



Issuer Guide 2024 – German Laender

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NORD/LB ISSUER GUIDE 2024 German Laender

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Introduction

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Foreword

As was previously the case, with an outstanding volume amounting to about EUR 413bn split across a total of 818 bonds the 16 German Laender continue to represent by far the largest sub-sovereign market in Europe. The outstanding maturities and annual issuance volumes of the German Laender segment are higher than at any other sub-national level. Traditionally characterised by a steady supply of new bonds and (high) relative attractiveness versus Bunds, the German Laender segment has always represented an interesting alternative to sovereign bonds. As a result, this sub-segment is among the most liquid, albeit not necessarily the most complex, markets in the European segment for supranationals, sub-sovereigns and agencies (SSA). Anchored in the constitution, the debt brake is one of the more recent regulatory developments and has defined the budgetary frameworks of the Laender since 2020. In contrast to the federal government (Bund), the debt brake essentially prohibits any net borrowing at Laender level not related to an emergency situation that is beyond the control of the public sector. As with the revised system of federal financial equalisation, the debt brake represents one of the most important changes with regard to Laender finances for quite some time. In 2020, shortly after coming into force, the debt brake was suspended for the period 2020 through to 2022 inclusive nationwide – due to the COVID-19 pandemic – after the emergency paragraphs contained in the legislation were invoked. As a result, in 2024, the debt brake is now expected to take effect again in 12 of the 16 German Laender to facilitate the supplementary budgets and special funds adopted to date by the 16 Laender parliaments. These were adopted with a view to mitigating the consequences of the pandemic and the energy (price) crisis due to the ongoing war in Ukraine.

Eleventh edition of the Issuer Guide – German Laender

The Issuer Guide – German Laender, which is now to be published on a yearly basis once again, is part of a series of NORD/LB Floor Research products covering individual issuers and market segments in the global bond market. Following on from the first issue in 2013 – and an unplanned break in 2019 – this publication is the eleventh edition in this format, which has consistently provided an extensive overview of the largest EUR market for subsovereigns. The focus of this Issuer Guide has always been to provide a relative comparison of this group of issuers and to highlight their respective idiosyncrasies. With the 16 Laender and the "Gemeinschaft deutscher Laender" joint issuance vehicle, we are once again firmly of the view that the present publication will offer our readers extensive insights into the German Laender segment.

Laender versus Bundeslaender: a grammatical-legal alignment

According to Germany's federal constitutional framework, a "Land" (as per official legal terminology; often referred to as a Bundesland in common German parlance; plural version: Laender/Bundeslaender), or federal state, is a partially sovereign member state of the Federal Republic of Germany. Since 1990, the Federal Republic of Germany has consisted of 16 federal states. According to the Basic Law (Grundgesetz [GG]; effectively the constitution of the Federal Republic of Germany), the Laender together do not merely represent some loose confederation of states, but rather form a sovereign federal nation. For this reason, although we have opted to adjust the headings this year, we will continue to refer occasionally to Bundeslaender in the main body text, since we also receive international recognition for greater returns and pick-ups with our "Beyond Bundeslaender" publication series, which shines a light on sub-sovereign issuers in other countries.



Print versions of all NORD/LB Issuer Guides aligned to specific needs

A few years ago, we decided to make the NORD/LB Issuer Guide – German Laender exclusively available in PDF format due to sustainability considerations. However, even a sustainable approach calls for some leeway: should any of our readers prefer the Issuer Guide in printed format for their work, then we will gladly supply a hard copy. Please get in touch with your NORD/LB contact to provide a shipping address and indicate the number of copies required. Alternatively, you can also contact markets@nordlb.de.

Extended chapter: German Laender and ESG

Staying on the topic of sustainability, this year we will again be dealing with ESG (Environmental, Social, Governance) aspects in connection with our analysis of the German Laender. Five Laender in total have now published their own frameworks, under which benchmark bonds have already been placed: North Rhine-Westphalia leads the way (sustainability framework), followed by Baden-Wuerttemberg and Hesse (both green frameworks), as well as Berlin (sustainability) and Saxony-Anhalt (social).

NORD/LB publications complementing our Issuer Guides

To complement this Issuer Guide, which aims to provide as comprehensive a market overview as possible, our publication spectrum also looks at specific market developments and fundamental changes in framework conditions across the entire SSA segment and covered bond market. These regular (in some cases weekly) publications, analyses and commentaries can be found in the usual manner on our website (https://www.nordlb.com/nordlb/floor-research) as well as via the NORD/LB Research Portal with Bloomberg (RESP NRDR <GO>). Should any of our readers not yet have access to these platforms, then please contact your account manager, send an email to markets@nordlb.de or simply click here.

Overarching changes in the segment

The principle of federal loyalty and the old federal financial equalisation system resulted in a clear convergence of the credit profiles of the individual Laender, both with respect to each other and versus the federal government. The introduction and preparatory phase of the debt brake and the monitoring of German Laender finances by the Stability Council represent additional factors that have served to heighten this effect in recent years. At the same time, Laender finances continue to face huge challenges. Growing municipal debt and high implicit pension liabilities are just two factors that are already making budget management significantly more difficult, and which will come into focus again in the coming years in the wake of COVID-19 and the energy (price) crisis. The reform of the federal financial equalisation system agreed at the end of 2016 reduces the previously increased pressure from the relationships among the Laender themselves. These and other major challenges (COVID-19, influxes of refugees, war, inflation, increased interest rates, etc.) are impeding the significant progress that the Laender have made in connection with required budget consolidation efforts. Nevertheless, fundamental and significant differences continue to exist between the individual Laender, a situation that, in our opinion, necessitates a relative analysis.

Conclusion

The aim of the present NORD/LB Issuer Guide – German Laender 2024 is to facilitate the relative comparison of German sub-sovereigns against the backdrop of the constitutional and regulatory framework conditions. In particular, we highlight the differences relating to spreads and issuance volumes in light of the fundamental development of finances and the economy in the German Laender. In addition, for the purpose of a differentiated analysis, we will also take a look at the Gemeinschaft deutscher Laender (Ticker: LANDER) as an issuer of Laender jumbos starting at a minimum amount of EUR 1bn.



Constitutional framework Principle of federal loyalty

Federal loyalty as unwritten constitutional law

Art. 20 of the Basic Law (Grundgesetz; GG) defines Germany as a federal republic. A structure of this type is classified under constitutional law on the basis that the federal government (Bund) and federal states (German Laender), as members of the federal republic, must collaborate with the aim of forging mutually beneficial ties. In his essay entitled "Unwritten Constitutional Law in a Monarchic Federal State" (Ungeschriebenes Verfassungsrecht im monarchischen Bundesstaat) published in 1916, Rudolf Smend shaped our understanding of the German principle of a federal state. As an unwritten facet of constitutional law, the relationship between the federal government and Laender, Smend writes, is based on a spirit of cooperation instead of one of pure subordination. In its decision of 21 May 1952, the German Federal Constitutional Court (Bundesverfassungsgericht) referred to Smend's interpretation and came to the view that the principle of federalism includes "a legal obligation on the federation (Bund) and all its members to 'conduct themselves in a way that is favourable towards the federation'" (Federal Constitutional Court Decision [BVerfGE] 1, 299). As such, the ruling gave rise to our contemporary understanding of the principle of "federal loyalty", as it is also known.

Implementation and definition of the principle of federal loyalty: Bremen and Saarland 1992

In 1992 an "extreme" budgetary crisis was identified in the Laender of Bremen and Saarland, which was subsequently confirmed by the Federal Constitutional Court for both Laender. The Court also defined the principle of federal loyalty: "If a member of the German federal community, whether it be the federal government or one of the federal states, is in the grip of an extreme budgetary crisis, the federal principle is defined by the duty of all the other members of the German federal community to render assistance to the affected member. The objective shall be to stabilise the budget based on concerted measures." (BVerfGE 86, 148) As a result, both Bremen and Saarland received payments to help restructure their budgets in the wake of the extreme budgetary crisis in these Laender. For example, between 1999 and 2004, Bremen received the equivalent of EUR 3.9bn (DEM 7.7bn) in staggered special-need federal supplementary grants (SoBez) of decreasing amounts in order to restructure the budget, while Saarland received the equivalent of EUR 2.6bn (DEM 5.0bn) across the same time frame.

"Extreme" budgetary crisis as a prerequisite for federal loyalty to apply

The decision handed down by the Federal Constitutional Court created a prerequisite for federal loyalty to apply or for assistance to be provided by the Bund and Laender: an "extreme" budgetary crisis. The Federal Constitutional Court used a total of three indicators to assess the Laender budgets and to determine whether an "extreme" budget crisis existed. The credit financing ratio, as the ratio of net borrowing to the budgetary revenue and expenditure; the interest-tax ratio, as the ratio of payable interest to taxes received; and the primary balance, as the difference between the primary or core expenditure and the primary revenue, in which the net borrowing and other items are excluded. In the case of both Bremen and Saarland, the budgetary crisis was assessed as "extreme" on the basis of these indicators in comparison with the other German Laender.



The case of Berlin in 2002

In 2002, Land Berlin tested the concept of federal loyalty. Berlin's Senate identified an extreme budget crisis, whereby it was concluded that federal restructuring aid would be an unavoidable measure required to help consolidate the city state's budget. The budgetary situation was regarded by the Berlin Senate as fulfilling the requirements for entitlement to restructuring aid under constitutional law. Berlin's application for a judicial review submitted to the Federal Constitutional Court was, however, rejected. The Court regarded restructuring obligations on the part of the federal government and claims by a federal state in distress "as alien to the federal financial equalisation system, based on the purpose and spirit of Art. 107 (2) Sentence 3 of the Basic Law (Grundgesetz; GG). They are in conflict with the principle implying that autonomous budgetary policy must be dealt with by the Laender independently and on their own responsibility" (press release issued by the Federal Constitutional Court, No. 96/2006 of 19 October 2006). Although the Federal Constitutional Court assessed the existence of a budget emergency as being the result of insufficient financial resources, it actually saw more of a need to reform the federal financial equalisation system instead of providing additional federal grants. Nevertheless, the Federal Constitutional Court emphasised that federal aid provided through restructuring funding was admissible as a last resort.

Federal aid only in extreme budgetary crises

The Court added that this was only permitted and necessary if a budgetary crisis was considered extreme in relation to the budgets of the other Laender. However, this was not the case in Berlin, it concluded. Nevertheless, the Court did identify potential for additional consolidation measures. In this context, it expressly pointed to the significantly higher expenditure by Berlin in comparison with Hamburg, e.g. in relation to "cultural affairs", among other aspects.

Comment

The principle of federal loyalty as unwritten constitutional law is a basic element of the principle of German federalism. The most recent judgement of the Federal Constitutional Court once again increased the pressure on the federal government (Bund) and Laender to reform the financial equalisation system should budgetary emergencies become increasingly apparent or were they to actually arise. Nonetheless, we do not believe that the likelihood of support from Bund and Laender in extreme emergency situations has decreased as a result of the most recent judgement. On the contrary, the increased pressure on both Bund and Laender led to an informed debate on revisions to the financial equalisation system and ultimately to a proposal to reform it in October 2016. As a result of this, the tensions between the contributor and recipient Laender (as they were known at this time) were significantly eased, providing the Laender with budgetary certainty in connection with the debt brake applicable from 2020. From our point of view, this is certainly to be assessed positively. From now on, a new and reformed system will be in force, in which less money will be redistributed horizontally between the Laender. Instead, VAT is distributed from the outset in such a way that Laender with many structurally weak municipalities receive more – in this way, the aim, among other aspects, is to avoid any debate between contributors and recipients. Moreover, the federal government is to ease the burden on the Laender to the tune of EUR 10bn per annum. At the same time, the tasks assigned to the Laender were modernised in key areas and the competencies of the federal government strengthened.



Constitutional framework The federal financial equalisation system

Federal financial relationships in Germany

With the federal financial equalisation system, Germany has at its disposal a system - similar to other federal nations – aimed at harmonising the financial power of the individual Laender, so that these are able to fulfil the tasks incumbent upon them. Furthermore, the federal financial equalisation system is intended to provide a platform for the creation and maintenance of equal living conditions across the whole of Germany. The special feature of the German system up to and including 2019 was a pronounced horizontal component of equalisation, via which money was distributed directly between the individual Laender. After the old regulations, namely the Financial Equalisation Act (Finanzausgleichsgesetz) and the Standards Act (Maßstäbegesetz) expired at the end of 2019, a revised version of the federal financial equalisation system within the meaning of Art. 107 GG has been in force since the beginning of 2020, in which the horizontal distribution level no longer plays such an important role. In the form applicable up to the end of 2019, the federal financial equalisation system comprised a vertical distribution component of all tax revenues at the level of federal government (Bund), Laender and municipalities, a horizontal VAT distribution component, the financial equalisation of the Laender in the actual sense of the phrase and federal supplementary grants (Bundesergänzungszuweisungen; BEZ).

Old system structured in four levels

The first level of the old federal financial equalisation system was focused on the distribution of joint taxes to the federal government, the Laender and the municipalities. The municipalities were entitled to a share of income tax and VAT. After this came the horizontal distribution of tax revenues. After allowing for marginal corrections, the principle of local tax receipts applied to income and corporation tax. A different distribution key was used for VAT, whereby up to 25% of tax receipts were initially distributed to Laender with below-average per capita tax revenues, with the aim of cutting gaps in financial strength and implementing an initial adjustment. The remaining Laender portion of VAT was distributed across all the Laender on a per capita basis. The third level of the old federal financial equalisation system comprised financial equalisation payments between the Laender themselves (closest to actual sense of the phrase in general), in which the financially stronger Laender made payments to the financially weaker ones. As was the case with the distribution of VAT, the aim here was not to completely converge the financial power of the Laender, but rather to bring it closer to the average. To determine the payment amounts, the financial strength per capita after VAT equalisation was calculated, whereby the populations of the city states (+35%) in addition to Brandenburg, Mecklenburg-Western Pomerania and Saxony-Anhalt (+2-5%) were notionally increased to take account of the elevated funding requirements in these Laender. The underlying revenues also contained 64% of the revenues at municipality level in the respective federal state, reflecting the fact that providing financial assistance to the municipalities was, and remains, a task incumbent upon the Laender. Under this system, the Laender displaying below average financial strength benefited from equalisation grants paid out by the Laender whose financial strength was deemed to be above average. The rankings of the Laender in terms of their respective financial strength was not altered by this.



Fourth and final level

The fourth and final level of the old federal financial equalisation system was composed of federal supplementary grants, otherwise referred to as BEZ payments here. These grants represented a form of funding that was paid to recipient Laender directly from the federal government. They can also be sub-divided into general BEZ and special-need BEZ (Sonderbedarfs-BEZ; SoBEZ). After taking into account financial equalisation payment from the Laender, every federal state that still had less than 99.5% of the average financial strength per capita received general BEZ grants. SoBEZ payments were intended for Laender facing extraordinary financial burdens. However, these payments were not designated for a special purpose. The main recipients of SoBEZ payments were the Laender that made up the former East Germany. These Laender were awarded such grants within the framework of Solidarity Pact II (Solidarpakt II) in order to cover any special charges resulting from the division of Germany. Moreover, Laender in which disproportionately high costs of political leadership were identified, primarily small Laender, also received SoBEZ, as the fixed costs of political leadership in these Laender are borne by fewer inhabitants.

Summary of the old federal financial equalisation system

The public perception of the old system of federal financial equalisation was shaped by debates about net payer and net recipient Laender, above all among the Laender themselves. In this context, the former group tended to hold a more negative opinion of the system than the latter. Overall, it was clear that the East German Laender and Berlin received the highest funding across the period under review as a whole since 1995, the costs of which were overwhelmingly borne by Laender in the south and west of Germany. On the net payer side, Bavaria shouldered the greatest financial burden in the period under review, with Baden-Wuerttemberg taking the silver medal in this respect. East German non-city states were at all times net recipients across every segment of the federal financial equalisation system since its inception.

Bavaria, Baden-Wuerttemberg and Hesse by far the largest payers in the old system of financial equalisation among the Laender (LFA)...

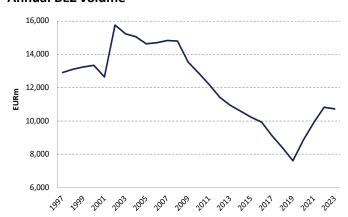
The distributed volume of financial equalisation payments between the Laender themselves in the actual sense of the phrase (LFA) increased significantly from EUR 1.5bn to EUR 5.7bn following the integration of the new Laender in the system in 1995, which was followed by sustained growth in the distributed volume up to the year 2022 in which a peak value of EUR 18.5bn was recorded (2023: EUR 18.3bn). The main payers across this period from 1995 through to 2023 were Bavaria (EUR 114.0bn), Baden-Wuerttemberg (EUR 84.9bn) and Hesse (EUR 72.9bn). Moreover, these three Laender were the only ones to always be net payers across this period. A glance at the statistical archives dating back to 1967 reveals that Baden-Wuerttemberg remains the only constant contributor, although Hesse has only switched to net recipient side on a single occasion. Under the LFA, the East German Laender are the largest beneficiaries, with Berlin taking top spot here at EUR 90.1bn, followed at some distance behind by Saxony (EUR 38.6bn). Additionally, it is noteworthy here that the difference between the contributions made by the largest payers and the allocation to the main recipients increased substantially over time, as was the case under the UStA, which signalled a rising economic disparity that held true in both absolute and relative per capita amounts. In 2023, Bavaria paid a total of EUR 684 per capita, while Bremen received EUR 1,115 per capita, equating to a difference of EUR 1,799. In 2010, this value totalled EUR 1,127 (payer Hesse: EUR 289 per capita; recipient Berlin: EUR 838 per capita), while back in 1995 when the new Laender were first integrated in the LFA, the equivalent figure stood at EUR 805. It is also worth noting that Bavaria had been a recipient under the LFA up to the mid-1980s before achieving its status as the largest net payer. In contrast, NRW has switched to the recipient side of the system since 2010 (sole exception over this period: 2020), having largely been a net payer before this time.



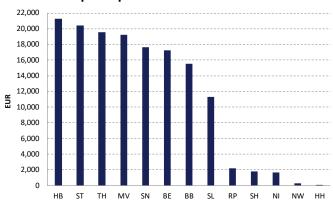
...and do not qualify for federal supplementary grants

As federal supplementary grants (BEZ) are intended for Laender with below-average financial strength in the reformed system too, it should come as little surprise that the economically powerful payer Laender under the LFA – Bavaria, Baden-Wuerttemberg and Hesse – receive no funding from this pot. The "new" Laender and Berlin have primarily benefited to the greatest extent from the payments made under Solidarity Pact II, which are contained within BEZ. The new Laender and the city state of Berlin account for roughly two thirds of the volume of EUR 352.9bn. In the overall calculation, Saxony is the largest recipient, banking a volume of EUR 72.0bn. In West Germany, Bremen and Lower Saxony benefit to the greatest extent from BEZ payments (EUR 14.6bn and EUR 13.7bn respectively). If we look at the overall volume of BEZ received in relation to number of inhabitants in 2023, Bremen is the largest beneficiary at EUR 21,273 per capita, followed by the new Laender and Berlin. Since 2009, the annual volume of BEZ payments had been on the slide, although the volume then rose sharply again in 2020 on account of the new federal financial equalisation system. In view of the greater role now incumbent upon the Bund, this trend is likely to continue over the years to come.

Annual BEZ volume



BEZ received per capita 1995-2023



Source: German Federal Ministry of Finance, NORD/LB Floor Research

Consolidation and restructuring aid

Apart from the above-mentioned mechanisms, the consolidation aid instrument also existed up to 2019. Through this, the Laender of Berlin, Bremen, Saarland, Saxony-Anhalt and Schleswig-Holstein received additional funds from the federal budget to enable them to comply with the stipulations of Art. 109 (3) of the Basic Law (Schuldenbremse; referred to as the debt brake in English), which was applicable from the start of 2020 onwards. In total, Bremen received EUR 300m per annum, while Saarland was entitled to a sum of EUR 260m on an annual basis. Berlin, Saxony-Anhalt and Schleswig-Holstein each received EUR 80m annually, with two-thirds of the payments being made in the budget year in question and the remaining third following 12 months later. The Stability Council was responsible for monitoring compliance with consolidation obligations, including the complete dismantling of the structural financing deficit by 2020. Bremen and Saarland have continued to receive additional funding of EUR 400m each from the Bund since 2020. This is known as restructuring aid and is linked to certain conditions with regard to debt reduction and budget consolidation as well as measures to be implemented to increase the economic and financial strength of the Laender (§1 Law on Restructuring Aid [Sanierungshilfengesetz; SanG]). In contrast to the consolidation aid, it is the Federal Ministry of Finance (BMF) that is responsible for the assessment is this instance.



Restructuring aid payments case study: Bremen

In this short case study, we shall take Bremen as an example to explain how the city state must comply with the restructuring obligations set out in the Law on Restructuring Aid and defined in the administrative agreement in order to qualify for restructuring aid from the federal government. The administrative agreement predominantly specifies the concept of budgetary repayments as well as regulating Bremen's reporting and disclosure obligations to the Federal Ministry of Finance (BMF). Bremen must submit a yearly report by 30 April of each year (first such deadline: 30 April 2021). This allows the budgetary repayments for the respective reporting year to be determined, while the report also comments on the measures implemented with the aim of reducing excessive debt and strengthening the economic and financial position of the city state. The BMF also audits this report with a view to verifying whether or not the conditions for awarding restructuring aid have been met. As such, the BMF can, at the request of Bremen, permit deviations from the ordinarily prescribed budgetary repayments in justified exceptional cases. As we set out in the previous paragraph, this should not be confused with the consolidation procedures that expired at the end of 2020 for the Laender of Berlin, Bremen, Saarland, Saxony-Anhalt and Schleswig-Holstein. A structurally balanced budget was planned for 2020. In 2021, the Stability Council determined that Berlin and Schleswig-Holstein had complied with this requirement. Due to the exceptionally high strain on Laender finances caused by the pandemic, the Stability Council identified that a specific emergency situation had occurred and therefore deemed the lack of a balanced budget in Bremen to be "insignificant". No impending budgetary emergency was identified for either Saarland or Saxony-Anhalt in the current Stability Report 2023.

Criticism of financial equalisation and the 2020 reform

Criticism has been directed at the federal financial equalisation system: for example, one argument cited was that by seeking to strongly align the financial strength of the Laender, there would be insufficient incentives for all parties involved to improve their economic situation, but especially for the recipients. In 2013, Bavaria and Hesse initiated legal proceedings with the Federal Constitutional Court in order to verify the constitutional conformity of the LFA. However, these Laender subsequently withdrew their claim in 2017 when the revised form of the federal financial equalisation system began to take shape. Since 2020, new rules have been in force governing federal financial relationships that provide additional money to the Laender but simultaneously award greater powers to the federal government. The convergence of financial strength is now handled by way of VAT distribution payments, with the scope of federal supplementary grants (BEZ) expanded too. Under the reformed system, the advance VAT equalisation component and LFA have been merged into what is now known as Financial Power Equalisation (Finanzkraftausgleich; FKA). As the financially strong Laender now give up a portion of VAT revenues but, in return, no longer make payments out from their own budgets, the concept of the Laender being categorised as either "payers" or "recipients" has been rendered obsolete. Another result of merging the UStA and LFA components was a short-term new role for North Rhine-Westphalia, which was ranked as economically strong in 2020 for one year only. Under the former arrangements, NRW received payments from the LFA between 2010 and 2019, while it posted payment outflows within the framework of the UStA. The distribution of VAT is conducted on the basis of number of inhabitants and financial power, with the share of municipal revenues taken into account upped to 75% and a larger portion of VAT going to the Laender overall. The notional population increases, the aim of which is to take into consideration the "structurally induced increased needs" of certain Laender, have, as was previously the case, been retained. Furthermore, as part of BEZ payments, federal government grants to the municipalities have been introduced in an effort to address differences in financial power.



The result

During the process of reworking the federal financial equalisation system, the top priority was to ensure that none of the Laender should be worse off than under the old framework. Under the revised version of the federal financial equalisation system, the Laender receive an additional sum of around EUR 10bn per year overall. If we take into consideration the fact that the Solidarity Pact II also expired at the end of 2019 and that no more payments will be made under this framework, the increase in funding paid out to the Laender actually amounts to just EUR 4bn. However, the request of the Laender to dynamically link this sum pro rata to increasing VAT receipts has not been fully met. Instead, a compromise was agreed in which a partial amount (EUR 1.42bn) is to be dynamically linked. In return for the additional financing for Laender and municipalities, the federal government has had additional powers at its disposal since 2020.

Additional powers for the federal government

The additional powers for the federal government (Bund) essentially involve:

- 1. Management of motorways at Bund level
 - In contrast to the previous arrangement, in which the Laender were responsible for managing motorways on behalf of the federal government, the Bund will in future be solely responsible for the construction and maintenance of major roads through the formation of an infrastructure company under private law (motorway administration).
- Digitisation through a central citizen portal set up by the Bund
 A new citizen portal will lead to more uniform standards for online administration applications. The aim here is to make administrative procedures more efficient.
- Investment assistance from the Bund "in areas of importance for the overall interest of the state"
 - In future, it is to become easier for the federal government to participate in financing for local authority projects. In particular, extended co-financing capabilities in relation to the education infrastructure of financially weak local authorities are planned.
- 4. Monitoring and control rights for the Stability Council and Federal Court of Auditors
 Additional powers to monitor the use of funds at Laender level.
- Strengthening tax administration powers at Bund level
 Strengthening of tax administration powers, particularly in the area of information technology.

New "municipal financial power allocation" for local authorities

In the case of general BEZ, the thresholds and tariffs for the equalisation payments have been raised. For local authorities, the implementation of a "municipal financial power allocation", which is to be used to cover gaps in financial power at municipal level, is likely to be of primary interest. The current special-need BEZ grants, from which the eastern German Laender mainly benefited, were discontinued at the end of 2019. The current horizontal equalisation between financially strong and financially weak Laender is being diluted. At the same time, the Bund will assume greater financial responsibility for the Laender by way of increased verticality in the system, while the dependency of the Laender on the federal government will also rise as a result of this.



Local authorities better off...

From a purely financial viewpoint, the impact of reorganising Bund-Laender finances on municipalities is certainly to be welcomed. The higher weighting of the financial situation of a federal state's municipalities within the scope of VAT allocation, as well as the structuring of BEZ based on the financial strength of the municipalities, will lead to greater account being taken of municipal financial power in the federal financial equalisation system and will lead - at least in theory - to the conclusion that the local authorities will have more solid finances following the new system taking effect. In practice, however, they only stand to benefit if the Laender actually forward the higher revenues on to the local authorities. This is assured in the Laender in which a combined rate or a uniformity principle has been established. There is, however, no generally applicable statutory allocation practice at municipality-Laender level. There is therefore a risk that only some of the extra funds will be forwarded to the municipalities and instead will end up in the general budget of the respective federal state. In addition, the municipalities stand to directly benefit from the additional federal funds for educational infrastructure. This is where the dependency on the federal government also increases. Added to this is the fact that linking the federal investment to the financial weakness of the municipalities acts as a disincentive for the Laender to provide their local authorities with sufficient financial resources off their own back.

...at the expense of increased dependency on the federal government

This additional federal assistance in the field of education, however, also means that the Laender bear rather less responsibility in one of their core areas: cultural policy. In future, this will result in local authorities not only being more directly dependent on the Bund, but also to a greater extent as well. With the introduction of a nationwide citizen portal, critics also pointed to the potential risk of interference in the administrative capacities of local authorities (principle of subsidiarity).

Greater convergence fails to materialise

As a whole, the Laender will benefit from the reorganisation of Bund-Laender finances and the resultant additional revenue to be provided by the federal government. For example, general BEZ payments of EUR 8.1bn in 2023 remained high in an historical context versus the EUR 8.2bn recorded in 2022. Added to this was a sum of EUR 1.7bn (2022: EUR 1.5bn) from the new BEZ in connection with efforts to compensate for low municipal fiscal capacity and EUR 210m (2022: EUR 209m) related to average-oriented research funding equalisation payments. However, there was only limited indication of greater convergence between the Laender in 2023. Although the gap between the highest and lowest levels of financial strength as measured by FKA narrowed in comparison with 2022, the gap in terms of financial strength as per BEZ widened. In this context, those Laender deemed to be particularly weak in terms of financial strength have continued to benefit to an above-average extent, although the rearranged system has also led to savings for the financially strong Laender too.

Bundestag approves comprehensive reform of Bund-Laender finances

Before the new regulations could be implemented, the Basic Law had to be amended in 13 sections. For this, a two-thirds majority in both chambers of the German parliament, the Bundestag and the Bundesrat, was required. The agreement on the sections to be reformed and the need to restructure the financial equalisation system made it highly likely in advance that the required majority would be comfortably achieved. In principle, the revised version is designed to apply for an unlimited period, unless at least three Laender and the federal government request a further reform after 2030. This gives the federal government a vetoing minority. The reform of the financial equalisation system was approved on 01 June 2017.



All change for the federal financial equalisation system?

The first two years of the new federal financial equalisation system were impacted by a series of special effects linked to COVID-19. However, as these have left their mark across all Laender, some insights can already be gained and conclusions drawn from these skewed first couple of years. As already outlined, the changes made to the federal financial equalisation system will primarily lead to the Bund assuming a more prominent role as well as to a slight improvement in the financially strong and, in particular, the financially weak Laender. With NRW again switching back to the collection of financially weaker Laender from 2021 onwards, this group once again constitutes the majority of the German population (56%). As such, a minority of the German population is now once again responsible for equalisation payments granted to the financially weaker majority. The abolition of the concept of Laender being categorised as either "net recipients" or "net payers" is more of a political detail and does not signify any erosion of solidarity between the Laender themselves. Under the new system, Bavaria and Baden-Wuerttemberg are facing a payment burden of around EUR 13.6bn. As calculated in advance, expenditure at the federal government level has been far higher than it was the case under the old system. For example, at EUR 8.1bn in 2023, general BEZ payments were well in excess of the equivalent value recorded in 2019 (EUR 4.5bn), albeit marginally down compared to 2022 (EUR 8.2bn). At this juncture, it is worth covering the new BEZ payments again: in this context, the new equalisation payment for low municipal fiscal capacity is, in particular, responsible for some unorthodox configurations. Take Saarland as an example: In 2023, the federal state received an additional sum of just under EUR 65m, despite the fact that after financial equalisation and general BEZ payments are taken into account, it boasts greater financial strength than Bremen, which came away empty handed. The new supplements also harbour the potential to drastically alter the order of financial strength among the Laender. After factoring in FKA payments, although before BEZ payments are considered, the relative financial strength of Thuringia stood at a score of 90 points (Berlin: 91.8). However, this value rose up to 100.8 points following BEZ payments of EUR 1,327m - of which EUR 338m was intended to offset particularly weak municipal fiscal capacity. In contrast, Berlin received BEZ payments of EUR 1,792m but no equalisation payments to offset the fiscal power of its municipalities, ultimately scoring 98.2 points for its financial strength. With Thuringia having received equalisation payments to offset low municipal fiscal capacity, it was able to rank higher in the financial power league table than Berlin. Regarding the average-oriented research funding equalisation payments, it should first and foremost be noted that these are non-earmarked funds, which can (or could) therefore be used by the recipients to cross-subsidise other budget items. In view of their low volume (EUR 210m), however, these payments currently have little impact on Laender budgets.

Comment

The task of the federal financial equalisation system is to provide a platform for the creation and maintenance of equal living conditions across Germany. Even though the distributed volumes of UStA and LFA have risen in the past, there are still significant financial discrepancies, especially between West and East German Laender, even 30 years after reunification. However, disparities among the West German Laender are now also starting to emerge. It certainly remains open to debate as to whether the reforms implemented in the form of Financial Power Equalisation (FKA) will lead to greater incentives for the Laender to pursue sound financial policies. In particular, the higher top-up rate for the final tier of the federal financial equalisation system would seem to be apt to give the richer Laender greater incentives to enhance their revenues than their financially weaker counterparts. In this context, there could be a threat of even greater fiscal drift between the "net recipients" and "net payers", because of which the Bund would be forced to intervene with even greater regularity by imposing regulations to even out the differences.



Challenges for Laender finances Debt brake and monitoring by the Stability Council

Debt brake to bring Laender net borrowing to an end in future

As far back as the signing of the Treaty of Rome, officially referred to as the Treaty establishing the European Economic Community (or EEC Treaty for short), subsequently renamed the "Treaty on the Functioning of the European Union" in 2009, the signatory countries agreed to keep a limit on public deficits. This requirement was implemented in German law in the form of Art. 109 of the Basic Law (Grundgesetz; GG) in 2009. The federal government (Bund) is therefore barred from generating any structural deficits that exceed 0.35% of nominal GDP, a stipulation that it also adhered to between 2012 and 2019. For the German Laender, the debt brake obliges them to manage without any structural deficits and the associated net borrowing. Aside from cyclical additional expenditure, exceptions are only permitted for natural disasters and exceptional emergency situations. The aim of these provisions is to maintain budgetary discipline as intended for the Stability and Growth Pact and to adhere to the Maastricht criteria on structural deficits and sovereign debt. At Bund level, a transitional period in which the existing structural deficit was dismantled ran between 2011 and 2016. The Laender also found themselves in a transitional phase in which they had to align their budgets in such a way that compliance with the debt brake would have been possible under normal circumstances from 2020 onwards. The legal basis for this transitional period was provided by Art. 143d GG. An emergency situation as outlined above came about with the onset of the COVID-19 pandemic, giving the Bund cause to adopt supplementary budgets in both March and June 2020. In 2023, too, the federal budget again exceeded the upper limit of the debt brake as a result of efforts to counteract the consequences of inflation and the energy crisis. In this context, the German Laender also planned additional expenditure. For example, NRW adopted two supplementary budgets (totalling roughly EUR 25bn overall) in 2020 alone. The budget plan for 2021 provided for the continuation of the agreed rescue package, which is why the volume of EUR 25bn was still available in 2022. Repayments of the COVID-19 loans are set to begin in the current year, as stipulated in the North Rhine-Westphalia Budget Act 2024.

Precise wording

The debt brake is enshrined in Art. 109(3) of the Basic Law (GG) as follows: "The budgets of the Federation and the Laender shall in principle be balanced without revenue from credits. The Federation and Laender may introduce rules intended to take into account, symmetrically in times of upswing and downswing, the effects of market developments that deviate from normal conditions, as well as exceptions for natural disasters or unusual emergency situations beyond governmental control and substantially harmful to the state's financial capacity. For such exceptional regimes, a corresponding amortisation plan must be adopted. Details for the budget of the Federation shall be governed by Article 115 with the proviso that the first sentence shall be deemed to be satisfied if revenue from credits does not exceed 0.35 per cent in relation to the nominal gross domestic product. The Laender themselves shall regulate details for the budgets within the framework of their constitutional powers, the proviso being that the first sentence shall only be deemed to be satisfied if no revenue from credits is admitted."



29th meeting of the Stability Council: Laender budget balance deteriorates significantly

Since 2010, the Stability Council has been monitoring the financial situations of the Bund and Laender. The committee meets every six months and has the power, for example, to prescribe restructuring programmes should any anomalies be determined in respect of the budgetary situations of either the Bund or the German Laender. In recent years, the Laender had already been taking into account the application of the debt brake (at the start of 2020) in their respective budgetary planning processes. The most recent meeting of the Stability Council outlined how the budget balance of Laender budgets (including supplementary budgets) had deteriorated in 2023 to EUR -0.1bn, as against the surplus of around EUR 12.4bn recorded in 2022. This deterioration results almost entirely from the core budget. While expenditures remained practically on a par with 2022, revenues fell by around -2.3% year on year. The decline in revenues is due in particular to the reduction in COVID-19-related federal aid and a decline in tax receipts of approximately -1%. In the current year, the expectation is of a financing deficit totalling around EUR -6.5bn in the core Laender budgets, which would represent a further deterioration in comparison with the prior year. According to the projection, at roughly +3.5%, expenditures would rise slightly more than revenues (around +3%). Particularly sharp growth of +7% is assumed in the area of personnel expenditures due to the effects of the Laender collective bargaining agreement. In the years 2025 to 2027, the deficits for the Laender as a whole will come in between EUR -4.0bn and EUR -3.0bn. At the end of the projection period, the budget balance is expected to return to an even keel.

Budget planning in a "challenging environment"

According to the Stability Council, the overall economic environment can be considered "highly challenging", which must be considered in connection with the current budget plans. In this context, the crisis-related burdens from previous years paired with increased interest rates, weak economic development and increasing structural tasks should be mentioned. Nevertheless, the burden related to the necessary process of fiscal normalisation and expansion of scope for action in terms of fiscal tasks remains high. Regarding compliance with European requirements for budgetary surveillance, the Stability Council sees the current path as being consistent with the applicable regulations, although it has also noted a need for budgetary action in the future. In their statement, the independent Advisory Board states that the short-term need to adjust the federal budget planning means that it shall refrain from reviewing the national requirements. This includes the ruling of the Federal Constitutional Court at the end of 2023 on the second supplementary budget for 2021 and the special funds. The Stability Council's procedures have also come under fire. The Advisory Board takes the view that the Stability Council should ensure that the national deficit is monitored at the required intervals. The primary focus, however, concerns public transparency regarding finances. In last year's edition of this Issuer Guide, we reported on the budget situation in Bremen at the time. In this context, the Stability Council again identified an impending budgetary emergency in the Hanseatic City back in December 2022. In the autumn of 2023 (28th meeting), Bremen presented its draft restructuring programme, which is to be voted on in the second half of 2024. In 2023, the city-state was able to meet its restructuring obligations tied to the restructuring aid from 2020 by making a repayment of EUR 80m. Prior to the onset of the COVID-19 pandemic, none of the 16 Laender had planned a budget balance for the coming year that either fell below or exceeded the threshold values defined by the Stability Council. Based on the financial planning released by the Laender, it is worth noting that the debt brake could probably have been adhered to under normal circumstances.



Economic framework conditions

Historically low interest rates, which were successively raised between July 2022 and September 2023, as well as ongoing high employment rates have in recent years really boosted efforts aimed at consolidating public budgets, which has been reflected both on the revenue and expenditure side. In addition, price-adjusted economic growth in the decade prior to 2020 was consistently positive, which has also been favourable for public budgets. According to the latest calculations by the Federal Statistical Office, however, German GDP fell by -0.3% year on year in 2023, which brought the positive trend seen in the year before to an end. The economic environment in 2023 was still being shaped by crises. Ongoing inflationary pressures resulting in a continuation of high prices, unfavourable financing conditions due to rising interest rates and lower demand from home and abroad are weakening the economy. Persistently scarce supply is now also being met with dwindling demand, particularly for capital goods. In addition, the unexpectedly strong growth in nominal wages could cause inflation to surge and delay the anticipated interest rate cuts by the ECB. The Council of Experts for the Assessment of Macroeconomic Developments has projected GDP growth in Germany of +0.2% in 2024 and +0.9% for 2025. Conversely, an inflation rate of 2.4% is expected for 2024 and 2.1% for 2025. The Council identifies key risk factors for future economic development in the continuing high energy costs and increasing geopolitical tensions in connection with the ongoing war in Ukraine and the Middle East conflict.

