

Free State of Bavaria Rating Report



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, although largely low-risk, contingent liabilities

Ratings & Outlook

Foreign and local

currency

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

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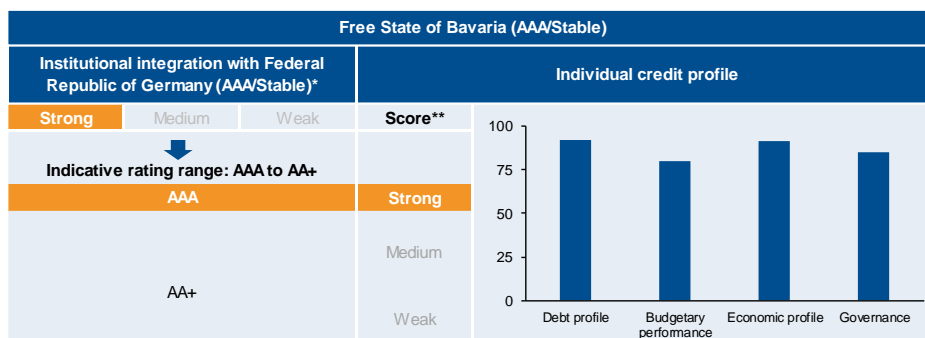
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Issuer page

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, a low debt burden, ample liquidity, and excellent capital market access. In addition, sizeable federal support measures have mitigated the adverse effects of the Covid-19 crisis on the economy and Bavaria's finances. Recently, the federal government has also taken measures to cushion the impact of the Russia-Ukraine war on the German economy and households, supporting all federal states. The rating is further underpinned by a highly integrated institutional framework, characterised by a very strong revenue equalisation system paired with the federal solidarity principle, which results in close alignment of Länders' creditworthiness with the German federal government's **AAA/Stable** ratings.

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: Our rating approach for the Free State of Bavaria



N.B. *Across countries/government layers (German federal states). **Across national peers (German federal states). From 1 (weakest) to 100 (strongest).

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

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Bloomberg: RESP SCOP

Integrated framework results in close alignment of creditworthiness

Institutional framework

The Free State of Bavaria, like all German federal states, benefits from a mature, highly predictable and 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 federal states in national legislation; iii) equal entitlement of federal states regarding negotiations on federal reforms; and iv) a solidarity principle that ensures extraordinary system support during budgetary emergencies.

We view the federal system under which the German Länder¹ 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 Republic of Germany (AAA/Stable). Consequently, our assessment results in an indicative downward rating distance of up to one notch between the German sovereign and the rating of an individual federal state (see **Figure 2**).

Figure 2: Framework assessment

| Institutional framework assessment: German Länder | | | | | | | | | | |
|---|--------|---------------------------|-------------|----------|----------------|-------|-------|-------|-------|--------|
| Category | Weight | | Assessment: | | Weighted score | | | | | |
| | | | Integration | Score | | | | | | |
| Institutionalised support | 25% | Transfer & bailout regime | Full | 100 | 25 | | | | | |
| | 15% | Borrowing limits | Full | 100 | 15 | | | | | |
| | 10% | Funding support | Full | 100 | 10 | | | | | |
| Fiscal interlinkage | 20% | Tax authority | Full | 100 | 20 | | | | | |
| | 15% | Fiscal equalisation | Full | 100 | 15 | | | | | |
| Political coherence | 10% | Distribution of powers | Full | 100 | 10 | | | | | |
| | 5% | Common policymaking | Full | 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

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 federal government are required to provide each other with mutual support in the event of a budgetary emergency. Berlin’s October 2006 claim 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 last resort if the budget and/or debt situation is assessed as extreme compared to that of other Länder.

Also, 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.

Regarding borrowing limits, Länder² have had to comply with a ‘debt brake’ since 2020, under which they cannot 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 German parliament used the emergency clause of the debt brake for the years 2020 to 2021 in response to the Covid-19 crisis.

Covid-19: Federal debt brake emergency clause invoked in 2020-22

¹ We use the term ‘Land’ (or collectively ‘Länder’) and ‘state’ interchangeably to refer to German federal states.

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 state level.

The draft 2022 federal budget also allows for borrowing under the emergency clause. Separately, the Free State of Bavaria invoked the safeguard clause of its debt brake for 2020 and 2021 to implement support measures and credit authorisations to mitigate the budgetary impact of Covid-19. Similarly to the federal level, Bavaria's 2022 draft budget also includes a provision to invoke the safeguard clause for this year.

