5
Employees	307	327	347	338	336	337	338	0.7
Civil servants	41	41	36	36	35	34	33	- 1.6
Total	4,835	4,548	4,541	4,559	4,575	4,595	4,614	- 0.3
Employees	3,033	2,720	2,711	2,717	2,734	2,765	2,803	- 0.6
Civil servants	1,803	1,829	1,830	1,842	1,841	1,830	1,811	0.0
	Full-time equivalents in thousands							
Central	506	482	460	457	450	443	439	- 1.0
Employees	183	163	142	138	136	134	133	- 2.2
Civil servants	324	319	318	319	314	309	306	- 0.4
State	2,170	2,015	2,007	2,032	2,046	2,062	2,069	- 0.3
Employees	994	853	847	860	868	887	902	- 0.7
Civil servants	1,176	1,162	1,160	1,172	1,179	1,176	1,167	- 0.1
Local	1,371	1,160	1,132	1,146	1,167	1,189	1,212	- 0.9
Employees	1,201	990	963	977	997	1,019	1,042	- 1.0
Civil servants	170	170	170	170	170	170	170	0.0
Social security funds	319	324	334	327	325	326	328	0.2
Employees	280	288	303	296	294	296	298	0.5
Civil servants	39	37	31	32	31	30	29	- 2.0
Total	4,366	3,982	3,934	3,963	3,988	4,021	4,048	- 0.5
Employees	2,657	2,293	2,254	2,270	2,296	2,336	2,376	- 0.8
Civil servants	1,709	1,688	1,680	1,692	1,693	1,685	1,673	- 0.2

Sources: Federal Statistical Office, Personal des öffentlichen Dienstes; Bundesbank calculations. * Primary (central, state and local authorities) and secondary (eg social security funds and Deutsche Bundesbank) public service: core budgets, special accounts and institutions established under public law. As at 30 June. ¹ The term "employee" covers salaried employees and workers. Civil servants also include judges and soldiers (in the case of the latter, on both fixed-term and permanent contracts). ² Excludes Federal Railways Fund. ³ Includes municipal special-purpose associations (estimated from 2011 onwards).

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sector staff, whereas the reverse was observed in the pay grades with lower wages and salaries (see the chart on page 48).²⁰ The average age has risen markedly overall.²¹ One reason for this is that cases of early retirement due to incapacity for work have fallen. As there is a positive correlation between wage and salary levels and the average age owing to seniority-based pay scales, this is also likely to have resulted in higher spending on current staff in and of itself.

²⁰ Several federal states revised the career classes following the 2006 federal structure reform, meaning that changes can only be tracked up to 2010. Statistical evidence of the outlined tendency can be provided at central government level for the years thereafter. The sharp decline in other types of employment is attributable to the fact that the workers assigned to this category in 2000 were assigned to specific career classes (mainly to the Lower Service) in 2010.

²¹ The average age was 42.3 years in 2000 (see A Altis and S Koufen (2011), Entwicklung der Beschäftigung im öffentlichen Dienst, Federal Statistical Office, Wirtschaft und Statistik, November 2011, p 1114). According to the statistics on public service personnel, this figure hit 44.6 years in 2014.

