NORD/LB Issuer Guide German Laender 2021

Markets Strategy & Floor Research

September 2021
Investment strategy recommendation and marketing communication
(see disclaimer on the last pages)

NORD/LB
ISSUER GUIDE
German Laender 2021

Author

Dr Norman Rudschuck, CIIA
Floor Analyst, Public Issuers/SSA
Director
norman.rudschuck@nordlb.de

Assisted by
Max Henß and Felix Fentzahn

Contents

Contents

Introduction

Author: Dr Norman Rudschuck, CIIA

Foreword

As was previously the case, the 16 German Laender continue to represent by far the largest sub-sovereign market in Europe. The outstanding volumes and annual issuance volumes of the Laender segment in Germany 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 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). In future – and above all after the coronavirus pandemic – issuance volumes are, however, likely to decline following the (re)application of the debt brake from 2023 at the earliest. This prohibits any net borrowing not related to an emergency situation that is also beyond the control of the public sector. The debt brake represents one of the most important changes with regard to Laender finances for quite some time, as is the case with the reform of the federal financial equalisation system. In 2020, shortly after coming into force, the debt brake was suspended for 2020, 2021 and now also 2022 – due, as is well known, to the coronavirus pandemic – after the emergency paragraphs contained in the legislation were invoked. As a result, the debt brake will take effect again in 2023 at the earliest to facilitate the supplementary budgets of the federal government and the 16 state parliaments. These supplementary budgets were adopted with a view to mitigating the consequences of the coronavirus pandemic. Please note: Date of going to press was on September 23 and therefore right before the elections in Germany. That is also the time when all graphs and spreads were updated.

Eighth edition of the Issuer Guide German Laender

The Issuer Guide German Laender, which will now be published on a yearly basis once again, is part of a series of NORD/LB Markets Strategy & Floor Research products on 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 issue is the eighth publication in this format, which has consistently provided an extensive overview of the largest EUR market for sub-sovereigns. The focus of the Issuer Guide has always been on this homogeneous group of issuers comprising the 16 Laender as well as the “Gemeinschaft deutscher Laender” (Joint Laender). We are once again firmly of the view this year that the present publication will offer our readers an extensive insight into the German Laender segment.

Printed version of all NORD/LB Issuer Guides will be dictated by actual demand

This year, for reasons of sustainability, we have decided to make the Issuer Guide German Laender 2021 exclusively available in PDF format. 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 printed version. Please get in touch with your account manager to provide a delivery address and indicate the number of copies required. Alternatively, our readers can also contact sales@nordlb.lu.

NORD/LB publications complementing our Issuer Guides

To complement the upcoming 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 and in some cases weekly publications, analyses and commentaries can be found in the usual manner on our website (www.nordlb.com/nordlb/floor-research), via our Wholesale capital market portal and on the NORD/LB Research portal at Bloomberg (RESP NRDR <GO>). Should any of our readers not yet have access to any of these, then please get in touch with your account manager or alternatively contact: sales@nordlb.lu.

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 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 the coronavirus crisis. The proposal put forward by Olaf Scholz, Federal Minister of Finance, for the municipal debt of around 2,500 local and regional authorities to be transferred to the federal government, is unlikely to receive the required two-thirds majority in the Bundestag and Bundesrat any time soon. According to a statement from the Bundestag, the five opposition motions submitted against the debt brake were as disparate in nature as the expert opinions provided. In our view, both federal government and Laender must be united in this aspect. In addition, extraordinary factors including the 2015 migrant crisis and, more topically, the economic measures implemented as part of the response to the coronavirus crisis must to some extent be borne by the Laender. 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 major challenges facing the Laender stand in contrast to the significant progress that they have made in the required efforts at budget consolidation: interest coverage has improved on a continuous basis over the past few years, while debt sustainability had also been recovering until the pandemic hit. Nevertheless, fundamental and significant differences continue to exist between the individual Laender, a situation which, in our opinion, necessitates a relative analysis.

Conclusion

The aim of our Issuer Guide German Laender 2021 is to facilitate the relative comparison of German Laender 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 16 Laender. In addition, for the purpose of a differentiated analysis, we will include a look at the Gemeinschaft deutscher Laender (Ticker: LANDER) as an issuer of Laender jumbos starting at a minimum value 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 (Bundeslaender or just Laender), as members of the federal republic, must collaborate to develop a mutually beneficial relationship. 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 for the federal states 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 restructure their budgets in the wake of the extreme budgetary crisis.

Extreme budgetary crisis as a prerequisite for federal loyalty to apply

The decision reached by the Federal Constitutional Court created a prerequisite for federal loyalty to apply or for assistance to be provided by the federal government and other 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 Laender.

The case of Berlin in 2002
In 2002, the state of 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 sub-sovereign 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 considered the existence of a budgetary crisis to be a consequence of insufficient funding, the Court viewed it far more as indicating the need to reform the federal financial equalisation system in general rather than highlighting the necessity for further supplementary federal grants, also known as supplementary federal grants known as BEZ payments (Bundesergänzungszuweisungen). The Federal Constitutional Court nevertheless emphasised that federal aid provided through restructuring funding was admissible as a last resort.

Federal aid only in extreme budget crisis
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. This was not the case in Berlin, it concluded. The Court saw the potential for further consolidation measures. As an example, it expressly pointed to the significantly higher expenditure by Berlin in comparison with Hamburg, e.g. on “cultural affairs”.

Comment
The principle of federal loyalty as unwritten constitutional law is a basic element of the German principle of 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 arise in the first place. We nonetheless 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. The tensions between contributor and recipient Laender were subsequently reduced significantly, giving the Laender budgetary certainty with regard to 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 – the aim here being 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 designed 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, specifically the Financial Equalisation Act (Finanzausgleichsgesetz) and the Standards Act (Maßstäbegesetz, MaßstG) 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, according to which the horizontal distribution level no longer plays such a prominent 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 federal government, Laender and municipality level, a horizontal VAT distribution component, the financial equalisation of the Laender in the actual sense of the phrase and federal supplementary grants (Bundesergänzungszuweisungen; BEZ).

Structure of the old system 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 communities 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 reducing differences in economic power 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 system of federal financial equalisation 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 Laender. 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%) and 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 sub-sovereign, reflecting the fact that providing financial assistance to the municipalities was, and remains, a task incumbent upon the Laender. Under this system, Laender displaying below average financial strength received equalisation grants from the Laender deemed to have above average financial strength. The ranking of the Laender in respect of the 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 (Bundesergänzungszuweisungen; BEZ). Generally speaking, these grants represented a form of funding that was paid to recipient Laender directly from the federal government (Bund). They could also be sub-divided into general BEZ and special-need BEZ (Sonderbedarfs-BEZ; SoBEZ). Every sub-sovereign that had less than 99.5% of the average financial strength per capita after taking into account financial equalisation payment from the Laender received general BEZ grants. Special-need BEZ payments were intended for Laender facing extraordinary financial burdens. However, these payments were not designated for a special purpose. The main recipients of the special-need BEZ were the Laender that made up the former East Germany. These Laender were awarded such grants within the framework of Solidarity Pact II in order to cover any special charges resulting from the former division of Germany. Moreover, Laender in which disproportionately high costs of political leadership were ascertained also received special-need BEZ. These were primarily small Laender, where the fixed costs of political leadership 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 and about net payer and net recipient Laender – primarily among the Laender themselves – with the former group tending to hold a more negative opinion of the system than the latter. Overall, it was clear that since 1995 the East German Laender and Berlin received the highest funding across the period under review as a whole. Moreover, the costs of this were overwhelmingly borne by Laender in the south and west of Germany. On the net payer side, Bavaria paid out the largest sum of all Laender during the period under review, with Baden-Wuerttemberg (BadWur) taking second place in the net payer rankings. East German non-city states were at all times net recipients across every segment of the federal financial equalisation system since its inception.

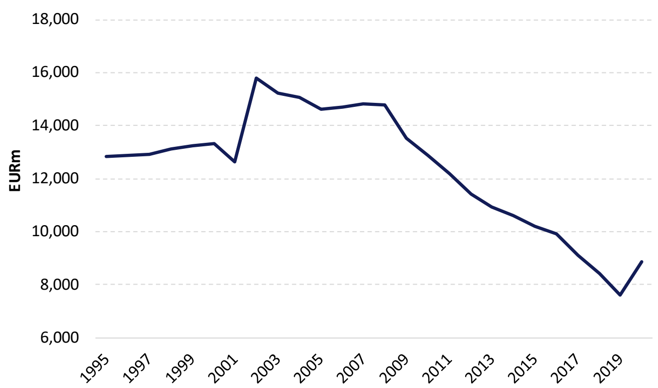
Bavaria, Baden-Wuerttemberg and Hesse the largest net payers in the old federal financial equalisation among the Laender (LFA)...

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 up to the point in 2018 that a peak value of EUR 11.4bn was recorded. The main payers in this period under review (from 1995 up to the reformation of the equalisation system) were Bavaria, BadWur and Hesse. Moreover, these three Laender were the only ones to always be categorised as net payers across the period under review. A glance at the statistical archives dating back to 1950 reveals that BadWur remains the only constant net payer. While Hesse has never been a recipient, there have been some years in which it did not make any payments out. Similarly to the UStA (VAT equalisation payments), the Eastern Laender are the largest beneficiaries under the LFA, with Berlin taking top spot here at EUR 76bn, followed some distance behind by Saxony. In this context, it is also worth noting that the difference between the contributions made by the largest payers and the allocation to the main recipients has widened significantly over time. This is a trend also reflected in developments under the UStA. As such, these twin movements have signalled a shift in the direction of rising economic disparity, which holds true in both absolute and adjusted per capita amounts. In 2019, Bavaria paid a total of EUR 510 per capita, while Berlin received EUR 1,176 p.c., which results in a difference of EUR 1,686. However, in 2010, the equivalent value totalled EUR 1,127 (Hesse as main payer: EUR 289 p.c.; Berlin as primary recipient: EUR 838 p.c.), while back in 1995 when the new Laender were first integrated in the LFA, this figure came in at just EUR 805. It is also worth noting that Bavaria had been a recipient Bundesland under the LFA up to the mid-1980s before rising to its position of a major net payer. In contrast, NRW conclusively switched to the recipient side of the system in 2010, having largely been a net payer in the past.

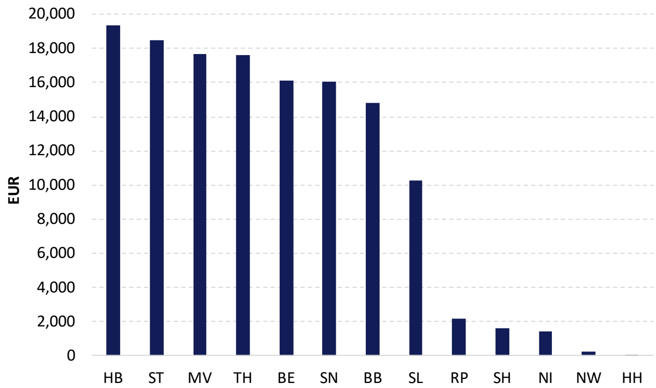
...and do not benefit from income in the form of federal supplementary grants (BEZ)

Given that the federal supplementary grants (BEZ) will continue to be awarded to Laender with below average financial strength even after the revised system takes effect, it should come as little surprise that the economically powerful payer Laender under the UStA and LfA – Bavaria, Baden-Wuerttemberg and Hesse – do not receive any funding from this particular pot. In fact, it is the “new” Laender and Berlin that have again primarily benefited to the greatest extent from the payments made under Solidarity Pact II, which are contained within BEZ. Around two thirds of the volume of EUR 312.6bn is attributable to the “new” Laender and city state of Berlin. Having benefited from a volume of EUR 63.9bn, Saxony, as already demonstrated by way of the UStA and overall calculation, is the largest recipient in this context. Among the Laender which constituted the former West Germany, Bremen and Lower Saxony have benefited to the greatest extent from BEZ payments (EUR 12.8bn and EUR 10.7bn respectively). If we reconcile the total volume of BEZ payments received with the number of inhabitants in 2020, Bremen is the largest beneficiary at EUR 19,369 per capita, followed by the new Laender and Berlin. The annual volume of BEZ had previously been in decline since 2009, although a significant increase was posted in 2020 on account of the introduction of the new federal financial equalisation system. Moreover, in view of the more prominent role that the federal government (Bund) will now be playing in this regard, it is highly likely that this trend will be continued over the coming years.

Annual BEZ volume



Per capita BEZ payments received 1995–2020



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

Consolidation and restructuring aid

Aside from the mechanisms outlined above, there is another instrument to mention: consolidation aid. Through this pot, the sub-sovereigns Berlin, Bremen, Saarland, Saxony-Anhalt and Schleswig-Holstein were awarded additional funds from the federal budget to enable them to comply with the stipulations of Art. 109 (3) of the Basic Law ("debt brake" or "zero-borrowing rule"; Schuldenbremse) applicable from the start of 2020 onwards. In total, Bremen received EUR 300m annually, while Saarland was entitled to a sum of EUR 260m per year. Berlin, Saxony-Anhalt and Schleswig-Holstein each received EUR 80m annually. The Stability Council was responsible for monitoring compliance with consolidation obligations, which included the elimination of the structural financing deficit in full by 2020. Since 2020, Bremen and Saarland have continued to receive additional funding of EUR 400m in each case from the federal government. This is known as restructuring aid and is tied 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 (§2 Law on Restructuring Aid [Sanierungshilfengesetz; SanG]).

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 (Sanierungshilfengesetz; SanG) 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. 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/financial position of the city state. The Federal Ministry of Finance also audits this report with a view to verifying whether or not the conditions for awarding restructuring aid have been met. As such, the Federal Ministry of Finance can, at the request of Bremen, permit deviations from the ordinarily prescribed budgetary repayments in justified exceptional cases.

Criticism of financial equalisation and the 2020 reform

Criticism was often 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 the economic situation in the respective Laender, but especially for the recipient Laender. In 2013, Bavaria and Hesse initiated legal proceedings with the Federal Constitutional Court in order to verify the constitutional conformity of the LFA. However, Bavaria and Hesse 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 to govern federal financial relationships. These 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 anticipated/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 are now giving 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” is now obsolete. Another result of merging the UStA and LFA components is that North Rhine-Westphalia (NRW) has assumed a new role as an economically strong sub-sovereign. Under the old system, 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 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 developing a new system of federal financial equalisation, the top priority was that no sub-sovereign should be worse off than under the old framework. Under the revised version of the federal financial equalisation system, 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 granted. Instead, a compromise was agreed in which a partial amount (EUR 1.42bn) is to be linked on a pro rata basis. In return for the additional financing for Laender and municipalities, the federal government was granted additional powers with effect from 2020 onwards.

Additional powers for the federal government

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

1. *Management of motorways by the federal government*

   In contrast to the current administration by the Laender on behalf of the federal government, the Bund will in future be solely responsible for the construction of major roads through the formation of an infrastructure company under private law (motorway administration).

2. *Digitisation through a central citizen portal set up by the federal government*

   A new citizen portal and thus more uniform standards for online administration applications is aimed at delivering more efficient administration.

3. *Investment promotion on the part of the federal government "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 for monitoring of the use of funds at Laender level.

5. *Strengthening the federal government's powers in relation to tax administration*

   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. The implementation of what is known as the "municipal financial power allocation" should primarily be of interest to local authorities. This will be used to even out discrepancies in financial power at local authority level. The previous special-need BEZ grants, which were mainly of benefit to the eastern German Laender, were discontinued at the end of 2019, while the system of horizontal equalisation payments between financially strong and financially weak Laender in place up to now is being diluted. At the same time, the financial responsibility of the Bund for the Laender will increase 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 on local authorities from the reorganisation of the financial relationship between the federal government and Laender is definitely to be welcomed. The higher weighting of the financial situation of the municipalities in a sub-sovereign in VAT allocation, as well as the structuring of BEZ payments 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, theoretically at least, lead to the conclusion that the local authorities will have more solid finances after the new system comes into 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 local authority-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 sub-sovereign. In addition, local authorities will benefit directly from the additional federal funds (EUR +3.5bn) for local authority 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 local authorities sets disincentives for the Laender to provide their local authorities themselves with sufficient financial resources.

…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 could result in local authorities not only being dependent on the federal government to a greater extent, but also more directly dependent 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.

Greater convergence fails to materialise

Owing to the additional revenue to be provided by the federal government, the Laender as a whole stand to benefit from the reorganisation of Bund-Laender financial arrangements. For example, general BEZ payments alone rose from EUR 4.5bn in 2019 to EUR 6.6bn in 2020. Added to this was a sum of just under EUR 1.3bn from the new BEZ in connection with efforts to compensate for low municipal fiscal capacity (EUR 1.15bn) and average-oriented research funding equalization payments (EUR 184.1m). However, there was little to indicate greater convergence on a Laender basis over the course of 2020, with the gap between the highest and lowest levels of financial strength as measured by FKA and BEZ actually widening further in comparison with 2019. 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 blocking minority. The reform of the financial equalisation system was approved on 1 June 2017.

2020: All change for the financial equalisation system?

The first year of the new federal financial equalisation system was shaped by a series of special effects connected to the coronavirus pandemic. However, as the impact was felt across all Laender, some insights can already be gleaned and conclusions drawn from this skewed first year. As outlined previously at the beginning of this section, 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 particularly financially weak Laender. With North Rhine-Westphalia switching to the group of financially strong Laender, this group once again constitutes the majority of the German population (58%). As such, the majority are now responsible for equalisation payments granted to the financially weaker minority. 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 federal financial equalisation system, Bavaria and Baden-Wuerttemberg are foregoing their entitlement to a sum of just under EUR 11.4bn. As calculated in advance, expenditure at federal government (Bund) level was far higher than under the old system. For example, at EUR 6.6bn, general BEZ payments were well in excess of the previous year's value EUR 4.5bn. 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: this sub-sovereign received an additional sum of just under EUR 23m, despite the fact that after financial equalisation and general BEZ payments it boasts greater financial strength than Bremen, which was forced to go empty handed. The new supplements also harbour the potential to drastically alter the order of financial strength among the Laender. For example, the relative financial strength of Mecklenburg-Western Pomerania after factoring in FKA and BEZ stood at a score of 97.9 points, which subsequently shot up to 100.5 points following an equalisation supplement of EUR 191m. This ultimately puts the north-eastern sub-sovereign above Rhineland-Palatinate, which received no additional payments for its financial strength score of 99.6 points. Regarding the average-oriented research funding equalization payments, it should first and foremost be noted that these are uncommitted funds, which can therefore be used by the recipients to cross-subsidize other budget items. In view of their low volume (EUR 184m), 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 the whole of Germany. Due to constant increases in the distributed UStA (VAT equalisation) and LFA (horizontal financial equalisation between the Laender) volumes in the past, it is clear that there are still significant financial discrepancies, in particular between West German and East German Laender, despite the fact that reunification took place more than 30 years ago now. However, there are some discrepancies among the West German Laender, as the majority of equalisation payments come from just three Laender. Nevertheless, it can be argued that the revised system offers greater incentives for the Laender to strive to improve their respective financial and economic situations.

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, which it 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. An emergency situation as outlined above was determined following the onset of the coronavirus pandemic, giving the Bund cause to agree two supplementary budgets in March and June 2020. Minister of Finance Olaf Scholz, who may eventually succeed Angela Merkel as German Chancellor depending on the outcome of negotiations to form a coalition government in the wake of the SPD's slender election victory on Sunday, 26 September 2021, has also planned for supplementary budgets in 2021 and 2022. This would therefore again require the debt brake to be suspended at the level of both Bund and Laender. After all, in this context, the Laender are also planning additional expenditure. For example, the Bavarian Landtag (regional parliament) approved a total of EUR 20bn in several steps to combat the consequences of the crisis, with North Rhine-Westphalia also adopting two supplementary budgets totalling approximately EUR 25bn. At Bund level, a transitional period in which existing structural deficits were to be 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. During this phase, Berlin, Bremen, Saarland, Saxony-Anhalt and Schleswig-Holstein all received consolidation aid from both the Bund and Laender. The legal basis for this transitional period was provided by Art. 143d GG.

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."

Implementation by the Laender

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 Bund or 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. According to information coming out of the 22nd and 23rd meetings of the Stability Council, a decline in tax revenues totalling 8.9% was posted in 2020. In this context, none of the Laender were able to forego net borrowing as they attempted to combat the coronavirus crisis. Overall, net borrowing rose by more than EUR 100bn in comparison with the budget plans. Moreover, the Stability Council assumes that net borrowing will again take place in both 2021 and 2022, while it also remains a distinct possibility in 2023 too, again owing to the impact of the pandemic. The Stability Council has therefore refrained from recommending measures aimed at reducing the excessive financing deficit at this point in time. In addition, it anticipates a return to the consolidation path and therefore compliance with the upper limit for the macroeconomic structural deficit of 0.5% of GDP from 2024 at the earliest.

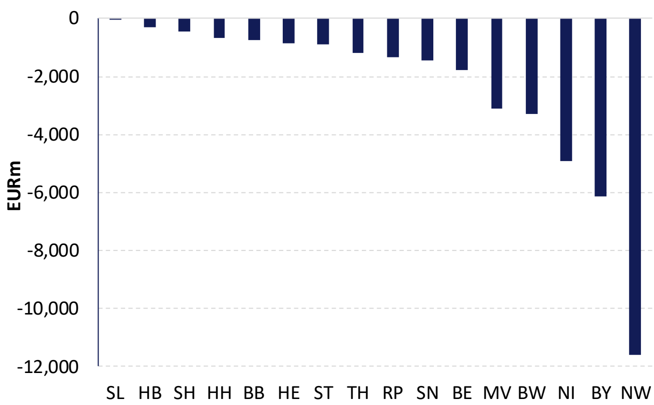
Results of the most recent Stability Council meeting

At the 23rd meeting of the Stability Council, it was confirmed that Bremen and Saarland had both successfully implemented their respective restructuring measures. As such, no budgetary emergencies have been identified in any of the Laender. In view of the continued high level of debt and coronavirus-related new borrowing, the Stability Council urged the Laender to continue consolidation efforts. Nevertheless, the Stability Council considers these regulatory transgressions to be permissible. Against this background, the Stability Council determined that both restructuring processes have been ended and that there are no indications of a budgetary emergency in either Bremen or Saarland. Berlin, Saxony-Anhalt and Schleswig-Holstein were also due to bring their respective consolidation processes to a close by the end of 2020. In this respect, the Stability Council determined that Berlin and Schleswig-Holstein had complied with the requirements, while Saxony-Anhalt's failure to meet its targets was justified by events linked to the pandemic. Numerous Laender had started the process of repaying old debts prior to the onset of the coronavirus crisis: in this context, Saxony has, for example, been whittling away at its liabilities since 2006, albeit with some interruptions. The development of key budget metrics is also reflected in the number of anomalies identified by the Stability Council. Key budget metrics (structural financial deficit per capita, credit financing ratio, debt level per capita and interest-tax ratio) are generally regarded as non-compliant when the value exceeds or falls short of a specific, defined threshold over several years. From 2011 (peak of identified anomalies: 29) up to 2019 (historical low: 16), the number of anomalies had fallen significantly in the run up to the pandemic. In 2020, the number of anomalies recorded increased by one in comparison with the previous year to now stand at 17. The value has therefore remained at a low level in spite of the coronavirus pandemic. Further insights into the half-yearly Stability Council meetings can be found in our weekly publication: the NORD/LB Covered Bond & SSA View. Prior to the onset of the coronavirus pandemic, none of the 16 Laender had planned a budget balance for the coming year that fell below 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. In 2020, none of the Laender were able to post a budget surplus. The aggregated overall balance totalled EUR -38.7bn. This deficit is the highest in the period under review, exceeding even those values recorded in the years immediately following the global financial crisis.

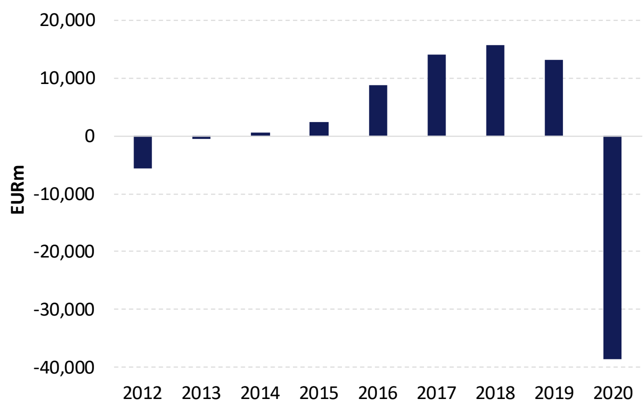
Economic framework conditions

Historically low interest rates in tandem with continued high levels of employment have boosted efforts aimed at consolidating public budgets, which has been reflected both on the income as well as the expenditure side of Laender balance sheets. 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 most recent data from the Federal Statistical Office (Destatis), the gross domestic product (GDP) of Germany fell by -4.6% year on year in 2020, a year dominated by the coronavirus pandemic. This not only brings the positive trend seen in recent years to an end, but also represents the largest decline in GDP recorded since the days of the global financial crisis in 2008/09 (GDP decline of -5.7% Y/Y). At the beginning of the pandemic, the expectation had originally been of a decline significantly exceeding -5% year on year owing to the imposition of lockdown. However, progress regarding the rollout of the vaccination programme and subsequent reopening of society have supported private consumption recently, promising an end to the pandemic measures across many sectors in the process. However, the spread of the delta variant continues to show in many places just how difficult it is to predict how the coronavirus situation will ultimately play out. In addition to the progress made in counteracting the coronavirus crisis, other factors that have in the meantime been pushed to the side could, however, start to have an influence on economic output at Laender level. For example, aspects to highlight here would include side effects of the lockdowns such as price increases on commodities markets and supply bottlenecks in the semiconductor industry. Relations between the USA and China should also continue to be monitored closely, as any potential resurgence in the trade conflict between these two world powers could also impact the export-oriented German economy.

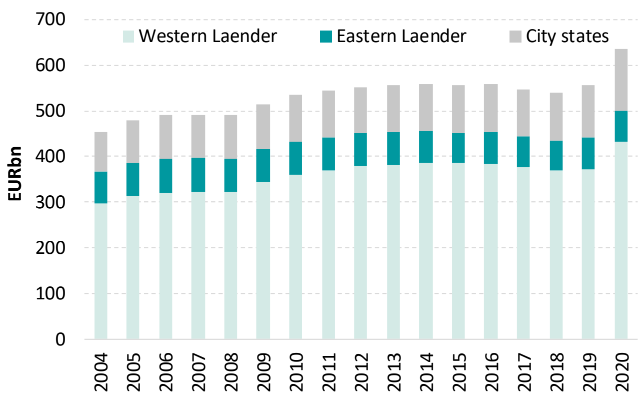
Budget balances of individual Laender



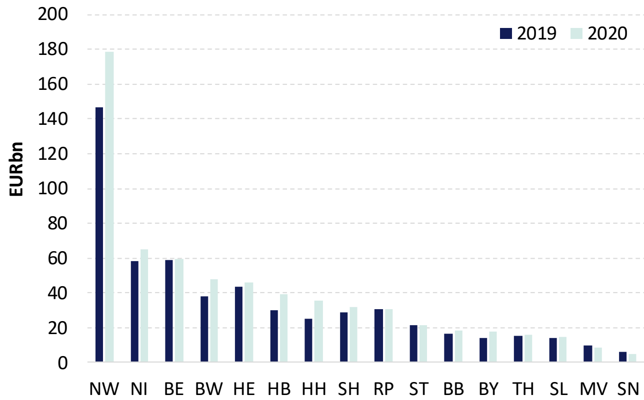
Budget balances of the Laender as a whole



Trend in overall debt level of the Laender



Debt level of individual Laender

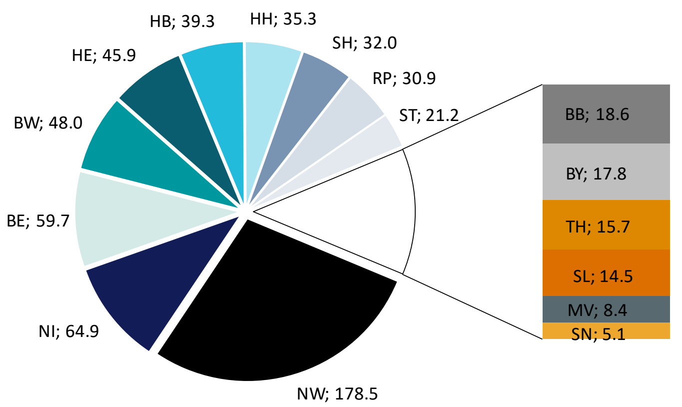


BW = Baden-Wurttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania,
NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia.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

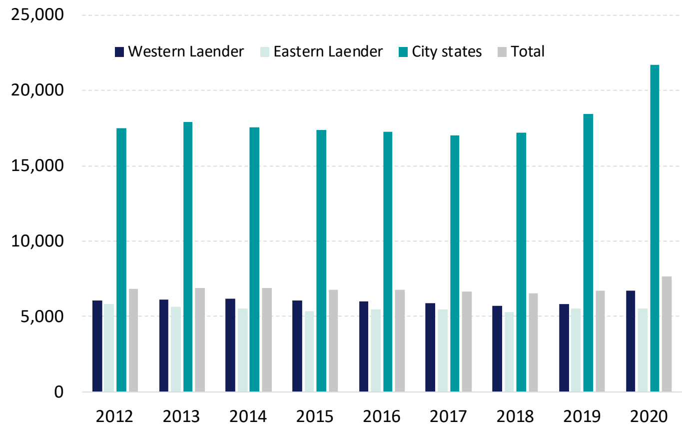
Laender debt trend – an overview

A look at the trend in debt level at Laender level reveals two strong increases: the first was at the start of the new millennium (at which point Germany was the “sick man of Europe”), with the other coming in connection with the global financial crisis. In the wake of the coronavirus pandemic in 2020, a third significant rise in the debt level can now be added to the previous two. At +14.3%, the rise in new debt in 2020 represents the highest value recorded over the past 17 years in both percentage and absolute terms. Of course, the largest share of this fresh debt was incurred by the most-populated sub-sovereign, NRW, where outstanding liabilities rose by +23.0% to EUR 178.5bn to account for 28.1% of overall Laender debt. However, the largest increase in new debt was attributable to the city state of Hamburg, at +39.5%, followed by Bremen (+30.9%) and Baden-Wuerttemberg (+26.5%). While a total of seven Laender recorded declining debt levels in 2019, only Saxony (-23.0%), Mecklenburg-Western Pomerania (-12.1%) and Saxony-Anhalt (-0.8%) managed this in 2020. 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. Two of the three city states, Berlin and Bremen, were also recipients of consolidation aid from the federal government. The national average has been in relatively stable fashion by between EUR 6,500 and EUR 7,000 for many years now, before rising to EUR 7,600 in 2020, although East German non-city states do present marginally lower debt levels than their West German counterparts. However, in the midst of the recent sharp increases in new debt, it should not be forgotten that the aggregated debt level declined in 2015, 2017 and 2018, which led to the expectation of compliance with the debt brake.

