13 March 2020

Public Finance

Free State of Bavaria
Rating Report

SCOPE AAA STABLE OUTLOOK

Credit strengths

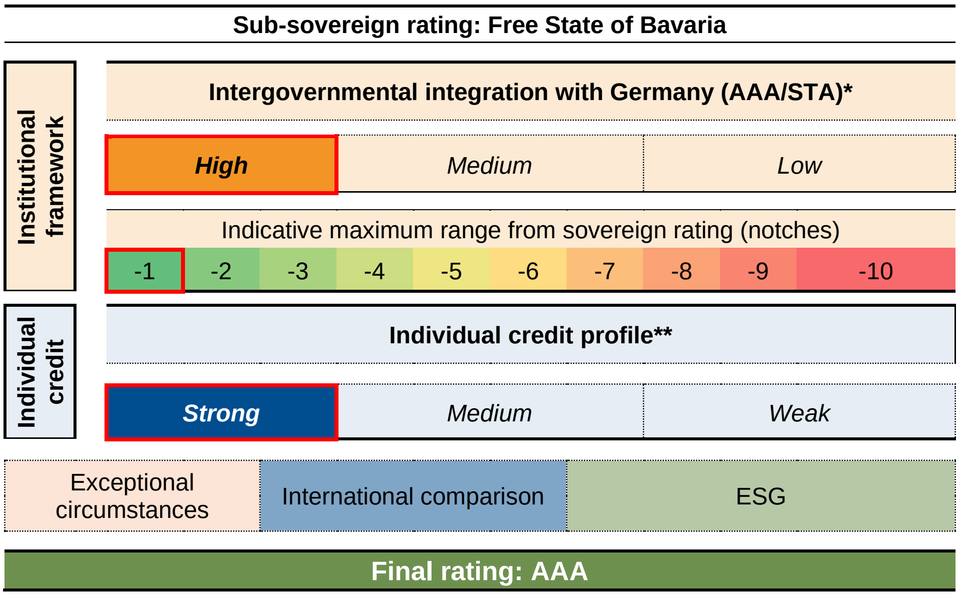
- Wealthy economy
- Strong budgetary performance
- Low debt burden
- Ample liquidity
- Excellent capital market access
- Highly integrated institutional framework

Credit weaknesses

- Limited revenue flexibility
- High pension liabilities
- Sizeable, though largely low-risk, contingent liabilities

Rating rationale and Outlook: The AAA rating reflects the Free State of Bavaria's exceptionally strong individual credit profile, captured by a wealthy economy, strong budgetary performance, low debt burden, ample liquidity, and excellent capital market access. In addition, the rating is underpinned by a highly integrated institutional framework, characterised by a very strong revenue equalisation system together with the federal solidarity principle. Credit challenges relate to limited revenue flexibility and high pension liabilities weighing on long-term expenditure flexibility, as well as sizeable, yet manageable, contingent liabilities. The Stable Outlook reflects our assessment that the risks Bavaria faces remain well balanced.

Figure 1: Scope's sub-sovereign approach to the rating of the Free State of Bavaria



*Across countries/government layers (German Länder) **Across national peers (German Länder)
Source: Scope Ratings GmbH

Positive rating-change drivers

- Not applicable

Negative rating-change drivers

- Downgrade of Germany's sovereign rating, necessitating a rating review
- Changes in the framework, resulting in weaker individual credit profile

Ratings & Outlook

Foreign currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

Local currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

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Institutional framework

Integrated framework results in strong alignment of creditworthiness

The Free State of Bavaria, like all Germany's Länder, benefits from a mature, highly predictable and an integrated institutional framework. The key elements are: i) a strongly interconnected revenue equalisation mechanism enshrined in the German constitution; ii) wide-ranging participation – and veto-rights – by the Länder in national legislation; iii) equal entitlement of the Länder regarding negotiations on federal reforms; and iv) a solidarity principle that ensures extraordinary system support in situations of budgetary emergency.

We view the federal system under which the German Länder[1] operate to be the strongest integrated system among European sub-sovereigns. We assess the system as 'high' for: i) institutionalised support; ii) fiscal interlinkage; and iii) political coherence, both among the Länder as well as between the Länder and the federal government. Consequently, our assessment results in a minimal indicative downward rating distance of at maximum one notch between the German sovereign (AAA) and the rating of the individual Land (see **Figure 2)**.

Figure 2: Framework assessment

Institutional framework assessment: German Länder

Category	Weight	Sub-weight		Assessment: Integration	Score	Weighted score
Institutionalised support	*50%*	*25%*	Transfer & bailout regime	**High**	100	25
		15%	Borrowing limits	**High**	100	15
		10%	Funding support	**High**	100	10
Fiscal interlinkage	*35%*	*20%*	Tax authority	**High**	100	20
		15%	Fiscal equalisation	**High**	100	15
Political coherence	*15%*	*10%*	Distribution of powers	**High**	100	10
		5%	Common policymaking	**High**	100	5
			Integration with the sovereign		**Σ**	***100***

Integration score	**0-10**	**10-20**	**20-30**	**30-40**	**40-50**	**50-60**	**60-70**	**70-80**	**80-90**	**90-100**
Indicative notch range	**0-10**	**0-9**	**0-8**	**0-7**	**0-6**	**0-5**	**0-4**	**0-3**	**0-2**	**0-1**

Source: Scope Ratings GmbH

Institutionalised support

➢ Transfer & bailout regime

We assess the integration of sub-sovereigns as 'high' when there is a constitutional and effective bailout rule, and/or a legislative procedure that allows for rules-based financial support in situations of budgetary emergency. Conversely, we assess a credible no-bailout framework and/or past debt crises as 'low' for integration, while ad-hoc financial support qualifies for 'medium'.

Länder have been granted additional financial support from the federal government in five instances: Bremen (1992, 2006), Saarland (1992, 2005) and Berlin (2002). The court approves claims on the grounds of the 'Bundestreueprinzip', under which the Länder and the Bund are required to provide each other with mutual support in the event of a budgetary emergency. Berlin's claim in October 2006 was denied, with the court arguing that the city-state was not in an extreme budgetary situation. However, the judges noted that federal emergency support remains possible as ultima ratio if the budget and/or debt situation is assessed as extreme compared to that of other Länder.

[1] We use 'state' and the colloquial German terms interchangeably to refer to German federal states, individually as 'Land' and collectively as 'Länder'.

We consider the interpretation of the 'Bundestreueprinzip' to be an implicit bail-out rule, as it requires the provision of federal support in times of budgetary stress. We therefore define the degree of integration as high.

- Borrowing limits

Second, we assess intergovernmental integration as high if permanent, quantitatively specified, legally binding and credible borrowing limits for central and regional governments exist. Otherwise, we assign medium or low integration if deficit rules have limited credibility, i.e. are self-imposed, inappropriate, and/or non-existent.