Financial burdens resulting from spending on pensions

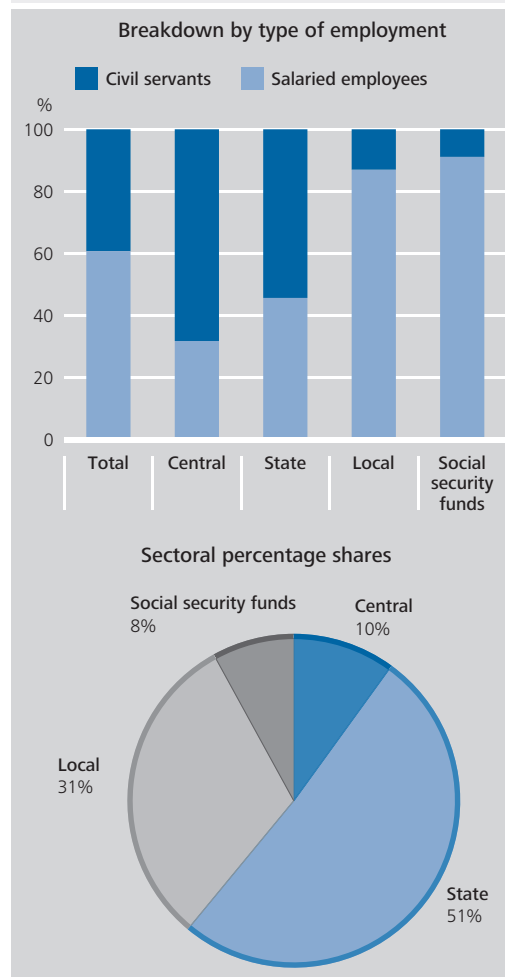
Determinants of pension expenditure

Spending on civil servant pensions has placed a growing strain on public finances over the past few years. Rising at an average annual rate of 5%, it has been increasing twice as sharply as overall government expenditure since 1991 and recently amounted to 2% of GDP according to the national accounts figures. Spending on pensions is linked to the number of persons entitled to pension benefits and the average level of pension payments (including healthcare payments). The former is determined by the previous staffing level and the age structure of current civil servants, in particular. Other factors that play a significant role are life expectancy, practices relating to recruitment and the awarding of civil servant status, and changes in the legal framework: these include changes to the standard retirement age and, owing to behavioural adjustments arising as a result of such changes, to the pension deductions in the case of early retirement. When determining average pension payments, the statutory ratio of pension per year of service to final pensionable income, the periods of service to be factored into the ratio, the career class and pay structure of former current staff and the scale of future pay adjustments are relevant.

Statutory adjustments curbing rise in pension expenditure

In the light of foreseeable higher burdens, various adjustments to federal legislation were adopted in recent years to curb pension expenditure; these were chiefly intended to transfer benefit cuts in the statutory pension insurance scheme to persons with civil servant pension entitlements.²² For example, cuts were made, *inter alia*, to surviving dependants' pensions (chiefly widows' and widowers' pensions).²³ Starting in 2003 and in line with the "Riester reform steps", the maximum pension level for persons with civil servant status was gradually cut by a total of 3¼ percentage points in eight stages.²⁴ In addition, pension deductions of up to 10.8% were also introduced for retirement due to incapacity for work (these were already standard in the case of

Public sector staff in 2014*

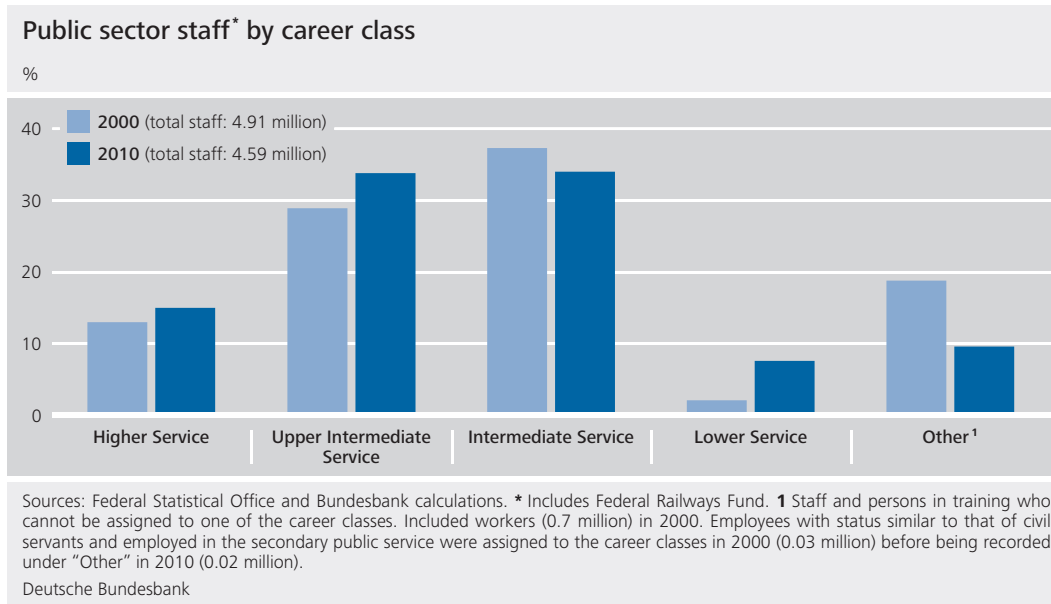


Sources: Federal Statistical Office and Bundesbank calculations.
 * Salaried employees and civil servants working in the primary or secondary public service, broken down by employer sector (central government excludes Federal Railways Fund). As at 30 June 2014.
 Deutsche Bundesbank

22 Individual federal states have also been able to independently set civil servant pensions since the 2006 federal structure reform. However, a great deal of state government legislation is still closely based on central government legislation.