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 Markets Strategy & Floor Research

Comment

Only a few months after entering into force, the debt brake had to be suspended after the onset of the coronavirus 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 developed braking power in the past, with the result that some Laender 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 to the current millennium. Ensuring the sustainability of public-sector budgets, as is 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 negotiations, for example with regard to investments, is 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 coronavirus 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/unusual 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.” The 23rd and most recent meeting of the Stability Council on 21 June 2021 offered the view that the situation will only be normalised again by 2024 at the earliest. We concur with this rather defensive assessment of the situation, although it is possible that the debt brake could re-enter into force in 2023.

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 Laender. The establishment of the Stability Council can be traced back to Federalism Reform II (Föderalismusreform II), since which time its existence has been governed by Art. 109a of the Basic Law (GG). The purpose of the Council is to regularly monitor the budgets of the national government and the federal states, 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 the national government and Laender, particularly with respect to their sustainability 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 Energy. 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 – rebuilding the East

To offset below-average municipal financial strength and ease infrastructural backlog needs, the states 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". Basket 1 contained special need BEZ (SoBEZ) payments amounting to EUR 105.3bn, which were put directly towards improving financial strength and infrastructure. Basket 2 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. With regard to 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. In order 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, which was to be used to finance infrastructure investments and to offset below-average financial strength. The second criterion related to the SoBEZ share that aimed to rectify the situation regarding disproportionately self-financed infrastructure investments compared to 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.

Drawing the balance

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 Basket 1. 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 point out 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; 20.0%) 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 Basket 1 came in on budget, the payments made under Basket 2 of EUR 56.3bn were actually well above the original target value of EUR 51.4bn. Due to the fact that the volume of payments from Basket 2 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 redefined federal financial equalisation system as well as the national German support system for structurally weak regions. However, it is not possible to reliably or accurately assess the precise extent to which the coronavirus pandemic will impact differences in living standards that continue to exist between the Laender at the present moment in time.

Restructuring programmes

If a critical budgetary situation is identified in the case of the national government or a sub-sovereign, the Stability Council agrees restructuring programmes with the administrative unit affected. In general, they extend over five years and contain guidelines to eliminate new annual debt as well as other consolidation measures. If the national government or a sub-sovereign neither sticks to the guidelines nor presents satisfactory suggestions 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 federal states Berlin, Bremen, Saarland and Schleswig-Holstein at the second meeting held on 15 October 2010. Restructuring programmes were agreed as a consequence. Compliance with these programmes and their progress is 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. For this reason, their recovery plans were extended until the end of 2020. Moreover, since 2019 both Bremen and Saarland have each been receiving restructuring aid to the tune of EUR 400m per year.

Monitoring of 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 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.

Monitoring system of the Stability Council

	Actual		Target	Limit violations	Financial planning				Limit violations
	2018	2019	2020		2021	2022	2023	2024	
Financial balance in EUR per capita									
Threshold value	48	-37	-933	**Yes / No**	-983	-983	-983	-983	**Yes / No**
Laender average	248	163	-733						
Credit financing ratio in %									
Threshold value	3.6	1.8	23.2	**Yes / No**	25.2	25.2	25.2	25.2	**Yes / No**
Laender average	0.6	-1.2	20.2						
Interest/tax ratio in %									
Threshold value (non-city states)	5.2	4.5	4.9	**Yes / No**	5.9	5.9	5.9	5.9	**Yes / No**
Threshold value (city states)	5.5	4.8	5.3		6.3	6.3	6.3	6.3	
Laender average	3.7	3.2	3.5						
Total debt in EUR per capita									
Threshold value (non-city states)	8,578	8,696	10,122	**Yes / No**	10,222	10,322	10,422	10,522	**Yes / No**
Threshold value (city states)	14,516	14,715	17,129		17,229	17,329	17,429	17,529	
Laender average	6,598	6,689	7,786						
Violations in the period		**Yes / No**					**Yes / No**		

Source: Stability Council, NORD/LB Markets Strategy & Floor Research

Stability Council offers many advantages…

The transparent method of working and presentation of the results enables the situation in each sub-sovereign 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 of 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. 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 also allows special circumstances such as economic downturns to be taken into account dynamically. The review of financial planning enables negative tendencies or even budgetary crises to be identified at an early stage.

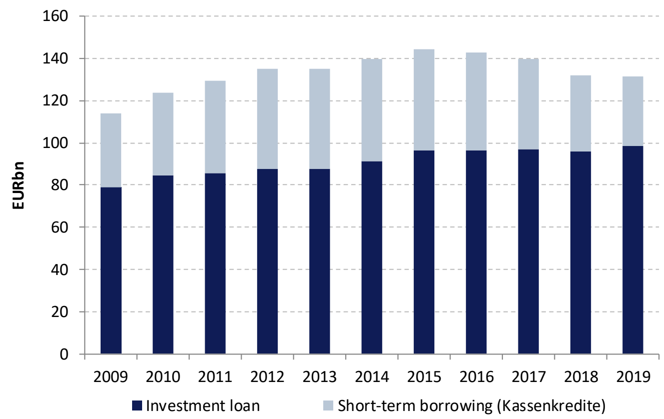
...and some disadvantages
However, in contrast, it should be noted that the financial planning of a sub-sovereign does not constitute any definitive or specific plan. This means compliance is not binding. The informative value of the figures for financial planning is, to a certain extent, accordingly 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 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 sub-sovereign 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 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 Laender 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 bi-annual 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 coronavirus pandemic.

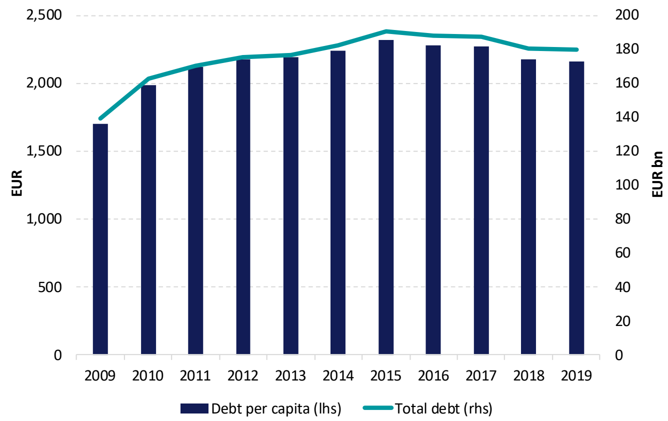
Challenges for Laender finances
Municipal budget situation as a stress factor for Laender finances

Latest data set: municipalities generate another surplus in 2019
In 2019, municipalities and municipal associations continued the positive trend with regard to their budget balances, generating a surplus of EUR 3.7bn. However, this was in fact down by EUR 3.3bn on the previous year (-47.8%). At EUR 4.1bn, the majority of this surplus was attributable to the core budgets. On the income side, an increase of 4% to EUR 279bn was posted in 2019. In this context, the rise of 3.2% to EUR 104bn in tax revenues should be highlighted in particular, in addition to growth in loan repayments of 14% to EUR 1.6bn. Over the same period, municipal expenditure rose by 5.5% to total EUR 275.3bn. In this respect, grants and subsidies for investment are particularly noteworthy: this balance sheet item increased by 21.6% to EUR 3.5bn. Slightly above-average growth of 5.9% and 5.7% respectively was recorded for the two largest expenditure items – personnel costs and current transfers – and these now stand at EUR 65.9bn and EUR 150.4bn. In contrast, expenditure in connection with granting loans to private enterprises fell by -71.8% to EUR 44.5m. Interest expenses were also in decline, falling by -6.0% to EUR 2.3bn. With regard to the municipal debt level, 2019 saw the fourth decline in a row. The sum total of liabilities fell in 2019 by 0.54% to EUR 179.4bn, which equates to 64.3% of revenue. This value is well below the Laender average, where the debt-to-revenue ratio amounts to 146.6%.

Development of municipal debt level in the non-public sector



Municipal debt level



Source: Federal Statistical Office, NORD/LB Markets Strategy & Floor Research

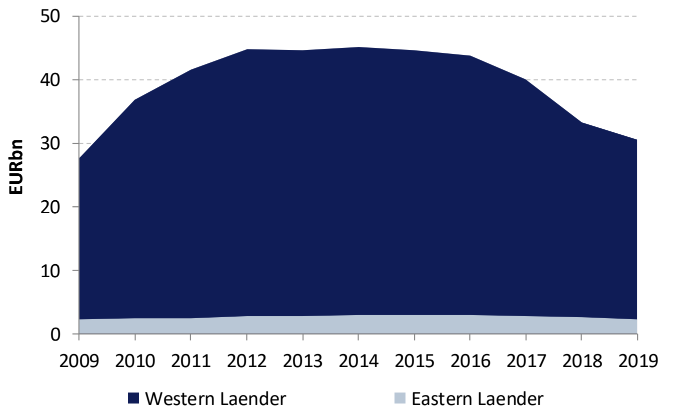
Steady investment loan volume in the recent past

Investment loans 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 differ significantly from case to case. At 76%, 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 the regard, at 41% (national average: 55%). Since 2009, the national average of investment loans in total municipal debt had been in a corridor between 49% and 52%, before rising to 55% in 2019.

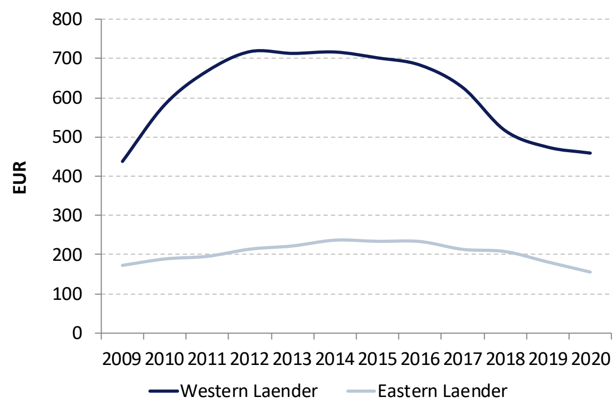
Turning point in short-term borrowings (Kassenkredite)

From 2005 to 2014, the volume of short-term borrowing (Kassenkredite) more than doubled on a nationwide basis. Kassenkredite were originally intended to cover short-term cash flow problems arising from timing mismatches in revenue and expenditure. 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 could be used to bridge this time gap. As at the end of 2016, however, 25.2% of the overall 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 short-term borrowings brings with it an increased risk of changes to the interest rate environment. For this reason, we take a critical view of a high level of Kassenkredit debt, even though the low interest rate environment currently in place minimises this risk. After Kassenkredit loan portfolios remained relatively constant between 2012 and 2016, sharper declines in the volumes of Kassenkredite were, however, again in evidence between 2016 and 2019. This is certainly a development which we welcome. At EUR 32.9bn, Kassenkredit municipal loans accounted for 18.3% of total municipal debt in 2018. In 2019 and 2020, Kassenkredit portfolios were scaled back further still – albeit to only a rather limited extent. The figures available for 2020 so far imply that this trend has been continued in spite of the coronavirus crisis. A striking aspect here remains that West German Laender have much higher Kassenkredit liabilities than their East German counterparts. However, it should also be noted that Kassenkredit debt levels have converged on a per capita basis.

Municipal cash boosting loans



Municipal cash boosting loans per capita



Source: Federal Statistical Office, NORD/LB Markets Strategy & Floor Research

2019: Kassenkredit volumes in decline in nine of 13 non-city states

A breakdown by Bundesland of the Kassenkredit burden on municipalities reveals major differences: the share of Kassenkredite in overall municipal debt ranges from 1.2% in Hesse to 48.2% in Saarland, where the Kassenkredit debt level already exceeds the volume of investment loans (2019). However, one aspect to highlight here is that in 2018 the municipalities in 11 of the 13 non-city state Laender reduced their Kassenkredit debt level, with ten from 13 repeating this trick in 2019. The extent of the declines in Kassenkredite also varied across the individual Laender to a significant extent. In this respect, Bavaria is to be highlighted in particular: at 62.7%, it registered by far the highest growth in Kassenkredite. The most significant reduction came in Hesse, at -42.4%. Saarland (48%) and Saxony-Anhalt (40%) have the highest shares of Kassenkredit loans in their overall debt levels. In fundamental terms, it is again striking that the declines were smaller in Laender with high volumes of Kassenkredite in their loan portfolios than in those with low volumes. Saxony-Anhalt, Rhineland-Palatinate and Saarland, Laender in which Kassenkredit portfolios account for shares of between just over 30% to just under 50% in their respective overall debt levels, were able to only register below-average declines of between 0.6% to 4%, while the declines in Thuringia and Schleswig-Holstein, for example, were higher (13% to 64.5%) despite the fact that their shares were much lower (1.7% to 5.9%).

Growing challenges, growing debt?

Municipal budgets are also facing a variety of challenges: if interest rates rise, for example, credit financing costs will also increase, resulting in burdens on budgets. In particular, any rise in money market rates could put pressure on municipalities with higher Kassenkredit debt levels. Although interest rate rises would still appear to be a rather distant prospect, municipalities must continue to pay greater attention to this situation as part of their financial planning processes. 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 privately organised banks. The banking crisis has also already led to a shift within the market for municipal finance: specifically, regional development 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 in recent years. In this context, in 2020, a new record value in the amount of EUR 7.6bn was recorded in terms of the volume of new commitments in the business area of Municipalities/Infrastructure. Of this figure, a total of EUR 3.7bn is accounted for by municipal financing alone. Within each sub-sovereign, therefore, the development bank was market leader in municipal financing. 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 750 per inhabitant. As a result, the focus is increasingly turning towards alternative funding options such as Schuldscheindarlehen (SSD) and bonds, some of which are issued in a joint format together with other municipalities.

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 generally established in response to the difficult municipal budget situation: in 2019, a survey of 300 municipalities conducted by a consulting firm indicated that 17% of the municipalities still considered themselves unable to repay their debts from their own resources. Although this suggests de facto insolvency, no insolvency proceedings can be initiated against municipalities, at least according to Section 12 of the Insolvency Code. In order to support the municipalities most affected by high Kassenkredit debt levels, Germany's Minister of Finance Olaf Scholz has called for a full haircut whereby the Bund (federal government) would assume liability for all municipal debt. This suggestion was, however, highly controversial even within the Grand Coalition (Germany's coalition government comprising the CDU/CSU and the SPD based in Berlin). As such, this plan is not expected to come to fruition. However, 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 sub-sovereign followed the Konnexitätsprinzip (the principle of related actions, i.e. a commitment that any allocation of tasks to regional and local authorities must be accompanied by the financial resources needed to carry them out). It would then be necessary to check whether the sub-sovereign 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 sub-sovereign 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 sub-sovereign, 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 local authority debt relief fund totalling EUR 3.8bn, in which more than 800 municipal authorities currently participate. The objective of the fund is to repay two-thirds of the municipal cash boosting loans (Kassenverstärkungskredite) that were taken out up to 2009. This is also intended to reduce the interest burden. Over a period of 15 years, an annual amount of EUR 255m is available for this purpose. Initially, however, this was only able to counteract a further increase in Kassenkredit debt. A significant reduction was made in 2015 for the first time, followed by further reductions in the following years. Up to year-end 2018, Kassenkredit debt had been cut by 12.5%, with a level of EUR 5.2bn maintained since then. Mecklenburg-Western Pomerania has adopted a different approach: in this case, a consolidation fund was set up to provide financial assistance for unavoidable deficits. In contrast, Hesse set up a programme that is unique throughout Germany. Known as "Hessenkasse", its objective is to take over the Kassenkredite of municipalities and to arrange debt relief via WIBank, the promotional bank of Hesse. Overall, a repayment amount of EUR 4.9bn was expected, which would have equated to around 93% of the municipal Kassenkredit debt level in 2017. Agreement on 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 of launching the programmes. In Rhineland-Palatinate, the absolute volumes available until 2026 stand at 28.0% of municipal debt in 2012. Saxony-Anhalt (16.2%), Hesse (12.8%), Lower Saxony (11.8%) and Schleswig-Holstein (10.7%) also have above-average programme ratios. This is different in the case of Saarland: although per capita municipal debt in Saarland is the highest in a comparison of Laender (ahead of Rhineland-Palatinate and North Rhine-Westphalia), the original programme volume amounts to only 4.3% in Saarland, while the average of all the programmes stands at 9.6%. 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 should go towards municipal investment projects. Although municipalities in North Rhine-Westphalia have the highest absolute and third-highest per capita debt, the programme volume, at 9.9%, is only slightly above the average. In Brandenburg (5.9%) and Mecklenburg-Western Pomerania (5.4% before and 9.5% after inclusion of special aid), the absolute programme volume is also below average, but this applies equally to the per capita municipal debt level.

Overview of municipal bail-out packages

	Maturity	Volume (EUR m)	Comment	Repayment of Kassen-kredite	Repayment of Credit market liabilities	Interest relief	Deficit coverage
BY	2007-2012	10	Annual				x
BB	2013 -	40	annual; additional municipal rescue package in Brandenburg aimed at mitigating consequences of the pandemic (volume EUR 580m up to 2022)				x
HE	2012-2020	3,200	Municipal rescue package suspended in 2020, debt relief programme now processed via HESSENKASSE	x	x	x	
MV	2018 -	25*	Annual; plus one-off sum of EUR 100m				x
NI	2012-2041	70**	Annual	x		x	
NW	2011-2020	5,850**	Overall			x	x
RP	2012-2026	255	Annual	x		x	
SL	2013-2024 2020-2065	17** 50	Annual	x	x		
ST	2011-2027	736	Overall	x	x	x	
SH	2012-2018	60	Annual				x

* 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).
** Figures include participation of local authorities.
*** Gradually lower since 2020
BY = Bavaria, BB = Brandenburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, ST = Saxony-Anhalt, SH = Schleswig-Holstein.
Source: relevant sub-sovereign legislation, NORD/LB Markets Strategy & Floor Research

Involvement of local authorities in bailout funds

A few Laender such as Lower Saxony and North Rhine-Westphalia do not supply the financial resources for local authority bailout funds solely from their own funds. For example, Lower Saxony set up a bailout fund with annual income of up to EUR 70m. Half of the funding for this is provided by Lower Saxony itself, with the other half obtained by way of a contribution financed by the municipalities. In this way, the model distributes the financial burdens resulting from the support of financially weak municipalities not only to the sub-sovereign, but also to the municipalities in their entirety. The previously discussed debt relief fund in Rhineland-Palatinate pursues a similar approach. A third of the liquidity requirement is respectively covered by the municipalities themselves, financial equalisation payments at municipal level and Rhineland-Palatinate. The group of local authorities in North Rhine-Westphalia that are called upon for a solidarity contribution within the scope of the "strengthening pact" is limited to those local authorities whose financial strength (measured by tax revenue) exceeds their financial needs (approximately assessed by number of inhabitants, among other factors). The proportion of local authorities in North-Rhine Westphalia included in the financing elements of the strengthening pact stands at just under 27%; it therefore remains lower than the equivalent proportion of municipalities in Lower Saxony that take part in its debt relief fund (50%). At around EUR 3.79bn, NRW is therefore now responsible for financing more than 73% of the total cost of the strengthening pact after several amendments were adopted to the Municipal Financing Act (e.g. solidarity levy and deduction at source).

Comment

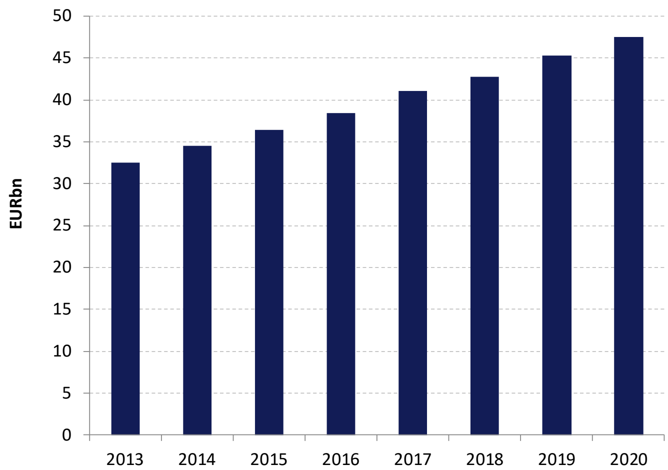
We regard the performance of municipal finances as one of the major challenges for Laender finances. In our view, a difficult budgetary situation at municipal level indirectly impacts the budgetary situation, which has been shaken by the impact of the coronavirus crisis, of the respective sub-sovereign. We consider it entirely positive that a large number of Laender counteract this with defined programmes. From our perspective, however, some Laender appear negative in the configuration of their municipal programmes. In Rhineland-Palatinate, for example, we believe there is an appropriate volume in relation to municipal debt, while we take a more critical view in the case of Saarland. The programme volume is much lower here in relation to the municipal debt level in comparison 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 positive trend on the revenue side, last seen in 2019, in conjunction with declining interest charges had, prior to the pandemic, already contributed to a stabilisation of finances in this respect. Here too, however, the coronavirus crisis and the associated loss of income represent a major source of uncertainty, meaning that municipal debt is set to rise again as a result.

Challenges for Laender finances
Challenge posed by pension obligations

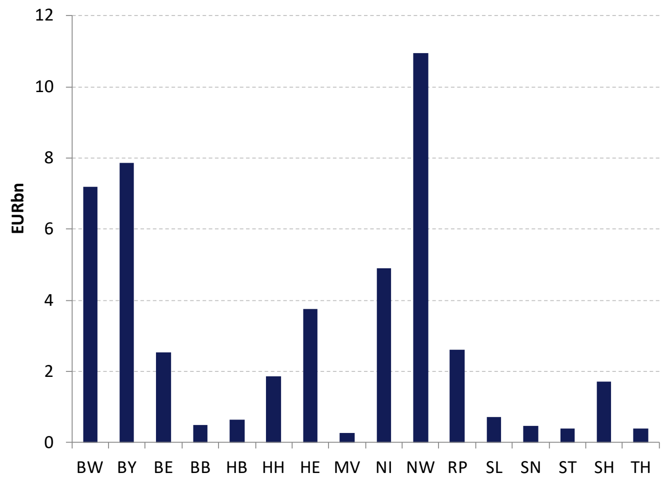
Pension obligations represent an increasing challenge for Laender finances
In view of demographic change and longer life expectancy, pension expenditure is playing an increasingly prominent role in Laender budgets. In contrast to the pay-as-you-go financed pension system, which applies in the case of 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 began to create pension reserves as stipulated in Section 14a (1) of the Federal Civil Service Remuneration Act (BBesG). From 2018 onwards, these are expected to be dissolved due to the highest expected charges in the subsequent 15 years (commonly referred to as the "pension avalanche"). These reserves may differ with regard to 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 provision that is only sustainable to a limited extent, other Laender rely on the additional creation of reserves through the sub-sovereign's own pension or retirement funds, extending above and beyond the reserves required by law. In our opinion, the differing methods for creating reserves pose major challenges, and in some cases such provisions are totally absent. These challenges are particularly relevant with regard to the debt brake, which is expected to be re-applied from 2023 onwards at the earliest.

Pension and allowance expenses represent significant items of expenditure for many Laender
In comparison with 2013, the pension and allowance expenses of the Laender have grown by +45.9% up to 2020. In the past budget year alone, a rise of +4.8% (previous year: +5.9%) was posted. In total, the Laender as a whole spent EUR 47.5bn on this item in 2020 (2019: EUR 45.3bn). This corresponded to 10.1% of total expenditure and was therefore more or less on a par with the level recorded in 2012. However, pension payments accounted for a greater proportion of Laender budgets than investments (9.5%). This budgetary strain is likely to continue rising in the future, with the majority of the baby boomer generation born between 1955 and 1969 now gradually starting to draw their pensions.

Development of pension and allowance expenses of all Laender



Pension and allowance expenses in 2020



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

Low(er) level of pension provisions in East Germany

At 15.1%, the share of pension provisions in relation to total expenditure was highest in Saarland, as has been the case in previous years. However, Rhineland-Palatinate, Baden-Wuerttemberg and Lower Saxony also all register values in excess of 12% for this item. In addition, it is striking that pension payments account for a far smaller proportion of expenses in the East German Laender. The value for 2020 was just 3.9%, having been 4.0% in the previous year. Looking at pension provisions in relation to the number of inhabitants, the city states of Hamburg and Bremen traditionally post the highest expenses in this regard. At EUR 1,011 per capita, the value for Hamburg is nearly ten times larger than that of Saxony (EUR 103). 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 of 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 German Laender, they result in significantly lower budget flexibility. Moving forward, the 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 diminish over the years and further convergence of the proportion of pension payments in the budget to the west German level is anticipated. In the coming years, we expect a further rise in payments. As a result, we believe that revenues will need to be increased further or, alternatively, expenditure must be cut, in order to ensure that there is at least no deterioration in the finance balances. Moreover, the continuing low level of interest rates and the associated discount effects further exacerbate the problem.

Regulatory framework
Risk weighting of outstanding claims against the Laender

Relevant regulatory framework: Regulation (EU) No. 575/2013 (CRR)
On the basis of the risk weightings that were defined by Basel II, the EU initially specified the provisions in Directive 2006/48/EC, before these definitions for risk weightings 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).

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. After this time, the risk weighting for such exposures was gradually increased in accordance with Article 114 (6). This meant that a 0% risk weighting applied to EUR-denominated bonds issued by the Polish state, for example, until the end of 2017, although this has risen to 100% since 2020.

Risk weighting of regional and local authorities
The risk weighting of regional and local authorities 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 weighting for regional and local authorities
As this definition is open to interpretation, the EBA shall maintain a public database containing all regional governments and local authorities 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 weighting of 0% in Germany:

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

Laender assigned 0% risk weighting
It follows from this that exposure to German Laender can be assigned a risk weighting of 0%, i.e. benefiting from the same regulatory advantages as, for example, German government bonds.

NORD/LB

Regulatory framework
Implications of the Liquidity Coverage Ratio

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 via 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
With the precise definition of HQLA having been unclear for a long time and resulting in a high degree of uncertainty, particularly due to the EBA recommendation published at the end of 2013, the Delegated Regulation for the implementation of the Liquidity Coverage Requirement 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 first published in July 2018 took effect from 30 April 2020. This governs the regulation concerning assets from third countries, repo transactions, CIU shares and stocks.

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 Laender.