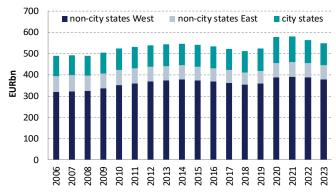
Budget balances of individual Laender

4,000 2,000 1,000 -1,000 -2,000 HH TH MV BW NI BY HB SH SN RP BE BB SL NW HE ST

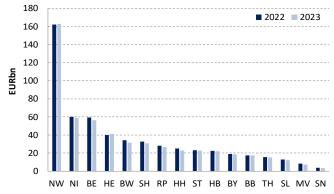
Budget balances of the Laender as a whole



Trend in overall debt level of the Laender



Debt level of individual Laender



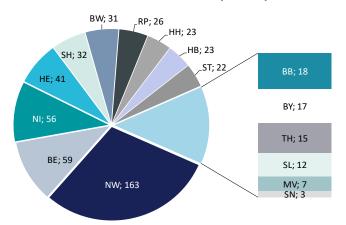
BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: German Federal Ministry of Finance, NORD/LB Floor Research



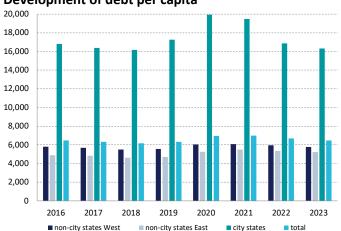
Laender debt trend – an overview

A look at the trend in debt level at the German Laender level reveals three strong increases: the first was at the start of the current millennium (at which point Germany was regarded as the "sick man of Europe"), with the second coming in connection with the global financial crisis in 2008/09. In the wake of the COVID-19 pandemic in 2020, a third significant rise in the debt level was added to the previous two. In 2023, new debt at Laender level again declined by -2.6% on this occasion. In the breakdown by respective federal state, the largest share of this fresh debt was incurred by the most-populated subsovereign, NRW, where outstanding liabilities rose by +0.5% to EUR 163bn to account for 29.7% of overall Laender debt. At 6.5%, Brandenburg accounted for the highest share of relative new debt, followed by Hesse (2.6%) and the previously mentioned NRW. Both Laender with the largest debt growth have a comparatively low debt level in absolute terms. Compared with 2022, an impressive total of 13 Laender reduced their debt levels. Mecklenburg-Western Pomerania heads up the list of these Laender, at -13%, followed by Baden-Wuerttemberg (-10.6%) and Hamburg (-9.8%). If we take a look at the respective debt levels on a per capita basis, the first thing we notice is that the city states register hugely above-average debt levels. The national average has been relatively stable at between EUR 6,000 and EUR 7,000 for many years now, although East German non-city states do present lower per capita debt levels than their West German counterparts. In 2023, per capita debt on a nationwide basis was again down on the prior year (-2.8% Y/Y). As such, the trend of steadily rising debt seen since 2019 has, for the time being at least, been brought to a halt since 2022.

The Laender and overall debt level (EURbn)



Development of debt per capita



BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: German Federal Ministry of Finance, NORD/LB Floor Research



Comment

Only a few months after entering into force, the debt brake had to be suspended after the onset of the COVID-19 crisis activated an emergency situation clause. In this context, resolutions were prepared in NRW, Bavaria, Baden-Wuerttemberg, Lower Saxony and Mecklenburg-Western Pomerania, among other Laender, to adopt a second supplementary budget in 2020, following the example of the Bund. Nevertheless, the Laender had to some extent already demonstrated braking power in the past, with the result that some subsovereigns had already started to repay their debts in advance, helping to curb the rise in the Laender debt level in the process. This was also supported by the economic conditions, which have clearly improved after a difficult start into the current millennium. Ensuring the sustainability of public-sector budgets, as the overarching aim of the debt brake, is fundamentally to be regarded as a positive, especially during stress situations such as the one we are currently facing. However, criticism can be directed at the fact that, due to the ban on net borrowing, the leeway in monetary policy operations, for example regarding investments, is (heavily) restricted for the Laender. The ECB, for example, repeatedly called for higher investments from public budgets before the economic stimulus packages in the context of the COVID-19 pandemic. At its 21st meeting on 22 June 2020, the Stability Council stated: "The Stability Council is of the view that the COVID-19 pandemic is a natural disaster/exceptional emergency situation as set out in Article 109(3) Sentence 2 GG which is beyond the state's control and is having a major impact on the state's financial situation. The debt brake envisages exemptions in such an event, which can and will allow an appropriate response to the crisis." At the 29th and most recent meeting on 06 May 2024, the Stability Council offered no comment on this assessment. Nevertheless, the Stability Council justifiably points to the ongoing financial burdens caused by the COVID-19 pandemic, which have been further exacerbated by the Russian war of aggression in Ukraine. In the federal budget adopted for 2024, a reactivation of the debt brake was again agreed. At federal level, according to the budget plans, a majority of the Laender should also be in a position to comply with this. Brandenburg, Bremen, Saxony-Anhalt and Schleswig-Holstein are the few Laender that have opted to suspend the debt brake again.



Challenges for Laender finances The Stability Council

The Stability Council - monitoring body for the federal government and Laender

The Stability Council was created in 2010 to meet the challenge of complying with the debt brake and to prevent budgetary crises, as had occurred in Bremen and Saarland in 1992. It is a joint body operated by the federal government and the German Laender. The establishment of the Stability Council can be traced back to Federalism Reform II (Foederalismusreform II), which governs its existence via Art. 109a of the Basic Law (GG). The purpose of the Council is to regularly monitor the budgets of the federal government (Bund) and the Laender, with the aim of identifying and/or preventing any impending budgetary crises ahead of time. As a result, the Stability Council is an important body for examining the budgets of Bund and Laender, particularly in relation to compliance with debt limits. The body is managed by the federal government. Its members are the Federal Minister of Finance, the finance ministers of the Laender and the Federal Minister for Economic Affairs and Climate Action. The Stability Council meets twice a year (usually in June and December). The first session was held on 28 April 2010. Since the beginning of 2020, its remit has included monitoring compliance with the debt brake, which is based on European requirements and procedures.

The "Aufbau Ost" project

In order to offset disproportionately low municipal financial strength and ease infrastructural backlog needs, the Laender of Berlin, Brandenburg, Mecklenburg-Western Pomerania, Saxony and Saxony-Anhalt received annual payments from 2005 to 2019 as part of the Solidarity Pact II. The aim here was to empower these Laender to counteract their special charges. The funds earmarked for this came in at EUR 156.7bn as planned and were split into two separate "Baskets". Basket1 contained special-need federal supplementary grants (SoBEZ) amounting to EUR 105.3bn, which were put directly towards improving financial strength and infrastructure. Basket2 totalled EUR 51.4bn and could be invested in broader policy fields, including the economy, promotion of innovation, research and development, education, transport, housing and urban development, EU structural funds, the elimination of ecological contaminations/site restoration and sport. Regarding progress made in the relevant areas, a final report was presented for the last time on 15 September 2020 and discussed in the statement covering the 22nd meeting of the Stability Council. The eastern German Laender bore responsibility for ensuring that the funds received were used for the prescribed purposes. To verify this, three criteria were defined in collaboration with the Bund, via which the appropriate use of funds was to be achieved with the aim of then closing the gap between the Laender. The first criterion focused on the SoBEZ share intended to be used to finance infrastructure investments and to offset disproportionately low financial strength. The second criterion related to the SoBEZ share intended to be used to rectify the situation regarding infrastructure investments self-financed to a disproportionate extent compared with the reference Laender. The third criterion concerned closing the infrastructure gap through disproportionate total investment expenditure compared with the reference Laender. The financially weak Laender of Lower Saxony, Rhineland-Palatinate, Saarland and Schleswig-Holstein were taken as a reference for the east German non-city states, while Hamburg was selected as the reference point for Berlin.



Balance sheet data

As planned, the Solidarity Pact II programme expired at the end of 2019. When the programme was first launched, a volume of EUR 105.3bn was planned for Basket1. Thereafter, payments were supposed to fall over time so that a final instalment of EUR 2.1bn would be paid in 2019 before the programme came to an end. At this point, we should state that the payments were not evenly distributed among the Laender. For example, Saxony received the largest share of the cumulative payments, at EUR 26.1bn (27%), followed by Berlin (EUR 19.0bn; 20%) and Saxony-Anhalt (EUR 15.7bn; 16.6%). Thereafter came Brandenburg with EUR 14.3bn (15.1%) and Mecklenburg-Western Pomerania with EUR 10.5bn (11.1%). While the payments from Basket1 came in on budget, the payments made under Basket2 of EUR 56.3bn were well above the original target value of EUR 51.4bn. Due to the fact that the volume of payments from Basket2 was upped by just under 10%, the total volume of grants under the programme as a whole came in at EUR 161.7bn. The promotion of innovation as well as research and development accounted for the largest shares of this additional expenditure, followed by the categories of economy and housing and urban development. With this support, the federal government laid the foundations for overcoming infrastructure deficits caused by the former division of Germany, increasing the quality of life for German citizens and improving the country's economic situation. However, the Laender have not simply been left to their own devices after Solidarity Pact II expired. In this context, grants continue to be made via the revised federal financial equalisation system as well as from the national German support system for structurally weak regions.

Restructuring programmes

If a critical budgetary situation is identified in the case of either the federal government or one of the Laender, the Stability Council agrees restructuring programmes with the impacted political authority. The implementation of the restructuring programme is intended to ensure that the analysis system of the ongoing budget monitoring for the affected body, i.e. federal government or regional government, no longer shows any anomalies with regard to an imminent budget emergency in the foreseeable future. The duration of the restructuring programme is agreed on a case-by-case basis but extends over at least two years. The programme contains guidelines for the targeted reduction in annual new debt and other consolidation measures. If the federal government or federal state in question neither sticks to the guidelines nor presents satisfactory proposals for restructuring concepts, a request is made for increased budgetary consolidation. If an impending budgetary crisis is still identified even after complete implementation of the restructuring measures, an agreement is reached on a further consolidation programme. Impending budgetary crises were identified for the Laender of Berlin, Bremen, Saarland and Schleswig-Holstein at the second meeting held on 15 October 2010. As a result, restructuring programmes were agreed, for which compliance and progress was reviewed at each half-yearly meeting of the Stability Council. The supervisory body also monitored compliance with the requirements incumbent on the affected Laender for them to receive consolidation aid up to 2019. At the end of 2016, it was announced that Berlin and Schleswig-Holstein had completed their respective recovery plans. In contrast, however, Bremen and Saarland were unable to achieve the requirements placed upon them with regard to the requisite key metric values in this period. Moreover, since 2020 both Bremen and Saarland have each been receiving restructuring aid to the tune of EUR 400m per year. Based on the continued anomalies, the Stability Council identified another imminent budgetary crisis for Bremen at its 29th meeting on 06 May 2024 and plans to vote on the restructuring agreements in the second half of 2024.



Monitoring four key budget indicators over two assessment periods

The Stability Council uses four key indicators to assess whether a budgetary crisis is impending. The development of these indicators is monitored in the current budgetary situation and financial planning. The current situation includes the actual figures for the last two budget years as well as the target figure for the current year. In the second assessment period the key financial indicators in the budgetary and financial planning for subsequent years are analysed.

Structural financial deficit per capita

The structural financial deficit is defined by the Stability Council as the financial deficit adjusted to allow for financial transactions and economic influences. It is calculated in EUR per inhabitant. If the threshold value is not reached, this is reported as an anomaly (non-compliance). For the term of the current budgetary situation of the Laender, the critical value is calculated as the Laender average minus EUR 200 per inhabitant, whereas for financial planning, the threshold value defined for the current financial year is used as the tolerance threshold. In order to factor in economic slowdowns, a surcharge of EUR 50 per inhabitant is generally included.

Credit financing ratio

The Stability Council also examines the credit financing ratio, which reflects the relation of new debt to adjusted expenditure. For the current budgetary situation, the body defines a threshold value comprising the Laender average plus three percentage points. In the financial planning, an unacceptable deviation from the critical value is identified if the threshold value for the current budgetary year is exceeded by two percentage points.

Interest-tax ratio

As a third key indicator, the Stability Council analyses the interest-tax ratio, defined as the ratio of interest expenditure to tax revenue. In the case of tax revenues, an adjustment is made for payment flows related to the financial equalisation among the Laender, general purpose federal supplementary grants (BEZ), promotional levies and vehicle tax compensation. The limit for this key indicator during the period of the current budgetary situation is also based on a relative comparison of the Laender. The critical value for non-city states is defined as 140% (150% for the city states) of the Laender average. For the duration of the financial planning, the tolerance value of the current budgetary year plus one percentage point applies as the limit.

Debt per capita

The last key indicator reflects the debt level on the credit market as of 31 December of each year in relation to the number of inhabitants. For the current budgetary situation, a limit violation is determined in cases where the key indicator exceeds 130% of the Laender average for non-city states (220% in the case of city states). For the duration of the financial planning, a limit amounting to the threshold value for the current budgetary year plus EUR 100 per citizen and year is used as a basis. A key indicator is generally regarded as non-compliant for a specific period if at least two critical values have been exceeded. By contrast, a time period is regarded as non-compliant if at least three out of four key indicators exceed their specified limits. If a time period is identified as non-compliant, an evaluation of the regional authority in question is carried out by the Stability Council.



	Act	ual	Target	Limit		Financial planning		Limit	
	2021	2022	2023	violations	2024	2025	2026	2027	violations
Financial balance in EUR per capita									
Threshold value	-177	-71	-335	Yes (3)	-385	-385	-385	-385	Yes (2)
Laender average	23	-129	-135						
Credit financing ratio in %									
Threshold value	4.0	3.6	3.7	Yes (2)	5.7	5.7	5.7	5.7	No
Laender average	1.0	0.6	0.7						
Interest/tax ratio in %									
Threshold value (non-city states)	3.6	3.1	4.1	Vaa (2)	5.1	5.1	5.1	5.1	Vac (2)
Threshold value (city states)	3.8	3.3	4.4	Yes (3)	5.4	5.4	5.4	5.4	Yes (2)
Laender average	2.6	2.2	2.9						
Total debt in EUR per capita									
Threshold value (non-city states)	9,854	9,787	9,880	Voc (4)	9,980	10,080	10,180	10,280	Voc (4)
Threshold value (city states)	16,676	16,563	16,721	Yes (4)	16,821	16,921	17,021	17,121	Yes (4)
Laender average	7,580	7,529	7,600						
Violations in the period		Ye	s (12)				Yes (8)		

Source: Stability Council, NORD/LB Floor Research

Stability Council offers many advantages...

The transparent method of working and presentation of the results enables the situation in each federal state budget to be easily assessed. The credit financing ratio and interest-tax ratio provide two additional indicators for the Stability Council. They were also used by the Federal Constitutional Court when assessing the budgetary situation for the Laender Bremen and Saarland in 1992 and Berlin in 2002. The mechanistic definition of critical values avoids any political interpretation of the respective budgetary situation, providing a clear advantage in the process. The agreement of recovery plans and the transparent monitoring of compliance with them should also be interpreted as positive aspects, since this applies constant pressure to those Laender obliged to follow a restructuring programme. Aligning the threshold values to the Laender average allows special circumstances such as economic downturns to be taken into account dynamically. The review of financial planning enables negative tendencies or budgetary crises to be identified at an early stage.

...and some disadvantages

However, in contrast, it should be noted that the financial planning of a federal state does not constitute any definitive or specific plan and consequently there is no binding obligation in terms of compliance. The informative value of the figures for financial planning is, to a certain extent, accordingly low. Aligning the threshold value to the Laender average entails the risk that negative tendencies or potential budgetary crises are not identified if a majority of the Laender generate poorer budget figures and the Laender average consequently falls. We also consider the choice of indicators to be worthy of discussion. Although the four indicators provide an insight into German Laender budgets, major structural budgetary problems such as significantly above-average personnel expenses or pension commitments, for example, are not registered. The definition of the critical values and the calculation of key indicators are also subject to (adjustment) methods that are not especially transparent. In our view, however, the biggest disadvantage of the Stability Council in its current legal framework is the absence of a mechanism for imposing sanctions. If a federal state does not comply with the restructuring plans, for example, it is only requested to comply with them and, in extreme cases, a new restructuring programme is defined. However, no effective means for sanctions are in place, such as cutting BEZ grants.



Comment

Despite these disadvantages, we believe that the Stability Council is a worthwhile committee for monitoring budgets at both federal government and federal state level. Due in particular to the introduction of the debt brake, which we see as a major challenge especially for financially weaker Laender, we regard the supervisory body as a suitable method of budget control at Bund and Laender level. From an investor viewpoint, too, we regard the Stability Council and especially its six-monthly reports to be important, since they provide up-to-date and transparent information on the budgetary situation of all Laender. Although we believe it to be a significant disadvantage that the Stability Council currently does not possess serious mechanisms for imposing sanctions, given the positive budget performance up to the end of 2019, this has not posed major problems. However, it shall remain to be seen what consequences this lack of adequate pressure might have in the years following the COVID-19 pandemic.



Challenges for Laender finances Municipal budget situation as stress factor

Latest data set: municipalities record first deficit in 2023 since 2011

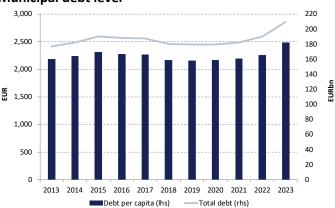
Having generated surpluses between 2011 and 2022, municipalities and municipal associations recorded a funding deficit amounting to EUR -6.8bn (core and extra budgets) in 2023. Adjusted expenses on the part of the municipalities and municipal associations rose comparatively sharply in 2023 by +12% (EUR +39.2bn) to EUR 364.9bn overall. Social expenses were the primary driving force on the expenditure side and rose by +11.7% to EUR 76.0bn. The reason behind this growth is the increased standard rates for Germany's unemployment payment and for social assistance (Bürgergeld). The core budgets were also burdened by personnel expenses, which rose by +7.4% to EUR 80.9bn mainly on account of the public sector collective bargaining agreement reached in 2023. Due to inflation, current non-personnel expenses rose by +8.2% and investments in tangible assets by +12.3%. The rise in interest expenditure of +37.4% in 2023 can be explained by higher interest rates as a result of ECB policy decisions. At EUR 358.1bn, adjusted revenues of municipal budgets in 2023 were up by +9% (EUR +29.7bn) on the previous year. However, this was not sufficient to offset the increase in expenditures. In 2023, tax revenues came to EUR 130.3bn, up +7.3% from 2022, with local business tax revenues also rising by +7.3%. While local business tax revenues dropped by -26.9% in Rhineland-Palatinate (BioNTech), they rose by an average of +9.5% in the other Laender. Regarding the municipal debt level, 2023 saw the fifth increase in a row. Liabilities rose by +10.1% to EUR 210.0bn. This value was therefore well below the average debt level of the Laender, which amounts to 111.1% of adjusted revenues. The sharpest growth in debt levels versus 2022 in percentage terms was recorded by the municipalities and municipal associations in Bavaria, at +174.6%, followed by Thuringia (+55.4%) and Hesse (+49.9%). In terms of the sharpest percentage declines in debt, Brandenburg (-62.9%) and Lower Saxony (-14.2%) lead the way.

Municipal debt level in the non-public sector



Source: Federal Statistical Office, NORD/LB Floor Research

Municipal debt level





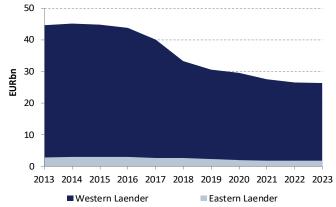
Significant rise in Laender investment loan volumes

Investment loans traditionally account for a significant portion of municipal debt. These are backed by direct assets, whereby the interest expenses can potentially be covered by the return on investments. The respective shares of investment loans in total municipal debt differed significantly from case to case. At 81%, the highest share of investment loans in overall municipal debt is attributable to municipalities in Schleswig-Holstein, while Baden-Wuerttemberg has the lowest value in this regard at 46% (national average: 60%). Between 2009 and 2020, the national average of investment loans in total municipal debt had been in a corridor of between 49% and 57%. In 2023, the value exceeded this range, now at 60%, for the third year in a row (2022: 59%).

Turning point in Kassenkredite loan portfolios loses momentum

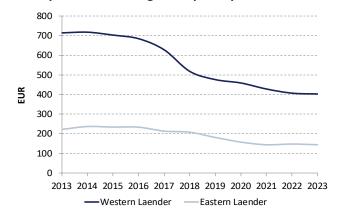
Kassenkredite were originally intended to cover short-term cash flow problems that can arise from timing mismatches in revenues and expenditures. For instance, if higher personnel costs are incurred at the start of a calendar year, while regular tax revenue has not yet been received, Kassenkredite can be used to bridge this time gap. Since the turn of the millennium, however, the volume of Kassenkredite has increased sevenfold across Germany. At the highpoint as at year-end 2014, for example, around 26% (roughly EUR 48bn) of total municipal debt was attributable to Kassenkredite. We can therefore say that these loans were not (exclusively) used for bridging purposes. Back in 1995, this figure came in at just 3.1%. A higher proportion of Kassenkredite liabilities brings with it an increased risk of changes to the interest rate environment. As a result, we take a negative view of a high level of Kassenkredite debt. While a low interest rate environment was the status quo for many years, this is now very much a thing of the past, with the ECB having increased key rates by a total of 450 basis points between July 2022 and September 2023. As a result, this veritable risk has emerged from the shadows to take centre stage. Having remained relatively constant between 2012 and 2016, Kassenkredite volumes have continually declined since this time. This is certainly a development which we welcome. At EUR 32.9bn, Kassenkredite municipal loans still accounted for a share of 18.3% in total municipal debt in 2019. Between 2020 and 2023, Kassenkredite portfolios were steadily scaled back further still. However, the outstanding volume of Kassenkredite at municipal level as at yearend 2023 amounted to EUR 28.1bn, which corresponded to a share of 13.4% of total municipal debt. Striking aspects in this context are, firstly, the fact that West German Laender have much higher Kassenkredite liabilities than their East German counterparts, with the latter having recorded a marginal decline in 2023. Secondly, it should also be noted that the trend towards a convergence in per capita levels of municipal cash boosting loans in both groups of Laender came to an end in 2023.

Municipal cash boosting loans



Source: Federal Statistical Office, NORD/LB Floor Research

Municipal cash boosting loans per capita





2023: Kassenkredite volumes decline in eight of 13 non-city states

A breakdown by federal state of the Kassenkredite burden on municipalities reveals a highly varied picture: the share of Kassenkredite in the total debt level of municipalities ranges from 0.4% in Hesse to 29.9% in Saxony-Anhalt. However, one aspect to highlight here is that, in 2020, nine of the 13 non-city state Laender were able to reduce their Kassenkredite debt levels, with seven of the 13 repeating this in 2021. In 2023, it was again eight of the 13 that successfully cut their Kassenkredite liabilities. The extent of the decline in Kassenkredite also varied significantly across the individual Laender. The sharpest reduction was posted by Brandenburg, at -62.9%. It is also fundamentally striking that the declines were smaller in Laender with high volumes of Kassenkredite in their loan portfolios than in those where the volumes are already lower. For example, North Rhine-Westphalia and Rhineland-Palatinate, Laender in which Kassenkredite portfolios accounted for shares of just under 30% in their respective overall debt levels, only registered below-average declines, while the declines in Brandenburg and Lower Saxony, for example, were far higher (-62.9% and -14.2% respectively), despite the fact that their shares were much lower, at 3.2% and 4.2% respectively. In percentage terms, the largest increase in Kassenkredite loans was recorded by Bavaria, at +174.6%, followed by Thuringia at +55.4%. Nevertheless, at 2.2% and 1.3% respectively, the volume of short-term liabilities in these two Laender remains at a low overall level that should be manageable.

Growing challenges, growing debt?

Municipal budgets are also facing a variety of challenges: following the succession of interest rate hikes, credit financing costs have now also become increasingly expensive, which in turn has placed budgets under strain. In particular, the rise in money market rates is putting additional pressure on municipalities with higher Kassenkredite debt levels. Although the ECB did make its first interest rate cut (25 basis points) in June 2024, further steps are likely to follow at a moderate pace. As such, although the interest rate peak is now behind us, municipalities must continue to pay increased attention to this situation in terms of their financial planning. In addition, significant effects on municipal financing are expected from regulatory changes. Due to the introduction of the leverage ratio by Basel III, municipal financing is likely to become increasingly unattractive for privately organised banks. The key indicator stipulates a minimum ratio of regulatory capital to the exposure of a bank, in which the risk of the exposure is irrelevant. Low-margin segments, and this includes municipal financing, are therefore likely to see a declining credit offer from private banks. The banking crisis had also already led to a shift within the market for municipal finance: specifically, regional promotional banks have experienced significant growth in this respect for years. In North Rhine-Westphalia, the municipal lending business of NRW.BANK has posted strong growth over recent years. After a new record of EUR 7.6bn was registered in 2020 (EUR 3.7bn for municipal financing), NRW.BANK generated a volume of new financing commitments of EUR 4.4bn (-42%) in the business area of Municipalities/Infrastructure in 2021. The reason for this was falling demand for COVID-19 aid. In contrast to the previous year, the volume of new commitments in 2023 fell by around -18% to EUR 4.8bn. Moreover, with a volume of new commitments totalling EUR 1.0bn, the NRW.BANK.Infrastructure programme (+19%) also continued to be subject to strong demand, having recorded growth of +20% compared with the prior year. Other regional development banks such as BayernLabo have also been experiencing growth in the municipal lending business over a period of several years. In contrast, KfW is already restricting its municipal lending to a maximum of EUR 1,000 per inhabitant. As a result, the focus has already increasingly turned towards alternative funding options such as Schuldscheindarlehen (SSD) and bonds, some of which are issued in a joint format together with other municipalities, for example under the NRWGK and DEUSTD tickers.



Laender support local authorities with bailout funds

In recent years, several Laender have implemented consolidation aid or debt relief funds with the aim of supporting municipalities. With reference to the self-governance of municipalities, these programmes are usually voluntary and highly varied in their structure. The programmes were established in response to the difficult municipal budget situation: in 2023, the municipal financing deficit of core budgets came to EUR -6.8bn overall (2022: EUR -2.6bn) and the trend in municipal expenditure remains firmly on the rise (2023: EUR 365bn; 2022: EUR 326bn). This suggests de facto insolvency, no insolvency proceedings can be initiated against municipalities, at least according to §12 of the Insolvency Code. To support the municipalities most affected by high Kassenkredite debt levels, Olaf Scholz, in his role as former Minister of Finance, called for a full haircut, whereby the Bund (federal government) would assume liability for all municipal debt. However, this plan was highly controversial even within the Grand Coalition in Berlin (the fourth Merkel cabinet; Germany's coalition comprising the CDU/CSU and the SPD that governed until December 2021). Nevertheless, the fact that the Laender support municipalities through various debt relief programmes can be justified, among other aspects, in that, in the event of a payment default, it would be necessary to clarify whether the respective federal state followed the Konnexitätsprinzip. It would then be necessary to check whether the federal state had made the necessary funding available to the municipality for the tasks transferred to it. The Laender constitutions also include corresponding articles that require the respective federal state to comply with a maintenance obligation, i.e. to ensure financial backing for performance of the tasks (e.g. Art. 58 of the Constitution of Lower Saxony).

Bailout funds reveal significant differences

The consolidation aid and debt relief funds that are provided already deal with this and, depending on the federal state, reveal some significant differences. In most cases, the repayment of loans or direct deficit coverage is the focal point. The corresponding cash inflows are often linked to the financial equalisation at municipal level. In 2012, for example, Rhineland-Palatinate set up a municipal debt relief fund totalling EUR 3.8bn, in which more than 700 local authorities currently participate. The objective of the fund is to repay twothirds of the municipal cash boosting loans (Kassenverstärkungskredite) that were taken out up to 2009. Given that the programme ultimately did not significantly relieve municipal finances in Rhineland-Palatinate, another bailout fund was announced in September 2022 in the form of the "Partnership for Municipal Debt Relief in Rhineland-Palatinate" (PEK-RP). A sum of EUR 3.0bn was made available in the state budget for this purpose. The plan envisages debt relief across three stages: up to the basic amount of EUR 500 per inhabitant, Kassenkredite loans remain with the respective municipality; from EUR 500 per inhabitant up to a maximum amount of EUR 2,500 per inhabitant, half of the liquidity loans are transferred to Rhineland-Palatinate; above this maximum amount, Rhineland-Palatinate assumes the liquidity loans in full. For districts, these amounts are divided by three (two thirds of the full amount for independent municipalities). Mecklenburg-Western Pomerania has adopted a different approach: in this case, a consolidation fund was set up as long ago as 2012 to provide financial assistance for unavoidable deficits. A debt relief fund was subsequently added to the mix in 2018. Both programmes, which are reported as special funds, ran in parallel until the consolidation fund expired in 2019. In contrast, Hesse set up a programme known as "Hessenkasse", the objective of which is to take over the Kassenkredite of municipalities and to arrange debt relief via WIBank, the federal state's promotional bank. Overall, a repayment amount of EUR 4.9bn was achieved, which equated to roughly 95% of the municipal Kassenkredite debt level in 2020. Agreement on both consolidation plans and, in some cases, the merging of existing municipalities with the aim of stabilising the budgets on a sustainable basis, represent aspects that all programmes share in common.



Clear differences in programme ratios

There are also differences in the scope of the programmes in relation to the total debt of the municipalities (at the time that the programmes were first launched in each case). The Hessenkasse programme set up in 2018, which envisages full debt relief for municipal Kassenkredite, whereby the municipalities in Hesse make a repayment contribution of EUR 25 per inhabitant per year, takes top spot here. Some way behind follows the latest debt relief programme implemented in Rhineland-Palatinate: a fund in the amount of EUR 3.0bn was announced here, whereby 50% of the municipal Kassenkredite debt is to be assumed by the federal state itself. The first debt relief fund was designed to reduce municipal debt (from 2012) by approximately 28% up to 2026. The scope of the programmes in Saxony-Anhalt (16.2%), Hesse (first programme 12.8%), Lower Saxony (11.8%) and Schleswig-Holstein (10.7%) are far smaller, although it is the situation in Saarland that is truly remarkable: despite the fact that Saarland regularly occupies one of the top spots (in a negative sense) in a comparison of the Laender for per capita municipal debt, the original programme volume in Saarland was actually just 4.3%. The Saarland Pact, which was agreed at the end of 2019 before coming into force at the start of 2020, is designed to counteract this situation. An annual amount of EUR 30m up to 2065 should gradually remove the burden of nearly half the outstanding Kassenkredite from the municipalities, while an extra EUR 20m is set to be put towards municipal investment projects. Although municipalities in NRW have the highest absolute and second highest per capita debt, at 9.9%, the programme volume is currently on the low side. For this reason, the governing coalition resolved in 2023 to implement a "Municipal Financing 2024" strategy by way of an amendment to the Municipal Financing Act, with the aim of allowing the federal state to assume (half) of the old debts. In Brandenburg (5.9%) and Mecklenburg-Western Pomerania (5.4%; or 9.5% once special aid is factored into the equation), the absolute programme volumes are also below average, with the low per capita debt level considered here as well.

Overview of municipal bailout packages (excl. COVID-19 bailout funds)

		Volume		Repa	yment of	Interest	Deficit
	Term	(EURm)	Comment	Kassen- Credit market kredite liabilities		relief	coverage
ВҮ	2007-2012	10	Annual				Х
Dī	2012 -	140	Annual				Χ
ВВ	2020-2022	40	Annual				Χ
HE	2013-2019 Reference date	3,200	Terminated with retroactive effect as at 31 December 2019 due to COVID-19	X	Х	X	
	in 2018	4,900	One-off; less repayment contributions	Χ			
MV	2018 -	25*	Annual; plus one-off sum of EUR 100m				X
NI	2012-2041	70**	Annual	Χ		X	
NW	2011-2020	5,850**	Overall			Х	Х
INVV	2025 -	9,850	Overall		X		
RP	2012-2026 Reference date in 2023	255 3,000	Annual One-off	X X		X	
SL	2013-2024 2020-2065	17 50	Annual	Х	Х		
ST	2011-2027	736	Overall	Χ	X	Χ	
31	2013-2025	400	Overall	Χ			
SH	2012-2018	60	Annual				Х

^{*} Excluding special aid for budgetary consolidation and debt reduction in the amount of EUR 40m per annum in the period 2014-2017 outside the Financial Equalisation Act Mecklenburg-Western Pomerania (FAG-MV).

Source: Relevant federal state legislation, NORD/LB Floor Research

^{**} Figures include participation of local authorities.



Bailout packages in the context of COVID-19

Municipalities continue to face significant problems in the wake of the COVID-19 pandemic. While the economic impacts of the pandemic years from 2020 to 2022 are noticeably fading away, municipalities have been exposed to new budgetary strains and, in part, collapsing revenues. The German Association of Cities and Municipalities estimates that municipalities will have to cope with a tax shortfall of almost EUR 20bn for the years 2021 to 2024 – as measured against expectations prior to the onset of the COVID-19 crisis. Since allocations to municipalities are also calculated from tax revenues, these revenues were also significantly lower. For this reason, it was clear as early as March 2020 that many municipalities were fearful of long-term negative consequences in connection with the pandemic. The Laender reacted by offering short-term financial assistance, which was subsequently followed by bailout and rescue packages. For the most part, these were designed to supplement the economic measures implemented by the federal government, ultimately doubling the financial relief provided to the municipalities. Each federal state supported its municipalities, in part with further relief measures. While some Laender such as Mecklenburg-Western Pomerania initially pledged financial assistance only for 2020 and 2021, others went much further: for example, Rhineland-Palatinate and Hesse both guaranteed support until 2022 and 2023 respectively. The aid packages often included an element to compensate for the loss of income from local public transport as well.

Comment

We regard the performance of municipal finances as one of the major challenges for Laender finances. In our view, a difficult budgetary situation at municipal level indirectly impacts the budgetary situation of the respective Laender, which have been shaken by the effects of the coronavirus crisis. From our perspective, the fact that numerous Laender have sought to counteract this scenario with defined programmes can only be evaluated positively. However, there are some negative aspects to highlight in terms of the individual configuration of the Laender municipal programmes. In Rhineland-Palatinate, for example, we believe that the programme volume in relation to municipal debt is appropriate, while we would take a more critical view in the case of Saarland. The programme volume here is much lower in relation to the municipal debt level compared with the other Laender, although in this regard, the newly implemented Saarland Pact could provide an element of support to some extent. Added to this is the fact that many municipalities continue to pin their hopes on the Bund clearing their debts. The recent positive development regarding municipal revenues after direct COVID-19 restrictions were lifted gained further momentum in 2022. However, in connection with the sharp rise in interest charges and stubbornly persistent inflation data, this will not help to stabilise municipal finances alone. The lowering of the income tax rate implemented by the Bund to mitigate "cold progression" was resolved in parallel with elevated inflation rates in 2022, although the actual fiscal effect will only become clear from 2024. The same applies to the public sector collective bargaining agreement. The programmes presented by the Laender are a commendable attempt at fighting fires, although they are too short-lived to properly eliminate structural deficits. In this context, municipalities will not have any additional scope to assume new responsibilities in the foreseeable future, even though they have urgently needed to address transformation challenges in their local area. There are still a great number of crucial, unresolved question marks regarding the future. In this sense, it can be expected that municipal debt levels will continue to rise for the foreseeable future and that the odd municipality will occasionally encounter financial difficulties.



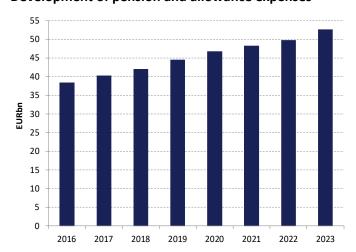
Challenges for Laender finances Pension obligations as a strain on Laender finances

Pension obligations represent an increasing challenge for Laender finances

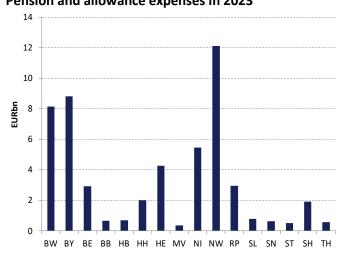
In view of demographic change and longer life expectancy, pension expenditure is an increasingly prominent element of the budgetary planning at Laender level. In contrast to the pay-as-you-go-financed pension system, which applies in the case of salaried employees, pension expenditure for government employees forms part of personnel costs and is paid from the ongoing budget. It is only since 1999 that the federal government and the Laender started to create pension reserves as stipulated in §14a (1) of the Federal Civil Service Remuneration Act (BBesG). From 2017 onwards, these are expected to be dissolved (in line with §7 of the Pension Reserves Act [VersRücklG]) due to the highest expected charges in the subsequent 15 years (commonly referred to as the "pension avalanche"). These reserves may differ regarding the investment types for the assets and in relation to the reserve policy. For example, some Laender have already been setting aside payments to a pension reserve since 2003, while others use their pension funds concurrently as lenders for their own budgetary purposes. While we consider these to be examples of a lack of pension provision, or a form of pension provision that is only sustainable to a limited extent, other Laender rely on the additional creation of reserves through the federal state's own pension or retirement funds, extending above and beyond the reserves required by law. The differing methods for creating reserves pose major challenges, and in some cases such provisions are totally absent. These challenges are, in our view, particularly relevant with regard to the partial reapplication of the debt brake from 2023 onwards.

Pension and allowance expenses represent major items of expenditure for many Laender In comparison with 2015, the pension and allowance expenses of the Laender have grown by +44.7% up to 2023. In the past budget year alone, a rise of +5.9% (previous year: +2.9%) was posted. In 2023, the Laender spent a cumulative total of EUR 52.7bn on this budget item (2022: EUR 49.8bn), corresponding to 10.7% of total expenditure. Accordingly, pension payments accounted for an identical proportion of Laender budgets as expenses for investments. This budgetary strain is likely to continue to rise in the future, with the majority of the boomer generation (born 1955-69) gradually starting to draw their pensions.

Development of pension and allowance expenses



Pension and allowance expenses in 2023



Source: Federal Ministry of Finance, NORD/LB Floor Research



Low(er) level of pension provisions in East Germany

At 13.9%, the share of pension provisions in relation to total expenditure was highest in Rhineland-Palatinate. However, Lower Saxony, Baden-Wuerttemberg and Saarland also register values of at least 13% for this item. In addition, it is striking that pension payments account for a far smaller proportion of expenses in the Laender that make up the former East Germany. The value for 2023 was just 3.5%, having been 3.4% in the previous year. Looking at pension provisions in relation to the number of inhabitants, the city states of Hamburg and Bremen traditionally posted the highest expenses in this regard. At EUR 1,053 per capita, the value in Hamburg, for example, was around seven times higher than that of Saxony (EUR 152). This relatively high expenditure is justified by the function and structure as city states, as reflected both in above-average personnel costs and an elevated assumed number of inhabitants in the calculation used under the current system of financial equalisation among the Laender.

Comment

For years, the pension liabilities of the Laender have represented substantial items of expenditure. Especially in the west of Germany, they significantly impair budget flexibility. Moving forwards, these charges are likely to continue rising. We believe that eastern German Laender have a clear advantage in this respect, because the resulting challenges are less severe. Nonetheless, this advantage will gradually ebb away over the years, with further convergence of the proportion of pension payments in the budget to the west German level anticipated as a result. In the coming years, we expect these payments to rise further. Consequently, we believe that revenues will either need to be consistently strengthened or expenditure must be cut, so that at least there is no deterioration in budget balances. However, rising interest rates could alleviate this issue, at least to some extent.



Regulatory framework Risk weighting of outstanding claims against German Laender

Relevant regulatory framework: Regulation (EU) No. 575/2013 (CRR)

On the basis of the risk weights that were defined by Basel II, the EU initially specified the provisions in Directive 2006/48/EC, before these definitions for risk weights were subsequently replaced by the CRR (Regulation (EU) No. 575/2013) in mid-2013. In 2019, this was expanded by the inclusion of elements under Basel III by Regulation (EU) 2019/876 (CRR II). An amending regulation (referred to as the CRR quick fix) to help with operating capital relief at banks in order to safeguard lending to the real economy and to mitigate the effects of COVID-19 then followed in June 2020.

Risk weighting of EU states using standard approach: 0%

The risk weighting for exposures to central governments or central banks is derived from Art. 114 of the CRR. In accordance with Paragraphs 3 and 4, this means a risk weighting of 0% for risk positions held against EU Member States or the ECB. If the exposure is denominated in the domestic currency of the respective country, this shall apply without any time limit. For exposures in a currency which is not the respective country's domestic currency, but nevertheless the currency of another Member State, a 0% risk weighting applied only until 31 December 2017. This was revised yet again in the wake of the COVID-19 pandemic: pursuant to Art. 500a(1), a total of 0% of the determined risk position was applied until 31 December 2022. Since 2023, this is being gradually increased until, in 2025, the risk weighting to be applied shall (again) be based fully on Art. 114(2).