23 Surviving dependants of civil servants are entitled to the following pensions pursuant to the 2001 Civil Servant Pension Amendment Act now that transitional provisions have been phased out: 55% of the deceased person's benefits for widows' and widowers' pensions, 20% for full-orphan's pensions and 12% for half-orphan's pensions.

24 Pension payments are calculated pursuant to the total old-age pension rate linked to pensionable remuneration achieved over a civil servant's period of service. Since 2011, the old-age pension rate for each year of service in central government has been 1.79375% of civil servants' pensionable pay (previously 1.875%), and the maximum pension rate of 71.75% (previously 75%) is still reached after 40 years of service. Up until the early 1990s, there were higher factors for the early years of service, and the maximum level of 75% was reached after only 35 years.



early retirement for other reasons). On the other hand, in parallel with raising the statutory retirement age to 67 by 2029, the standard retirement age for central government civil servants has been increasing by an initial period of one month a year since 2012. At the same time, the periods taken into account for higher education courses were reduced.²⁵ As a result, the average old-age pension rate was 67.2% in 2013 compared with 72.8% in 1994.²⁶ Furthermore, the pension reserves that were unanimously adopted at central and state government level in 1998 (see the box on pages 49 to 51) continued to have a dampening impact on pension expenditure. The uniform adjustment cut of 0.2 percentage point made to the remuneration of central government civil servants, both current and retired, in spring 2015 was thus already the ninth of its kind.

Sharp overall rise in recipients of civil servant pensions in the public sector ...

On the one hand, developments in the number of recipients of civil servant pensions in the public sector reflect longer life expectancy and an increase in the number of staff close to retirement age. On the other hand, legislative changes that have tended to narrow retirement options have also played a role. All in all, the number of recipients has climbed by one-quarter since 1993 to just over 1½ million in 2014 (annual average rise of just over 1%).²⁷

Developments at central government level were strongly influenced by the German railway and postal services and their successor enterprises. Just over two-thirds of the total number of recipients of civil servant pensions at central government level (640,000 at last count) are part of this group. In the 1990s, the overall number of recipients initially rose sharply owing to a wide range of early retirement schemes as well as cases of retirement due to incapacity for work. However, the number of railway service pensioners has fallen perceptibly again in the meantime. The number of pensions financed by central government arising from employment contracts concluded before

... with decline at central government level ...

²⁵ This provision was supposed to also equate to a transfer of the cuts made in the statutory pension insurance scheme, where, for example, periods of study were even no longer counted at all. The federal states have not acted consistently in this regard.

²⁶ See A Altis and S Koufen (2014), Ist die Beamtenversorgung langfristig noch finanzierbar?, Federal Statistical Office, Wirtschaft und Statistik, March 2014, pp 181-193.

²⁷ The proportion of old-age pensions has risen from 56% to 75%, while the proportion of surviving dependants' pensions has correspondingly decreased. Civil servant pension recipients attributable to the German railway and postal services are consistently included in the detailed statistics of civil servant pension recipients used here (in contrast to the pension expenditure recorded in the national accounts). Phased inclusion, as in the national accounts, would have led to pension numbers almost doubling overall since 1993.

Reserves for financing future civil servant pensions

In the 1990s, government decision-makers became more acutely aware of the steeply growing burden of public old-age provision facing both the pay-as-you-go statutory pension insurance scheme and central, state and local governments funding the pension payments of their employees awarded civil servant status. Civil servants' non-contributory pensions are likewise financed on a pay-as-you-go basis in that pension obligations from the past are serviced from current budgets, while the cumulating pension entitlements of currently working civil servants will weigh on future budgets. The related public funding requirements may increase if, for example, the recruitment of new staff with civil servant status leads to a later spike in the number of recipients of civil servant pensions or if the relative burden of civil servant pensions rises as a result of a shrinking population (and a declining number of taxpayers). As state governments, in particular, increased their headcount significantly in the 1970s, a large pension burden has accumulated in the meantime.