In the Covid-19 pandemic, the federal government has assumed the role as a primary shock absorber, shouldering a large part of the costs for the economy caused by ongoing pandemic restrictions as well as for direct healthcare spending. This led to budget deficits at the federal level of EUR 130.7bn in 2020 and EUR 215.6bn in 2021 (including a EUR 60bn transfer of unused Covid-19 funds to the federal energy and climate fund). Finally, the federal government created a fund equipped with up to EUR 30bn to support the states that were affected by the 2021 floods that occurred in Germany, which includes Bavaria, although it was not among the most affected.

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 federal government and the Länder. The Council comprises the finance ministers of each Land and the federal ministers of finance and economic affairs.

The Stability Council and the debt brake are important pillars for integrated financial relations between central and regional German governments, which leads us to assess integration between the two levels of government as high.

Autonomous funding and equal Basel risk-weights

We view the level of funding support between the Länder and the federal government as high based on their history of stand-alone capital market issuance combined with aligned risk weights to the sovereign.³

Shared tax authority with the federal government for high-revenue taxes

Fiscal interlinkage

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

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

Bavaria benefits from the reformed equalisation scheme

The German system is shaped by a federal financial equalisation system that strongly aligns different fiscal capacities among the regions. A reformed equalisation system took effect in 2020, with horizontal distribution occurring via deductions and top-ups to collected VAT, as well as vertical transfers from the federal government. As in the previous system, Bavaria is the largest net contributor with deductions on its VAT revenues of EUR 7.8bn in 2020. The net effect of the change is 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.

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).

Federal reforms further strengthen political coherence**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.

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 policymaking as high. This has been highlighted during the Covid-19 crisis, with major measures coordinated by the prime ministers of the Länder together with the Chancellor.

Special role of Bavaria with regional party

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

Individual credit profile

Bavaria is the second most populous German state with about 13m residents (16% of the German total), and it has the country's second largest regional economy (18% of the total). The state's main responsibilities include healthcare and education, which are financed predominantly via shared taxes, transfers and other income.

Strongest individual credit profile among peers

We assess Bavaria's individual credit profile as 'exceptionally strong'. 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) high quality of governance and strong commitment to fiscal prudence at the regional level. 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. In addition, the Covid-19 crisis has led to higher debt levels and temporary budgetary deterioration due to revenue losses and additional expenditure especially in 2020. But the state's budgetary reserves and prudent financial management compensate for the shock over the medium term.

Debt burden and liquidity profile**High own cash reserves**

The Free State of Bavaria benefits from ample liquidity, which supported a continuous reduction of its already low debt burden going into the Covid-19 crisis. It has sizeable cash holdings compared to national peers, stemming from its sound budgetary and financial management. Bavaria's ample cash holdings comfortably cover debt service through to 2023.

Solid cash flow profile and conservative liquidity planning

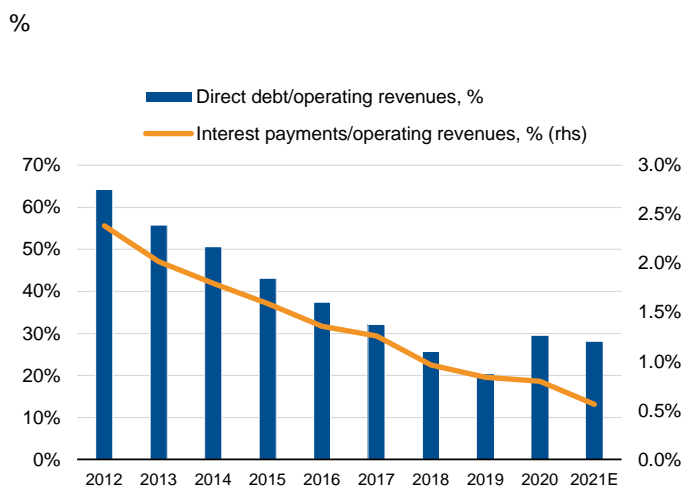
Bavaria benefits from highly predictable cash flows and prudent budgetary assumptions for liquidity planning. The state's cash flows, especially inflows, are prone to seasonal variations driven by the tax calendar. Like other Länder (excluding city-states), Bavaria's cash reserves tend to increase over the year, with peaks in mid-July and mid-October followed by significant outflows at the end of October and November. Moreover, the

federal state accumulates the Bavarian municipalities' shares of 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

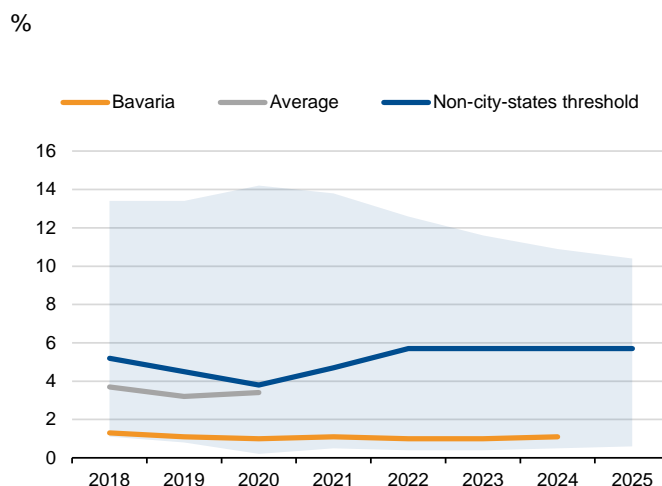
Bavaria has excellent access to external funding, which strengthens its resilience to shocks. External liquidity, if required, is available at short notice via credit facilities from various major financial institutions. German Länder lend excess liquidity to each other via commercial cash transactions,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