Risk weighting of regional governments or local authorities (RGLAs)

The risk weight of regional and local authorities (RGLAs) is equated with that of the relevant state in accordance with Art. 115(2) CRR, subject to two provisos: rights to levy taxes must be in place and, based on the existence of specific institutional precautions for reducing the risk of default, there is no risk-related difference with risk positions held against the central government of the state in question. The risk weighting for other sub-sovereigns of Member States is 20%, assuming the exposure is denominated in the respective country's domestic currency. For other sub-sovereigns, the risk weighting is the same as in the case of institutions, provided the sub-sovereign is from a country on the list of third countries that are equivalent from a legal and supervisory viewpoint.

EBA maintains database of risk weightings of RGLAs

As this definition is open to interpretation, the EBA maintains a <u>public database</u>, which contains all RGLAs in the EU where competent authorities treat risk exposures as exposures to their respective central government. Accordingly, outstanding claims against the following levels are assigned a risk weight of 0% in Germany:

- German Laender and their legally dependent special funds
- Municipalities and municipal associations

0% risk weighting assigned to German Laender

It follows from this that exposure to German Laender can be assigned a risk weight of 0%, i.e., exposures of this kind benefit from the same regulatory advantages as, for example, German government bonds (Bunds).



Regulatory framework Implications of the Liquidity Coverage Ratio (LCR)

Implementation of the LCR with major implications for SSAs and in particular agencies

During the financial crisis, the liquidity position of credit institutions increasingly became the focus of attention. Consequently, in December 2010 the Basel Committee on Banking Supervision (BCBS) announced a Liquidity Coverage Ratio (LCR) and a Net Stable Funding Ratio (NSFR). Following a transitional phase since 2015, full compliance with the LCR has been mandated since 2018. In the EU, the corresponding regulations were defined in European law in Regulation (EU) No. 575/2013 and Directive 2013/36/EU (CRD IV), as well as through the LCR Regulation. The definition of the means used to calculate the LCR presents major implications for SSAs.

Objective of the LCR: reduction in liquidity risks for credit institutions

The objective of the LCR is to control the liquidity risk of a credit institution in such a way that sufficient High-Quality Liquid Assets (HQLA) are available at all times to survive a significant stress scenario lasting 30 days. It comprises the minimum liquidity buffer that is required in order to bridge liquidity mismatches of one month in crisis situations. Specifically, the LCR is calculated from the ratio of HQLA to the net payment outflows in the 30-day stress scenario, whereby this ratio must be at least 100%.

10 October 2014: European Commission publishes LCR Regulation

After there had been a lack of clarity for a long time about the precise definition of HQLA, as well as the EBA recommendation published at the end of 2013 only leading to further uncertainty in particular, the <u>Liquidity Coverage Requirement Delegated Act</u> was finally published on 10 October 2014. This LCR legal act specified in particular which assets are to be treated as HQLA in future. A revised version of the LCR Regulation finalised in February 2022 entered into force on 08 July 2022 and mainly affects covered bond regulations.

Categorisation in different liquidity levels

Under the HQLA definition, the legislation, as proposed by the BCBS, divides HQLA into different liquidity levels. Depending on the assigned level, this results in upper and lower limits for certain levels and the application of possible haircuts. On the following two pages we provide a brief overview of asset classification and allocation, before analysing the implications for the German Laender. Brief note from our side: in market practice, however, a distinction is occasionally made within Level 1 between "Level 1A" and so-called "Level 1B" assets (Level 1 covered bonds due to obligatory haircut), even if such a linguistic distinction appears neither in the CRR nor the LCR Regulation.



Liquidity levels - an overview

Level 1 assets (Art. 10 LCR)

- ≥ 60% of the liquidity buffer; no haircut

So-called "Level 1B" assets (Art. 10(1)(f) LCR; certain covered bonds)

- < 70% of the liquidity buffer; haircut of at least 7%

Level 2A assets (Art. 11 LCR)

- < 40% of the liquidity buffer; haircut of at least 15%

Level 2B assets (Art. 12 & 13 LCR)

- ≤ 15% of the liquidity buffer; haircut of at least 25-50%

Source: LCR-R, NORD/LB Floor Research

Classification overview

	Level 1 assets (minimum of 60% of liquidity buffer; min. 30% excluding (f) – covered bonds)	Minimum haircut (for shares or units in CIUs)
(a)	Coins and bank notes	- (-)
(b)	Following exposures to central banks:	- (-)
	Assets representing claims on or guaranteed by the ECB or an EEA Member State's central bank	
	Assets representing claims on or guaranteed by central banks of third countries, provided that these have an ECAI rating of CQS 1.	
	Reserves held by the credit institution in a central bank referred to in i) and ii) provided that the credit institution is permitted to withdraw such reserves at any time during stress periods and the conditions for such withdrawals have been specified in an agreement between the relevant competent authority and the ECB or the central bank	
(c)	Assets representing claims on or guaranteed by the following central or regional governments, local authorities or public sector entities (PSEs):	- (5%)
	Central government of an EEA Member State	
	Central government of a third country, provided that it has an ECAI rating of CQS 1	
	Regional governments, local authorities or public sector entities (PSEs) in an EEA Member State, provided that they are treated as exposures to the central government of the respective EEA Member State (i.e., risk weight of 0%)	
	Regional governments or local authorities in a third country of the type referred to in ii), provided that they are treated as exposures to the central government of the third country (i.e., same risk weight as the central government [0%])	
	PSEs provided that they are treated as exposures to the central state of an EEA Member State or to one of the regional governments or local authorities referred to in iii) (i.e., same risk weight of 0%)	
(d)	Assets representing claims on or guaranteed by the central government or the central bank of a third country, which has not been allocated a rating of CQS 1 (rating below AA-), and certain reserves	- (5%)
e)	Assets issued by credit institutions which meet at least one of the following requirements:	- (5%)
	Incorporated in, or established by the central government of, an EEA Member State or the regional government or local authority in an EEA Member State, the government or local authority is under the legal obligation to protect the economic basis of the credit institution and maintain its financial viability throughout its lifetime and any exposure to that regional government or local authority, if applicable, is treated as an exposure to the central government of the EEA Member State (i.e., risk weight of 0%);	
	The credit institution is a promotional lender as defined in Art. 10(1)(e)(ii)	
f)	Qualifying EEA covered bonds that fulfil all of the following criteria:	7% (12%)
	Covered bonds as defined in Art. 3 No. 1 CBD, or which were issued prior to 08 July 2022 and fulfil the requirements of (i) Art. 52(4) of the UCITS Directive at the time of issuance, so that they qualify for preferential treatment as covered bonds through to maturity	
	(ii) Risk positions against banks in the cover pool in line with Art. 129(1)(c) and 129(1a) CRR	
	(iii) Deleted	
	(iv) issue volume of at least EUR 500m or equivalent in domestic currency	
	(v) Rating: CQS 1 from ECAI; no rating: risk weight of 10% pursuant to Art. 129(5) CRR	
	(vi) Overcollateralisation of at least 2%	
g)	Assets representing claims on or guaranteed by multilateral development banks and international organisations as defined in Art. 117(2) and Art. 118 of the CRR	- (5%)



Classification overview (continued)

	Level 2A assets (maximum of 40% of liquidity buffer)	Minimum haircut (for shares or units in CIUs)
(a)	Assets representing claims on or guaranteed by regional governments, local authorities or PSEs in an EEA Member State, where exposures to them are assigned a risk weight of 20% pursuant to Art. 115(1)(5) and Art. 116(1)(2)(3) CRR	15% (20%)
(b)	Assets representing claims on or guaranteed by the central government or the central bank of a third country or by a regional government, local authority or PSE in a third country, where exposures to them are assigned a risk weight of 20% pursuant to Art. 114(2) and Art. 115 or Art. 116 CRR	15% (20%)
(c)	Qualifying EEA covered bonds that do not reach Level 1B	15% (20%)
(d)	Qualifying covered bonds issued by credit institutions in third countries (supervisory requirements must be examined in each particular case: Regulation 2016/2358/EU does not apply)	15% (20%)
(e)	Corporate debt securities which meet all of the following requirements:	15% (20%)
	(i) CQS1 (minimum rating of at least AA- or equivalent in event of a short-term credit assessment)	
	(ii) issue size of at least EUR 250m or equivalent in domestic currency	
	(iii) maximum time to maturity of the securities at the time of issuance is 10 years	
	Level 2B assets (maximum of 15% of liquidity buffer)	Minimum haircut (for shares or units in CIUs)
(a)	Exposures in the form of ABS under certain conditions (pursuant to Art. 13 of the LCR Regulation)	25-35% (30-40%)
(b)	Corporate debt securities which meet all of the following requirements:	50% (55%)
	(i) CQS ≤ 3	
	(ii) issue size of at least EUR 250m or equivalent in domestic currency	
	(iii) maximum time to maturity of the securities at the time of issuance is 10 years	
(c)	Shares, provided that they meet certain conditions	50% (55%)
(d)	Restricted-use committed liquidity facilities provided by the ECB, the central bank of an EEA Member State or a third country, under certain conditions	-
(e)	Qualifying EEA covered bonds (no rating restriction)	30% (35%)
(f)	Only for religiously observant credit institutions: certain non-interest-bearing assets	50% (55%)

NB: CQS = Credit Quality Step (rating class) as defined in CSA

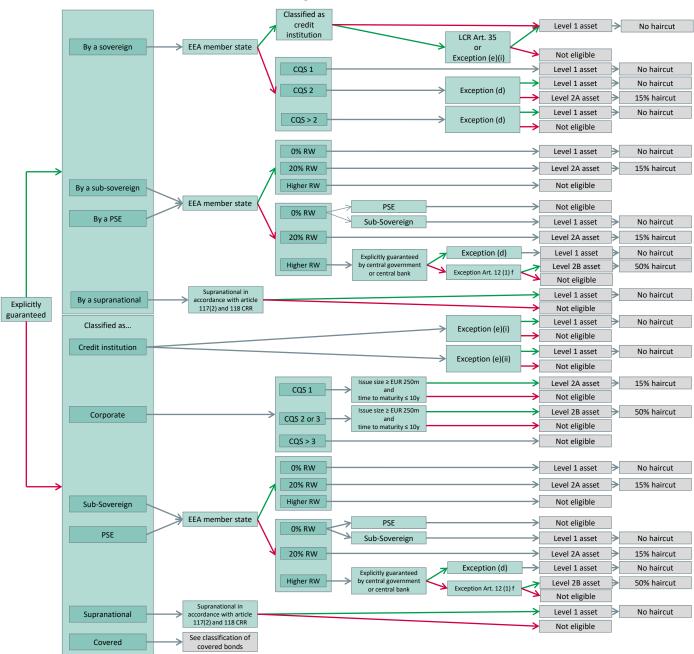
Source: LCR-R, NORD/LB Floor Research

Classification of PSEs and sub-sovereigns

The classification of PSEs and sub-sovereigns (regional governments and local authorities; RGLAs for short) is almost identical. If an explicit guarantee is given for a bond or an issuer by a central government, classification is the same as for sovereigns. If no explicit guarantee is given, classification is carried out primarily on the basis of the issuer's risk weighting. If, in regulatory terms, PSE and sub-sovereign bonds may be treated as exposures to the respective central government and a risk weight of 0% can be applied, these issuers can accordingly be classified as Level 1. Theoretically, exceptions to this are issuers from outside the EEA where a risk weight of 0% can be applied but there is no explicit guarantee in place. If it involves a PSE, classification is not possible. Sub-sovereigns can be classified as a Level 1 asset. Institutions where a risk weight of 20% can be applied are classified as Level 2A issuers. Institutions with higher risk weightings that are based outside the EAA and have an explicit guarantee from a central bank or government can be classified as Level 1 issuers using the conditions of Exemption (d) (see classification of sovereigns). If an explicit guarantee is not specified, a Level 2B classification as defined in Art. 12(1)(f) LCR Regulation remains an option. This refers to institutions which, due to their religious beliefs, are not permitted to hold interest-bearing assets. Bonds of other PSEs and sub-sovereigns for which the risk weighting is higher than 20% under the standardised credit risk approach cannot be classified as liquid assets.



LCR classification of assets (Articles 10 – 12 LCR Regulation)



Comments: stated haircuts do not apply to shares or units in CIUs; PSE = Public Sector Entity; CQS = Credit Quality Step (rating class) as defined in CSA; green = condition met; red = condition not met; grey = tbc

Source: LCR-R, NORD/LB Floor Research

0% risk weighting enables Level 1 classification for German Laender bonds

Since exposure to German Laender can be assigned a risk weight of 0% under the CRR standard approach (see previous chapter), this consequently results in Level 1 classification for German Laender bonds. In the case of the LCR, too, from a regulatory viewpoint this results in equal treatment of exposures to both the Bund (federal government) and German Laender.



Regulatory framework Impacts of the Net Stable Funding Ratio (NSFR)

Introduction of the NSFR targets reduction in funding risks

In December 2010, the Basel Committee on Banking Supervision (BCBS) announced the introduction of a Net Stable Funding Ratio (NSFR) which, similar to the LCR, is aimed at increasing the stability of financial institutions. The aim of the LCR is to prevent liquidity bottlenecks in a 30-day stress scenario, whereas the NSFR focuses on reducing funding risks across a 12-month time frame. The objective is to reduce a bank's susceptibility to disruptions in the usual funding channels, to counteract potential liquidity disruptions and thereby prevent a systemic stress scenario. In particular, the NSFR is designed to limit overreliance on short-term funding. In October 2014, the BCBS published the final NSFR framework.

EU implementation of the NSFR

In Article 413(1), the <u>CRR</u> already includes an initial requirement for institutions to structure their long-term liabilities in such a way that they can be adequately funded under both normal and stressed conditions. Moreover, institutions are already subject to requirements to report to the competent authorities. However, detailed criteria and weighting factors for the NSFR were only included in Articles 428a et seq. of the CRR with the banking package of 20 May 2019. The new rules came into force on 28 June 2021. In future, simplified NSFR calculations will apply to "small and non-complex institutions" (in accordance with Article 4 (1) No. 145 of the CRR). However, the regulator has also introduced some deviations from the Basel framework in its implementation into European law. For example, the definition and the weighting of liquid assets have been taken from the LCR. There are also differences in relation to calibration and individual instruments. The aim of these differences and subsequent introduction at a later date (currently only the reporting obligation applies) is to make it easier for institutions at European level to introduce the Basel framework, which is regarded as quite conservative. The simplified requirements for small and non-complex institutions are also a European feature.

Definition of the NSFR

The NSFR is defined as the Available Amount of Stable Funding (ASF) relative to the Required Amount of Stable Funding (RSF). A value of 100% should be maintained as a minimum value here.

Stable funding considerations

The idea behind the NSFR is to ensure that the Available Stable Funding (ASF) fully covers the Required Stable Funding (RSF) for a time horizon of one year. The maturity, quality and liquidity of an asset are the main factors used to calculate how much stable funding the respective asset requires. The stability of the liabilities is mainly defined by their maturity and their availability in relation to the probability of outflows.



Calculation of the NSFR

The NSFR is calculated using the formula below and expressed as a percentage (Art. 428b and 428c of the CRR):

$$NSFR = \frac{Available Stable Funding (ASF)}{Required Stable Funding (RSF)} \ge 100\%$$

The calculation is carried out in the reporting currency. Institutions are required to apply the appropriate factors to the book value of assets, liabilities and off-balance-sheet items, as outlined in the following.

Calculation of the RSF

The RSF is calculated by multiplying the totality of all assets and off-balance-sheet exposures in accordance with Articles 428r-428ah of the CRR by the appropriate weighting factors (Required Stable Funding Factor, RSFF). As a rule, in the context of the calculation of the RSF, it can be assumed that assets with a longer residual maturity will be assigned a higher RSF weight factor. At the same time, better quality and liquidity make for a lower RSF weight. In the event that funding routes should be disrupted, the expectation is that high quality liquid assets (HQLA) would be easy to sell and therefore could help counteract any liquidity bottleneck. The funding risk of assets with longer residual maturities tends to be higher. Consequently, such assets call for larger amounts of stable funding.

Calculation of the ASF

Ideally, an institution should have ASF to cover at least 100% of the RSF amount calculated in the first instance. ASF is derived from the totality of all liabilities pursuant to Articles 428k to 4280 of the CRR, multiplied by the respective risk weight factors (Available Stable Funding Factor, ASFF). The allocation of ASF weight factors to the respective liabilities is initially based on the maturity of the liability. Accordingly, a longer residual maturity results in a higher allocation of the instrument to the ASF. Consequently, all liabilities with a residual maturity of at least one year, in other words, a maturity date outside the period assessed by the NSFR, are given a weight factor of 100%. These liabilities are regarded as stable funding in full, as there is no funding risk within a year. Alongside maturity, the respective counterparty of the liabilities plays a role. Liabilities against retail customers or small and medium-sized enterprises (SMEs) are deemed to be more stable.

Weighting factors could change again

As previously mentioned, the NSFR entered into force on 28 June 2021, although the EBA has already been tasked with reviewing this by way of Article 510 CRR after the CRR came into force in June 2019. The particular focus is on derivative contracts (Art. 428s [2] and Art. 428at [2]). In this regard, netting sets of derivative contracts are therefore taken into account in both the NSFR and the simplified calculation of the NSFR at 5% of the required stable funding.

German Laender enjoy preferential regulatory treatment pursuant to CRR

From our perspective, the effect of the NSFR on the German Laender will be positive. Since LCR-eligible assets only need to be backed by less stable funding due to their lower RSF factor, they are given preferential treatment. The LCR level of 1 for German Laender produces an NSFR classification of 0% pursuant to Art. 428r CRR.



Regulatory framework Classification of SSAs under Solvency II

Solvency II with major implications for SSAs and German Laender in particular

On 10 October 2014, the European Commission published the <u>delegated regulation implementing Solvency II</u>. To calculate the solvency capital requirements for insurance companies, the regulation calls for a variety of risk modules to be taken into account, with the market risk module entailing significant implications. In addition to interest rate, equity, real estate and exchange rate risks as well as market risk concentrations, it shows how the spread risk is calculated. As is the case for the risk weighting in banking regulations, there are also exemptions here, which significantly enhance the relative attractiveness of selected groups of issuers.

Art. 180(2) gives preferred status to selected issuers

The criteria for the preferred regulatory treatment of exposure arise, in particular, from Art. 180(2) Solvency II. Exposures that meet certain criteria (see below) may be allocated a stress factor of 0%, whereby no capital backing is required for these items to support spread risk. According to Art. 180(9), a stress factor of 0% also applies in the case of credit derivatives where the underlying financial instrument is a bond or a loan to any exposure listed in Art. 180(2). Furthermore, according to Art. 199(8), a probability of default of 0% can be assumed for exposures to counterparties referred to in points (a) to (d) of Article 180(2), while, in addition, according to Art. 187(3), a risk factor of 0% is assigned for market risk concentration. Overall, very positive implications therefore arise from this preferred treatment, which, in our opinion, applies to a large number of SSAs.

Art. 180(2) regulates RGLA exposures for the first time

In the European Commission's <u>delegated regulation (EU) 2019/981</u> dated 08 March 2019, guarantees from RGLAs were finally included. Exposure to RGLAs has also now been defined. Fundamentally, guarantee recipients must have preferred status in terms of the guarantees from RGLAs and exposure to these. However, two restrictions must be taken into account: first, RGLAs must be regarded as identical exposure to the respective central government ((EU) 2015/2011; Article 115 CRR), and second, the conditions laid down in Article 215 of the Regulation (EU) 2015/35 must be satisfied. RGLAs that are not equal to a central government as per Article 116 are, pursuant to Article 180 of (EU) 2019/981, automatically considered to have a *stress*_i risk factor in line with CQS 2. This also applies to bonds/issuers guaranteed by these RGLAs. According to our understanding, this means that international regions of non-member states can never benefit from preferred status.



Criteria for preferred status within the scope of Solvency II

Art. 180 (2): Specific exposures

Exposures in the form of bonds and loans to the following shall be assigned a *stress_i* risk factor of 0%:

- a) The European Central Bank
- b) Member States' central governments and central banks denominated and funded in the domestic currency of that central government and the central bank
- c) Multilateral development banks referred to in Art. 117 (2) of Regulation (EU) No 575/2013 (CRR)
- d) International organisations referred to in Art. 118 (CRR).

Exposures in the form of bonds and loans that are fully, unconditionally and irrevocably guaranteed by one of the counterparties mentioned in points (a) to (d), where the guarantee meets the requirements set out in Art. 215, shall also be assigned a risk factor stress; of 0%. For the purposes of sub-paragraph 1 b, risk exposures in the form of bonds and loans that are fully, unconditionally and irrevocably guaranteed by one of the RGLAs mentioned in Article 1 of the European Commission Implementing Regulation (EU) 2015/2011 (1) are to be regarded as risk exposures against the central government, provided that the guarantee satisfies the requirements laid down in Article 215.

Art. 215: Guarantees

In the calculation of the Basic Solvency Capital Requirement, guarantees shall only be recognised where explicitly referred to in this chapter, and where in addition to the qualitative criteria in Articles 209 and 210, all of the following criteria are met:

- a) the credit protection provided by the guarantee is direct;
- b) the extent of the credit protection is clearly defined and incontrovertible;
- c) the guarantee does not contain any clause, the fulfilment of which is outside the direct control of the lender, that
 - i) would allow the protection provider to cancel the protection unilaterally;
 - ii) would increase the effective cost of protection as a result of a deterioration in the credit quality of the protected exposure;
 - iii) could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original obligor fails to make any payments due;
 - iv) could allow the maturity of the credit protection to be reduced by the protection provider;
- d) on the default, insolvency or bankruptcy or other credit event of the counterparty, the insurance or reinsurance undertaking has the right to pursue, in a timely manner, the guarantor for any monies due under the claim in respect of which the protection is provided and the payment by the guarantor shall not be subject to the insurance or reinsurance undertaking first having to pursue the obligor;
- e) the guarantee is an explicitly documented obligation assumed by the guarantor;
- f) the guarantee fully covers all types of regular payments the obligor is expected to make in respect of the claim.

Source: Solvency II, NORD/LB Floor Research

Equal treatment of central government exposure and exposure with an explicit state guarantee

From a regulatory perspective, the effect of Art. 180(2) is therefore equal treatment of central government exposure and exposures which benefit from an explicit central government guarantee. Promotional banks guaranteed by RGLAs have now been newly and explicitly included. These institutions now also have preferred status. However, unlike the rules under CRD IV for banks, in conjunction with Art. 215, this Article defines minimum requirements for guarantees, which we understand are met by most explicit guarantees.



German Laender benefit from 0% stress factor

At the beginning of July 2015, the European Insurance and Occupational Pensions Authority (EIOPA) published a Final Report on the basis of a consultation paper produced at the end of November 2014, which defined a list of regional and local governments that meet the requirements of Art. 85 and can therefore be assigned a stress factor of 0%. The most important issuers to benefit from a 0% stress factor here are the German Laender. As with the risk weight under Basel III, under Solvency II, the Spanish regions are, for example, given preferential treatment as per the EIOPA list, while the absence of Italian regions, for instance, implies that a *stress*_i risk factor of 0% cannot be assigned here. The table below summarises the regional and local authorities that can be assigned a stress factor of 0%. In Directive (EU) 2015/2011 of 11 November 2015, this Final Report was approved with the result that the proposed classification became effective.

Regional and local authorities (0% stress factor possible)

CountryRegional and local governmentsAustriaBundeslaender & municipalities

Belgium Municipalities (Communautés/Gemeenschappen), regions (Régions/Gewesten), towns (Communes, Gemeenten) &

provinces (Provinces, Provincies)

Denmark Regions (Regioner) & municipalities (Kommuner)

Finland Municipalities (kunta/kommun), towns (kaupunki/stad), province of Åland

France Regions (régions), municipalities (communes), "Départements"

Germany Laender, municipalities & municipal associations

Liechtenstein Municipalities

Luxembourg Municipalities (communes)
Lithuania Municipalities (Savivaldybės)

The Netherlands Provinces (Provincies), municipalities (Gemeenten) & water associations (Waterschappen)

Poland Districts (powiat), municipalities (gmina), regions (województwo), district and municipal associations (związki

międzygminne i związki powiatów) & the capital Warsaw

Portugal Autonomous regions the Azores and Madeira

Spain Autonomous regions (comunidades autónomas) and local government (corporación local)

Source: (EU) 2015/2011, NORD/LB Floor Research

Non-EEA regions not included on EIOPA list

Interestingly, EIOPA only cites EEA regional and local governments in its list, although there is no restriction to Member States under Art. 85. In contrast, the <u>Final Report based on the consultation paper</u> states that the scope shall be restricted initially to EEA regional and local governments. However, future extension of the scope to include regional and local governments of the relevant third countries is not ruled out. If Solvency II also follows the risk weight according to Basel III for international sub-sovereigns when applying preferred status, we believe that Canadian regions (as well as the UK) would also benefit from a stress factor of 0%. If exposures to Canadian provinces & territories were to be treated in the same way as exposures to their central government, our interpretation under Art. 180(3) based on the rating of Canada would also result in a stress factor of 0%.

Conclusion

We are of the opinion that the Solvency II Directive highlights the importance of regulation within the SSA segment. The possibility of preferential regulatory treatment or regulatory equivalence with central governments would lead to a significant increase in the relative attractiveness of selected SSAs – including for the German Laender.



Regulatory framework ECB repo collateral rules and their implications

General framework and Temporary framework define collateral rules

Within the scope of its statutes, access to ECB liquidity is only possible on a collateralised basis. The ECB defines the assets that are eligible as collateral in its General framework and Temporary framework. There are some significant differences in the criteria for acceptance as collateral, especially for government-affiliated issuers. For this reason, and also due to the fact that on 29 June 2023 (following the end of the pandemic-related, time-limited reduction in valuation haircuts) the opportunity to adjust the details presented itself to the ECB, we devote the following section to a more detailed look at the ECB repo rules.

Overview of collateral regulations (in accordance with General framework)

Eligibility criteria	Marketable assets	Non-marketable assets			
Type of asset	ECB debt certificates, other marketable debt instruments	Credit claims and Schuldscheindarlehen (SSD)	Retail mortgage-backed debt instruments (RMBDs)		
Credit standards	The asset must meet high credit quality standards. These are assessed using ECAF (Eurosystem credit assessment framework) rules for marketable assets	The debtor/guarantor must satisfy high credit quality requirements. Creditworthiness is assessed on the basis of the ECAF rules for credit claims.	The asset must meet high credit standards. The high credit standards are assessed using ECAF rules for RMBDs.		
Place of issue	Debt instruments must be issued with a central bank or an approved securities settlement system in the European Economic Area (EEA)	-	-		
Settlement/ handling procedures	Debt instruments shall be transferable in book entry form and shall be held and settled in Member States whose currency is the euro through an account with a national central bank (NCB) or with an eligible SSS, so that the provision and realisation of collateral is subject to the law of a Member State whose currency is the euro	Credit claims must be settled in accordance with the processes of the Eurosystem, which are stipulated in the relevant national documentation of the NCB	The procedures for commissioning, using and settling the RMDBs are based on Eurosystem procedures as defined in the national documentation of the home NCB		
Type of issuer/ debtor/guarantor	NCBs, public sector entities, private sector, multilateral development banks or international organisations	Public sector entities, non-financial enterprises, multilateral development banks or international organisations	Credit institutions that are counterparties and based in a Member State whose currency is the euro		
Place of establishment of the issuer/debtor/ guarantor	Issuer: EEA or non-EEA G-10 countries; Debtor: EEA; Guarantor: EEA	Eurozone	Eurozone		
Acceptable markets	Regulated markets as defined in the <u>Directive 2014/65/EU</u> , non-regulated markets approved by the ECB	-	-		
Currency	Euro	Euro	Euro		

Source: ECB, NORD/LB Floor Research



Overview of collateral regulations (in accordance with General framework	(continued)

Cross-border use	Yes	Yes	Yes
		f) and the mobilisation agreement	
	an EEA country.	d) the guarantor (if relevant),e) the credit claim agreement,	
	shall be the law of	c) the debtor,	
	the cash-flow generating assets	b) the creditor,	
Legal basis	Member State. The law governing	a) the counterparty,	-
	generating assets by the SPV shall be governed by the law of a	There shall be no more than two governing laws in total that apply to:	
	the acquisition of the cash-flow	currency is the euro.	
	For asset-backed securities (ABS),	law of a Member State whose	
		and mobilisation:	
		credit claim agreement	
		Governing law for	
		minimum amount of EUR 0.5m	
		- cross-border use	
		home NCB;	
Minimum amount	-	EUR 0 or any higher amount set by the	-
		domestic use:	
		submitting the credit claim	
		Minimum amount at the time of	

Source: ECB, NORD/LB Floor Research

Precise definition of possible collateral

In accordance with Part 4, Title II, Chapter 1, Article 62 of the General Framework, the ECB accepts bonds with fixed, unconditional nominal volume as collateral (in contrast to convertible bonds, for example). The bonds must carry a coupon that could not result in negative cash flows. In addition, bonds without a coupon payment (zero coupons), with fixed or variable interest payments based on a reference interest rate, are also eligible. Bonds designed so that the coupon payment changes in line with a rating upgrade or downgrade, or inflation-linked bonds, are also eligible for use as collateral. Special rules apply to ABS with regard to the first condition (fixed, unconditional nominal volume). The ECB generally divides collateral into two groups: marketable and non-marketable assets, which differ primarily in terms of their acceptance criteria.

Temporary framework extends collateral rules

Apart from assets that meet these acceptance criteria, the Temporary Framework extends the criteria to some extent. Under certain conditions and subject to valuation adjustments pursuant to <u>Guideline (EU) 2014/528</u>, certain bonds that are denominated in GBP, JPY or USD may be accepted for collateral purposes, while the credit threshold limits may be waived for debt securities that were issued or are guaranteed by IMF/EU programme states.

Valuation discount (haircut) for collateral is derived from allocation to a haircut category

ECB-compliant collateral (marketable) is divided into five haircut categories, which differ with regard to issuer classification and type of collateral. The haircut category is the key factor in determining haircuts to which certain debt securities are subject. The haircuts also differ on the basis of residual term to maturity and coupon structure. Since the revised version came into force, haircuts for bonds with variable coupons correspond to those of fixed-interest bonds (of the respective category). The haircut categories shown in the table are defined in Guideline (EU) 2016/65.



Haircut categories - an overview

Category I	Category II	Category III	Category IV	Category V
Debt instruments issued by central governments	Debt instruments issued by local and regional governments	Debt instruments issued by non-financial corpora- tions, corporations in the government sector and agencies which are non- credit institutions that do not meet the quantitative criteria set out in Annex XIIa to Guideline (EU) 2015/510 (ECB/2014/60)	Unsecured debt instruments issued by credit institutions or institutions which are credit institutions that do not meet the quantitative criteria set out in Annex XIIa of Directive (EU) 2015/510 (ECB/2014/60)	Asset-backed Securities
Debt instruments issued by the European Union	Debt instruments issued by entities (credit institutions or non-credit institutions) classified by the Eurosystem as agencies and which meet the quantitative criteria set out in Annex XIIa to Directive (EU) 2015/510 (ECB/2014/60)		Unsecured debt instruments issued by financial corporations other than credit institutions	
ECB debt certificates	Debt instruments issued by multilateral devel- opment banks and interna- tional organisations other than the European Union			
Debt certificates issued by national central banks (NCBs) prior to the date of adoption of the euro in their respective Member State	Legislative covered bonds			
	Multi-cédulas			

Source: ECB, NORD/LB Floor Research

What else has changed since July 2023?

The Governing Council of the ECB also decided that, since the risk profile of jumbo covered bonds is similar to that of other covered bonds regulated by law and multi-cédulas (Spanish covered community bonds) from its perspective, the same valuation haircuts in haircut category II would apply to all the above-named in future. The references to jumbo covered bonds were consequently deleted. All debt instruments issued by the European Union will be assigned to haircut category I (previously category II) with immediate effect. Moreover, since May 2024, haircuts will no longer be applied to debt certificates issued by the ECB and national central banks of Member States whose currency is the euro prior to the introduction of the common currency. However, another new feature is that instruments with the longest residual term of more than ten years are allocated to three new categories (10-15 years, 15-30 years and 30+ years). As a result, and in conjunction with the decision to apply a term-related theoretical valuation correction, the granularity of the risk coverage of this theoretical valuation is expected to be improved, which is of relevance for instruments with longer maturities in particular.



Haircuts by haircut category and rating – an overview

	Desidual				Haircut	category				
Credit	Residual maturity	Categor	y I	Category	y II	Category	/ III	Category IV		Category V
quality	(years)(*)	Fixed/ floating coupon	Zero coupon							
	0-1	0.5%	0.5%	1.0%	1.0%	1.0%	1.0%	7.5%	7.5%	4.0%
	1-3	1.0%	2.0%	1.5%	2.5%	2.0%	3.0%	10.0%	11.5%	5.0%
	3-5	1.5%	2.5%	2.5%	3.5%	3.0%	4.5%	12.0%	13.0%	7.0%
AAA to A-	5-7	2.0%	3.0%	3.5%	4.5%	4.5%	6.0%	14.0%	15.0%	9.0%
AAA IU A-	7-10	3.0%	4.0%	4.5%	6.5%	6.0%	8.0%	16.0%	17.5%	12.0%
	10-15	4.0%	5.0%	6.5%	8.5%	7.5%	10.0%	18.0%	22.5%	18.0%
	15-30	5.0%	6.0%	8.0%	11.5%	9.0%	13.0%	21.0%	25.0%	20.0%
	>30	6.0%	9.0%	10.0%	13.0%	11.0%	16.0%	24.0%	31.5%	22.0%
	0-1	5.0%	5.0%	5.5%	5.5%	6.5%	6.5%	11.5%	11.5%	
	1-3	6.0%	7.0%	7.5%	10.5%	9.5%	12.0%	18.5%	20.0%	
DDD	3-5	8.5%	10.0%	11.0%	16.0%	13.0%	18.0%	23.0%	27.0%	
BBB+ to BBB-	5-7	10.0%	11.5%	12.5%	17.0%	15.0%	21.5%	25.5%	29.5%	Not
000-	7-10	11.5%	13.0%	14.0%	21.0%	17.0%	23.5%	26.5%	31.5%	permissible
	10-15	12.5%	14.0%	17.0%	25.5%	19.5%	28.0%	28.5%	35.0%	
	15-30	13.5%	15.0%	20.0%	28.5%	22.0%	31.0%	31.5%	39.0%	
	>30	14.0%	17.0%	22.0%	32.5%	25.0%	35.5%	34.5%	43.0%	

^{(*),} i.e. [0-1) residual maturity less than 1 year, [1-3] residual maturity equal to or greater than 1 year and less than 3 years, etc. Source: ECB, NORD/LB Floor Research

ECB assigns bonds issued by German Laender to second-highest haircut category

The listing of haircut categories shows that German Laender as regional governments are assigned to the same level as, for example, agencies such as KfW, which are recognised by the ECB. This means that German Laender bonds receive the second-best treatment under the reportules, after instruments issued by central governments and central banks. The ECB's definitions of collateral therefore provide for further preferential treatment of German Laender from a regulatory viewpoint.

What is left following the COVID-19 crisis?

As a result of the coronavirus crisis, the ECB announced comprehensive, temporary adjustments to the collateral framework on 07 April 2020 that focused on mitigating possible shortages of liquidity on the financial markets in the Eurozone. Originally, the temporary adjustment envisaged a general reduction in the collateral haircuts of 20% up to September 2021 (subsequently up to June 2022). This was gradually concluded by the resolution of the Governing Council of the ECB on 23 March 2022: from 08 July 2022 until the end of June 2023, a flat rate reduction in the haircuts of 10% applied. The new table shown above, which by treating bonds with fixed and floating coupons equally, as mentioned before, evidently simplifies matters systematically, has applied since July 2023. However, the fact that the valuation haircuts for bonds with floating coupons (with a maturity of >1 year) were consistently less than their fixed-coupon equivalents before COVID-19 must also be mentioned. In the new reality, this regularly results in a doubling of the reduction rates. The creation of three new categories for maturities of ten years or more, which we mentioned before, also leads to larger haircuts for longer maturities. Instead of the "gradual approach" to "gradually lower the Eurosystem's risk tolerance to the level preceding the pandemic" that had been announced, the ECB will ultimately be tightening the regulations once again.



Performance and relative value Benchmark indices for German Laender

iBoxx € Regions as a benchmark for German Laender?

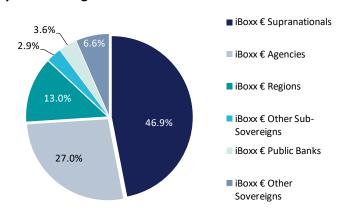
When looking for an adequate benchmark index for bonds issued by the German Laender, the iBoxx € Regions from the data provider Markit always stands out. Containing a total of 203 bonds (composition: July 2024), the sub-index of the iBoxx € Sub-Sovereigns maps the universe of EUR-denominated bonds issued by regional governments and local authorities (RGLAs). With a volume-weighting of 75.5% (153 bonds), German bonds dominate the index. However, for various reasons we do not consider the index to be the ideal benchmark for bonds issued by German Laender.

Criteria for classifying issuers in the iBoxx € Sub-Sovereigns sub-indices

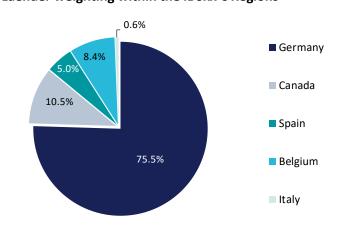
Agencies	Issuers whose main business activity is carrying out a task which is funded by a local authority and which is neutral in relation to competition (e.g. KfW).			
Supranationals	Issuers owned by more than one country (e.g. EIB).			
Public banks	Issuers which are publicly owned and funded but which offer commercial bank services (e.g. BNG)			
Regions	Issuers that represent regional or local governments (e.g. German Laender) – with either an implicit or explicit guarantee and strong relationship to or ownership by the government.			
Other sub-sovereigns	All other bonds that are regarded as sub-national. A distinction is made between three groups: 1. Non-financials: State-funded issuers from a non-financial sector such as state-owned railway companies. 2. Guaranteed financials: Private sector issuers guaranteed by regional municipalities. 3. State-guaranteed bonds by non-guaranteed institutions			

Source: Markit, NORD/LB Floor Research

Sub-indices of the iBoxx € Sub-Sovereigns by outstanding volume



Laender weighting within the iBoxx € Regions



Source: Markit, NORD/LB Floor Research

Criteria for bond selection in the iBoxx € Sub-Sovereigns sub-indices

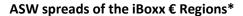
Bond type	Only those bonds whose cash flows can always be determined in advance are taken into consideration in the Markit iBoxx € indices. T-bills and other money market instruments are not included; the only currency permitted is the euro. The origin of the issuer is irrelevant.
Rating	All bonds in the Markit iBoxx € indices must have an investment grade Markit iBoxx rating. The rating approach used by the Markit iBoxx indices is based on the average of the ratings awarded by the three rating agencies Fitch, Moody's and S&P.
Residual term to maturity	Each bond included in an iBoxx € Index must have a minimum residual term to maturity of one year on the day the composition of the Index is specified.
Outstanding volume	Minimum volume outstanding EUR 1.0bn

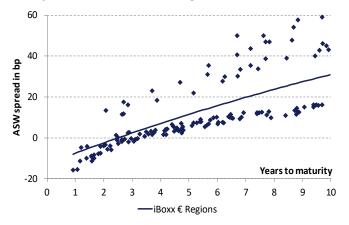
Source: Markit, NORD/LB Floor Research



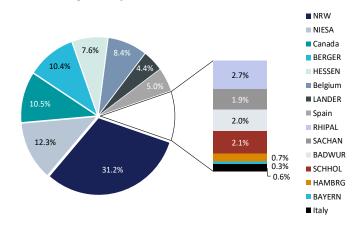
Risk premiums vary due to periphery issuers

From our perspective, the inclusion of <u>Canadian provinces</u> as well as municipalities and regions in <u>Belgium</u>, <u>Spain</u> and Italy does not ideally replicate the Laender segment. In fact, due to issuers originating from European periphery countries in particular, the ASW spreads can, in part, differ significantly from those of the German Laender. As a result of divergent ratings and collateral mechanisms as well as differences in fundamental analysis, the spread level of the German Laender is considerably lower than that of issuers from the periphery, which, from our point of view, in turn reduces the comparability of the index.





iBoxx € Regions by issuer



Weighting of the German Laender does not reflect the actual Laender bond market

In our view, the weighting of the German Laender in the iBoxx € Regions does not truly depict the actual Laender market either. This is primarily due to the criteria for bond selection used by Markit for the iBoxx € Sub-Sovereigns indices. The criteria, in particular the specification of minimum issue volumes of EUR 1.0bn and fixed-interest bonds, cause a distorted weighting of the Laender in relation to one another. As a result, there is a large supply of bonds with lower volumes, while Saarland, for example, was not rated until October 2016 and Bremen exclusively issued floaters up to 2014. In general, the specification of the iBoxx € Regions means there is no benchmark for the performance and risk premiums of Laender floaters. Nevertheless, after excluding the periphery issuers, the iBoxx € Regions almost exactly replicates the ASW spread levels of bonds issued by the German Laender.