Liquidity levels – an overview

Level 1 assets (Art. 10 LCR)

- ≥ 60% of the liquidity buffer; no haircut

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 Markets Strategy & 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:	- (-)
	(i)	Assets representing claims on or guaranteed by the ECB or an EEA member state's central bank	
	(ii)	Assets representing claims on or guaranteed by central banks of third countries (CQS 1)	
	(iii)	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 withdrawal 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%)
	(i)	Central government of an EEA member state	
	(ii)	Central government of a third country (CQS 1)	
	(iii)	Regional governments or local authorities in an EEA member state, provided that they are treated as exposures to the central government of the EEA member state (i.e., risk weighting of 0%)	
	(iv)	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 weighting as central government [0%])	
	(v)	PSEs provided that they are treated as exposures to the central government of an EEA member state or to one of the regional governments or local authorities referred to in (iii) (i.e., same risk weighting of 0%)	
(d)		Assets representing claims on or guaranteed by the central government or the central bank of a third country of CQS 1 under certain conditions	- (5%)
(e)		Assets issued by credit institutions which meet at least one of the following requirements:	- (5%)
	(i)	Incorporated 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 weighting of 0%);	
	(ii)	The credit institution is a promotional lender as defined in the next paragraph (see following pages)	
(f)		Qualifying EEA covered bonds; issue volume at least EUR 500m or equivalent in domestic currency, rating: min. CQS 1 (max. 70% of liquidity buffer)	7% (12%)
(g)		Assets representing claims on or guaranteed by the multilateral development banks and the international organisations referred to in Art. 117 (2) and 118, respectively, of Regulation (EU) No. 575/2013	- (5%)

NB: CQS = Credit Quality Step (rating class) as defined in CSA
Source: LCR-R, NORD/LB Markets Strategy & Floor Research

NORD/LB

Classification overview (continued)

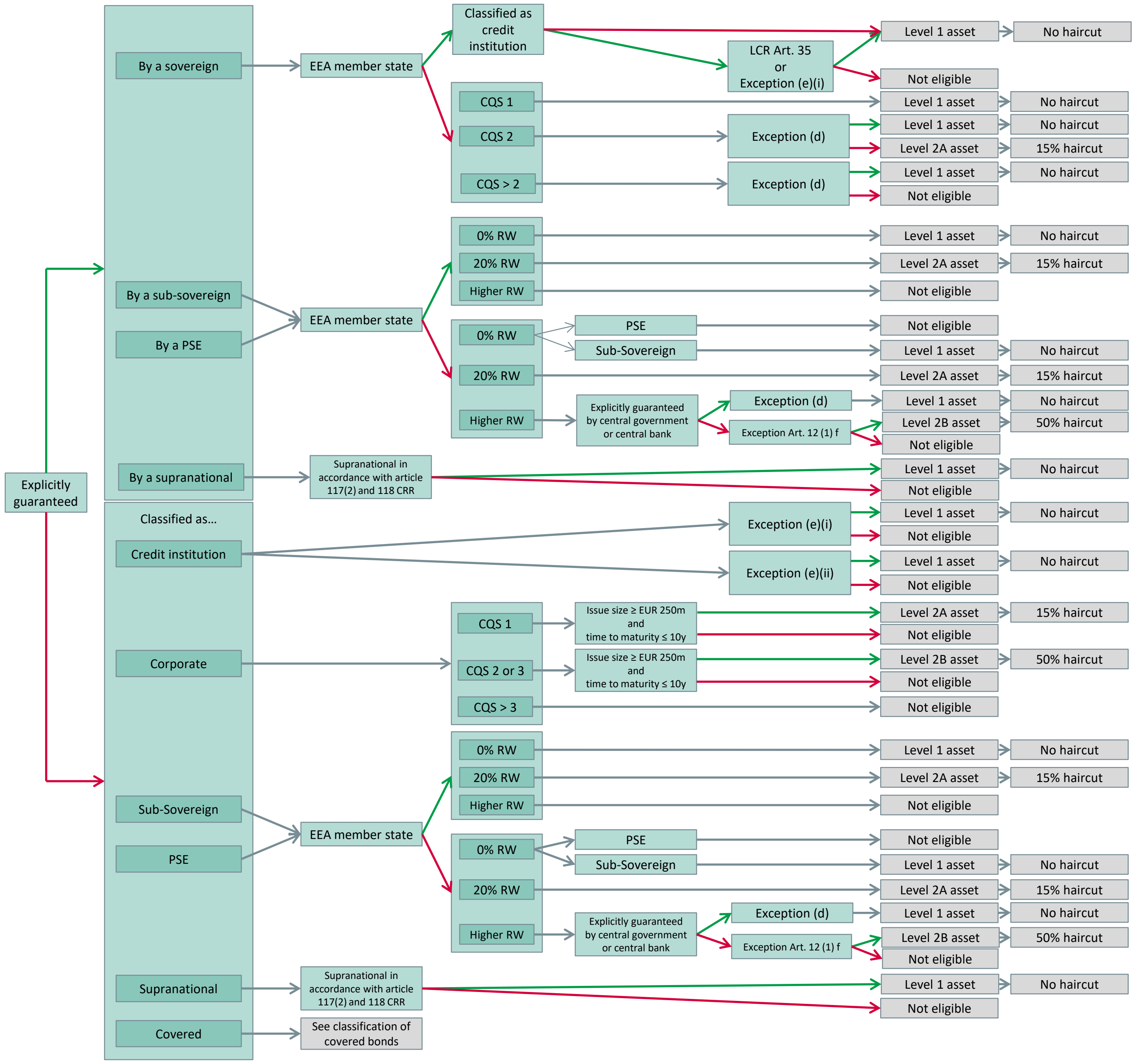
	Level 2A assets (maximum of 40% of liquidity buffer)	Minimum haircut (for shares or units in CIUs)
(a)	Assets representing claims on or guaranteed by regional governments, local authorities or PSEs in an EEA member state, where exposures to them are assigned a risk weighting of 20%	15% (20%)
(b)	Assets 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 weighting of 20%	15% (20%)
(c)	Qualifying EEA covered bonds (not reaching 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: (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	15% (20%)
	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	25-35% (30-40%)
(b)	Corporate debt securities which meet all of the following requirements: (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	50% (55%)
(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 Markets Strategy & Floor Research

Classification of PSEs and sub-sovereigns

The classification of PSEs and sub-sovereigns (regional governments and local authorities; RGLA 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 weighting 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 weighting 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 weighting 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 Markets Strategy & Floor Research

0% risk weighting enables Level 1 classification for Bundeslaender bonds

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

Regulatory framework
Impacts of the Net Stable Funding Ratio

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 over-reliance on short-term funding. In October 2014, the BCBS published the final NSFR framework.

EU implementation of the NSFR

In Article 413 (1), the CRR 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):

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

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 428o 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 counter-party 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 Laender will be positive. Since LCR-eligible assets only need to be backed by less stable funding because of 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 Laender in particular

On 10 October 2014, the European Commission published the delegated regulation implementing Solvency II. 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

Guarantees from RGLAs were finally included in the European Commission's delegated regulation (EU) 2019/981 dated 8 March 2019. 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 116), 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 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 (ECB);
b) Member States' central governments and central banks denominated and funded in the domestic currency of that central government and central bank;
c) multilateral development banks referred to in Art. 117 (2) 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 $stress_i$ 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 Markets Strategy & Floor Research

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

From a regulatory perspective, Art. 180 (2) therefore has the effect of ensuring equal treatment for 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.

Bundeslaender 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 weighting 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)

Country	Regional and local governments
Austria	Laender & municipalities
Belgium	Municipalities (Communauté/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 (région), municipalities (commune), “Départements”
Germany	Bundeslaender, municipalities & municipal associations
Liechtenstein	Municipalities
Luxembourg	Municipalities (communes) & municipal associations (syndicats de 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 (Gobierno local)
Sweden	Municipalities (Kommuner), councils (Landsting) & regions (Regioner)

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

Non-EEA regions not included on EIOPA list

Interestingly, EIOPA only cites EEA regional and local governments on its list, although there is no restriction to Member States under Art. 85. In contrast, the Final Report based on the consultation paper 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 weighting according to Basel III for international sub-sovereigns when applying preferred status, we believe that Canadian regions would also benefit from a stress factor of 0%. If exposures to Canadian regions 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 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 quasi-government issuers. For this reason, 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-debt instruments (RMBDs)
Credit standards	The asset must meet high credit standards. The high credit standards are assessed using ECAF (Eurosystem credit assessment framework) rules for marketable assets.	The debtor/guarantor must satisfy high credit standards. 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	European Economic Area (EEA)	-	-
Settlement/ handling procedures	Place of settlement: Eurozone. Instruments must be centrally deposited in book-entry form with national central banks (NCBs) or a securities settlement system (SSS) that fulfils the standards and assessment procedures detailed in the Eurosystem User Assessment Framework	Eurosystem procedures	Eurosystem procedures
Type of issuer/ debtor/guarantor	NCBs, public sector, private sector, multilateral development banks and international organisations	Public sector, non-financial corporations, multilateral development banks and international organisations	Credit institutions
Issuer, debtor or guarantor headquarters	Issuer: EEA or G-10 countries outside the EEA; Debtors: EEA; Guarantor: EEA	Eurozone	Eurozone
Admissible markets	Regulated markets, unregulated markets admitted by the ECB	-	-
Currency	Euro	Euro	Euro

Source: ECB, NORD/LB Markets Strategy & Floor Research

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

Minimum amount	-	Minimum amount at the time of submitting the credit claim - domestic use: set by NCB; - cross-border use: uniform minimum amount of EUR 0.5m.	-
Legal basis	For asset-backed securities (ABS), the acquisition of the underlying assets must be governed by the law of an EU member state. The law governing underlying credit claims must be the law of an EEA country.	Governing law for credit claim agreement and its use as an asset: law of a member state. The total number of different jurisdictions applicable to a) the counterparty, b) the creditor, c) the debtor, d) the guarantor (if relevant), e) the credit claim agreement, f) and the mobilisation agreement shall not exceed two in order to use the credit claims as collateral.	-
Cross-border use	Yes	Yes	Yes

Source: ECB, NORD/LB Markets Strategy & 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, particular 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. Haircuts for bonds with variable coupons correspond to those of fixed-interest bonds (of the respective category).

Haircut categories – an overview

Category I	Category II	Category III	Category IV	Category V
Central government debt instruments	**Regional and local authority debt instruments**	Legislative covered bonds with the exception of covered bond jumbos	Unsecured debt instruments issued by banks or institutions that are banks that do not fulfil the quantitative criteria defined in Annex XIIa of Directive (EU) 2015/510 (ECB/2014/60)	ABS
ECB bonds	Debt instruments placed by issuers (banks and non-banks) that are classified by the Eurosystem as institutions with a public development mission and that fulfil the quantitative criteria defined in Annex XIIa of Directive (EU) 2015/510 (ECB/2014/60))	Multi-cédulas	Unsecured debt instruments issued by financial corporations other than banks	
Bonds issued by the national central banks in their respective Member State prior to introduction of the euro	Debt instruments issued by multilateral development banks and international organisations	Debt instruments issued by non-financial corporates, companies active in the government sector or non-bank institutions that do not fulfil the quantitative criteria defined in Annex XIIa of Directive (EU) 2015/510 (ECB/2014/60).		
	Jumbo covered bonds			

Source: ECB, NORD/LB Markets Strategy & Floor Research

Haircuts by haircut category and rating – an overview

Credit quality	Residual maturity (years)(*)	Haircut category												
		Category I			Category II			Category III			Category IV			Category V
		fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	
AAA to A-	0-1	0.5%	0.5%	0.5%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	7.5%	7.5%	7.5%	4.0%
	1-3	1.0%	2.0%	0.5%	1.5%	2.5%	1.0%	2.0%	3.0%	1.0%	10.0%	10.5%	7.5%	4.5%
	3-5	1.5%	2.5%	0.5%	2.5%	3.5%	1.0%	3.0%	4.5%	1.0%	13.0%	13.5%	7.5%	5.0%
	5-7	2.0%	3.0%	1.0%	3.5%	4.5%	1.5%	4.5%	6.0%	2.0%	14.5%	15.5%	10.0%	9.0%
	7-10	3.0%	4.0%	1.5%	4.5%	6.5%	2.5%	6.0%	8.0%	3.0%	16.5%	18.0%	13.0%	13.0%
	>10	5.0%	7.0%	2.0%	8.0%	10.5%	3.5%	9.0%	13.0%	4.5%	20.0%	25.5%	14.5%	20.0%
Credit quality	Residual maturity (years)(*)	Haircut category												
		Category I			Category II			Category III			Category IV			Category V
		fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	
BBB+ to BBB-	0-1	6.0%	6.0%	6.0%	7.0%	7.0%	7.0%	8.0%	8.0%	8.0%	13.0%	13.0%	13.0%	Not permissible
	1-3	7.0%	8.0%	6.0%	9.5%	13.5%	7.0%	12.0%	15.0%	8.0%	22.5%	25.0%	13.0%	
	3-5	9.0%	10.0%	6.0%	13.5%	18.5%	7.0%	16.5%	22.0%	8.0%	28.0%	32.5%	13.0%	
	5-7	10.0%	11.5%	7.0%	14.0%	20.0%	9.5%	18.5%	26.0%	12.0%	30.5%	35.0%	22.5%	
	7-10	11.5%	13.0%	9.0%	16.0%	24.5%	13.5%	19.0%	28.0%	16.5%	31.0%	37.0%	28.0%	
	>10	13.0%	16.0%	10.0%	19.0%	29.5%	14.0%	19.5%	30.0%	18.5%	31.5%	38.0%	30.5%	

(*), 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 Markets Strategy & Floor Research

ECB assigns Laender bonds 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 the KfW that are recognised by the ECB. This means that Bundeslaender bonds receive the second-best treatment under the repo rules, after instruments issued by central governments and central banks. The ECB's definitions of collateral therefore provide for further preferential treatment of Laender from a regulatory viewpoint.

Coronavirus crisis: temporary adjustment to haircut categories extended until June 2022

On 07 April 2020, the ECB announced comprehensive temporary adjustments to the security framework that were aimed at mitigating the impact of potential liquidity tensions on the financial markets across the single currency area. Originally, the temporary adjustment envisaged a general reduction in security discounts of 20% up to September 2021. As early as December 2020, however, the ECB announced that this measure would be extended until June 2022.

Haircuts by haircut category and rating – an overview (temporary adjustment)

Credit quality	Residual maturity (years)(*)	Haircut category												
		Category I			Category II			Category III			Category IV			Category V
		fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	
AAA to A-	0-1	0.4%	0.4%	0.4%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	6.0%	6.0%	6.0%	3.2%
	1-3	0.8%	1.6%	0.4%	1.2%	2.0%	0.8%	1.6%	2.4%	0.8%	8.0%	8.4%	6.0%	3.6%
	3-5	1.2%	2.0%	0.4%	2.0%	2.8%	0.8%	2.4%	3.6%	0.8%	10.4%	10.8%	6.0%	4.0%
	5-7	1.6%	2.4%	0.8%	2.8%	3.6%	1.2%	3.6%	4.8%	1.6%	11.6%	12.4%	8.0%	7.2%
	7-10	2.4%	3.2%	1.2%	3.6%	5.2%	2.0%	4.8%	6.4%	2.4%	13.2%	14.4%	10.4%	10.4%
	>10	4.0%	5.6%	1.6%	6.4%	8.4%	2.8%	7.2%	10.4%	3.6%	16.0%	20.4%	11.6%	16.0%
Credit quality	Residual maturity (years)(*)	Haircut category												
		Category I			Category II			Category III			Category IV			Category V
		fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	fixed coupon	zero coupon	floating coupon	
BBB+ to BBB-	0-1	4.8%	4.8%	4.8%	5.6%	5.6%	5.6%	6.4%	6.4%	6.4%	10.4%	10.4%	10.4%	Not permissible
	1-3	5.6%	6.4%	4.8%	7.6%	10.8%	5.6%	9.6%	12.0%	6.4%	18.0%	20.0%	10.4%	
	3-5	7.2%	8.0%	4.8%	10.8%	14.8%	5.6%	13.2%	17.6%	6.4%	22.4%	26.0%	10.4%	
	5-7	8.0%	9.2%	5.6%	11.2%	16.0%	7.6%	14.8%	20.8%	9.6%	24.4%	28.0%	18.0%	
	7-10	9.2%	10.4%	7.2%	12.8%	19.6%	10.8%	15.2%	22.4%	13.2%	24.8%	29.6%	22.4%	
	>10	10.4%	12.8%	8.0%	15.2%	23.6%	11.2%	15.6%	24.0%	14.8%	25.2%	30.4%	24.4%	

(*), 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 Markets Strategy & Floor Research

Performance and Relative Value
Benchmark indices for German Laender

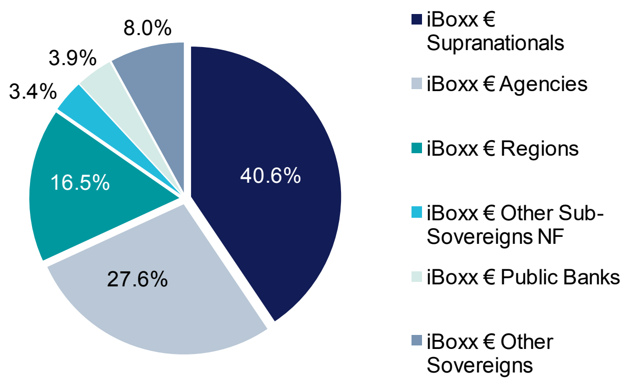
iBoxx € Regions as benchmark for German Laender?
When looking for a benchmark index for bonds issued by the German Laender, the iBoxx € Regions from data provider Markit always stands out. Containing a total of 201 bonds (at the time of going to print), the sub-index of the iBoxx € Sub-Sovereigns maps the universe of EUR bonds issued by regional authorities. With a volume weighting of 80.1% (158 bonds), German bonds dominate the index. For various reasons, however, we do not consider the index to be the ideal benchmark for bonds issued by German Laender.

Criteria for classifying issuers into iBoxx € Sub-Sovereigns sub-indices

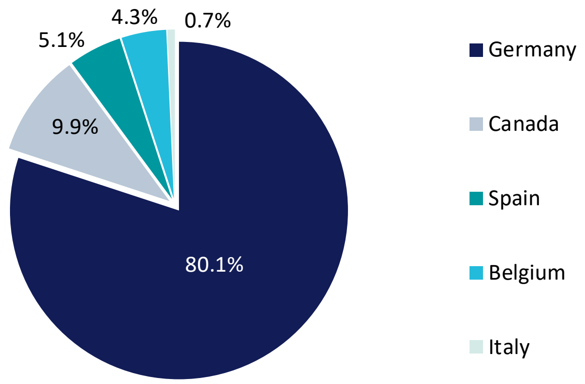
Agencies	Issuers whose main business activity is carrying out a task which is funded by a local authority and which is neutral in relation to competition (e.g. KfW).
Supranationals	Issuers owned by more than one country (e.g. EIB).
Public banks	Issuers which are publicly owned and funded but who offer commercial bank services (e.g. BNG)
Regions	*Issuers that represent regional or local governments (e.g. Laender) – with either 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 Markets Strategy & Floor Research

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



Laender weighting within the iBoxx € Regions



Source: Markit, NORD/LB Markets Strategy & Floor Research

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

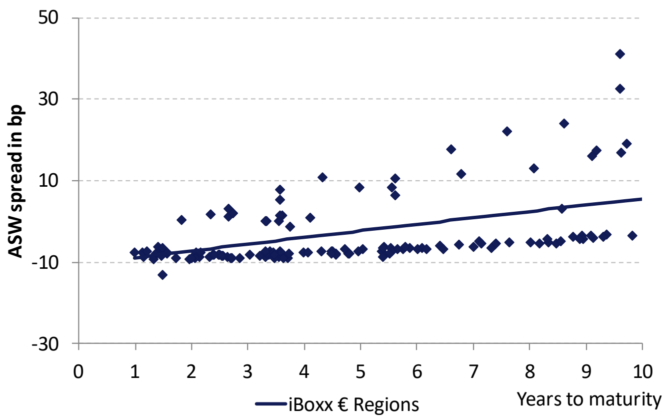
Bond type	Only those bonds whose cash flows can always be determined in advance are taken into consideration in the Markit iBoxx € indices. T-bills and other money market instruments are not included; the only currency permitted is the euro. The origin of the issuer is irrelevant.
Rating	All bonds in 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 Markets Strategy & Floor Research

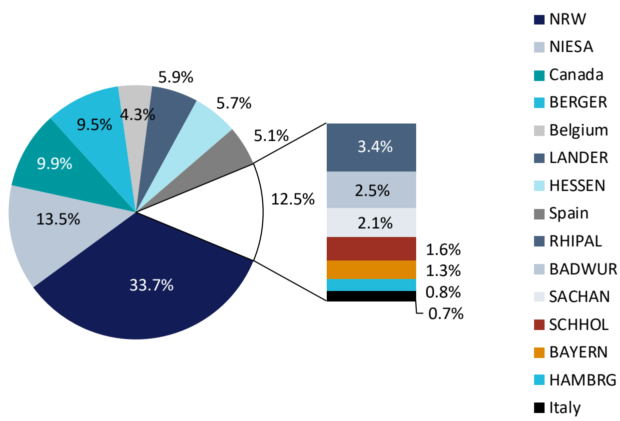
Risk premiums vary due to periphery issuers

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

ASW spreads of the iBoxx € Regions*



iBoxx € Regions by issuer



* Residual term to maturity > 1 year and < 10 years.
Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Weighting of Laender does not reflect the actual Laender bond market

The weighting of the 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 other. 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 Laender.

Comment

Given the inherent weaknesses of the iBoxx € Regions, we shall use the total number of Laender bonds in circulation to produce a relative view of each of the Laender in the following analyses. For this reason, we analyse fixed-interest bonds in relation to all Laender bonds with an outstanding volume of at least EUR 500m. Similarly, unless fixed-interest bonds are available for analysis, we look at floaters from a sub-sovereign in relation to all the Laender floaters with an outstanding volume of at least EUR 500m.

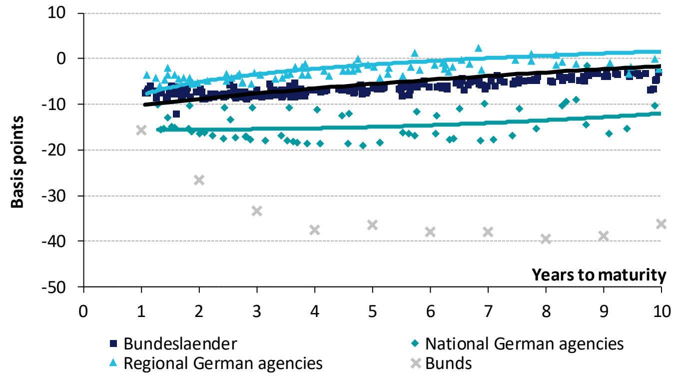
Performance and Relative Value
Performance drivers

LCR and dwindling liquidity as performance drivers
While SSA spread performance in 2014 was still being impacted by the LCR classification in particular, as well as a general decline in liquidity, this trend towards the drying-up of the market has been exacerbated further since 2015 by way of the Eurosystem's securities purchasing programme. From 2016 through to mid-2018, the spread performance of SSAs was primarily characterised by the purchases made by the ECB and the national central banks within the scope of their EAPP and PSPP. An approach on the part of the central banks that could occasionally be described as aggressive also impacted the spread development of sub-sovereigns. After the scope of the purchase programme was expanded to include Laender bonds, the measures taken by the central bank have had a very direct impact. In addition, spreads were affected by a general decline in liquidity within the SSA segment, which merely served to further increase the rarity value of a number of bonds and issuers. Several extensions of the PSPP (including a reversal of the decision to bring net purchasing activities to an end) in addition to the PEPP launched in 2020 have ensured that demand for Laender bonds has been sustained at a high level.

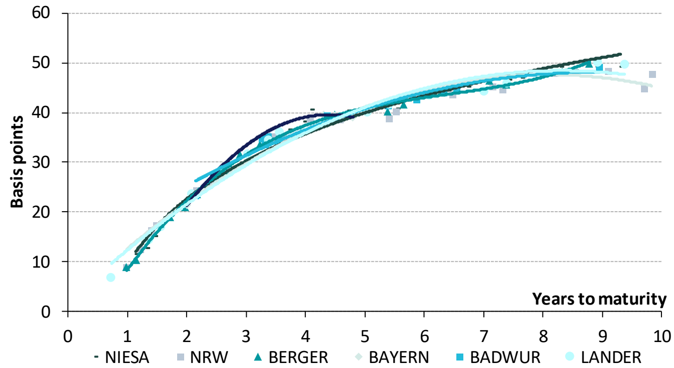
Laender bonds – a comparison

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 to Bunds in the German SSA investment segment. Even though the PSPP has already had a considerable impact on the Laender segment, there are still some premiums. The newly launched PEPP is ensuring that spreads in this segment are compressed further – although this is mainly among Laender bonds themselves, and less in comparison with German sovereign bonds. An interesting aspect to note here is the relative stability of the ASW spreads in comparison with the G spreads, where volatility is significantly higher due to the fluctuations in the respective Bunds.

ASW spreads – a comparison



ASW spreads – a comparison



NB: Residual term to maturity >1 year and <10 years; minimum outstanding volume of EUR 500m. National agencies: KFW, FSMWER, RENTEN, among others. Regional agencies: NRWBK, ERSTAA, LBANK, BAYLAN, IBB, BYLABO, WIBANK, among others.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

An overview of the German Laender

Author: Dr Norman Rudschuck, CIIA

Laender characterised by high degree of heterogeneity – spread convergence continues due to purchase programmes

German Laender are characterised by a high degree of heterogeneity. Differences exist not only in terms of area, number of inhabitants and economic strength. The Laender also differ significantly with regard to factors such as debt situation, focus on exports and demographic trends. In addition, the liquidity of their bonds and their ratings result in differences, although these are now at most reflected marginally due to the very small differences in spreads. This spread convergence is being intensified or manifested by way of the ECB's focus on bonds issued by German sub-sovereigns within the framework of its securities purchases (e.g. under the PSPP and PEPP). In the discussion below, we will initially look at the overall development of the Laender, before focusing on the differences between them.

Broad range of products

German Laender offer a broad range of bonds and Schuldscheindarlehen (SSD). At present, an outstanding volume of EUR 414.8bn is spread across 923 separate bond deals. The equivalent of just EUR 12.3bn (1.9%) of this amount is not denominated in EUR, which illustrates the fact that foreign currencies remain of marginal importance in terms of sub-sovereigns funding mixes, while fixed-coupon bonds (outstanding volume: EUR 364.1bn) and floating rate notes (floaters/FRNs; EUR 35.7bn) dominate Laender funding profiles. Overall, 168 EUR-denominated bonds feature benchmark-size volumes. SSD deals and Kassenkredite account for a volume of around EUR 221.0bn. Due to the lack of transparency on the SSD market, however, in some cases the relevant data here can only be estimated. The data also includes a total of 17 Laender jumbos (EUR 19.4bn) jointly placed by a group of several Laender.

General information

Total debt*

EUR 635.8bn

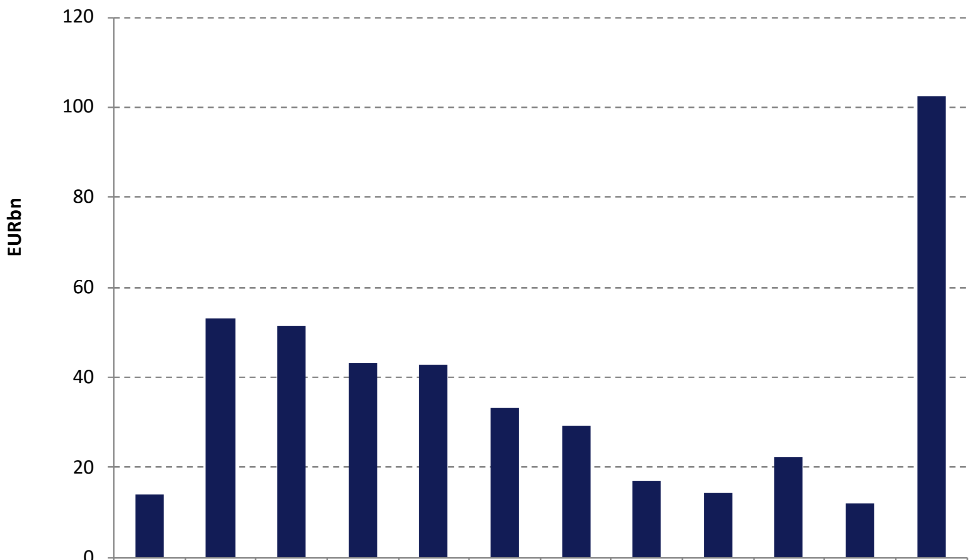
Of which bonds**

EUR 434.3bn

* As reported at year-end 2020

** Data retrieved on 21 September 2021

Outstanding bonds issued by the German Bundeslaender



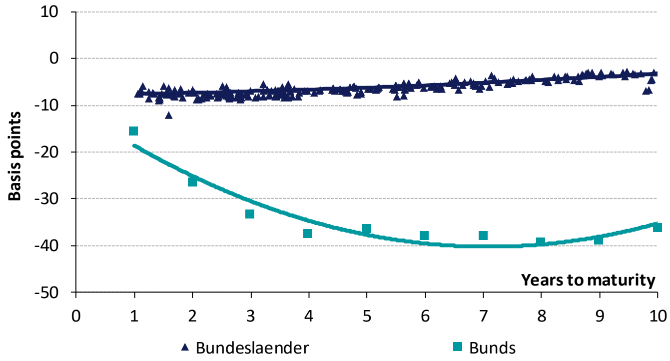
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Laender bonds	14.1	53.0	51.5	43.1	42.7	33.1	29.1	16.9	14.2	22.2	11.9	102.4

Foreign currencies are converted into EUR at rates as at 21 September 2021.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

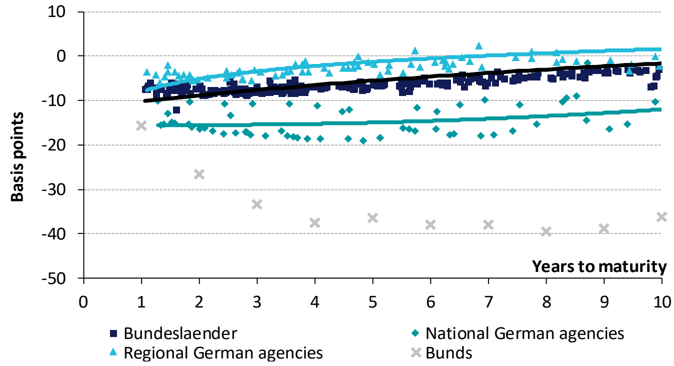
Ratings

The ratings agencies Fitch, Moody's and S&P link their ratings for each of the Laender with the rating of the German federal government (for the most part). Fitch regards the system of financial equalisation among the Bundeslaender and the federal loyalty principle in general as the dominant factor 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. 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 the system of financial equalisation among the Laender and the principle of federal loyalty in to its rating decision, it diverges more widely from the AAA rating held by the German federal government. In this context, for example, S&P currently awards NRW an AA rating (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, FMSWER, RENTEN, among others. Regional agencies: NRWBK, LBANK, BAYLAN, IBB, BYLABO, WIBANK, among others.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Relative value

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

80.1%

No. of German bonds in iBoxx € Regions

158 (out of 201) [78.6%]

Pick-up versus swaps*

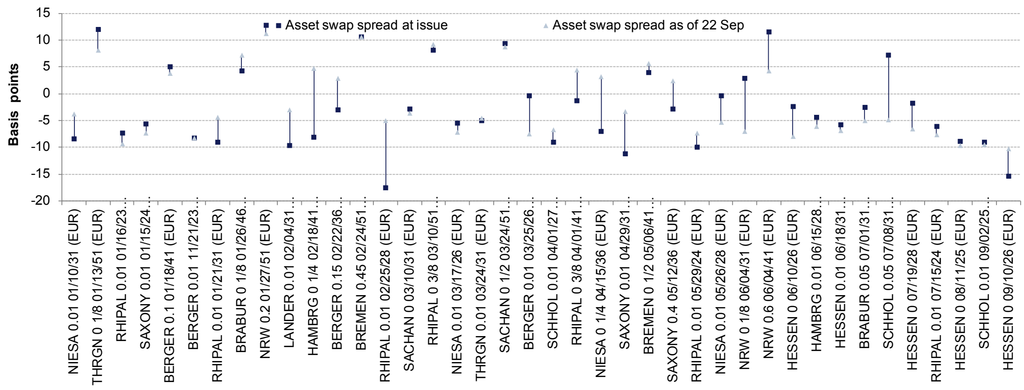
-12bp to +12bp (Median: -5bp)

Pick-up versus Bunds*

+9 to +54bp (Median: +31bp)

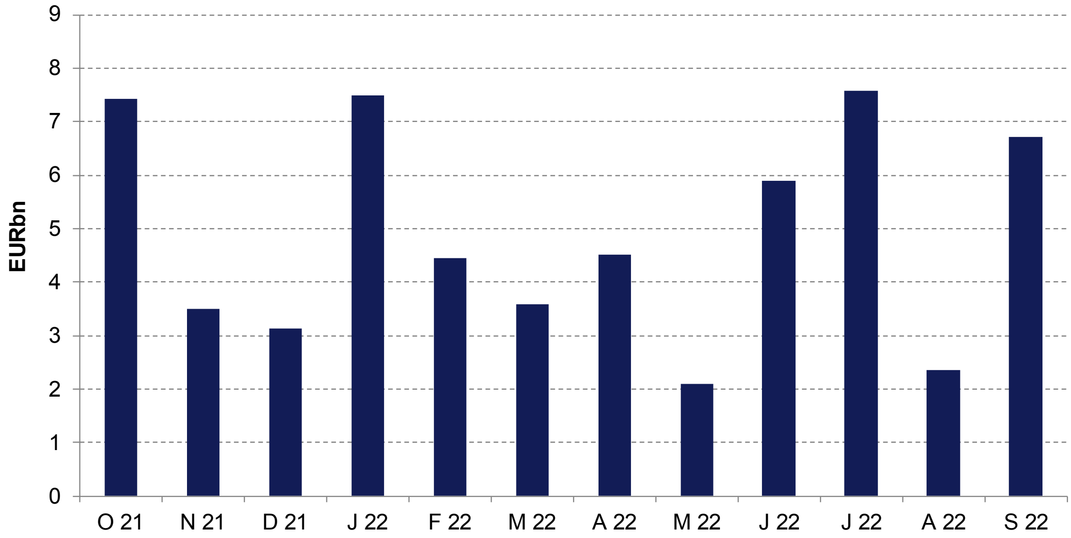
*vs. interpolated figures; minimum term of 1 year; minimum volume EUR 0.5bn.