Figure 3: Debt and interest burden



* For 2021 with data from the Federal Statistical Office. Source: Bayerisches Staatsministerium der Finanzen und für Heimat, Federal Statistical Office, Scope Ratings GmbH

Figure 4: Interest-to-adjusted-tax ratio



Source: German Stability Council, Scope Ratings GmbH

Continuous pre-pandemic debt reduction, low level of debt

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). Before the Covid-19 pandemic, Bavaria's direct debt had reduced significantly to EUR 13bn at the end of 2019, or 20% of operating revenues, down from 64% in 2012 (see **Figure 3**). In line with previous years, Bavaria used own cash holdings for debt service in 2020 and increased its postponed credit authorisations by around EUR 1.46bn to EUR 16.25bn⁴.

Low interest-payment burden

The reduction of debt also led to a fall in Bavaria's interest payments relative to operating revenues, to 0.8% in 2019 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. This view is also supported by Bavaria's very low interest-to-adjusted-tax ratio (see **Figure 4**) relative to national peers.

Significant increase in debt due to pandemic, level remains low

In response to the Covid-19 crisis and as is the case for the federal government and other Länder, Bavaria passed legislation to invoke the safeguard clause of its debt brake and adopted budgetary measures that allow for up to EUR 20bn of new debt issuances in 2020 and up to EUR 11.6bn in 2021 via credit authorisations. In the 2022 draft budget, another EUR 5.8bn of credit authorisations are foreseen. Unused credit authorisations can be transferred to subsequent years under certain conditions, supporting the Land's financing flexibility. The funds are collected under a dedicated account (chapter 13 19

⁴ 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.

'Sonderfonds Corona-Pandemie') in the Land's core budget created in 2020 to address the Covid-19 crisis.

Actual debt take-up has been lower than authorisations, and the volume of the 2020 authorisation of EUR 20bn should be roughly sufficient to cover funding needs for 2020-22. Bavaria's direct debt increased by about EUR 4.9bn in 2020 and another EUR 2.1bn in 2021, according to the national statistical office's figures. Bavaria's direct debt relative to its operating revenues increased by about 9pps in 2020 (see **Figure 3**) and we expect that the debt-to-operating-revenue ratio has already reached its pandemic-induced peak in 2020. In 2021 we project a slight decline of the ratio, based on a strong rebound of revenues and despite the nominal debt increase.

Debt service to rise modestly and reduce expenditure flexibility to some degree

Under the debt brake rule, credit authorisations under the emergency clause come with a pre-defined redemption plan. Bavaria will amortise annual instalments of 5% of the total amount incurred under the 2020 credit authorisation from 2024, from 2025 for debt incurred under the 2021 credit authorisation, and from 2026 for debt incurred under the 2022 credit authorisation. An expected overall utilisation of EUR 20bn for the years 2020-22 would lead to additional debt service costs annually of EUR 1bn from 2026, somewhat reducing expenditure flexibility. Thanks to favourable financing rates, we expect the interest-payment burden to stay below 1% of operating revenue.

Sound debt management, excellent market access

As for all German Länder, we assess Bavaria's access to capital markets as excellent. This was also evidenced during the Covid-19 crisis. Bavaria re-entered the bond markets for the first time since end-2014 in 2020, issuing EUR 7.2bn mostly at near-zero coupons. In 2021, Bavaria issued another EUR 3.4bn of debt. Bavaria employs a conservative debt-management strategy with no foreign currency exposure and limited interest rate risks. Going forward, Bavaria's debt management strategy envisions: 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 risks, very modest take-up of Covid-19 guarantees

Outstanding contractual guarantees issued by Bavaria have increased to around EUR 9.8bn in 2020, up from about EUR 8.5bn in 2019. The increase was mostly due to EUR 755m of guarantees provided to Bavaria's regional development bank, LfA Förderbank (**AAA/Stable**), to facilitate lending to businesses hit by the Covid-19 crisis, with a maximum envelope of EUR 12bn. A guarantee envelope of up to EUR 26bn for the newly created 'BayernFonds', which was set up to issue guarantees itself (or inject capital) into medium-sized Bavarian companies, remained unutilised as of the end of 2020, as no request had been received. An extension of both Covid-19 related guarantee programmes to mid-2022 is planned (with a reduced guarantee envelope for the 'BayernFonds' of EUR 6.5bn).

