

## State government finances in 2021: surplus and additional reserves from emergency borrowing

*The budgets of the state governments and their local governments shaped up very well in the second year of the coronavirus pandemic. Altogether, they recorded a surplus of €5 billion in 2021 following a deficit of €32 billion in 2020. This favourable outcome was due not only to a sharp rise in tax revenue but also to the fact that the Federal Government assumed the bulk of pandemic-related burdens. In structural terms, the surplus was considerably higher still, as the structural balance excludes the unfavourable effects of the cyclical component, financial transactions and temporary coronavirus-related burdens.*

*More specifically, half of the federal states (including their off-budget entities and municipalities) reported a surplus in 2021. Rhineland-Palatinate, home to the main site of a vaccine manufacturer, came off particularly well. In structural terms, all state government budgets were at the very least balanced – even without temporary coronavirus-related burdens being factored out.*

*Within the framework of their respective debt brakes, state governments made use of emergency borrowing totalling €18 billion, despite the good state of their finances. Special calculations indicate that they needed only a small portion of this to close funding gaps in their core budgets and off-budget entities. They thus used most of this borrowing to top up reserves with which they can finance future budgets. These reserves may be part of the core budget or resources placed in special funds. Rhineland-Palatinate was the only federal state to have already repaid all the emergency loans it took out in 2020.*

*Going by budget documents and surveys, state governments held reserves of over €110 billion as at the end of 2021. These also include pension pots of almost €50 billion. Several federal states are planning to use reserves to close gaps in their budgets for some years to come. However, where the reserves to be used for this purpose have effectively been formed from emergency borrowing in connection with the pandemic, such an approach seems questionable.*

*As things stand, a large surplus is on the cards for the federal states this year, and most of them have sizeable reserves available should budget developments take a turn for the worse. Therefore, despite the difficult environment in which they are currently operating, further take-up of emergency loans at the state government level this year does not appear self-evident. Their very good starting position should enable the state governments to make a considerable contribution to the financial challenges. In any event, central government will assume the lion's share of expenditure stemming from the current energy crisis.*

*Individual federal states' finances still lack transparency. The opportunities offered by competition between the federal states risk remaining unused as long as data are difficult to compare. The diversity of rules in state-specific debt brakes also makes it harder to compare the structural fiscal positions of the federal states. In addition, important budgetary data are published with a major time lag in some cases. The Stability Council, in particular, remains tasked with making substantial progress with respect to transparency, comparability and timely publication.*

## Overview

*Surpluses in second pandemic year and thus far further improvement in current year*

State and local governments recorded a perceptible surplus in 2021. This was possible due to taxes growing sharply and central government assuming a fairly large proportion of pandemic-related burdens. Nevertheless, most federal states once again activated their debt brake escape clauses. Significant rises in surpluses have so far still been on the horizon for the current year.

*Report structure and contents*

This report builds on the corresponding analyses of the annual figures for state government finances in recent years. Government finance statistics are specially processed (see the box on pp. 15 f.) and cover the federal states and their municipalities. Particular focus is placed on key variables such as balance, debt and interest burden. The report presents the results for both the federal states as a whole and for individual federal states. A later section takes a closer look at the accounting for the state-specific

debt brakes for 2021. This examines which federal states (non-city states excluding their municipalities) took out emergency loans and compares the extent to which the budgetary data indicate a need for this. The concluding remarks contextualise the results and point to shortcomings in the transparency and comparability of state government finances.

## Financial performance of state and local governments in 2021

### Federal states as a whole: surplus despite temporary burdens

In 2021, state governments (including off-budget entities and local governments) recorded an unadjusted surplus of €5 billion (just over 0.1% of gross domestic product; see the adjacent table, item 1, and the chart on p. 16). State government core budgets, meanwhile, posted a deficit of €6 billion. On balance, they used the bulk of this deficit to finance the surplus of €6½ billion in their off-budget entities.<sup>1</sup> Local governments (core budgets and off-budget entities) contributed a surplus of €4½ billion.

*State and local governments recorded a surplus in their core budgets and off-budget entities in 2021, ...*

### Budgetary figures for state governments (including local governments) as a whole

€ billion

Item	Item No	2020	2021
Fiscal balance	1	- 32.2	5.1
Financial transactions (net)	2	- 7.7	- 8.5
Settlement of payments under the state government financial equalisation scheme	3	0.7	0.4
Adjusted balance	4=1-2+3	- 23.9	14.0
Cyclical component	5	- 13.3	- 8.9
Coronavirus response measures <sup>1</sup>	6	- 7.8	- 9.1
Offsetting relief provided by central government funds <sup>2</sup>	6a	6.4	-
Partially adjusted structural balance	7=4-5-6a	- 17.0	22.8
Adjusted structural balance adjusted for temporary coronavirus response measures	8=4-5-6	- 2.8	31.9
Net interest burden	9	10.1	10.2
Adjusted structural primary balance	10=8+9	7.3	42.1

From a structural perspective, the surplus of state and local governments was significantly higher still, reaching €32 billion (see the adjacent table, items 2-8). To calculate the structural figure, the unadjusted balance is adjusted for various items that obscure the underlying financial situation. The following are deducted:

*... which was significantly higher still in structural terms*

- burdens in the amount of €9 billion stemming from the unfavourable cyclical component (Bundesbank estimate);
- financial transactions of €8½ billion;

Sources: Federal Statistical Office, legislative texts and Bundesbank calculations. <sup>1</sup> Excluding financial transactions. <sup>2</sup> Central government funds to compensate for local governments' lower revenue from local business tax and lagged residual payments of consolidation assistance for 2019.

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<sup>1</sup> The more timely monthly cash statistics for core budgets still showed a surplus of €1 billion. Subsequent closing entries, such as allocations to off-budget entities, led to the aforementioned deficit.

## Preparation of state government data and data gaps

The Bundesbank prepares the cash statistics for the purpose of presenting results for both the federal states as a whole and for individual state governments. The data prepared in this way form the basis for the analysis in the first part of the report and can be found in the tables on pp. 30-33:<sup>1</sup>

- The picture of the federal states' fiscal situation is supposed to be complete and comparable. Their off-budget entities and the local government level are therefore also included in addition to their core budgets. It then no longer matters for the results which of the entities assumes a given task and bears any resulting deficits. Furthermore, this makes non-city states and city states more easily comparable, as the latter include the local government level.
- Shifts in financial assets and temporary effects should not distort the underlying picture. For this reason, four adjustments are necessary. The first two of these four steps are implemented in a similar way by both central government and many state governments in their debt brakes.
  - First, financial transactions (shifts in financial assets such as loans granted) are disregarded.
  - Second, cyclical effects are deducted from the fiscal balance. In this report, the Bundesbank uses its own method to calculate the cyclical effects on the basis of its spring projection.
  - Third, the provisional settlement figures for the financial equalisation scheme and the supplementary central govern-

ment transfers are additionally taken into account on an accruals basis.

- Fourth, larger one-off effects are also generally factored out. That being said, none were recorded in the reporting year aside from the coronavirus burdens that were not reimbursed by central government. In individual federal states, however, there were gaps in the data on coronavirus burdens. Comparisons among federal states are therefore made on the basis of results that have not been adjusted for these burdens (partially adjusted structural balances).

### Remaining weaknesses in the data pool

Despite the preparation of the data outlined above, the results and the underlying fiscal policy can, in some cases, only be interpreted to a limited extent.

- One problematic factor is that some state governments record data in a way that deviates from the intended methodology. This applies, for example, to coronavirus-related business aid from central government; in some state governments, this was recorded as other operating expenditure rather than as business transfers. This means that expenditure categories are no longer comparable between state governments. Although coronavirus-related business aid from central government was intended to be channelled through the state government budgets, it also partly affected the balance. This was the case where state governments had received the central government funds

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<sup>1</sup> For a more in-depth explanation of this approach, see Deutsche Bundesbank (2021a), pp. 17-19.

but had not yet disbursed them. As in previous years, capital transfers used to absorb losses do not always appear to have been correctly separated from acquisitions of participating interests. The latter only change the type of financial assets recorded, not the amount. In this analysis, however, the adjustment for financial transactions is carried out in line with budgetary reporting (as is the case for most debt brakes).

- The volume of public spending is unclear in some places. This is due, in particular, to transfer balances within the general government sector, which arise in cases where the bookings of the receiving and paying entities do not match. According to the cash statistics, state government off-budget entities received current transfers of €43 billion from the state government core budgets last year, whereas the

core budgets only paid out €21 billion. For the consolidated result of core budgets and off-budget entities, the cash statistics also included core budget payments to off-budget entities from other items. On balance, these exceeded the revenue of the off-budget entities by €2 billion, meaning that it is not possible to adjust them. Where internal payments are service charges, the cash statistics do not consolidate these at all. Service costs are then double-counted. The distortion increases when services for government entities are outsourced from the core budget to off-budget entities.