Comment

Given the weak points outlined above of the iBoxx € Regions, we shall use the total number of Laender bonds in circulation to produce a relative view of each of the German Laender in the following analysis. For this reason, we analyse fixed-interest bonds in relation to all German Laender bonds in benchmark format with an outstanding volume of at least EUR 500m. Similarly, where no fixed-interest bonds are available for analysis, where necessary we look at the floaters issued by a Bundesland in relation to all Laender floaters with an outstanding volume of at least EUR 500m as well.

^{*} Residual term to maturity >1 year and <10 years. Source: Bloomberg, Markit, NORD/LB Floor Research



Performance und relative value Total return and spread performance

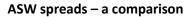
Expiring ECB purchase programmes and renewed increase in liquidity

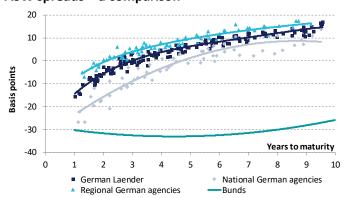
Since 2016, the spread performance of SSAs has primarily been characterised by the purchases made by the ECB and the national central banks within the scope of the APP and PSPP. Furthermore, spreads were determined by the dwindling liquidity of the German Laender segment seen in the wake of COVID-19 through to 2022. Despite the fact that the ECB discontinued its net purchasing activities halfway through 2022 and the issuance volumes on the part of the German Laender have started to rise again since 2023, the ECB is set to remain active as an investor in the capital market by way of PEPP reinvestments until the end of 2024 (at least). Moreover, since July 2024, the ECB has started to reduce portfolio holdings under the PEPP by an average of EUR 7.5bn per month.

Performance und relative value Laender bonds – a comparison

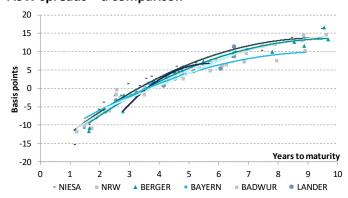
Only a certain relative attractiveness remains

Up to the beginning of the Eurosystem's purchase programme in March 2015, German Laender bonds traditionally offered a high level of relative attractiveness compared with Bunds in the German SSA segment. Even though the PSPP had already had a considerable impact on the Laender segment, there were still premiums to be found on occasion. Launched in 2020, the PEPP ensured further spread compression in this segment — although this was mainly among the Laender themselves, and less in comparison with Bunds. An interesting aspect to note is the relative stability of the ASW spreads in comparison with the G spreads, where volatility is significantly higher due to the fluctuations in Bunds. In comparison with last year's edition of our Issuer Guide — German Laender, we have observed a widening of spreads in connection with German Laender bonds, which are trading around 15 basis points wider at both the short and long end. It is also striking that the pick-up versus national agencies as well as the pick-up of regional agencies vis-à-vis the Laender have fallen across the entire maturity range and that as a result all three curves have now converged overall.





ASW spreads – a comparison





ESG – further development stalling at present

Green light for ESG bonds from German Laender

There can be no doubt that ESG bonds have already become a firm fixture on the international capital markets. We most recently published a study dealing with the global ESG bond market in June 2024 (cf. NORD/LB Fixed Income Special - ESG-Update 2024). When it comes to the trend towards bonds with ESG aspects, German Laender are refusing to be left behind. For example, North Rhine-Westphalia recognised the potential of this segment as early as 2015, when it issued an inaugural sustainability bond. Since then, NRW has been an annual issuer of sustainability bonds on the primary market. In 2021, two more Laender joined the ranks of ESG issuers. To start with, Baden-Wuerttemberg issued an inaugural green bond in March 2021, before Hesse also issued a green bond in June of the same year. In 2023, the German capital Berlin as well as Saxony-Anhalt then became the fourth and fifth Laender respectively to join the list of issuers of ESG bonds. In the short to medium term, we expect further Laender to conduct refinancing activities on the capital market via ESG bonds. The reasons for this are manifold. On the one hand, refinancing costs are often a few basis points cheaper (key word: greenium), while on the other, the concept of sustainability is now part and parcel of political initiatives and joint efforts aimed at shaping a new era. Hesse, for example, explicitly included this as an objective in its constitution in 2018: "The state, municipalities and associations of municipalities shall take into account the principle of sustainability in their actions in order to safeguard the interests of future generations" (Art. 26c of the Hessian Constitution). Conversely, the higher costs for more extensive reporting could be a stumbling block for some Laender, as this could limit the profitability of ESG issues.

Green, Social and Sustainability - a classification

Three forms of sustainable bonds have in particular established themselves on the capital market: green bonds, social bonds and sustainability bonds. The respective designation already indicates the primary sustainability goal to be pursued. In particular, green bonds pursue goals that serve environmental protection. For example, this can take the form of promoting the use of renewable energy or the financing of regional and long-distance public transport projects through more environmentally friendly drive options. Social bonds, on the other hand, are used (as you might expect) in connection with social projects. These are reflected, for example, in the promotion of social housing and subsidies, or in measures to reduce unemployment and targeted financing of support measures. Sustainability bonds, on the other hand, are all-rounders and the projects supported can be of both an ecological and social nature. Projects that are fundamentally eligible for financing through sustainability bonds are to be found in the corresponding issuer frameworks: these tend to be closely linked to the respective Guidelines of the International Capital Market Association (ICMA). The goals of the respective frameworks are primarily based on the UN Sustainable Development Goals (SDGs) and the respective category of the Green Bond Principles (GBP), Social Bond Principles (SBP) or Sustainability Bond Guidelines (SBG). In addition to the corresponding use of proceeds, the respective ICMA guidelines also provide guidance on the process of project evaluation and selection, management of proceeds and reporting.



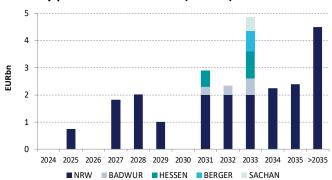
New issuance volume at record level in 2023 - EUR 0m so far in 2024

Since the first sustainability bond was issued by North Rhine-Westphalia in 2015, this segment has enjoyed continually growing popularity, with additional bonds placed on an annual basis. In 2021, the Laender Hesse (EUR 600m) and Baden-Wuerttemberg (EUR 300m) each issued a green bond. In May 2022, it was once again Baden-Wuerttemberg that took centre stage by placing another green bond (EUR 350m) and offered the prospect of further green issues. In late 2022 and mid-2023, Berlin (EUR 750m) and Saxony-Anhalt (EUR 500m) first launched their frameworks and then issued fresh benchmark bonds. In addition, after offering two sub-benchmark deals in the previous two years, BADWUR then also succeeded in issuing its first green benchmark in June 2023. The aggregated volume of ESG bonds issued by the German Laender in 2023 came to a record EUR 4.9bn. As such, the total volume of ESG bonds issued by the German Laender currently stands at an unchanged level of EUR 26.4bn, as no ESG bonds have been placed so far in 2024, with the majority of this volume attributable to sustainability bonds from NRW. With efforts to invest more in environmental and social areas, we anticipate that further Laender will opt to issue ESG bonds.

ESG volume issued over time (EURbn)

5 4 9 2 1 0 2016 2017 2018 2019 2020 2021 2022 2023 2024 ■ NRW ■ BADWUR ■ HESSEN ■ BERGER ■ SACHAN

Maturity profile of ESG bonds (EURbn)



Source: Bloomberg, NORD/LB Floor Research

NRW offering long maturities

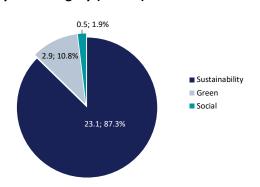
In terms of the maturity profile of the ESG bonds issued by the German Laender, there is already quite a wide range of different maturities. NRW is unsurprisingly setting the pace in this regard, with the original maturities of the bonds issued ranging from seven years (issued in 2016, before subsequently falling due in 2023) to 30 years (issued in 2022; maturing in 2052). However, the 10y maturity segment has dominated activities in this segment up to now. Baden-Wuerttemberg, Hesse, Berlin and Saxony-Anhalt all also opted for this maturity segment for their inaugural ESG deals.

Data situation: as expected, sustainability ahead of green

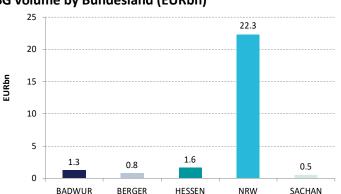
Due to the early participation of North Rhine-Westphalia in the ESG market in the form of sustainability bonds, it is hardly surprising that this form of ESG bond boasts by far the largest volume to date (EUR 23.1bn; 87.3%). However, the four green bonds issued since 2021 (purely social bonds were only added by SACHAN in 2023) are in all likelihood merely the beginning of the story in this context. The volume of EUR 2.9bn issued here so far represents only around 10.8% of the total volume. The initial lack of social bonds is perhaps misleading. After all, given that NRW and Berlin issue sustainability bonds, social aspects are also included in the use of proceeds here. For example, the bond issued by North Rhine-Westphalia in 2022 covered aspects such as affordable local public transport and the promotion of affordable housing.



Volume by ESG category (EURbn)



ESG volume by Bundesland (EURbn)



Source: Bloomberg, NORD/LB Floor Research

Frameworks - similarities and differences (I)

The issuers' frameworks all comply with the ICMA Principles. As already mentioned, the Laender of BADWUR and HESSEN (to use their tickers) have issued green bonds and published corresponding green bond frameworks in addition to having had them assessed by a second party opinion; NRW has been through the same process with its Sustainable Bond Framework. The content is therefore geared towards the four ICMA pillars, namely use of proceeds, process of project evaluation and selection, management of proceeds and annual reporting. While HESSEN and BADWUR have a corresponding focus on green finance, NRW can act more flexibly between social and environmental aspects with regard to the use of proceeds. This is also reflected in the project selection to date. Broken down into the categories of the ICMA's Green Bond Principles, for example, the majority of Hesse's green bond proceeds went towards "clean transport" (46%), followed by "environmentally sustainable management of living natural resources and land use" (29%). Meanwhile, a total of 14% was allocated to the category of "energy efficiency". A similar distribution of the use of proceeds can also be seen in Baden-Wuerttemberg, with the highest proportion (22%) attributable to the category "energy efficiency", followed by 18% to "environmentally sustainable management of living natural resources and land use". In addition, "green buildings" account for a share of 17% and "clean transport" for 13%. Conversely, with its framework, NRW follows six categories of the Social Bond Principles and eight categories of the Green Bond Principles. Whereas pre-COVID-19 it was mainly green aspects that still played a part in the use of proceeds, NRW has increasingly concentrated on social projects as part of its pandemic response. For example, 47% of the (most recent) sustainability bond No. 10 was used to finance the category "access to basic social services". The total share of green categories in the last issue came in at just under 17%. At the end of 2022, Berlin became the fourth federal state to present its foundation for the issuance of ESG bonds in the form of its Sustainability Bond Framework. From now on, it intends to appear on the capital market as a regular issuer of sustainable bonds. Accordingly, these can be issued as sustainability bonds with a focus on green and/or social aspects. The suitability assessment and final selection of suitable green and social projects for sustainable financing is the responsibility of the Sustainable Financing Coordination Group. With regard to reporting, the federal capital undertakes to provide separate information on the use of funds and the sustainability impact in the form of an allocation and impact report. The former is to be published within one year of the respective bond issue and published annually from the year following the issue until the issue proceeds have been fully allocated. The impact report is also to be published 12 months after the bond placement at the latest.



Frameworks – similarities and differences (II)

From mid-2023 onwards, Saxony-Anhalt launched activities in the field of social bonds via a corresponding <u>Social Bond Framework</u>. The federal state emphasises that the issue proceeds will be used for social projects related to combating the effects of the COVID-19 pandemic and future pandemic resilience. These include improved access to basic social services, job creation and unemployment prevention programmes, as well as the development of affordable basic infrastructure. Accordingly, a significant part of the expenditure underlying the framework comes from the special COVID-19 fund from 15 December 2021. The 60 individual projects already included in it – divided into individual years – trigger payment flows within five years until 2027. Reporting on payment outflows as well as the respective status of projects is the responsibility of the Landtag (regional parliament) of Saxony-Anhalt.

Comment

Despite the increasing volume in recent years, which led to a record level in 2023, we still believe that there remains significant additional untapped growth potential in the ESG segments of the German Laender. In this way, what was once a niche product with bonds solely from NRW has ultimately been transformed into an established sub-market with many players. Critical to this development is the ever-increasing need for financing, due, among other aspects, to amendments to the energy transition and climate protection laws of the individual Laender. The ICMA principles provide solid guidelines containing core recommendations. Furthermore, the entering into force of the EU Green Bond Standard (cf. NORD/LB Fixed Income Special – ESG Update 2024) could breathe fresh life into the segment. External audits also safeguard the use of proceeds with constant monitoring processes in place. The simple fact alone that only five of the 16 German Laender have a corresponding framework in place unequivocally underlines the inherent catch-up potential for the vast majority of the Laender.



An overview of the German Laender

Laender characterised by high degree of heterogeneity – spread convergence could be reversed due to terminated purchase programmes

The German Laender are characterised by a high degree of heterogeneity. Differences between the German Laender exist not only in terms of area, number of inhabitants and economic strength; they also differ significantly with regard to factors such as debt situation, focus on exports and demographic trends. In addition, the liquidity of German Laender bonds and their ratings result in differences, although these are at most reflected marginally due to the very minor deviations in spreads. In the past, this spread convergence was intensified or perhaps even actually manifested by way of the ECB's focus on bonds issued by German Laender within the framework of its securities purchases (e.g. under the APP and PEPP). Net purchasing activity has now been brought to an end both in this context and in connection with APP reinvestments, meaning that the fundamental differences between the Laender will gradually start to become more important again. In the discussion below, we will initially look at the overall development of the Laender, before focusing on differences between them.

Broad range of products

The 16 German Laender offer a broad range of bonds and Schuldscheindarlehen (SSD). At present, an outstanding volume of EUR 412.7bn is spread across 818 separate bond deals. Only EUR 12.1bn (2.9%) of this amount is not denominated in EUR, which serves to illustrate the fact that foreign currencies remain of minor importance in Laender funding mixes. Fixed-coupon bonds (outstanding volume: EUR 368.2bn) and floating rate notes (EUR 29.4bn; FRNs) dominate the Laender funding profiles. Overall, 381 EUR-denominated bonds feature a volume of at least EUR 500m and can therefore be classified as benchmark bonds. In the non-public segment, loans and Kassenkredite together account for a volume of EUR 140bn (core households). The data also includes a total of 15 Laender jumbos (EUR 16.0bn) jointly placed by a group of several Laender.

General information

Total debt*

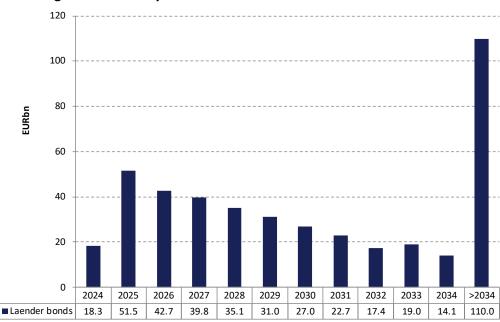
EUR 548.4bn

Of which bonds**

EUR 412.7bn

- * As reported at year-end 2023
- ** Data retrieved on 12 August 2024

Outstanding bonds issued by the German Laender



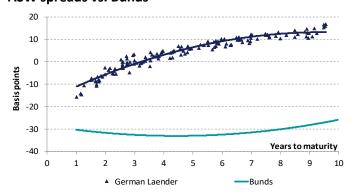
Foreign currencies are converted into EUR at rates as at 12 August 2024. Source: Bloomberg, NORD/LB Floor Research



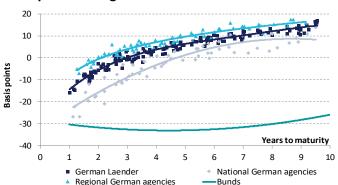
Ratings

The rating agencies Fitch, Moody's and S&P link their ratings for each of the German Laender with the rating of the German federal government (for the most part). Fitch regards the system of financial equalisation and the principle of federal loyalty in general as the dominant factors in equating the ratings directly. Moody's also views this system as a significant factor, although the agency does take other aspects into consideration, with the result that the ratings are not necessarily equated. The federal state of NRW, for example, is currently rated Aa1, which is one notch below the Aaa top rating held by the German federal government. S&P makes an even wider distinction. Although this rating agency does also factor in the system of financial equalisation among the German Laender and the principle of federal loyalty to its rating decision, it occasionally diverges more widely from the AAA rating held by the German federal government. In this context, for example, S&P currently awards NRW a rating of AA (for the first time since 2004) following a rating upgrade in September 2019.

ASW spreads vs. Bunds



ASW spreads vs. agencies



NB: Residual term to maturity >1 year and <10 years; minimum outstanding volume of EUR 500m.

National agencies: KFW, RENTEN, among others. Regional agencies: NRWBK, LBANK, BAYLAN, IBB, BYLABO, WIBANK, among others. Source: Bloomberg, NORD/LB Floor Research

Relative value

Volume-weighting of the German Laender in the iBoxx € Regions 75.5%

No. of German bonds in iBoxx € Regions

153 (out of 203) [75.4%]

Pick-up versus swaps*

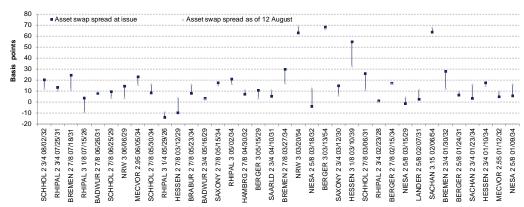
-13 to +19bp (Median: +5bp)

Pick-up versus Bunds*

+4 to +46bp (Median: +31bp)

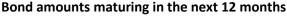
 $\mbox{*}$ vs. interpolated figures; minimum term of 1 year; minimum volume EUR 0.5bn.

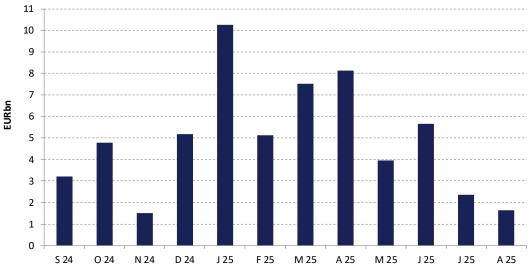
Performance of fixed income benchmark issues 2024**



^{**} Issuance volume of at least EUR 0.5bn. Bonds are not necessarily liquid. Source: Bloomberg, NORD/LB Floor Research







Source: Laender, Bloomberg, NORD/LB Floor Research

Refinancing

Although Laender issuance volumes have been declining for many years, they have none-theless remained at a high level. Prior to the COVID-19 pandemic, the recently introduced debt brake was a major factor in this development. After the period between 2020 and 2022, significant refinancing volumes and gross credit authorisations were again expected for 2023 as well. The most important funding instruments are bonds and SSD deals, while public-sector bonds in benchmark format are used just as frequently as large-volume private placements. As a result, there is a relatively abundant fresh supply of large-volume bonds. After credit authorisations rose from around EUR 70bn to approximately EUR 154bn in 2020 on the back of supplementary budgets, these authorisations fell to EUR 119bn in 2021 and EUR 91bn in 2022. For 2024, a sum of EUR 91.9bn has been announced. As such, credit authorisations remain at an elevated level (2019: EUR 67bn).

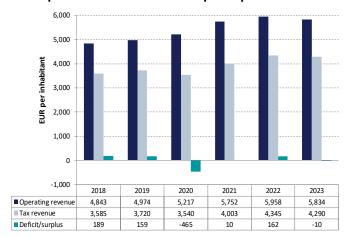
Credit authorisations of German Laender in 2024 (EURbn)*

	Net	Gross
Baden-Wuerttemberg	-0.19	32.36
Bavaria	-0.05	1.94
Berlin	0.38	8.43
Brandenburg	1.00	3.11
Bremen	0.00	2.65
Hamburg	0.20	2.30
Hesse	0.00	5.91
Mecklenburg-Western Pomerania	0.00	2.00
Lower Saxony	-0.12	7.06
North Rhine-Westphalia	-3.04	10.10
Rhineland-Palatinate	0.05	4.30
Saarland	0.00	1.50
Saxony	0.00	0.24
Saxony-Anhalt	0.00	2.10
Schleswig-Holstein	1.65	6.94
Thuringia	-0.16	1.00
Total	-0.28	91.94

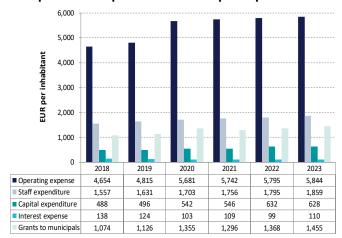
^{*}Some figures are rounded and/or provisional; as at: 12 August 2024; unchanged values from 12 July 2024 Source: Bloomberg, NORD/LB Floor Research



Development of revenue in EUR per capita



Development of expenditure in EUR per capita



Source: Federal Ministry of Finance, NORD/LB Floor Research

Budget figures 2023

Balance (vs. 2022)

EUR -0.9bn (EUR -14.6bn)

Balance / GDP (2022)

-0.02% (0.35%)

Balance per capita (2022)

EUR -10 (EUR 162)

Tax revenue (vs. 2022)

EUR 362.8bn (EUR -3.7bn)

Taxes per capita (2022)

EUR 4,290 (EUR 4,345)

Taxes / interest paid (2022)

38.9x (43.8x)

Total revenue / interest paid (2022)

52.9x (60.1x)

Debt level (vs. 2022)

EUR 548.4bn (EUR -14.6bn)

Debt / GDP (2022)

13.3% (14.6%)

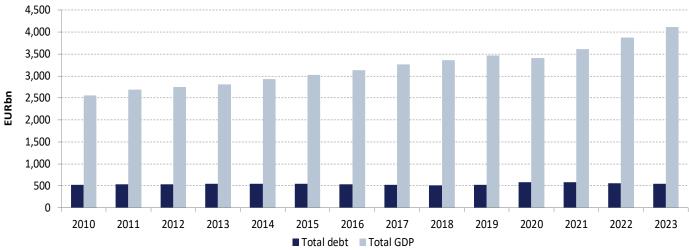
Debt / revenue (2022)

1.1x (1.1x)

Although the budgetary development of the Laender had, generally speaking, been very positive in the years prior to COVID-19, the pandemic brought this trend to an abrupt halt in 2020. However, the German Laender were again in a position to post a positive budget balance of EUR 0.8bn as early as 2021, before rising again significantly in 2022 (EUR 13.7bn). This upward trajectory could not, however, be continued in 2023: the budget balance fell by EUR -14.6bn to EUR -0.9bn. This can be attributed to the increase in overall expenditure, in particular the rise in interest expenses, with tax revenues falling at the same time. The rise in total expenditure amounting to EUR +5.4bn to EUR 494.3bn was accompanied by a more pronounced decline in total revenues of EUR -9.2bn to EUR 493.4bn. As such, the positive development seen in recent years was interrupted for the time being in 2023. Over the past five years, total expenditure has risen by +27.9% (2022: 32.0%), while total revenues have grown by just +22.7% (2022: 32.0%) across the same time frame. Grants to municipalities, which were already up last year, increased again by EUR +7.6bn to stand at EUR 123.0bn. Moreover, personnel expenses also rose by EUR +5.9bn year on year to total EUR 157.3bn. As a result, personnel expenses have now increased by +21.6% overall in the past five years. Based on the increased interest expenses (EUR +1.1bn) in tandem with falling revenues, the ratio of total revenue to interest paid declined from 60.1x in 2022 to 52.9x in 2023. The negative development in tax receipts in addition to the rise in interest expenses also led to a fall in the ratio of taxes to interest paid following the record high seen last year (2023: 38.9x; 2022: 43.8x). The rising trend of recent years in relation to capital expenditure also came to a halt. Following a sharp rise to EUR 53.3bn in 2022, these expenses fell by EUR -0.2bn to EUR 53.1bn in 2023. While it was a mixed picture on the key credit metric front at both German Laender and Bund level in 2020 due to the pandemic, a recovery started to set in during 2021. However, in 2023, it was not possible to build upon the record values for interest coverage and total revenues seen in 2022. Nevertheless, debt sustainability (reflecting the ratio of debt to total revenues) was maintained at a level of 1.1x (2022: 1.1x), while the ratio of debt to GDP developed in positive fashion. This metric declined from 14.6% in 2022 to 13.3% last year. This ratio has continually declined since 2021.





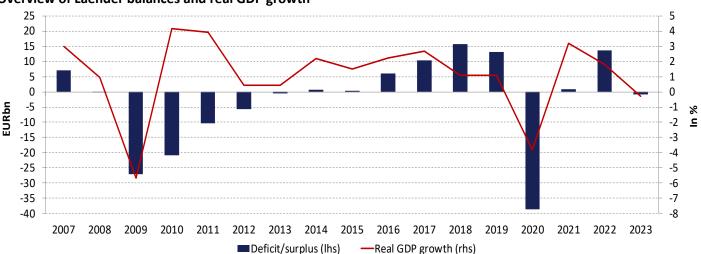


Source: Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Further decline in Laender debt in 2023

While the overall debt level of the German Laender rose on a constant basis over previous years, from 2014 onwards, the debt trend stabilised, before falling again in both 2017 and 2018. Due to the introduction of the debt brake at the start of 2020, however, the majority of the Laender took the opportunity to assume fresh debt again during the 2019 budget year. In 2020, growth in debt continued owing to the COVID-19 pandemic, eventually reaching a peak value of EUR 581.0bn in the 2021 budget year. In the following two years, liabilities then fell again. In 2023, the aggregated debt level totalled EUR 548.4bn, which reflects a further decline of -2.6% versus the prior year. Gross credit authorisations were initially supposed to total roughly EUR 70bn in 2020, although the actual value eventually came in at EUR 154bn. The reason for this was several supplementary budgets implemented in an attempt to deal with the additional financial expenditure incurred on account of the COVID-19 pandemic. For 2024, the Laender are currently planning credit authorisations totalling EUR 91.9bn. This represents stagnation at a high level, after credit authorisations came in as high as EUR 119.4bn in 2021. This is another indicator that the economic consequences of the pandemic are, slowly but surely, continuing to ebb away.

Overview of Laender balances and real GDP growth



Source: Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research



Budget balances decline sharply

The aggregated budget balances of the German Laender have followed a significantly positive trend since 2010. Although a deficit of EUR -20.8bn was posted in 2010, deficits have subsequently fallen on an almost constant basis. A sea change came about in 2014, before what is by far the largest surplus in recent years was recorded in 2018 (EUR +15.7bn). This was closely followed by the budget balance recorded in 2019 (EUR +13.2bn). The positive trend seen over recent years was not continued into 2020, again owing to the pandemic. In fact, the largest deficit in recent years was recorded in 2020, at EUR -38.6bn. The primary drivers of this development were falling tax revenues (-4.9% on average across Germany) and a rise in expenditures (+18.9% on average across Germany). In 2021, this development was turned on its head: through a sharp rise in tax revenues (+13.2%) and only a marginal rise in expenditure (+1.2%), a positive budget balance of EUR +0.8bn was recorded. However, it was not possible to sustain this trend in 2023: the aggregated budget balance of the Laender fell by EUR -14.6bn to total EUR -0.9bn overall.

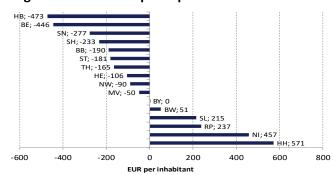
Overview of the German Laender 2023

	Adjusted revenue (EURbn)	Adjusted expenditure (EURbn)	Balance (EURbn)	Debt level (EURbn)	GDP (EURbn)	Debt / GDP (in %)	Balance / GDP (in %)
BW	61.9	61.3	0.6	30.5	615.1	5.0	0.1
ВҮ	70.9	70.9	0.0	17.2	768.5	2.2	0.0
BE	35.5	37.2	-1.7	58.9	193.2	30.5	-0.9
ВВ	15.6	16.1	-0.5	18.3	97.5	18.8	-0.5
НВ	7.4	7.7	-0.3	22.6	39.3	57.6	-0.8
НН	20.2	19.2	1.1	22.6	150.6	15.0	0.7
HE	34.1	34.8	-0.7	41.0	351.1	11.7	-0.2
MV	10.6	10.7	-0.1	7.2	59.2	12.1	-0.1
NI	44.1	40.4	3.7	56.4	363.1	15.5	1.0
NW	99.7	101.4	-1.6	163.0	839.1	19.4	-0.2
RP	22.2	21.2	1.0	26.5	174.3	15.2	0.6
SL	6.0	5.8	0.2	12.2	41.4	29.5	0.5
SN	22.7	23.8	-1.1	3.6	156.0	2.1	-0.7
ST	12.7	13.1	-0.4	22.0	78.4	28.0	-0.5
SH	17.4	18.1	-0.7	31.5	118.7	26.6	-0.6
TH	12.4	12.7	-0.3	15.1	76.0	19.8	-0.5
Total	493.4	494.3	-0.9	548.4	4,121.2	13.3	0.0

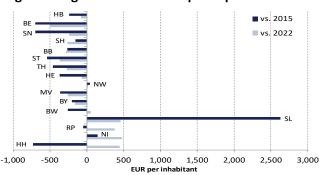
BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: National accounts produced by the Laender, Federal Statistical Office, NORD/LB Floor Research



Budget balance in EUR per capita



Change in budget balance in EUR per capita

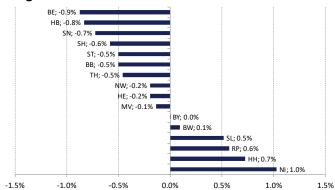


BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: Federal Ministry of Finance, NORD/LB Floor Research

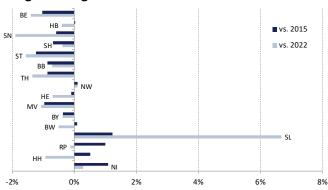
Negative trend in German Laender budget balances

The positive trend seen in recent years could not be sustained in 2023. The budget balance per capita declined to EUR -10 (2022: EUR 162). As such, this metric featured a minus sign before the figure for the first time since 2020. The deterioration was notably strong in Hamburg, where a particularly sharp decline versus 2022 was registered. Nevertheless, as in the previous year, the Hanseatic City was still able to post the largest budget surplus per capita. In contrast, Lower Saxony recorded the highest growth. The balance per capita here rose to EUR 457 (2022: EUR 312). Other Laender that saw an improvement in this value year on year include North Rhine-Westphalia and Saarland. With a cash surplus of EUR 3.7bn, it was again Lower Saxony that was responsible for generating the highest budget balance in absolute terms. However, if we contextualise this figure in relation to its population, Lower Saxony claims second place in a comparison of all German Laender.

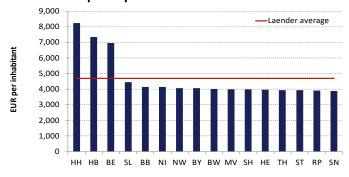
Budget balance as a % of GDP



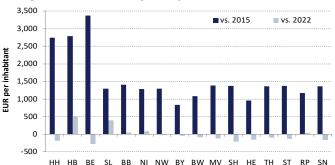
Change in budget balance as a % GDP



Taxes in EUR per capita



Change in taxes in EUR per capita



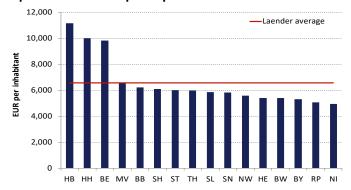
BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: Federal Ministry of Finance, NORD/LB Floor Research



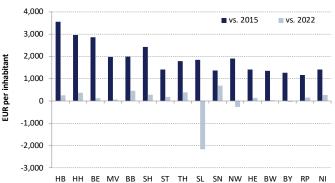
City states with highest tax revenue per capita

In terms of tax revenues per capita, the city states of Bremen, Berlin and above all Hamburg traditionally stand out, with all three generating above-average tax revenues in relation to their number of inhabitants. This trend was continued in 2023, with Hamburg again topping the charts for this metric. The strongest growth in percentage terms was achieved by Saarland (+9.8%), followed by Bremen (+7.4%). Brandenburg, Lower Saxony and Rhineland-Palatinate were among the other sub-sovereigns that posted an improvement in their tax revenues per capita.

Expenditure in EUR per capita



Change in expenditure in EUR per capita

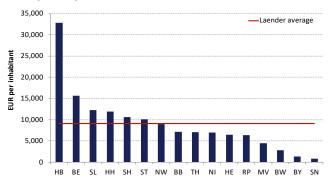


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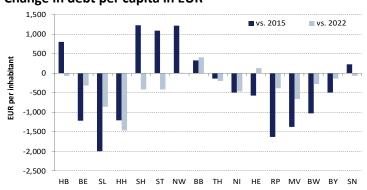
Lower Saxony again records lowest expenditure per capita

The city states also traditionally post the largest outflows in terms of per capita expenditure levels. As a result, Bremen tops the table for this particular category, with the Hanseatic City spending a sum of EUR 11,155 per capita in 2023. At the other end of the scale, in a repeat of both 2021 and 2022, Lower Saxony again posted the lowest expenditure per capita. The largest rise in per capita expenditure was recorded by the Free State of Saxony at EUR +13.4%. As a result, Saxony's expenditure per capita for 2023 amounts to EUR 5,826, which positions the Free State in lower mid-table in a comparison of the German Laender. Saarland recorded the sharpest decline in per capita expenditure: in comparison with the previous year, the value here fell by EUR -27.1%. In this respect, the East German non-city states (aggregated EUR 6,063) again have higher expenditure levels per capita than West German non-city states (aggregated EUR 5,395), whereby the trend towards a convergence in expenditure values has been interrupted for the time being.

Debt per capita in EUR



Change in debt per capita in EUR



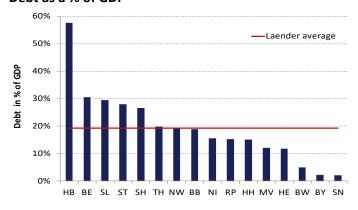
BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: Federal Ministry of Finance, NORD/LB Floor Research



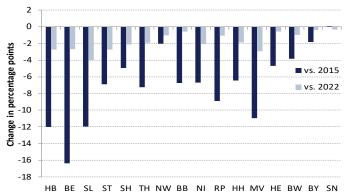
Highest debt per capita in city states and Saarland

For years now, the city states as well as the Saarland have had the highest level of per capita debt. Bremen's historically weak budget performances have exacerbated this development. Having already posted substantial growth in debt per capita in 2019 and 2020, Bremen's aggregated decline in this metric (now EUR -24,600) since 2021 in unprecedented in a German Laender comparison. In this context, Bremen reduced its debt per capita by EUR -20,000 in 2022 alone. Taking the 16 German Laender as a whole, only Brandenburg, Hesse and North Rhine-Westphalia failed to reduce their debt levels in per capita terms in 2023. With a reduction of EUR -1,466, Hamburg recorded the sharpest decline in per capita debt.

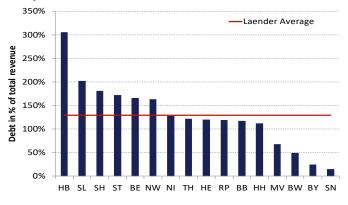
Debt as a % of GDP



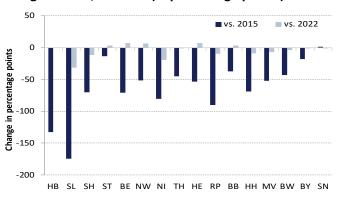
Change in debt as % of GDP (in percentage points)



Debt/revenue



Change in debt/revenue (in percentage points)



BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Constant debt / revenue ratio

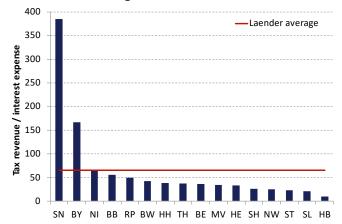
The ratio of debt to revenue also reveals major differences between the German Laender. In 2023, no reduction in this metric was recorded in five sub-sovereigns: Berlin, Brandenburg, Hesse, North Rhine-Westphalia, and Saxony-Anhalt. The reason for this is that in 2023 revenues at Laender level fell for the first time since the pandemic year of 2020. Compared with the previous year, Saarland, Lower Saxony and Schleswig-Holstein achieved the greatest reduction in their respective debt-revenue ratios.



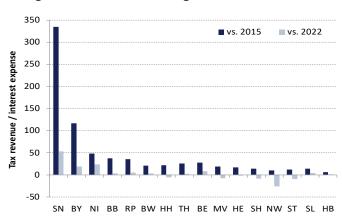
Rising trend across Germany for interest coverage

Despite the marginal rise in interest expenses and reduction in tax revenues on the part of the German Laender in 2023, the majority of the Laender recorded an improvement in their tax-interest coverage. No improvement in this metric was recorded in 2023 by Hamburg, Hesse, Mecklenburg-Western Pomerania, North Rhine-Westphalia, Saxony-Anhalt and Schleswig-Holstein. However, since these sub-sovereigns are in mid-table in a national comparison and the declines were in any case minimal, this can be regarded as more of a side note to the main headline. Once again, the Free States of Saxony and Bavaria achieved by far the best values in this regard.

Tax-interest coverage



Change in tax-interest coverage



BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia. Source: Federal Ministry of Finance, NORD/LB Floor Research

Comment

The German Laender segment continues to represent the most important sub-market for sub-sovereign issuers in Europe and even the world. A steady supply of fresh bonds ensures that the market offers a relatively diverse range of products. The positive development in German Laender finances has largely continued. For example, key credit metrics have improved, in some cases outperforming the equivalent values from the last pre-crisis year of 2019. However, the heterogeneity of this market segment has nevertheless remained at a high level. Balances, tax revenue, debt and a number of key credit metrics reveal differences between the sub-sovereigns, which are actually quite considerable in some cases. Despite the strong progress that has been made, the German Laender of Bremen and Saarland in particular are under pressure due to their high levels of debt. Overall, however, an improvement in the creditworthiness of the Laender can be reported. Nevertheless, it should not be overlooked that the former market environment helped to conceal fundamental differences. In this context, the purchase programmes of the Eurosystem (PSPP and PEPP) suppressed both spreads and yields. The huge economic breakdown triggered by the COVID-19 crisis in 2020 precipitated a decline in revenue streams and growth in new debt on the part of the German Laender. Signs of recovery initially looked to be on the cards for 2022, although rising energy prices due to Russia's war of aggression in Ukraine subsequently posed a major challenge as the year went on. This was then accompanied by additional geopolitical tensions over the course of 2023. In addition, the ECB increased key rates by 425 basis points within the space of 12 months. As a result, the interest burden intensified, and it stayed that way in 2023. As a result, increased heterogeneity between the German Laender in 2023 hardly comes as a surprise.





Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

11,339,260

State capital

Stuttgart

Government

Greens/CDU

Minister-President

Winfried Kretschmann (Greens)

Expected next election date

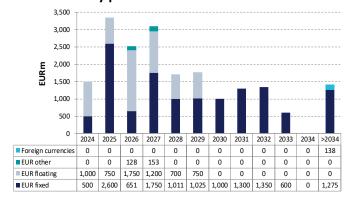
Spring 2026

Ratings	Long-term	Outlook	
Fitch	-	-	
Moody's	Aaa	Stab	
S&P	AA+	Pos	

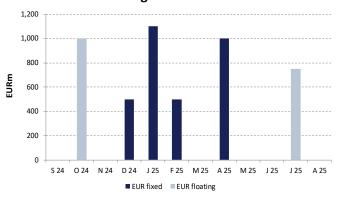
Baden-Wuerttemberg

Covering a total area of 35,748km² and with a population of 11.3m inhabitants, Baden-Wuerttemberg is the third largest German federal state in terms of both size and population. Historically, the present-day sub-sovereign was formed in 1951 from the regions of Wuerttemberg-Baden, Wuerttemberg-Hohenzollern and Baden by the Allied Powers in the wake of the Second World War, with Stuttgart designated as the state capital. As the sixthlargest city in Germany, Stuttgart is also the most important economic hub in Baden-Wuerttemberg. Germany owes much of its reputation as a world-renowned, innovative export nation to the federal state of Baden-Wuerttemberg. For example, major industrial firms such as the Mercedes-Benz Group, Porsche and Bosch are located in and around the Stuttgart area. In order to retain and continue attracting internationally renowned and established companies in future, the sub-sovereign has been supporting entrepreneurs and start-ups via the startup bw programme since 2017. The promotional organisation THE Start-up LÄND offers financial support in addition to consulting, support, networking events and international competitions. Patent applications constitute one indicator for the success of this programme: in 2023, just under 14,600 applications were submitted in Baden-Wuerttemberg, more than in any other of the German Laender. The picture is underlined by a total of 77,800 new business start-ups in 2023, which reflects a growth rate of +4.3% in comparison with 2022. Compared with the previous year, the number of newly founded small businesses in particular recorded growth of +21.5% to around 17,700. In addition to its high-tech industries, Baden-Wuerttemberg is also a popular holiday destination, with tourists flocking in their droves to visit the Black Forest and Lake Constance as well as to the famous vineyards of the "Allgäu region". Moreover, four of Germany's eleven elite-level universities are located in Baden-Wuerttemberg (Heidelberg, Karlsruhe, Konstanz and Tübingen), serving to underline the region's research strength even more. Since 2021, the federal state has been issuing green bonds as well, and looks set to build up an ESG curve in the future.

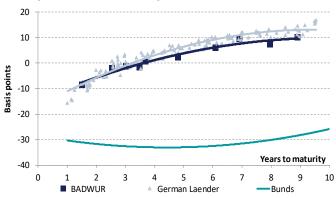
Overall maturity profile



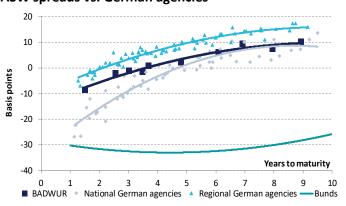
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies



NB: Foreign currencies are converted into EUR at rates as at 12 August 2024; residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn. Source: Bloomberg, NORD/LB Floor Research



Capital market

Debt level* (ranking**)

EUR 30.5bn (11th)

Outstanding bonds

EUR 19.6bn

ESG volume

EUR 1.3bn

Bloomberg ticker

BADWUR

* As reported at the end of the previous year.

Economy 2023

GDP (ranking)

EUR 615.1bn (3rd)

GDP per capita (ranking)

EUR 54,339 (5th)

Real GDP growth (ranking)

-0.6% (8th)

Unemployment (ranking)

3.9% (2nd)

** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

42.0x (6th)

Total revenue/interest paid (ranking)

57.0x (6th)

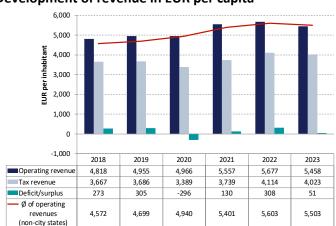
Debt/GDP (ranking)

5.0% (3rd)

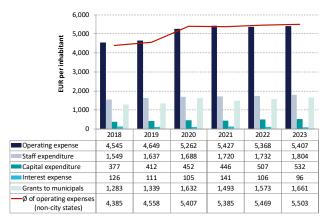
Debt/revenue (ranking)

0.5x (3rd)

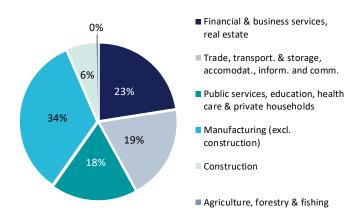
Development of revenue in EUR per capita



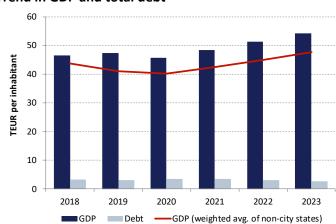
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Debt sustainability and interest coverage
- + Strong, innovative and diversified economy
- + International trade
- + Low unemployment rate

Weaknesses/Risks

- Development of indebtedness
- Dependency on manufacturing sector
- Resource bottlenecks being felt particularly keenly





Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

13,345,062

State capital

Munich

Government

CSU/Free Voters of Bavaria

Minister-President

Markus Söder (CSU)

Expected next election date

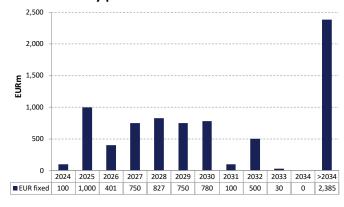
Autumn 2028

Ratings	Long-term	Outlook
Fitch	-	-
Moody's	Aaa	Stab
S&P	AAA	Stab

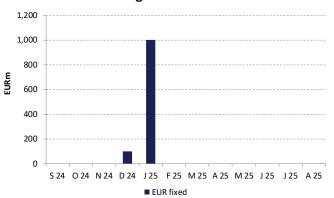
Bavaria

At 70,542km², the Free State of Bavaria is the largest German federal state as measured by area. It has a population of 13.4m inhabitants, with only North Rhine-Westphalia (NRW) exceeding this figure. The Free State of Bavaria has existed in its present form since 01 September 1955, when Lindau was re-integrated into the federal state. Only a handful of other Laender can boast a similarly broad industrial base. Aside from a focus on industry (mechanical and electrical engineering in addition to information and communication technology), the automotive industry is of particular importance. Moreover, in 2023, just under 40% of all patents registered in Germany originated in Bavaria, underlining the innovative capacity of its economy. In this respect, Bayerische Motoren Werke AG (BMW) takes third place in a national comparison with 1,963 patent applications in 2023. In addition, agriculture and tourism are major sectors of the economy as well. No other federal state has a greater area of agricultural land. From a tourism viewpoint, Bavaria is a global brand with an international profile that is reflected in strong visitor numbers. In fact, approximately 21% of all overnight stays in hotels and guest houses in Germany per year are attributable to Bavaria. Since 2019, the Free State has registered a negative external trade balance. In 2023, imports overtook exports by a value of EUR 12.7bn. Bavaria has always made a significant contribution to the economic output of Germany. In 2023, Bavarian GDP amounted to EUR 768.5bn, which corresponds to 18.6% of German economic output as a whole. At 3.4%, unemployment in Bavaria is the lowest across Germany. The Bavarian budget has also been solid for many years now. In this context, Bavaria can claim one of the top spots for all key credit metric rankings in a comparison of the German Laender. Having implemented two supplementary budgets totalling EUR 20bn in order to combat the COVID-19 pandemic, Bavaria is presumably unlikely to achieve its target of continual debt reduction, which it voluntarily set itself many years ago. Nevertheless, the budgetary situation in Bavaria remains exemplary in a German Laender comparison. For many years, the Free State has been by far the most important contributor within the federal financial equalisation system.

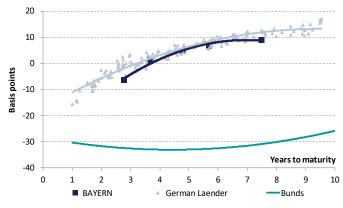
Overall maturity profile



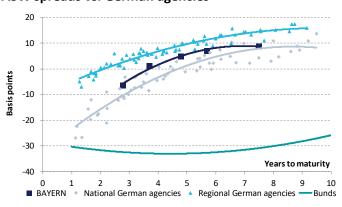
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies



NB: Foreign currencies are converted into EUR at rates as at 12 August 2024; residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn. Source: Bloomberg, NORD/LB Floor Research



Capital market

Debt level* (ranking**)

EUR 17.2bn (5th)

Outstanding bonds

EUR 7.6bn

ESG volume

EUR 0.0bn

Bloomberg ticker

BAYERN

Economy 2023 GDP (ranking)

EUR 768.5bn (2nd)

GDP per capita (ranking)

EUR 57,343 (2nd)

Real GDP growth (ranking)

0.3% (6th)

Unemployment (ranking)

3.4% (1st)

Key figures 2023

Tax-interest coverage (ranking)

166.7x (2nd)

Total revenue/interest paid (ranking)

218.1x (2nd)

Debt/GDP (ranking)

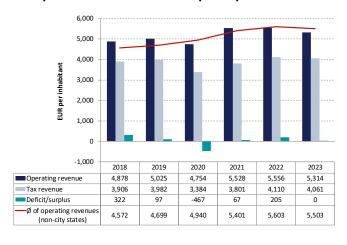
2.2% (2nd)

Debt/revenue (ranking)

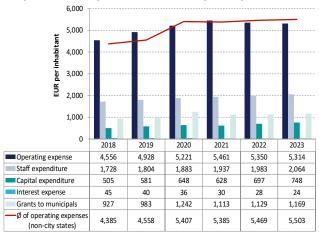
0.2x (2nd)

* As reported at the end of the previous year.

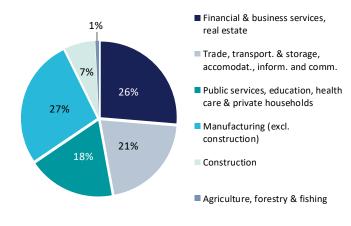
Development of revenue in EUR per capita



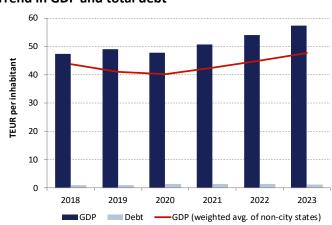
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Debt sustainability and interest coverage
- + Strong, innovative and diversified economy
- + Internationally competitive
- + Low unemployment rate

Weaknesses/Risks

- High level of pension payments and personnel expenses
- Dependency on foreign trade

^{**} Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research





Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2023) 3,782,202

State capital

-

Government

CDU/SPD

Mayor

Expected next election date

Autumn 2026

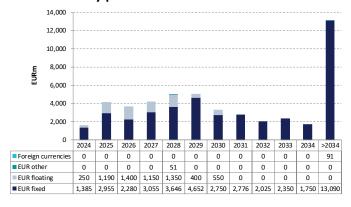
Kai Wegner

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	Aa1	stab
S&P	-	-

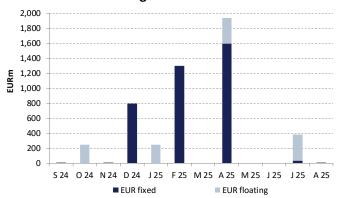
Berlin

With a population of around 3.8m people and covering an area of approximately 891km², the capital city of Germany, Berlin, is the country's most densely populated federal state and one of the largest cities in the European Union (EU) by population. Following reunification in 1990, Berlin was reinstated as the federal capital of unified Germany. The most important institutions of the federal government were then gradually relocated to Berlin, creating many new jobs in the process. One in every four Berliners is a foreign national, with one in three coming from an immigrant background. In total, Berlin is home to people from nearly 190 different countries. Woodland and forests, farms, waterways, allotments, parklands and sports areas account for roughly 44% of the area of Berlin, making it one of the greenest capital cities in Europe. On top of this, Berlin is still aiming to achieve climate neutrality by 2050. The city's proximity to universities and research institutions promotes the influx and investment of companies from sectors including information and communication technology, multimedia, transport technology and environmental engineering, in addition to medtech and biotech firms. In response to the consequences of the COVID-19 pandemic, Berlin launched the "Neustart Wirtschaft" (Economic Reboot) programme in March 2022. This builds upon strategies and measures that were developed and implemented over the course of 2020 and 2021 during the initial recovery phases. Tourism, retail and the creative economy all stand to benefit from this initiative. However, the majority of Berlin's value added is derived from the service sector, accounting for just under 63% of the gross value added generated by the local economy. At the same time, Berlin (alongside London) is also regarded as the start-up powerhouse of Europe. No other cities within Europe have the same standard of infrastructure required by start-ups. In the wake of Brexit, Berlin is expected to see future growth in this key economic segment for the EU. Overall, Berlin generated nearly 4.7% of Germany's total economic output in 2023. After the federal financial equalisation system was reconfigured, Berlin was once again the largest recipient under the terms of Financial Power Equalisation (Finanzkraftausgleich; FKA) in 2023.

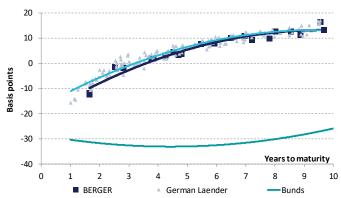
Overall maturity profile



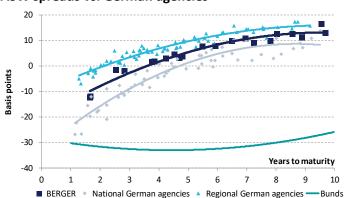
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies



NB: Foreign currencies are converted into EUR at rates as at 12 August 2024; residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn. Source: Bloomberg, NORD/LB Floor Research



Capital market

Debt level* (ranking**)

EUR 58.9bn (15th)

Outstanding bonds

EUR 49.1bn

ESG volume

EUR 0.8bn

Bloomberg ticker

BERGER

Economy 2023 GDP (ranking)

EUR 193.2bn (6th)

GDP per capita (ranking)

EUR 51,209 (6th)

Real GDP growth (ranking)

1.6% (4th)

Unemployment (ranking)

9.1% (15th)

Key figures 2023

Tax-interest coverage (ranking)

35.8x (9th)

Total revenue/interest paid (ranking)

48.2x (10th)

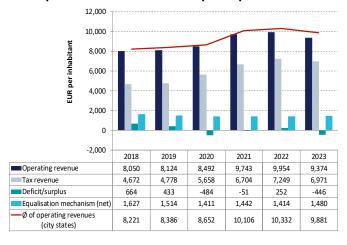
Debt/GDP (ranking)

30.5% (15th)

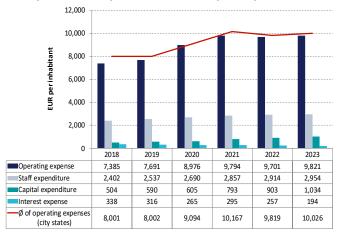
Debt/revenue (ranking)

1.7x (12th)

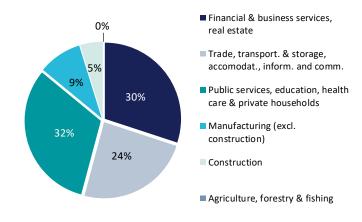
Development of revenue in EUR per capita



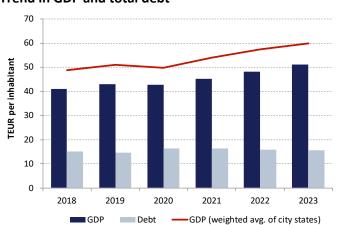
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Solid budgetary development with constant debt
- + Above-average economic growth
- + High-density start-up network

Weaknesses/Risks

- Above-average personnel expenditure
- Above-average unemployment rate
- High interest expenses

^{*} As reported at the end of the previous year.

^{**} Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

2,581,667

State capital

Potsdam

Government

SPD/CDU/Greens

Minister-President

Dietmar Woidke (SPD)

Expected next election date

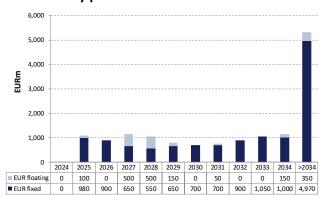
22 September 2024

Ratings	Long-term	Outlook
Fitch	-	-
Moody's	Aaa	stab
S&P	-	-

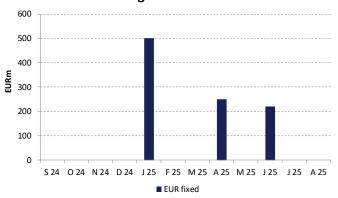
Brandenburg

With an area totalling 29,654km2, Brandenburg is one of the largest German Laender as measured by area. However, with a population of just 2.6m people, it also has the secondlowest population density after Mecklenburg-Western Pomerania. Following the establishment of Brandenburg in its present form on 03 October 1990, a large number of companies settled around the federal state's capital Potsdam, and the federal capital Berlin. These companies firstly benefit from the well-developed infrastructure on offer in the metropolitan region, while secondly Brandenburg is one of Europe's research hotspots, with natural sciences and engineering of key importance in this respect. The automotive manufacturer Tesla commenced operations at its "Gigafactory" some time ago now, with the number of jobs here having now been increased to 12,500. In future, this is set to rise further to 22,500 jobs. Brandenburg is pursuing an innovative economic policy approach with a regional and sectoral focus. For example, synergy potentials are being unlocked in partnership with Berlin on the basis of the joint innovation strategy known as "innoBB 2025". While attempts to merge Brandenburg and Berlin into a single, joint federal state may ultimately have failed in 1996, their close cooperation in the context of the "Berlin/ Brandenburg Metropolitan Region" continues to sustain the close links between the two German Laender. Despite the creation of jobs for skilled workers, demographic development remains a core challenge for Brandenburg. No other federal state has a lower proportion of 15 to 25-year-olds in the overall population. For many years, unemployment in Brandenburg was particularly high in comparison with the rest of Germany. However, targeted support programmes, financed in particular by the European Social Fund (ESF), have succeeded in counteracting this circumstance. In 2023, economic output of EUR 97.5bn, equivalent to around 2.4% of total GDP in Germany, was generated in Brandenburg. Regarding economic growth in real terms, Brandenburg, which is the largest of the Laender that made up the former East Germany, is ranked in a striking second place.

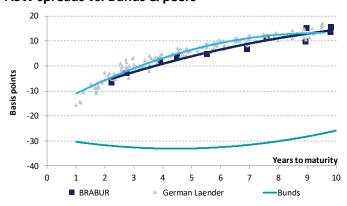
Overall maturity profile



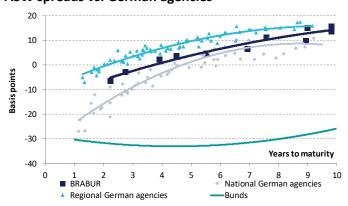
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 18.3bn (6th)

Outstanding bonds

EUR 14.9bn

ESG volume

EUR 0.0bn

Bloomberg ticker

BRABUR

Economy 2023
GDP (ranking)

EUR 97.5bn (11th)

GDP per capita (ranking)

EUR 37,814 (13th)

Real GDP growth (ranking)

2.1% (2nd)

Unemployment (ranking)

5.9% (7th)

Key figures 2023

Tax-interest coverage (ranking)

55.9x (4th)

Total revenue/interest paid (ranking)

81.3x (4th)

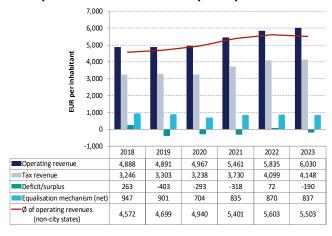
Debt/GDP (ranking)

18.8% (9th)

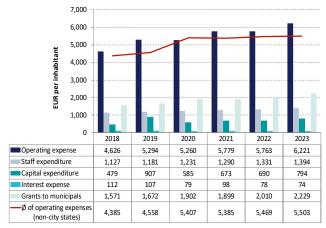
Debt/revenue (ranking)

1.2x (6th)

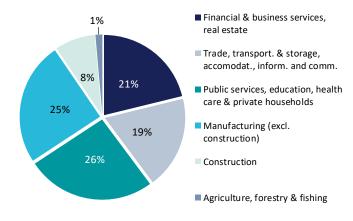
Development of revenue in EUR per capita



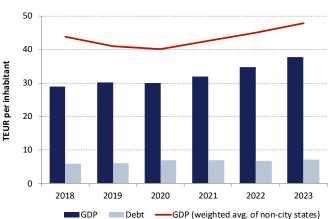
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Solid GDP growth
- + High-level investment in economy and infrastructure
- + Good budget metrics

- Demographic trend
- Below-average GDP per capita

^{*} As reported at the end of the previous year.

** Ranking of the Land among the Laender for the

^{**} Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023) 691,703

State capital

Government

SPD/Greens/Die Linke (the Left Party)

Mayor

Andreas Bovenschulte (SPD)

Expected next election date

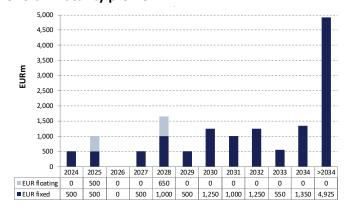
Spring 2027

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

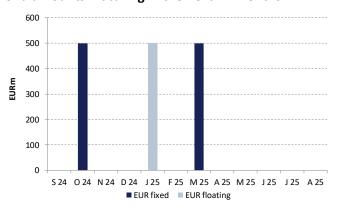
Bremen

With a population of 692,000 inhabitants and covering an area of 420km², the city state of Bremen, which actually comprises the two cities of Bremen and Bremerhaven, has the smallest population of all 16 German Laender. Although Bremen has a long tradition of self-determination, ultimately it was due to the logistical interests of the USA that the actual Allied Power in this area (the United Kingdom) entrusted this part of the territory it occupied in the north of Germany to the Americans. Today, Bremen's port remains the second most important in Germany in economic terms, after Hamburg. Bremen's special status paved the way to its recognition as an independent sub-sovereign in 1947. Trade, transport and the hospitality industry are the mainstays of Bremen's economy. The automotive industry, as well as the aviation and aerospace technology sector, are also major employers in Germany's smallest federal state. Bremen Technology Park, one of the largest of its kind in Germany, offers a breeding ground for these economic sectors. Bremen plays a leading role within the food industry. By contrast, the ship and steel industry has been undergoing a structural transformation over recent decades and, as a result, now only plays a subordinate role. In 2023, the GDP of Bremen amounted to EUR 39.3bn, which equates to just under 1.0% of Germany's nationwide economic output. In terms of real economic growth, the Hanseatic City is ranked in mid-table in a comparison of the Laender at -0.6%. Unemployment continues to be a real thorn in the side of Bremen. At 10.6% in 2023, this remained the highest across Germany, while unemployment is also the most common cause for over-indebtedness in the city state. The exclave of Bremerhaven can be considered, in particular, as structurally weak. In comparison with 2020, however, the Hanseatic City has managed to reduce unemployment in recent years. After an impending budget emergency was identified for Bremen back in 2021, the Stability Council renewed its evaluation once again in 2023. In the second half of 2024, a restructuring agreement with Bremen based on updated budget data is set to be presented to the Stability Council.

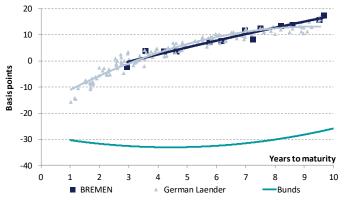
Overall maturity profile



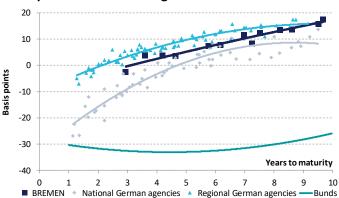
Bond amounts maturing in the next 12 months



ASW spreads vs. Bonds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 22.6bn (8th)

Outstanding bonds

EUR 14.5bn

ESG volume

EUR 0.0bn

Bloomberg ticker

* As reported at the end of the previous year.

BREMEN

GDP (ranking)

EUR 39.3bn (16th)

GDP per capita (ranking)

EUR 56,981 (3rd)

Real GDP growth (ranking)

-0.6% (8th)

Unemployment (ranking)

10.6% (16th)

** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

9.7x (16th)

Total revenue/interest paid (ranking)

14.1x (16th)

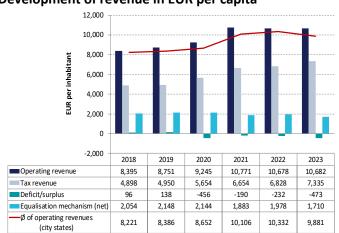
Debt/GDP (ranking)

57.6% (16th)

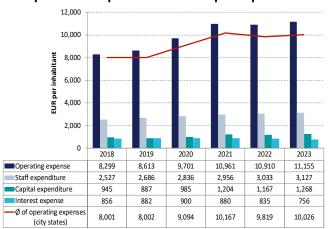
Debt/revenue (ranking)

3.1x (16th)

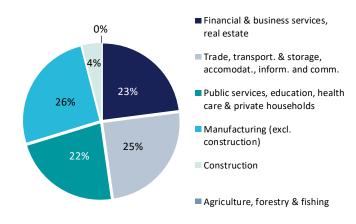
Development of revenue in EUR per capita



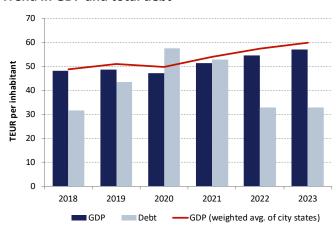
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

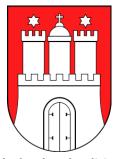
Strengths/Chances

- + Diminishing debt level
- + Strong economic output per capita
- + Comparatively positive initial demographic position

- Low debt sustainability and interest coverage
- High expenditure in relation to population
- Highest unemployment of all Laender

Economy 2023





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023) 1,910,160

State capital

-

Government

SPD/Greens

Minister-President

Peter Tschentscher (SPD)

Expected next election date

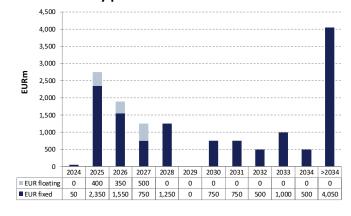
02 March 2025

Long-term	Outlook
AAA	stab
-	-
-	-
	AAA

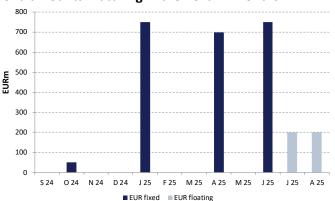
Hamburg

With a population of approximately 1.9m people, the Free and Hanseatic City of Hamburg is Germany's second-largest city after Berlin. Hamburg covers a total area of 755km², producing a population density of 2,455 inhabitants per square kilometre, meaning that it again ranks second only to Berlin in a German Laender comparison for this metric. Hamburg has traditionally valued its sense of political independence and owes its economic importance to the city's port, which is among the largest of its kind in Europe. Across Europe, only the ports of Rotterdam and Antwerp handled a greater volume of container transshipments in 2023. The importance of the economic sectors involving logistics, the port and maritime trade is accordingly high. Approximately 124,000 jobs are directly dependent on the port. As a commercial, transport and services hub within Germany, Hamburg represents one of the country's most important conurbations and boasts excellent transport links. This is also reflected in the composition of Hamburg's GDP: the financial and commercial sector contribute more to the relative gross value added in Hamburg than is the case for any other of the German Laender. Demographic trends in Hamburg are also relatively advantageous. The only other German sub-sovereign with a higher proportion of the overall population aged between 25 and 45 is Berlin, while the proportion of over 65s is the lowest in Germany. This gives rise to a comparatively positive outlook for demographic trends in Hamburg. Alongside the city's internal potential, the international profile of the city has now been promoted for a number of years. However, it is not only the tourism sector that has benefited from this; as its reputation has grown, the Hanseatic city has also become the preferred location for Chinese companies looking to establish a presence in continental Europe. The international profile of Hamburg can be seen in other ways too: for example, 39.3% of the population comes from a migrant background. In addition to the stunning Elbphilharmonie concert hall, Hamburg is also becoming more popular as a location for conferences and trade fairs. In 2023, Hamburg's economy generated 3.7% of Germany's economic output. For years now, Hamburg has generated the highest GDP per capita across all German Laender (2023: EUR 79,176; national average: EUR 48,750).

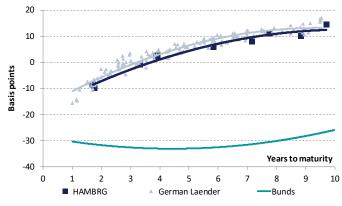
Overall maturity profile



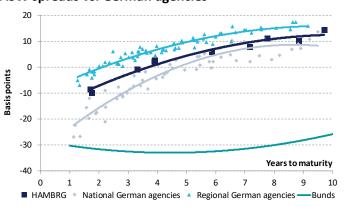
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 22.6bn (9th)

Outstanding bonds

EUR 14.8bn

ESG volume

EUR 0.0bn

Bloomberg ticker

HAMBRG

* As reported at the end of the previous year. ** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.

GDP per capita (ranking)

EUR 79,176 (1st)

Real GDP growth (ranking)

-1.1% (13th)

Unemployment (ranking)

7.4% (12th)

Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

38.4x (7th)

Total revenue/interest paid (ranking)

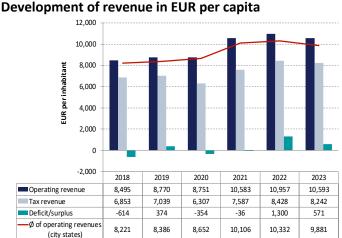
49.3x (9th)

Debt/GDP (ranking)

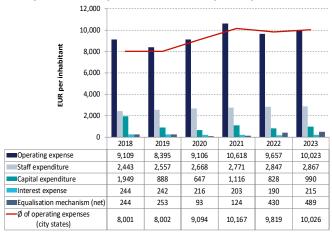
15.0% (6th)

Debt/revenue (ranking)

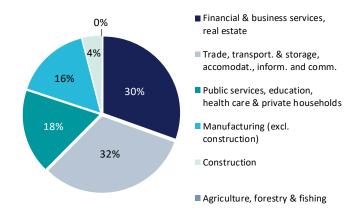
1.1x (5th)



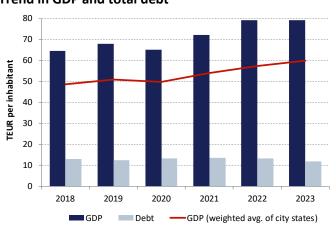
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Economic power in relation to population
- + Prospering foreign trade
- + Comparatively positive demographic indicators
- + High tax revenues in relation to population

- Unemployment is above average
- Debt level in relation to population

Economy 2023 GDP (ranking) EUR 150.6bn (9th)





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

6,420,729

State capital

Wiesbaden

Government CDU/SPD

Minister-President

Boris Rhein (CDU)

Expected next election date

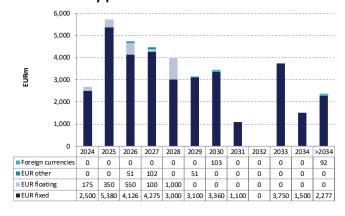
Autumn 2028

Ratings	Long-term	Outlook
Fitch	-	-
Moody's	-	-
S&P	AA+	stab

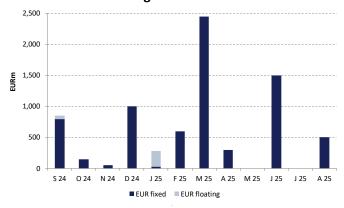
Hesse

With approximately 6.4m inhabitants, the federal state of Hesse is one of the most populous German Laender. Covering an area of 21,116km2, only three other non-city states have a higher population density than Hesse. Its economy is heavily diversified, with manufacturing industries (excluding construction), trade, hospitality and transport, in addition to both public and private service providers, all generating a similarly high level of gross value added respectively. The chemicals, metal processing and automotive industries predominate in northern Hesse. Trading companies, in particular, benefit from Frankfurt Airport's role as one of the most important air traffic hubs in Europe (freight and passenger transport) in conjunction with the highly developed transport infrastructure. The economy is nevertheless dominated by finance, leasing and corporate services. As the largest city in Hesse, the international financial centre of Frankfurt is also a focus of the sub-sovereign's financial sector. It is here that, among other organisations, the European Central Bank (ECB), the European Insurance and Occupational Pensions Authority (EIOPA) and the German stock exchange are headquartered. The importance of this financial hub is potentially set to be increased further as foreign banks and financial services providers (continue to) relocate to Frankfurt in the wake of the United Kingdom's withdrawal from the EU (more commonly known as Brexit). In order to confront global challenges such as global warming, scarcity of resources and the digital transformation, a new innovation programme has been launched to tie in with national and international initiatives such as the European Green Deal, the Sustainable Development Goals (SDGs) of the United Nations and the hightech strategy of the German federal government. The strategy covers aspects ranging from start-up consulting and support for companies in the area of research and development (R&D), all the way through to sourcing IT equipment for schools and universities. Moreover, the innovation programme will outline how a small, yet innovative municipality might be able to cut a significant portion of its greenhouse gas emissions as early as 2024 or to design more resource-efficient and sustainable products on the basis of 3D printing.

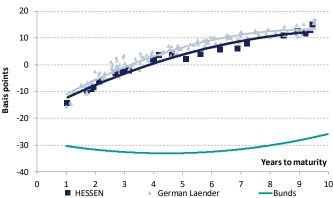
Overall maturity profile



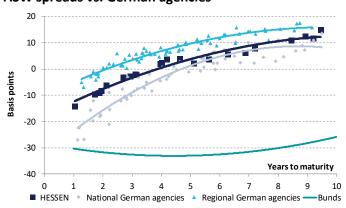
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 41.0bn (13th)

Outstanding bonds

EUR 36.9bn

ESG volume

EUR 1.6bn

Bloomberg ticker

HESSEN

* As reported at the end of the previous year.

GDP (ranking)

EUR 351.1bn (5th)

GDP per capita (ranking)

EUR 54,806 (4th)

Real GDP growth (ranking)

1.2% (5th)

Unemployment (ranking)

5.2% (4th)

** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

33.3x (11th)

Total revenue/interest paid (ranking)

44.4x (11th)

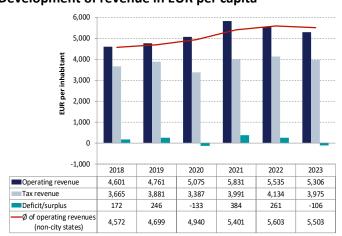
Debt/GDP (ranking)

11.7% (4th)

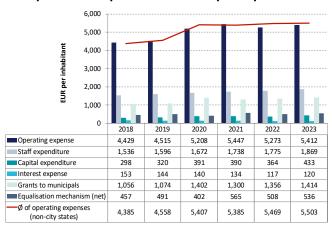
Debt/revenue (ranking)

1.2x (8th)

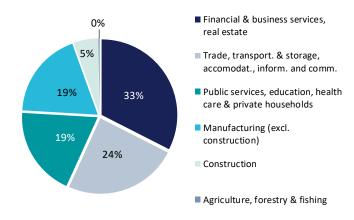
Development of revenue in EUR per capita



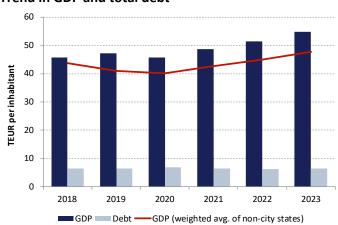
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Solid budget policy has reversed long history of
- + Low unemployment rate

- Below-average investment concentration
- Low interest coverage
- High level of absolute debt

Economy 2023





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

1,629,464

State capital

Schwerin

Government

SPD/Die Linke (the Left Party)

Minister-President

Manuela Schwesig (SPD)

Expected next election date

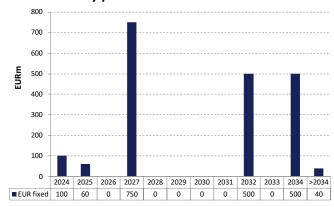
Autumn 2026

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

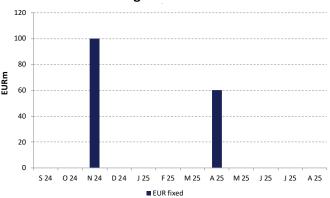
Mecklenburg-Western Pomerania

With a population of 1.6m inhabitants and covering an area of 23,295km², Mecklenburg-Western Pomerania is the most sparsely populated federal state. It has existed in its present form since the reunification of Germany (aside from the cession of Amt Neuhaus back to Lower Saxony in 1993) and is characterised by a large number of islands (794) and Bodden (briny lagoons) along the total length of its Baltic Sea coastline of 1,945km. As a result, tourism plays a vital role in the federal states economy. Tourism intensity in 2023 with around 19,500 overnight stays per 1,000 permanent residents was once again higher in Mecklenburg-Western Pomerania than in any other sub-sovereign. Agriculture, forestry and fishing also play a major role; these industries contribute more as a percentage of GDP than in any other federal state. However, public services also contribute more to gross value added in Mecklenburg-Western Pomerania than in any other of the Laender. Shipping and the economic sectors associated with this remain significant too. For example, according to information in our NORD/LB Regional Economy report, several businesses operating in this sector are ranked among the 100 biggest companies across the subsovereign as a whole. Mecklenburg-Western Pomerania is also trying to gain a foothold in the field of future technologies. The main drivers here are the two universities in Rostock and Greifswald, with the Wendelstein 7-X nuclear reactor having been located at the University of Greifswald since November 2015 for research purposes. In addition, the federal state is traditionally well-represented in the aerospace sector. Owing to its extensive stretch of coastline, renewable energies are playing an increasingly important role too. More than 70% of all electricity generated is now obtained from renewable sources. For example, the Lüttow-Valluhn solar park, which was newly opened on 07 September 2022, should save just under 6,000 tons of CO₂ per year. In 2023, Mecklenburg-Western Pomerania generated GDP of EUR 59.2bn, which corresponds to 1.4% of total German economic output. As such, GDP per capita is one of the lowest across Germany. However, it should be stressed that the budget situation had been continuously improved in the years before the COVID-19 pandemic. This is reflected by the relatively low debt per capita metric.

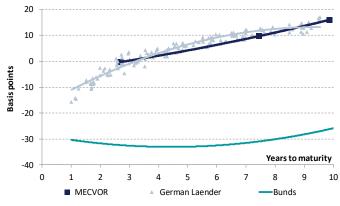
Overall maturity profile



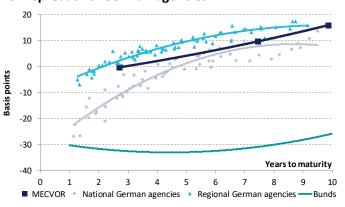
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 7.2bn (2nd)

Outstanding bonds

EUR 2.0bn

ESG volume

EUR 0.0bn

Bloomberg ticker

MECVOR

Economy 2023

GDP (ranking)

EUR 59.2bn (14th)

GDP per capita (ranking)

EUR 36,335 (14th)

Real GDP growth (ranking)

3.3% (1st)

Unemployment (ranking)

7.7% (14th)

Key figures 2023

Tax-interest coverage (ranking)

34.5x (10th)

Total revenue/interest paid (ranking)

56.2x (7th)

Debt/GDP (ranking)

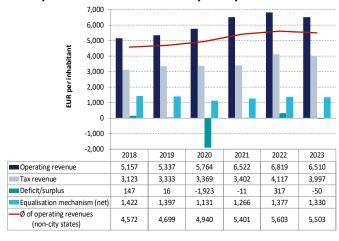
12.1% (5th)

Debt/revenue (ranking)

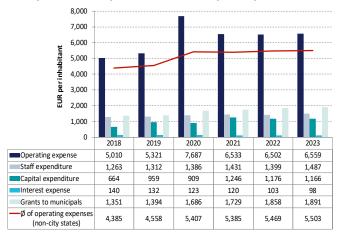
0.7x (4th)

Development of revenue in EUR per capita

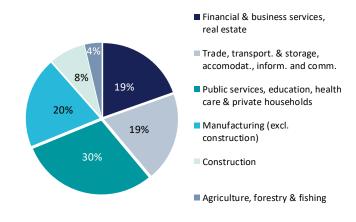
* As reported at the end of the previous year.