This prompted government entities to set up dedicated pension reserves and pension funds for their civil servants from the second half of the 1990s. Whereas the pension reserves are generally intended to cushion temporary financial burdens, the pension funds basically aim to finance all pension benefits of new civil servants appointed after the fund's establishment in an insurance-like fashion. The pension reserves and funds receive transfers from the core budgets with a view to their investment and subsequent withdrawal to relieve the core budgets. The transfers are mostly based on current civil servants' earnings. Ideally, a fair system of intergenerational burden-sharing would require those who benefit from the services supplied by civil

servants to concurrently finance the associated pension liabilities via higher taxes or charges. However, it must also be remembered that the changeover to a funded system imposes a dual burden on the changeover generation, which has to bear the costs of both former civil servants' pension payments and (at least partly) transfers for future pension funding of currently serving staff. Yet, this is the prerequisite for easing the future burden on government budgets. By contrast, if the pension reserves are funded through higher borrowing (leading to increased interest payments), the associated financial burdens are not frontloaded but merely change their formal definition.¹

In 1998, uniform pension reserves were agreed for central government and all state governments to cushion the expected future peaks in financial burdens. The reserves were to be filled between 1999 and 2013. The annually envisaged pay increases for civil servants were to be reduced by around 0.2 percentage point during this period and the cumulative amount thus saved transferred to the pension reserves.

¹ Under national budgetary rules, which are geared to new borrowing, government expenditures could conceivably be increased by the setting-up of pension reserves and later decreased by their release. But the European budgetary rules are pegged to the system of national accounts. Hence the structural general government deficit, which is the key benchmark, is not affected by the accumulation or release of reserves as these, too, are recorded in the government sector (and payments between core budgets and reserves consolidated). A different accounting scenario would arise if civil servants' pension entitlements vis-à-vis their public employer were subsequently to be recorded outside the government sector, eg by paying contributions to an insurance corporation – insofar as this is compatible with the principle of permanent appropriate support for civil servants (Alimentationsprinzip).

Following some years of underfunding² and against the backdrop of an increase in the life expectancy of retired civil servants, central government decided to extend the build-up phase up to and including 2017. At the end of 2014, the central government pension reserve totalled €8½ billion. In March 2015, the level of central government civil servants' pay was correspondingly 1.8% lower overall than it would have been without the pay rise haircuts that began in 1999. The cumulated haircuts have both lowered current civil servants' pensionable pay and led to a permanent decrease (over and above the additional cut in the pension rate) in the volume of their pension entitlements.³ From 2018, the central government civil servant pension reserve is to be used to relieve the central government budget over a 15-year period. Withdrawals could amount to just over €½ billion per year. The annual relief for future budgets would be well below 5% in relation to civil servant pension payments of just over €21 billion envisaged for 2018 in the financial plan drawn up in summer 2015.

In addition, central government set up a dedicated civil servant pension fund in 2007. It was intended as a changeover to a kind of funded pension system for all new civil servants. Since its creation, the dedicated civil servant pension fund has received transfers calculated on an actuarial basis in order to permanently finance all pension payments due for this category of staff from 2020 onwards.⁴ At the end of 2014, the fund contained just over €1½ billion. In 2014, the transfers amounted to just under €½ billion.

Central government currently thus has total provisions for civil servant pensions of €10½ billion. According to central government's integrated wealth accounts, provisions in the order of €530 billion would be required to fully cover all civil servant pension and

healthcare entitlements. The transfers to the two pension facilities in the past year covered around half of the €3 billion in newly arisen obligations from currently serving civil servants and predominantly flowed into the pension reserve. In addition, future obligations were revised upwards by around €25 billion as a 0.35 percentage point lower discount factor (of just over 3%) was applied in view of the low interest rate level. This clearly illustrates the major importance of discount rates for long time-horizons.

Since the federalism reform in 2006, each state government has been free to decide whether it wished to continue its pension reserves. For a time, most states carried on with the system that had been established by federal law. First adjustments were made in view of budgetary strains caused by the financial and economic crisis in 2009. Lower Saxony, for example, discontinued its transfers at the end of the last decade with a view to limiting its net borrowing. Lower Saxony's budget plans in recent years had already envisaged withdrawals of funds, but implementation was waived due to better-than-expected budget developments. The federal state of Bremen, too, decided to discontinue its transfers to its civil servant pension reserve. Parts of the

² To reduce the maximum civil servant pension rate (ie old-age pension in relation to pensionable civil servant pay) eight pension increases between 2003 and 2011 were lowered by ½ percentage point each. Half the savings from these haircuts were channelled into the civil servants' pension reserves. The above-mentioned general haircuts and the originally envisaged additional allocations to the pension reserve were suspended during this time.

³ This measure was planned alongside the cuts in the statutory pension insurance scheme, which were, however, put on hold following the change in the central government in 1998 until the sustainability factor was introduced in 2005.