- temporary burdens of around €9 billion arising from measures taken in response to the coronavirus pandemic<sup>2</sup> (Bundesbank estimate based on draft legislation and surveys). In particular, these include spending on

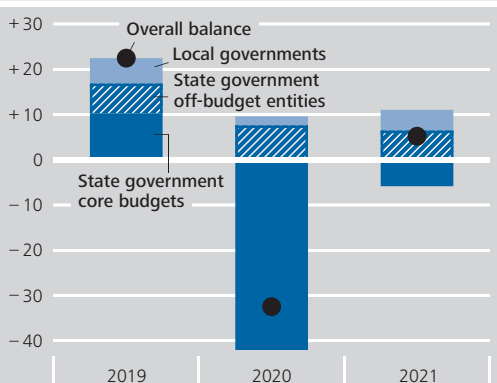
coronavirus tests in schools and vaccination centre costs.

The excellent outturn and the notable improvement on the year were driven largely by strong tax revenue, which rose considerably and was markedly higher than the figure expected by the Working Party on Tax Revenue Estimates before the pandemic (in October 2019) for 2021.

*Dynamic tax developments*

### Fiscal balance of state governments (including local governments)\*

€ billion



Sources: Federal Statistical Office and Bundesbank calculations.  
 \* Government finance statistics.  
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However, it is highly uncertain to what extent the highly favourable structural developments are in fact so favourable, as it became more difficult to distinguish temporary factors from structural ones in the coronavirus years. For example, it was only possible to estimate cyclical factors with a considerably higher degree of

*Structural surplus potentially overstated by payment shifts*

<sup>2</sup> The coronavirus-related burdens reported here are adjusted for coronavirus-related revenue from central government that has yet to be disbursed. See also the box on pp. 15f.

uncertainty more recently.<sup>3</sup> Moreover, structural tax revenue in 2021 may be overstated by the fact that tax payments for which there had been a deferral in 2020 due to the pandemic were made in the meantime. Last but not least, it is impossible to fully gauge the financial ramifications of the coronavirus pandemic that went beyond recorded measures, e.g. non-payment of fees due to the pandemic-related closure of various facilities.

## Comparing individual federal states

### Balances vary considerably from state to state

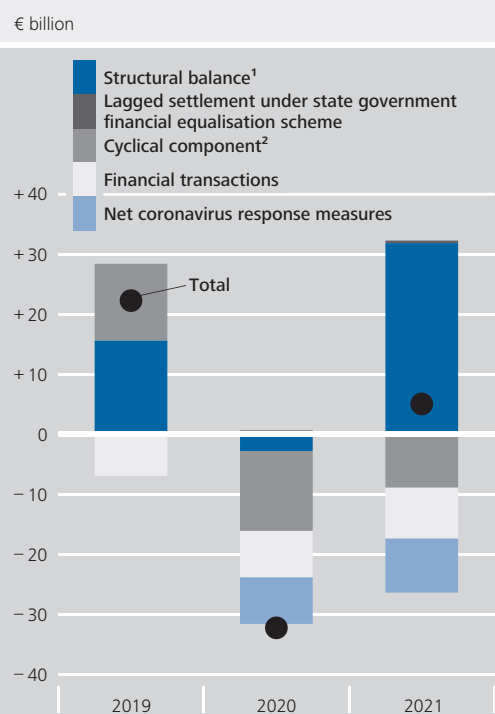
This article also presents the results and adjusted balances for each federal state. However, it was not possible to factor out temporary coronavirus response measures, as some federal states did not fully quantify these burdens on request (temporary coronavirus-related burdens of €110 per capita were deducted for the federal states as a whole). As a result, the structural balances reported for individual federal states still include the burdens arising from coronavirus response measures, i.e. their actual structural figures are more favourable than shown here. The state government balances can therefore only be labelled as partially adjusted. Nevertheless, they are much more informative than the unadjusted balances, as they exclude cyclical factors, delays in financial equalisation and financial transactions, some of which are sizeable. Detailed state-by-state results can be found in the table on pp. 30 f. To improve comparability between the federal states, figures are given below relative to the population size of each federal state.

*Partially adjusted balances of some federal states still include temporary coronavirus measures*

*Half of federal states recorded unadjusted surplus*

In unadjusted terms, half of the federal states (including their municipalities) closed 2021 with a surplus. Rhineland-Palatinate recorded the highest surplus, at €710 per capita. The largest deficit (€570 per capita) was posted by Berlin.

### Factors influencing fiscal balance of state governments (incl. local governments)\*



Sources: Federal Statistical Office and Bundesbank calculations.  
 \* Government finance statistics. **1** Calculated as a residual.  
**2** According to Bundesbank estimate of June 2022.  
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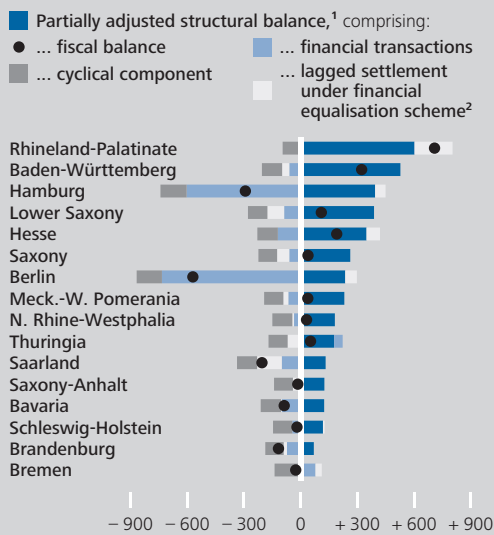
The partly adjusted balances of the federal states still varied considerably in 2021, but to a lesser extent. Looking at the federal states as a whole, the partially adjusted surplus amounted to €270 per capita. At €600, Rhineland-Palatinate again recorded the highest surplus (see the table on pp. 30 f., item 7). This state is home to the main site of a major coronavirus vaccine manufacturer. Corporation tax and local business tax, in particular, therefore in-

*Partially adjusted balances vary widely*

<sup>3</sup> Uncertainty is also reflected in the rather high revision of the cyclical component in 2020. Cyclical factors in 2020 are no longer assessed as unfavourably as they were in last year's report (improvement of €6½ billion): macroeconomic developments are not as far below trend levels anymore due to calculations using new data and projections revising trend levels downwards. The cyclical component of 2021 could be revised in a similar way, especially if energy shortages have a greater dampening impact on macroeconomic developments than assumed in the 2022 spring projection.

### Fiscal balances of individual state governments (including local governments) in 2021\*

€ per capita



Sources: Federal Statistical Office and Bundesbank calculations.  
 \* Government finance statistics. **1** Fiscal balance adjusted for financial transactions, settlement of payments under the state government financial equalisation scheme, cyclical component and one-off effects. The only one-off effects were coronavirus response measures. However, the amounts could not be attributed to individual states. **2** Settlement of payments under the state government financial equalisation scheme.

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creased sharply.<sup>4</sup> At the lower end of the range, Bremen's budget was balanced. In the absence of budgetary recovery assistance from central government, Bremen as well as Saarland would have recorded large partially adjusted deficits (€590 and €270 per capita, respectively).

*Tax revenue up sharply, with considerable differences between states despite financial equalisation*

State government and local government tax revenue accounted for just over two-thirds of their total revenue, rising sharply overall. However, there are considerable differences in per capita revenue. For example, the spread among the non-city states reached €880, with the figure for Hesse (€5,900) being 18% higher than that of Saxony-Anhalt (see also the tables on pp. 30 f., item 19). There are multiple reasons for these differences. For example, the financial equalisation scheme (including supplementary central government grants that are dependent on financial capacity) does not fully even out varying levels of tax revenue. It should also be borne in mind that state and local governments sometimes have different tax rates and multi-

pliers. Differences in revenue resulting from this remain hidden in the financial equalisation scheme. The way the scheme is set up,<sup>5</sup> the differences remain smaller and the ranking changes. In 2021, the spectrum ranged from just under 98% in Bremen to 108% in Bavaria.<sup>6</sup>

In addition to strong tax revenue, almost all federal states received higher central government grants (see the table on pp. 32 f., item 21). This was due primarily to an increase in central government funds for transfers to enterprises in 2021 in response to the coronavirus pandemic. To the extent that state governments pass on these funds as intended, they do not ease the burden on state government budgets.<sup>7</sup> However, according to a survey of finance ministries, some federal states did not fully pay out these funds to enterprises prior to closing their books (see also the box on pp. 15 f.). In these states, the fiscal balance for 2021 thus improved to the tune of €3½ billion

*Higher central government transfers accompanied by higher expenditure, but outflow of funds not complete*

**4** Rhineland-Palatinate thus became a federal state with high financial capacity and was required to hand over VAT funds to recipient federal states under the financial equalisation scheme. This comparison is based on the provisional settlement of financial equalisation for 2021. Nevertheless, Rhineland-Palatinate's structural position remains overstated by around €200 per capita. The main reason for this is that the exceptional increases in local business tax in 2021 are not reflected in the financial equalisation scheme until 2022. For more on this and on further distortions, e.g. from the lagged allocation of corporation tax to other federal states that are home to operating sites, see Weiß et al. (2022).

**5** In particular, adjusted for different tax rates, taking into account only three-quarters of municipalities' financial capacity and a higher weighting of the financial needs of city states; data available as at the date of provisional settlement. See Federal Ministry of Finance (2022).