Debt brake to be implemented in 2020

From 2020, Länder[2] must comply with a 'debt brake' under which no Länder are allowed to run structural financing deficits unless hit by a severe economic downturn or a natural disaster. The debt brake also caps the structural annual deficit of the central government at 0.35% of GDP.

The finances of the Länder and their compliance with debt limits are monitored by the Stability Council, which was established in 2010 as a joint body of the German Federation and the Länder. The Stability Council monitors restructuring programmes and compliance with budgetary targets as defined in fiscal consolidation agreements between the Bund and the Länder. The Council comprises the finance ministers of each Land and the federal ministers of finance and economic affairs.

We view the Stability Council and the debt brake as important pillars for integrated financial relations between central and regional German governments, which leads us to assess integration as high.

- Funding support

The third criterion on institutional support relates to the degree of mutual funding support. A history of common funding and/or equal risk weights with autonomous funding lead us to assess integration as high. A medium or low level of integration is characterised by either federal dominance on sub-sovereign funding or autonomous funding under separate risk weights.

Equal risk-weights combined with autonomous funding

We assign a high level of integration between the Länder and the federal government based on their history of stand-alone capital market issuance combined with aligned risk weights to the sovereign.[3]

Fiscal interlinkage

- Tax authority

First, we assess the degree of intergovernmental integration based on the division of tax authority. The higher the degree of shared decision-making on taxes, the higher we assess the level of integration across jurisdictions. One-sided dependence leads to medium integration and a complete separation of tax authorities leads to a low assessment of interlinkage.

Shared tax authority with the Bund on high-revenue taxes

The Länder and the federal government share the tax authority, deciding together on rates and revenue distribution on high-revenue taxes (income and VAT). The latest reform on federal financial relations (in 2017) took effect in 2020 and has resulted in a higher distributed share of VAT revenues to the Länder. The VAT distribution will also fully compensate for the different taxing powers, thereby replacing the former two-step process of horizontal equalisation payments between the Länder. Alongside common

[2] The debt brake is a legal framework that prohibits structural deficits from 2020 onwards; article 109 (3) of the Basic Law stipulates that the Länder may incur deficits in a case of a recession or a natural disaster provided they pass respective legislation at the Land level.
[3] Regulatory treatment of a sub-sovereign exposure in comparison with respective sovereign exposure for banks, which, in the European context, is defined under the European Banking Authority's Capital Requirements Regulation (CRR).

taxes, the central government and the Länder have separate tax authority on other less-revenue-generating taxes.

We assess the tax authority as highly integrated, based on the high share of common taxes and the clear separation of tax authority on less-revenue-generating taxes.

- Fiscal equalisation

Second, we assess the extent of fiscal equalisation. Legal rules to lower differences in living standards lead to a high assessment of interlinkage. Predictable redistribution payments to cover mandatory spending justify a medium while unpredictable or ad-hoc transfers lead to a low assessment.

Bavaria is the largest contributor to the equalisation system

The German system is shaped by a mechanism that strongly aligns different fiscal capacities among the regions. Bavaria was the largest net contributor to the system in 2018 (EUR 6.6bn[4]), with most other Länder being net beneficiaries (12 out of 16) to prevent political and economic division. The reformed equalisation system took effect in 2020, with distribution occurring via VAT. The net effect should be positive for all Länder as contributions from the federal government are greater under the new system. As a result, we maintain our assessment that the fiscal equalisation system contributes materially to high integration.

Political coherence

- Distribution of powers

First, we assess the degree of political coherence between government levels based on the distribution of powers. High (medium) integration is characterised by the distinct (imprecise) distribution of responsibilities. Low integration is assigned if relations are shaped by frequent conflicts and persistent separatist movements.

Federal reforms further strengthen the high level of political coherence

In 2017, the German government and the Länder agreed to reshape financial relations in the federal system, generally binding from 2020. In return for higher payments from the equalisation system, the regions have assigned limited executive and legislative rights to the central government in formerly autonomous policy areas, including physical and digital infrastructure and the higher-education system. In conformity with earlier federal reforms ('Föderalismusreformen II'), we observe that the higher the share of common national legislation ('konkurrierende Gesetzgebung'), the more integrated the German federal system becomes.

- Common policy-making

Second, we assess the degree of common policy-making as high if legislative processes require high co-ordination between government levels. Conversely, a medium (low) assessment reflects one-sided dominance (unilateral control by central government) in legislative processes.

The high share of common national legislation and the increasing political and financial involvement of the central government in regional policy areas lead us to assess the degree of common policy-making as high.

Special role of Bavaria with regional party

In addition, Bavaria has a unique role in the national political landscape. It is the only federal Land with a separate party: the Christian Social Union, or the CSU. The CSU has been in power since 1957 under different coalitions but usually as a one-party government and has always appointed the Land's prime minister. The party also has a long-standing agreement with the Christian Democrats (CDU) to co-operate in federal

[4] Free State of Bavaria, final accounts 2018

and regional elections. While the CDU does not compete with the CSU in Bavaria, the two parties form a common parliamentary party on the national level. The CSU's ability to represent Bavaria's interests at the national level increases Bavaria's influence on national policy-making relative to the other Länder.

Individual credit profile

We assess Bavaria's individual credit profile as 'exceptionally strong' in view of the state's[5] ability to maintain balanced budgets and cover debt repayments, even under adverse conditions. This reflects Bavaria's: i) low debt, ample liquidity, and excellent capital market access; ii) strong budgetary performance and above-average expenditure flexibility along with average revenue flexibility compared to other German Länder; iii) wealthy and highly competitive economy; and iv) the high quality of governance at the regional level.

Our qualitative assessments are also informed by our Core Variable Scorecard (CVS), which highlights that Bavaria has the strongest individual credit profile among the German Länder, underpinned by exceptionally strong financial indicators and good budgetary results with high investment levels. Its GDP per capita is one of the highest in Europe while its unemployment rate is the lowest in Germany. Finally, Bavaria's governance indicators compare favourably in both a national and international context.