Guarantees in 2020 were for housing (EUR 2.8bn) and individual authorisations (EUR 6.6bn). High property values make it less likely that Bavaria will need to honour guarantees relating 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 267bn in 2021). In a positive development, financial risk from the state's exposure was reduced in 2017⁵ after BayernLB repaid its state aid in full. Moreover, the repayment of Bavaria's capital contribution in 2017 led to an early conclusion of related EU proceedings. The bank's

⁵ In 2008/09, 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 European Commission scheduled a repayment of EUR 4.96bn until 31 December 2019 at the latest. With the repayment of EUR 1bn as of 30 June 2017, BayernLB has fully met the repayment obligation. The guarantees for the structured credit portfolio were terminated in 2014.

Solid management of major holdings

balance sheet is strong with i) a solid capital base, reflected by a CET1 capital ratio of 17.3% at YE 2021, well in excess of the regulatory requirement (8.625% minimum for 2021); and ii) a low NPL ratio of 0.6% at end-2021.

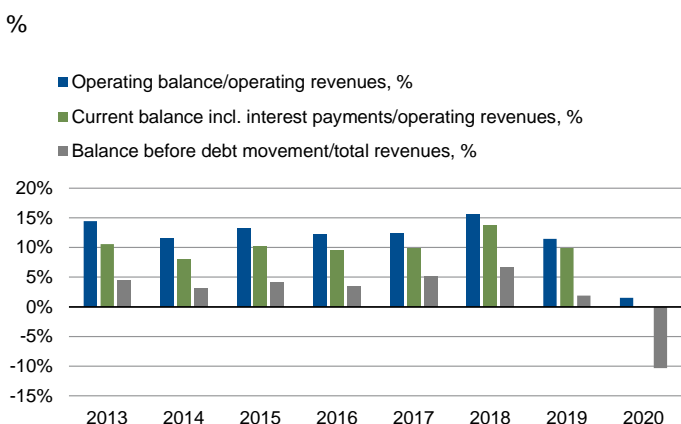
Bavaria's strong management of its major shareholdings is reflected in good overall financial results, indicating a low risk of related contingent liabilities materialising. The combined debt of entities in which Bavaria holds a majority share (excluding financial institutions) increased to around EUR 2.35bn in 2020. The Covid-19 crisis led to a significant increase in the share of debt regarding Bavaria's majority participations with a negative annual result that increased to around 63% in 2020, up from 3% in 2019. We expect this to be largely an event-driven one-off. The Covid-19 crisis adversely affected the profitability of several holdings in 2020 and 2021, with Bavaria providing support via loans or capital injections. Among the worst-hit entities were Nuremberg Airport and exhibition centres.

Strong budgetary performance and flexibility

Budgetary performance and flexibility

Bavaria benefits from strong budgetary performance, with historically high operating surpluses averaging 12.9% of operating revenues in 2015-19 and significant surpluses before debt movement averaging 4.2% of total revenues (see **Figure 5**). This performance was underpinned by strong growth in tax revenues, continuous cost control and conservative budgetary management, which have supported a substantial reduction in debt and a build up of cash reserves.

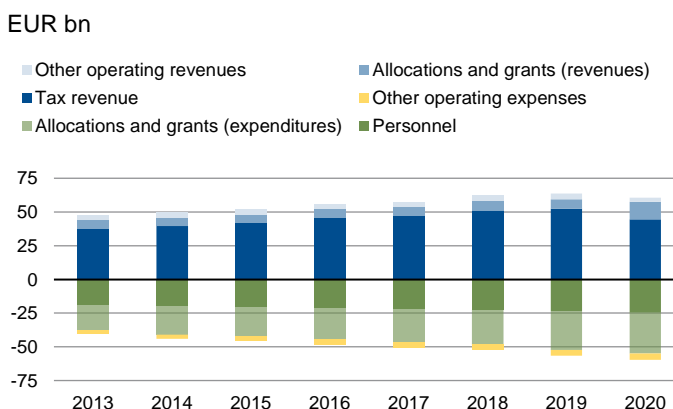
Figure 5: Budgetary performance



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

Operating revenue is driven by strong national growth

Figure 6: Components of operating balance



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

Above-average expenditure flexibility vis-à-vis peers

Bavaria's operating revenue is dominated by taxes (see **Figure 6**). As most taxes are subject to revenue equalisation, Bavaria mainly receives shared taxes (largely personal income taxes, VAT and corporate taxes), limiting revenue flexibility. These revenues are initially collected by Bavarian tax offices but are later redistributed at the national level in accordance with revenue-sharing agreements and additional transfer mechanisms. This weakens the link between the state's tax revenues and its economic performance.