**6** Measured in terms of normalised tax revenue in relation to normalised average financial capacity.

**7** According to central government data, transfers to enterprises in response to the coronavirus pandemic increased by €30 billion (around €360 per capita) to €48 billion in 2021. By contrast, central government's compensation payments for expected shortfalls in local business tax revenue, totalling €6 billion in 2020, were fully dispensed with.



overall, while the result for the current year is correspondingly less favourable.<sup>8</sup>

*Comparability of expenditure data among federal states severely restricted in some cases*

Looking at the federal states as a whole, expenditure growth was mainly concentrated in the categories of other operating expenditure, personnel and current transfers to enterprises. The differences between individual federal states were considerable in some cases. These are only partly attributable to federal states focusing on different areas of expenditure; they are also due, amongst other things, to the fact that the federal states do not record business aid financed from central government funds in a uniform manner. It seems to be not least for this reason that payments to enterprises and other operating expenditure, for example, vary so widely from state to state. The central and state government budgetary planning system to be used throughout Germany is actually intended to prevent such discrepancies in recording methods. Action is needed to ensure that identical forms of expenditure are also identically categorised.

*Transfers to households vary widely but are partly refunded by central government*

Social benefits at the local government level are the prime component of transfers to households (see the table on pp. 30 f., item 14). However, they do not reflect the actual burdens at the state and local government level as central government partly offsets burdens, leaving state and local governments with correspondingly higher revenue. For example, central government pays just under three-quarters of the accommodation costs for recipients of unemployment benefit II. In the case of the basic allowance for the elderly and for persons with reduced earning capacity, it even reimburses the transfers in full.<sup>9</sup>

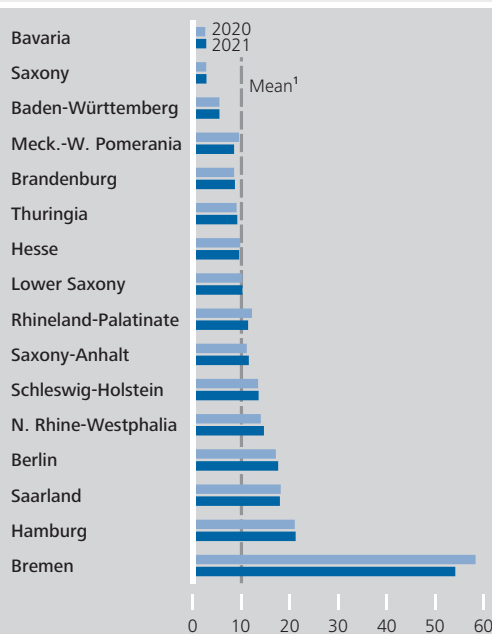
### Debt and interest burden across the federal states

*By far the highest debt in Bremen*

On aggregate, the per capita debt of state and local governments stood at €10,000.<sup>10</sup> Bremen recorded by far the highest figure of just over €54,000, followed by Hamburg with slightly more than €21,000. At the other end of the

### Debt of individual state governments (including local governments)\*

€ thousand per capita



Sources: Federal Statistical Office and Bundesbank calculations. \* Government finance statistics. Debt in the non-public and public sectors (non-consolidated). <sup>1</sup> Population-weighted mean of all state and local governments (2020: €9,983; 2021: €10,095).

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scale, Bavaria and Saxony each reported around €2,800.

Although the budgets as a whole recorded a surplus, aggregate debt rose by a total of €9 billion, or €110 per capita (see the table on pp. 32 f., item 23). The fiscal balance and change in debt diverged even more strongly in some federal states: among non-city states, per capita debt grew most strongly in North Rhine-

*Debt growth despite surplus, but also significant declines in some federal states*

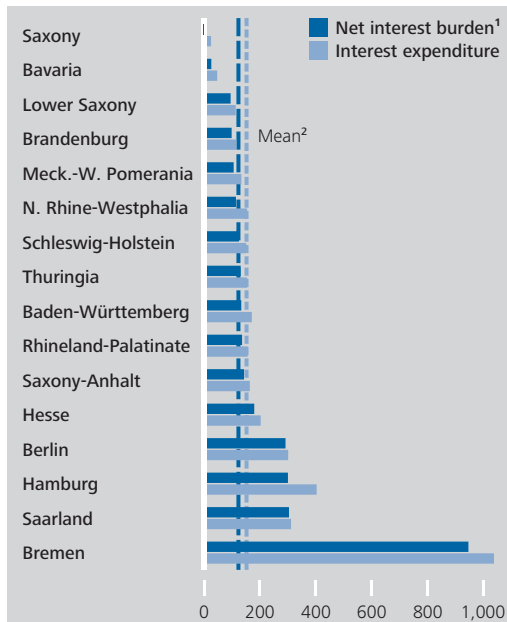
<sup>8</sup> The situation in Bavaria is different. Undisbursed receipts from central government for business aid were evidently still included in the monthly cash statistics at the end of the year. Revenue from central government of €2 billion (€160 per capita) was taken off the books when they were closed, which appears to have prevented there being a legacy burden in the current year.

<sup>9</sup> The notable increase in transfers in Saarland appears to be due to a misclassification of central government-provided coronavirus aid for businesses.

<sup>10</sup> The figures presented here are taken from the debt statistics of the Federal Statistical Office. These cover debt to the non-public and public sectors. Debt as defined under budget law can additionally include unused borrowing authorisations, which are thus available as a reserve. The corresponding amount of borrowing on the capital market is then still outstanding.

### Interest burden of individual state governments (including local governments) 2021\*

€ per capita



Sources: Federal Statistical Office and Bundesbank calculations.  
 \* Government finance statistics. **1** Interest expenditure less interest income. **2** Population-weighted mean of all state and local governments.

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Westphalia (+€640). At the same time, however, the state closed the year with a moderate surplus. Although Bremen recorded a slight deficit, its per capita debt fell most sharply from a high level (-€4,180), with the state repaying loans related to interest rate derivatives. These derivatives hedge long-term interest rate conditions. As market interest rates rose, the negative market value of the derivatives fell below their end-2020 level, and Bremen required less cash collateral to finance them.<sup>11</sup>

*Average rate of interest down in most federal states*

The calculated average rate of interest on debt<sup>12</sup> continued to fall on the year for the federal states as a whole, but only slightly, declining to 1.5% (see the tables on pp. 30-33, item 24 in each case). Although federal states are able to borrow under similar conditions, there are significant differences between their average rates of interest. The reasons for this concern debt structure (e.g. varying fixation periods and times at which loans were taken out) and interest rate hedges. Differing premia on bond

issues probably also contributed to the variance.<sup>13</sup> However, data on such factors are often lacking. Last year, the highest average rates of interest were calculated for Baden-Württemberg (3.1%). As in the previous year, Saxony recorded the lowest average rate of interest (0.9%). In Baden-Württemberg, average rates of interest rose particularly significantly, climbing by 0.5 percentage point. However, this is due solely to one debt instrument, which accumulated interest obligations for a decade that fell due last year.<sup>14</sup> The average rate of interest fell most sharply in Bavaria, where debt increased particularly strongly in relation to its starting point in 2020 without interest expenditure rising in the process.

Besides interest expenditure, some federal states also generate considerable interest income. Interest payments between core budgets and off-budget entities (transactions that the government finance statistics do not consolidate) often play a key role in this context. The net interest burden denotes the difference between interest expenditure and interest income and, in this respect, the total burden arising from debt instruments issued and purchased. The largest net interest burden (per capita) was recorded by the city states and Saarland (see the table on pp. 30 f., item 8). In Bremen, the net interest burden accounted for 8% of total expenditure, which was attributable to current payments for derivatives to a significant extent.<sup>15</sup> In Saarland, its share amounted to 4%. However, these particular states receive special support of €400 million per year in each case

*Very diverse net interest burdens, due in part to interest rate hedges*

<sup>11</sup> See Deutsche Bundesbank (2021a), p. 24, for information on the impact of derivatives on debt and discrepancies between the fiscal balance and changes in debt levels.

<sup>12</sup> Calculated from interest expenditure as reported in the government finance statistics and debt according to the debt statistics as at the end of the previous year.

<sup>13</sup> Premia and discounts can also play a substantial role in comparisons of the calculated average rates of interest in the annual government finance statistics. Premia reduce interest expenditure, while discounts increase it. See Deutsche Bundesbank (2021b).

<sup>14</sup> See Ministry of Finance for Baden-Württemberg (2022).

<sup>15</sup> Unlike many other federal states, Bremen records expenditure on interest rate hedges separately, thus making its budget more transparent.



for their debt burdens, which are well above average. Deducting this budgetary recovery assistance provided by central government from their net interest burden, the ratios fall to 3% in Bremen and -1½% in Saarland. By way of comparison, Hesse, the non-city state with the highest ratio, recorded a net interest expenditure ratio of 2%. As in previous years, Saxony did not record a net burden.

## State government debt brakes in 2021

### Difficult to keep track of debt brakes

*Comparison thwarted by differing rules*

The federal states have designed their debt brakes very differently.<sup>16</sup> As a result, their accounts can be compared to a limited extent only. Furthermore, not all states have yet provided comprehensive accounts for 2021.<sup>17</sup> The overview presented in this article is therefore incomplete.

*Problems gauging reserves held to meet debt brakes*

In particular, the way in which reserves, special funds and budgetary authorisations carried forward to subsequent years interact with the debt brakes is confusing. Yet it is these very relationships that proved especially significant during the coronavirus crisis, as the federal states in some cases took out extensive emergency loans to top up reserves and special funds. In some instances, borrowing authorisations, too, are carried forward to future years (see also the box on p. 25).