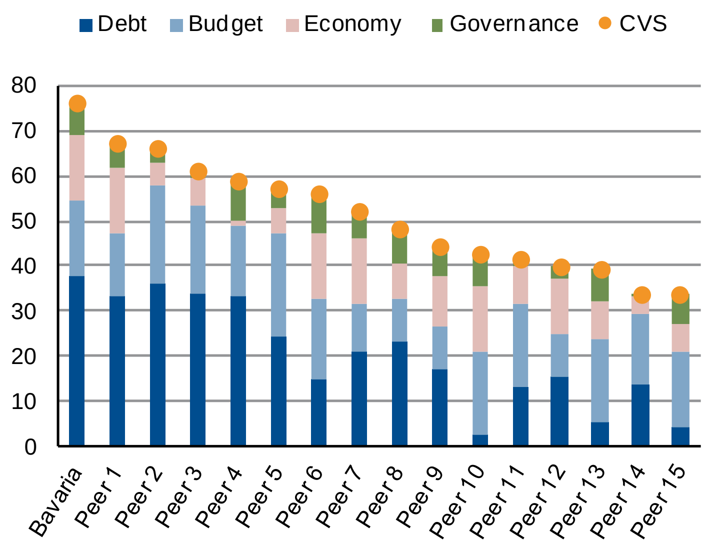
Our qualitative and quantitative assessments are summarised in **Figures 3 and 4.**

Figure 3: Qualitative Scorecard (QS) result

Individual credit profile – qualitative assessment (QS)					
Category	**Weight**	**Qualitative scorecard**	**Risk** *Low*	*Medium*	*High*
Debt burden and liquidity profile	*40%*	Debt profile			
		Contingent liabilities			
		Funding and liquidity			
Budget performance and flexibility	*30%*	Budget management			
		Expenditure flexibility			
		Revenue flexibility			
Economy and social profile	*20%*	Growth & diversification			
		Labour & demographics			
Quality of governance	*10%*	Recent events & policy risk			
		Transparency/accountability			

Source: Scope Ratings GmbH

Figure 4: Core Variable Scorecard (CVS) result



Source: Scope Ratings GmbH

Debt burden and liquidity profile

High own cash reserves

The Free State of Bavaria benefits from ample liquidity, which supports the continuous reduction of its already low debt burden. Bavaria holds sizeable cash holdings vis-à-vis national peers, stemming from its sound budgetary and financial management. Bavaria's ample cash holdings are comfortably covering debt service through to 2021. Moreover,

[5] We use 'state' and the colloquial German terms interchangeably to refer to German federal states, individually as 'Land' and collectively as 'Länder'.

the recent increase in cash reserves took place alongside an increase of postponed credit authorisations[6].

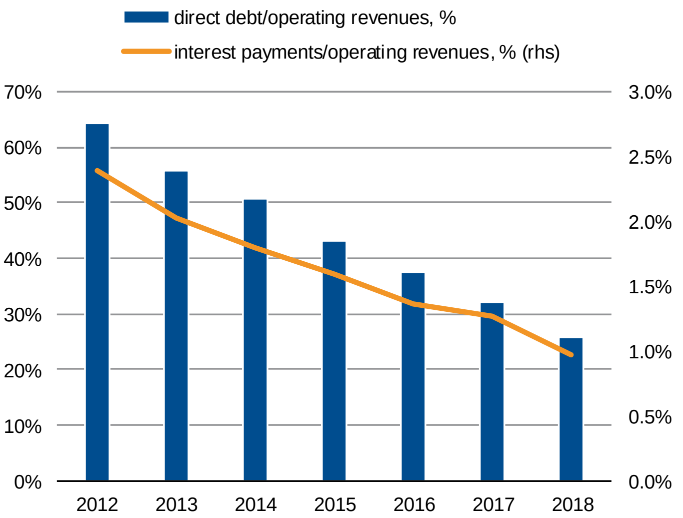
Solid cash flow profile and conservative liquidity planning

Bavaria benefits from highly predictable cash flows and prudent budgetary assumptions for liquidity planning. The state's cash flows, especially inflows, are prone to seasonal variations driven by the tax calendar. Similar to other Länder (excluding city-Länder), Bavaria's cash reserves tend to increase over the year, with peaks in mid-July and mid-October followed by significant outflows at the end of October and November. Moreover, the Land accumulates the Bavarian municipalities' shares in taxes before distributing them to the municipalities every quarter. These factors partly explain the state's excess liquidity during the year.

Excellent access to external liquidity

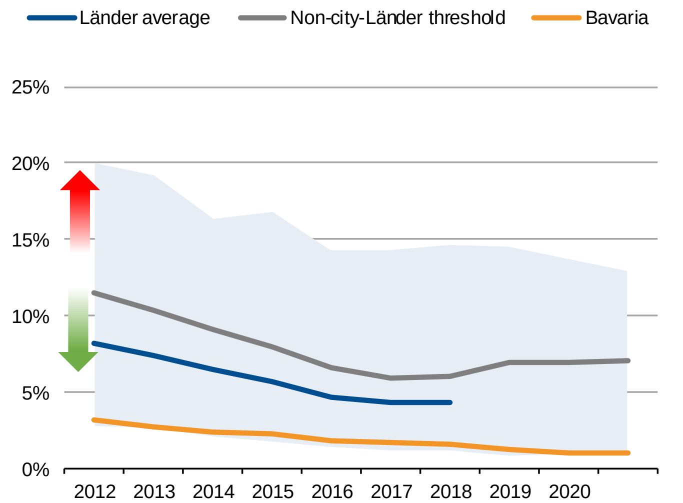
Bavaria has excellent access to external funding, which further strengthens its resilience to shocks. Access to external liquidity, if required, is available at short notice via credit facilities from various major financial institutions. In addition, German Länder lend excess liquidity to each other via commercial cash transactions, generating another source of liquidity. Combined with Bavaria's own sizeable reserves, this makes the risk of a liquidity shortfall negligible.

Figure 5: Debt and interest burden



Source: Bayerisches Staatsministerium der Finanzen und für Heimat, Scope Ratings GmbH

Figure 6: Interest-to-adjusted-tax ratio



Source: Bayerisches Staatsministerium der Finanzen und für Heimat, Scope Ratings GmbH

Low debt burden and continuous debt reduction

Bavaria benefits from a low debt burden in a national and international context and has repaid all maturing debt without recourse to credit authorisations in recent years (reflecting its high cash holdings). Bavaria's direct debt as a share of operating revenues reduced significantly between 2012 and 2018, from 64% to 26% (see **Figure 5**). In line with previous years, Bavaria's debt reduction in 2018 went beyond the amount budgeted (including postponed borrowing authorisations), by 5.3% to around EUR 27bn, via settling due loans using cash and postponing around EUR 11bn of unused credit authorisations to future budgets.

Low interest-payment burden

The reduction of debt has led to a fall in Bavaria's interest payments relative to operating revenues, to 1.0% in 2018 from 2.4% in 2012, further bolstering its fiscal position. Based on recent stability council assessments, Bavaria will continue to outperform most German Länder in terms of fiscal indicators, thus comfortably meeting the debt brake rule. This

[6] In view of Bavaria's high own cash holdings combined with the low interest rate environment, a major instrument for reducing cash holdings is the postponement of credit authorisations. This means that authorisations to accept debt for the repayment of due loans are unused and due loans are settled using existing cash holdings.

view is also supported by Bavaria's very low interest-to-adjusted-tax ratio (see **Figure 6**) vis-à-vis national peers.