⁴ Allocation rates are set to be reviewed at three-year intervals. The initial rates (prescribed for staff with no particular age limit) of around 29% for civil servants in the Higher Service and close to 25% for those in the Upper Intermediate Service were increased perceptibly from 2012 to just under 37% and just over 29% respectively.

reserve are now being used to finance additional financial strains resulting from court rulings relating to civil servant pension payments. While the state of Rhineland-Palatinate continues to transfer money to the reserve, it also withdraws amounts so as to finance its current budget, although it does not offset these amounts against its structural fiscal balance in the context of the debt brake.

Well before central government, the state government of Rhineland-Palatinate introduced a fully funded system for its newly appointed civil servants in 1996, not least to increase transparency regarding all costs for employees with civil servant status. The state's contributions, calculated on an actuarial basis, considerably exceeded the transfers to the pension reserve in view of the larger number of employees with this status.⁵ Most other state governments – like central government – did not set up funded pension schemes for their staff with civil servant status until around a decade later. The regulations governing the different schemes vary notably, however. North Rhine-Westphalia, for example, transfers a flat monthly amount for each new civil servant, which is, however, likely to be lower than the amount calculated in actuarial terms.

According to a survey conducted by the finance ministry of North Rhine-Westphalia⁶, the capitalised assets of all civil servant pension reserves and funds of the federal states amounted to around €30 billion overall at the end of 2014 – while expenditure on civil servant pensions and related healthcare payments of the core budgets alone came to €31 billion in that year. Of those funds, €5 billion alone (ie around €1,300 per inhabitant) were attributable to Rhineland-Palatinate. According to the survey, the total volume of reserve assets for Bavaria stood at merely €2 billion (around €200 per inhabitant). Bavaria has significantly re-

duced its transfers in the last few years to avoid net borrowing and achieve the goal of fully repaying its debts in the decade to come. By contrast, according to a draft law adopted by the government of North Rhine-Westphalia, the state's outstanding amount of close to €8 billion (around €500 per inhabitant) is to be further topped up by 2016 in line with the current rules (by an overall amount of just over €1 billion at that time). The two pension facilities are to be merged in 2017. Total transfers are subsequently to be reduced to €200 million. As no withdrawals are currently envisaged from the old pension reserve, which would be possible from 2018, the reduction in transfers overstates the actual budgetary relief from the changeover. But as transfers have been counted so far towards the new borrowing limit, the burden on the state budget will nevertheless be somewhat lower initially. Conversely, this will further limit the scope for future net withdrawals and the associated later financial leeway for complying with the debt brake.

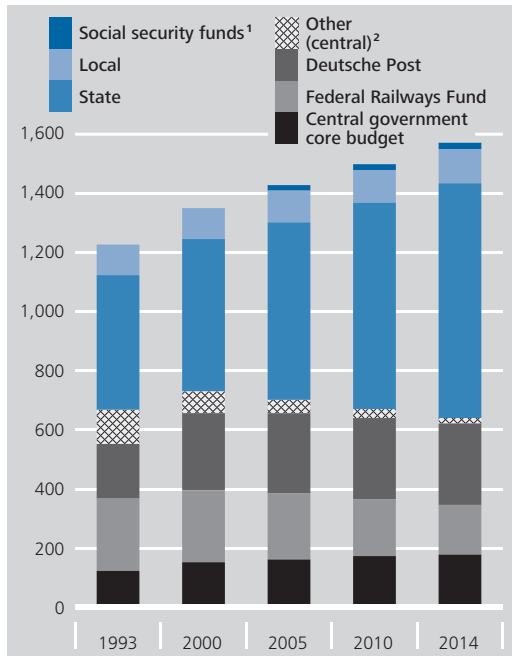
In general, it is important for state governments to rigorously continue to consolidate their budgets so as to ensure that they are able to comply with the debt brake in 2020. Besides achieving structurally balanced budgets, they would also be well advised to make supplementary provisions for civil servant pensions so as to ease the strain of foreseeable high burdens on future budgets. Looking ahead, it would make sense to switch over to a pre-financed system, above all to obtain a clear and continuous picture of the full costs of employing staff with civil servant status.

⁵ However, these contributions were made in the form of loans. In this way, it was possible to fully finance them through borrowing in the context of both the old debt ceiling and the debt brake. Correspondingly, the withdrawal of funds does not relieve the structural balance (which in both cases is consistent with the European deficit rules).