*Most states activated escape clauses in 2021*

The coronavirus pandemic meant that state governments (much like central government) were in a difficult situation until well into last year. Against this backdrop, most state governments (as well as central government) once again activated their debt brake escape clauses. Berlin, Mecklenburg-West Pomerania, Rhineland-Palatinate and Thuringia, however, did not, planning instead to use reserves to balance their budgets. Rhineland-Palatinate was

an exception, only reporting net cyclical borrowing in its budget plan.

In response to the Bundesbank's requests for information or in budget documents, the federal states (non-city states excluding the local government level) reported taking out emergency loans in excess of €18 billion (€220 per capita) on balance overall in the 2021 financial year. At the same time, the federal states as an aggregate, including their off-budget entities, recorded a surplus (before adjustment). The following section gauges the extent to which the various states have used these emergency loans to build reserves.

*Despite surpluses, take-up of emergency loans in excess of €18 billion*

### Bundesbank calculation approximates structural annual financing needs

In this report, the Bundesbank provides a calculation of the structural fiscal balances approximate to the debt brake for the federal states for analytical purposes. The results indicate the extent to which borrowing under the escape clause (or recourse to existing reserves) would have been necessary to finance a structural deficit incurred in 2021.

Specifically, this back-of-the-envelope calculation is based uniformly on the balance of state governments' core budgets and off-budget entities, even though some states do not include off-budget entities in their debt brakes. This ensures that the actual budgetary situation is not obscured by, for instance, core budgets pre-financing off-budget entities. In addition, focusing on the balance takes into account the fundamental principle of budgets operating on an annual basis, because the balance only covers cash inflows and outflows for the period

*Bundesbank's own calculation of structural net borrowing requirements approximate to debt brake*

*Fiscal balance of core budgets and off-budget entities ...*

<sup>16</sup> For an overview, see Deutsche Bundesbank (2021a), pp. 40-42.

<sup>17</sup> Central government, on the other hand, publishes data in a timely manner: provisional figures are available as early as 1 March of the following year, with the final figures being published on 1 September.

## Federal states' financing needs according to Bundesbank calculations and emergency loans taken out in 2021

€ per capita

Federal state	1 Fiscal balance, total <sup>1</sup>	1a of which: core budgets	1b of which: off-budget entities	2 Financial transactions <sup>2</sup>	3 Cyclical component <sup>2</sup>	4 Structural financing needs <sup>3</sup> = -1+2+3	5 Emergency borrowing <sup>4</sup>	6 Amount estimated for building reserves <sup>5</sup> = 5-4	7 Repayment volume from outstanding emergency loans taken out in 2020 and 2021 <sup>2</sup>	8 Estimated annual repayment burden from emergency loans <sup>6</sup>
Baden-Württemberg	132	72	60	2	-144	-274	85	359	733	29
Bavaria	-104	-104	0	-	-	104	226	122	774	39
Brandenburg	-248	-357	108	-24	233	457	778	320	1,021	34
Hesse	149	331	-182	1	309	161	129	-32	567	19
Meck.-W. Pomerania	10	296	-286	-	-	-10	-	-	1,769	88
Lower Saxony	163	-179	342	-0	91	-72	287	358	838	34
N. Rhine-Westphalia	11	-271	283	-	-	-11	256	268	883	18
Rhineland-Palatinate	446	560	-114	10	309	-127	-41	-	-	-
Saarland	6	82	-76	0	206	200	345	145	610	20
Saxony	-44	-1	-43	-	-	44	155	110	589	98
Saxony-Anhalt	-1	-1,132	1,130	-	-24	-23	1,024	1,047	1,061	46
Schleswig-Holstein	21	-1	22	-112	151	19	-50	-	1,765	46
Thuringia	-186	-122	-64	-	-	186	-	-	329	41
Berlin	-571	-33	-537	-132	-208	231	-	-	1,992	74
Bremen	-29	181	153	24	600	652	1,475	823	1,475	49
Hamburg	-294	-27	-266	-28	260	525	494	-31	726	36

1 Source: Federal Statistical Office, quarterly results including phasing-out period. 2 Source: Federal states' finance ministries, unless otherwise stated. 3 Without adjustment for one-off effects, i.e. including coronavirus response measures, and excluding the provisional settlement of payments under the state government financial equalisation scheme. 4 Emergency loans supplemented by borrowing by or for coronavirus special funds if applicable. A positive value indicates emergency borrowing in 2021. A negative value indicates net repayment. 5 Value given only for positive borrowing. 6 Bundesbank calculations based on repayment deadlines as reported by federal states.

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in question and is therefore not influenced by the fact that funds have been withdrawn from or added to reserves. By contrast, changes in reserves do have an impact on net borrowing in the budget (the target variable underlying most debt brakes): it falls if existing reserves are used and rises when reserves are formed.

... adjusted according to state-specific rules

In line with the rules for all debt brakes, the local government level is included for city states only. Cyclical effects and financial transactions have also been adjusted in accordance with state-specific rules based on the data provided by the federal states. The calculations thus indicate which emergency loans would have been necessary to cover the financing needs of the federal states and their off-budget entities, following state-specific adjustment rules.

Deviation from emergency borrowing indicates change in reserves

This calculation of structural financing requirements approximate to the debt brake is then compared with the emergency borrowing reported by the federal states. The difference in-

dicates the extent to which reserves were either formed from emergency loans or used to limit the scope of emergency borrowing. If, for example, a state tops up reserves, the emergency loan taken out is higher than the balance calculated by the Bundesbank here.

## Calculations point to high levels of reserve formation in individual federal states

Five states concluded 2021 without new emergency loans on balance. Rhineland-Palatinate deserves particular mention here, as it repaid all of its emergency loans taken out in the previous year. While Schleswig-Holstein repaid somewhat more emergency loans per capita than Rhineland-Palatinate, this was only a small fraction of the very large amount that the state had taken out in 2020. According to its longer-term financial forecast, the state intends to use the remaining reserves by the end of the dec-

Five states repaid emergency loans or did not take out new ones, ...

ade. Berlin, Mecklenburg-West Pomerania and Thuringia left their respective stocks of emergency loans unchanged. Thuringia and Berlin used previously formed reserves to finance their deficit.

... three remained significantly below the average of €220 per capita ...

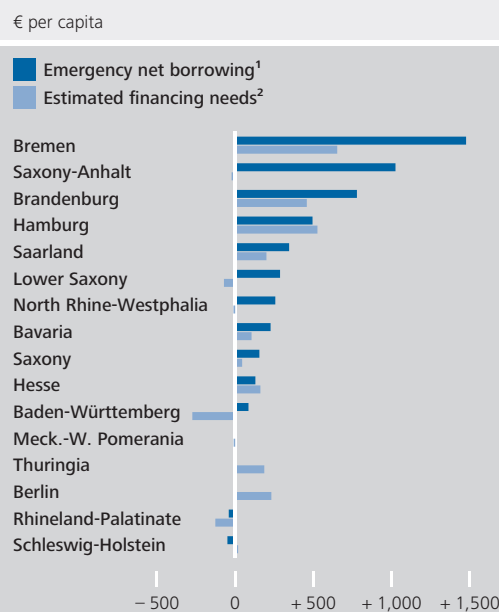
In total, state governments took out new emergency loans in excess of €220 per capita. Baden-Württemberg, Hesse and Saxony remained well below this figure. In Baden-Württemberg, however, the favourable structural balance (calculated with a considerable cyclical burden)<sup>18</sup> would have enabled it to repay a significant amount of its emergency loans. Instead, it increased its reserves using new emergency borrowing and at the expense of its control account. Meanwhile, Hesse recorded a structural deficit. In this case, the unadjusted surplus achieved was not sufficient to offset the high level of cyclical relief calculated on a state-specific basis. The calculation suggests that, on balance, Hesse used reserves to limit new debt resulting from the pandemic. In Saxony, transfers to the pension fund caused its deficit to be lower than its take-up of emergency borrowing. In making relatively high annual transfers to the pension fund, the state is complying with a requirement set out in its constitution.

... and eight surpassed the average – by a large margin in some cases – despite no apparent financing requirements of this magnitude

Emergency borrowing stood above the average of €220 per capita – in some cases only slightly so – in eight federal states. Bavaria, North Rhine-Westphalia, Lower Saxony, Saarland and Hamburg (in ascending order) recorded up to €500. Bavaria, Hamburg and Saarland had structural financing needs. In Bavaria and Saarland, however, these were considerably lower than the emergency loans they took out.<sup>19</sup> The federal states of Bremen, Saxony-Anhalt and Brandenburg reported even higher new emer-

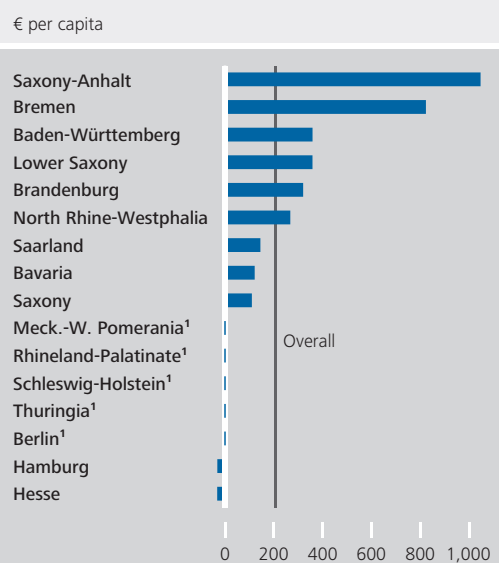
<sup>18</sup> Baden-Württemberg recorded the second highest actual cyclical burden per capita (after Berlin) although, ex post, it was around €100 per capita lower than budgeted. In view of this, only a correspondingly smaller level of net borrowing would have been permitted. However, the state recorded net borrowing on the basis of the higher planned cyclical burden. The difference was debited to the control account.  
<sup>19</sup> In Saarland, emergency borrowing was recorded by a special fund. The manner in which the core budget was settled remains unclear.