Sound debt management

As for all German Länder, we assess Bavaria's access to capital markets as excellent. This was most evident during the last financial crisis, when all Länder maintained their excellent access, demonstrating investor confidence in the German framework. In addition, Bavaria also employs a conservative debt-management strategy with no foreign currency exposure and limited interest rate risks. Going forward, in view of the low interest rate environment, Bavaria's debt management strategy foresees i) the issuance of fixed-rate debt only; and ii) the exclusion of new derivatives to minimise risks and maintain low administrative costs in debt management.

Contractual guarantees exhibit low and declining risks

Outstanding contractual guarantees issued by Bavaria have been declining, reaching around EUR 5bn in 2018. Guarantees primarily relate to: i) social housing (EUR 3bn); and ii) individual authorisations (EUR 2bn). Improved property values make it less likely that the Free State of Bavaria will have to honour the guarantees related to real estate transactions. In addition, guarantees for debt incurred by social housing associations are not relevant to the budget, in our opinion, because of the associations' stable rent income.

Materialisation of contingent liabilities in the financial sector unlikely

Challenges relate to Bavaria's sizeable implicit contingent liabilities arising from its 75% shareholding in the BayernLB bank (total assets of EUR 220bn in 2018). As a positive development, financial risk from the state's exposure was reduced in 2017[7] after BayernLB repaid its state aid in full. Moreover, the repayment of Bavaria's capital contribution in 2017 led to an early conclusion of the related EU proceedings. The bank's balance sheet is strong with i) a solid capital base, reflected by a CET1 capital ratio of 14.5% in September 2019, well in excess of the regulatory requirement (minimum 10.3% for 2020) and ii) a low NPL ratio of 0.7% in the first nine months of 2019, resulting in low risk provisions. However, as expected, the bank's profit before taxes fell to EUR 433 m in 9M 2019 (9M 2018: EUR 716 m). This was a result of i) lower one-off income, as the previous year's income contained extraordinary gains from a restructuring exposure; and ii) persistently low interest rates and a competitive market leading to margin erosion, although net interest and commission income was on par with the level as of 9M 2018, at around EUR 1.5bn. In this context, we note positively Bayern LB's plans to reposition its business model, which will involve heavy investment into IT upgrades and a material reduction of capital-markets-oriented businesses. The multi-year transformation strategy is scheduled for completion by the end of March 2020.

Solid management of major holdings

Bavaria's strong management of its major shareholdings is reflected in overall good financial results, indicating a low risk of materialisation of related contingent liabilities. The combined debt of entities in which Bavaria holds a majority share (excluding financial institutions) remained stable in 2018, at around EUR 1.8 bn, as did the share of debt of regarding participations with a negative annual result, which remained at around 3%.

Municipal finances compare favourably in a national context

Municipal finances compare favourably in a national context. The interest burden of Bavarian municipalities fell from 0.8% of operating revenues in 2016 to 0.6% in 2018, which is moderate relative to the national average (0.9%). Bavarian municipalities recorded a high surplus before debt movements, at 4% of total revenues in 2018 (national average: 1.3%), which helped to reduce total municipal debt by 3.3%, like in previous years. Cash advances to the non-public sector ('Kassenkredite') as a share of total debt also remained low, at 1.4% in 2018 (national average: 21.5%).

[7] In 2008/2009, Bavaria injected EUR 10bn of capital into the bank and issued EUR 4.8bn in guarantees for Bayern LB's structured finance portfolio. Under the EU state-aid proceedings, the EU Commission has scheduled a repayment of EUR 4.96bn until 31.12.2019 at the latest. With the repayment of EUR 1bn as of 30.06.201, BayernLB has fully met the repayment obligation. The guarantees for the structured credit portfolio were terminated in 2014.

Budgetary performance and flexibility

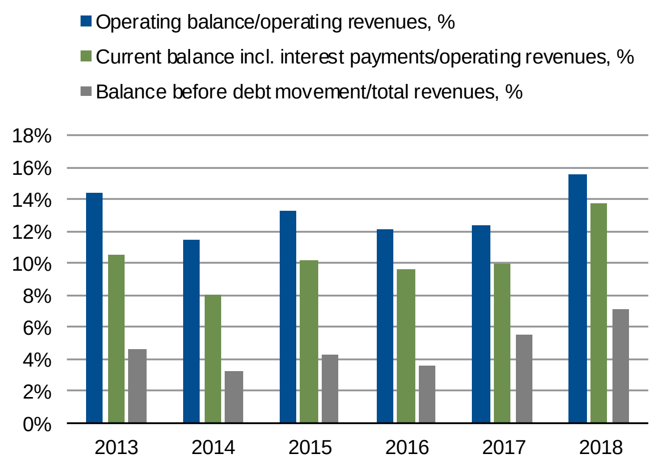
A track record of strong budgetary performance and flexibility

Bavaria benefits from strong budgetary performance, with high operating surpluses averaging 12.9% of operating revenues in 2014-18 and significant surpluses before debt movement averaging 4.7% of total revenues (see **Figure 7**). This performance is underpinned by the strong growth in tax revenue, continuous cost control and conservative budgetary management, which have helped towards a substantial reduction in debt and a build-up of cash reserves.

Strong budgetary performance in 2018

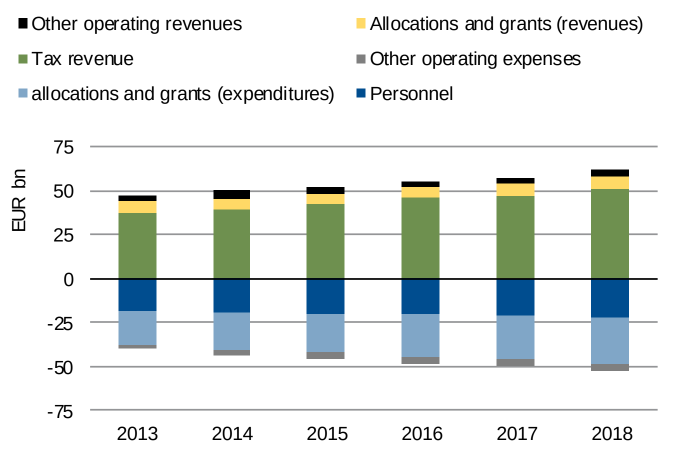
In line with Germany's favourable economic growth during 2018, Bavaria's tax revenue after financial equalisation improved against the budget by around EUR 1.75bn. Taking further changes into account, Bavaria recorded a surplus before debt movements of 6.6% of total revenues in 2018, an improvement against the budgetary target of around EUR 4.2bn. This surplus was allocated to the budgetary reserve.