⁶ See Press release of 21 August 2015 at <http://www.fm.nrw.de>

Recipients of civil servant pensions by public sector employer

Thousand, as at the start of the year



Sources: Federal Statistical Office and Bundesbank calculations.
1 Recorded from 2005 onwards. **2** Recipients pursuant to Chapter I of the law pertaining to Article 131 of the German Basic Law (Grundgesetz) and legally independent entities.
 Deutsche Bundesbank

Overall, civil servant pension recipients in the east German states remain far fewer in number, which is because public sector employees were not awarded civil servant status until after German reunification.²⁹ The number of civil servant pension recipients in local government and the social security funds rose at a considerably weaker pace – most recently coming to 115,000 and 20,000 respectively – meaning that civil servant pension obligations play a far less important role for them.

While rising life expectancy also contributed to the general surge in the number of civil servant pension recipients, this effect was counteracted by the increase in the average retirement age. This was edging upwards even before the statutory retirement age was raised in 2012 on the back of previous reform measures (pension deductions in the event of early retirement, phasing out early retirement schemes, cutting the old-age pension rate).³⁰ Another key element in this was clearly the significant decrease in incapacity for work being cited as a reason for retirement, particularly for teaching staff at state and local government level. Prior to the new legislation on pension deductions coming into force in 2001, the share of retirement

Rise in life expectancy, yet increasing retirement age

the Federal Republic of Germany²⁸ was founded also recorded a sharp decline. On balance, both of these factors slightly outweighed the pick-up in pensions for those who worked in the primary public service at central government level (+45%) and in the postal service's successor enterprises. Overall, the number of central government pensioners has therefore shrunk by 4% since 1993.

... and significant growth at state government level

By contrast, the number of pension recipients at state government level jumped substantially (by 74½% to approximately 795,000). A large-scale recruitment drive took place up to the early 1980s – this focused primarily on hiring teaching staff in response to the baby boom, which persisted until the mid-1960s, and the trend to acquire higher education qualifications, which entails a longer period of compulsory schooling. The sharp rise in civil servant pension recipients in the west German states since the turn of the millennium is primarily due to a wave of these teachers entering retirement.

28 Civil servant pension recipients pursuant to Chapter I of the law pertaining to Article 131 of the German Basic Law (Grundgesetz) who are assigned to central government. This covers civil servants, soldiers on permanent contracts who served in the armed forces of the Third Reich, officers from the Reich Labour Service (Reichsarbeitsdienst) and other officials in receipt of civil servant pensions who lost their positions after the Second World War, together with surviving dependents. See Federal Statistical Office, Versorgungsempfänger des öffentlichen Dienstes, Fachserie 14, Reihe 6.1.

29 Furthermore, the east German states and Berlin are still incurring expenditure in connection with former GDR state officials. While these former employees do not receive civil servant pensions, they do receive pensions from the statutory pension insurance scheme. Central government and the aforementioned federal states reimburse the scheme for these payments. These are classified in the budgets as transfers rather than personnel expenditure. The overall volume, approximately half of which is borne by central government, has continued to grow moderately in recent years and stood at €5 billion in 2014.

30 Phased retirement schemes could also have played a role here. These schemes ultimately mean that participating staff who enter the work-free period of phased retirement continue to be recorded as current staff. If phased retirement were being used as an alternative to early retirement, it would cause the average retirement age to rise.

cases due to incapacity for work had soared to over 60%. This share subsequently plunged back to only around one-sixth of new pension recipients in 2013. The share of public sector staff entering early retirement climbed to around one-quarter by the end of the 1990s before tumbling to a mere 4% of late. As a result, reaching the retirement age was by far the main reason for retiring (78%) in recent times. The gradual raising of the retirement age will therefore further postpone the point of retirement and thus have a dampening effect on the number of recipients of civil servant pensions.