Bavaria enjoys a high share of investments (12.4% of total expenditure in 2020) and low administrative costs (6.9% of expenditure in 2020). The state also has a track record of fiscal consolidation and implementing cost cuts during economic downturns to offset budgetary shocks, which will be relevant after the Covid-19 shock. However, the expenditure structure is rigid: Bavaria's largest budgetary items relate to transfers and grants for ongoing purposes (at 44% of expenditure in 2020) as well as key allocations to municipalities. Around 36% 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.

Bavaria's 2020-21 budgets impacted by the Covid-19 crisis

After years of budgetary surpluses and net debt reduction, budgetary results in 2020 and 2021 were driven by the Covid-19 pandemic. Due to greater uncertainty and efforts to increase operational flexibility, Bavaria passed a budget just for 2021 instead of for the usual two years. The draft budget for 2022 covers only one year as well, due to ongoing uncertainty.

2021 budgetary result significantly better than budgeted

Bavaria's financial results worsened from a surplus of around EUR 1.2bn in 2019, or 2% of total revenues, to a deficit of 10% for 2020. For 2021, we expect a moderate surplus of around 1% of total revenues on the back of a strong recovery of tax revenues, which rebounded from EUR 44.5bn in 2020 to EUR 50.1bn in 2021.

The strong tax revenue recovery in 2021 is also reflected in the upward revision of the November 2021 tax estimates relative to the exercise in May. In our view, adverse budgetary effects of the pandemic will be counterbalanced over the medium-term due to Bavaria's: i) conservative budget management; ii) track record of commitment to fiscal consolidation; iii) ability to adjust budgets in view of the high investment levels; and iv) economic and demographic outperformance versus national peers.

We estimate total additional pandemic-related expenditure of around EUR 7bn in 2020 and 2021 and another EUR 4.7bn in 2022. This mainly relates to investments to increase healthcare capacity and procure medical equipment and the vaccination campaign, fiscal support to households and municipalities, and funds directed to transfers, loan guarantees and capital injections for small and medium-sized businesses. Bavaria also approved the Hightech Agenda Plus investment programme with EUR 900m for research and development and to stimulate the economy. Finally, a Covid investment programme totalling EUR 1.5bn will be launched in 2022, further stimulating the economy and increasing the Land's investment activities to record-high levels.

Pension payments weigh on long-term budgetary flexibility

Pension expenditure will take up a growing share of Bavaria's budget. The number of eligible pensioners is set to rise to 185,000 in 2040 (by 29% vs 2019), weighing on the state's long-term expenditure flexibility. According to Bavaria's report on future pension expenditure, which includes an alternative assumption with pension adjustments of 2.5%-3.5% p.a., the share of pension expenditure will rise steadily from 9.1% in 2018 to peak at: i) 11.1% in 2027 and then decline to 9.4% in 2050 (with a moderate growth rate of 2.5% p.a.); ii) 11.7% during 2033-36 (with a growth rate of 3% p.a.); and iii) 12.6% during 2037-42 (with a historically unlikely growth rate of 3.5% p.a.).

To ease rising pressure from pension obligations, Bavaria has: i) implemented cost-saving measures; ii) pursued prudent fiscal policy and iii) created a pension fund. The capital stock of the pension fund stood at EUR 3.4bn at the end of 2020. In addition to annual fund inflows of EUR 110m until 2030, Bavaria contributes pension allowances (EUR 28.5m in 2020). Overall, the combined measures, including anticipated savings, will result in a moderate share of pension expenditure with a peak below 10%-12%, which is broadly in line with current levels.

Record-high investment levels and return to balance in 2023

Bavaria's financial plan for 2021-25 is based on keeping investments at a record-high level (from around 12% of total expenditure in 2020 to 15% in 2025) and a return to balance in 2023. This will entail significant consolidation efforts via an economic recovery and some expenditure adjustments.

Spending will give strong focus on demographic developments and greenhouse gas reduction. Programmes include: i) the technology initiatives Hightech Agenda Bayern, to

which EUR 2bn is allocated until the end of the legislative period in 2023, and Hightech Agenda Plus, a supplement to the former in response to the Covid-19 crisis to provide additional growth stimulus of EUR 900m for 2021 and 2022 and a EUR 1.5bn Covid-19 investment programme to be launched in 2022; and ii) a Bavarian climate protection offensive that includes higher outlays for research and development on environmental and climate protection at around EUR 231m in the 2019/20 budget.

Economy and social profile

Bavaria has a favourable socio-economic profile underpinned by a large, wealthy, well-diversified and highly competitive economy, resulting in high regional growth potential and a strong ability to generate its own revenues for the long term. Bavaria is one of the key economic regions in Germany, contributing 19% of national GDP. The state is also one of the wealthiest regions in Europe, with a GDP per capita of 17% above the German average and 41% above the euro area average.