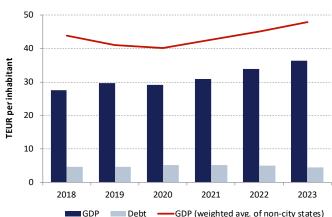
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Above-average revenues in relation to population
- + Very solid debt sustainability and interest coverage metrics
- + Low debt level

- Low economic output (both in absolute terms and per capita)
- Unemployment is above average

^{**} Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023) 8,161,981

State capital

Hanover

Government

SPD/Greens

Minister-President

Stephan Weil (SPD)

Expected next election date

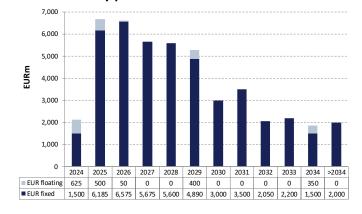
Autumn 2027

Long-term	Outlook
AAA	stab
-	-
-	-
	Ū

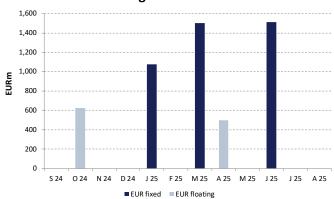
Lower Saxony

Formed from the regions of Hanover, Oldenburg, Brunswick and Schaumburg-Lippe in 1946, Lower Saxony is the second largest of the German Laender, covering an area of approximately 47,710km². Its population of just over 8.1m people is exceeded by only three other German Laender. The share of the population aged between 6 and 15 years old is disproportionately high, which must be rated as a relative advantage given the general demographic trend in evidence across Germany as a whole. The economy is dominated by the automotive industry and its suppliers, which are located across the region with a focus on the areas around Hanover, Brunswick, Wolfsburg, Salzgitter and Emden. More than a quarter of Lower Saxony's GDP is generated by manufacturing industries. The importance of this economic sector is therefore only higher in three other German Laender. Lower Saxony's highly developed infrastructure is also an advantage in this regard, with the subsovereign actually boasting the most extensive rail network of all Laender across Germany. Home to the largest exhibition site in the world, Hanover plays host to globally leading industrial trade fairs, including, for example, Hannover Messe, Domotex, EuroBlech, IAA Transportation, among others. As the state capital, Hanover is therefore an important location for current and future technologies at international level. Traditionally, agriculture is also a key sector of the economy in Lower Saxony. In fact, only in Saxony-Anhalt is gross value added higher in absolute terms for this sector. Lower Saxony also ranks among the leading German Laender in terms of its use of renewable energies. As part of Germany's efforts to wean itself off Russian gas, a liquefied natural gas (LNG) terminal was put into operation at the end of 2022. Located in Wilhelmshaven, this was the first such LNG terminal in Germany, and has been supplemented by another in Brunsbüttel, which was opened in March 2023. Stade became the third LNG site in Germany in the spring of 2024. As such, Lower Saxony is assuming a leading role in solving a nationwide issue, with implications for the whole of Germany. In 2023, Lower Saxony generated 8.8% of German GDP, which is the fourth highest contribution of all German Laender.

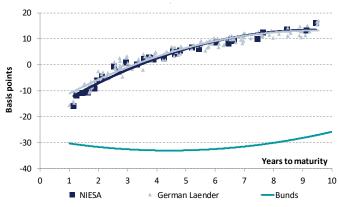
Overall maturity profile



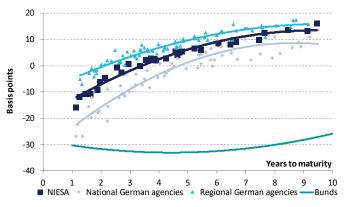
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 56.4bn (14th)

Outstanding bonds

EUR 46.6bn

ESG volume

EUR 0.0bn

Bloomberg ticker

NIESA

* As reported at the end of the previous year.

EUR 363.1bn (4th)

GDP per capita (ranking)

EUR 44,531 (8th)

Real GDP growth (ranking)

0.2% (7th)

Unemployment (ranking)

5.7% (6th)

** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.

Key figures 2023

Tax-interest coverage (ranking)

63.5x (3rd)

Total revenue/interest paid (ranking)

82.8x (3rd)

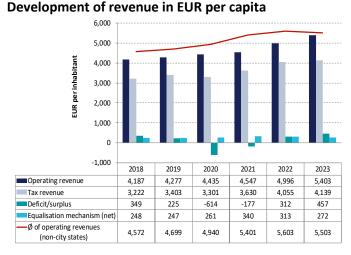
Debt/GDP (ranking)

15.5% (8th)

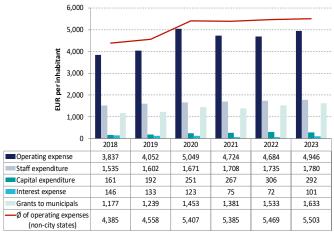
Debt/revenue (ranking)

1.3x (10th)

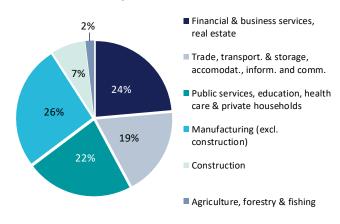
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research



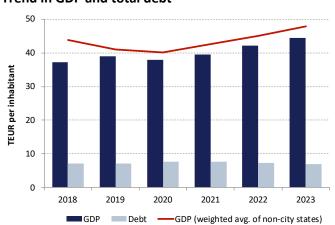
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Solid budgetary development
- + Low expenditure in relation to population
- + Solid demographic trend

- Below-average revenues in relation to population
- Relatively high debt level
- Imports higher than exports

Economy 2023
GDP (ranking)





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

18,190,422

State capital

Düsseldorf

Government CDU/Greens

Minister-President

Hendrik Wüst (CDU)

Expected next election date

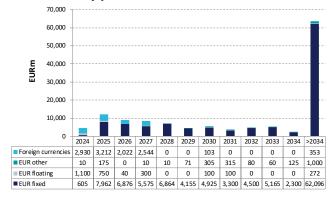
Spring 2027

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	Aa1	stab
S&P	AA	stab

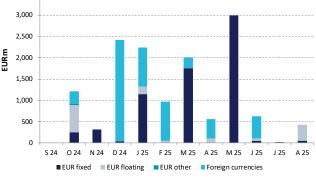
North Rhine-Westphalia

North Rhine-Westphalia (NRW) has existed since 1947. With a population of 18.2m people, it is Germany's most populous sub-sovereign. Covering a total area of almost 34,112km², NRW is moreover the most densely populated of all the non-city Laender. The population has been increasing over recent years, with this growth based on a positive balance in migratory movements. Forecasts suggest that the population will begin to decrease over the next few decades. However, the influx of immigrants does present the federal state with an opportunity to counteract its problems related to demographic trends. NRW has developed its strong economic position over the course of several decades. This should not be taken for granted, as the Land has been in the midst of a structural transformation since the beginning of the 1960s. Over this period, NRW has transitioned from a region shaped by mining and heavy industry - albeit the Ruhr Metropolis is still the most industrialised region in Europe – in the direction of an economy geared towards a modern service sector. In 2023, a total of 7.6m people in NRW were employed in this sector, with this number having doubled since 1970. At 7.2%, unemployment is in excess of the national average (5.7%). In response to future challenges, NRW has established an interdisciplinary working group in the form of the "Economy & Work 4.0" initiative, with the aim of promoting and advancing development and innovation processes. For example, NRW is scheduled to be the first of the Laender to have a comprehensive network of broadband and fibre-optic technology by 2026. The federal state has also defined ambitious goals in climate protection. By 2030, the aim is to cut greenhouse gas emissions by 65% in comparison with 1990, and by 88% by 2040. Thereafter, from 2045, NRW expects to achieve greenhouse gas neutrality. NRW has always generated a large portion of Germany's overall GDP, although this share has been on the slide for a few years now. With GDP of EUR 839.1bn in 2023, a total of 20.4% of German economic output was generated in NRW. Prior to the pandemic and flood disasters that struck the region in the summer of 2021, NRW was well on its way to consolidating its budget to (sustainably) break its long history of budget deficits through a second consecutive surplus. Since 2010, NRW was always a recipient under the terms of the old financial equalisation system among the Laender. Under the Financial Power Equalisation (FKA), NRW received a total of EUR 1.2bn in 2023.

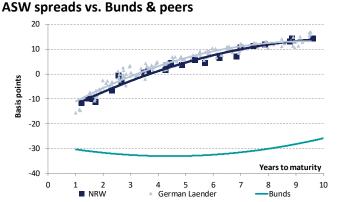
Overall maturity profile



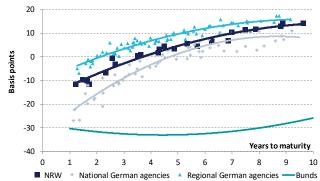
3.500



Bond amounts maturing in the next 12 months



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 162.9bn (16th)

Outstanding bonds

EUR 130.3bn

ESG volume

EUR 20.8bn

Bloomberg ticker

NRW

EUR 839.1bn (1st)

GDP per capita (ranking)

EUR 46,194 (7th)

Real GDP growth (ranking)

-1.0% (12th)

Unemployment (ranking)

7.2% (11th)

** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

25.3x (13th)

Total revenue/interest paid (ranking)

34.1x (13th)

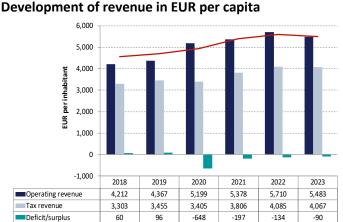
Debt/GDP (ranking)

19.4% (10th)

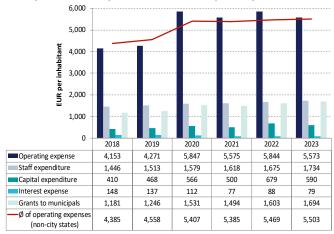
Debt/revenue (ranking)

1.6x (11th)

* As reported at the end of the previous year.



Development of expenditure in EUR per capita



Gross value added by economic sector

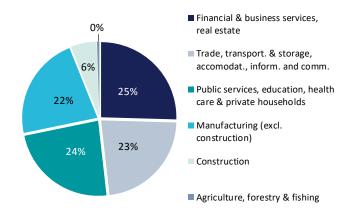
4,572

4,699

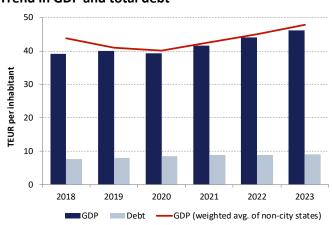
4,940

Ø of operating revenues

(non-city states)



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

5,401

5,603

5,503

Strengths/Chances

- + Solid budget performance
- + Broadly diversified economy
- + Strong economic power

- Above-average pension liabilities
- Below-average debt sustainability
- High unemployment in structurally weak areas

Economy 2023
GDP (ranking)

Davidonment of revenue in CLID ner cenit





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

4,174,311

State capital

Mainz

Government

SPD/Greens/FDP

Minister-President

Alexander Schweitzer (SPD)

Expected next election date

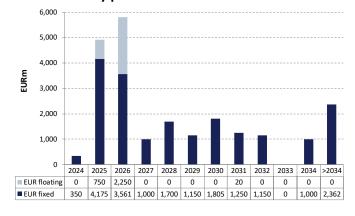
Spring 2026

Katings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

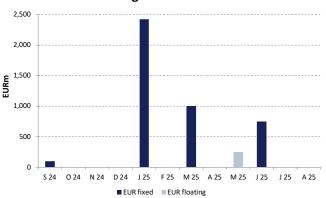
Rhineland-Palatinate

A total of seven regions were merged to form the federal state of Rhineland-Palatinate on 18 May 1946, which was initially in the US occupation zone after the Second World War, before passing into the control of the French. The sub-sovereign, which has covered a total area of 19,858km² since its inception, now has a population of around 4.2m people. Over the course of the next few decades, Rhineland-Palatinate is expected to be faced with the challenge of a declining population. Industry plays a more significant role in Rhineland-Palatinate's economy than in most other German Laender. The proportion of gross value added attributable to manufacturing industries (excluding construction) is only higher in Baden-Wuerttemberg and Bavaria. Industrial clusters can be found in various locations along the river Rhine. The chemicals sector is by far the most important branch of industry, responsible for more than 30% of total sales in the economy of Rhineland-Palatinate. Vehicle manufacturing and mechanical engineering, in addition to the production of metal products as well as rubber and plastic goods, also play a significant role even though they still pale in comparison to the chemicals industry. Last year, real GDP growth in Rhineland-Palatinate amounted to -4.9%, meaning that the economy here contracted rather sharply in real terms. However, the low unemployment rate is a positive aspect to be highlighted. At 4.9% in 2023, this was the third-lowest value across Germany. Looking to the future, Rhineland-Palatinate will primarily focus on promoting SMEs. In the past, targeted investments were made in research infrastructure in order to boost the innovative capacity of these firms. With the help of a communal debt relief fund, municipalities are also set to be freed from financial constraints linked to Kassenkredite. In 2023, Rhineland-Palatinate's economic output amounted to EUR 174.2bn, which equated to just under 4.2% of Germany's national GDP. For the third year in succession, Rhineland-Palatinate posted a positive budget balance. This development can be attributed in particular to the reduced debt level and lower interest expenses. In the Financial Power Equalisation (FKA) framework, Rhineland-Palatinate has also switched from recipient side to rank among the contributor Laender. This trend is expected to be consolidated over the next few years.

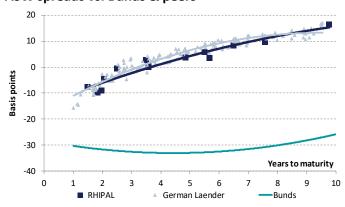
Overall maturity profile



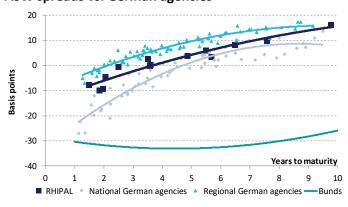
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 26.5bn (10th)

Outstanding bonds

EUR 22.5bn

ESG volume

EUR 0.0bn

Bloomberg ticker

RHIPAL

GDP per capita (ranking)

EUR 41,797 (9th)

Real GDP growth (ranking)

-4.9% (16th)

Unemployment (ranking)

4.9% (3rd)

Key figures 2023

Tax-interest coverage (ranking)

48.9x (5th)

Total revenue/interest paid (ranking)

66.5x (5th)

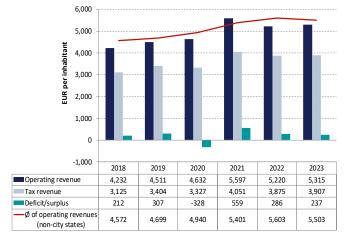
Debt/GDP (ranking)

15.2% (7th)

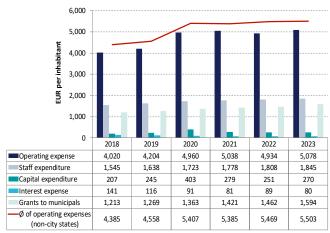
Debt/revenue (ranking)

1.2x (7th)

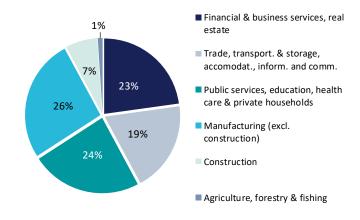
Development of revenue in EUR per capita



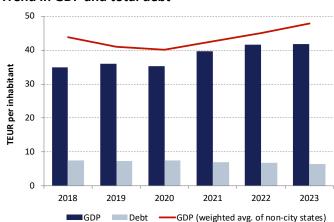
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Solid budget metrics
- + Diversified economic structure
- + Low unemployment rate

- Highly dependent on the chemicals industry
- Below-average per capita revenue basis
- Lowest economic growth of all 16 German Laender

^{*} As reported at the end of the previous year.

Economy 2023 GDP (ranking) EUR 174.2bn (7th)

^{**} Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

994,424

State capital

Saarbrücken

Government SPD

Minister-President

Anke Rehlinger (SPD)

Expected next election date

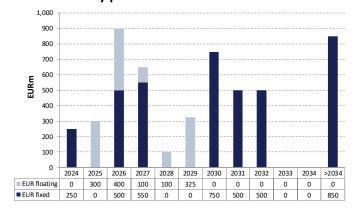
Spring 2027

Ratings	Long-term	Outlool
Fitch	AAA	stab
Moody's	-	-
S&P	-	-
S&P	-	-

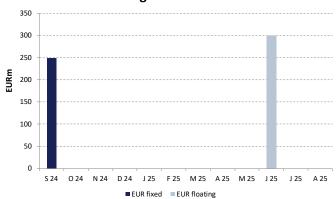
Saarland

Covering an area of just 2,571km², Saarland is the smallest sub-sovereign in Germany (excluding the city states). At the same time, its overall population of just under one million people means that it is virtually twice as densely populated as the neighbouring federal state of Rhineland-Palatinate. Saarland is the youngest of the western German Laender: after the Second World War, Saarland was initially a French protectorate until 1949 and an autonomous region until 1957, before eventually being incorporated within the Federal Republic of Germany. Saarland has the highest property ownership rate and the most cars per thousand inhabitants. The most important industries in Saarland are the steel, mechanical engineering and vehicle industries, although two of these three mainstays of the local economy actually suffered declines in gross value added in 2023. While the steel industry had to contend with declines in demand, the industry benefited from billions in state support for green steel towards the end of 2023, which aims to support the Saarland's decarbonisation efforts. Mechanical engineering also recorded a decline: annual sales fell by -6.2% to EUR 4.9bn. Only the vehicle manufacturing sector provided positive impetus. According to data from the German Association of the Automotive Industry (VDA), 4.1m vehicles were manufactured in Germany in 2023 – corresponding to growth of +14.6% versus 2022. However, supply chain difficulties continue to pose problems for the supplier industry in Saarland as well. The GDP rose by EUR +2.5bn to EUR 41.3bn in the previous year, while the budget balance also grew to EUR 214m (2022: EUR -2,396m). Over the past decade, the budget balance per capita has never been higher than in 2023. Following a negative result in the previous year, a positive budget balance per capita of EUR 214 overall was recorded for 2023. However, this is the weakest value in a German Laender comparison. Aside from the three city states, Saarland has the highest per capita debt level of EUR 12,273. In terms of key budget metrics such as tax-interest coverage and the ratio of total revenue to interest paid, Saarland again ranks towards the bottom of the Laender table. At 6.8%, unemployment is higher than the national average of 5.7%.

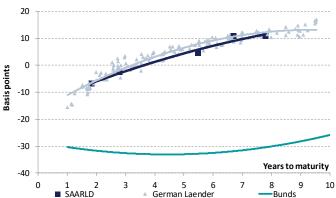
Overall maturity profile



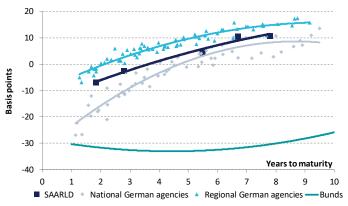
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Outstanding bonds

EUR 5.1bn

ESG volume

EUR 0.0bn

Bloomberg ticker

SAARLD

GDP per capita (ranking)

EUR 41,617 (10th)

Economy 2023

Real GDP growth (ranking)

-0.6% (8th)

Unemployment (ranking)

6.8% (10th)

Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

20.6x (15th)

Total revenue/interest paid (ranking)

28.1x (15th)

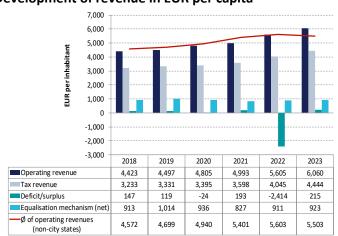
Debt/GDP (ranking)

29.5% (14th)

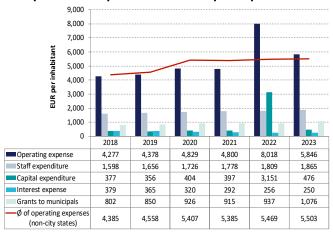
Debt/revenue (ranking)

2.0x (15th)

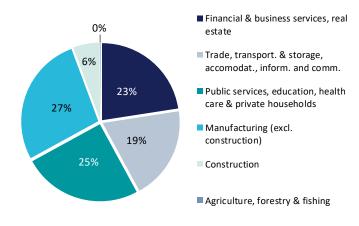
Development of revenue in EUR per capita



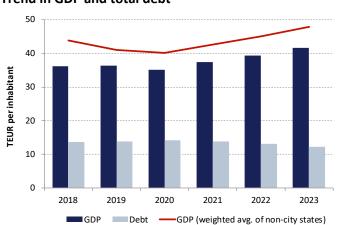
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Absolute debt level is low
- + Active promotion of more sustainable economy and industry

- Long history of budget deficits
- Economic dependency from high export and import ratios
- Below-average debt sustainability and interest coverage

^{*} As reported at the end of the previous year. ** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.

Debt level* (ranking**) GDP (ranking) EUR 12.2bn (3rd) EUR 41.3bn (15th)





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

4,089,467

State capital

Dresden

Government

CDU/Greens/SPD

Minister-President

Michael Kretschmer (CDU)

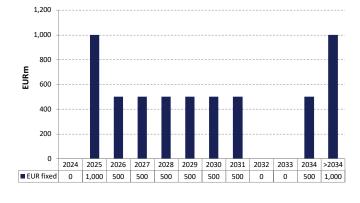
Expected next election date 01 September 2024

Ratings	Long-term	Outlook
Fitch	-	-
Moody's	-	-
S&P	AAA	neg

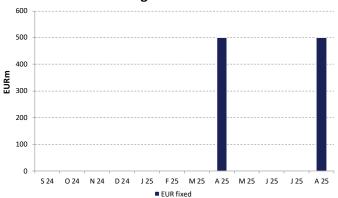
Saxony

Covering an area of 18,450km² and with a population of nearly 4.1m inhabitants, the Free State of Saxony is the most densely populated of the East German Laender with the exception of the city state of Berlin. Since being established on 03 October 1990, Saxony has also been the strongest of the new German Laender in an economic sense. Saxony's three most important economic sectors are public and private sector services (I), manufacturing industries (II) as well as finance, rental and corporate services (III). The latter sector has become increasingly important in recent decades. Since reunification, numerous companies from a range of economic sectors have settled in Saxony. In particular, companies from the microelectronics and electrical engineering sectors as well as mechanical engineering and the automotive industry have relocated to the Free State. In order to bolster this trend, Saxony is pursuing an innovation strategy aimed at transforming the sub-sovereign into one of Europe's leading scientific and economic regions by 2030. To achieve this goal, Saxony is in the process of implementing measures intended to improve the innovative capacity and competitiveness of SMEs in particular. Saxony also has one of the highest investment ratios among the 16 German Laender and additionally boasts a relatively well-educated population. The conurbations of Leipzig-Halle and Chemnitz-Zwickau represent the driving force of Saxony's economy. In economic terms, the Greater Dresden area is the strongest region in Saxony as measured by GDP. In 2023, the economy in Saxony generated a GDP of EUR 156.0bn, which equated to 3.8% of total economic output in Germany. Traditionally, the Free State has been and remains to this day one of the largest recipients within the federal financial equalisation system, although at the same time it has also had one of the best budgetary situations too. For example, Saxony can regularly be found topping the Laender tables for key budget metrics. Saxony enjoys huge financial flexibility as a result of posting the lowest debt level of all German Laender. Considering unemployment and real GDP growth, Saxony is ranked in mid-table in a comparison of the sub-sovereigns, although at a value of EUR 38,143, its GDP per capita is relatively low (ranked 12th among German Laender).

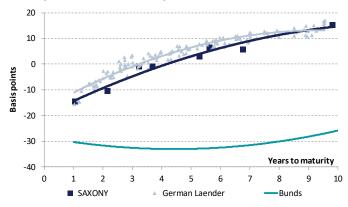
Overall maturity profile



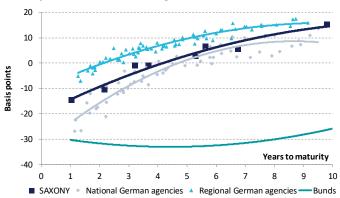
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 3.3bn (1st)

Outstanding bonds

EUR 5.5bn

ESG volume

EUR 0.0bn

Bloomberg ticker

SAXONY

GDP per capita (ranking)

EUR 38,143 (12th)

Real GDP growth (ranking)

-0.6% (8th)

Unemployment (ranking)

6.2% (9th)

Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

384.6x (1st)

Total revenue/interest paid (ranking)

550.8x (1st)

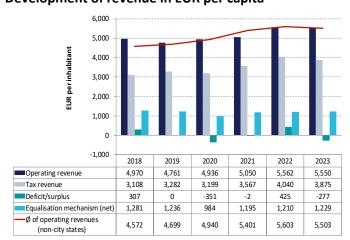
Debt/GDP (ranking)

2.1% (1st)

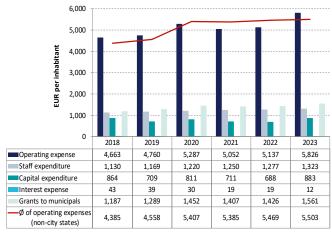
Debt/revenue (ranking)

0.1x (1st)

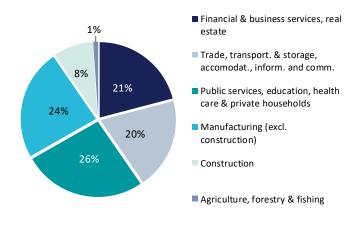
Development of revenue in EUR per capita



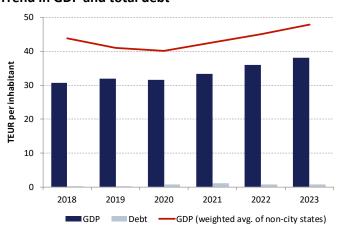
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Healthy debt sustainability and interest coverage
- + Low absolute debt
- + Well-diversified economy
- + Highly attractive urban centres

- Below-average economic power in per capita terms
- Demographic trend as a risk factor

^{*} As reported at the end of the previous year. ** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.

Economy 2023 GDP (ranking) EUR 156.0bn (8th)





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

2,180,448

State capital

Magdeburg

Government CDU/SPD/FDP

Minister-President

Reiner Haseloff (CDU)

Expected next election date

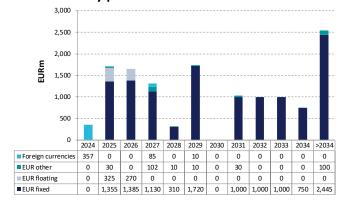
Summer 2026

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	Aa1	stab
S&P	-	-

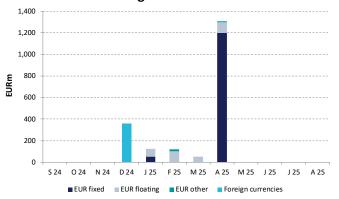
Saxony-Anhalt

With a population of just under 2.2m people living across an area of 20,459km², Saxony-Anhalt has the third-lowest population density of all German Laender. As is the case with the other new Laender, the federal state of Saxony-Anhalt came into existence on 03 October 1990. Key pillars of the economy include manufacturing industries, transport and the service sector. According to the information presented in our NORD/LB Regional Economy report, around 80% of employees at the 100 largest companies in Saxony-Anhalt are active in these three economic sectors. The manufacturing industries are dominated by the chemicals sector, the food industry, mechanical engineering and metalwork. Most of the 100 largest companies are based in the region between Wernigerode, Magdeburg and Halle. In addition to the economic sectors mentioned above, agriculture also plays a comparatively important role. Moreover, the service sector and future-oriented industries such as biotechnology, information and communication technologies, renewable resources, wind energy and photovoltaics have established themselves as key economic pillars as well. The relative structural weakness of this sparsely populated sub-sovereign has been counteracted since the reunification of Germany through the massive expansion of infrastructure. For example, the project to connect the industrial port at Magdeburg to the European waterway network was completed towards the end of 2023 at a cost of EUR 45m. Saxony-Anhalt is also committed to further developing its scientific infrastructure in the areas of engineering, environmental and life sciences. In spring 2022, the chip manufacturer Intel announced plans to construct a factory in Magdeburg. Construction is expected to begin in summer 2024, with around 10,000 jobs to be created in the process. This is the largest investment in Saxony-Anhalt for several decades. In 2023, 1.9% of total German economic output originated from Saxony-Anhalt. As is the case with the other Laender in eastern Germany, Saxony-Anhalt has been particularly affected by the issue of demographic change: the proportion of over 65s is higher in Saxony-Anhalt than anywhere else in Germany, while at the same time the proportion of those aged 6 and under is the lowest in a comparison of the Laender. Since its inception, Saxony-Anhalt always has been a net recipient within the federal financial equalisation system.

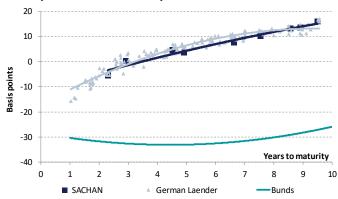
Overall maturity profile



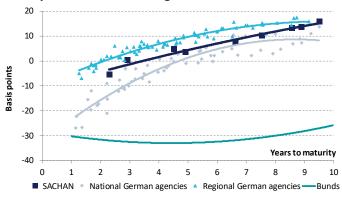
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 22.0bn (7th)

Outstanding bonds

EUR 13.4bn

ESG volume

EUR 0.5bn

Bloomberg ticker

SACHAN

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* As reported at the end of the previous year.

** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.

EUR 78.4bn (12th)

GDP per capita (ranking)

EUR 35,911 (15th)

Real GDP growth (ranking)

-1.4% (15th)

Unemployment (ranking)

7.5% (13th)

Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

22.6x (14th)

Total revenue/interest paid (ranking)

33.6x (14th)

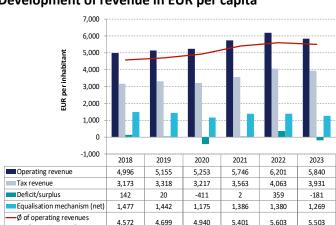
Debt/GDP (ranking)

28.0% (13th)

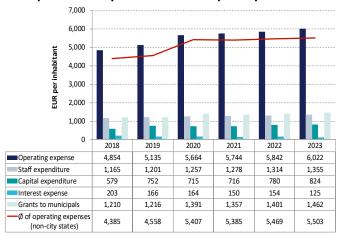
Debt/revenue (ranking)

1.7x (13th)

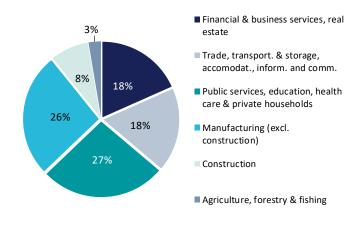
Development of revenue in EUR per capita



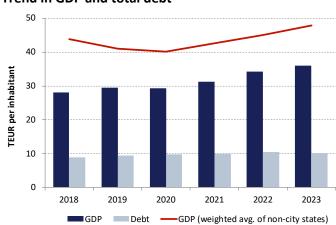
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

(non-city states)

- + Continual economic growth
- + Manufacturing industries prominent
- + Low personnel expenses and pension liabilities

- Below-average economic power in per capita terms
- Demographic trend as a risk factor
- Below-average debt sustainability

Economy 2023
GDP (ranking)





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

2,965,691

State capital

Kiel

Government

CDU/Greens

Minister-President

Daniel Günther (CDU)

Expected next election date

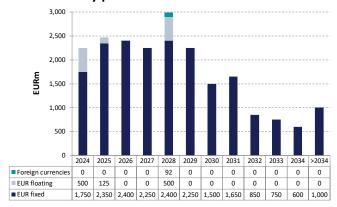
Spring 2027

Katings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

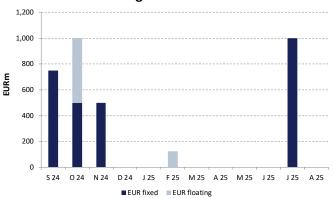
Schleswig-Holstein

Covering a total area of 15,804km², Schleswig-Holstein is the smallest non-city state in Germany apart from Saarland. Founded on 23 August 1946, Schleswig-Holstein was the first federal state to ratify its own state constitution after the promulgation of the Basic Law. Steadily growing tourism is a vital pillar of the economy of Schleswig-Holstein. Annual revenues from this sector were again in excess of EUR 10bn in 2023, which is on a par with revenues generated by major industrial sectors. Prior to the COVID-19 pandemic, around three quarters of gross value added was generated via the service sector, which is slightly above the national average. Schleswig-Holstein's economic development activities are concentrated on the food industry, information technology, telecommunications and media, life sciences, logistics and aviation, in addition to microtechnology and nanotechnology. Traditionally, fishing has also been an important area of the economy. In fact, Schleswig-Holstein accounts for approximately two thirds of the German fishing sector. Its location between the North and Baltic Sea means that attention is also focused on the maritime economy and the renewable energies sector. The latter is an essential element of the sub-sovereign's future economic planning. For example, Schleswig-Holstein has ambitions of becoming a major exporter of green energy. In 2021, the Land was already obtaining more than 140% of its gross electricity consumption from "green" sources. The government underlined these ambitions to become a more sustainable energy economy by recently adopting the Energy Transformation and Climate Protection Act, which supplements existing efforts in the area of wind power with an expansion of photovoltaic capacities and plans to establish municipal heating networks. By 2030, Schleswig-Holstein is striving to cut greenhouse gas emissions by at least 65% in comparison with the levels recorded in 1990, and by at least 88% by 2040, before achieving greenhouse gas neutrality by 2045. In 2023, Schleswig-Holstein generated GDP of EUR 118.7bn, which equates to roughly 2.9% of total economic output across Germany. As was the case in the prior year, the 2023 budget year saw Schleswig-Holstein record another cash deficit. At 5.5%, unemployment in Schleswig-Holstein is below the national average.

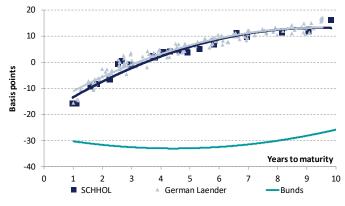
Overall maturity profile



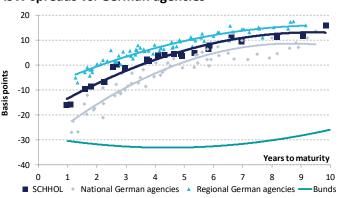
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies





Debt level* (ranking**)

EUR 31.5bn (12th)

Outstanding bonds

EUR 21.0bn

ESG volume

EUR 0.0bn

Bloomberg ticker

SCHHOL

GDP per capita (ranking)

EUR 40,090 (11th)

Real GDP growth (ranking)

-1.1% (13th)

Unemployment (ranking)

5.5% (5th)

Key figures 2023

Tax-interest coverage (ranking)

26.2x (12th)

Total revenue/interest paid (ranking)

38.8x (12th)

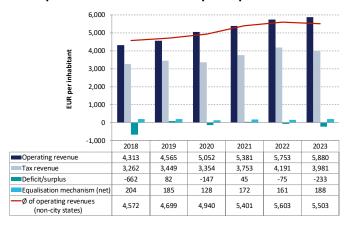
Debt/GDP (ranking)

26.6% (12th)

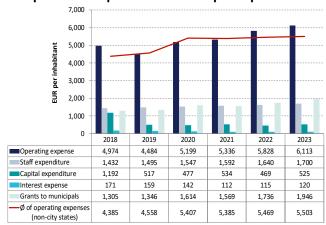
Debt/revenue (ranking)

1.8x (14th)

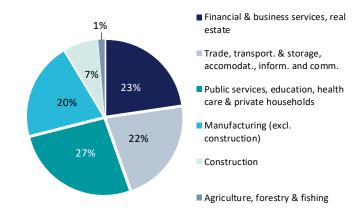
Development of revenue in EUR per capita



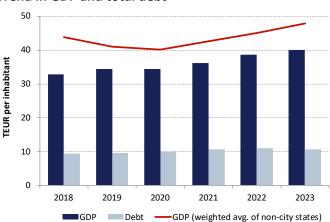
Development of expenditure in EUR per capita



Gross value added by economic sector



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Strengths/Chances

- + Broadly diversified economy
- + Below-average unemployment rate
- + Beneficiary of the energy transition

- Below-average debt sustainability and interest coverage
- High and rising level of pension liabilities
- Below-average economic output in per capita terms

^{*} As reported at the end of the previous year.

Economy 2023 GDP (ranking) EUR 118.7bn (10th)

^{**} Ranking of the Land and among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research





Link to the Ministry of Finance

Homepage

Number of inhabitants (2023)

2,122,335

State capital

Erfurt

Government

Die Linke (the Left Party)/SPD/Greens

Minister-President

Bodo Ramelow (Die Linke)

Expected next election date

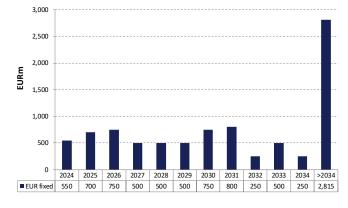
01 September 2024

Ratings	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

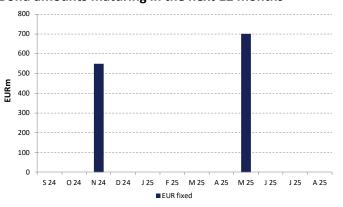
Thuringia

At 16,202km², the Free State of Thuringia is the smallest of the eastern German Laender (excluding the city state of Berlin) in terms of area. However, with a population of around 2.1m people, only Saxony is more densely populated among the non-city state Laender in the east of Germany. Thuringia, which was established in 1990, has an economy that is dominated by manufacturing industries. These account for a greater proportion of gross value added than in any other of the eastern German Laender. Including the construction sector, which accounts for a higher share of gross value added in only three other German sub-sovereigns, manufacturing industries are responsible for nearly one third of the gross value added generated by the Free State. A large part of its economic output is attributable to the region around the chain of cities extending from Erfurt to Jena via Weimar. The automotive and mechanical engineering sectors as well as the optical and medical technology sectors are of particular significance here. The economy of Thuringia is also distinguished by its relatively high capacity for innovation. Within the Free State, a discrepancy between the planning region in the south-west of Thuringia and the rest of the federal state has become apparent in recent years. This planning region is increasingly developing into the economic and growth engine of Thuringia. Investments are also being made in the education and research centres of Thuringia, with a particular focus in this regard on Jena, Erfurt and Ilmenau with its University of Technology. After being ranked in third place in the Education Monitor 2022, Thuringia successfully defended its place on the podium in the 2023 edition by again taking the bronze medal. This continues to represent a good basis from which the Free State can confront issues such as a lack of skilled workers and demographic trends, which are factors that represent major challenges for this sub-sovereign as well. In terms of its vision for the future, Thuringia is seeking to catch up with the elite group of non-city states in the area of digital infrastructure within the next decade. By 2025, convergent gigabit networks should be available in every community. Unemployment in Thuringia amounted to 5.9% in 2023. Since its inclusion in the federal financial equalisation system, Thuringia has always been a net recipient. At EUR 75.9bn, Thuringia contributes around 1.8% of German GDP.