Pension adjustments muted

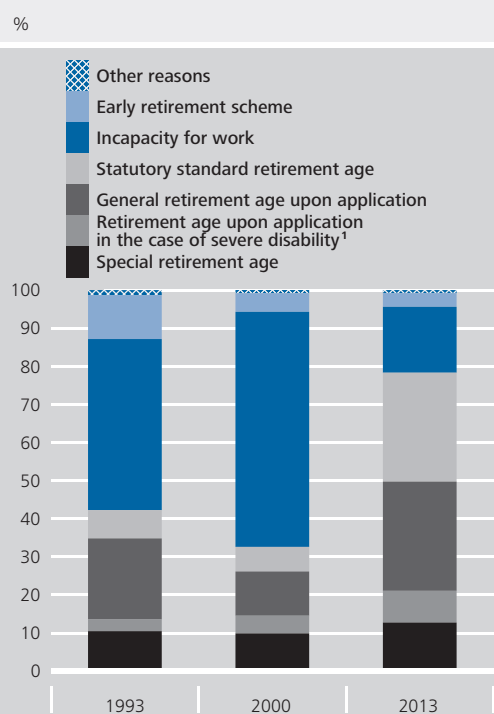
In addition to the pension level at the start of retirement and the number of recipients of civil servant pensions, the regular adjustments to pension payments are a key parameter for pension expenditure patterns. In the past, these adjustments were regularly undertaken in conjunction with those made to civil servants' pay; however, for a number of years they have been substantially lower, which is primarily attributable to the gradual reduction in the civil servant pension level from 2003 onwards. The pension-curbing legislative measures outlined above were accompanied by expenditure-boosting structural effects. In particular, the waning significance of surviving dependents (with lower entitlements) and eligible railway service staff (who, on average, receive low pension payments in relative terms) exacerbated the burden. All in all, average monthly gross pension payments have risen by just under 2½% per year since the mid-1990s.³¹

Outlook and concluding remarks

Further moderate increase in staff levels on the cards

The current trend towards a moderate increase in public sector staff levels is likely to continue over the next few years – not least in view of the budgetary situation, which is relatively favourable on the whole. The need for additional staff could continue to rise in the area of childcare, in particular. Furthermore, long-term

New recipients of old-age civil servant pensions



Sources: Federal Statistical Office and Bundesbank calculations.
¹ Includes retirement age upon application in the case of the special retirement age.
 Deutsche Bundesbank

staff reduction processes could come to an end in central government and be gradually phased out in the east German states. Opportunities for increasing efficiency – for instance, in connection with making the management of resources more results-based – and the projected fall in pupil numbers³² could lower staffing requirements in and of themselves.³³ However, opposing structural changes are occurring in the education sector. These include the perceptible hike in the number of higher education qualifications, for which numerous calls have been made, as well as changes possibly

³¹ The switch from annual bonus payments to correspondingly higher monthly salaries in the case of some public sector employers is likely to only slightly overstate actual growth over the period as a whole.

³² The 13th coordinated population projection by the Federal Statistical Office of spring 2015 forecasts a further drop in the number of persons aged under 20.

³³ If the need for larger-scale staff downsizing in isolated instances arises, this could be partly met in future – even after making it easier for public sector staff to move to the private sector – by means of early retirement in some cases.

arising as a result of the measures laid down by law to integrate disabled persons into mainstream education. Staffing requirements, particularly in the education sector, could also increase markedly (at least temporarily) in response to the currently high influx of refugees. To a certain extent, this could also apply to the area of public administration.

Check cost-effectiveness and alternative provision of services when increasing staff levels

It is important – particularly prior to expanding the scope of government services – to carefully examine whether shifts between functions and increases in efficiency are possible when allocating resources. If staffing levels are expanded, a decision must be made regarding the requisite funding (possibly fee-based). Even in individual cases, it would be necessary to calculate whether it would make more economic sense for services to be provided by the private sector. This is all the more the case given that a decision in favour of additional public sector staff is typically accompanied by a long-term financial commitment. That being said, there seems to have been a certain degree of flexibility in this regard in recent years, which is reflected, in particular, in the growing prominence – for new staff, at least – of fixed-term employment contracts.³⁴ As a general rule, fixed-term contracts can also reasonably cover only temporary staffing needs.³⁵

All in all, no long-term decoupling from private sector pay levels expected

In the near future, general wage and salary growth in the public sector is expected to be broadly in line with that in the private sector – as it has been in recent years. Given the favourable labour market situation and general government's sound overall budgetary position, it is currently unlikely that the negative gap between public and private sector wages and salaries will become greater, at least. Moreover, general government will have to try hard in its capacity as an employer to continue to attract highly qualified, motivated staff against the backdrop of demographic change. This will also need to be taken into account in the pay developments of individual wage and salary grades as well as in any other public sector reforms.

Overall, civil servant pension expenditure will place a considerably greater strain on public finances in the coming years. However, developments will be highly divergent at central, state and local government levels. Up until the 2006 federal structure reform, the Federal Government's Civil Servant Pension Reports outlined expected developments in general government pension recipient figures and costs. By contrast, the 2013 projections relate solely to central government. They reveal a marked decline of more than two-fifths up to 2050 in the number of civil servant pension recipients attributable to the railway and postal services. The reduction in the number of soldiers on permanent contracts and general job shedding to date are also providing relief. Based on the report's assumption that civil servant pension payments will be adjusted by an annual rate of 2.6% from 2014, and thus in line with the macroeconomic developments assumed in said report, the ratio of central government's civil servant pension expenditure (excluding railway and postal services) to GDP will remain constant at 0.2% until 2050. Including these items, the civil servant pension expenditure ratio will even shrink considerably (from 0.6% in 2013 to 0.3% in 2050). Central government will therefore not be affected by demographic change in the form of rising civil servant pension benefits. However, funding requirements, particularly for grants to the statutory pension insurance scheme, will climb significantly.