Before the Covid crisis, economic expansion was strong, although it slowed in 2019. Average real GDP growth was 2.6% in 2010-19, outperforming the German 2% average.

Bavaria's real GDP declined by 4.3% in 2020 due to the Covid-19 shock, slightly less than the German average of 4.6%. The global shut down in 2020 hit Bavaria's export-oriented industry hard, with exports declining by 11% in 2020 YoY for the year as a whole. The economic recovery in 2021 was robust with 3% real GDP growth, however a repeated increase in supply chain disruptions slowed growth markedly towards the end of the year. In 2022, further disruptions, high energy prices and other economic effects of the Russian invasion of Ukraine weigh on the growth outlook. We currently estimate real GDP growth in Germany of 2.6% this year, subject to high uncertainty and assuming no embargo of Russian energy, and a similar level for the Bavarian economy.

Bavaria enjoys favourable labour market characteristics, even though the Covid-19 shock caused the unemployment rate to increase to 3.6% in December 2020 from 2.8% in December 2019, but below the peak of 4.2% in February 2021. In March 2022, the rate stood at 3%, back at its March 2019 level. Robust labour market outcomes reflect the federal government's large discretionary support, e.g. in the form of a national furlough scheme that was extended until mid-2022 and grants to hard-hit businesses. Bavaria has the lowest unemployment rate among German Länder (see **Figure 8**).

Key economic region in Germany

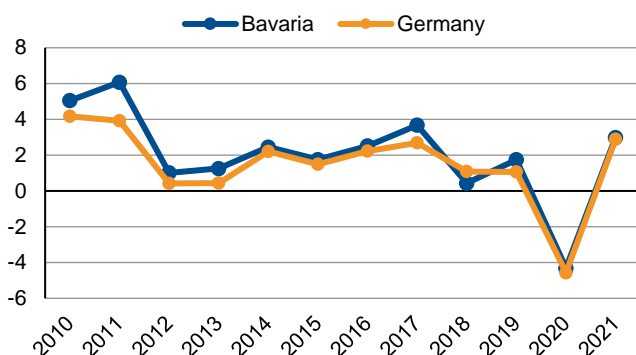
Robust economic growth and highly competitive economy

Severe impact in 2020, 2021 and 2022 recovery with obstacles

Lowest unemployment in Germany despite Covid-19 effect

Figure 7: Real GDP growth

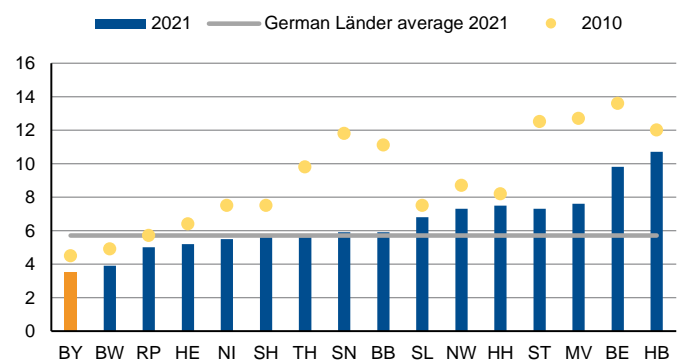
% YoY



Source: Federal Statistical Office, Scope Ratings GmbH

Figure 8: Unemployment ratio

% of total labour force, average



Source: Federal Statistical Office, Scope Ratings GmbH

Favourable demographic profile versus other Länder

Bavaria enjoys positive demographics compared to other Länder, supporting Bavaria's long-term tax revenue potential. Bavaria's statistical office projects a 3.9% increase in the total population by 2040. The state reported a high ratio of people aged 16-65 in 2020

(66%). Ageing will lead to an increase in the proportion of people aged 65 and over versus those aged 20-64, from 34% in 2020 to around 46% in 2040.

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

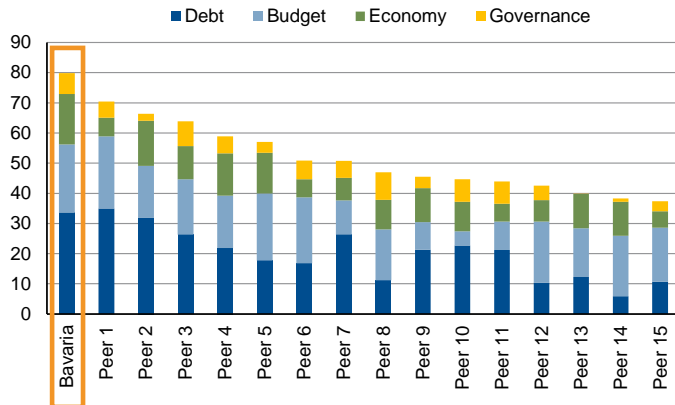
After losing its electoral majority in 2018, the CSU reached a coalition agreement with the smaller, conservative Free Voters party. The CSU won 37.2% of the vote in the regional election, its lowest result since 1950. CSU's Markus Söder is the region's president, while the Free Voters run three ministries: economy, environment and culture.