Performance of benchmark issues**



** Issuance volume of at least EUR 0.5bn. Bonds are not necessarily liquid.
For the sake of readability, the Methuselah bond issued by NRW (priced at ms +111bp in 2021) is not included this year.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Bond amounts maturing in the next 12 months



Source: Laender, Bloomberg, NORD/LB Markets Strategy & Floor Research

Refinancing

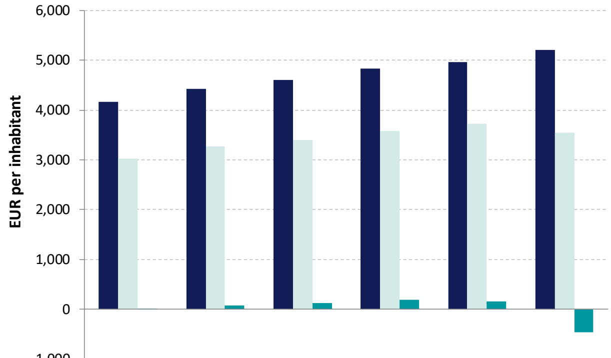
Although Laender issuance volumes have been declining for many years, they have nonetheless remained at a high level. Before the coronavirus pandemic, the recently introduced debt brake was a factor in this development. After 2020, significant refinancing volumes and gross credit authorisations are expected for both 2021 and 2022. The most important funding instruments are bonds and SSD, 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. In 2020, credit authorisations rose by around EUR 70bn versus initial planning to approximately EUR 154bn due to several supplementary budgets. At the time of going to print, we have identified a falling trend again for 2021, at EUR 119bn. However, this should in no way be taken to mean that the pandemic has been overcome fully.

Credit authorisations of German Laender in 2021 (EURbn)*

	Net	Gross
Baden-Wuerttemberg	2.50	21.39
Bavaria	10.60	11.96
Berlin	0.00	6.61
Brandenburg	1.81	4.55
Bremen	1.18	2.79
Hamburg	2.39	4.57
Hesse	2.85	8.04
Mecklenburg-Western Pomerania	2.15	3.20
Lower Saxony	1.12	7.64
North Rhine-Westphalia	13.80	29.20
Rhineland-Palatinate	1.27	7.88
Saarland	0.50	2.20
Saxony	2.00	2.80
Saxony-Anhalt	-0.10	1.75
Schleswig-Holstein	0.55	3.78
Thuringia	-0.07	1.00
Total	**42.55**	**119.36**

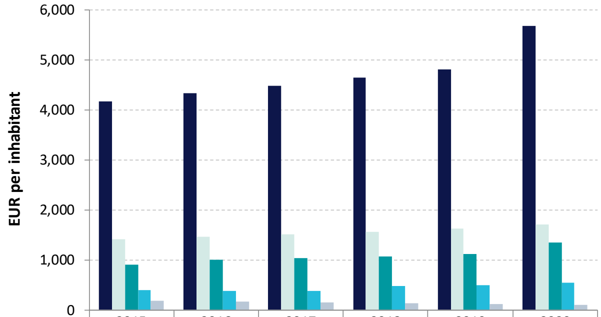
*Some figures are rounded and/or provisional; as at: 21 September 2021; unchanged values from 06 May 2021
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



	2015	2016	2017	2018	2019	2020
Operating revenue	4,173	4,420	4,615	4,843	4,974	5,219
Tax revenue	3,028	3,271	3,394	3,585	3,720	3,542
Deficit/surplus	3	74	127	189	159	-465

Development of expenditure in EUR per capita



	2015	2016	2017	2018	2019	2020
Operating expense	4,170	4,346	4,488	4,654	4,815	5,684
Staff expenditure	1,420	1,461	1,520	1,557	1,631	1,704
Grants to municipals	902	1,001	1,043	1,074	1,126	1,356
Capital expenditure	404	378	382	488	496	542
Interest expense	182	162	151	138	124	103

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

Budget figures 2020

Balance (vs. 2019)
EUR -38.7bn (EUR -51.9bn)

Balance/GDP (2019)
-1.2% (0.32%)

Balance per capita (2019)
EUR -465 (EUR 159)

Tax revenue (vs. 2019)
EUR 294.4bn (EUR -15.0bn)

Taxes per capita (2019)
EUR 3,542 (EUR 3,720)

Taxes/interest paid (2019)
34.4x (30.0x)

Total revenue/interest paid (2019)
50.6x (40.1x)

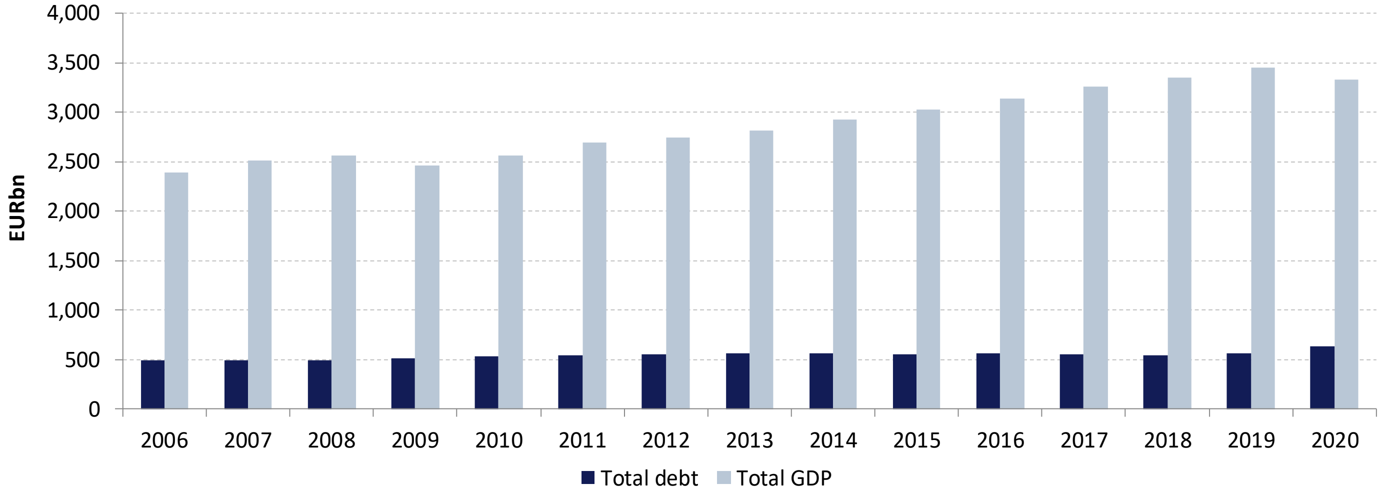
Debt level (vs. 2019)
EUR 635.8bn (EUR +78.2bn)

Debt/GDP (2019)
19.1% (16.2%)

Debt/revenue (2019)
1.5x (1.3x)

Although the budgetary development of the Laender was, generally speaking, very positive in recent years, the coronavirus pandemic brought this trend to an abrupt halt. Falling tax revenues and rising expenditure, in some cases sharply so, led to a negative budget balance of EUR -38.7bn, nearly EUR 52bn down on the result posted in the prior year. The decline in tax revenues of EUR 15bn to EUR 294.4bn was not quite as marked as the growth in expenditure of EUR 72bn to EUR 472bn. The positive trend in total revenues seen in recent years was, however, continued, rising by EUR 22.1bn to EUR 433.8bn, equating to growth of 32% versus the past seven years. In contrast, total expenditure saw a markedly sharper increase of 44.4% across the same time frame. This development can primarily be attributed to the additional charges arising in 2020 mentioned at the start of this section. Grants to municipalities in particular, for which disproportionately high growth of almost 65.7% has been recorded over the past seven years, increased significantly again in 2020 (2020: EUR 112.7bn, 2019: EUR 93.6bn). In contrast, at +24.1%, personnel expenses rose only slightly below average across the same period (2020: EUR 141.6bn). Meanwhile, the general yield trend continued to have a positive impact on interest expenses: over the past seven years, interest expenses have fallen by nearly 46% to the most recent figure of EUR 8.5bn. It should therefore come as little surprise that, as a result, there has been an improvement in the ratio of total revenue to interest paid (50.6x). The development in interest expenses was so positive that it was able to counteract the decline in tax revenues, producing a new all-time record value for tax-interest coverage in the period under review (2020: 34.4x; 2019: 30.0x; 2018: 25.9x). Capital expenditure rose for the third successive year, increasing relatively sharply by 9.4% to EUR 45.0bn on this occasion (2019: EUR 41.2bn). Owing to the pandemic, it was a mixed picture in terms of the key credit metrics of the Laender: on the one hand, there were record values in interest coverage and increased total revenues. However, on the other, these positive aspects were dented by deteriorating debt sustainability scores: for example, the ratio of debt to total revenues recently increased to 1.5x as against 1.3x in the prior year, while the ratio of debt to GDP also grew from 16.2% to 19.1%.

Overview of Laender debt and economic output

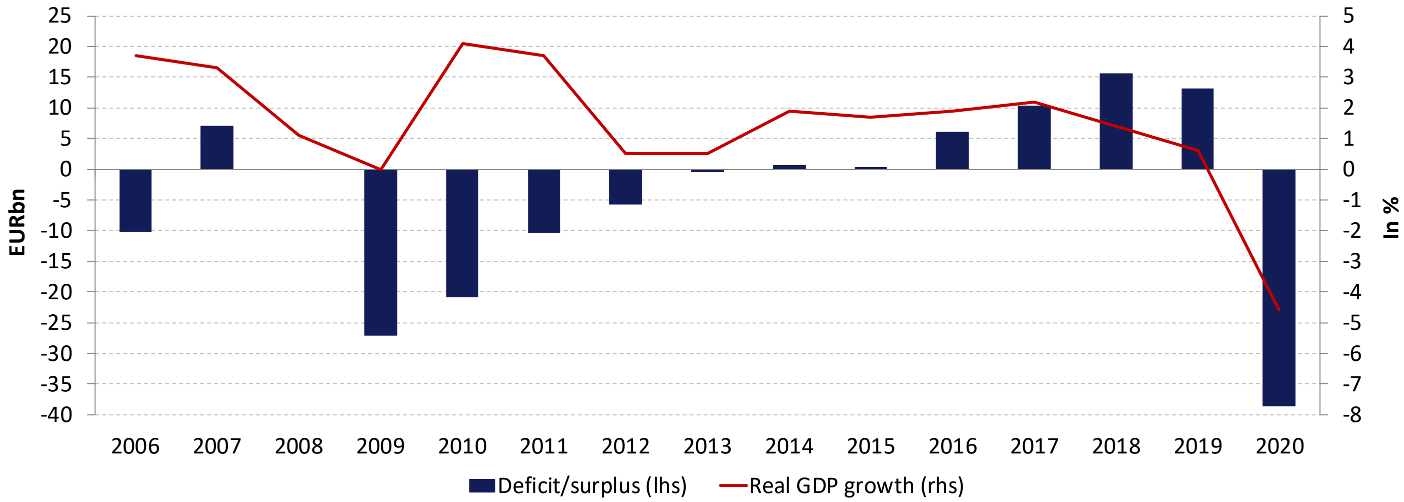


Source: Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Laender debt levels on the rise again

While the overall debt level of the Laender rose on a constant basis over previous years, from 2014 onwards, the debt trend stabilised and even fell 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, debt rose once more on account of the coronavirus pandemic, with aggregated new debt totalling EUR 78.2bn. Due to the pandemic situation, the numerous economic measures aimed at mitigating the impact of the crisis and the suspension of the debt brake, we expect another sharp rise in Laender debt for the current year. Gross credit authorisations were initially supposed to total roughly EUR 70bn in 2020, although the actual value eventually came in at EUR 154bn. For 2021, the Laender are currently (as at: 21 September 2021) planning credit authorisations of EUR 119.4bn. Although the pandemic situation has recently calmed somewhat, if things were to seriously deteriorate again it is possible that the Laender would be forced to take on additional fresh debt. In this sense, it is not possible at the moment to offer a serious, reliable estimate for either 2021 or, in particular, for 2022.

Overview of Laender balances and real GDP growth



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

Positive trend in Laender balances

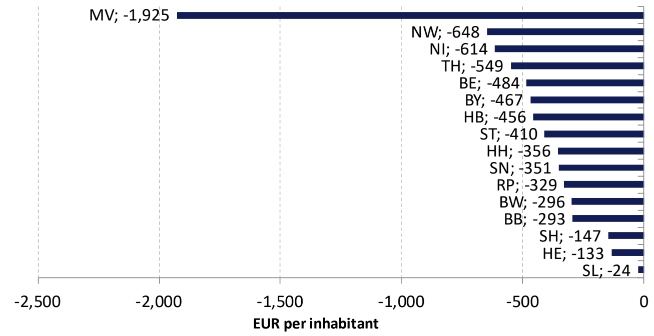
The aggregated budget balances of the Laender have followed a significantly positive trend since 2009. Although a deficit of EUR 27.1bn was posted in 2009, deficits have subsequently fallen on an almost constant basis. A sea change came about in 2018, resulting in by far the largest surplus in recent years. This was closely followed by the budget balance recorded in 2019. The positive trend seen over recent years was not continued into 2020, again owing to the coronavirus crisis. 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 significant rise in expenditures (+18.9% on average across Germany). Due to the fundamentally sound nature of the budget balances recorded in the years immediately before 2020, German Laender have, so far, navigated the pandemic better than other comparable regions and regional authorities around the world.

Overview of the Bundeslaender 2020

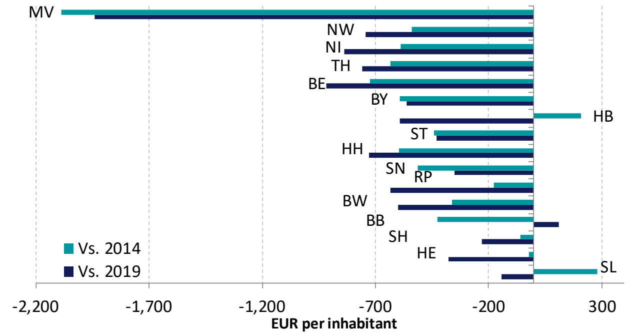
	Adjusted income (EURbn)	Adjusted expenditure (EURbn)	Balance (EURbn)	Debt level (EURbn)	GDP (EURbn)	Debt/GDP (in %)	Balance/GDP (in %)
BW	55.1	58.4	-3.3	48.0	500.8	9.6	-0.7
BY	62.5	68.6	-6.1	18.0	610.2	2.9	-1.0
BE	31.1	32.9	-1.8	59.7	154.6	38.6	-1.2
BB	12.6	13.3	-0.7	18.6	73.9	25.2	-1.0
HB	6.3	6.6	-0.3	39.3	31.6	124.5	-1.0
HH	16.2	16.9	-0.6	35.3	118.1	29.9	-0.6
HE	31.9	32.8	-0.8	45.8	281.4	16.3	-0.3
MV	9.3	12.4	-3.1	8.4	46.0	18.4	-6.7
NI	35.5	40.4	-5.0	64.9	295.9	22.0	-1.7
NW	93.2	104.8	-11.6	178.5	697.1	25.6	-1.7
RP	19.0	20.3	-1.3	30.8	141.9	21.7	-1.0
SL	4.7	4.8	-0.1	14.5	33.6	43.2	-0.1
SN	20.0	21.5	-1.4	5.0	125.6	4.0	-1.1
ST	11.5	12.4	-0.9	21.2	62.7	33.9	-1.4
SH	14.7	15.1	-0.4	32.0	97.2	32.9	-0.4
TH	10.2	11.4	-1.2	15.6	61.5	25.4	-1.9
Total	**433.8**	**472.4**	**-38.6**	**635.8**	**3,332.2**	**19.1**	**-1.2**

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 Markets Strategy & Floor Research

Balance in EUR per capita



Change in balance in EUR per capita

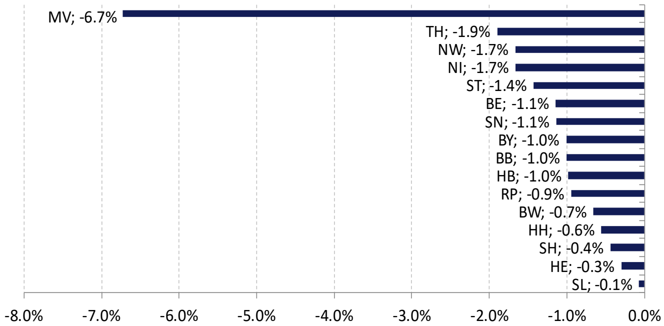


BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia.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

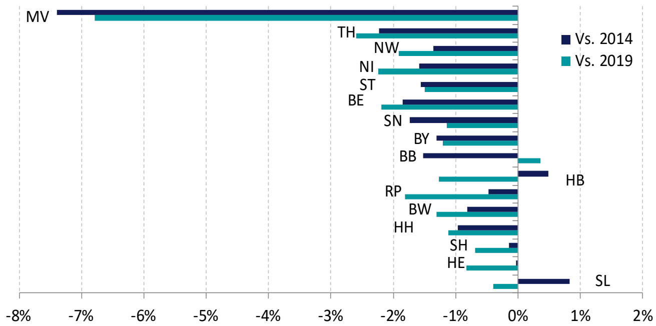
Development of budget balances over time

Due to huge additional charges and the absence of significant portions of tax revenues, not a single sub-sovereign was able to generate a positive balance on a per capita basis in 2020. This slump was particularly pronounced in Mecklenburg-Western Pomerania, which was confronted with a disproportionately sharp rise in expenditure. The financial consequences of the coronavirus crisis are crystallised even further when we compare the current budget balances with the results recorded in previous years: Brandenburg is the only sub-sovereign to post a higher balance in 2020 than in 2019. In comparison with 2014, only Saarland and Bremen are on a better footing, although it should be noted here that both Laender were undergoing restructuring processes across this time frame. In view of the unusual circumstances of the past two years, we should not place too much emphasis on current trends.

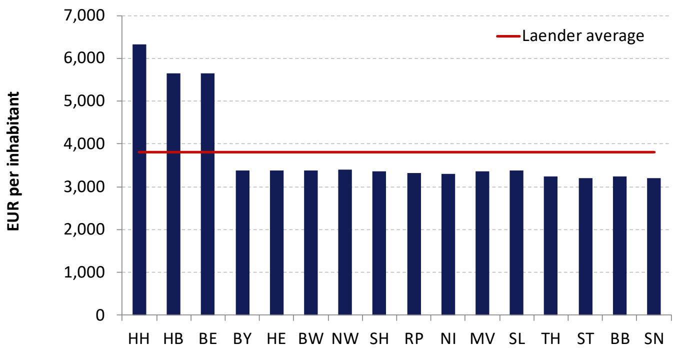
Budget balance as a % of GDP



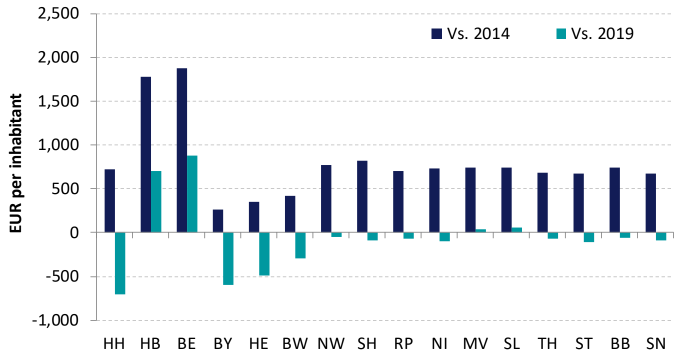
Change in budget balance as a % GDP



Taxes in EUR per capita



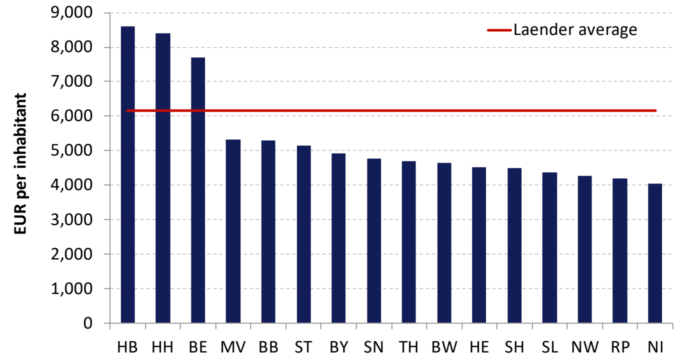
Change in taxes in EUR per capita



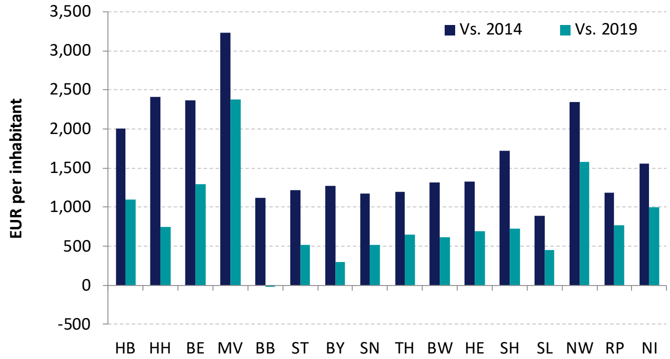
BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia.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

City states with highest tax revenue per capita
In terms of tax revenues, 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 population. This trend was continued in 2020, with Hamburg again topping the charts for this metric despite having actually recorded the sharpest decline of all Laender in comparison with 2019. At this juncture, it should also be mentioned that Bremen and Berlin were the only Laender to register significantly positive growth in per capita revenues in comparison with 2019.

Expenditure in EUR per capita



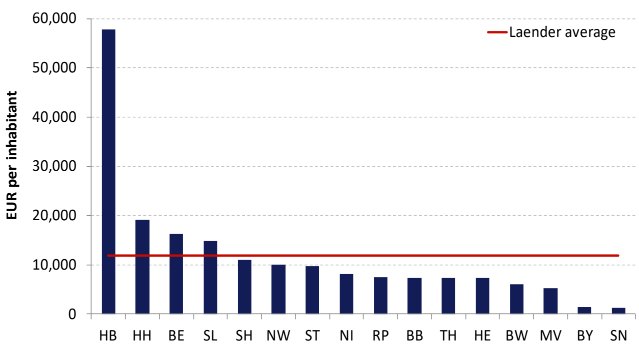
Change in expenditure in EUR per capita



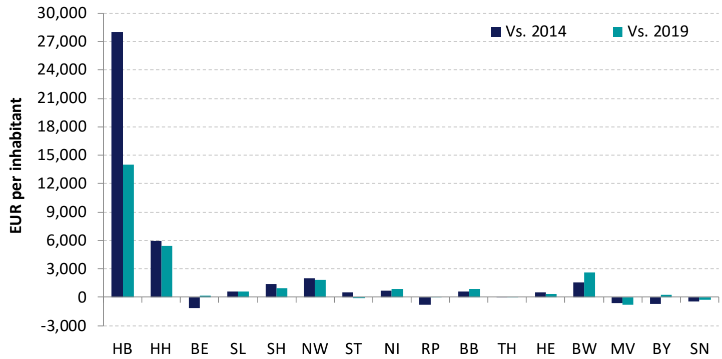
BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia.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

Lower Saxony with lowest expenditure per capita
The city states traditionally display the largest outflows in terms of per capita expenditure levels, while Lower Saxony again posted the lowest level of per capita expenditure in 2020. In this respect, East German states have slightly higher expenditure levels in comparison with West German non-city states, although in both regions the difference in expenditure levels has widened again in both of the previous two years following a sustained period of convergence in their respective values.

Debt per capita in EUR



Change in debt per capita in EUR

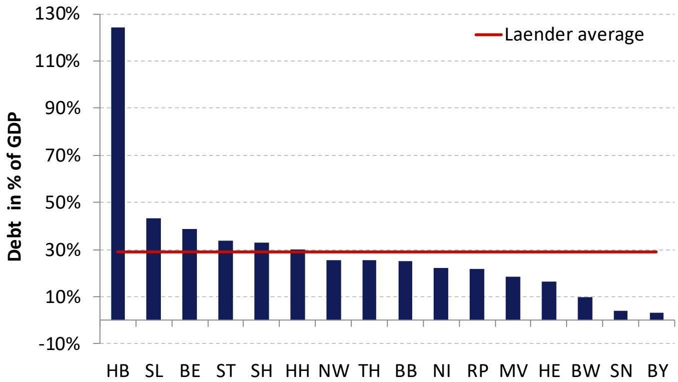


BW = Baden-Wuerttemberg, BY = Bavaria, BE = Berlin, BB = Brandenburg, HB = Bremen, HH = Hamburg, HE = Hesse, MV = Mecklenburg-Western Pomerania, NI = Lower Saxony, NW = North Rhine-Westphalia, RP = Rhineland-Palatinate, SL = Saarland, SN = Saxony, ST = Saxony-Anhalt, SH = Schleswig-Holstein, TH = Thuringia.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

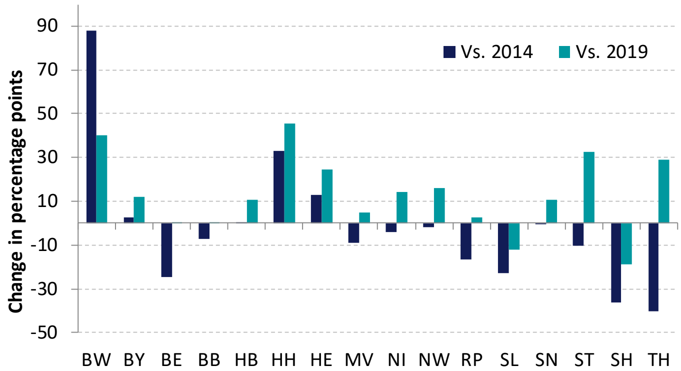
Highest debt per capita in city states and Saarland

For years now, the city states and 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, Bremen recorded a further increase in the value of this metric in 2020. Last year, only Mecklenburg-Western Pomerania and Saxony were able to slightly reduce their debt per capita.

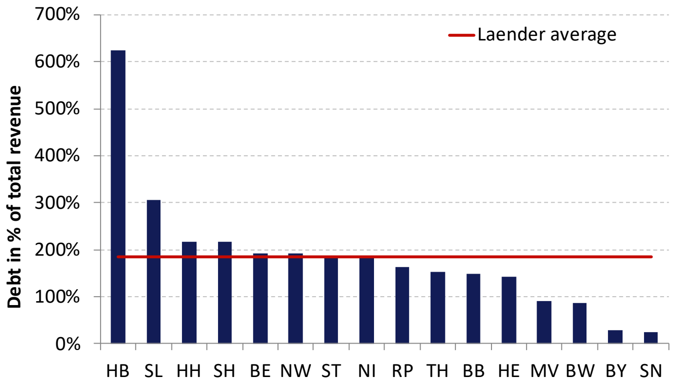
Debt as a % of GDP



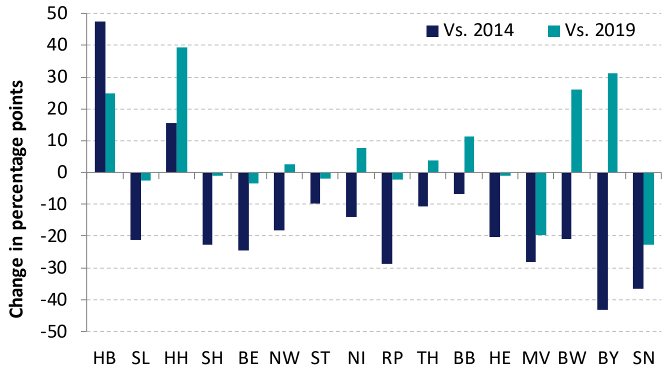
Change in debt as % of GDP in comparison (in pp)



Debt/revenue in comparison



Change in debt/revenue in comparison (in pp)



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 Markets Strategy & Floor Research

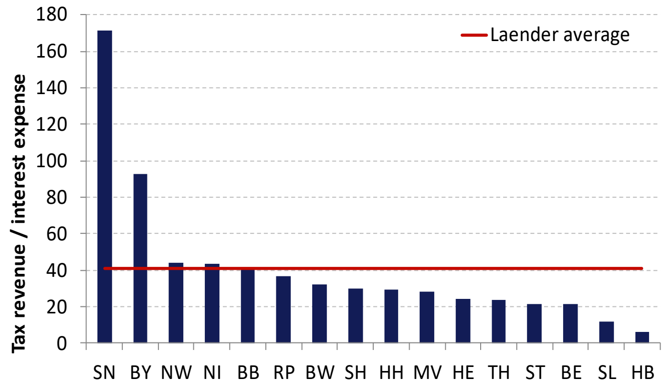
Saarland and Berlin defy pandemic to continue positive trend

The ratio of debt to revenue also reveals major differences between the Laender. In this regard, Saarland and Berlin stand out in particular, having both successfully improved fraught budget situations. The most notable deteriorations in comparison with 2019 were recorded in Hamburg, Bavaria and Baden-Wuerttemberg, although the latter does still boast an especially positive ratio of debt to revenue.