### Federal states' emergency net borrowing and estimated financing needs in 2021



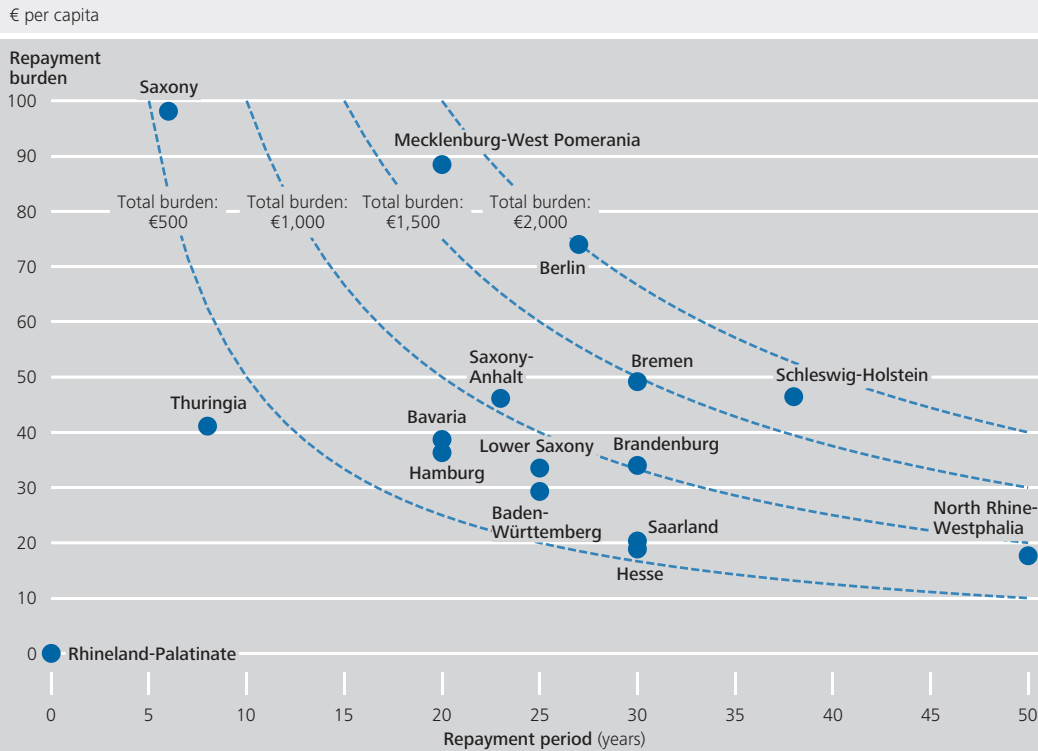
Sources: Federal Statistical Office, data from federal states' finance ministries and Bundesbank calculations. <sup>1</sup> Emergency borrowing under state-specific debt brake as specified in federal states' data, supplemented by further non-cyclical borrowing by or for coronavirus special funds if applicable. <sup>2</sup> Fiscal balance of core budgets and off-budget entities according to government finance statistics, adjusted for financial transactions and cyclical effects according to federal states' specifications.  
 Deutsche Bundesbank

### Difference between federal states' emergency net borrowing\* and estimated financing needs\*\* in 2021



Sources: Federal Statistical Office, data from federal states' finance ministries and Bundesbank calculations. \* Emergency borrowing under state-specific debt brake as specified in federal states' data, supplemented by further non-cyclical borrowing by or for coronavirus special funds if applicable. \*\* Fiscal balance of core budgets and off-budget entities according to government finance statistics, adjusted for financial transactions and cyclical effects according to federal states' specifications. <sup>1</sup> No data, as no emergency loans were taken out in 2021.  
 Deutsche Bundesbank

### Future average annual repayment burden from emergency loans taken out in 2020 and 2021



Sources: Federal states' finance ministries and Bundesbank calculations.  
 Deutsche Bundesbank

gency loans (above €500 per capita). According to the back-of-the-envelope calculation, these states, too, used the emergency loans to build up reserves – to a large extent in some cases.

*Limit emergency credit authorisations to crisis-related burdens*

However, using emergency loans to build up reserves for the future seems questionable. It makes budgets less transparent and undermines the principle of annuality. Using reserves at a later date to finance expenditure not related to the crisis would – at the very least – be incompatible with the intention of the debt brake.<sup>20</sup> Instead, in a better-than-anticipated financial situation, it would stand to reason that fewer emergency loans be taken out or that existing ones be repaid. Should the situation flare up again in the following years, it would then be up to the state parliaments to declare a new emergency. This would need to be justified by the developments at that time. New, targeted emergency borrowing would then be approved as appropriate. At the same

time, the choice of specific crisis management measures would need thorough justification.

## Repayments

The debt brakes require the federal states to draw up repayment schedules for the emergency loans they take out. At the end of 2021, the federal states reported a total volume with pending repayment of €71 billion (€850 per capita). Some states are planning to take out additional emergency loans this year as well. On the other hand, sizeable reserves are available (see also the box on p. 25) with which the federal states could repay emergency loans. If they were to make use of these, repayments would not burden their budgets. The repayment burdens that have accumulated so far

*At end-2021, emergency loans of €71 billion were pending*

<sup>20</sup> See also Deutsche Bundesbank (2021c). The requirements of the Constitutional Court of Hesse governing the justification of emergency loans from the judgement of 27 October 2021 also indicate legal problems.

## State government reserves as at the end of 2021

There is no complete overview of the state government reserves. Even using the budget accounts for 2020, which are now available, it would only be possible to compile such an overview with a great deal of effort. The number of reserve pots is too large. Although the use of such funds is restricted by law, it stands to reason that they could be mobilised, if necessary, for other purposes – possibly via legislative changes. Gathering data on reserve stocks is important in order to better gauge the state of state government finances. These data are therefore significant, not least for Germany's central fiscal surveillance body, the Stability Council. Consequently, it is vital for the Stability Council to ensure the availability of better, clearer data.

For this Monthly Report, the state governments were asked about their reserve stocks as at the end of 2021. They provided more detailed information on stocks in pre-financed special funds and reserves. In addition to these, other reserves may also exist. For example, some state governments are incurring budget liabilities (which count towards the debt brake) and, at the same time, carrying forward expenditure appropriations funded by these liabilities (residual expenditure) to later years. In Bavaria's 2021 budget accounts, for example, these amounted to €14 billion (including residual expenditure connected to the pandemic). In Baden-Württemberg's 2020 budget accounts, they came to just under €7 billion. In addition, there is scope for expenditure of €4 billion stemming from unused borrowing authorisations from previous years. In the survey, however, this stock was not reported as reserves.

The state governments reported stocks of around €110 billion in reserves and special funds. The stocks listed below include both new reserves resulting from the coronavirus crisis and older reserves:

- The reported general reserves increased somewhat, reaching €33 billion by the end of 2021. The general reserves per capita are particularly high in Bremen and Berlin.
- The cumulative surpluses from 2020 and 2021 created reserves of €12 billion in coronavirus special funds. Hesse dissolved its special fund with reserves of just under €1 billion following a ruling by the state's constitutional court. The per capita increase in Saxony-Anhalt was particularly large. This state formed its coronavirus special fund via borrowing in the core budget at the end of 2021.
- Reserves in pre-financed off-budget entities for investment purposes fell by just under one-third to €7 billion. Transfers to other reserve pots appear to have contributed to this decline.
- Civil servant pensions place a considerable burden on state government budgets, especially in the western German states. State governments provisioned the largest amounts overall for these costs. The reported stock rose significantly, climbing by one-tenth to €49 billion. At €2,340 per capita, Saxony has by far the highest provisions in relation to the size of its population. Other state governments have stopped filling up such stocks in recent years and – as in the case of Saarland and Bremen, for example – are already drawing markedly on these reserves.

The other reserves reported by the state governments come to €7 billion. The bulk of this total was attributable to a collective item reported by Schleswig-Holstein, which, as evidenced by the 2020 budget accounts, largely constituted provisions for pandemic-related budgetary burdens.

vary considerably. Rhineland-Palatinate has already repaid its emergency loans in full. By contrast, the total repayment burden stemming from emergency borrowing is particularly high in Berlin (at around €1,990 per capita),<sup>21</sup> Mecklenburg-West Pomerania and Schleswig-Holstein (at around €1,750 per capita in each case). The repayment deadlines are also very different: the longest deadlines are in North Rhine-Westphalia, at up to 50 years.