Figure 7: Budgetary performance



Source: Bayerisches Staatsministerium der Finanzen und für Heimat, Scope Ratings GmbH

Figure 8: Components of operating balance (EUR bn)



Source: Bayerisches Staatsministerium der Finanzen und für Heimat, Scope Ratings GmbH

Bavaria continues to outperform budget, but at a lower level

Based on current tax estimates, deteriorating economic trends, and Bavaria's conservative budgetary planning, we expect the Free State to again surpass its 2019 budget due to high tax revenue growth (around +2% from previous year), but at a lower level than in 2018. Overall, we expect both revenue and expenditure in 2019 to increase from previous-year levels, by around 3.5%[8] and 8.5%[9], respectively. The higher expenditure will be due to increases in i) allocations and grants for ongoing purposes (+11%; including state financial equalisation outflows, up by 2.1%); ii) capital expenditure (+15.9%); and iii) personnel expenses (+4.8%). Therefore, we forecast an operating surplus of around 10% of operating revenues (from 15.5% in 2018) and a surplus before debt movements of around 2% of total revenues (from around 6.6% of total revenues in 2018).

Operating revenue is driven by strong national growth

Bavaria's operating revenue is dominated by taxes (see **Figure 8**). As most taxes are subject to revenue equalisation, Bavaria mainly receives shared taxes (largely personal income taxes, VAT and corporate taxes), thereby limiting revenue flexibility. These revenues are initially collected by Bavarian tax offices but are later redistributed at national level in accordance with revenue-sharing agreements and additional transfer

[8] Total revenues include deposit repayments to the Republic of Austria totalling EUR 1,230m as part of the general cleanup of HETA Asset Resolution AG. Since the Free State of Bavaria only processed the payments, there is an equal amount reflected on the expenditure side. Without the general adjustment, there would have been an increase of 1.4%.

[9] Without the payment to Austria (as part of the general adjustment of HETA Asset Resolution AG), the increase in expenditure would have been around 6.5%.

mechanisms. This weakens the link between the state's tax revenues and its economic performance.

Above-average expenditure flexibility vis-à-vis peers

The Free State of Bavaria enjoys a high share of investments (13% of total expenditure in 2019) and low administrative costs (6.4% of expenditure in 2019). The state also has a track record of fiscal consolidation and implementing cost-cutting during economic downturns to offset budgetary shocks. However, the expenditure structure is rigid: Bavaria's largest budgetary items relate to transfers and grants for ongoing purposes (at 44% of expenditure, according to the 2019 budget) as well as expenditure for federal fiscal equalisation and key allocations to municipalities. Around 37% is dedicated to personnel costs (around 60% of which is spent on education, science, research and culture, and 20% on security and legal protection), which reflects the Free State's extensive investments in education, science and high security standards.

Pension payments weigh on long-term budgetary flexibility

With the number of eligible pensioners set to rise to 178,400 in 2040 (by 44% since 2014), pension expenditure will take up an increasingly larger share of Bavaria's budget, weighing on the state's long-term expenditure flexibility. According to Bavaria's report on future pension expenditure, which includes an alternative assumption on adjustments of the pensions by 2%-3% p.a., the share of pension expenditure will rise steadily from 8.95% in 2013 and peak between i) 10.9% during 2027-31 (with a growth rate of 2% p.a.) up to ii) 13.5% during 2039-45 (with growth rate of 3% p.a.).

To ease the rising pressure from unfunded pension obligations, Bavaria plans to co-finance pension payments via: i) savings through increases in the retirement age and compensation levels; ii) continuous debt reduction, thereby generating some fiscal room; and iii): withdrawals from its pension fund. The capital stock of the pension fund was EUR 3.19bn at the end of 2019. In addition to annual fund inflows of EUR 110m until 2030, Bavaria contributes pension allowances (EUR 19.9m in 2018). Overall, the combined measures, including anticipated savings, will result in a moderate share of pension expenditure, peaking below 10% and thus in line with today's levels.

Record-high investment levels over the medium term, along with continuous debt reduction

Bavaria's financial plan for 2019-23 (see **Figure 9**) is based on i) the record-high investment level (from around 13% of total expenditure in 2019 to 14.6% in 2023); and ii) rising current expenditure to combat demographic changes, economic trends and environmental risks. At the same time, Bavaria intends to continue to deleverage using its high cash holdings. According to the supplementary budget for 2019/20, the Free State intends to repay EUR 100m; this means the overall reduction in legacy debt between 2012 and 2020 will amount to EUR 5.7bn. Further debt repayments totalling EUR 150m are planned for the 2021-23 period.

Spending will take a particular focus on demographic developments and greenhouse gas reduction. Programmes include i) technology initiative Hightech Agenda Bayern, to which EUR 2bn is allocated until the end of the legislative period in 2023; the programme will also add 1,000 new professorships to increase the number of student places by 10,000; ii) a Bavarian climate protection offensive including, among other things, higher outlays for research and development on environmental and climate protection at around EUR 231m in the 2019/20 budget.

2020/21: Slowing growth in national tax revenue mitigated by individual strengths

In our opinion, the expected decline in tax revenue growth in 2020/21, which mirrors the national economic slowdown, is mitigated by Bavaria's: i) conservative budget management; ii) low and declining debt service costs; iii) possibility to adjust budgets in view of the high investment levels; and iv) economic and demographic outperformance vis-à-vis national peers. Bavaria's economy is likely to benefit in the long term from the innovation boost provided by the high-tech agenda. At the same time, the Free State is mitigating the emerging economic downturn.

Figure 9: Financial planning

	2019	2020	2021	2022	2023
Financial planning (in EUR m)					
Current revenue	62,140	57,093	59,244	60,871	62,547
Capital revenue	2,160	1,378	1,234	1,224	1,229
Total revenue (adjusted)	64,299	58,471	60,478	62,095	63,776
Current expenditure	56,943	51,839	53,568	54,993	56,312
Capital expenditure	8,588	8,911	9,217	9,424	9,635
Total expenditure (adjusted)	65,530	60,749	62,785	64,418	65,946
Balance before debt movement[10]	-829	-1,827	-1,857	-1,873	-1,721
Gross borrowing	2,881	2,326	1,365	1,187	831
Redemption	2,931	2,376	1,415	1,237	881
Net reserve movements	-50	-50	-50	-50	-50
Ratios (%)					
Investment quota (%)	13.0	14.6	14.6	14.6	14.6
Current balance/current revenue (%)	8.4	9.2	9.6	9.7	10.0
Current balance/capital expenditure (%)	60.5	59.0	61.6	62.4	65.0

Source: Bayerisches Staatsministerium der Finanzen und für Heimat, Scope Ratings GmbH

Economy and social profile

Key economic region in Germany

Bavaria has a favourable socio-economic profile underpinned by a large, wealthy, well-diversified and highly competitive economy, resulting in a high regional growth potential and strong ability to generate its own revenues for the long term. With GDP of around EUR 605bn in 2017, Bavaria is one of the key economic regions in Germany, contributing 18% of national GDP in 2018. Bavaria is also one of the wealthiest regions in Europe, with a GDP per capita outperforming both the German average, by 17%, and the euro area average, by 40%.