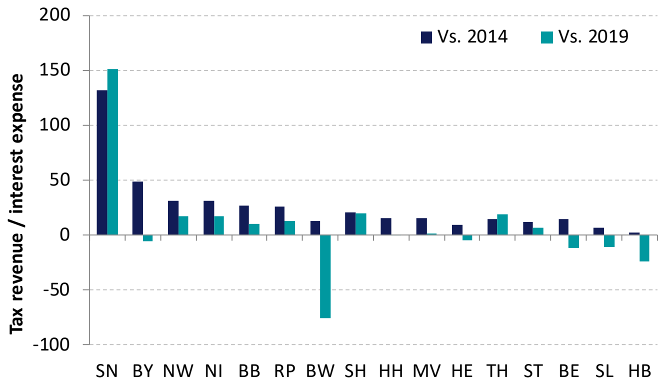
Interest coverage declining in some places

Despite the issues presented by the coronavirus pandemic, nearly half of the German Laender were able to improve their interest coverage on a year-on-year basis. In fact, in relation to 2014, this positive development can actually be seen across all Laender. Saxony registers by far the highest value in this regard, followed by Bavaria. At the other end of the scale are Bremen, Saarland, Berlin and Saxony-Anhalt.

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 Markets Strategy & Floor Research

Comment

The segment of German Laender 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 the market offers a relatively diverse range of products. The increased issuance volume aimed at counteracting the effects of the coronavirus crisis will also provide an unexpectedly high level of new issuances this year. Laender finances largely continued their positive development in the previous year. For example, key credit metrics have improved, although the heterogeneity of this market segment has nevertheless remained unaffected by this development. Balances, tax revenue, debt and a number of key credit metrics reveal differences between the Laender, which are actually quite considerable in some cases. Despite the strong progress that has been made, the 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 forgotten that the current market environment is still concealing fundamental differences. In this context, the purchase programmes of the Eurosystem (PSPP and PEPP) are suppressing both spreads and yields. The huge economic breakdown triggered by the coronavirus crisis in 2020 precipitated a decline in revenue streams and growth in new debt on the part of the Laender. Although incipient signs of recovery have been identified in 2021, the debt brake has already been suspended again for 2022. This is likely to further increase the heterogeneity of the Bundeslaender sub-market.

Baden-Wuerttemberg

Covering a total area of 35,732 km^2 and with a population of 11.1 million inhabitants, Baden-Wuerttemberg is the third largest sub-sovereign of Germany in terms of both size and population. Historically, the present-day Bundesland was formed in 1951 from the regions of Wuerttemberg-Baden, Wuerttemberg-Hohenzollern and Baden by the Allies in the wake of the Second World War, with Stuttgart designated as the regional capital. As the sixth-largest city in Germany, Stuttgart is also the most important economic hub in BadWur. Germany owes much of its reputation as a world-renowned, innovative export nation to Baden-Wuerttemberg. For example, major industrial firms such as Daimler, Porsche and Bosch are located in and around the Stuttgart area. Apart from these key employers, however, the sub-sovereign's real trump card is what is known as its "hidden champions". These small and medium-sized enterprises (SMEs) are global market leaders in their particular, respective fields. More than a quarter of the globally leading companies based in Germany are headquartered in Baden-Wuerttemberg. In the segment of up to 250 employees (per company) alone, more than 300 of these drivers of innovation are located here, all of which make a significant contribution to the exceptional diversity of the industrial landscape of Germany's south-west. Overall, SMEs account for more than 99% of all businesses. At 5.68% of gross domestic product (GDP), no other region across the whole of Europe can boast such strong levels of investment in research and development as those seen in BadWur. This also results in the highest number of registered patents. According to the statistics published by the German Patent and Trade Mark Office (DPMA) on an annual basis, BadWur recorded 13,033 patent registrations in 2020. No other Land made a greater contribution to the total of 42,249 patent registrations recorded across Germany as a whole. In addition to its high-tech industries, BadWur is also a popular holiday destination, with tourists flocking in their droves to see the Black Forest and Lake Constance as well as to the famous vineyards of the Allgäu region. Moreover, four of Germany's 11 elite-level universities are located here (Heidelberg, Karlsruhe, Konstanz and Tübingen), underlining the region's research strength even more clearly, which means that academic excellence is equally as important to the region as its technologically intensive industries.

Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2020)

11,101,991

State capital

Stuttgart

Government

Greens/CDU

Minister-President

Winfried Kretschmann (Greens)

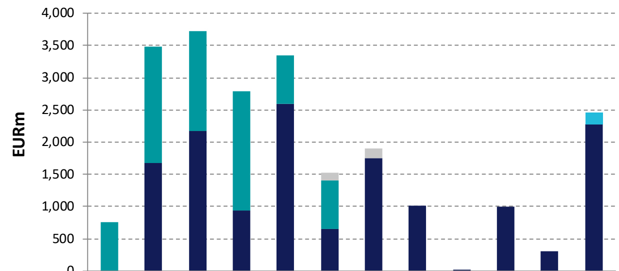
Expected next election date

Spring 2026

Ratings

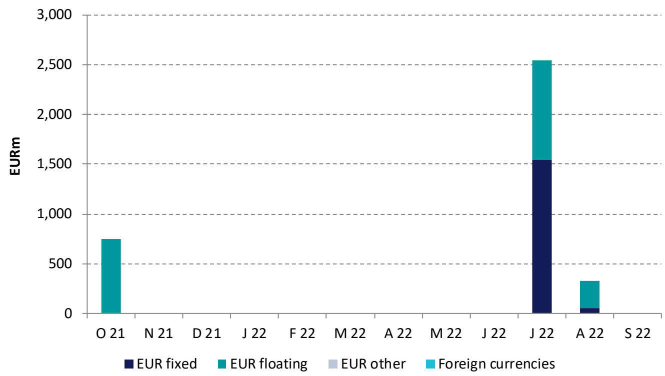
	Long-term	Outlook
Fitch	-	-
Moody's	Aaa	stab
S&P	AA+	stab

Overall maturity profile



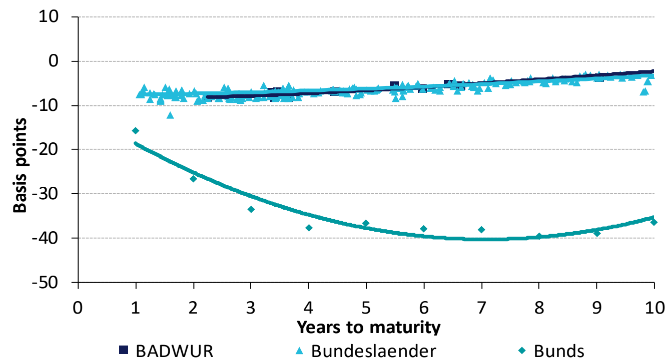
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Foreign currencies	0	0	0	0	0	0	0	0	0	0	0	186
EUR other	0	0	0	0	0	128	153	0	0	0	0	0
EUR floating	750	1,820	1,550	1,850	750	750	0	0	0	0	0	0
EUR fixed	0	1,670	2,175	933	2,600	651	1,750	1,011	25	1,000	300	2,275

Bond amounts maturing in the next 12 months

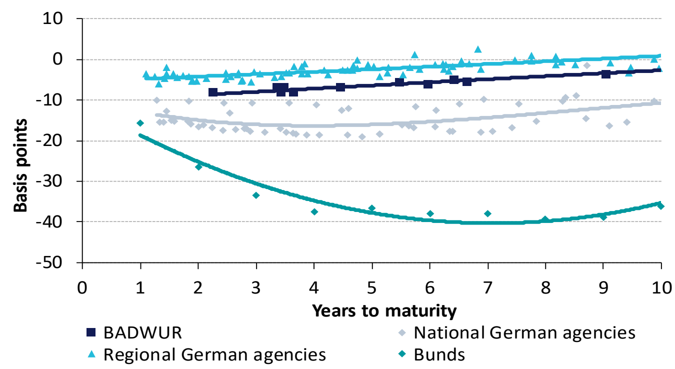


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks

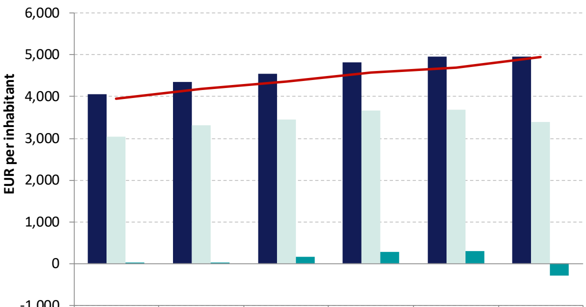


Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market	Economy 2020	Key figures 2020
Debt level* (ranking)**	**GDP (ranking)**	**Tax-interest coverage (ranking)**
EUR 48.0bn (13th)	EUR 500.8bn (3rd)	32.2x (7th)
Outstanding bonds	**GDP per capita (ranking)**	**Total revenue/interest paid (ranking)**
EUR 22.3bn	EUR 45,108 (4th)	47.2x (8th)
Bloomberg ticker	**Real GDP growth (ranking)**	**Debt/GDP (ranking)**
BADWUR	-5.5% (11th)	9.6% (3rd)
	Unemployment (ranking)	**Debt/revenue (ranking)**
	4.1% (2nd)	0.9x (3rd)

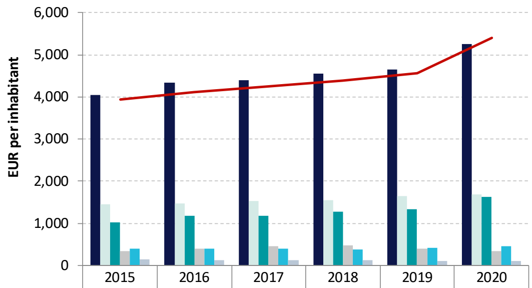
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



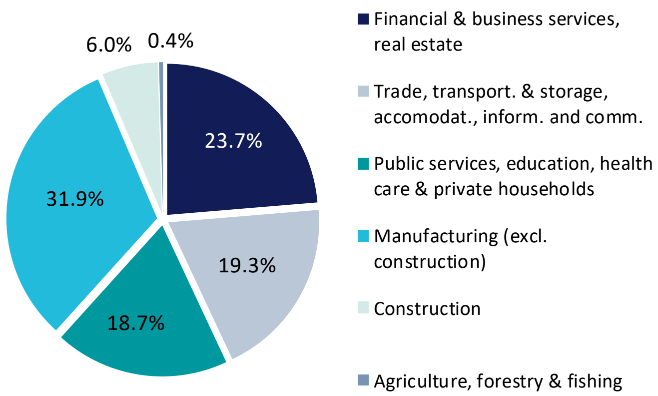
	2015	2016	2017	2018	2019	2020
Operating revenue	4,049	4,353	4,555	4,818	4,955	4,967
Tax revenue	3,037	3,304	3,447	3,667	3,686	3,389
Deficit/surplus	0	17	157	273	305	-296
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

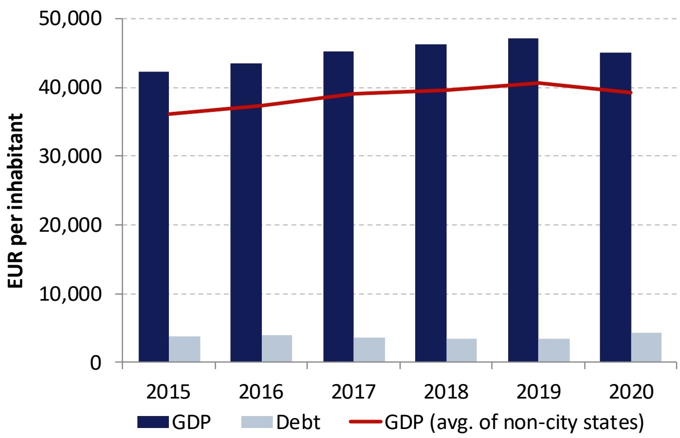


	2015	2016	2017	2018	2019	2020
Operating expense	4,049	4,336	4,399	4,545	4,649	5,263
Staff expenditure	1,444	1,469	1,535	1,549	1,637	1,689
Grants to municipals	1,031	1,177	1,172	1,283	1,339	1,632
Equalisation mechanism (net)	346	405	455	478	407	331
Capital expenditure	396	398	390	377	412	452
Interest expense	141	134	127	126	111	105
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

Gross value added by economic sector



Trend in GDP and total debt



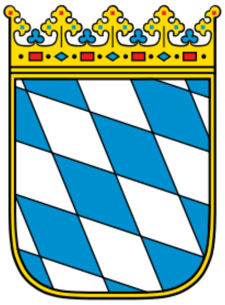
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Strengths

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

Weaknesses

– Development of indebtedness
– Suffered above-average economic slump during the pandemic



Bundesland and politics

Link to the Ministry of Finance

[Homepage]

Number of inhabitants (2020)

13,123,566

State capital

Munich

Government

CSU/Free Voters of Bavaria

Minister-President

Markus Söder (CSU)

Expected next election date

Autumn 2023

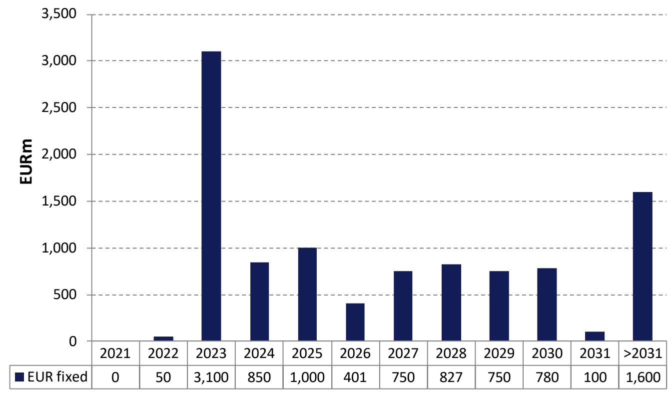
Ratings

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

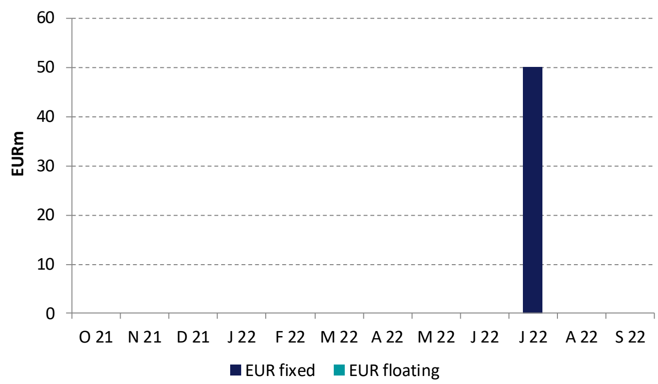
Bavaria

At 70,550 km^2, the Free State of Bavaria is the largest sub-sovereign by area. It has a population of 13.1 million inhabitants, with only North Rhine-Westphalia (NRW) exceeding this figure. The Free State of Bavaria has existed in its present form since 1 September 1955, when Lindau was re-integrated into the Bundesland. 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 2020, just under a third of all the patents registered in Germany came from Bavaria, underlining the innovative capacity of the local economy. However, agriculture and tourism are also major sectors of the economy. No other sub-sovereign has a greater area of agricultural land. From a tourism viewpoint, Bavaria is a global brand. Bavaria's international profile is reflected in strong visitor numbers, with approximately 20% of all overnight stays in hotels and guesthouses in Germany per year attributable to Bavaria. In terms of economic output, Bavaria has always made a substantial contribution to the GDP of Germany. In 2020, Bavarian GDP amounted to EUR 610.2bn, which corresponds to 15% of German economic output as a whole. Unemployment in Bavaria is the lowest across Germany. The Bavarian budget has also developed positively for several years in succession. In this context, the Free State of Bavaria takes one of the top spots for all key credit metric rankings in a comparison of the Laender. However, Bavaria is unlikely to meet its self-defined target of being debt free by 2032, as efforts to combat the coronavirus pandemic necessitated two supplementary budgets in 2020 totalling EUR 20bn. Nevertheless, the budgetary situation in Bavaria remains exemplary in a Laender comparison. For many years, the Free State of Bavaria was by far the most important net payer to the federal financial equalisation system. However, with the introduction of the new system on 01 January 2020 and the associated removal of direct revenue distribution streams between the Laender themselves, an aspect for which the Bavarian state government was a leading advocate, the financial power of this southern sub-sovereign is set to rise further still in future.

Overall maturity profile

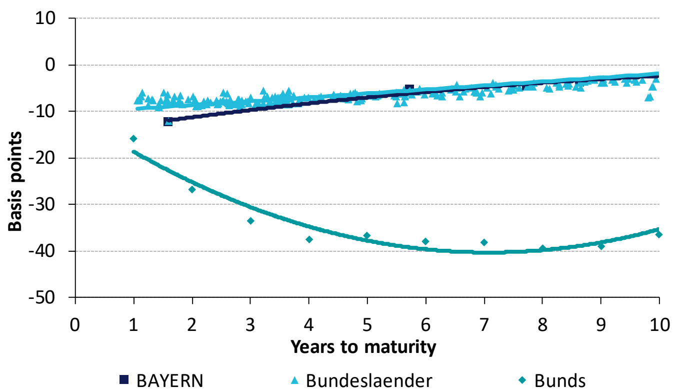


Bond amounts maturing in the next 12 months

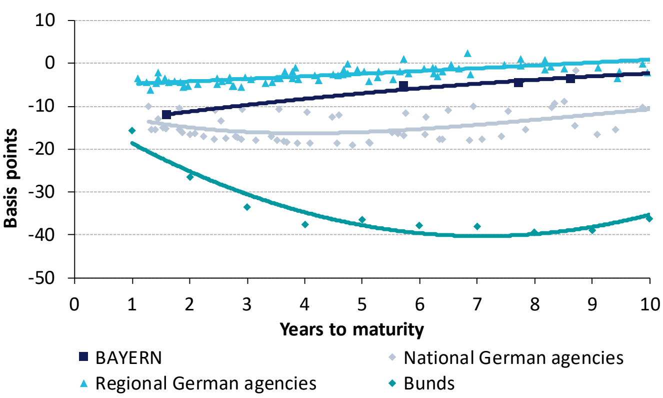


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



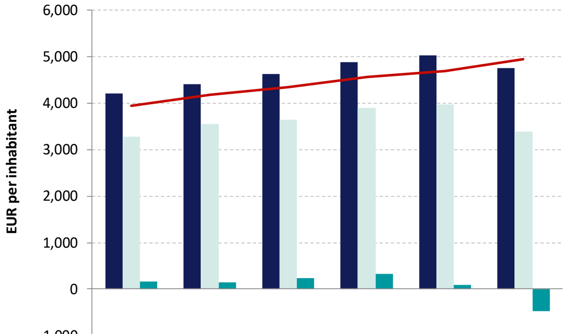
Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

NORD/LB

Capital market	Economy 2020	Key figures 2020
Debt level* (ranking)**	**GDP (ranking)**	**Tax-interest coverage (ranking)**
EUR 17.8bn (5th)	EUR 610.2bn (2nd)	92.9x (2nd)
Outstanding bonds	**GDP per capita (ranking)**	**Total revenue/interest paid (ranking)**
EUR 10.2bn	EUR 46,498 (2nd)	130.4x (2nd)
Bloomberg ticker	**Real GDP growth (ranking)**	**Debt/GDP (ranking)**
BAYERN	-5.5% (11th)	2.9% (1st)
	Unemployment (ranking)	**Debt/revenue (ranking)**
	3.6% (1st)	0.3x (2nd)

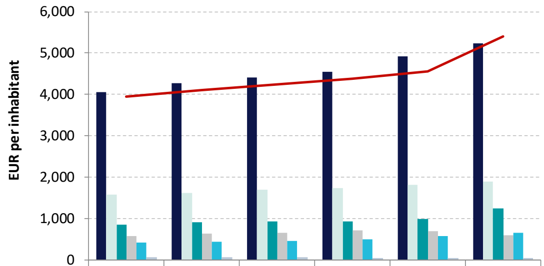
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



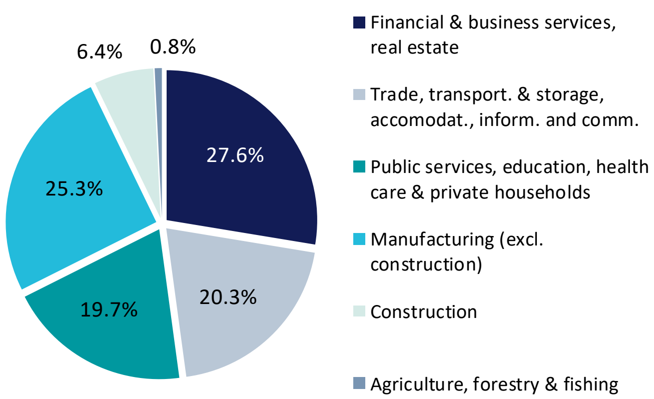
	2015	2016	2017	2018	2019	2020
Operating revenue	4,208	4,407	4,634	4,878	5,025	4,760
Tax revenue	3,277	3,546	3,638	3,906	3,982	3,389
Deficit/surplus	162	140	230	322	97	-467
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

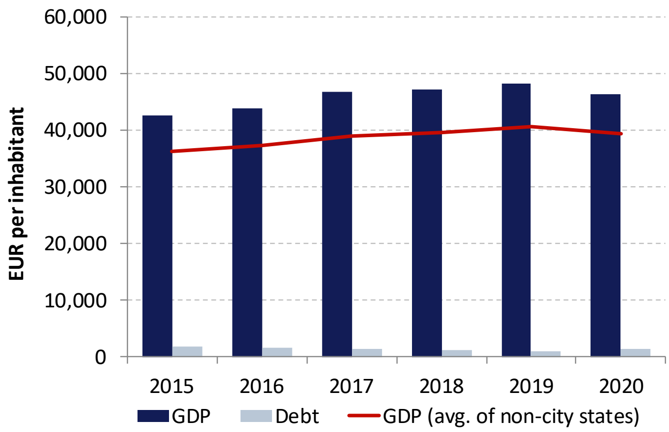


	2015	2016	2017	2018	2019	2020
Operating expense	4,046	4,267	4,403	4,556	4,928	5,227
Staff expenditure	1,579	1,623	1,691	1,728	1,804	1,885
Grants to municipals	841	913	925	927	983	1,244
Equalisation mechanism (net)	581	633	659	709	698	592
Capital expenditure	425	433	455	505	581	649
Interest expense	65	58	56	45	40	36
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

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 Markets Strategy & Floor Research

Strengths

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

Weaknesses

– High level of pension payments and personnel expenses
– Suffered above-average economic slump during the pandemic

Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2020)

3,662,501

State capital

-

Government

SPD/Linke (the Left Party)/Greens

Mayor

Michael Müller (SPD)

Expected next election date

26 September 2021

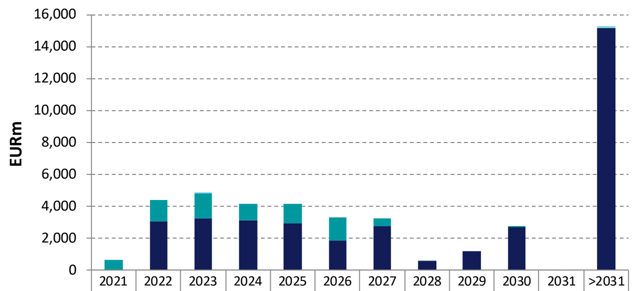
Ratings

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

Berlin

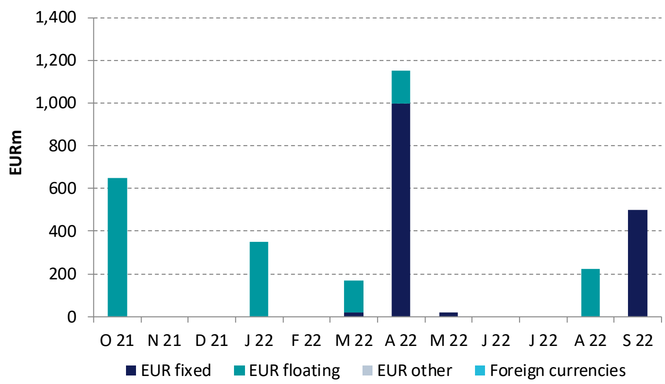
With a population of around 3.7 million people and covering an area of roughly 892 km^2, the capital city of Germany, Berlin, is the most densely populated sub-sovereign in Germany and the largest city in the European Union (EU). Following reunification in 1990, Berlin again became the capital of Germany. The most important institutions of the federal government were then gradually relocated to Berlin, creating many new jobs in the process. One in every five Berliners is of foreign nationality and one in three comes from an immigrant background. In total, Berlin is home to people from nearly 190 different countries. With over 2,500 parks and green spaces, Berlin is the greenest capital city in Europe, while it is also aiming to be climate-neutral by 2050. The city's proximity to universities and research institutions also promotes the influx and investment of companies from sectors including information and communication technology, multimedia, transport technology, environmental engineering, medical technology and biotechnology However, the majority of Berlin's value added is derived from the service sector, accounting for just under 64% of the gross value added generated by the Berlin economy. Alongside London, Berlin is also regarded as the start-up powerhouse of Europe. No other cities within Europe have the same standard of infrastructure needed for start-ups. As the UK departs the EU, Berlin is expected to see future growth in this key economic segment. In 2020, Berlin generated just under 4.6% of Germany's total economic output, while the capital city was once again one of the biggest recipients in the federal financial equalisation system during the same year. Precisely because of this circumstance, the impact resulting from the change of system on Berlin's budgetary situation will need to be closely monitored moving forwards. In 2010, the Stability Council identified an impending budget emergency for Berlin. As a result, a restructuring programme was imposed on the Bundesland. The Stability Council verified at regular intervals that Berlin was complying with the programme on a consistent basis. The emergency situation was finally lifted at the end of 2016.

Overall maturity profile



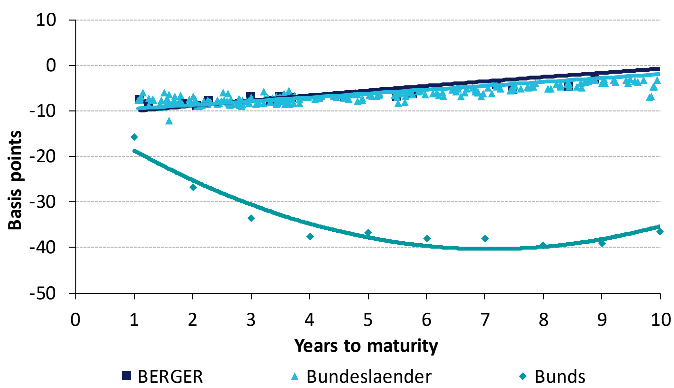
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Foreign currencies	0	0	46	0	0	0	0	0	0	0	0	123
EUR other	0	0	0	0	0	0	0	51	0	0	0	0
EUR floating	650	1,375	1,600	1,005	1,190	1,400	500	0	0	50	0	0
EUR fixed	0	3,040	3,240	3,135	2,955	1,880	2,755	571	1,202	2,700	26	15,165

Bond amounts maturing in the next 12 months

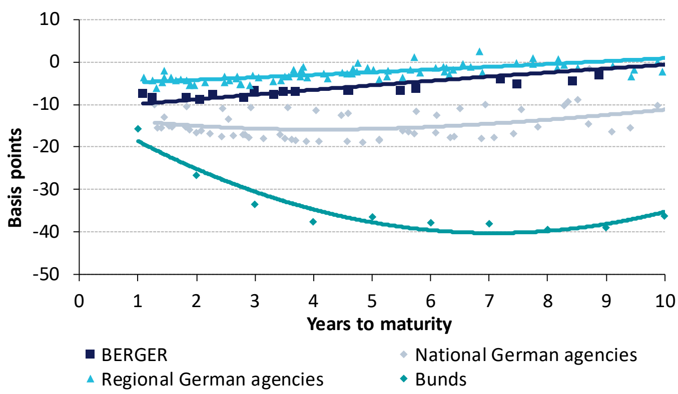


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market

Debt level* (ranking)**

EUR 59.7bn (14th)

Outstanding bonds

EUR 44.7bn

Bloomberg ticker

BERGER

Economy 2020

GDP (ranking)

EUR 154.6bn (6th)

GDP per capita (ranking)

EUR 42,221 (6th)

Real GDP growth (ranking)

-3.3% (3rd)

Unemployment (ranking)

9.7% (15th)

Key figures 2020

Tax-interest coverage (ranking)

21.4x (14th)

Total revenue/interest paid (ranking)

32.1x (14th)

Debt/GDP (ranking)

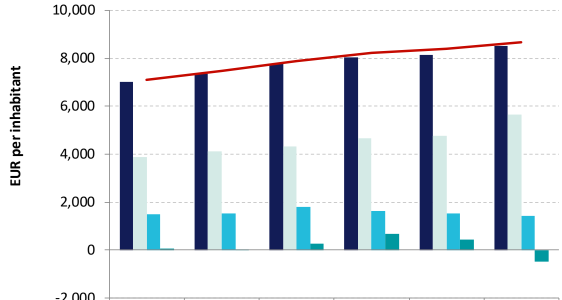
38.6% (14th)

Debt/revenue (ranking)

1.9x (12th)

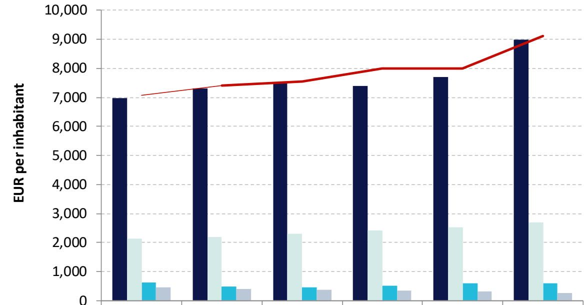
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



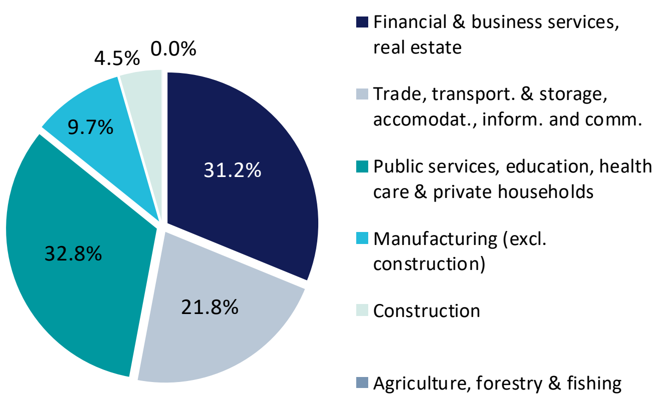
	2015	2016	2017	2018	2019	2020
Operating revenue	7,021	7,352	7,749	8,050	8,124	8,496
Tax revenue	3,871	4,131	4,308	4,672	4,778	5,661
Equalisation mechanism (net)	1,488	1,535	1,809	1,627	1,514	1,412
Deficit/surplus	58	38	282	664	433	-484
Ø of operating revenues (city states)	7,092	7,473	7,871	8,221	8,386	8,665

Development of expenditure in EUR per capita

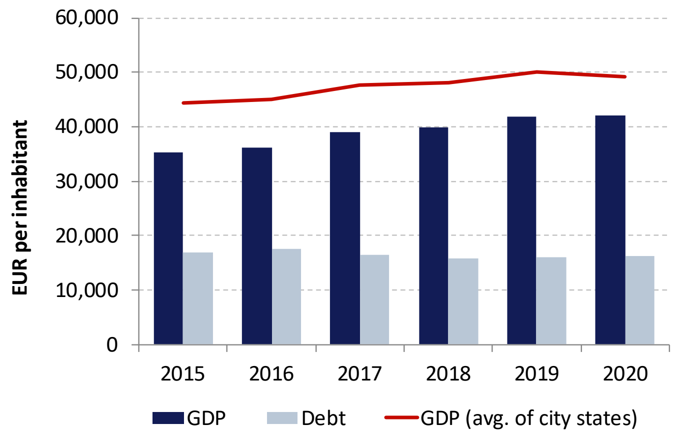


	2015	2016	2017	2018	2019	2020
Operating expense	6,962	7,314	7,466	7,385	7,691	8,980
Staff expenditure	2,127	2,184	2,300	2,402	2,537	2,692
Capital expenditure	619	477	455	504	590	606
Interest expense	456	387	365	338	316	265
Ø of operating expenses (city states)	7,064	7,402	7,541	8,001	8,002	9,108

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 Markets Strategy & Floor Research

Strengths

+ Solid budget performance
+ Solid economic growth prior to the pandemic
+ High-density start-up network

Weaknesses

– Key credit metrics below average
– Above-average unemployment rate
– High interest expenses

Brandenburg

With an area totalling 29,484 km², Brandenburg is one of the largest Laender in Germany. However, with 2.5 million inhabitants, it also has the second-lowest population density after Mecklenburg-Western Pomerania. Following the establishment of Brandenburg in its present form on 3 October 1990, a large number of companies settled around the Bundesland's capital, Potsdam, and the federal capital, Berlin. They benefited firstly from the well-developed infrastructure in the metropolitan region. Secondly, Brandenburg is one of Europe's research hotspots, with the life sciences and engineering sectors of key importance in this respect. The ongoing construction of a gigafactory for the automotive manufacturer Tesla could incentivise additional innovative companies to relocate to the sub-sovereign in addition to creating numerous jobs. While attempts to merge Brandenburg and Berlin into one, joint sub-sovereign may 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 Laender. The highlight of this cooperation so far was the opening of Berlin-Brandenburg Airport (BER) at the end of October 2020, which removed a long-standing financial burden on the sub-sovereign in the process. Despite the creation of jobs for qualified staff, demographic trends remain a key issue for Brandenburg. No other sub-sovereign has a lower proportion of its overall population aged 15-25 years old. In comparison with the rest of Germany, unemployment in Brandenburg has been particularly high for many years. Targeted support programmes, financed in particular by the European Social Fund (ESF), have, however, had some success in counteracting this issue. In 2020, economic output of EUR 75bn was generated in Brandenburg, which is equivalent to around 2.2% of total GDP in Germany. In the previous budget year, a cash deficit of just under EUR 1.0bn was posted, which can be explained by a constant rise in expenditure. In this context, disproportionately high increases in personnel costs are to be highlighted in particular.