## ■ Concluding remarks

### Use of emergency borrowing and outlook

*Do not undermine debt brakes with reserves financed by emergency borrowing*

The debt brakes allow higher loans to be taken out if required in an emergency. However, there is a risk of excessive recourse to the escape clauses undermining the debt brakes. Emergency borrowing in connection with the coronavirus crisis should therefore only be used for measures that are necessary to combat this specific crisis. This also applies to the use of reserves built up from emergency loans. Furthermore, the fundamental principle of budgets operating on an annual basis implies that emergency borrowing authorisations should be for a specific financial year. An improvement in budgetary developments can mean that emergency loans are no longer needed. In that case, it would not make sense to set these borrowing authorisations aside for later use. In the spirit of the debt brake, then, there is much to be said for the states promptly liquidating reserves that they have ultimately built up using emergency loans justified by the coronavirus pandemic. This would prevent inappropriate use of funds and reduce the subsequent repayment burden.

*Very favourable developments in state government finances so far this year – difficult to justify emergency borrowing*

State government finances have so far remained in good shape this year. To date, there are signs of a sharp rise in unadjusted surpluses. This is due to very high tax revenue, which is considerably higher than was forecast in the last pre-crisis tax estimate for 2022. An-

other reason for the surpluses is that central government bears most of the non-tax burdens associated with the pandemic and the war in Ukraine. This is reflected not least in the very different budgetary positions of central government and the state governments. More specifically, central government is likely to still record a large structural deficit in 2022. By contrast, the structural state government budget surplus could even be higher than before the coronavirus crisis. Based on their favourable budgetary situation and sizeable reserves, it does not appear self-evident that state governments will need to take out emergency loans again this year.<sup>22</sup>

The future outlook is fraught with uncertainty as a result of the war in Ukraine and the associated energy crisis. Real growth is weakening, but price dynamics are increasing government revenue. Overall, state governments will enter next year with a good structural starting position. Central government is assuming the bulk of burdens resulting from the fallout of the Ukraine war, such as the energy crisis. The good financial situation should enable the federal states to make a considerable contribution to the current financial challenges. The new tax estimate at the end of October will provide an updated basis for budget planning.

*Outlook for 2023 extremely uncertain, but good starting position creates resilience*

<sup>21</sup> The high repayment burden in Berlin is due to the fact that the emergency loans taken out there in 2020 were also for cyclical burdens. The latter amounted to €620 per capita.

<sup>22</sup> Saarland is pursuing its own course. It receives extensive budgetary recovery assistance from central government, not least to help shoulder its very high debt. In order to cope with elevated transformation burdens, partly as a result of the Ukraine war, Saarland is planning to launch a credit-financed special fund of €3 billion (just over €3,000 per capita and thus, for example, higher than Bavaria's total per capita debt), for a term of one decade. The funds are intended to finance the restructuring of industrial sites, but also to finance energy efficiency improvements in state-owned buildings and investment in universities. The projects have yet to be outlined in detail. To a large extent, however, they relate to the state's normal tasks and do not appear especially linked to an emergency situation caused by the war in Ukraine. Hence, such extensive additional borrowing is inconsistent with the intention of the escape clause and is even less in keeping with central government's budgetary recovery assistance.



## Cyclical adjustment should be reviewed

*States use different cyclical adjustment procedures*

Cyclical components are calculated differently by each federal state and can vary widely. For example, despite the sharp economic downturn, the tax level procedures for 2020 identified almost no negative cyclical components. These procedures, in particular, require high reserves or safety margins. If these reserves or margins are depleted at the start of a downturn, it is no longer possible to maintain a steady budget under the regular debt brake. Hamburg's tax trend procedure should actually have done better here. Yet, in 2020, calculations using this procedure identified considerable cyclical relief.<sup>23</sup>

*Simultaneous cyclical strains and relief across Germany economically unconvincing*

The impact of cyclical effects on state government finances (see the table on p. 22, column 3) continued to range from high relief (for example, in Bremen, at €600 per capita) to persistently large burdens (in Berlin, for instance, at €210 per capita) in the 2021 reporting year. Given the state government financial equalisation scheme and the similarity of economic developments across Germany, this is difficult to comprehend and economically unconvincing. Where cyclical components are so different, the structural key figures of the states' debt brakes cannot be compared either. To ensure that the comparison across states is meaningful, alternative calculations, such as those presented in the first part of this report on financial results, are therefore required. The tables agreed by the Stability Council for debt brake accounting for all state governments are not suitable for this purpose,<sup>24</sup> as they are not sufficiently harmonised.

*Bundesbank proposal: supplement cyclical adjustment with error component*

Initial experience with cyclical adjustment at the central and state government levels suggests that most procedures should be revised. It seems expedient to look into harmonising the various cyclical adjustment procedures practised by state governments. The Bundesbank has presented a proposal to reform central government's cyclical adjustment proced-

ure: namely, introducing an estimation error component, which could stabilise budgetary policy.<sup>25</sup> This would benefit state government finances, in particular, where expenditure volumes are more rigid than at the central government level. The procedure would therefore also be closer to a tax trend procedure, such as the one used by Rhineland-Palatinate.

## Essential to enhance dataset

The Stability Council is Germany's central institution for fiscal surveillance. Budgetary surveillance would benefit from the publication of an informative set of data.<sup>26</sup> Even in less uncertain times, it is very difficult to obtain an overview of the need or scope for action in the individual federal states. Conducting even a retrospective analysis of fiscal developments, structural budgetary positions, reserve stocks and repayment obligations is immensely challenging. In order to be able to monitor budgets effectively, meaningful data on respective state government budget outturns and budgetary planning as well as on the need for action are required. A major step in the right direction would be for each state to provide clear information showing how each new tax estimate affects its budget. In a similar vein, regular updates could be made to show what state-specific budgetary effects are caused by changes in tax law enacted in the meantime and what cyclical components arise as a result of a new macroeconomic projection by the Federal Government. Available reserves would have to be clearly presented. This should not just apply to the current budget at any given time, but also to plans for the following years.

*Stability Council should ensure greater transparency of states' financial situation and budgetary plans*

<sup>23</sup> This was due to the fact that, because of its commercial double-entry bookkeeping, Hamburg released extensive provisions for tax repayments with an effect on the recorded cyclical effects.

<sup>24</sup> See Deutsche Bundesbank (2019).

<sup>25</sup> See Deutsche Bundesbank (2022).

<sup>26</sup> See also Deutsche Bundesbank (2019) and Independent Advisory Board to the Stability Council (2019).

*Make better use  
of benefits of  
federalism*

Generally speaking, the benefits of the federal system should be put to better use. It would be expedient to present the budget outturns of and public services rendered by the individual federal states on the basis of a robust set of data to aid comparability between the states.

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## Budgetary figures for state governments (including local governments) in 2021\*

Item	BW	BY	BB	HE	MV	NI	NW	RP	SL
<b>Derivation of partially adjusted structural balances</b>	€ per inhabitant								
Fiscal balance (1)	323	- 87	- 117	191	38	109	31	708	- 205
Memo item: € million	3,584	- 1,146	- 297	1,198	61	876	556	2,904	- 201
Financial transactions (net) (2)	- 60	- 100	- 72	- 121	- 65	- 87	- 35	2	- 100
Settlement of payments under the state government financial equalisation scheme (3)	38	4	18	- 71	26	89	9	- 200	130
Adjusted balance (4)=(1)-(2)+(3)	421	17	- 28	240	129	285	75	506	26
Cyclical component <sup>1</sup> (5)	- 107	- 107	- 97	- 108	- 102	- 103	- 106	- 95	- 106
One-off effects (6)	0	0	0	0	0	0	0	0	0
Partially adjusted structural balance (7)=(4)-(5)-(6)	528	124	70	348	231	388	181	601	132
Memo item: Coronavirus response measures									
Adjusted structural balance adjusted for temporary coronavirus response measures									
Net interest burden <sup>2</sup> (8)	133	26	99	179	106	95	114	136	304
Partially adjusted structural primary balance (9)=(7)+(8)	661	150	168	528	337	483	295	737	436
Memo item: Adjusted structural balance adjusted for temporary coronavirus response measures									
<b>Expenditure, revenue and debt</b>	€ per inhabitant								
Total expenditure (10)	7,486	8,115	8,048	8,622	8,021	7,353	8,260	7,152	7,985
of which:									
Personnel expenditure <sup>3</sup> (11)	3,070	2,949	2,964	3,209	2,755	2,956	2,999	3,035	3,169
Expenditure on current staff (11a)	2,305	2,221	2,530	2,488	2,320	2,240	2,244	2,264	2,337
Civil service pension benefits <sup>4</sup> (11b)	765	728	433	721	435	716	755	771	832
Other operating expenditure (12)	1,307	1,390	1,537	1,751	1,354	1,299	2,179	1,461	1,587
Interest expenditure (13)	171	47	116	202	134	113	154	156	311
Transfers to households (14)	728	862	902	1,070	902	1,089	1,155	891	1,032
Current transfers to enterprises (15)	799	340	647	767	493	243	227	171	535
Fixed asset formation (16)	730	957	564	572	849	570	495	549	432
Adjusted total expenditure <sup>5</sup> (17)	7,338	7,945	7,708	8,366	7,893	7,199	8,081	7,122	7,872
Less interest expenditure (17a)	7,167	7,898	7,592	8,164	7,760	7,086	7,927	6,966	7,561
Less interest expenditure and fees (17b)	6,697	7,411	6,931	7,378	7,289	6,588	6,966	6,447	7,151
Total revenue (18)	7,808	8,028	7,929	8,812	8,058	7,462	8,291	7,860	7,928
of which:									
Tax revenue <sup>6</sup> (19)	5,515	5,688	5,125	5,904	5,100	5,248	5,472	5,489	5,244
Fees (20)	470	487	661	785	471	497	961	519	409
Transfers from central government <sup>7</sup> (21)	938	939	1,008	1,045	1,346	900	963	803	1,496
Adjusted total revenue <sup>5</sup> (22)	7,865	8,069	7,775	8,714	8,124	7,587	8,262	7,723	8,151
Less fees (22a)	7,395	7,582	7,114	7,929	7,654	7,090	7,301	7,204	7,742
Debt at year-end (23)	5,508	2,782	8,702	9,585	8,526	10,250	14,677	11,414	17,971
Calculated average rate of interest (%) <sup>8</sup> (24)	3.11	1.83	1.36	2.07	1.40	1.11	1.10	1.28	1.71
<b>Tax rates and multipliers</b>									
Real estate acquisition tax (%) (25)	5.0	3.5	6.5	6.0	6.0	5.0	6.5	5.0	6.5
Real estate tax B (%) <sup>9</sup> (26)	404	396	412	503	434	443	579	412	469
Local business tax (%) <sup>9</sup> (27)	370	377	322	411	388	407	448	395	445
<b>Other figures</b>									
Staff (FTEs per 1,000 inhabitants) <sup>10</sup> (28)	35.3	32.2	36.5	35.8	31.9	33.7	33.9	34.1	33.3
Recipients of pension benefits (per 1,000 inhabitants) <sup>11</sup> (29)	14.5	13.5	5.9	14.8	5.4	14.7	14.6	14.4	17.7
A 13 annual gross civil servant pay (in €1,000) <sup>12</sup> (30)	67.5	70.7	67.1	65.7	66.7	67.1	65.5	67.9	65.4