Pandemic crisis necessitated borrowing, delay in debt reduction plans

The fiscal objective of continuously reducing Bavaria's debt is legally enshrined in article 18, paragraph 1, sentence 2 of the Bavarian budgetary laws ('Bayerische Haushaltordnung'). According to the coalition agreement, strategic priorities for the 2018-23 administrative term 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; and iv) a continued build-up of reserves. Bavaria has reacted with a sizeable support package to support businesses and providing direct healthcare spending through the pandemic. We do not expect the state will make use of the full envelope of credit authorisations, yet the crisis will still delay the administration's debt reduction plans materially.

Appendix I: CVS/QS results and mapping table

Figure 9: CVS results, Free State of Bavaria



Source: Scope Ratings GmbH

Figure 10: QS results Free State of Bavaria

| Individual credit profile - qualitative assessment (QS) | | | | | |
|---|--------|-------------------------------|-------|--------|------|
| Category | Weight | Qualitative Scorecard | Risk | | |
| | | | Low | Medium | High |
| Debt burden and liquidity profile | 40% | Debt profile | Green | | |
| | | Contingent liabilities | Green | | |
| | | Funding and liquidity | Green | | |
| Budget performance and flexibility | 30% | Budget management | Green | | |
| | | Expenditure flexibility | Green | | |
| | | Revenue flexibility | | Yellow | |
| Economy and social profile | 20% | Growth & diversification | Green | | |
| | | Labour & demographics | Green | | |
| Governance | 10% | Recent events & policy risk | Green | | |
| | | Transparency & accountability | Green | | |

Source: Scope Ratings GmbH

Rating mapping table

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

| |
|------------------------------|
| Issuer |
| Free State of Bavaria |
| Country |
| Germany |
| Sovereign rating |
| AAA |
| Indicative rating adjustment |
| 0 |
| Additional considerations |
| - |
| Final rating |
| AAA |