Robust economic growth and highly competitive economy

Economic expansion has been strong, with real GDP growth averaging 2.4% between 2013 and 2017, exceeding the German average of 1.8% (see **Figure 10**). The slowing economic momentum in Germany is also reflected in the slower growth rate in Bavaria: down to 0.9% in the first half of 2019 (national average of 0.4%), from 1.4% in 2018 (see **Figure 10**). Industrial production in Bavaria also declined by 4.5% in the first half of 2019, with effects especially pronounced among makers of vehicles (-18.1%) and chemicals (-6.0%), mainly due to declining exports. By contrast, sectors with a domestic focus remained strong, including construction, retail, hospitality as well as providers of information technology and communication services.

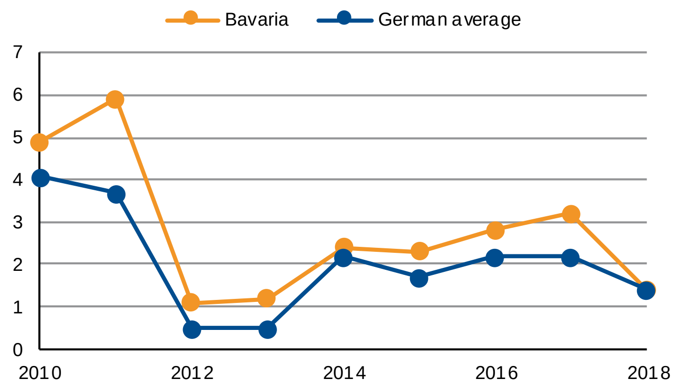
We expect GDP growth to continue to soften in coming years but to remain above the German average. This assumption is based on i) Bavaria's declining exports, its high export share and global economic uncertainties, balanced with ii) the region's highly competitive industrial base driven by electrical and mechanical engineering and a booming regional property and construction sector.

[10] Including budgetary savings commitments ('Globale Minderausgaben' in 2019: EUR 401.7m, 2020: EUR 451m, 2021-23: EUR 450m).

Lowest unemployment in Germany

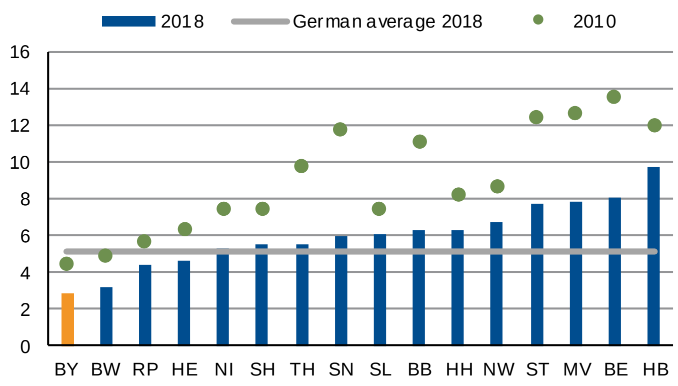
Bavaria enjoys favourable labour market characteristics, even if we expect unemployment to rise slightly in the medium term as a result of the current economic downturn. Due to constant job creation, unemployment has continued to fall, to 2.9% in 2018, and remains the lowest of the 16 Länder (see **Figure 11**). As of December 2019, the unemployment rate was 2.8% (national average: 4.9%).

Figure 10: Real GDP growth, 2010-18, %



Source: Federal Statistical Office, Scope Ratings GmbH

Figure 11: Unemployment, % of total labour force, 2018



Source: Federal Statistical Office, Scope Ratings GmbH

Favourable demographic profile vis-à-vis other Länder

Bavaria enjoys positive demographics vis-à-vis other Länder, which are supporting the Free State's long-term tax revenue potential. Bavaria's Statistical Office projects an increase in the total population by 4% until 2038. However, the Free State records a high ratio of population aged 16-65 years in 2018 (66.2%), with the ratio of the population aged 65 years and older expected to increase from 22% per 100 persons aged 20 to 64 years to 48% in 2038.

Quality of governance

Stable political environment

We assess Bavaria's quality of governance and decision-making flexibility as strong. This is supported by the state's i) track record of nominal debt reduction; ii) regular fulfilment of policy objectives defined in strategic plans; and iii) ability to weather economic downturns by cutting costs to compensate for adverse budgetary developments.

Governing coalition of CSU/Free Voters

After losing their electoral majority in 2018, the CSU reached a coalition agreement with the smaller, conservative Free Voters party to govern Bavaria. The CSU won 37.2% in the regional election, its lowest result since 1950. Under the coalition deal, the CSU's Markus Söder will remain the region's president, while the Free Voters will take over three ministries: economy, environment and culture.

Stable policy environment with a clear strategic focus

The fiscal objective of continuously reducing Bavaria's debt is legally enshrined in Article 18 paragraph 1 sentence 2 BayHO. According to the coalition agreement, strategic priorities for the administrative term of Bavaria (2018-23) include: i) balanced budgets without recourse to new debt; ii) compliance with the debt brake mechanism from 2020; iii) a strong commitment to become debt-free in the long run; iv) a continued build-up of reserves. Given the commitment to continuous debt reduction backed by Bavaria's budgetary laws, we expect only limited changes to budgetary policies and debt strategy going forward.

Additional considerations

International comparison

Bavaria's individual credit profile compares very favourably in an international context. This is supported by i) a low debt burden, ii) strong budgetary performance, including a high investment level; iii) very wealthy economy with low unemployment; and iv) strong governance indicators.

Long-term environmental and social risks

Alongside our assessment of rating-relevant credit risks, we consider long-term environmental and social developments. We assess developments regarding the German Länder by using selected sustainability indicators as defined by the German Sustainability Strategy (DNS)[11], which itself is based on the Sustainable Development Goals (SDGs) set by the United Nations for 2030.

Relative underperformance on environmental benchmarks

With regards to environmental indicators, Bavaria remains below the average of German Länder in terms of greenhouse gas emissions, primary energy consumption and renewable energy use. The Land has also failed to meet DNS targets, particularly related to the reduction of greenhouse gas emissions (11% against a 40% benchmark). As part of the new Bavarian climate protection initiative, the Free State will provide an additional EUR 240m over 2020-23 to strengthen climate protection measures. The 2019/20 budget has also allocated around EUR 231m for the Free State's Climate Protection Program 2050. The climate protection offensive includes a 10-point plan with 96 concrete measures and is based on the three pillars of Bavarian climate policy: i) reduce the region's greenhouse gas emissions; ii) adapt to the consequences of climate change; and iii) intensify research on environmental and climate protection.

Outperformance on education; further action needed on gender pay gap

With regards to social indicators, Bavaria excels in educational attainment and exceeds the goals of the DNS.

Methodology

The methodology applicable for this rating and/or rating outlook, Sub-Sovereign Credit Rating, published on 7 June 2019, is available on www.scoperatings.com.