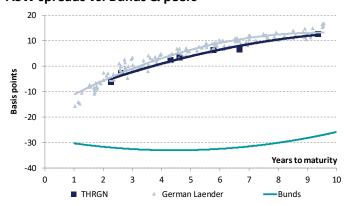
Overall maturity profile



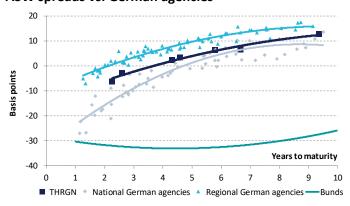
Bond amounts maturing in the next 12 months



ASW spreads vs. Bunds & peers



ASW spreads vs. German agencies



NB: Foreign currencies are converted into EUR at rates as at 12 August 2024; residual term to maturity >1 year and <10 years; outstanding volume at least EUR 0.5bn. Source: Bloomberg, NORD/LB Floor Research



Debt level* (ranking**)

EUR 15.1bn (4th)

Outstanding bonds

EUR 8.9bn

ESG volume

EUR 0.0bn

Bloomberg ticker

THRGN

* As reported at the end of the previous year.

Economy 2023
GDP (ranking)

EUR 75.9bn (13th)

GDP per capita (ranking)

EUR 35,715 (16th)

Real GDP growth (ranking)

1.8% (3rd)

Unemployment (ranking)

5,503

5.9% (7th)

** Ranking of the Land among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender. Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

Key figures 2023

Tax-interest coverage (ranking)

37.3x (8th)

Total revenue/interest paid (ranking)

55.0x (8th)

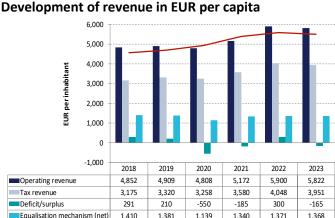
Debt/GDP (ranking)

19.8% (11th)

Debt/revenue (ranking)

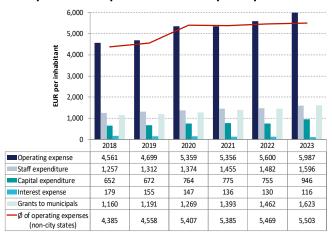
1.2x (9th)

Davidonment of revenue in EUD ner capit



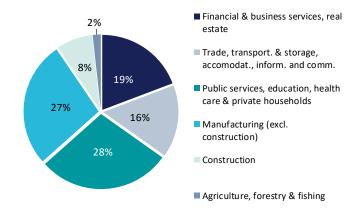
4,699

Development of expenditure in EUR per capita

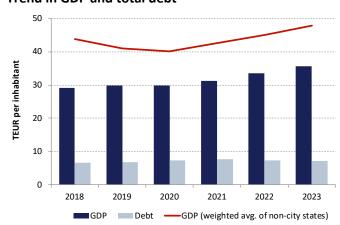


Gross value added by economic sector

4,572



Trend in GDP and total debt



Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Floor Research

5,401

Strengths/Chances

Ø of operating revenues

(non-city states)

- + Low absolute debt level
- + Manufacturing industries prominent
- + Low level of pension liabilities
- + High-performance education system

- Below-average economic output in per capita terms
- Demographic trend as a risk factor
- Widening gap between urban and rural areas





Link to bond overview
Homepage

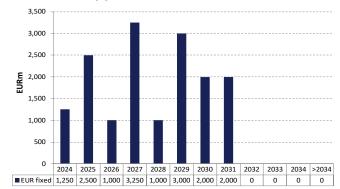
Ratings	Long-term	Outlook
Fitch	AAA*	-
Moody's	-	-
S&P	-	-

^{*} Issuer ratings not available. However, Fitch awards a rating for each individual bond.

Gemeinschaft deutscher Laender (Joint Laender)

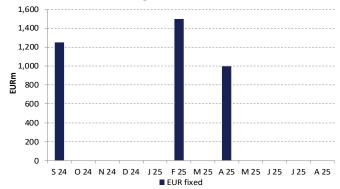
An idiosyncrasy of the bond market in general, and one specific to the German sub-sovereign market, is the Gemeinschaft deutscher Laender issuance vehicle. Within this framework, several sub-sovereigns issue joint bonds (known as "Laender jumbos"; issuance volumes starting from EUR 1bn), whereby each federal state assumes several (but not joint) liability for the issuance overall. As a result, joint and several liability structures do not exist for such deals. The first time that several Laender grouped together to issue a joint bond of this kind was in 1996. Since then, the Gemeinschaft deutscher Laender has become an established issuer on the bond market, joining forces to place joint bonds on a semi-regular basis (mostly twice per year). The sub-sovereigns involved in these deals are characterised in particular by a comparatively low refinancing requirement. The largevolume Laender jumbos enable these issuers to generate economies of scale that are reflected in lower interest expenses. In total, seven Laender are (still) involved in the bond issuances currently in circulation. While Saxony-Anhalt, Hesse and NRW ceased to use Laender jumbos as a funding instrument after the first issuance in 1996, with Berlin subsequently opting not to participate in the joint issuing vehicle since 2002, the following Laender have at times made use of Laender jumbos as key funding instruments: Brandenburg, Bremen, Hamburg, Mecklenburg-Western Pomerania, Rhineland-Palatinate, Saarland and Schleswig-Holstein. In fact, these Laender have raised substantial amounts of their respective funding volumes on the basis of the joint issuances currently in circulation. The last deal in which Brandenburg was involved fell due in 2023. As a result of the particular structure of the Gemeinschaft deutscher Laender, there is no issuer rating. Instead, the rating agency Fitch rates each individual issuance in order to take account of the differing participation structures (several – but not joint – liability basis). However, this does not lead to any differences: since Laender jumbo No. 11, Fitch has awarded a rating of AAA to all bonds of this kind. As justification for the rating, Fitch cites the system comprising the principle of federal loyalty and the new system of federal financial equalisation payments, in which it generally sees an exceptionally low default risk (AAA). In total, the Joint Laender issuance vehicle presently accounts for an outstanding volume of EUR 16.0bn split across 15 separate bond deals, making it an important player within the market for German Laender bonds. The outstanding volume is EUR-denominated in full and features a fixed coupon. Other instruments such as Schuldscheindarlehen (SSD) are not jointly issued. Having issued a Laender jumbo in the form of a floating rate note (FRN; floater) in 2008, the Gemeinschaft has subsequently refrained from using this instrument. Here, too, the coupon has long since been in region of between 0% and 0.01%. There have now been 64 separate bond deals issued by the Gemeinschaft deutscher Laender – and it is the most recent of these that is also the longest outstanding bond, with a final maturity in February 2031. The largest bond (No. 47) comprises a volume of EUR 1.5bn. In 2024, one additional bond placed under the LANDER ticker is set to fall due. As such, further issuance activity could well be on the cards before year-end.

Overall maturity profile



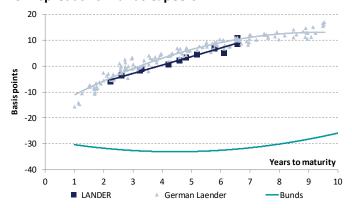
Source: Bloomberg, NORD/LB Floor Research

Bond amounts maturing in the next 12 months



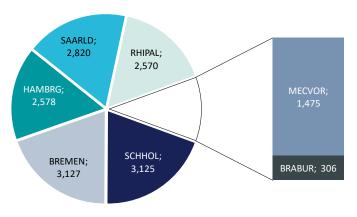


ASW spreads vs. Bunds & peers



Source: Bloomberg, NORD/LB Floor Research

Share of current outstanding volume attributable to the Laender (EURm)

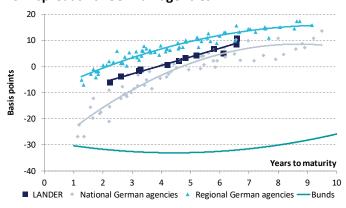


Source: Ministry of Finance of Rhineland-Palatinate, NORD/LB Floor Research

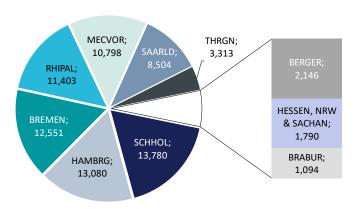
Strengths/Chances

- + Includes smaller issuers
- + More liquid bond volumes

ASW spreads vs. German agencies



Cumulative share of total volume issued since 1996 (EURm)



- Participants are primarily German Laender with budgetary problems, high-level dependency on the federal financial equalisation system and/or below-average economic output
- Complex structure
- Several (but not joint) liability



Appendix

Overview by debt level, Kassenkredite and non-public sector loans* in addition to outstanding bond volumes

Issuer	Ticker	Official debt level** (EURbn)	Of which outstanding Kassenkredite** (EURbn)	Of which outstanding loans** (EURbn)	Outstanding volume of bonds (EURbn)	Number of benchmark bonds
Baden-Wuerttemberg	BADWUR	30.5	-	14.2	19.6	23
Bavaria	BAYERN	17.2	-	8.8	7.6	7
Berlin	BERGER	58.9	-	13.8	49.1	42
Brandenburg	BRABUR	18.3	0.1	3.2	14.9	22
Bremen	BREMEN	22.6	0.3	5.3	14.5	20
Hamburg	HAMBRG	22.6	0.04	4.9	14.8	19
Hesse	HESSEN	41.0	0.04	7.0	36.9	34
Mecklenburg-Western Pomerania	MECVOR	7.2	-	4.3	2.0	3
Lower Saxony	NIESA	56.4	-	10.4	46.6	42
North Rhine-Westphalia	NRW	163.0	0.3	32.5	130.3	54
Rhineland-Palatinate	RHIPAL	26.5	0.3	5.1	22.5	26
Saarland	SAARLD	12.2	0.2	5.5	5.1	6
Saxony	SAXONY	3.6	-	0.4	5.5	11
Saxony-Anhalt	SACHAN	22.0	-	8.6	13.4	12
Schleswig-Holstein	SCHHOL	31.5	1.4	7.1	21.0	30
Thuringia	THRGN	15.1	-	6.2	8.9	14
Joint Laender	LANDER	-	-	-	16.0	15
Bund-Laender bond	BULABO	-	-	-	Fell due: 15/07/2020	0
Sum total	-	548.4	2.6	137.3	428.7	380

^{*} Excludes supplementary budgets

Source: Bloomberg, issuers, Federal Ministry of Finance, NORD/LB Floor Research

Appendix Ratings overview

Issuer	Fit	tch	Mod	ody's	S&P		
(Bloomberg ticker)	Rating	Outlook	Rating	Outlook	Rating	Outlook	
BW (BADWUR)	-	-	Aaa	stab	AA+	pos	
BY (BAYERN)	-	-	Aaa	stab	AAA	stab	
BE (BERGER)	AAA	stab	Aa1	stab	-	-	
BB (BRABUR)	-	-	Aaa	stab	-	-	
HB (BREMEN)	AAA	stab	-	-	-	-	
HH (HAMBRG)	AAA	stab	-	-	-	-	
HE (HESSEN)	-	-	-	-	AA+	stab	
MV (MECVOR)	AAA	stab	-	-	-	-	
NI (NIESA)	AAA	stab	-	-	-	-	
NW (NRW)	AAA	stab	Aa1	stab	AA	stab	
RP (RHIPAL)	AAA	stab	-	-	-	-	
SL (SAARLD)	AAA	stab	-	-	-	-	
SN (SAXONY)	-	-	-	-	AAA	neg	
ST (SACHAN)	AAA	stab	Aa1	stab	-	-	
SH (SCHHOL)	AAA	stab	-	-	-	-	
TH (THRGN)	AAA	stab	-	-	-	-	
Joint Laender (LANDER)*	AAA*	-	-	-	-	-	

^{*} Ratings for all bonds currently in circulation; no outlook provided. Source: Bloomberg, NORD/LB Floor Research

^{**} As reported at the end of the previous year



Appendix Key figures 2023 – at a glance

Key metrics as at year-end 2023 (EURm)	Adjusted revenue	Adjusted expenses	Balance	Debt	GDP	Debt/GDP (in %)	Balance/GDP (in %)
Baden-Wuerttemberg	61,887	61,309	578	30,544	615,071	5.0%	0.1%
Bavaria	70,917	70,915	2	17,218	768,469	2.2%	0.0%
Berlin	35,456	37,145	-1,689	58,940	193,219	30.5%	-0.9%
Brandenburg	15,569	16,060	-492	18,338	97,477	18.8%	-0.5%
Bremen	7,389	7,716	-327	22,618	39,252	57.6%	-0.8%
Hamburg	20,235	19,145	1,091	22,634	150,575	15.0%	0.7%
Hesse	34,067	34,746	-679	41,012	351,139	11.7%	-0.2%
Mecklenburg-Western Pomerania	10,607	10,688	-81	7,175	59,217	12.1%	-0.1%
Lower Saxony	44,100	40,371	3,728	56,414	363,109	15.5%	1.0%
North Rhine-Westphalia	99,741	101,384	-1,643	162,993	839,084	19.4%	-0.2%
Rhineland-Palatinate	22,188	21,197	991	26,486	174,249	15.2%	0.6%
Saarland	6,027	5,813	214	12,186	41,348	29.5%	0.5%
Saxony	22,695	23,826	-1,131	3,529	155,982	2.1%	-0.7%
Saxony-Anhalt	12,735	13,130	-395	21,961	78,380	28.0%	-0.5%
Schleswig-Holstein	17,438	18,129	-691	31,515	118,680	26.6%	-0.6%
Thuringia	12,356	12,706	-350	15,052	75,909	19.8%	-0.5%
Total	493,405	494,282	-877	548,355	4,121,160	13.3%	0.0%

 $Source: Federal\ Ministry\ of\ Finance,\ Federal\ Statistical\ Office,\ NORD/LB\ Floor\ Research$



Appendix	Laender	· budgets	2023					
2023 (EURm)	BW	BY	BE	ВВ	НВ	нн	HE	MV
Adjusted revenue	61,887	70,917	35,456	15,569	7,389	20,235	34,067	10,607
Tax revenue	45,618	54,190	26,364	10,709	5,074	15,743	25,521	6,514
as a % of total revenue	73.71%	76.41%	74.36%	68.79%	68.66%	77.80%	74.91%	61.41%
Federal supplementary grants (BEZ)	-	-	1,733	641	352	-	-	655
as a % of total revenue	-	-	4.89%	4.12%	4.76%	-	-	6.18%
Special-need BEZ (SoBEZ)	-	-	59	97	60	-	-	82
as a % of total revenue	-	-	0.17%	0.62%	0.81%	-	-	0.77%
Financial Power Equalisation (FKA)	-	-	3,805	1,423	771	-	-	1,431
as a % of total revenue	-	-	10.73%	9.14%	10.43%	-	-	13.49%
Total equalisation payments	-	-	5,597	2,161	1,183	-	-	2,168
as a % of total revenue	-	-	15.79%	13.88%	16.01%	-	-	20.44%
Adjusted expenses	61,309	70,915	37,145	16,060	7,716	19,145	34,746	10,688
Personnel expenditure	20,458	27,549	11,171	3,599	2,163	5,477	12,003	2,423
in % of total expenditure	33.37%	38.85%	30.08%	22.41%	28.03%	28.61%	34.54%	22.67%
Interest expenditure	1,086	325	735	192	523	410	767	189
in % of total expenditure	1.77%	0.46%	1.98%	1.19%	6.78%	2.14%	2.21%	1.77%
Grants to municipalities	18,832	15,601	5	5,755	11	16	9,080	3,081
in % of total expenditure	30.72%	22.00%	0.01%	35.83%	0.15%	0.08%	26.13%	28.83%
Investment expenditure	6,030	9,986	3,910	2,050	877	1,891	2,777	1,901
in % of total expenditure	9.84%	14.08%	10.53%	12.76%	11.36%	9.88%	7.99%	17.78%
Financial Power Equalisation (FKA)	4,495	9,130	-	-	-	934	3,444	-
in % of total expenditure	7.33%	12.87%	-	-	-	4.88%	9.91%	-
Budget balance	578	2	-1,689	-492	-327	1,091	-679	-81
Total debt	30,544	17,218	58,940	18,338	22,618	22,634	41,012	7,175

Source: Federal Ministry of Finance, NORD/LB Floor Research

Appendix

Appendix	Laciluei	buugets	2023 (60	iitiiiueuj				
2023 (EURm)	NI	NW	RP	SL	SN	ST	SH	TH
Adjusted revenue	44,100	99,741	22,108	6,027	22,695	12,735	17,438	12,356
Tax revenue	33,784	73,984	16,308	4,419	15,847	8,571	11,805	8,386
as a % of total revenue	76.61%	74.18%	73.50%	73.33%	69.83%	67.30%	67.70%	67.87%
Federal supplementary grants								
(BEZ)	650	376	-	265	1,553	841	136	886
as a % of total revenue	1.47%	0.38%	-	4.40%	6.84%	6.60%	0.78%	7.17%
Special-need BEZ (SoBEZ)	-	-	48	66	73	86	66	85
as a % of total revenue	-	-	0.22%	1.10%	0.32%	0.68%	0.38%	0.69%
Financial Power Equalisation (FKA)	1,568	1,212	-	587	3,398	1,839	357	1,933
as a % of total revenue	3.56%	1.22%	-	9.74%	14.97%	14.44%	2.05%	15.64%
Total equalisation payments	2,218	1,588	48	918	5,024	2,766	559	2,904
as a % of total revenue	5.03%	1.59%	0.22%	16.23%	22.14%	21.72%	3.21%	23.50%
Adjusted expenses	40,372	101,384	21,197	5,813	23,826	13,130	18,129	12,706
Personnel expenditure	14,529	31,534	7,702	1,854	5,410	2,954	5,043	3,387
in % of total expenditure	35.99%	31.10%	36.33%	31.90%	22.71%	22.50%	27.82%	26.66%
Interest expenditure	532	2,925	334	215	41	379	450	225
in % of total expenditure	1.32%	2.88%	1.57%	3.69%	0.17%	2.89%	2.48%	1.77%
Grants to municipalities	13,329	30,806	6,655	1,070	6,385	3,187	5,772	3,445
in % of total expenditure	33.01%	30.39%	31.39%	18.41%	26.80%	24.27%	31.84%	27.11%
Investment expenditure	2,381	10,729	1,125	473	3,612	1,797	1,556	2,007
in % of total expenditure	5.90%	10.58%	5.31%	8.14%	15.16%	13.69%	8.58%	15.79%
Financial Power Equalisation (FKA)	-	-	272	-	-	-	-	-
in % of total expenditure	-	-	1.51%	-	-	-	-	-
Budget balance	3,728	-1,643	991	214	-1,131	-395	-691	-350
Total debt	56,424	162,993	26,486	12,186	3,259	21,961	31,515	15,052

Laender budgets 2023 (continued)

Source: Federal Ministry of Finance, NORD/LB Floor Research



3,876.8 4,121.2

Appendix Overview by key economic indicators

2,927.4 3,026.2 3,134.7

Development of nominal GDP (EURbn)											
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	442.7	463.3	474.9	497.3	516.9	525.4	509.0	539.4	576.1	615.1	3
Bavaria	534.1	554.7	577.7	605.8	620.2	644.0	629.5	668.0	716.8	768.5	2
Berlin	118.5	124.9	133.2	141.3	150.0	157.1	156.5	165.9	178.9	193.2	6
Brandenburg	63.7	65.3	67.5	70.6	72.8	76.1	75.9	80.8	88.7	97.5	11
Bremen	29.8	30.5	31.4	32.4	32.9	33.2	32.2	34.8	37.1	39.3	16
Hamburg	103.4	108.2	110.5	116.6	119.1	125.4	120.4	134.1	148.3	150.6	9
Hesse	253.8	260.3	271.2	280.1	286.4	295.7	287.4	306.2	325.8	351.1	5
Mecklenburg-Western Pomerania	39.4	40.1	41.1	44.2	44.4	47.6	47.0	49.8	54.8	59.2	14
Lower Saxony	259.1	261.4	280.6	287.9	297.7	310.9	303.8	317.3	340.1	363.1	4
North Rhine-Westphalia	617.5	637.3	653.4	679.0	703.3	717.4	706.5	746.5	794.0	839.1	1
Rhineland-Palatinate	127.5	132.9	136.3	140.1	143.3	147.0	144.4	162.5	171.7	174.2	7
Saarland	33.3	34.0	34.3	35.3	35.9	35.9	34.6	36.7	38.8	41.3	15
Saxony	109.3	113.6	117.2	121.8	125.3	130.4	128.7	135.4	146.3	156.0	8
Saxony-Anhalt	56.3	57.4	59.0	60.9	62.2	64.7	64.3	67.8	74.5	78.4	12
Schleswig-Holstein	82.9	84.8	87.5	92.6	95.1	99.6	99.9	105.4	113.7	118.7	10
Thuringia	56.2	57.5	59.0	61.2	62.3	63.8	63.3	66.2	71.1	75.9	13

3,267.2 3,367.9 3,474.1 3,403.7 3,617.0

Development of nominal GDP in EUR per capita
--

Federal government

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	41,473	42,910	43,507	45,260	46,772	47,327	45,851	48,531	51,429	54,339	5
Bavaria	42,226	43,445	44,829	46,726	47,578	49,066	47,934	50,768	54,007	57,343	2
Berlin	34,395	35,741	37,551	39,320	41,164	42,821	42,684	45,203	48,145	51,209	6
Brandenburg	25,980	26,442	27,092	28,265	28,990	30,146	30,033	31,894	34,720	37,814	13
Bremen	45,173	45,739	46,450	47,638	48,282	48,704	47,235	51,345	54,504	56,981	3
Hamburg	58,950	60,935	61,449	64,042	64,798	67,589	65,094	72,372	79,172	79,176	1
Hesse	41,809	42,422	43,773	44,972	45,747	47,038	45,755	48,654	51,368	54,806	4
Mecklenburg-Western Pomerania	24,663	24,954	25,497	27,428	27,529	29,582	29,213	30,893	33,831	36,335	14
Lower Saxony	33,176	33,186	35,359	36,195	37,327	38,874	37,980	39,591	42,074	44,531	8
North Rhine-Westphalia	35,074	35,899	36,547	37,929	39,228	39,970	39,388	41,671	44,032	46,194	7
Rhineland-Palatinate	31,858	32,966	33,576	34,428	35,070	35,903	35,260	39,619	41,551	41,797	9
Saarland	33,594	34,302	34,397	35,510	36,148	36,332	35,101	37,344	39,322	41,617	10
Saxony	26,989	27,908	28,711	29,852	30,684	32,011	31,667	33,440	35,982	38,143	12
Saxony-Anhalt	25,141	25,617	26,325	27,317	28,000	29,475	29,385	31,187	34,208	35,911	15
Schleswig-Holstein	29,350	29,809	30,488	32,094	32,838	34,303	34,353	36,136	38,705	40,090	11
Thuringia	26,031	26,563	27,263	28,394	28,987	29,907	29,746	31,288	33,553	35,715	16
Federal government	36,149	37,046	38,067	39,527	40,594	41,763	40,929	43,481	46,264	48,750	

NB: Lowest values in orange, highest values in blue.

Source: Federal Statistical Office, national accounts produced by the Laender (VGRdL), NORD/LB Floor Research



Real GDP growth Y/Y in %											
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	2.2	2.5	1.1	3.6	2.2	-0.4	-4.8	4.0	2.2	-0.6	8
Bavaria	2.4	1.8	2.5	3.7	0.4	1.8	-3.9	3.8	2.1	0.3	6
Berlin	2.7	3.6	5.1	4.3	3.9	2.9	-2.5	3.3	4.5	1.6	4
Brandenburg	3.8	0.9	2.1	2.6	0.7	1.7	-2.1	1.7	2.6	2.1	2
Bremen	1.2	0.4	1.9	1.4	-0.2	-1.5	-5.1	4.7	2.0	-0.6	8
Hamburg	-0.4	2.0	2.1	1.8	0.1	3.6	-4.9	1.7	5.2	-1.1	13
Hesse	1.7	0.5	2.7	2.2	0.6	1.4	-5.1	4.0	1.5	1.2	5
Mecklenburg-Western Pomerania	3.1	0.3	1.4	4.3	-1.8	4.4	-3.2	1.5	3.0	3.3	1
Lower Saxony	2.9	-0.6	6.0	0.9	1.3	2.1	-4.0	1.5	1.0	0.2	7
North Rhine-Westphalia	2.0	1.5	1.2	2.5	1.4	0.0	-3.2	2.3	0.7	-1.0	12
Rhineland-Palatinate	2.1	2.5	1.1	1.4	0.3	0.5	-3.6	10.0	0.2	-4.9	16
Saarland	3.2	0.3	-0.5	1.9	-0.5	-2.0	-5.0	2.9	0.9	-0.6	8
Saxony	3.2	2.2	1.8	2.3	0.8	1.5	-3.5	2.4	2.3	-0.6	8
Saxony-Anhalt	1.1	0.4	1.5	1.0	-0.2	1.6	-2.2	1.3	2.0	-1.4	15
Schleswig-Holstein	1.7	0.8	2.3	2.9	0.6	2.4	-1.5	-0.2	1.8	-1.1	13
Thuringia	3.6	0.8	1.2	2.0	-0.2	0.0	-3.0	2.1	1.7	1.8	3
Federal government	2.2	1.5	2.2	2.7	1.1	1.1	-3.8	3.2	1.8	-0.3	
Unemployment rate (%)											
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	4.0	3.8	3.8	3.5	3.2	3.2	2020 4.1	3.9	3.5	2023 3.9	Ranking 2
Baden-Wuerttemberg		3.8 3.6	3.8 3.5	3.5 3.2	3.2 2.9	3.2 2.8	4.1 3.6	3.9 3.5	3.5 3.1		2
Baden-Wuerttemberg Bavaria Berlin	4.0 3.8 11.1	3.8 3.6 10.7	3.8 3.5 9.8	3.5 3.2 9.0	3.2 2.9 8.1	3.2 2.8 7.8	4.1 3.6 9.7	3.9 3.5 9.8	3.5 3.1 8.8	3.9 3.4 9.1	2 1 15
Baden-Wuerttemberg	4.0 3.8 11.1 9.4	3.8 3.6 10.7 8.7	3.8 3.5 9.8 8.0	3.5 3.2 9.0 7.0	3.2 2.9	3.2 2.8 7.8 5.8	4.1 3.6 9.7 6.2	3.9 3.5 9.8 5.9	3.5 3.1	3.9 3.4	2
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen	4.0 3.8 11.1 9.4 10.9	3.8 3.6 10.7 8.7 10.9	3.8 3.5 9.8 8.0 10.5	3.5 3.2 9.0 7.0 10.2	3.2 2.9 8.1 6.3 9.8	3.2 2.8 7.8 5.8 9.9	4.1 3.6 9.7 6.2 11.2	3.9 3.5 9.8 5.9 10.7	3.5 3.1 8.8 5.6 10.2	3.9 3.4 9.1 5.9 10.6	2 1 15 7 16
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg	4.0 3.8 11.1 9.4 10.9 7.6	3.8 3.6 10.7 8.7 10.9 7.4	3.8 3.5 9.8 8.0 10.5 7.1	3.5 3.2 9.0 7.0 10.2 6.8	3.2 2.9 8.1 6.3 9.8 6.3	3.2 2.8 7.8 5.8 9.9 6.1	4.1 3.6 9.7 6.2 11.2 7.6	3.9 3.5 9.8 5.9 10.7 7.5	3.5 3.1 8.8 5.6 10.2 6.8	3.9 3.4 9.1 5.9 10.6 7.4	2 1 15 7 16 12
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse	4.0 3.8 11.1 9.4 10.9 7.6 5.7	3.8 3.6 10.7 8.7 10.9 7.4 5.5	3.8 3.5 9.8 8.0 10.5 7.1 5.3	3.5 3.2 9.0 7.0 10.2 6.8 5.0	3.2 2.9 8.1 6.3 9.8 6.3 4.6	3.2 2.8 7.8 5.8 9.9 6.1 4.4	4.1 3.6 9.7 6.2 11.2 7.6 5.4	3.9 3.5 9.8 5.9 10.7 7.5 5.2	3.5 3.1 8.8 5.6 10.2 6.8 4.8	3.9 3.4 9.1 5.9 10.6 7.4 5.2	2 1 15 7 16 12 4
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2	3.8 3.6 10.7 8.7 10.9 7.4 5.5	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7	2 1 15 7 16 12 4
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7	2 1 15 7 16 12 4 14
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5 8.2	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1 8.0	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0 7.7	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8 7.4	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3 6.8	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0 6.5	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8 7.5	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5 7.3	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3 6.8	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7	2 1 15 7 16 12 4 14 6
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5 8.2 5.4	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1 8.0 5.2	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0 7.7 5.1	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8 7.4 4.8	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3 6.8 4.4	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0 6.5 4.3	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8 7.5	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5 7.3 5.0	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3 6.8 4.6	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7 7.2 4.9	2 1 15 7 16 12 4 14 6 11
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5 8.2 5.4 7.2	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1 8.0 5.2 7.2	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0 7.7 5.1 7.2	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8 7.4 4.8 6.7	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3 6.8 4.4 6.1	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0 6.5 4.3 6.2	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8 7.5 5.2 7.2	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5 7.3 5.0 6.8	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3 6.8 4.6 6.3	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7 7.2 4.9 6.8	2 1 15 7 16 12 4 14 6 11 3
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5 8.2 5.4 7.2 8.8	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1 8.0 5.2 7.2 8.2	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0 7.7 5.1 7.2 7.5	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8 7.4 4.8 6.7 6.7	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3 6.8 4.4 6.1 6.0	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0 6.5 4.3 6.2 5.5	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8 7.5 5.2 7.2 6.1	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5 7.3 5.0 6.8 5.9	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3 6.8 4.6 6.3 5.6	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7 7.2 4.9 6.8 6.2	2 1 15 7 16 12 4 14 6 11 3
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony Saxony-Anhalt	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5 8.2 5.4 7.2 8.8 10.7	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1 8.0 5.2 7.2 8.2 10.2	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0 7.7 5.1 7.2 7.5 9.6	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8 7.4 4.8 6.7 6.7 8.4	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3 6.8 4.4 6.1 6.0 7.7	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0 6.5 4.3 6.2 5.5 7.1	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8 7.5 5.2 7.2 6.1 7.7	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5 7.3 5.0 6.8 5.9 7.3	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3 6.8 4.6 6.3 5.6 7.1	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7 7.2 4.9 6.8 6.2 7.5	2 1 15 7 16 12 4 14 6 11 3 10 9
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony Saxony-Anhalt Schleswig-Holstein	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5 8.2 5.4 7.2 8.8 10.7 6.8	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1 8.0 5.2 7.2 8.2 10.2 6.5	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0 7.7 5.1 7.2 7.5 9.6 6.3	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8 7.4 4.8 6.7 6.7 8.4 6.0	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3 6.8 4.4 6.1 6.0 7.7 5.5	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0 6.5 4.3 6.2 5.5 7.1 5.1	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8 7.5 5.2 7.2 6.1 7.7 5.8	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5 7.3 5.0 6.8 5.9 7.3 5.6	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3 6.8 4.6 6.3 5.6 7.1	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7 7.2 4.9 6.8 6.2 7.5 5.5	2 1 15 7 16 12 4 14 6 11 3 10 9
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony Saxony-Anhalt	4.0 3.8 11.1 9.4 10.9 7.6 5.7 11.2 6.5 8.2 5.4 7.2 8.8 10.7	3.8 3.6 10.7 8.7 10.9 7.4 5.5 10.4 6.1 8.0 5.2 7.2 8.2 10.2	3.8 3.5 9.8 8.0 10.5 7.1 5.3 9.7 6.0 7.7 5.1 7.2 7.5 9.6	3.5 3.2 9.0 7.0 10.2 6.8 5.0 8.6 5.8 7.4 4.8 6.7 6.7 8.4	3.2 2.9 8.1 6.3 9.8 6.3 4.6 7.9 5.3 6.8 4.4 6.1 6.0 7.7	3.2 2.8 7.8 5.8 9.9 6.1 4.4 7.1 5.0 6.5 4.3 6.2 5.5 7.1	4.1 3.6 9.7 6.2 11.2 7.6 5.4 7.8 5.8 7.5 5.2 7.2 6.1 7.7	3.9 3.5 9.8 5.9 10.7 7.5 5.2 7.6 5.5 7.3 5.0 6.8 5.9 7.3	3.5 3.1 8.8 5.6 10.2 6.8 4.8 7.3 5.3 6.8 4.6 6.3 5.6 7.1	3.9 3.4 9.1 5.9 10.6 7.4 5.2 7.7 5.7 7.2 4.9 6.8 6.2 7.5	2 1 15 7 16 12 4 14 6 11 3 10 9

NB: Lowest values in orange, highest values in blue. Reversed for unemployment figures. Source: Federal Statistical Office, national accounts produced by the Laender (VGRdL), NORD/LB Floor Research



Appendix Overview by budget indicators

Official debt level (EURbn)											
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	45.6	40.7	40.6	37.6	35.4	35.3	38.9	38.0	34.2	30.5	11
Bavaria	25.1	22.6	19.4	16.9	14.6	12.9	17.8	19.8	18.9	17.2	5
Berlin	59.8	58.6	58.0	56.5	54.4	53.9	59.6	59.6	59.4	58.9	15
Brandenburg	16.7	16.7	16.2	15.4	14.8	15.3	17.3	17.8	17.2	18.3	6
Bremen	19.5	21.2	21.0	20.5	21.5	29.7	39.0	36.0	22.4	22.6	8
Hamburg	23.2	23.2	22.9	22.3	23.9	23.2	24.9	25.4	25.1	22.6	9
Hesse	41.0	42.6	42.7	40.9	39.9	40.4	43.0	40.4	40.0	41.0	13
Mecklenburg-Western Pomerania	9.4	9.2	8.3	7.8	7.5	7.4	8.4	8.5	8.2	7.2	2
Lower Saxony	57.2	58.1	57.2	57.2	56.6	56.4	61.8	61.6	59.9	56.4	14
North Rhine-Westphalia	136.8	136.9	137.0	138.8	135.6	142.9	153.8	158.6	162.2	163.0	16
Rhineland-Palatinate	32.6	32.1	32.5	31.1	30.5	29.8	30.8	28.5	28.0	26.5	10
Saarland	14.0	14.1	13.8	13.8	13.6	13.7	13.9	13.5	13.0	12.2	3
Saxony	3.2	2.3	1.9	1.6	1.4	1.1	3.6	4.3	3.5	3.3	1
Saxony-Anhalt	20.5	20.0	20.2	20.8	19.9	20.9	21.2	21.9	22.9	22.0	7
Schleswig-Holstein	26.8	26.7	26.5	25.7	27.4	27.8	29.1	31.0	32.6	31.5	12
Thuringia	15.7	15.6	14.8	15.3	14.3	14.3	15.4	16.1	15.5	15.1	4

Debt per	capita	in	EUR
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	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	4,286	3,791	3,734	3,441	3,224	3,180	3,504	3,427	3,042	2,700	3
Bavaria	1,991	1,781	1,509	1,315	1,124	985	1,354	1,510	1,417	1,286	2
Berlin	17,468	16,844	16,477	15,917	15,137	14,769	16,286	16,285	15,943	15,631	15
Brandenburg	6,826	6,785	6,507	6,190	5,911	6,098	6,867	7,031	6,711	7,119	9
Bremen	29,736	32,044	31,275	30,384	31,617	43,542	57,443	52,927	32,924	32,854	16
Hamburg	13,300	13,116	12,810	12,391	13,132	12,583	13,510	13,758	13,375	11,910	13
Hesse	6,788	6,978	6,909	6,625	6,406	6,435	6,845	6,425	6,276	6,405	6
Mecklenburg-Western Pomerania	5,870	5,782	5,175	4,872	4,676	4,625	5,203	5,252	5,068	4,405	4
Lower Saxony	7,339	7,414	7,210	7,191	7,111	7,049	7,725	7,709	7,385	6,294	7
North Rhine-Westphalia	7,783	7,753	7,669	7,763	7,580	7,970	8,576	8,844	8,973	8,979	10
Rhineland-Palatinate	8,170	7,983	8,011	7,666	7,489	7,294	7,537	6,967	6,739	6,357	5
Saarland	14,100	14,272	13,904	13,850	13,628	13,830	14,121	13,742	13,127	12,273	14
Saxony	783	566	453	381	346	279	874	1,055	862	798	1
Saxony-Anhalt	9,142	8,976	9,006	9,272	8,938	9,495	9,703	10,014	10,483	10,068	11
Schleswig-Holstein	9,533	9,423	9,270	8,925	9,499	9,587	10,015	10,673	11,066	10,653	12
Thuringia	7,254	7,223	6,837	7,101	6,630	6,689	7,231	7,573	7,280	7,086	8

NB: Lowest values in blue, highest values in orange.