Bundesland and politics

Link to the Ministry of Finance
[Homepage]

Number of inhabitants (2020)
2,524,818

State capital
Potsdam

Government
SPD/CDU/Greens

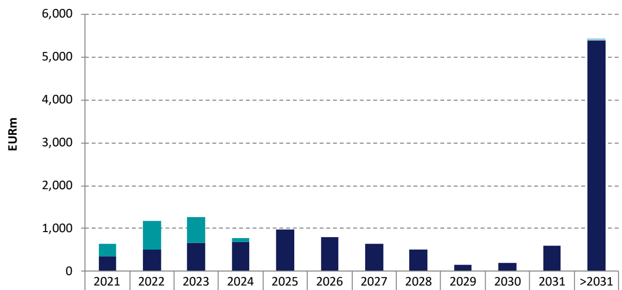
Minister-President
Dietmar Woidke (SPD)

Expected next election date
Autumn 2024

Ratings

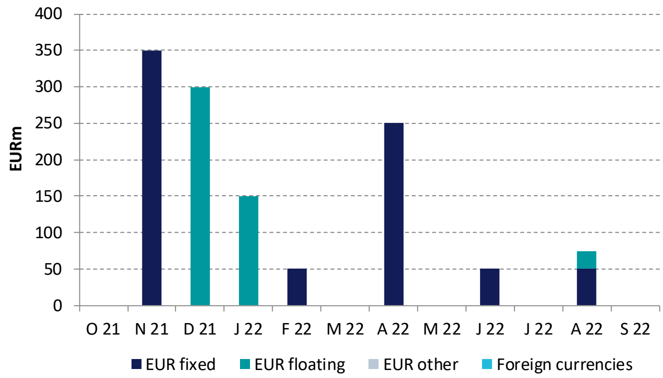
	Long-term	Outlook
Fitch	-	-
Moody's	Aaa	neg
S&P	-	-

Overall maturity profile



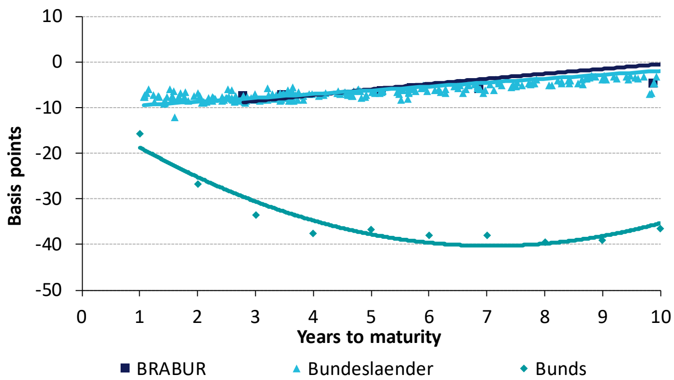
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Foreign currencies	0	0	0	0	0	0	0	0	0	0	0	4
EUR other	0	0	0	0	0	0	0	0	0	0	0	20
EUR floating	300	675	600	100	0	0	0	0	0	0	0	0
EUR fixed	350	500	660	675	980	800	650	500	150	200	600	5,400

Bond amounts maturing in the next 12 months

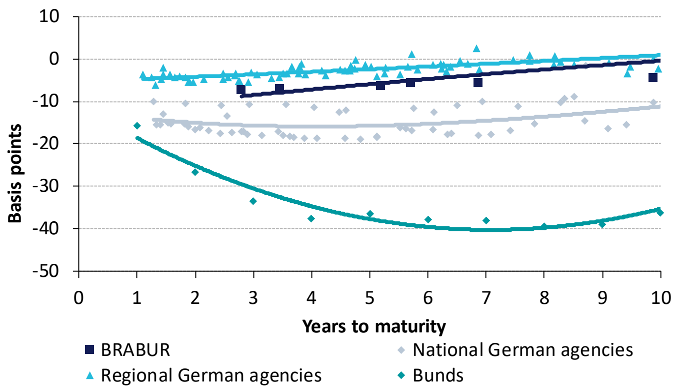


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

NORD/LB

Capital market

Debt level* (ranking)**
EUR 18.6bn (6th)

Outstanding bonds
EUR 13.2bn

Bloomberg ticker
BRABUR

Economy 2020

GDP (ranking)
EUR 73.9bn (11th)

GDP per capita (ranking)
EUR 29,282 (13th)

Real GDP growth (ranking)
-3.2% (1st)

Unemployment (ranking)
6.2% (9th)

Key figures 2020

Tax-interest coverage (ranking)
41.1x (5th)

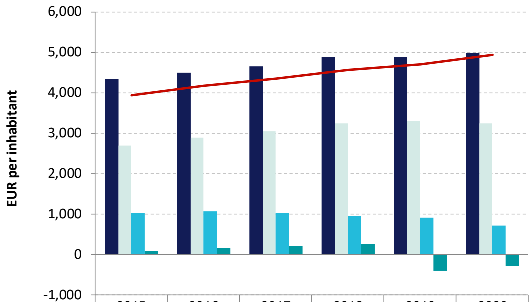
Total revenue/interest paid (ranking)
63.0x (4th)

Debt/GDP (ranking)
25.2% (8th)

Debt/revenue (ranking)
1.5x (6th)

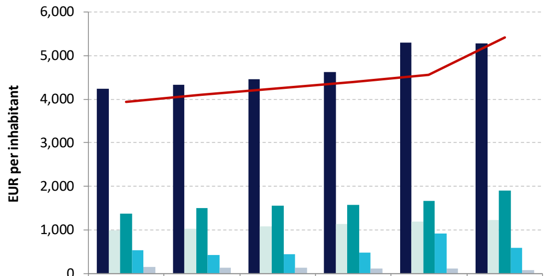
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



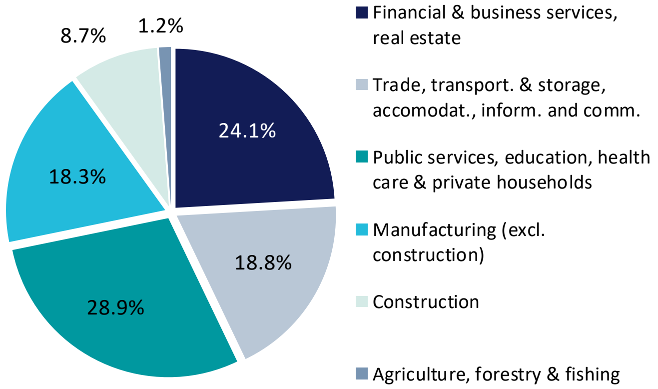
	2015	2016	2017	2018	2019	2020
Operating revenue	4,332	4,489	4,655	4,888	4,891	4,979
Tax revenue	2,689	2,894	3,050	3,246	3,303	3,246
Equalisation mechanism (net)	1,026	1,075	1,027	947	901	717
Deficit/surplus	95	168	200	263	-403	-293
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

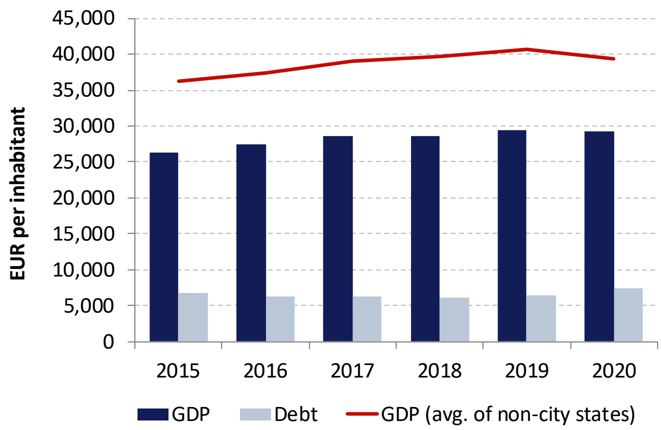


	2015	2016	2017	2018	2019	2020
Operating expense	4,237	4,320	4,455	4,626	5,294	5,273
Staff expenditure	979	1,020	1,087	1,127	1,181	1,234
Grants to municipals	1,371	1,503	1,547	1,571	1,672	1,907
Capital expenditure	529	430	439	479	907	587
Interest expense	146	133	120	112	107	79
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

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 Markets Strategy & Floor Research

Strengths

+ Solid economic growth before the coronavirus crisis
+ High-level investment in economy and infrastructure
+ Good budget metrics

Weaknesses

– Demographic trend
– Negative budget balance
– Low economic output per capita

Bundesland and politics

Link to the Ministry of Finance
Homepage
Number of inhabitants (2020)
681,202
State capital
-
Government
SPD/Greens/Linke (the Left Party)
Mayor
Andreas Bovenschulte (SPD)
Expected next election date
Spring 2023

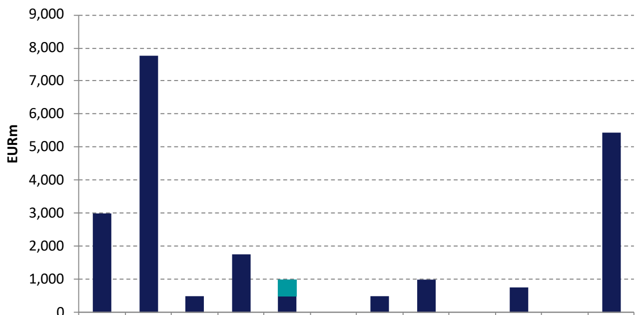
Ratings

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

Bremen

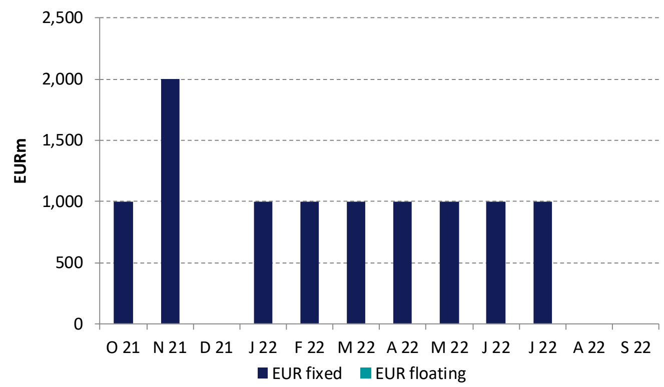
With a population of 681,000 inhabitants and covering an area of 419 km², the city state of Bremen, which actually comprises the two cities of Bremen and Bremerhaven, has the smallest population of all 16 Laender. Although Bremen has a long tradition of self-determination, ultimately it was due to the 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 in addition to the aviation and aerospace technology sector are also major employers in Bremen, which is the smallest of all Laender. Bremen Technology Park, one of the largest of its kind in Germany, represents the breeding ground for these economic sectors, while the city state also boasts a leading position in the food industry. By contrast, the ship and steel industry has been undergoing a structural transformation in recent decades and is consequently now only playing a subordinate role. In 2020, Bremen's GDP amounted to EUR 31.6bn, which equates to just under 1.0% of Germany's nationwide economic output. Unemployment in Bremen, which is the highest in Germany, is proving to be problematic (2020: 11.2%), while the exclave of Bremerhaven can be described as structurally weak. Bremen is one of the four Laender for which the Stability Council identified an impending budget emergency in 2010. Since then, Bremen has followed a restructuring programme as agreed with the supervisory body, as part of which it is committed to ongoing reporting. After an initial recovery plan was put in place until 2016, the Stability Council then continued to identify an ongoing budget emergency, agreeing an extension of the measures with Bremen covering the period 2017–2020. Although the Stability Council does not regard the restructuring process as having been fully completed by the end of 2020, it is satisfied that an impending budget emergency no longer exists. Nevertheless, the Stability Council has urged Bremen to pursue additional consolidation measures.

Overall maturity profile



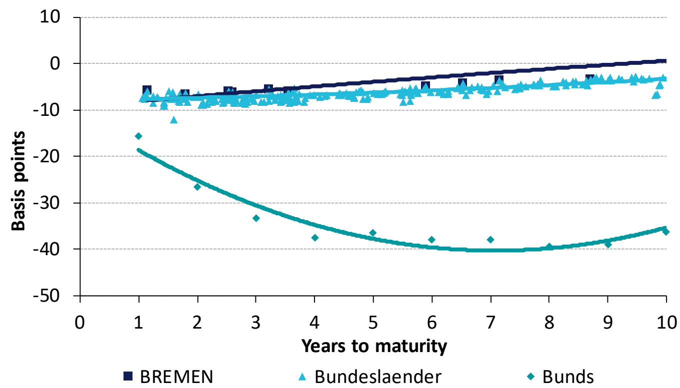
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR floating	0	0	0	0	500	0	0	0	0	0	0	0
EUR fixed	3,000	7,750	500	1,750	500	0	500	1,000	0	750	0	5,425

Bond amounts maturing in the next 12 months

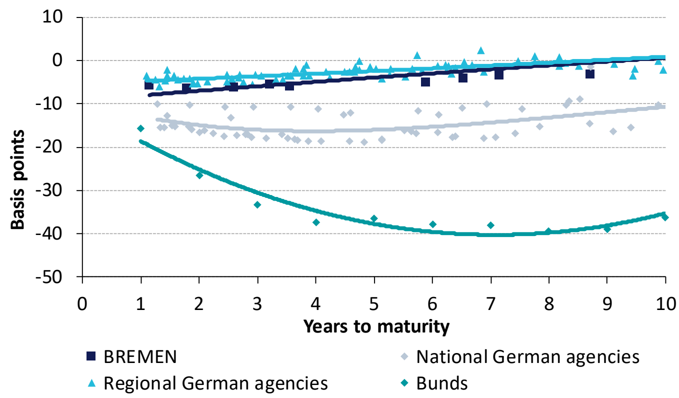


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks

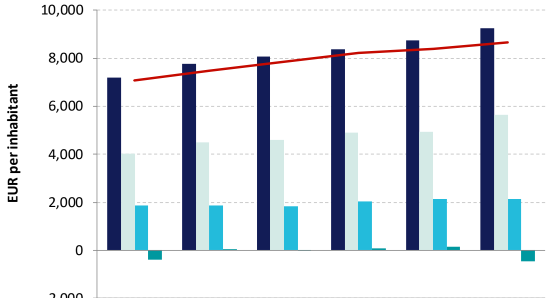


Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market	Economy 2020	Key figures 2020
Debt level* (ranking)**	**GDP (ranking)**	**Tax-interest coverage (ranking)**
EUR 39.3bn (11th)	EUR 31.6bn (16th)	6.3x (16th)
Outstanding bonds	**GDP per capita (ranking)**	**Total revenue/interest paid (ranking)**
EUR 21.7bn	EUR 46,469 (3rd)	10.3x (16th)
Bloomberg ticker	**Real GDP growth (ranking)**	**Debt/GDP (ranking)**
BREMEN	-7.0% (16th)	124.4% (16th)
	Unemployment (ranking)	**Debt/revenue (ranking)**
	11.2% (16th)	6.2x (16th)

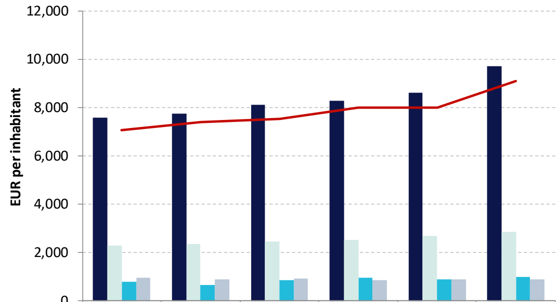
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



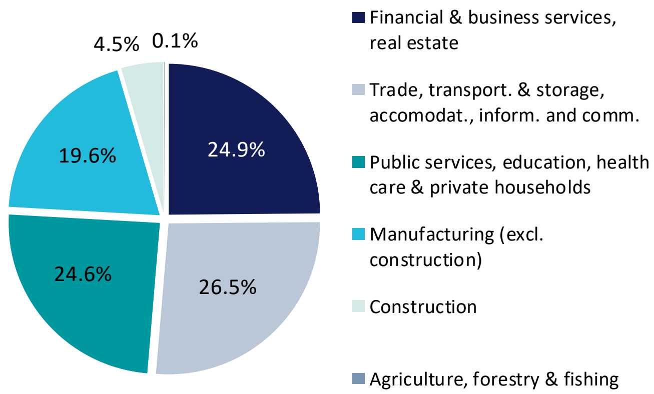
	2015	2016	2017	2018	2019	2020
Operating revenue	7,206	7,774	8,090	8,395	8,751	9,253
Tax revenue	4,043	4,491	4,610	4,898	4,950	5,659
Equalisation mechanism (net)	1,860	1,876	1,827	2,054	2,148	2,146
Deficit/surplus	-389	8	-25	96	138	-456
Ø of operating revenues (city states)	7,092	7,473	7,871	8,221	8,386	8,665

Development of expenditure in EUR per capita

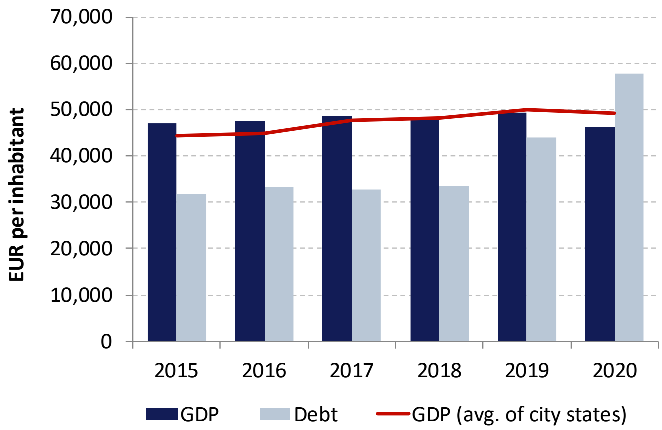


	2015	2016	2017	2018	2019	2020
Operating expense	7,594	7,766	8,115	8,299	8,613	9,710
Staff expenditure	2,289	2,340	2,442	2,527	2,686	2,839
Capital expenditure	775	656	861	945	887	986
Interest expense	958	880	903	856	882	901
Ø of operating expenses (city states)	7,064	7,402	7,541	8,001	8,002	9,108

Gross value added by economic sector



Trend in GDP and total debt



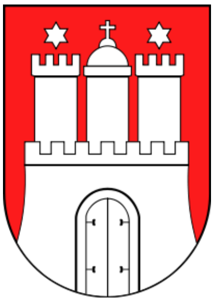
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Strengths

+ Prospering foreign trade
+ Strong economic output per capita
+ Comparatively positive initial demographic position

Weaknesses

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



Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2020)

1,845,229

State capital

-

Government

SPD/Greens

Minister-President

Peter Tschentscher (SPD)

Expected next election date

Spring 2025

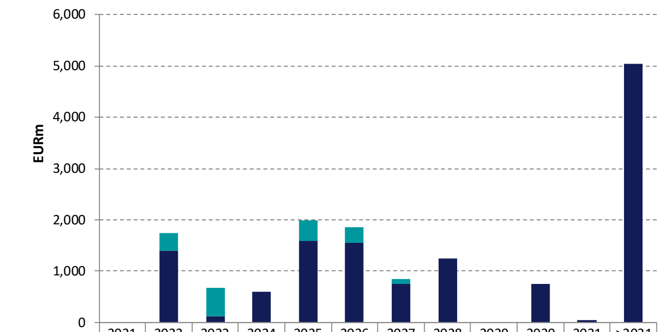
Ratings

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

Hamburg

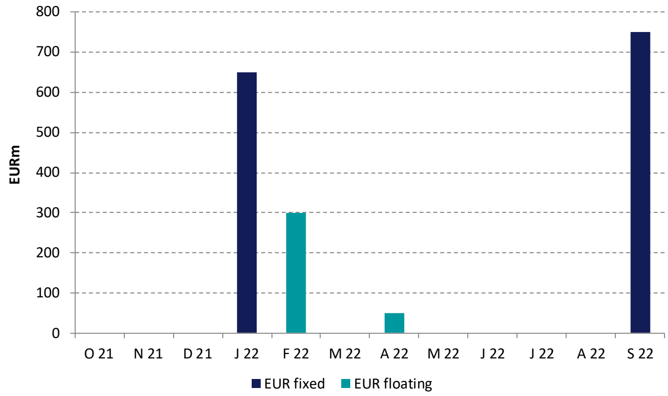
With a population of 1.8 million people, the Free and Hanseatic City of Hamburg is Germany's second-largest city after Berlin. Hamburg covers a total area of 755 km^2, producing a population density of 2,447 inhabitants per square kilometre, meaning that it again ranks second only to Berlin in a Laender 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 anywhere in the world. In 2020, only the ports of Rotterdam and Antwerp handled a greater volume of container trans-shipments in Europe. The importance of the economic sectors involving logistics, the port and maritime trade is accordingly high. More than 124,000 jobs are directly and indirectly dependent on the port in Hamburg. As a commercial, transport and services hub within Germany, Hamburg represents one of the country's main conurbations and boasts excellent transport links. This is also reflected in its GDP composition: the financial and commercial sector contribute more to the relative gross value added in Hamburg than is the case for any other sub-sovereign. The demographic trend in Hamburg is also relatively advantageous. The only other Bundesland that has a higher proportion of the overall population aged between 25 and 45 is Berlin, while the proportion of over 45s is the lowest in Germany. This gives rise to a comparatively positive outlook for Hamburg's demographic trend. 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 to have benefited from this; the Hanseatic city has in the meantime also become the preferred location for Chinese companies in Germany as a result. Alongside the recently opened Elbphilharmonie concert hall, the Hamburg Messe & Congress exhibition complex has also boosted the city's reputation abroad. In 2020, Hamburg's economy generated 3.6% of Germany's economic output. For years now, Hamburg has generated the highest GDP per capita of all Laender (2020: EUR 66,022; nationwide: EUR 40,116). Therefore, there are a great number of aspects to life up north that can be described as top class – except for the city's two football teams!