Historical default rates of the entities rated by Scope Ratings can be viewed in the rating performance report on https://www.scoperatings.com/#governance-and-policies/regulatory-ESMA. Please also refer to the central platform (CEREP) of the European Securities and Markets Authority (ESMA): http://cerep.esma.europa.eu/cerepweb/statistics/defaults.xhtml. A comprehensive clarification of Scope's definition of default as well as definitions of rating notations can be found in Scope's public credit rating methodologies on www.scoperatings.com.

The rating outlook indicates the most likely direction of the rating if the rating were to change within the next 12 to 18 months.

[11] https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Nachhaltigkeitsindikatoren/Publikationen/Downloads-Nachhaltigkeit/machbarkeitsstudie-indikatoren-nachhaltigkeit-5911101159005.html

I. Appendix: CVS/QS results and mapping table

Individual credit profile - Free State of Bavaria

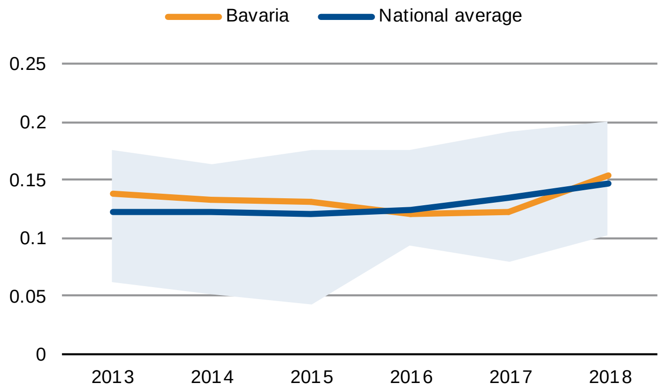
Category	Weight	QS	*Risk*	*Score*	CVS	*Score*	*Weight*	Total (QS-CVS avg)
Debt burden and liquidity profile	*40%*	Debt profile	Low	100	Interest, % op.rev.	100	*50%*	**97**
		Contingent liabilities	Low	100	Debt, % op.rev	100	*25%*	
		Funding and liquidity mgmnt	Low	100	Balance before debt, % op.rev.	76	*25%*	
		Debt QS score	**Σ**	**100**	***Debt CVS score***	**Σ**	**94**	
Budget performance and flexibility	*30%*				Operating balance, % op.rev.	68	*40%*	**70**
		Budget management	Low	100	SD operating balance	46	*15%*	
		Expenditure flexibility	Low	100	Personnel exp., % op.exp.	13	*15%*	
		Revenue flexibility	Medium	50	Capex, % tot exp.	46	*15%*	
					Transfers, % op.rev.	93	*15%*	
		Budget QS score	**Σ**	**83**	***Budget CVS score***	**Σ**	**57**	
Economy and social profile	*20%*				GDP per capita	89	*40%*	**86**
		Growth & diversification	Low	100	Unemployment rate	100	*20%*	
		Labour market & demographics	Low	100	GDP volatility	4	*20%*	
					Old-age dependency ratio	77	*20%*	
		Economy QS score	**Σ**	**100**	***Economy CVS score***	**Σ**	**72**	
Quality of governance	*10%*	Recent events & policy risk	Low	100	Quality	100	*33%*	**86**
		Transparency & accountability	Low	100	Impartiality	26	*33%*	
					Corruption	87	*33%*	
		Governance QS score	**Σ**	**100**	***Governance CVS score***	**Σ**	**71**	
						Individual credit profile	**Σ**	***86***

Indicative sub-sovereign rating			**Individual credit profile**						
			Strong		Medium			Weak	
			≥ 75	≥ 65	≥ 55	≥ 45	≥ 35	≥ 25	< 25
			Indicative maximum notch adjustment from sovereign rating:						
Institutional framework: integration with sovereign		0 - 1	0	0	0	-1	-1	-1	-1
	Full	0 - 2	-1	-1	-1	-1	-1	-2	-2
		0 - 3	-1	-1	-1	-2	-2	-2	-3
		0 - 4	-1	-1	-2	-2	-3	-3	-4
	Medium	0 - 5	-1	-2	-2	-3	-3	-4	-5
		0 - 6	-2	-2	-3	-3	-4	-5	-6
		0 - 7	-2	-2	-3	-4	-5	-5	-7
		0 - 8	-2	-3	-4	-4	-5	-6	-8
	Low	0 - 9	-2	-3	-4	-5	-6	-7	-9
		0 - 10	-3	-4	-5	-6	-7	-8	-10

Source: Scope Ratings GmbH

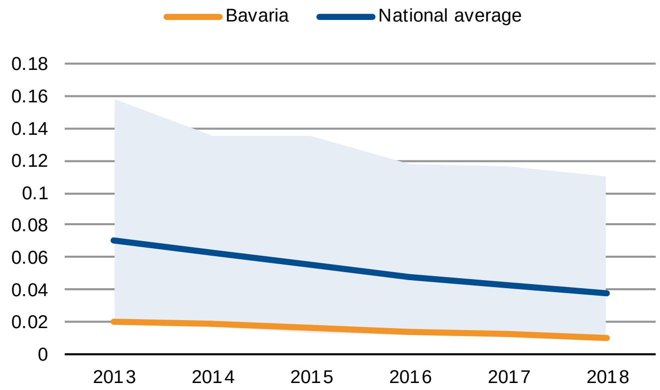
II. Appendix: Peer comparison

Figure 12: Operating balance/operating revenue, %



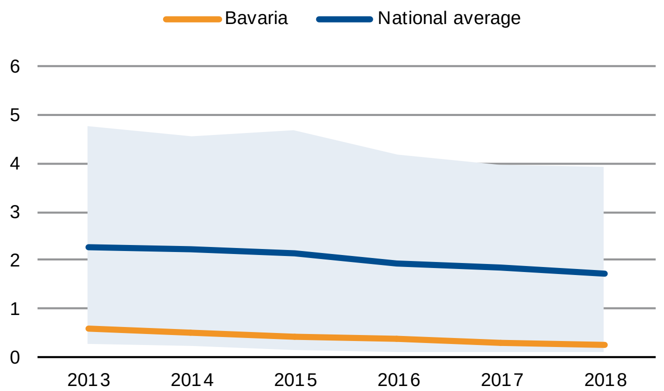
Source: Federal Ministry of Finance, Scope Ratings GmbH

Figure 13: Interest payments/operating revenue, %



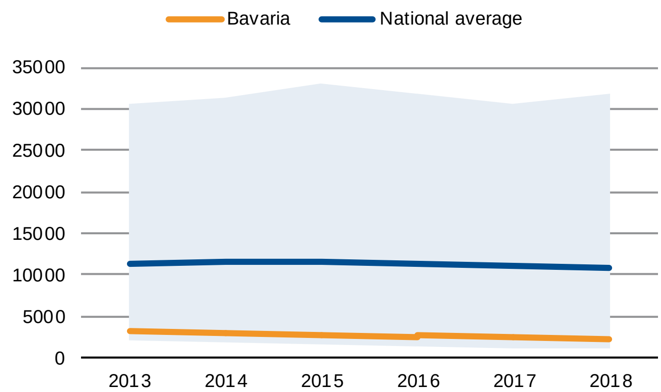
Source: Federal Ministry of Finance, Scope Ratings GmbH