Appendix II: Statistical table

| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|-------------------------------|---------|---------|---------|---------|---------|---------|---------|
| Financial performance | EUR m, unless noted otherwise | | | | | | | |
| Operating revenue | 47,323 | 49,593 | 52,440 | 55,355 | 57,178 | 61,979 | 63,817 | 60,529 |
| Tax revenues | 37,623 | 39,709 | 42,143 | 45,900 | 47,097 | 51,134 | 52,329 | 44,529 |
| Allocations and grants | 6,250 | 5,868 | 6,267 | 6,477 | 7,015 | 6,822 | 7,039 | 13,035 |
| Other operating revenue | 3,449 | 4,016 | 4,029 | 2,978 | 3,065 | 4,022 | 4,449 | 2,964 |
| Current revenue | 47,395 | 49,672 | 52,514 | 55,419 | 57,253 | 62,041 | 63,887 | 60,634 |
| Active interests | 73 | 79 | 74 | 63 | 76 | 62 | 70 | 105 |
| Operating expenditure | 40,495 | 43,924 | 45,498 | 48,622 | 50,143 | 52,346 | 56,499 | 59,608 |
| Personnel | 19,028 | 19,804 | 20,283 | 20,984 | 21,861 | 22,592 | 23,677 | 24,742 |
| Allocations and grants | 18,639 | 21,162 | 21,944 | 23,838 | 24,499 | 25,862 | 28,709 | 30,153 |
| Other operating expenditure | 2,829 | 2,958 | 3,271 | 3,800 | 3,783 | 3,892 | 4,113 | 4,714 |
| Current expenditure | 41,450 | 44,816 | 46,332 | 49,374 | 50,864 | 52,942 | 57,034 | 60,091 |
| Interest payments | 955 | 892 | 834 | 753 | 721 | 597 | 535 | 483 |
| Operating balance | 6,827 | 5,669 | 6,941 | 6,734 | 7,035 | 9,633 | 7,318 | 920 |
| Current balance | 5,945 | 4,856 | 6,181 | 6,044 | 6,390 | 9,098 | 6,853 | 542 |
| Capital revenue | 1,545 | 2,139 | 1,534 | 1,570 | 2,663 | 1,773 | 2,071 | 1,551 |
| Capital expenditure | 5,358 | 5,375 | 5,518 | 5,683 | 5,956 | 6,647 | 7,684 | 8,525 |
| Capital balance | -3,813 | -3,236 | -3,984 | -4,113 | -3,293 | -4,874 | -5,613 | -6,975 |
| Total revenue | 48,941 | 51,811 | 54,047 | 56,989 | 59,917 | 63,814 | 65,958 | 62,184 |
| Total expenditure | 46,808 | 50,191 | 51,850 | 55,058 | 56,820 | 59,589 | 64,718 | 68,617 |
| Balance before debt movement | 2,132 | 1,620 | 2,197 | 1,931 | 3,096 | 4,225 | 1,240 | -6,433 |
| Financial ratios | | | | | | | | |
| Balance before debt movement/total revenue, % | 4.4 | 3.1 | 4.1 | 3.4 | 5.2 | 6.6 | 1.9 | -10.3 |
| Operating balance/operating revenue, % | 14.4 | 11.4 | 13.2 | 12.2 | 12.3 | 15.5 | 11.5 | 1.5 |
| Interest payments/operating revenue, % | 2.0 | 1.8 | 1.6 | 1.4 | 1.3 | 1.0 | 0.8 | 0.8 |
| Transfers/operating revenue, % | 13.2 | 11.8 | 12.0 | 11.7 | 12.3 | 11.0 | 11.0 | 21.5 |
| Personnel expenditure/operating expenditure, % | 47.0 | 45.1 | 44.6 | 43.2 | 43.6 | 43.2 | 41.9 | 41.5 |
| Capital expenditure/total expenditure, % | 11.4 | 10.7 | 10.6 | 10.3 | 10.5 | 11.2 | 11.9 | 12.4 |
| Debt | | | | | | | | |
| Budget debt | 20,565 | 20,025 | 19,525 | 19,525 | 19,525 | 19,525 | 19,525 | 19,525 |
| thereof, direct debt | 16,413 | 15,100 | 13,876 | 13,106 | 10,958 | 8,985 | 6,883 | 5,428 |
| thereof, postponed credit authorisations | 4,152 | 4,925 | 5,648 | 6,419 | 8,567 | 10,540 | 12,642 | 14,097 |
| Stabilisation fund | 10,000 | 10,000 | 10,000 | 9,450 | 8,950 | 7,450 | 7,400 | 7,350 |
| thereof, direct debt | 10,000 | 10,000 | 8,752 | 7,622 | 7,412 | 6,942 | 6,064 | 5,192 |
| thereof, postponed credit authorisations | 0 | 0 | 1,248 | 1,828 | 1,538 | 508 | 1,337 | 2,158 |
| Covid-19 pandemic fund | - | - | - | - | - | - | - | 7,208 |
| thereof, direct debt | - | - | - | - | - | - | - | 7,208 |
| thereof, postponed credit authorisations | - | - | - | - | - | - | - | 0 |
| Postponed credit authorisations | 4,152 | 4,925 | 6,896 | 8,247 | 10,105 | 11,048 | 13,978 | 16,254 |
| Total direct debt | 26,413 | 25,100 | 22,628 | 20,728 | 18,370 | 15,927 | 12,947 | 17,829 |
| Overall risk | 30,565 | 30,025 | 29,525 | 28,975 | 28,475 | 26,975 | 26,925 | 34,083 |
| Debt ratios | | | | | | | | |
| Total direct debt/operating revenue, % | 55.8 | 50.6 | 43.2 | 37.4 | 32.1 | 25.7 | 20.3 | 29.5 |
| Overall risk/operating revenue, % | 64.6 | 60.5 | 56.3 | 52.3 | 49.8 | 43.5 | 42.2 | 56.3 |
| Interest payments/total debt, % | 3.6 | 3.6 | 3.7 | 3.6 | 3.9 | 3.7 | 4.1 | 2.7 |
| Economy | | | | | | | | |
| GDP at market prices | 511,943 | 534,066 | 554,688 | 577,717 | 605,752 | 620,188 | 643,366 | 624,403 |
| Share of German GDP, % | 18.2 | 18.2 | 18.3 | 18.4 | 18.5 | 18.4 | 18.5 | 18.5 |
| GDP per capita (EUR) | 40,754 | 42,226 | 43,445 | 44,829 | 46,726 | 47,572 | 49,109 | 47,547 |
| % of German GDP per capita | 116.9 | 116.8 | 117.3 | 117.8 | 118.2 | 117.1 | 117.5 | 117.4 |
| Population ('000s) | 12,562 | 12,648 | 12,768 | 12,887 | 12,964 | 13,077 | 13,125 | 13,140 |
| Real GDP growth, % | 1.3 | 2.4 | 1.8 | 2.5 | 3.7 | 0.4 | 1.7 | -4.3 |
| Unemployment rate (% of labour force) | 3.8 | 3.8 | 3.6 | 3.5 | 3.2 | 2.9 | 2.8 | 3.6 |

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



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