Overall maturity profile



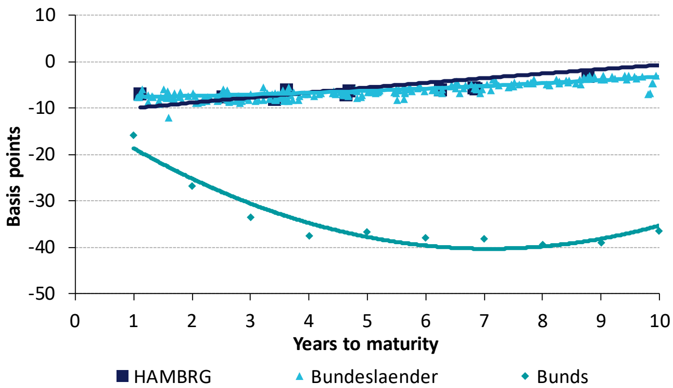
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR floating	0	350	550	0	400	300	100	0	0	0	0	0
EUR fixed	0	1,400	125	600	1,600	1,550	750	1,250	0	750	50	5,050

Bond amounts maturing in the next 12 months

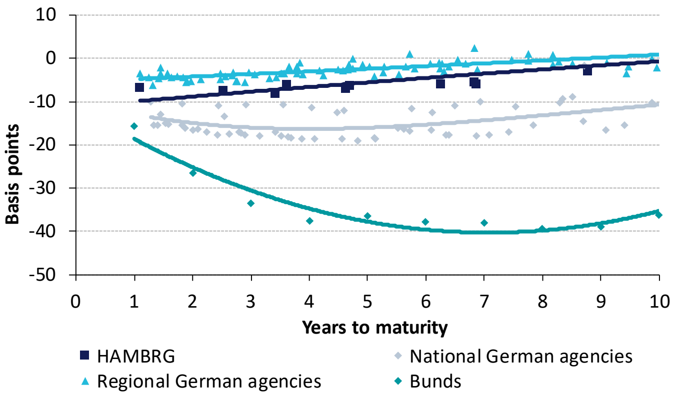


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

NORD/LB

Capital market

Debt level* (ranking)**

EUR 35.3bn (10th)

Outstanding bonds

EUR 14.8bn

Bloomberg ticker

HAMBRG

Economy 2020

GDP (ranking)

EUR 118.1bn (9th)

GDP per capita (ranking)

EUR 64,022 (1st)

Real GDP growth (ranking)

-5.8% (14th)

Unemployment (ranking)

7.6% (12th)

Key figures 2020

Tax-interest coverage (ranking)

29.1x (7th)

Total revenue/interest paid (ranking)

40.4x (10th)

Debt/GDP (ranking)

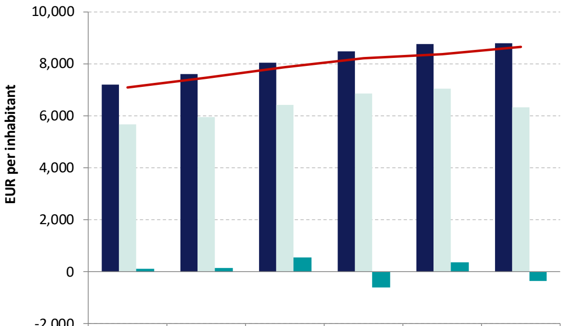
29.9% (11th)

Debt/revenue (ranking)

2.2x (14th)

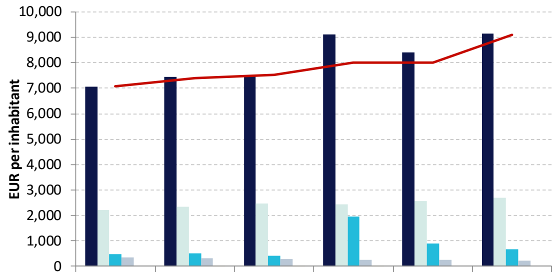
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



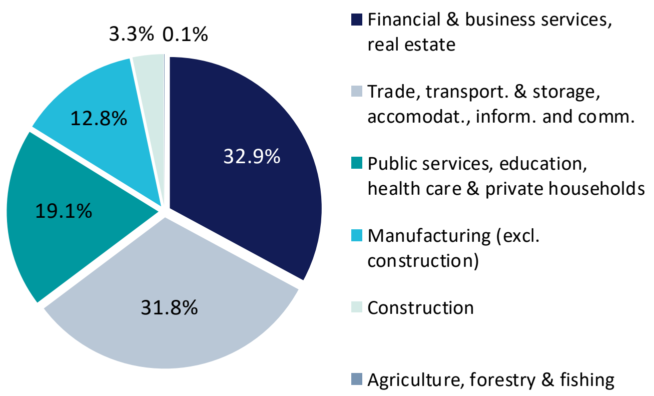
	2015	2016	2017	2018	2019	2020
Operating revenue	7,190	7,599	8,032	8,495	8,770	8,786
Tax revenue	5,686	5,964	6,412	6,853	7,039	6,332
Deficit/surplus	125	158	557	-614	374	-356
Ø of operating revenues (city states)	7,092	7,473	7,871	8,221	8,386	8,665

Development of expenditure in EUR per capita

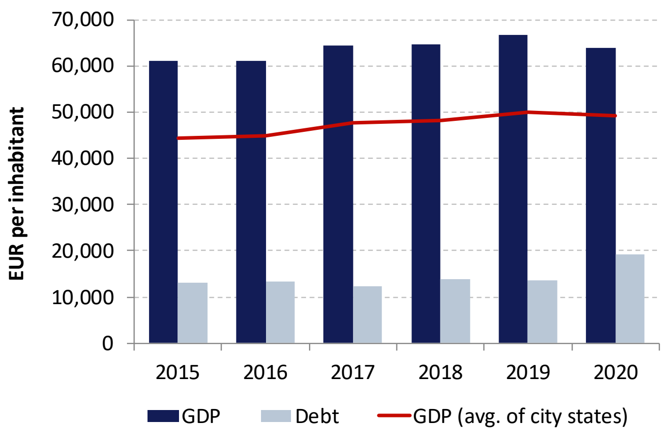


	2015	2016	2017	2018	2019	2020
Operating expense	7,065	7,440	7,474	9,109	8,395	9,141
Staff expenditure	2,213	2,345	2,449	2,443	2,557	2,678
Capital expenditure	485	501	406	1,949	888	650
Interest expense	335	305	276	244	242	217
Equalisation mechanism (net)	0	1	1	1	0	0
Ø of operating expenses (city states)	7,064	7,402	7,541	8,001	8,002	9,108

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 Markets Strategy & Floor Research

Strengths

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

Weaknesses

– High expenditure in relation to population
– Debt level in relation to population

Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2020)

6,288,710

State capital

Wiesbaden

Government

CDU/Greens

Minister-President

Volker Bouffier (CDU)

Expected next election date

Autumn 2023

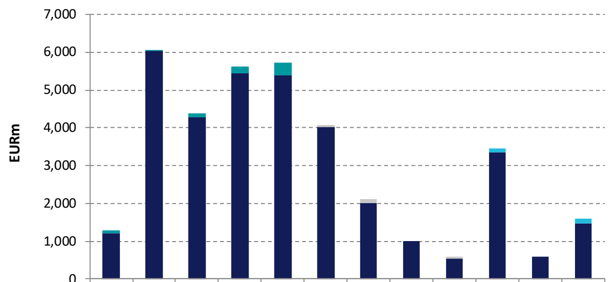
Ratings

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

Hesse

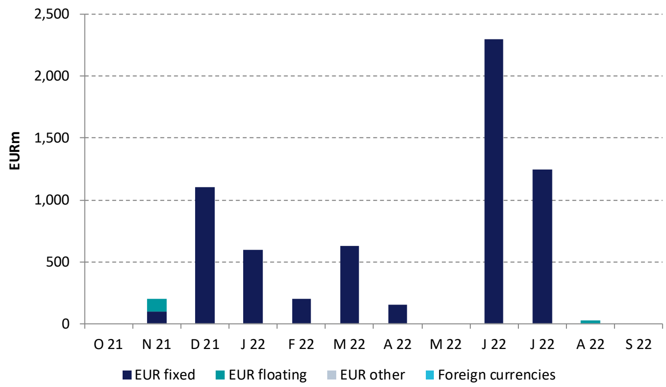
With approximately 6.3 million inhabitants, the sub-sovereign of Hesse is one of the most populous in Germany. It has an area of 21,115 km², which means that only three other non-city states have a higher density of population. Hesse's economy is heavily diversified. Manufacturing industries (ex. construction), trade, hospitality and transport, in addition to both public and private service providers, all generate a similar 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 Bundesland's financial sector. It is here that, among other organisations, the ECB, the EIOPA and the German stock exchange are headquartered. The importance of this financial centre is set to be increased further with the relocation of a number of foreign banks and financial services providers in the wake of the United Kingdom's withdrawal from the EU, colloquially referred to as Brexit, a drawn-out process which has now been finalised. In order to counter the predicted decline in the working-age population in the coming years and the associated shortage of skilled employees, a series of measures and projects were already adopted a few years ago. In 2020, Hesse's economy generated 8.5% of Germany's nationwide economic output. In terms of per capita GDP, Hesse is ranked in the upper third of all Laender (EUR 44,750). In addition, "Hessenkasse" is a noteworthy aspect of the economy. This is a debt relief programme for 179 municipalities with a volume of EUR 4.9 billion, which is primarily intended to remove the need for local authorities to rely on short-term debt over the long term. With the COVID-19 pandemic having placed municipal finances under real strain, a 50% reduction to Hessenkasse payments for 2020 was granted without the need to specifically apply for this relief.

Overall maturity profile



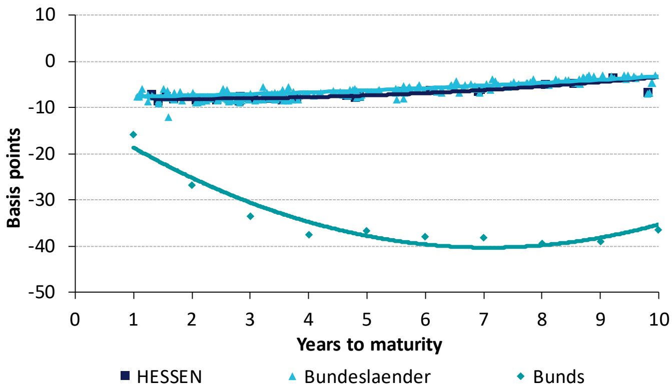
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Foreign currencies	0	0	0	0	0	0	0	0	0	92	0	123
EUR other	0	0	0	0	0	51	102	0	51	0	0	0
EUR floating	99	25	100	175	350	0	0	0	0	0	0	0
EUR fixed	1,200	6,025	4,277	5,450	5,380	4,026	2,000	1,000	550	3,360	600	1,470

Bond amounts maturing in the next 12 months

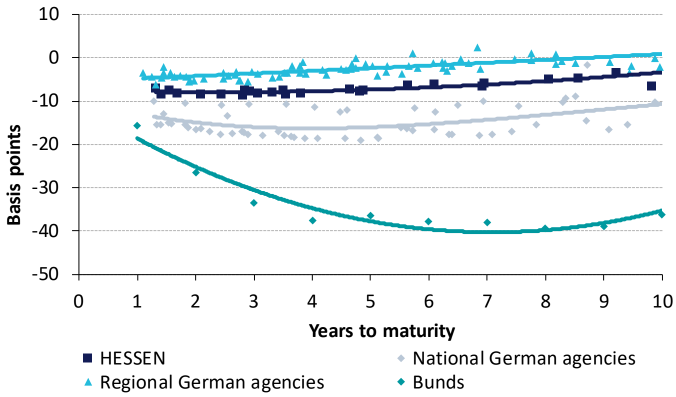


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market

Debt level* (ranking)**
EUR 45.9bn (12th)

Outstanding bonds
EUR 36.5bn

Bloomberg ticker
HESSE

Economy 2020

GDP (ranking)
EUR 281.4bn (5th)

GDP per capita (ranking)
EUR 44,750 (5th)

Real GDP growth (ranking)
-5.6% (13th)

Unemployment (ranking)
5.4% (4th)

Key figures 2020

Tax-interest coverage (ranking)
24.3x (10th)

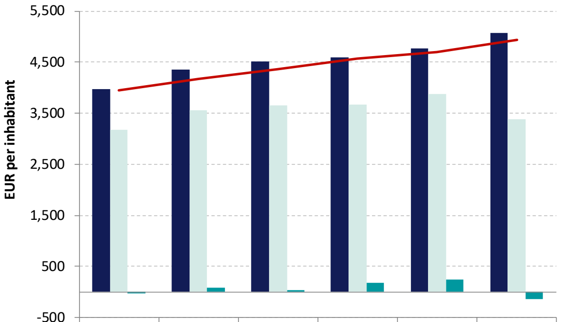
Total revenue/interest paid (ranking)
36.4x (11th)

Debt/GDP (ranking)
16.3% (4th)

Debt/revenue (ranking)
1.4x (5th)

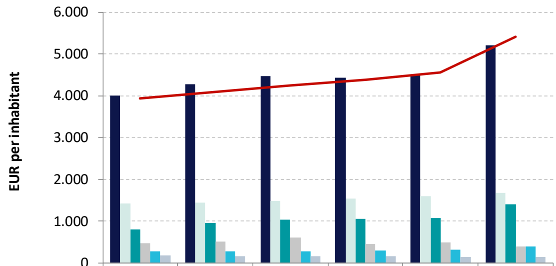
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



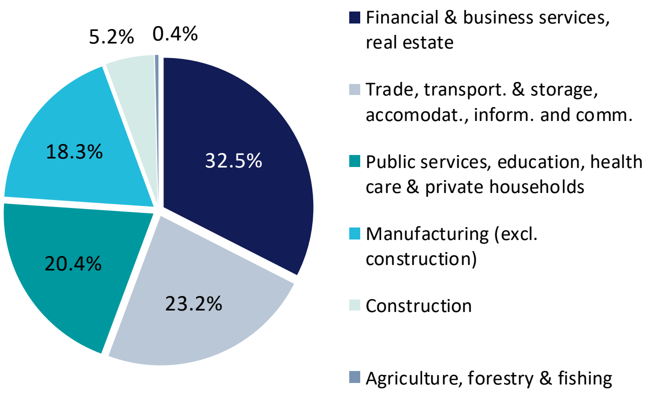
	2015	2016	2017	2018	2019	2020
Operating revenue	3,969	4,359	4,514	4,601	4,761	5,078
Tax revenue	3,182	3,550	3,660	3,665	3,881	3,389
Deficit/surplus	-37	76	35	172	246	-133
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

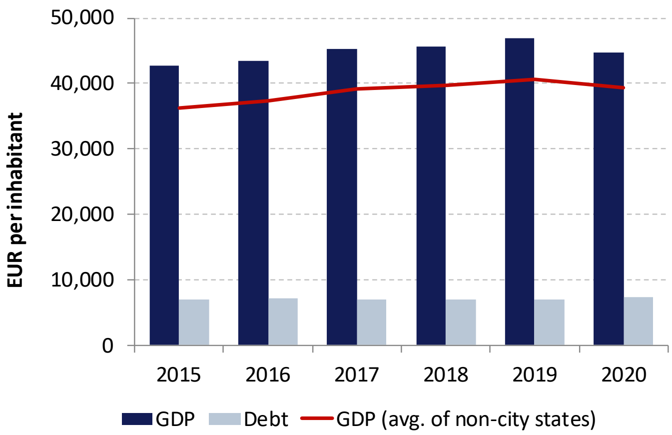


	2015	2016	2017	2018	2019	2020
Operating expense	4.005	4.283	4.479	4.429	4.515	5.212
Staff expenditure	1.420	1.439	1.480	1.536	1.596	1.673
Grants to municipals	796	964	1.045	1.056	1.074	1.403
Equalisation mechanism (net)	467	521	610	457	491	402
Capital expenditure	275	272	282	298	320	392
Interest expense	190	165	161	153	144	140
Ø of operating expenses (non-city states)	3.943	4.104	4.246	4.385	4.558	5.408

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 Markets Strategy & Floor Research

Strengths

+ Solid budget policy has reversed long history of deficits prior to the pandemic
+ Low unemployment rate

Weaknesses

– Below-average investment concentration
– Slightly below-average interest coverage
– High level of absolute debt
– Disproportionately sharp decline in GDP for 2020

Mecklenburg-Western Pomerania

With a population of 1.6 million inhabitants and covering an area of 23,194 km^2, Mecklenburg-Western Pomerania is the most sparsely populated sub-sovereign. It has existed in its present form since the reunification of Germany and is characterised by a large number of islands (794) and its long Baltic coastline, Bodden and inland coastline (1,470 km). As a result, tourism plays an accordingly vital role. Tourism intensity (measured by the number of overnight stays per permanent resident) in Mecklenburg-Western Pomerania is higher than in any other sub-sovereign. At 28 million overnight stays in 2020, this figure was around 19% below that of the previous year, although this decline was nevertheless significantly below the national average (38%). The role of forestry and fishing is also comparatively high; in Mecklenburg-Western Pomerania, these industries have a higher relative contribution to GDP than in any of the other Laender. However, public services also contribute more to gross value added in Mecklenburg-Western Pomerania than in any other sub-sovereign. Shipping and the economic sectors associated with this are still significant. In this context, according to data from NORD/LB Sector Strategy , several companies in this sector rank among the 100 largest companies in Germany. Mecklenburg-Western Pomerania is also increasingly trying to gain a foothold in future technologies. The main drivers behind this are the Bundesland's two universities in Rostock and Greifswald. For example, the Wendelstein 7-X nuclear fusion reactor has been located at the University of Greifswald since November 2015 for research purposes. In addition, the sub-sovereign is traditionally well-represented in the aerospace sector. Owing to the extensive stretch of coastline, renewable energies are also playing an increasingly important role. More than 70% of all electricity generated is now obtained from renewable sources. In 2020, the Bundesland generated GDP of EUR 46.0bn, which corresponds to 1.4% of total German economic output. As such, GDP per capita is the lowest of all Laender. Moreover, the budget situation in the years before the COVID-19 pandemic had been continuously improved. This is above all reflected in the relatively low value for the debt per capita metric.

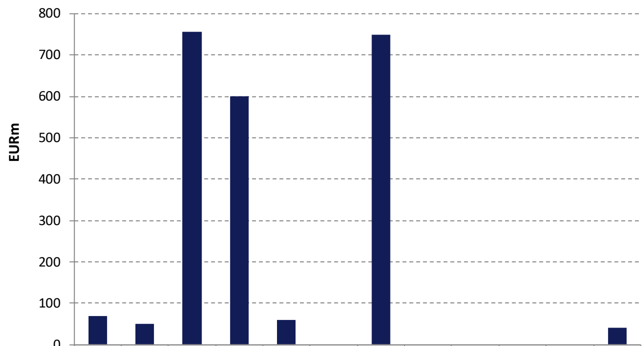
Bundesland and politics

Link to the Ministry of Finance
Homepage
Number of inhabitants (2020)
1,609,367
State capital
Schwerin
Government
SPD/CDU
Minister-President
Manuela Schwesig (SPD)
Expected next election date
26 September 2021

Ratings

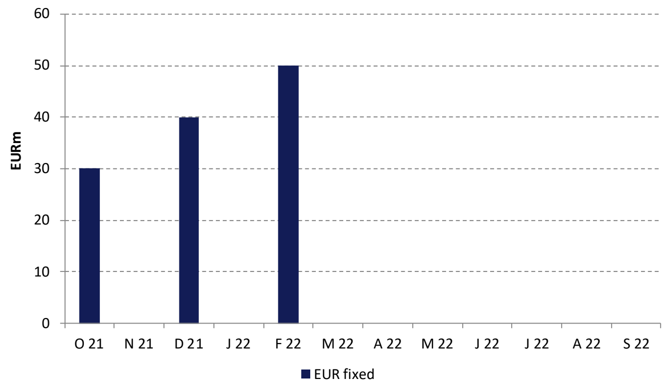
	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

Overall maturity profile



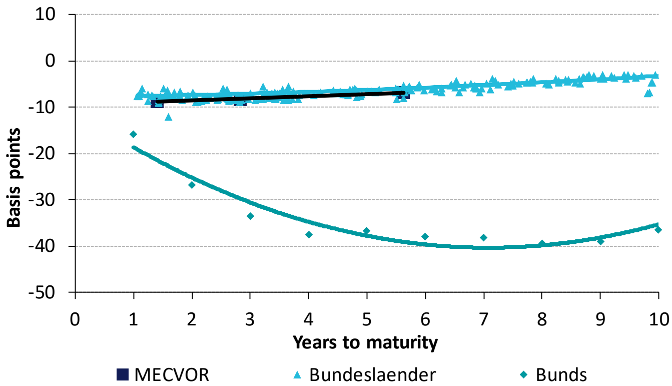
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR fixed	70	50	756	600	60	0	750	0	0	0	0	40

Bond amounts maturing in the next 12 months

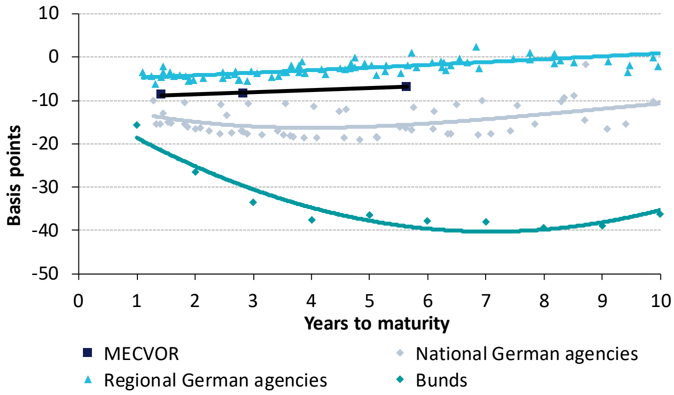


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks

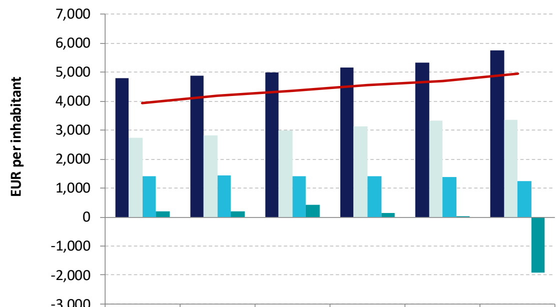


Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market	Economy 2020	Key figures 2020
Debt level* (ranking)**	**GDP (ranking)**	**Tax-interest coverage (ranking)**
EUR 8.4bn (2nd)	EUR 46.0bn (14th)	28.1x (9th)
Outstanding bonds	**GDP per capita (ranking)**	**Total revenue/interest paid (ranking)**
EUR 2.3bn	EUR 28,590 (16th)	48.1x (7th)
Bloomberg ticker	**Real GDP growth (ranking)**	**Debt/GDP (ranking)**
MECVOR	-3.2% (1st)	18.4% (5th)
	Unemployment (ranking)	**Debt/revenue (ranking)**
	7.8% (14th)	0.9x (4th)

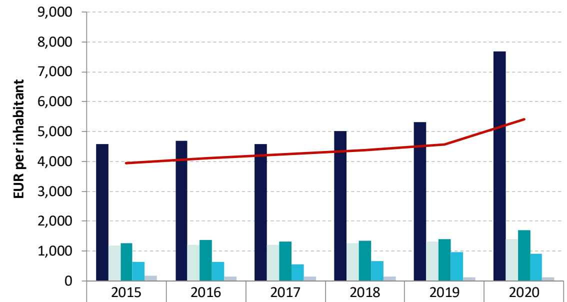
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



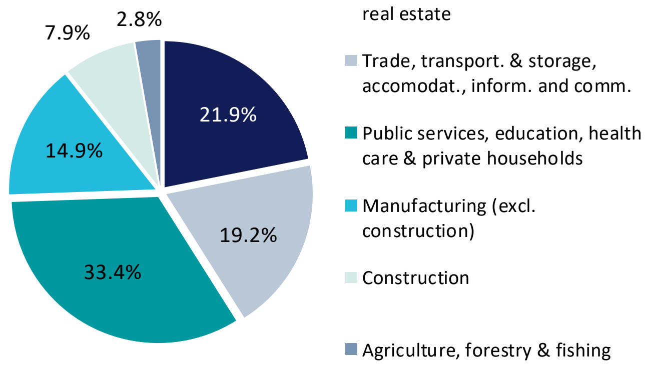
	2015	2016	2017	2018	2019	2020
Operating revenue	4,799	4,882	5,006	5,157	5,337	5,769
Tax revenue	2,733	2,813	2,996	3,123	3,333	3,372
Equalisation mechanism (net)	1,427	1,446	1,419	1,422	1,397	1,253
Deficit/surplus	208	197	420	147	16	-1,925
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

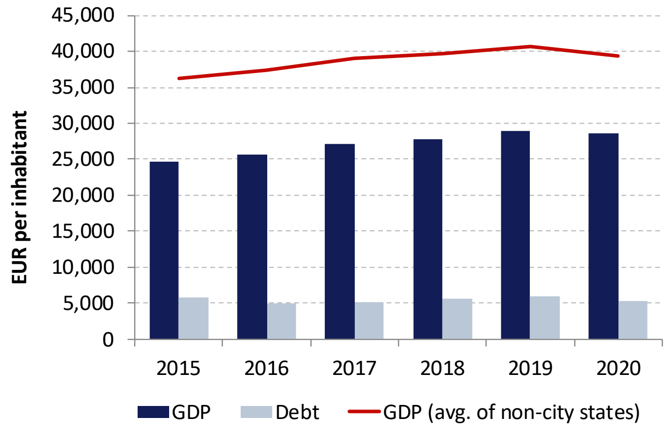


	2015	2016	2017	2018	2019	2020
Operating expense	4,591	4,685	4,586	5,010	5,321	7,694
Staff expenditure	1,183	1,200	1,217	1,263	1,312	1,387
Grants to municipals	1,265	1,361	1,329	1,351	1,394	1,688
Capital expenditure	639	636	546	664	959	909
Interest expense	176	155	140	132	123	120
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

Gross value added by economic sector



Trend in GDP and total debt



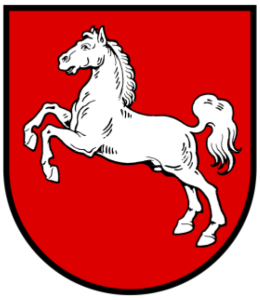
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Strengths

+ Above-average revenues in relation to number of inhabitants
+ Very solid debt sustainability and interest coverage metrics
+ Solid economic growth prior to the pandemic

Weaknesses

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



Lower Saxony

Formed from the regions of Hanover, Oldenburg, Brunswick and Schaumburg-Lippe in 1946, Lower Saxony is Germany's second-largest sub-sovereign, covering an area of approximately 47,614 km^2. Its population of nearly 8.0 million people is exceeded by only three other Laender. The population of Lower Saxony features a greater proportion of inhabitants aged 6-15 than any other sub-sovereign, 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 spread across the region in Hanover, Braunschweig, Wolfsburg, Salzgitter and Emden. More than one quarter of the GDP of Lower Saxony is generated by manufacturing industries. The importance of this economic sector is therefore only higher in three other Laender. Lower Saxony's highly developed infrastructure is of great advantage in this regard, with the sub-sovereign actually boasting the most extensive rail network of all Laender across Germany. Hanover is home to the largest exhibition site in the world. Prior to the coronavirus pandemic, this played host to globally leading industrial (e.g. Hannover Messe, Domotex, EuroBlech etc.) and information technology (formerly CeBIT) trade fairs, making Hanover as the regional capital an important location for current and future technologies at international level. Traditionally, farming is also a key sector of the economy in Lower Saxony, with gross value added higher in this sub-sovereign than any other. Lower Saxony also ranks among the leading Laender in terms of its use of renewable energies. In regional terms, tourism is also an important economic pillar. In 2020, only three other Laender generated a higher GDP. Lower Saxony contributed 8.9% to Germany's nationwide economic output. Each year, NORD/LB produces updated rankings of the most import companies in Lower Saxony. This report measures factors such as economic performance and significance for labour market policy, in particular, via the use of selected key metrics.

Bundesland and politics

Link to the Ministry of Finance
Homepage

Number of inhabitants (2020)
7,996,046

State capital
Hanover

Government
SPD/CDU

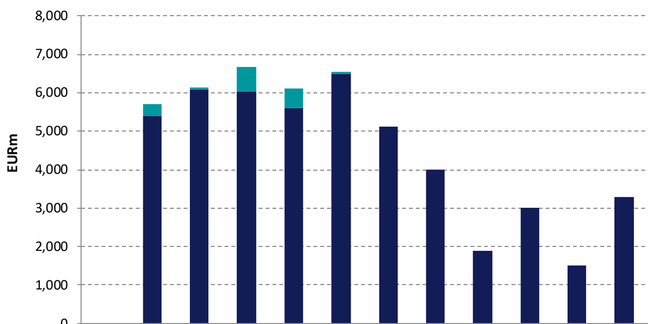
Minister-President
Stephan Weil (SPD)

Expected next election date
Autumn 2022

Ratings

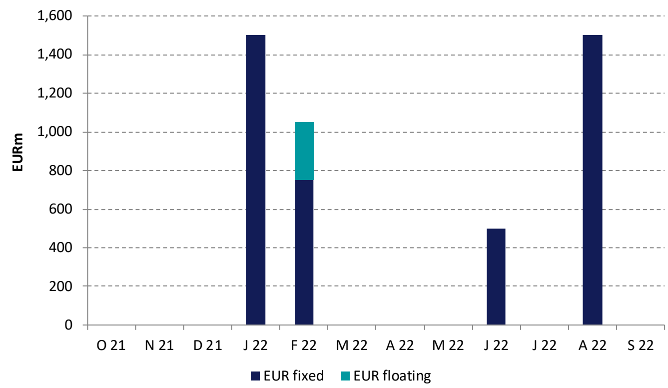
	Long-term	Outlook
Fitch	**AAA**	**stab**
Moody's	-	-
S&P	-	-

Overall maturity profile



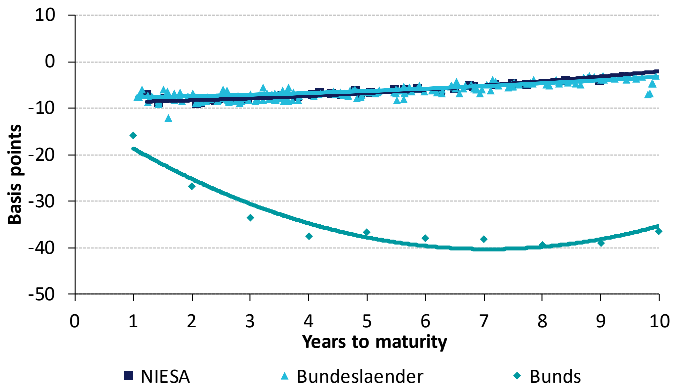
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR floating	0	300	50	625	500	50	0	0	0	0	0	0
EUR fixed	0	5,400	6,100	6,050	5,610	6,500	5,125	4,000	1,875	3,000	1,500	3,300

Bond amounts maturing in the next 12 months

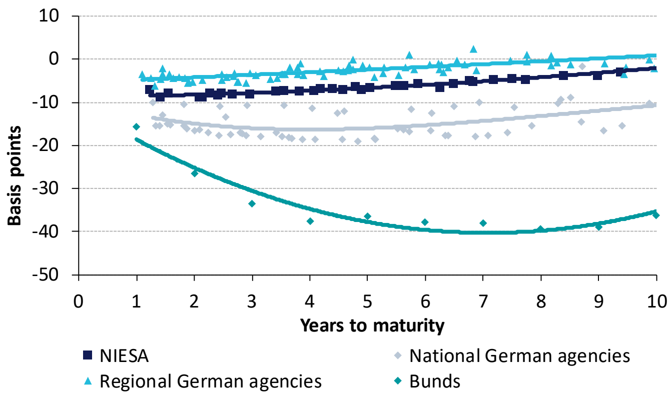


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks

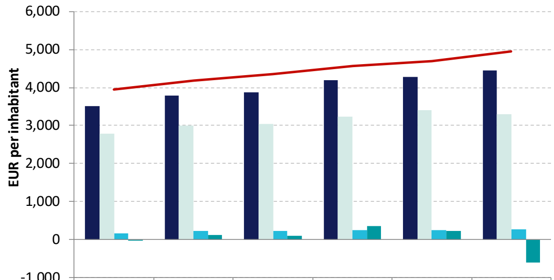


Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market	**Economy 2020**	**Key figures 2020**
Debt level* (ranking)**	**GDP (ranking)**	**Tax-interest coverage (ranking)**
EUR 64.9bn (15th)	EUR 295.9bn (4th)	43.8x (8th)
Outstanding bonds	**GDP per capita (ranking)**	**Total revenue/interest paid (ranking)**
EUR 50.0bn	EUR 37,005 (8th)	58.8x (5th)
Bloomberg ticker	**Real GDP growth (ranking)**	**Debt/GDP (ranking)**
NIESA	-4.9% (10th)	22.0% (7th)
	Unemployment (ranking)	**Debt/revenue (ranking)**
	5.8% (5th)	1.8x (9th)

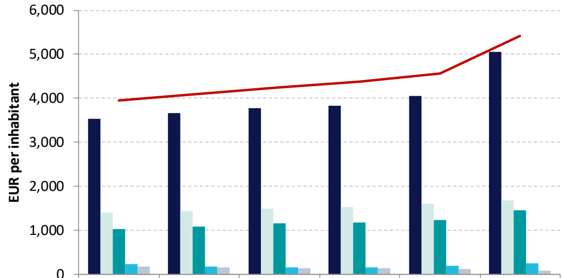
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



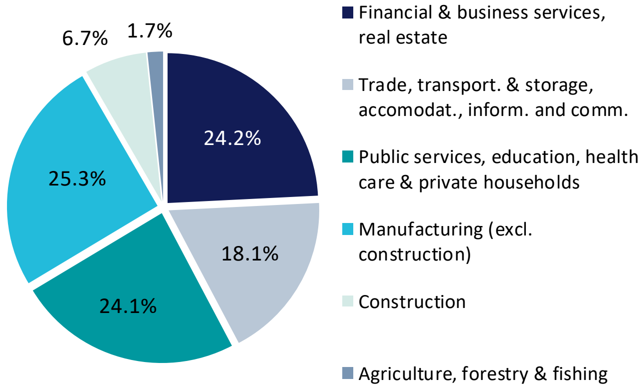
	2015	2016	2017	2018	2019	2020
Operating revenue	3,519	3,792	3,870	4,187	4,277	4,439
Tax revenue	2,779	2,998	3,040	3,222	3,403	3,304
Equalisation mechanism (net)	170	223	221	248	247	269
Deficit/surplus	-20	123	105	349	225	-614
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