Figure 14: Total debt/overall revenue, %



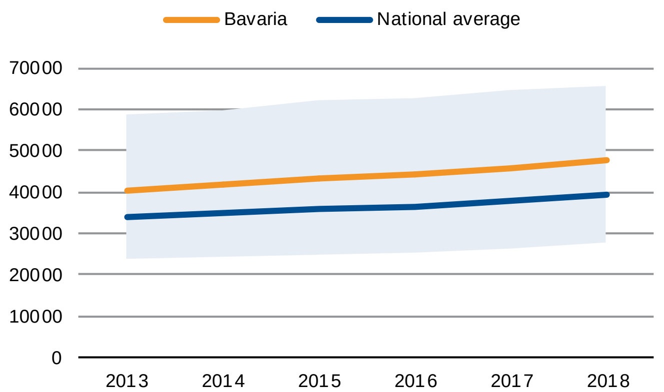
Source: Federal Ministry of Finance, Federal Statistical Office, Scope Ratings GmbH

Figure 15: Debt per inhabitant (EUR)



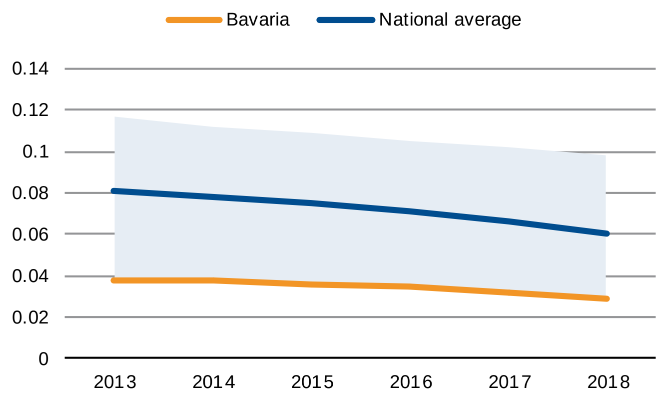
Source: Federal Statistical Office, Scope Ratings GmbH

Figure 16: GDP per capita (EUR)



Source: Federal Statistical Office, Scope Ratings GmbH

Figure 17: Unemployment (% of labour force)



Source: Federal Statistical Office, Scope Ratings GmbH

III. Appendix: Statistical table

	2013	2014	2015	2016	2017	2018
Financial performance	(in EUR m, unless noted otherwise)					
Operating revenue	47,323	49,593	52,440	55,355	57,178	61,979
Operating revenue growth, %	*8.3*	*4.8*	*5.7*	*5.6*	*3.3*	8.4
Tax revenue	37,623	39,709	42,143	45,900	47,097	51,134
Allocations and grants	6,250	5,868	6,267	6,477	7,015	6,822
Other operating revenue	3,449	4,016	4,029	2,978	3,065	4,022
Current revenue	47,395	49,672	52,514	55,419	57,253	62,041
Active interests	73	79	74	63	76	62
Operating expenditure	40,495	43,924	45,498	48,622	50,143	52.346
Operating expenditure growth, %	*7.0*	*8.5*	*3.6*	*6.9*	*3.1*	4.4
Personnel	19,028	19,804	20,283	20,984	21,861	22.592
Allocations and grants	18,639	21,162	21,944	23,838	24,499	25.862
Other operating expenditure	2,829	2,958	3,271	3,800	3,783	3.892
Current expenditure	41,450	44,816	46,332	49,374	50,864	52.942
Interest payments	955	892	834	753	721	597
Operating balance	6,827	5,669	6,941	6,734	7,035	9.633
Current balance	5,945	4,856	6,181	6,044	6,390	9.098
Capital revenue	1,545	2,139	1,534	1,570	2,663	1.773
Capital expenditure	5,358	5,375	5,518	5,683	5,956	6.647
Capital balance	-3,813	-3,236	-3,984	-4,113	-3,293	-4.874
Total revenue	48,941	51,811	54,047	56,989	59,917	63.814
Total expenditure	46,808	50,191	51,850	55,058	56,820	59.589
Balance before debt movement	2,132	1,620	2,197	1,931	3,097	4.225
Financial ratios						
Balance before debt movement/total revenue, %	4.4	3.1	4.1	3.4	5.2	6.6
Operating balance/operating revenue, %	14.4	11.4	13.2	12.2	12.3	15.5
Interest payments/operating revenue, %	2.0	1.8	1.6	1.4	1.3	1.0
Transfers/operating revenue, %	13.2	11.8	12.0	11.7	12.3	11.0
Personnel expenditure/operating expenditure, %	47.0	45.1	44.6	43.2	43.6	43.2
Capital expenditure/total expenditure, %	11.4	10.7	10.6	10.3	10.5	11.2
Debt						
Budget debt	20,565	20,025	19,525	19,525	19,525	19.525
thereof, direct debt	16,413	15,100	13,876	13,106	10,958	8.995
thereof, postponed credit authorisations	4,152	4,925	5,648	6,419	8,567	10.540
Stabilisation fund	10,000	10,000	10,000	9,450	8,950	7.450
thereof, direct debt	10,000	10,000	8,752	7,622	7,412	6.942
thereof, postponed credit authorisations	0	0	1,248	1,828	1,538	508
Postponed credit authorisations	4,152	4,925	6,896	8,247	10,105	11.048
Total direct debt	26,413	25,100	22,628	20,728	18,370	15.927
Overall risk	30,565	30,025	29,525	28,975	28,475	26.975
Debt ratios						
Total direct debt/operating revenue, %	55.8	50.6	43.2	37.4	32.1	25.7
Overall risk/operating revenue, %	64.6	60.5	56.3	52.3	49.8	43.5
Interest payments/total debt, %	3.6	3.6	3.7	3.6	3.9	3.7
Economic performance						
GDP at market prices	509,084	530,417	553,662	578,315	605,390	625,200
Share in Germany's GDP, %	*18.0*	*18.1*	*18.2*	*18.3*	*18.5*	*18.5*
GDP per capita (EUR)	40,526	41,937	43,365	44,875	46,698	47,946
% of Germany's GDP per capita	*115.6*	*115.6*	*116.2*	*117.0*	*117.8*	*117.4*
Population ('000s)	12,562	12,648	12,768	12,887	12,964	13,077
Unemployment rate (% labour force)	3.8	3.8	3.6	3.5	3.2	2.9

Source: Bayerisches Staatsministerium der Finanzen und für Heimat, Ministry of Finance, Federal Statistical Office, Scope Ratings GmbH

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