Source: Federal Ministry of Finance, NORD/LB Floor Research



Official debt level as a % o	f GDP										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	10.29	8.78	8.56	7.56	6.86	6.70	7.70	7.10	5.97	4.97	3
Bavaria	4.70	4.08	3.36	2.80	2.35	2.00	2.85	3.00	2.64	2.24	2
Berlin	50.43	46.91	43.54	39.99	36.25	34.26	38.60	36.60	33.11	30.50	15
Brandenburg	26.23	25.55	23.97	21.80	20.27	20.13	23.03	22.57	19.39	18.81	9
Bremen	65.60	69.61	66.97	63.44	65.17	89.75	120.76	105.12	57.68	57.62	16
Hamburg	22.46	21.47	20.71	19.12	20.08	18.62	21.15	20.03	17.39	15.03	6
Hesse	16.17	16.36	15.74	14.61	13.93	13.67	15.08	13.36	12.37	11.68	4
Mecklenburg-Western Pomerania	23.78	23.07	20.30	17.74	16.97	15.61	17.89	17.09	15.43	12.12	5
Lower Saxony	22.07	22.23	20.37	19.85	19.02	18.13	20.51	19.52	17.66	15.54	8
North Rhine-Westphalia	22.15	21.48	20.97	20.44	19.28	19.94	22.12	21.63	20.43	19.43	10
Rhineland-Palatinate	25.59	24.11	23.82	22.22	21.27	20.29	21.53	17.58	16.29	15.20	7
Saarland	42.01	41.45	40.40	39.10	37.80	38.13	40.73	37.98	33.72	29.47	14
Saxony	2.90	2.02	1.58	1.28	1.12	0.87	2.79	3.19	2.40	2.09	1
Saxony-Anhalt	36.44	34.91	34.28	34.09	32.06	32.24	33.48	32.63	30.38	28.02	13
Schleswig-Holstein	32.39	31.50	30.28	27.72	28.83	27.88	29.52	29.68	28.91	26.55	12
Thuringia	27.89	27.08	25.15	25.08	22.92	22.36	24.66	24.59	21.63	19.83	11
Official debt level/tax revo	enue										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Official debt level/tax revo		2015 1.23x	2016 1.12x	2017 1.00x	2018 0.87x	2019 0.86x	2020 1.03x	2021 0.91x	2022 0.82x	2023 0.67x	Ranking 11
	2014										_
Baden-Wuerttemberg	2014 1.43x	1.23x	1.12x	1.00x	0.87x	0.86x	1.03x	0.91x	0.82x	0.67x	11
Baden-Wuerttemberg Bavaria	2014 1.43x 0.63x	1.23x 0.54x	1.12x 0.42x	1.00x 0.36x	0.87x 0.29x	0.86x 0.25x	1.03x 0.40x	0.91x 0.40x	0.82x 0.38x	0.67x 0.38x	11 5
Baden-Wuerttemberg Bavaria Berlin	2014 1.43x 0.63x 4.55x	1.23x 0.54x 4.30x	1.12x 0.42x 3.93x	1.00x 0.36x 3.67x	0.87x 0.29x 3.19x	0.86x 0.25x 3.08x	1.03x 0.40x 2.88x	0.91x 0.40x 2.42x	0.82x 0.38x 2.41x	0.67x 0.38x 1.29x	11 5 15
Baden-Wuerttemberg Bavaria Berlin Brandenburg	2014 1.43x 0.63x 4.55x 2.72x	1.23x 0.54x 4.30x 2.50x	1.12x 0.42x 3.93x 2.24x	1.00x 0.36x 3.67x 2.02x	0.87x 0.29x 3.19x 1.81x	0.86x 0.25x 3.08x 1.84x	1.03x 0.40x 2.88x 2.12x	0.91x 0.40x 2.42x 1.88x	0.82x 0.38x 2.41x 1.82x	0.67x 0.38x 1.29x 0.40x	11 5 15 6
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse	2014 1.43x 0.63x 4.55x 2.72x 7.62x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x	11 5 15 6 8
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x	0.67x 0.38x 1.29x 0.40x 0.50x	11 5 15 6 8 9
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x 2.84x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x 2.40x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x 1.62x 2.37x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x 1.50x 2.20x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x 2.07x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x 1.54x 2.34x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x 1.54x 2.12x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x 1.50x 2.06x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x	11 5 15 6 8 9 13 2
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x 2.10x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x 1.62x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x 1.50x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x 1.54x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x 1.54x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x 1.50x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x 0.16x	11 5 15 6 8 9 13 2
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x 2.84x 2.95x 3.09x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x 2.10x 2.64x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x 2.40x 2.55x 2.71x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x 1.62x 2.37x 2.49x 2.43x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x 1.50x 2.20x 2.29x 2.39x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x 2.07x 2.3x 2.14x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x 1.54x 2.34x 2.52x 2.26x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x 1.54x 2.12x 2.32x 1.71x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x 1.50x 2.06x 2.38x 1.68x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x 0.16x 1.24x	11 5 15 6 8 9 13 2 14 16
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x 2.84x 2.95x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x 2.10x 2.64x 2.75x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x 2.40x 2.55x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x 1.62x 2.37x 2.49x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x 1.50x 2.20x 2.29x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x 2.07x 2.3x 2.14x 4.16x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x 1.54x 2.34x 2.52x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x 1.54x 2.12x 2.32x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x 1.50x 2.06x 2.38x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x 0.16x 1.24x 3.57x	11 5 15 6 8 9 13 2 14
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x 2.84x 2.95x 3.09x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x 2.10x 2.64x 2.75x 2.92x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x 2.40x 2.55x 2.71x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x 1.62x 2.37x 2.49x 2.43x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x 1.50x 2.20x 2.29x 2.39x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x 2.07x 2.3x 2.14x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x 1.54x 2.34x 2.52x 2.26x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x 1.54x 2.12x 2.32x 1.71x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x 1.50x 2.06x 2.38x 1.68x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x 0.16x 1.24x 3.57x 0.58x	11 5 15 6 8 9 13 2 14 16
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x 2.84x 2.95x 3.09x 5.33x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x 2.10x 2.64x 2.75x 2.92x 5.14x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x 2.40x 2.55x 2.71x 4.75x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x 1.62x 2.37x 2.49x 2.43x 4.56x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x 1.50x 2.20x 2.29x 2.39x 4.24x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x 2.07x 2.3x 2.14x 4.16x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x 1.54x 2.34x 2.52x 2.26x 4.16x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x 1.54x 2.12x 2.32x 1.71x 3.83x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x 1.50x 2.06x 2.38x 1.68x 3.67x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x 0.16x 1.24x 3.57x 0.58x 0.27x	111 5 15 6 8 9 13 2 14 16 10 3
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony	2014 1.43x 0.63x 4.55x 2.72x 7.62x 2.35x 2.21x 2.23x 2.84x 2.95x 3.09x 5.33x 0.31x	1.23x 0.54x 4.30x 2.50x 7.82x 2.29x 2.17x 2.10x 2.64x 2.75x 2.92x 5.14x 0.21x	1.12x 0.42x 3.93x 2.24x 6.89x 2.12x 1.93x 1.84x 2.40x 2.55x 2.71x 4.75x 0.16x	1.00x 0.36x 3.67x 2.02x 6.57x 1.92x 1.80x 1.62x 2.37x 2.49x 2.43x 4.56x 0.13x	0.87x 0.29x 3.19x 1.81x 6.42x 1.90x 1.74x 1.50x 2.20x 2.29x 2.39x 4.24x 0.11x	0.86x 0.25x 3.08x 1.84x 8.82x 1.78x 1.66x 1.39x 2.07x 2.3x 2.14x 4.16x 0.09x	1.03x 0.40x 2.88x 2.12x 10.15x 2.13x 2.02x 1.54x 2.34x 2.52x 2.26x 4.16x 0.27x	0.91x 0.40x 2.42x 1.88x 7.99x 1.80x 1.61x 1.54x 2.12x 2.32x 1.71x 3.83x 0.30x	0.82x 0.38x 2.41x 1.82x 4.97x 1.78x 1.59x 1.50x 2.06x 2.38x 1.68x 3.67x 0.24x	0.67x 0.38x 1.29x 0.40x 0.50x 0.50x 0.90x 0.16x 1.24x 3.57x 0.58x 0.27x	111 5 15 6 8 9 13 2 14 16 10 3 1

NB: Lowest values in blue, highest values in orange.

Source: Federal Ministry of Finance, Federal Statistical Office, NORD/LB Floor Research



Tax revenue/interest expo	enditure	!									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	20.1x	21.5x	24.7x	27.2x	29.1x	33.3x	32.2x	26.5x	38.9x	42.0x	9
Bavaria	44.8x	50.5x	60.9x	65.2x	86.3x	98.5x	92.9x	125.3x	147.7x	166.7x	2
Berlin	7.5x	8.5x	10.7x	11.8x	13.8x	15.1x	21.4x	22.7x	28.2x	35.8x	14
Brandenburg	14.4x	18.4x	21.7x	25.5x	29.1x	30.8x	41.1x	38.1x	52.6x	55.9x	3
Bremen	4.6x	4.2x	5.1x	5.1x	5.7x	5.6x	6.3x	7.6 x	8.2x	9.7x	16
Hamburg	14.4x	17.0x	19.5x	23.3x	28.1x	29.1x	29.1x	37.3x	44.4x	38.4x	5
Hesse	15.6x	16.7x	21.6x	22.7x	23.9x	27.0x	24.3x	29.7x	35.4x	33.3x	10
Mecklenburg-Western Pomerania	13.3x	15.5x	18.1x	21.4x	23.6x	27.1x	28.1x	33.0x	41.9x	34.5x	7
Lower Saxony	13.2x	15.8x	18.8x	20.9x	24.2x	27.6x	43.8x	50.4x	40.3x	63.5x	8
North Rhine-Westphalia	13.0x	15.0x	19.2x	21.0x	24.2x	31.0x	44.1x	43.3x	51.7x	25.3x	4
Rhineland-Palatinate	11.2x	13.4x	14.6x	17.1x	22.1x	29.4x	36.6x	50.3x	43.7x	48.9x	6
Saarland	5.6x	6.4x	7.4x	8.0x	8.9x	10.4x	11.6x	14.0x	16.2x	20.6x	15
Saxony	40.0x	50.0x	60.8x	69.9x	79.7x	108.2x	171.4x	186.6x	332.1x	384.6x	1
Saxony-Anhalt	9.5x	11.0x	12.8x	14.6x	19.1x	20.3x	21.5x	23.2x	32.5x	22.6x	13
Schleswig-Holstein	9.3x	12.4x	14.8x	18.4x	20.5x	24.3x	30.0x	32.6x	35.0x	26.2x	11
Thuringia	10.1x	11.6x	14.3x	16.7x	20.5x	22.7x	24.0x	27.6x	34.9x	37.3x	12
Adjusted revenue (EURm)											
rajusteu revenue (Eorin)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	42,952	44,054	47,670	49,888	53,335	54,999	55,139	61,821	64,034	61,887	3
Bavaria	51,786	54,048	56,989	59,917	63,792	65,949	62,468	72,849	74,275	70,917	2
Berlin	23,799									70,517	
Brandenburg		24,713	26,283	27,701	29,340	29,812	31,116	35,831	37,379	35,456	5
	10,537	24,713 10,764	26,283 11,198	27,701 11,612	29,340 12,279	·	•	·	•	•	
Bremen	•	·	-			29,812	31,116	35,831	37,379	35,456	5
Bremen Hamburg	10,537	10,764	11,198	11,612	12,279	29,812 12,334	31,116 12,572	35,831 13,859	37,379 15,015	35,456 15,569	5 11
	10,537 4,658	10,764 4,839	11,198 5,277	11,612 5,491	12,279 5,734	29,812 12,334 5,961	31,116 12,572 6,288	35,831 13,859 7,286	37,379 15,015 7,313	35,456 15,569 7,389	5 11 15
Hamburg	10,537 4,658 12,297	10,764 4,839 12,851	11,198 5,277 13,757	11,612 5,491 14,541	12,279 5,734 15,641	29,812 12,334 5,961 16,200	31,116 12,572 6,288 16,211	35,831 13,859 7,286 19,620	37,379 15,015 7,313 20,732	35,456 15,569 7,389 20,235	5 11 15 9
Hamburg Hesse	10,537 4,658 12,297 23,011	10,764 4,839 12,851 24,512	11,198 5,277 13,757 27,083	11,612 5,491 14,541 28,043	12,279 5,734 15,641 28,826	29,812 12,334 5,961 16,200 29,936	31,116 12,572 6,288 16,211 31,937	35,831 13,859 7,286 19,620 36,705	37,379 15,015 7,313 20,732 35,374	35,456 15,569 7,389 20,235 34,067	5 11 15 9 6
Hamburg Hesse Mecklenburg-Western Pomerania	10,537 4,658 12,297 23,011 7,394	10,764 4,839 12,851 24,512 7,737	11,198 5,277 13,757 27,083 7,863	11,612 5,491 14,541 28,043 8,063	12,279 5,734 15,641 28,826 8,301	29,812 12,334 5,961 16,200 29,936 8,583	31,116 12,572 6,288 16,211 31,937 9,284	35,831 13,859 7,286 19,620 36,705 10,508	37,379 15,015 7,313 20,732 35,374 11,104	35,456 15,569 7,389 20,235 34,067 10,607	5 11 15 9 6 14
Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony	10,537 4,658 12,297 23,011 7,394 27,140	10,764 4,839 12,851 24,512 7,737 28,893	11,198 5,277 13,757 27,083 7,863 30,131	11,612 5,491 14,541 28,043 8,063 30,753	12,279 5,734 15,641 28,826 8,301 33,420	29,812 12,334 5,961 16,200 29,936 8,583 34,188	31,116 12,572 6,288 16,211 31,937 9,284 35,494	35,831 13,859 7,286 19,620 36,705 10,508 36,501	37,379 15,015 7,313 20,732 35,374 11,104 40,667	35,456 15,569 7,389 20,235 34,067 10,607 44,100	5 11 15 9 6 14 4
Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia	10,537 4,658 12,297 23,011 7,394 27,140 59,881	10,764 4,839 12,851 24,512 7,737 28,893 63,688	11,198 5,277 13,757 27,083 7,863 30,131 68,432	11,612 5,491 14,541 28,043 8,063 30,753 71,801	12,279 5,734 15,641 28,826 8,301 33,420 75,534	29,812 12,334 5,961 16,200 29,936 8,583 34,188 78,369	31,116 12,572 6,288 16,211 31,937 9,284 35,494 93,192	35,831 13,859 7,286 19,620 36,705 10,508 36,501 96,390	37,379 15,015 7,313 20,732 35,374 11,104 40,667 103,576	35,456 15,569 7,389 20,235 34,067 10,607 44,100 99,741	5 11 15 9 6 14 4
Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate	10,537 4,658 12,297 23,011 7,394 27,140 59,881 14,578	10,764 4,839 12,851 24,512 7,737 28,893 63,688 15,284	11,198 5,277 13,757 27,083 7,863 30,131 68,432 16,343	11,612 5,491 14,541 28,043 8,063 30,753 71,801 17,287	12,279 5,734 15,641 28,826 8,301 33,420 75,534 17,289	29,812 12,334 5,961 16,200 29,936 8,583 34,188 78,369 18,470	31,116 12,572 6,288 16,211 31,937 9,284 35,494 93,192 18,984	35,831 13,859 7,286 19,620 36,705 10,508 36,501 96,390 22,985	37,379 15,015 7,313 20,732 35,374 11,104 40,667 103,576 21,711	35,456 15,569 7,389 20,235 34,067 10,607 44,100 99,741 22,188	5 11 15 9 6 14 4 1
Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland	10,537 4,658 12,297 23,011 7,394 27,140 59,881 14,578 3,590	10,764 4,839 12,851 24,512 7,737 28,893 63,688 15,284 3,745	11,198 5,277 13,757 27,083 7,863 30,131 68,432 16,343 3,968	11,612 5,491 14,541 28,043 8,063 30,753 71,801 17,287 4,265	12,279 5,734 15,641 28,826 8,301 33,420 75,534 17,289 4,381	29,812 12,334 5,961 16,200 29,936 8,583 34,188 78,369 18,470 4,438	31,116 12,572 6,288 16,211 31,937 9,284 35,494 93,192 18,984 4,728	35,831 13,859 7,286 19,620 36,705 10,508 36,501 96,390 22,985 4,905	37,379 15,015 7,313 20,732 35,374 11,104 40,667 103,576 21,711 5,564	35,456 15,569 7,389 20,235 34,067 10,607 44,100 99,741 22,188 6,027	5 11 15 9 6 14 4 1 8
Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony	10,537 4,658 12,297 23,011 7,394 27,140 59,881 14,578 3,590 17,318	10,764 4,839 12,851 24,512 7,737 28,893 63,688 15,284 3,745 18,041	11,198 5,277 13,757 27,083 7,863 30,131 68,432 16,343 3,968 17,640	11,612 5,491 14,541 28,043 8,063 30,753 71,801 17,287 4,265 18,268	12,279 5,734 15,641 28,826 8,301 33,420 75,534 17,289 4,381 20,268	29,812 12,334 5,961 16,200 29,936 8,583 34,188 78,369 18,470 4,438 19,385	31,116 12,572 6,288 16,211 31,937 9,284 35,494 93,192 18,984 4,728 20,025	35,831 13,859 7,286 19,620 36,705 10,508 36,501 96,390 22,985 4,905 20,418	37,379 15,015 7,313 20,732 35,374 11,104 40,667 103,576 21,711 5,564 22,726	35,456 15,569 7,389 20,235 34,067 10,607 44,100 99,741 22,188 6,027 22,695	5 11 15 9 6 14 4 1 8 16
Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony Saxony-Anhalt	10,537 4,658 12,297 23,011 7,394 27,140 59,881 14,578 3,590 17,318 9,986	10,764 4,839 12,851 24,512 7,737 28,893 63,688 15,284 3,745 18,041 10,795	11,198 5,277 13,757 27,083 7,863 30,131 68,432 16,343 3,968 17,640 10,811	11,612 5,491 14,541 28,043 8,063 30,753 71,801 17,287 4,265 18,268 10,888	12,279 5,734 15,641 28,826 8,301 33,420 75,534 17,289 4,381 20,268 11,033	29,812 12,334 5,961 16,200 29,936 8,583 34,188 78,369 18,470 4,438 19,385 11,313	31,116 12,572 6,288 16,211 31,937 9,284 35,494 93,192 18,984 4,728 20,025 11,455	35,831 13,859 7,286 19,620 36,705 10,508 36,501 96,390 22,985 4,905 20,418 12,464	37,379 15,015 7,313 20,732 35,374 11,104 40,667 103,576 21,711 5,564 22,726 13,560	35,456 15,569 7,389 20,235 34,067 10,607 44,100 99,741 22,188 6,027 22,695 12,735	5 11 15 9 6 14 4 1 8 16 7

NB: Lowest values in blue, highest values in orange. Reversed for tax revenue/interest expenses as well as adjusted revenue. Source: Federal Ministry of Finance, Federal Statistical Office, NORD/LB Floor Research



Adjusted revenue in EUR ¡	per capi	ta									
·	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	4,008	4,049	4,353	4,555	4,818	4,955	4,966	5,557	5,677	5,458	12
Bavaria	4,080	4,208	4,407	4,634	4,878	5,025	4,754	5,528	5,556	5,314	15
Berlin	6,859	7,021	7,352	7,749	8,050	8,124	8,492	9,743	9,954	9,374	3
Brandenburg	4,287	4,332	4,489	4,655	4,888	4,891	4,967	5,461	5,835	6,030	6
Bremen	7,037	7,206	7,774	8,090	8,395	8,751	9,245	10,771	10,678	10,682	1
Hamburg	6,976	7,190	7,599	8,032	8,495	8,770	8,751	10,583	10,957	10,593	2
Hesse	3,776	3,969	4,359	4,514	4,601	4,761	5,075	5,831	5,535	5,306	16
Mecklenburg-Western Pomerania	4,623	4,799	4,882	5,006	5,157	5,337	5,764	6,522	6,819	6,510	4
Lower Saxony	3,468	3,519	3,792	3,870	4,187	4,277	4,435	4,547	4,996	5,403	13
North Rhine-Westphalia	3,395	3,565	3,825	4,013	4,212	4,367	5,199	5,378	5,710	5,483	11
Rhineland-Palatinate	3,634	3,771	4,019	4,251	4,232	4,511	4,632	5,597	5,220	5,315	14
Saarland	3,630	3,761	3,982	4,279	4,423	4,497	4,805	4,993	5,605	6,060	5
Saxony	4,271	4,417	4,322	4,475	4,970	4,761	4,936	5,050	5,562	5,550	10
Saxony-Anhalt	4,467	4,808	4,835	4,869	4,996	5,155	5,253	5,746	6,201	5,840	8
Schleswig-Holstein	3,399	3,725	4,006	4,241	4,313	4,565	5,052	5,381	5,753	5,880	7
Thuringia	4,239	4,304	4,528	4,674	4,852	4,909	4,808	5,172	5,900	5,822	9
Adiusted expenditure (EU	Rm)										
Adjusted expenditure (EU	Rm) 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking*
Adjusted expenditure (EU	-	2015 44,050	2016 47,483	2017 48,173	2018 50,312	2019 51,608	2020 58,430	2021 60,373	2022 60,558	2023 61,309	Ranking* -
	2014										_
Baden-Wuerttemberg	2014 42,254	44,050	47,483	48,173	50,312	51,608	58,430	60,373	60,558	61,309	_
Baden-Wuerttemberg Bavaria	2014 42,254 50,178	44,050 51,966	47,483 55,178	48,173 56,938	50,312 59,579	51,608 64,680	58,430 68,602	60,373 71,959	60,558 71,531	61,309 70,915	_
Baden-Wuerttemberg Bavaria Berlin	2014 42,254 50,178 22,961	44,050 51,966 24,507	47,483 55,178 26,147	48,173 56,938 26,691	50,312 59,579 26,918	51,608 64,680 28,222	58,430 68,602 32,889	60,373 71,959 36,017	60,558 71,531 36,432	61,309 70,915 37,145	- - -
Baden-Wuerttemberg Bavaria Berlin Brandenburg	2014 42,254 50,178 22,961 10,210	44,050 51,966 24,507 10,527	47,483 55,178 26,147 10,778	48,173 56,938 26,691 11,114	50,312 59,579 26,918 11,619	51,608 64,680 28,222 13,350	58,430 68,602 32,889 13,313	60,373 71,959 36,017 14,667	60,558 71,531 36,432 14,828	61,309 70,915 37,145 16,060	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen	2014 42,254 50,178 22,961 10,210 5,097	44,050 51,966 24,507 10,527 5,100	47,483 55,178 26,147 10,778 5,271	48,173 56,938 26,691 11,114 5,508	50,312 59,579 26,918 11,619 5,668	51,608 64,680 28,222 13,350 5,867	58,430 68,602 32,889 13,313 6,598	60,373 71,959 36,017 14,667 7,415	60,558 71,531 36,432 14,828 7,472	61,309 70,915 37,145 16,060 7,716	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg	2014 42,254 50,178 22,961 10,210 5,097 11,873	44,050 51,966 24,507 10,527 5,100 12,628	47,483 55,178 26,147 10,778 5,271 13,470	48,173 56,938 26,691 11,114 5,508 13,532	50,312 59,579 26,918 11,619 5,668 16,771	51,608 64,680 28,222 13,350 5,867 15,508	58,430 68,602 32,889 13,313 6,598 16,868	60,373 71,959 36,017 14,667 7,415 19,686	60,558 71,531 36,432 14,828 7,472 18,272	61,309 70,915 37,145 16,060 7,716 19,145	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse	2014 42,254 50,178 22,961 10,210 5,097 11,873 23,677	44,050 51,966 24,507 10,527 5,100 12,628 24,738	47,483 55,178 26,147 10,778 5,271 13,470 26,609	48,173 56,938 26,691 11,114 5,508 13,532 27,827	50,312 59,579 26,918 11,619 5,668 16,771 27,750	51,608 64,680 28,222 13,350 5,867 15,508 28,389	58,430 68,602 32,889 13,313 6,598 16,868 32,775	60,373 71,959 36,017 14,667 7,415 19,686 34,286	60,558 71,531 36,432 14,828 7,472 18,272 33,703	61,309 70,915 37,145 16,060 7,716 19,145 34,746	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania	2014 42,254 50,178 22,961 10,210 5,097 11,873 23,677 7,131	44,050 51,966 24,507 10,527 5,100 12,628 24,738 7,402	47,483 55,178 26,147 10,778 5,271 13,470 26,609 7,546	48,173 56,938 26,691 11,114 5,508 13,532 27,827 7,387	50,312 59,579 26,918 11,619 5,668 16,771 27,750 8,064	51,608 64,680 28,222 13,350 5,867 15,508 28,389 8,557	58,430 68,602 32,889 13,313 6,598 16,868 32,775 12,382	60,373 71,959 36,017 14,667 7,415 19,686 34,286 10,526	60,558 71,531 36,432 14,828 7,472 18,272 33,703 10,587	61,309 70,915 37,145 16,060 7,716 19,145 34,746 10,688	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony	2014 42,254 50,178 22,961 10,210 5,097 11,873 23,677 7,131 27,346	44,050 51,966 24,507 10,527 5,100 12,628 24,738 7,402 28,049	47,483 55,178 26,147 10,778 5,271 13,470 26,609 7,546 29,155	48,173 56,938 26,691 11,114 5,508 13,532 27,827 7,387 29,917	50,312 59,579 26,918 11,619 5,668 16,771 27,750 8,064 30,631	51,608 64,680 28,222 13,350 5,867 15,508 28,389 8,557 32,391	58,430 68,602 32,889 13,313 6,598 16,868 32,775 12,382 40,405	60,373 71,959 36,017 14,667 7,415 19,686 34,286 10,526 37,924	60,558 71,531 36,432 14,828 7,472 18,272 33,703 10,587 38,129	61,309 70,915 37,145 16,060 7,716 19,145 34,746 10,688 40,372	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia	2014 42,254 50,178 22,961 10,210 5,097 11,873 23,677 7,131 27,346 61,784	44,050 51,966 24,507 10,527 5,100 12,628 24,738 7,402 28,049 65,635	47,483 55,178 26,147 10,778 5,271 13,470 26,609 7,546 29,155 68,398	48,173 56,938 26,691 11,114 5,508 13,532 27,827 7,387 29,917 73,025	50,312 59,579 26,918 11,619 5,668 16,771 27,750 8,064 30,631 74,466	51,608 64,680 28,222 13,350 5,867 15,508 28,389 8,557 32,391 76,648	58,430 68,602 32,889 13,313 6,598 16,868 32,775 12,382 40,405 104,807	60,373 71,959 36,017 14,667 7,415 19,686 34,286 10,526 37,924 99,925	60,558 71,531 36,432 14,828 7,472 18,272 33,703 10,587 38,129 105,999	61,309 70,915 37,145 16,060 7,716 19,145 34,746 10,688 40,372 101,384	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate	2014 42,254 50,178 22,961 10,210 5,097 11,873 23,677 7,131 27,346 61,784 15,192	44,050 51,966 24,507 10,527 5,100 12,628 24,738 7,402 28,049 65,635 15,852	47,483 55,178 26,147 10,778 5,271 13,470 26,609 7,546 29,155 68,398 16,019	48,173 56,938 26,691 11,114 5,508 13,532 27,827 7,387 29,917 73,025 16,430	50,312 59,579 26,918 11,619 5,668 16,771 27,750 8,064 30,631 74,466 16,422	51,608 64,680 28,222 13,350 5,867 15,508 28,389 8,557 32,391 76,648 17,211	58,430 68,602 32,889 13,313 6,598 16,868 32,775 12,382 40,405 104,807 20,329	60,373 71,959 36,017 14,667 7,415 19,686 34,286 10,526 37,924 99,925 20,688	60,558 71,531 36,432 14,828 7,472 18,272 33,703 10,587 38,129 105,999 20,522	61,309 70,915 37,145 16,060 7,716 19,145 34,746 10,688 40,372 101,384 21,197	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland	2014 42,254 50,178 22,961 10,210 5,097 11,873 23,677 7,131 27,346 61,784 15,192 3,891	44,050 51,966 24,507 10,527 5,100 12,628 24,738 7,402 28,049 65,635 15,852 3,986	47,483 55,178 26,147 10,778 5,271 13,470 26,609 7,546 29,155 68,398 16,019 4,119	48,173 56,938 26,691 11,114 5,508 13,532 27,827 7,387 29,917 73,025 16,430 4,227	50,312 59,579 26,918 11,619 5,668 16,771 27,750 8,064 30,631 74,466 16,422 4,236	51,608 64,680 28,222 13,350 5,867 15,508 28,389 8,557 32,391 76,648 17,211 4,321	58,430 68,602 32,889 13,313 6,598 16,868 32,775 12,382 40,405 104,807 20,329 4,752	60,373 71,959 36,017 14,667 7,415 19,686 34,286 10,526 37,924 99,925 20,688 4,715	60,558 71,531 36,432 14,828 7,472 18,272 33,703 10,587 38,129 105,999 20,522 7,960	61,309 70,915 37,145 16,060 7,716 19,145 34,746 10,688 40,372 101,384 21,197 5,813	-
Baden-Wuerttemberg Bavaria Berlin Brandenburg Bremen Hamburg Hesse Mecklenburg-Western Pomerania Lower Saxony North Rhine-Westphalia Rhineland-Palatinate Saarland Saxony	2014 42,254 50,178 22,961 10,210 5,097 11,873 23,677 7,131 27,346 61,784 15,192 3,891 16,655	44,050 51,966 24,507 10,527 5,100 12,628 24,738 7,402 28,049 65,635 15,852 3,986 18,193	47,483 55,178 26,147 10,778 5,271 13,470 26,609 7,546 29,155 68,398 16,019 4,119 17,782	48,173 56,938 26,691 11,114 5,508 13,532 27,827 7,387 29,917 73,025 16,430 4,227 17,585	50,312 59,579 26,918 11,619 5,668 16,771 27,750 8,064 30,631 74,466 16,422 4,236 19,017	51,608 64,680 28,222 13,350 5,867 15,508 28,389 8,557 32,391 76,648 17,211 4,321 19,383	58,430 68,602 32,889 13,313 6,598 16,868 32,775 12,382 40,405 104,807 20,329 4,752 21,449	60,373 71,959 36,017 14,667 7,415 19,686 34,286 10,526 37,924 99,925 20,688 4,715 20,424	60,558 71,531 36,432 14,828 7,472 18,272 33,703 10,587 38,129 105,999 20,522 7,960 20,991	61,309 70,915 37,145 16,060 7,716 19,145 34,746 10,688 40,372 101,384 21,197 5,813 23,826	-

NB: Lowest values in orange, highest values in blue. Reversed for adjusted expenditure figures.

8,957

Thuringia

9,106

9,181

9,171

9,776

10,025

11,362

11,296 11,911 12,709

^{*} No ranking, as low/high expenditure values are neither positive or negative per se.

Source: Federal Statistical Office, national accounts produced by the Laender (VGRdL), NORD/LB Floor Research



Adjusted expenditure in E	UR per	capita									
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking*
Baden-Wuerttemberg	3,943	4,049	4,336	4,399	4,545	4,649	5,262	5,427	5,368	5,407	-
Bavaria	3,954	4,046	4,267	4,403	4,556	4,928	5,221	5,461	5,350	5,314	-
Berlin	6,617	6,962	7,314	7,466	7,385	7,691	8,976	9,794	9,701	9,821	-
Brandenburg	4,154	4,237	4,320	4,455	4,626	5,294	5,260	5,779	5,763	6,221	-
Bremen	7,701	7,594	7,766	8,115	8,299	8,613	9,701	10,961	10,910	11,155	-
Hamburg	6,735	7,065	7,440	7,474	9,109	8,395	9,106	10,618	9,657	10,023	-
Hesse	3,885	4,005	4,283	4,479	4,429	4,515	5,208	5,447	5,273	5,412	-
Mecklenburg-Western Pomerania	4,459	4,591	4,685	4,586	5,010	5,321	7,687	6,533	6,502	6,559	-
Lower Saxony	3,494	3,539	3,669	3,765	3,837	4,052	5,049	4,724	4,684	4,946	-
North Rhine-Westphalia	3,503	3,674	3,823	4,082	4,153	4,271	5,847	5,575	5,844	5,573	-
Rhineland-Palatinate	3,787	3,911	3,940	4,041	4,020	4,204	4,960	5,038	4,934	5,078	-
Saarland	3,934	4,003	4,133	4,291	4,227	4,378	4,829	4,800	8,018	5,846	-
Saxony	4,107	4,454	4,356	4,308	4,663	4,760	5,287	5,052	5,137	5,826	-
Saxony-Anhalt	4,436	4,618	4,627	4,786	4,854	4,854	5,664	5,744	5,842	6,022	-
Schleswig-Holstein	3,485	3,695	3,872	4,198	4,974	4,484	5,199	5,336	5,828	6,113	-
Thuringia	4,153	4,195	4,254	4,249	4,561	4,699	5,359	5,356	5,600	5,983	-
Budget balance (EURm)											
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	697	4	187	1,715	3,023	3,391	-3,291	1,447	3,476	578	4
Bavaria	1,608	2,081	1,811	2,979	4,213	1,269	-6,135	889	2,744	2	6
Berlin	838	206	137	1,009	2,422	1,590	-1,773	-186	947	-1,689	16
Brandenburg	327	237	420	498	660	-1,016	-741	-808	186	-492	11
Bremen	-440	-266	5	-17	66	94	-310	-128	-159	-327	8
Hamburg	424	223	287	1,009	-1,130	692	-657	-66	2,461	1,091	2
Hesse	-666	-226	474	217	1,076	1,547	-838	2,419	1,671	-679	12
Mecklenburg-Western Pomerania	263	335	317	676	237	26	-3,098	-18	516	-81	7
Lower Saxony	-205	-156	976	836	2,789	1,798	-4,911	-1,423	2,539	3,728	1
North Rhine-Westphalia	-1,903	-1,947	34	-1,225	1,069	1,722	-11,615	-3,536	-2,423	-1,643	15
Rhineland-Palatinate	-614	-568	324	857	867	1,258	-1,346	2,297	1,189	991	3
Saarland	-301	-241	-151	-12	145	117	-24	190	-2,396	214	5
Saxony	663	-152	-142	683	1,251	2	-1,425	-6	1,735	-1,131	14
Saxony-Anhalt	70	426	464	185	315	44	-896	5	785	-395	10
Schleswig-Holstein	-244	87	384	125	-1,917	237	-427	133	-222	-691	13
		0,	301	123	1,517	237	-427	133	-222	-031	13
Thuringia	186	238	592	917	624	448	-1,167	-389	637	-350	9

NB: Highest values in orange, lowest values in blue. Reversed for budget balance figures.

Source: Federal Statistical Office, national accounts produced by the Laender (VGRdL), NORD/LB Floor Research

 $[\]ensuremath{^{*}}$ No ranking, as low/high expenditure values are neither positive or negative per se.



Budget balance per capita	in EUR										
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	65	3	22	160	273	305	-296	130	308	51	5
Bavaria	127	162	140	230	322	97	-467	67	205	0	6
Berlin	241	59	38	283	664	433	-484	-51	252	-446	15
Brandenburg	133	95	168	200	163	-403	-293	-318	72	-190	12
Bremen	-664	-389	8	-25	96	138	-456	-190	-232	-473	16
Hamburg	241	126	158	558	-614	374	-354	-36	1,300	571	1
Hesse	-109	-38	76	35	172	246	-133	384	261	-106	9
Mecklenburg-Western Pomerania	164	208	197	420	147	16	-1,923	-11	317	-50	7
Lower Saxony	-26	-20	123	105	349	225	-614	-177	312	457	2
North Rhine-Westphalia	-108	-109	2	-68	60	96	-648	-197	-134	-90	8
Rhineland-Palatinate	-153	-140	78	211	212	307	-328	559	286	237	3
Saarland	-304	-242	-151	-11	147	119	-24	193	-2,414	215	4
Saxony	163	-34	-30	173	307	0	-351	-2	425	-277	14
Saxony-Anhalt	31	190	207	83	142	20	-411	2	359	-181	11
Schleswig-Holstein	-86	30	133	43	-662	82	-147	45	-75	-233	13
Thuringia	86	109	274	425	291	210	-550	-185	300	-165	10
Budget balance as a % of 0	GDP 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Ranking
Baden-Wuerttemberg	0.16	0.00	0.04	0.34	0.58	0.64	-0.65	0.27	0.61	0.09	5
Bavaria	0.30	0.38	0.31	0.49	0.68	0.20	-0.98	0.13	0.38	0.00	6
Berlin	0.71	0.16	0.10	0.72	1.61	1.01	-1.15	-0.11	0.53	-0.87	16
Brandenburg	0.51	0.36	0.62	0.71	0.91	-1.33	-0.98	-1.03	0.21	-0.50	11
Bremen	-1.48	-0.86	0.02	-0.05	0.20	0.28	-0.96	-0.38	-0.41	-0.83	15
Hamburg	0.41	0.21	0.26	0.87	-0.95	0.56	-0.56	-0.05	1.71	0.72	2
Hesse	-0.26	-0.09	0.17	0.08	0.38	0.52	-0.29	0.80	0.52	-0.19	8
Mecklenburg-Western Pomerania	0.67	0.84	0.77	1.53	0.53	0.06	-6.62	-0.04	0.97	-0.14	7
Lower Saxony	-0.08	-0.06	0.35	0.29	0.94	0.58	-1.63	-0.45	0.75	1.03	1
North Rhine-Westphalia	-0.31	-0.31	0.01	-0.18	0.15	0.24	-1.67	-0.48	-0.31	-0.20	9
Rhineland-Palatinate	-0.48	-0.43	0.24	0.61	0.61	0.86	-0.94	1.42	0.69	0.57	3
Saarland	-0.90	-0.71	-0.44	-0.03	0.40	0.33	-0.07	0.53	-6.22	0.52	4
Saxony	0.61	0.43					1 12	0.00	1.18	-0.73	1.1
	0.61	-0.13	-0.12	0.58	1.00	0.00	-1.12	0.00	1.10	0.70	14
Saxony-Anhalt	0.12	0.74	-0.12 0.79	0.58	1.00 0.51	0.00	-1.12	0.01	1.04	-0.50	12
Saxony-Anhalt Schleswig-Holstein											

NB: Highest values in blue, lowest values in orange.

Source: Federal Ministry of Finance, Federal Statistical Office, NORD/LB Floor Research



Appendix Age structure of the Laender populations

Share of different age groups in the population

	Under the age of 6	6 to 15 years old	15 to 25 years old	25 to 45 years old	45 to 65 years old	Aged 65+
Baden-Wuerttemberg	5.8%	8.6%	10.5%	26.2%	27.7%	21.1%
Bavaria	5.8%	8.4%	10.1%	26.4%	28.1%	21.2%
Berlin	5.8%	8.4%	9.9%	32.1%	25.0%	18.8%
Brandenburg	4.8%	8.7%	8.5%	22.2%	29.9%	25.8%
Bremen	6.0%	8.5%	11.0%	27.6%	26.0%	21.0%
Hamburg	6.0%	8.5%	10.5%	31.2%	26.0%	17.9%
Hesse	5.7%	8.7%	10.4%	25.9%	28.1%	21.3%
Mecklenburg-Western Pomerania	4.6%	8.3%	8.8%	22.4%	29.0%	26.8%
Lower Saxony	5.6%	8.6%	10.3%	24.4%	28.4%	22.7%
North Rhine-Westphalia	5.7%	8.6%	10.4%	25.5%	28.1%	21.7%
Rhineland-Palatinate	5.6%	8.4%	9.8%	24.8%	28.5%	22.8%
Saarland	5.1%	7.8%	9.3%	24.1%	28.6%	25.1%
Saxony	4.9%	8.6%	9.3%	23.5%	27.0%	26.8%
Saxony-Anhalt	4.6%	8.1%	8.8%	21.9%	28.8%	27.8%
Schleswig-Holstein	5.3%	8.4%	9.9%	23.7%	29.1%	23.6%
Thuringia	4.6%	8.3%	8.9%	22.2%	28.6%	27.4%
Federal government	5.6%	8.5%	10.1%	25.6%	28.0%	22.3%

Source: Federal Statistical Office, NORD/LB Floor Research

Appendix Election calendar

Provisional dates for the next Laender parliamentary (Landtag) elections (and frequency)

Baden-Wuerttemberg	Spring 2026	5 years
Bavaria	Autumn 2028	5 years
Berlin	Autumn 2026	5 years
Brandenburg	22 September 2024	5 years
Bremen	Spring 2027	4 years
Hamburg	02 March 2025	5 years
Hesse	Autumn 2028	5 years
Mecklenburg-Western Pomerania	Autumn 2026	5 years
Lower Saxony	Autumn 2027	5 years
North Rhine-Westphalia	Spring 2027	5 years
Rhineland-Palatinate	Spring 2026	5 years
Saarland	Spring 2027	5 years
Saxony	01 September 2024	5 years
Saxony-Anhalt	Summer 2026	5 years
Schleswig-Holstein	Spring 2027	5 years
Thuringia	01 September 2024	5 years

Source: German Federal Council (Bundesrat), NORD/LB Floor Research



Appendix

Data and definitions used

Data source and actuality for securities

Nearly all of the data on securities used within this Issuer Guide is based on the Bloomberg financial information system, whereby our own trading (NOLB) was used as the primary source of price information. Information with regard to the respective composition of the iBoxx indices was obtained from data provider Markit.

Data source and actuality for Schuldscheindarlehen (SSD)

To determine the issuance volume of SSD, the data was requested directly from the individual Laender. The portion of Laender debt attributable to SSD deals was also ascertained via a survey, although approximate estimations were used in some cases.

Data source and assumptions for assessment of budget situation

Federal Ministry of Finance cash statistics were used to analyse the German Laender budgets for financial year 2023. It should be noted that these figures do not necessarily reflect the actual budgets. Rather, the cash statistics relate to payments actually made in 2023. In our opinion, this does not appropriately illustrate the movements in funds connected to the system of financial equalisation among the German Laender (FKA) for the 2023 budget year. For instance, a payment claim can arise in one financial year but actual payments can take place in part in the following year. Payments from federal supplementary grants (BEZ) are similar in this regard, which is why we use the provisional annual financial statements for 2023 of the Federal Ministry of Finance to illustrate the figures relating to the federal financial equalisation system. The historical data for the German Laender budgets is based on the final results of the development of the German Laender budgets.

Terminology: debt sustainability and interest coverage

Determining the debt sustainability and interest coverage represents an important part of our analysis of the budgets of the German Laender. These terms relate to the various key indicators that measure debt and interest expenses against other variables. Here, we use debt in relation to economic output or the total revenue of a subsovereign as one example of debt sustainability. In our debt sustainability analysis, we also look at debt per capita. When determining interest coverage, we focus primarily on the ratio of revenue or taxes to the interest expenses during a given period.

Data source and assumptions for assessment of economic situation

When analysing the economic situation in a Land, we used data from the Federal Statistical Office (Destatis) and from the respective statistical offices in the Laender. In some instances, we also used data from other sources, such as the German Patent and Trade Mark Office (DPMA). The data used is in part based on analyses carried out by our NORD/LB Regional Economy and Sector Strategy (formerly known as Regional Research) teams.

Special thanks to our helping hands

We would like to take this opportunity to thank Maike Maas for her valuable contributions to this study. Her commitment and ideas have resulted in a highly differentiated presentation of the market for bonds issued by German Laender in a slightly adapted format.



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