Pension obligations increasing overall – tending to fall at central government level but accompanied by rising grants to statutory pension insurance scheme

The fact that there are no longer any official consolidated projections of civil servant pension obligations for the federal states makes it more difficult to analyse the situation and compromises the transparency of public finances. To address this, it would be beneficial for the Stability Council to agree on comparable pro-

Marked increase in pension obligations at state government level likely until around 2025

³⁴ The Federal Statistical Office's statistics on public service personnel show that just over 430,000 members of staff were employed on fixed-term contracts as at 30 June 2014. This equates to just over 9% of total staff and constitutes an increase of almost 10% since 2011.

³⁵ By contrast, types of contract that, for instance, primarily aim to shift expenses to social security funds, for example, appear questionable.

jections and overviews. In the context of budgetary surveillance, this would make it easier to determine the potential need for action at an early stage and work towards any corrective action.³⁶ Information is available in the Civil Servant Pension Reports of individual federal states on state-specific developments. These indicate that the particularly personnel-intensive state government budgets in western Germany will continue to be perceptibly affected by the increase in civil servant pension obligations over the next few years.³⁷

Growing pension obligations cannot be fully met using reserves alone

All things considered, the federal states' current pension reserves will be easily outstripped by growing civil servant pension obligations over the next decade. Although capital-funded pension funds have existed at central government level and in numerous federal states for several years, their inflows are, in any case, only intended to cover the pensions of employees who have been awarded civil servant status in recent years and will therefore normally still have a large part of their working life ahead of them. In this respect, frequent checks will have to be carried out to determine whether adjustments need to be made to civil servant pension benefits – in addition to regular adjustments to limit the generally rapid rise in healthcare-related expenses (civil servant healthcare payments) – as budgetary pressure increases. The requirements set out in the German Basic Law are to be observed. In any event, it is likely that extending working life and increasing the retirement age will continue to play a significant role, just as they do in the case of the statutory pension insurance scheme. Against the backdrop of demographic change caused by rising life expectancy coupled with relatively low birth rates, which are unlikely to be fundamentally offset by any additional wave of migration, the statutory retirement age will probably need to be further raised above the age of 67 in future. If the greatest possible level of planning certainty is to be ensured in this regard, it would be advisable to have a timely discussion about any further adjustments that

may become necessary in the wake of demographic change. One possible target could be for the average length of time for which an old-age pension is drawn and the average working life to move in parallel with each other.

In terms of spending on current staff and civil servant pensions, differences in the financial situation of individual federal states are of major significance. The unfavourable financial situation in several federal states, which are suffering from restricted flexibility, particularly on the revenue side, indicates that personnel expenditure should be limited as much as possible. One particular avenue to pursue in this respect is to examine whether staff numbers can be cut. In principle, the differences in staff deployment between federal states – which are considerable on the whole – point to scope for action. Furthermore, greater focus could be placed on the standard working week or adjusting civil servant pay rates. The limits set by the Federal Constitutional Court should, for the most part, still provide some leeway. From an economic perspective, it would, in particular, be reasonable when determining the pay of not only civil servants but potentially also salaried employees in individual federal states to take into account differences relating to average living costs and thus purchasing power. This could be supplemented by taking into consideration further regional gradations. The different price levels are likely to be reflected in the respective levels of private sector pay, too, which are also of particular importance with respect to the tax revenue collected in each federal state.

Stronger divergence in pay levels of individual federal states appropriate

³⁶ See also the second statement by the Advisory Board of the Stability Council of 8 December 2014, as well as the background information, at <http://www.stabilitaetsrat.de>

³⁷ For example, in its 2015 Civil Servant Pension Report, Baden-Württemberg expects pension recipient figures to climb significantly by one-third up to the middle of the next decade and – subject to estimates regarding the number of vacant positions that will be refilled – essentially stabilise at this level until 2050. In its 2012 report, North Rhine-Westphalia assumes a somewhat lower increase of just over one-quarter up to the mid-2020s, which is expected to be followed by a slight fall up to 2040.