Sources: Federal Statistical Office, Federal Ministry of Finance and Bundesbank calculations. \* Core budgets and off-budget entities. Abbreviations: BW – Baden-Württemberg, BY – Bavaria, BB – Brandenburg, HE – Hesse, MV – Mecklenburg-West Pomerania, NI – Lower Saxony, NW – North Rhine-Westphalia, RP – Rhineland-Palatinate, SL – Saarland, SN – Saxony, ST – Saxony-Anhalt, SH – Schleswig-Holstein, TH – Thuringia, BE – Berlin, HB – Bremen, HH – Hamburg. **1** Data pursuant to the Bundesbank's cyclical adjustment procedure based on figures from the Deutsche Bundesbank

spring 2022 macroeconomic forecast. **2** Interest expenditure less interest income. **3** Including refunds to central government for legacy claims for pension benefits in eastern Germany (under the Entitlement Transfer Act (*Anspruchs- und Anwartschaftsüberführungsgesetz* – AAÜG)). **4** Including healthcare subsidies and AAÜG payments. **5** Excluding financial transactions. Payments under the state government financial equalisation scheme are settled on the revenue side. **6** Taxes and compensation for motor vehicle tax; state government financial equalisation

SN	ST	SH	TH	BE	HB	HH	Total	Total	Item
									€ per inhabitant
									€ million
									<b>Derivation of partially adjusted structural balances</b>
39	- 15	- 20	52	- 570	- 26	- 293	61	.	Fiscal balance (1)
157	- 33	- 57	110	- 2,090	- 18	- 541	.	5,063	Memo item: € million
.	.	.	.	.	.	.	.	- 8,477	
- 60	- 2	- 44	45	- 734	78	- 603	- 102	414	Financial transactions (net) (2)
64	39	- 9	69	- 61	- 33	- 55	5	.	Settlement of payments under the state government financial equalisation scheme (3)
163	26	16	76	102	- 138	255	168	13,955	Adjusted balance (4)=(1)-(2)+(3)
- 99	- 100	- 102	- 101	- 134	- 138	- 138	- 107	- 8,854	Cyclical component <sup>1</sup> (5)
0	0	0	0	0	0	0	0	0	One-off effects (6)
262	125	118	177	236	0	394	274	22,809	Partially adjusted structural balance (7)=(4)-(5)-(6)
.	.	.	.	.	.	.	- 109	- 9,055	Memo item: Coronavirus response measures
.	.	.	.	.	.	.	.	.	Adjusted structural balance adjusted for temporary coronavirus response measures
- 2	143	125	131	291	945	300	123	10,236	Net interest burden <sup>2</sup> (8)
261	268	243	308	527	945	694	398	33,045	Partially adjusted structural primary balance (9)=(7)+(8)
.	.	.	.	.	.	.	506	42,100	Memo item: Adjusted structural balance adjusted for temporary coronavirus response measures
									€ per inhabitant
									<b>Expenditure, revenue and debt</b>
7,473	7,822	7,979	7,406	11,101	12,061	13,323	8,178	.	Total expenditure (10)
								.	of which:
2,908	2,956	2,797	2,891	3,578	3,904	3,977	3,049	.	Personnel expenditure <sup>3</sup> (11)
2,530	2,511	2,110	2,453	2,784	2,911	2,878	2,344	.	Expenditure on current staff (11a)
378	444	687	439	793	994	1,098	706	.	Civil service pension benefits <sup>4</sup> (11b)
1,323	1,721	1,261	1,336	3,425	2,884	3,962	1,735	.	Other operating expenditure (12)
25	164	150	154	301	1,036	403	152	.	Interest expenditure (13)
819	854	1,027	789	872	1,235	1,008	959	.	Transfers to households (14)
693	690	735	399	1,045	946	2,194	525	.	Current transfers to enterprises (15)
691	701	738	691	531	534	717	659	.	Fixed asset formation (16)
7,280	7,785	7,843	7,337	10,277	11,971	12,461	7,970	.	Adjusted total expenditure <sup>5</sup> (17)
7,255	7,622	7,693	7,183	9,977	10,934	12,058	7,818	.	Less interest expenditure (17a)
6,834	7,140	7,097	6,778	9,279	9,983	9,804	7,151	.	Less interest expenditure and fees (17b)
7,511	7,806	7,959	7,458	10,531	12,033	13,029	8,241	.	Total revenue (18)
								.	of which:
5,128	5,021	5,249	5,073	7,177	7,312	7,642	5,050	.	Tax revenue <sup>6</sup> (19)
421	482	596	404	698	951	2,254	667	.	Fees (20)
967	1,261	1,052	1,105	1,611	2,221	1,834	1,036	.	Transfers from central government <sup>7</sup> (21)
7,542	7,910	7,961	7,514	10,513	11,969	12,853	8,246	.	Adjusted total revenue <sup>5</sup> (22)
7,122	7,429	7,365	7,109	9,815	11,017	10,599	7,579	.	Less fees (22a)
2,829	11,562	13,582	9,191	17,615	54,146	21,218	10,095	.	Debt at year-end (23)
0.90	1.46	1.12	1.70	1.76	1.77	1.92	1.53	.	Calculated average rate of interest (%) <sup>8</sup> (24)
									Tax rates and multipliers
3.5	5.0	6.5	6.5	6.0	5.0	4.5	5.4	.	Real estate acquisition tax (%) (25)
500	424	408	438	810	687	540	481	.	Real estate tax B (%) <sup>9</sup> (26)
423	389	381	410	410	460	470	403	.	Local business tax (%) <sup>9</sup> (27)
									Other figures
36.4	36.7	32.0	35.7	41.9	44.5	39.2	34.7	.	Staff (FTEs per 1,000 inhabitants) <sup>10</sup> (28)
3.7	6.1	14.2	6.8	17.8	23.1	20.1	13.4	.	Recipients of pension benefits (per 1,000 inhabitants) <sup>11</sup> (29)
69.2	67.4	64.5	67.4	67.5	66.1	66.5	67.0	.	A 13 annual gross civil servant pay (in €1,000) <sup>12</sup> (30)

scheme and financial capacity-dependent supplementary central government grants according to provisional settlement figures. **7** Excluding financial capacity-dependent supplementary central government grants and compensation for motor vehicle tax. **8** Interest expenditure as a percentage of debt at the end of the previous year. **9** Revenue-weighted average local government multipliers for 2021. **10** Public sector staff working in state and local governments as at 30 June 2020. Areas in which non-public sector enterprises normally operate (such as uni-

versity and other hospitals, nutrition, utilities, transport, finance) are not included. **11** Recipients of state and local governments' civil service pension benefits as at 1 January 2021. **12** Total of annual basic salary at the final level of the pay grade, general job-based allowance or structural allowance, special payment(s), assuming a 40-hour week. Total column shows the unweighted mean here. The A 13 pay grade applies in particular to many school teachers. Source: German Trade Union Confederation (2021).

### Budgetary figures for state governments (including local governments) in 2021: change against 2020\*

Item	BW	BY	BB	HE	MV	NI	NW	RP	SL
<b>Derivation of partially adjusted structural balances</b>	€ per inhabitant								
Fiscal balance (1)	751	444	247	635	121	287	415	854	-138
Memo item: € million	8,345	5,825	623	3,994	194	2,298	7,439	3,501	-135
Financial transactions (net) (2)	22	2	-68	38	8	-10	32	67	-6
Settlement of payments under the state government financial equalisation scheme (3)	89	10	-14	-104	9	92	17	-233	197
Adjusted balance (4)=(1)-(2)+(3)	819	452	301	494	121	389	400	554	65
Cyclical component <sup>1</sup> (5)	52	53	49	58	45	49	53	55	43
One-off effects (6)	-76	-80	-50	-88	-67	-60	-77	-51	-173
Partially adjusted structural balance (7)=(4)-(5)-(6)	843	480	302	523	143	399	424	550	196
Memo item: Coronavirus response measures	.	.	.	.	.	.	.	.	.
Adjusted structural balance adjusted for temporary coronavirus response measures	.	.	.	.	.	.	.	.	.
Net interest burden <sup>2</sup> (8)	18	-9	18	-10	-7	-9	4	-8	-41
Partially adjusted structural primary balance (9)=(7)+(8)	861	471	320	514	136	391	428	542	154
Memo item: Adjusted structural primary balance adjusted for temporary coronavirus response measures	.	.	.	.	.	.	.	.	.
<b>Expenditure, revenue and debt</b>	€ per inhabitant								
Total expenditure (10)	177	513	511	580	422	265	247	378	301
of which:									
Personnel expenditure <sup>3</sup> (11)	87	90	65	138	52	92	86	126	86
Expenditure on current staff (11a)	60	69	68	105	58	68	71	89	65
Civil service pension benefits <sup>4</sup> (11b)	26	21	-3	33	-6	24	15	37	20
Other operating expenditure (12)	119	152	197	152	51	123	124	83	5
Interest expenditure (13)	38	-9	19	-8	-18	-6	1	-13	-42
Transfers to households (14)	36	29	30	60	38	28	48	38	289
Current transfers to enterprises (15)	184	-9	-47	234	99	-80	51	43	-8
Fixed asset formation (16)	-109	-25	55	-12	9	41	0	47	36
Adjusted total expenditure <sup>5</sup> (17)	220	518	354	574	424	235	267	476	318
Less interest expenditure (17a)	181	527	335	582	442	241	266	489	361
Less interest expenditure and fees (17b)	130	486	287	500	449	189	243	461	348
Total revenue (18)	929	957	751	1,215	542	552	662	1,232	303
of which:									
Tax revenue <sup>6</sup> (19)	619	708	565	788	339	564	593	801	497
Fees (20)	51	41	48	82	-7	52	23	28	13
Transfers from central government <sup>7</sup> (21)	264	232	-14	214	216	183	87	147	-24
Adjusted total revenue <sup>5</sup> (22)	1,063	998	648	1,097	567	634	691	1,026	654
Less fees (22a)	1,012	957	600	1,015	574	582	668	998	641
Debt at year-end (23)	7	204	177	-201	-1,013	42	641	-812	-177
Calculated average rate of interest (%) <sup>8</sup> (24)	0.52	-0.74	0.11	-0.27	-0.64	-0.17	-0.10	-0.14	-0.24
Tax rates and multipliers									
Real estate acquisition tax (%) (25)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Real estate tax B (%) <sup>9</sup> (26)	4.4	1.9	2.3	2.7	2.0	3.8	2.5	4.8	12.8
Local business tax (%) <sup>9</sup> (27)	2.3	9.6	-2.3	0.1	4.5	1.7	-2.4	13.1	-3.9

Sources: Federal Statistical Office, quarterly cash statistics (including post-bookings); Bundesbank calculations. \* Core budgets and off-budget entities. Abbreviations: BW – Baden-Württemberg, BY – Bavaria, BB – Brandenburg, HE – Hesse, MV – Mecklenburg-West Pomerania, NI – Lower Saxony, NW – North Rhine-Westphalia, RP – Rhineland-Palatinate, SL – Saarland, SN – Saxony, ST – Saxony-Anhalt, SH – Schleswig-Holstein, TH – Thuringia, BE – Berlin, HB – Bremen, HH – Hamburg. **1** Data pursuant to the Bundesbank's cyclical adjustment procedure based on figures from the spring 2022 macroeconomic forecast. **2** Interest expenditure less interest income. **3** Including healthcare subsidies and refunds to central government for legacy claims for pension benefits in eastern Germany (under the Deutsche Bundesbank

SH – Schleswig-Holstein, TH – Thuringia, BE – Berlin, HB – Bremen, HH – Hamburg. **1** Data pursuant to the Bundesbank's cyclical adjustment procedure based on figures from the spring 2022 macroeconomic forecast. **2** Interest expenditure less interest income. **3** Including healthcare subsidies and refunds to central government for legacy claims for pension benefits in eastern Germany (under the



SN	ST	SH	TH	BE	HB	HH	Total	Total	Item
							€ per inhabitant	€ million	<b>Derivation of partially adjusted structural balances</b>
762	280	313	169	- 128	372	250	449	.	Fiscal balance (1)
3,096	613	908	357	- 469	253	460	.	37,305	Memo item: € million
273	- 21	74	40	- 632	- 35	- 476	- 9	- 753	Financial transactions (net) (2)
20	2	- 54	40	- 195	- 52	- 125	- 3	- 241	Settlement of payments under the state government financial equalisation scheme (3)
509	303	185	168	309	356	601	455	37,817	Adjusted balance (4)=(1)-(2)+(3)
48	47	50	46	68	68	84	54	4,449	Cyclical component <sup>1</sup> (5)
- 68	- 75	- 72	- 69	- 84	- 252	- 114	- 77	- 6,401	One-off effects (6)
529	331	208	191	325	540	631	478	39,769	Partially adjusted structural balance (7)=(4)-(5)-(6)
.	.	.	.	.	.	.	- 15	- 1,274	Memo item: Coronavirus response measures
.	.	.	.	.	.	.	417	34,641	Adjusted structural balance adjusted for temporary coronavirus response measures
8	- 2	- 2	- 7	31	17	- 9	1	111	Net interest burden <sup>2</sup> (8)
537	329	205	184	356	557	622	480	39,880	Partially adjusted structural primary balance (9)=(7)+(8)
.	.	.	.	.	.	.	418	34,753	Memo item: Adjusted structural primary balance adjusted for temporary coronavirus response measures
							€ per inhabitant		<b>Expenditure, revenue and debt</b>
- 120	317	186	516	1,418	1,246	1,713	412	.	Total expenditure (10)
									of which:
73	111	99	124	189	166	134	100	.	Personnel expenditure <sup>3</sup> (11)
83	119	82	123	171	144	105	81	.	Expenditure on current staff (11a)
- 10	- 8	17	2	18	23	29	18	.	Civil service pension benefits <sup>4</sup> (11b)
86	98	84	109	335	366	310	138	.	Other operating expenditure (12)
7	2	1	- 8	32	17	- 11	3	.	Interest expenditure (13)
38	84	28	38	15	93	32	42	.	Transfers to households (14)
65	72	92	22	139	401	613	79	.	Current transfers to enterprises (15)
- 17	74	14	7	126	12	84	- 2	.	Fixed asset formation (16)
128	290	222	504	765	1,214	1,161	387	.	Adjusted total expenditure <sup>5</sup> (17)
120	288	220	512	733	1,197	1,173	384	.	Less interest expenditure (17a)
88	258	155	476	677	1,104	1,070	340	.	Less interest expenditure and fees (17b)
642	597	501	684	1,291	1,617	1,961	862	.	Total revenue (18)
									of which:
549	396	432	416	903	1,060	1,181	97	.	Tax revenue <sup>6</sup> (19)
33	29	65	36	56	93	103	43	.	Fees (20)
67	273	123	267	190	327	566	180	.	Transfers from central government <sup>7</sup> (21)
656	620	432	695	1,090	1,753	1,791	867	.	Adjusted total revenue <sup>5</sup> (22)
624	591	366	659	1,034	1,660	1,688	823	.	Less fees (22a)
53	418	109	146	475	- 4,177	172	111	.	Debt at year-end (23)
0.14	0.01	- 0.04	- 0.19	0.05	- 0.33	- 0.09	- 0.10	.	Calculated average rate of interest (%) <sup>8</sup> (24)
									Tax rates and multipliers
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	.	Real estate acquisition tax (%) (25)
1.5	1.0	3.7	0.8	0.0	0.0	0.0	2.7	.	Real estate tax B (%) <sup>9</sup> (26)
1.2	7.0	1.6	0.9	0.0	0.0	0.0	3.2	.	Local business tax (%) <sup>9</sup> (27)

Entitlement Transfer Act (*Anspruchs- und Anwartschaftsüberführungsgesetz – AAÜG*). **4** Including healthcare subsidies and AAÜG payments. **5** Excluding financial transactions. Payments under the state government financial equalisation scheme are settled on the revenue side. **6** Taxes and compensation for motor vehicle tax; state government financial equalisation scheme and general supplement-

tary central government grants according to provisional settlement figures. **7** Excluding general supplementary central government grants and compensation for motor vehicle tax. **8** Interest expenditure as a percentage of debt at the end of the previous year. **9** Revenue-weighted average local government multipliers.