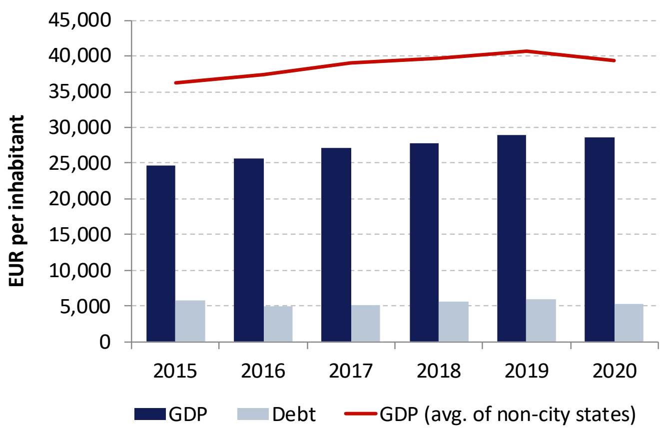


	2015	2016	2017	2018	2019	2020
Operating expense	3,539	3,669	3,765	3,837	4,052	5,053
Staff expenditure	1,393	1,427	1,490	1,535	1,602	1,673
Grants to municipals	1,020	1,087	1,158	1,177	1,239	1,454
Capital expenditure	226	174	163	161	192	251
Interest expense	175	160	146	133	123	75
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

Gross value added by economic sector



Trend in GDP and total debt



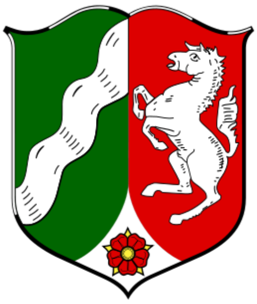
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Strengths

+ Solid budgetary development
+ Low expenditure relative to the number of inhabitants
+ Low unemployment rate

Weaknesses

– Low investment ratio
– Below-average revenues in relation to population
– Relatively high absolute debt level



Bundesland and politics

Link to the Ministry of Finance

[Homepage]

Number of inhabitants (2020)

17.931.816

State capital

Düsseldorf

Government

CDU/FDP

Minister-President

Armin Laschet (CDU)

Expected next election date

Spring 2022

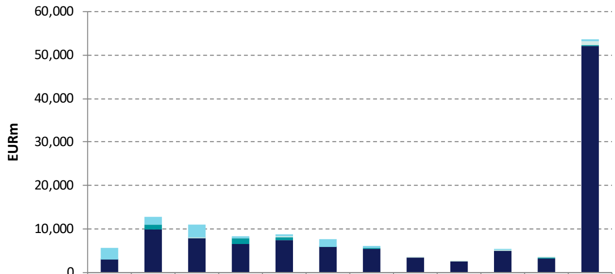
Ratings

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

North Rhine-Westphalia

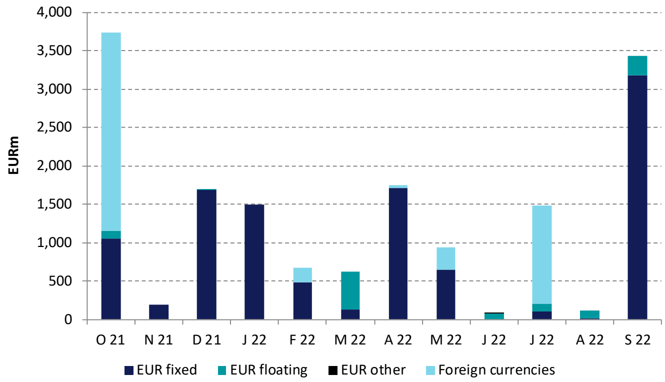
North Rhine-Westphalia (NRW) has existed since 1947. With a population of 17.9 million people, it is Germany's most populous sub-sovereign. In addition, NRW covers a total area of almost 34,098 km^2, making it the most densely populated of all the non-city Laender. The population has been increasing over the past few years, with this growth resulting from a positive balance in migratory movements. Forecasts nevertheless suggest that the population will begin to decrease over the next few decades. However, the influx of immigrants does present the sub-sovereign with an opportunity to counteract its problems related to demographic trends. Approximately 710,000 companies from a vast range of sectors are based in NRW, ensuring that this Bundesland's economy is broadly diversified. Moreover, eight of the 30 DAX-listed companies are located in NRW (or nine from the newly composed DAX index comprising an expanded 40 firms). The sub-sovereign of NRW is also a very popular destination for foreign direct investment, not least because of its strong economy and its well-developed transport infrastructure. The economy (and the Ruhr valley in particular) has been undergoing a major structural transformation for decades now: at 12.3% since 1991, the decline in the share of gross value added attributable to manufacturing industries has been more pronounced in NRW than in any other Land. In contrast, however, the share of gross value added generated by the service sector in NRW has increased to the same degree. NRW is coping with this upheaval primarily through strategies aimed at promoting the "Economy 4.0". For example, NRW is scheduled to be the first sub-sovereign to have a comprehensive network of broadband and fibre-optic technology by 2026. 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 697.1bn in 2020, a total of 20.9% of German economic output was generated in NRW. Prior to the pandemic and flood disasters that struck the region, NRW was well on its way to consolidating its budget with a second consecutive surplus in the billions, which would have enabled the sub-sovereign to break out of its long-standing deficit cycle. Since 2010, NRW was at all times a recipient under the terms of the old financial equalisation system among the Laender.

Overall maturity profile



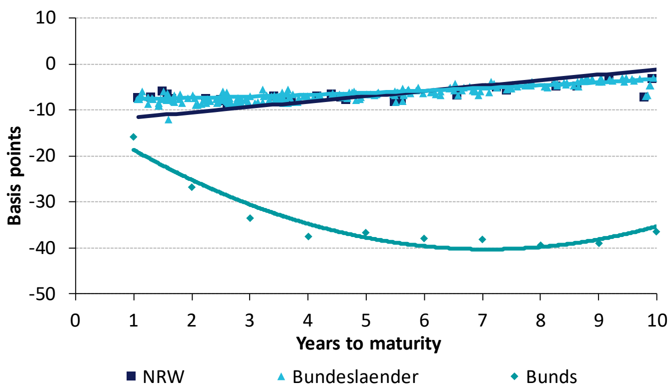
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Foreign currencies	2,589	1,915	2,936	522	525	1,720	414	0	0	92	0	429
EUR other	0	10	80	25	175	0	10	10	71	305	315	965
EUR floating	109	1,065	50	1,200	750	40	300	0	0	100	100	272
EUR fixed	2,940	9,890	7,927	6,588	7,412	5,876	5,325	3,328	2,535	4,875	3,200	52,011

Bond amounts maturing in the next 12 months

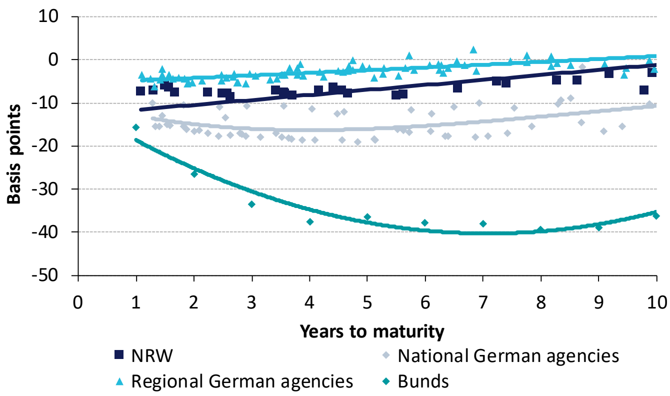


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market

Debt level* (ranking)**

EUR 178.5bn (16th)

Outstanding bonds

EUR 129.0bn

Bloomberg ticker

NRW

Economy 2020

GDP (ranking)

EUR 697.1bn (1st)

GDP per capita (ranking)

EUR 38,876 (7th)

Real GDP growth (ranking)

-4.4% (6th)

Unemployment (ranking)

7.5% (11th)

Key figures 2020

Tax-interest coverage (ranking)

44.1x (4th)

Total revenue/interest paid (ranking)

67.4x (3rd)

Debt/GDP (ranking)

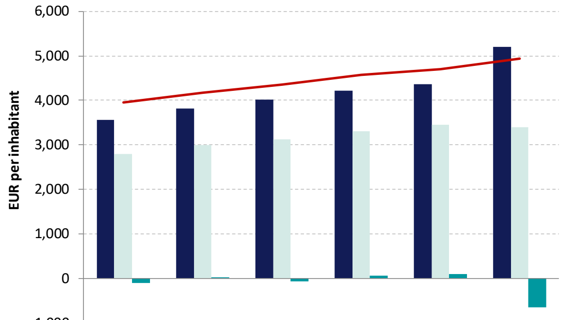
25.6% (10th)

Debt/revenue (ranking)

1.9x (11th)

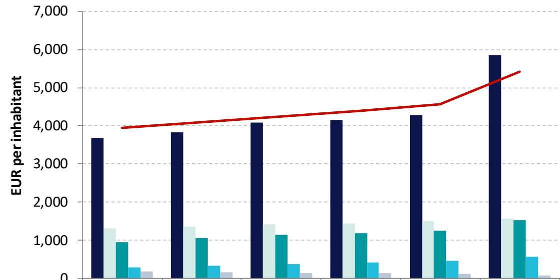
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



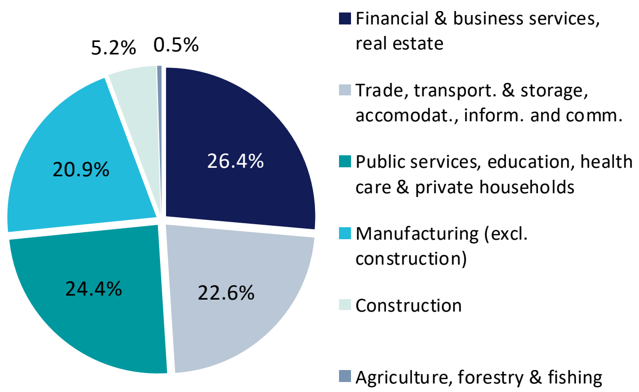
	2015	2016	2017	2018	2019	2020
Operating revenue	3,565	3,825	4,013	4,212	4,367	5,197
Tax revenue	2,789	3,002	3,114	3,303	3,455	3,404
Deficit/surplus	-109	2	-68	60	96	-648
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

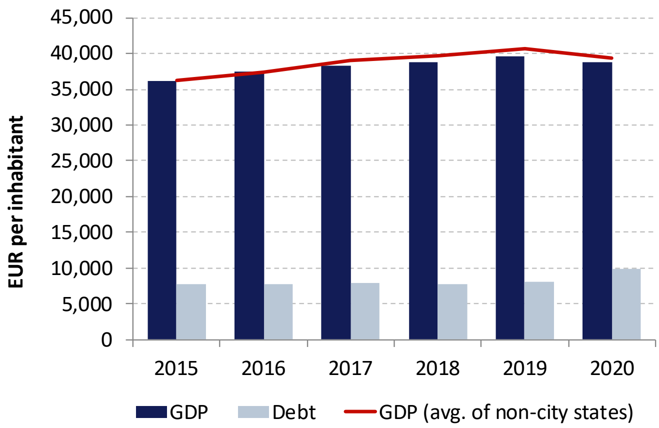


	2015	2016	2017	2018	2019	2020
Operating expense	3,674	3,823	4,082	4,153	4,271	5,845
Staff expenditure	1,321	1,362	1,419	1,446	1,513	1,579
Grants to municipals	947	1,065	1,140	1,181	1,246	1,531
Capital expenditure	300	334	370	410	468	566
Interest expense	186	156	148	137	112	77
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

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 Markets Strategy & Floor Research

Strengths

+ Solid budget performance
+ Well-diversified economy

Weaknesses

— Above-average pension liabilities
— Below-average debt sustainability and interest coverage
— High unemployment in structurally weak areas

Rhineland-Palatinate

Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2020)

4,092,650

State capital

Mainz

Government

SPD/FDP/Greens

Minister-President

Malu Dreyer (SPD)

Expected next election date

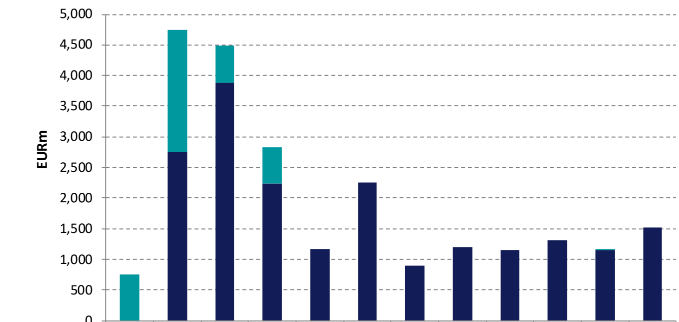
Spring 2026

Ratings

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

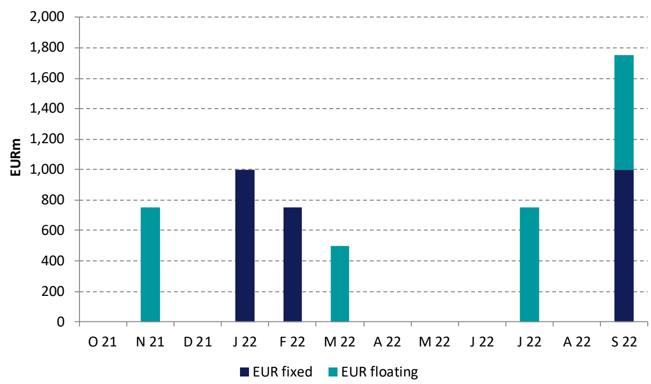
A total of seven regions were merged to form the sub-sovereign of Rhineland-Palatinate on 18 May 1946, which was initially in the American and subsequently the French occupied zone after the Second World War. The Land, which covers a total area of 19,854 km^2, now has a population of almost 4.1 million 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 Laender. The proportion of gross value added attributable to manufacturing industries (excluding construction) is only higher in Baden-Wuerttemberg and Saarland. Industry is concentrated in various locations along the river Rhine. The chemicals sector is by far the most important branch of industry, responsible for more than 25% of total sales in the economy of Rhineland-Palatinate. Other key sectors, albeit to a far less significant extent than the chemicals industry, include vehicle manufacturing and mechanical engineering, the production of metal products as well as rubber and plastic goods. The tourism sector has also been developed to an above-average extent. In 2019 – and therefore prior to the coronavirus crisis – more than 23 million overnight stays were registered in the holiday regions across Rhineland-Palatinate. The Rhine, which is regarded as the most important waterway in Europe, plays a key role both for tourism and for the economy. At -1.3% year on year, growth in real GDP was negative in 2019 for the first time in six years. Due to the pandemic, this trend also continued in 2020 (-3.0% Y/Y). Looking to the future, Rhineland-Palatinate will primarily rely 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 Kassenkredit municipal loans. In 2020, Rhineland-Palatinate's economic output amounted to EUR 142.0bn, which equated to just under 4.3% of Germany's national GDP. For a long time, Rhineland-Palatinate was a net recipient within the federal financial equalisation system. The exception to this rule came in 2012, which it switched to the net payer side – albeit only for a single year.

Overall maturity profile



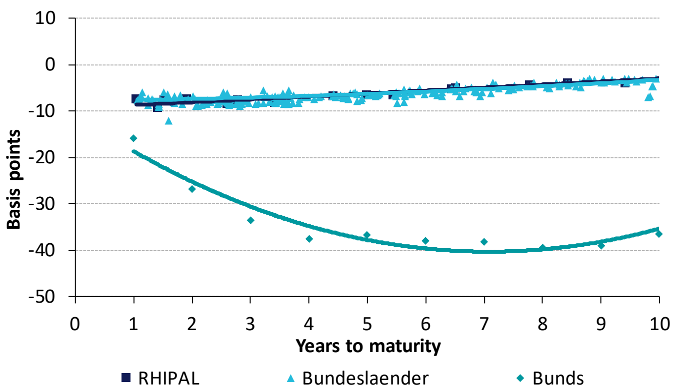
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR floating	750	2,000	600	580	0	0	0	0	0	0	20	0
EUR fixed	0	2,750	3,890	2,242	1,175	2,261	900	1,200	1,150	1,305	1,150	1,512

Bond amounts maturing in the next 12 months

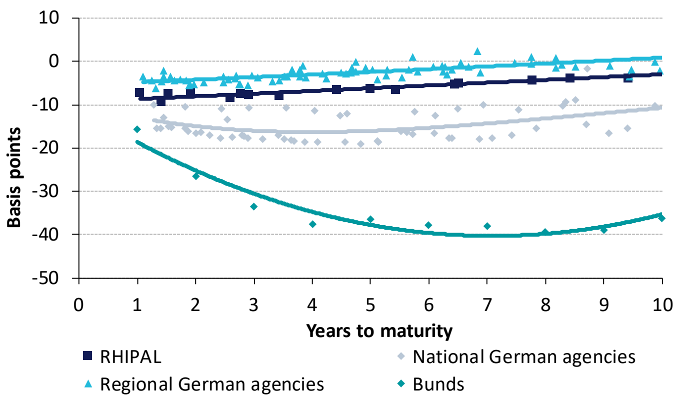


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

NORD/LB

Capital market

Debt level* (ranking)**

EUR 30.9bn (8th)

Outstanding bonds

EUR 23.5bn

Bloomberg ticker

RHIPAL

Economy 2020

GDP (ranking)

EUR 141.9bn (7th)

GDP per capita (ranking)

EUR 34,673 (9th)

Real GDP growth (ranking)

-4.5% (8th)

Unemployment (ranking)

5.2% (3rd)

Key figures 2020

Tax-interest coverage (ranking)

36.6x (6th)

Total revenue/interest paid (ranking)

50.9x (6th)

Debt/GDP (ranking)

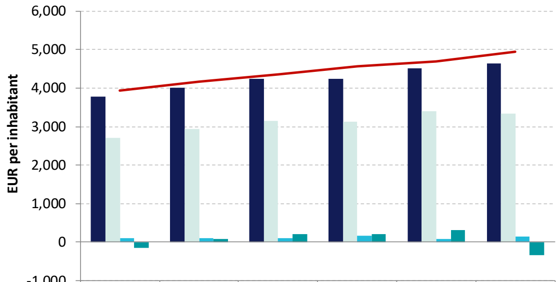
21.7% (6th)

Debt/revenue (ranking)

1.6x (8th)

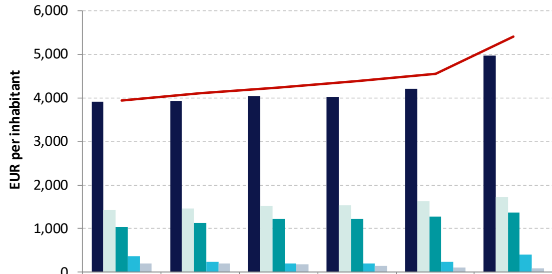
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



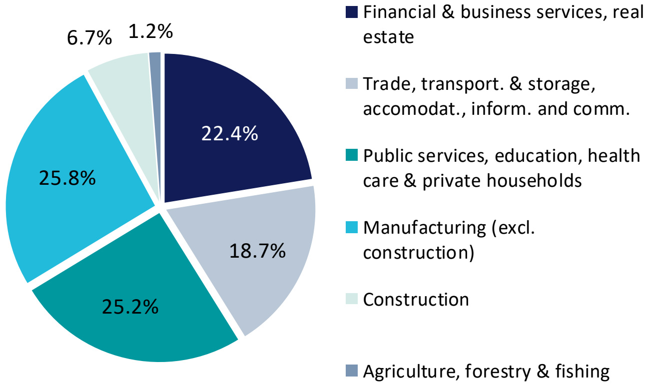
	2015	2016	2017	2018	2019	2020
Operating revenue	3,771	4,019	4,251	4,232	4,511	4,638
Tax revenue	2,706	2,949	3,145	3,125	3,404	3,332
Equalisation mechanism (net)	114	114	99	166	93	141
Deficit/surplus	-140	80	211	212	307	-329
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

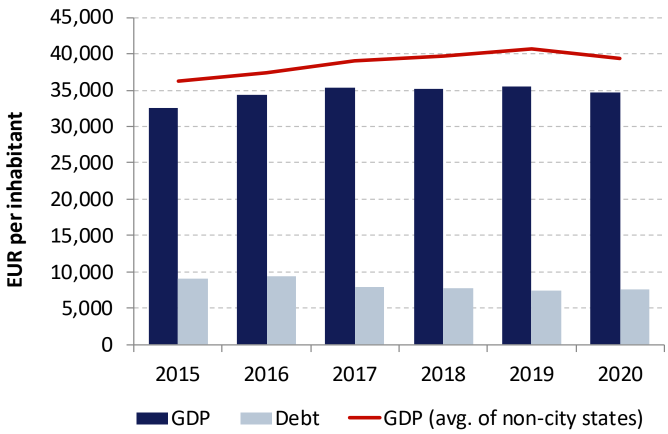


	2015	2016	2017	2018	2019	2020
Operating expense	3,911	3,940	4,041	4,020	4,204	4,967
Staff expenditure	1,422	1,465	1,522	1,545	1,638	1,726
Grants to municipals	1,029	1,138	1,216	1,213	1,269	1,365
Capital expenditure	369	234	209	207	245	404
Interest expense	202	201	184	141	116	91
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

Gross value added by economic sector



Trend in GDP and total debt



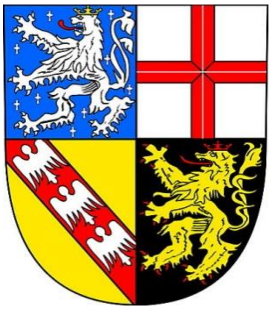
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Strengths

+ Long period of budget deficits appears surmountable
+ Diversified economic structure
+ Low unemployment rate

Weaknesses

– Highly dependent on the chemicals industry
– Low per capita revenue basis



Saarland

Covering an area of just 2,569 km², Saarland is the smallest of all the Laender (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 adjacent Bundesland 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 it was incorporated within the Federal Republic of Germany. Its economy is primarily characterised by manufacturing industries. Excluding the construction industry, Baden-Wuerttemberg is the only sub-sovereign where the proportion of gross value added attributable to this sector is higher. In recent decades, however, Saarland's traditional dependence on industry has diminished slightly. Nevertheless, nearly one third of gross value added was generated by this sector. Mechanical engineering and the automotive industry are of significant importance here, although the metal industry has also remained a key sector. In 2020, the Saarland economy generated GDP of EUR 33.6bn and was consequently responsible for 1.0% of total German economic output. Owing to the coronavirus pandemic, all Laender experienced a decline in GDP in 2020. However, at -6.7% year on year, the contraction was especially pronounced in Saarland. Moreover, Saarland has been experiencing budgetary difficulties for decades. In 2010, the Stability Council identified an impending budgetary crisis. Since then, Saarland has been obliged to follow a restructuring programme, compliance with which is monitored by the Stability Council. Berlin and Schleswig-Holstein have also been monitored by the Stability Council since 2010. At the end of 2016 they were released from the recovery plan, but a budget emergency continued to be identified for Saarland (and Bremen). As a result, the recovery plan was extended by a further five years until 2020. In June 2021, the Stability Council confirmed that Saarland had successfully implemented restructuring measures, that the threat of a budgetary crisis was no longer imminent, and that the restructuring programme had been concluded. However, in a statement the Stability Council emphasised the fact that further efforts would still be necessary over the next few years to stabilise the budget.

Bundesland and politics

Link to the Ministry of Finance

[Homepage]

Number of inhabitants (2020)

984,851

State capital

Saarbrücken

Government

CDU/SPD

Minister-President

Tobias Hans (CDU)

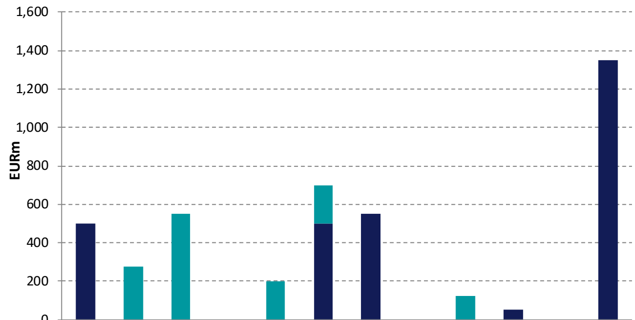
Expected next election date

Spring 2022

Ratings

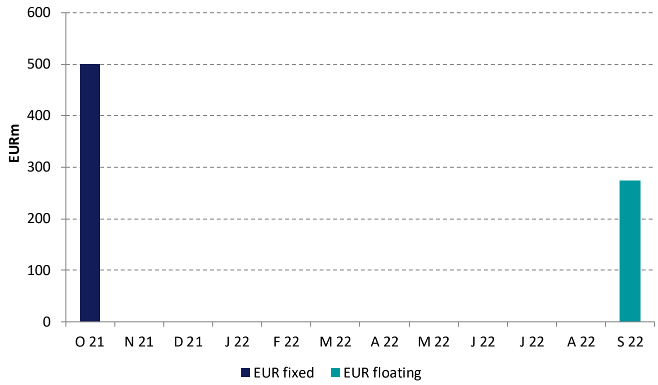
	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

Overall maturity profile



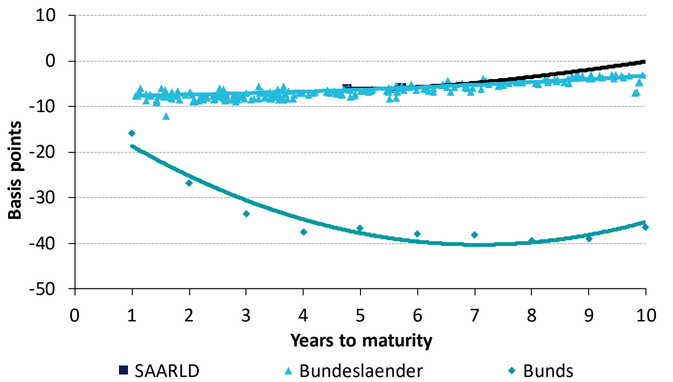
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR floating	0	275	550	0	200	200	0	0	125	0	0	0
EUR fixed	500	0	0	0	0	500	550	0	0	50	0	1,350

Bond amounts maturing in the next 12 months

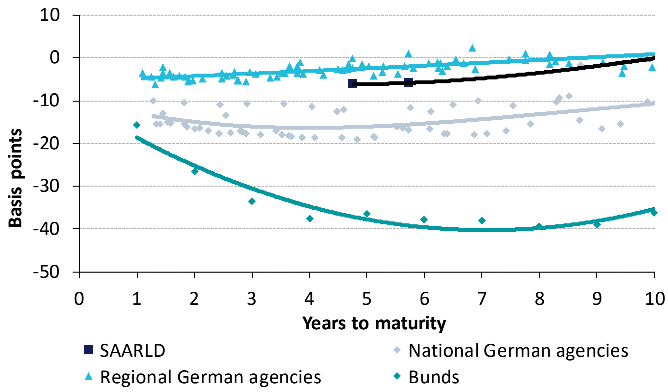


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market

Debt level* (ranking)**
EUR 14.5bn (3rd)

Outstanding bonds
EUR 4.3bn

Bloomberg ticker
SAARLD

Economy 2020

GDP (ranking)
EUR 33.6bn (15th)

GDP per capita (ranking)
EUR 34,125 (10th)

Real GDP growth (ranking)
-6.7% (15th)

Unemployment (ranking)
7.2% (10th)

Key figures 2020

Tax-interest coverage (ranking)
11.6x (15th)

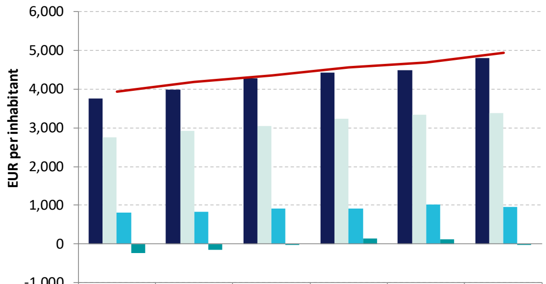
Total revenue/interest paid (ranking)
16.5x (15th)

Debt/GDP (ranking)
43.2% (15th)

Debt/revenue (ranking)
3.1x (15th)

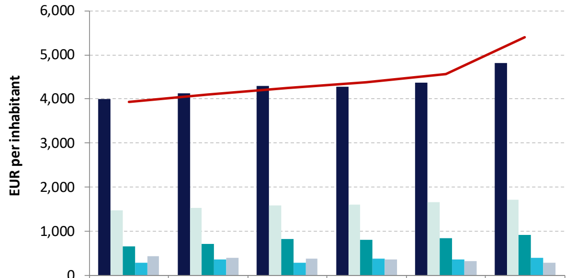
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



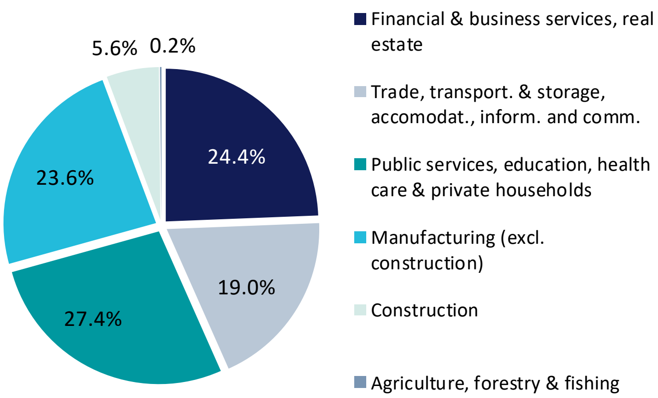
	2015	2016	2017	2018	2019	2020
Operating revenue	3,761	3,982	4,279	4,423	4,497	4,801
Tax revenue	2,755	2,921	3,040	3,233	3,331	3,392
Equalisation mechanism (net)	799	837	916	913	1,014	962
Deficit/surplus	-242	-151	-12	147	119	-24
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

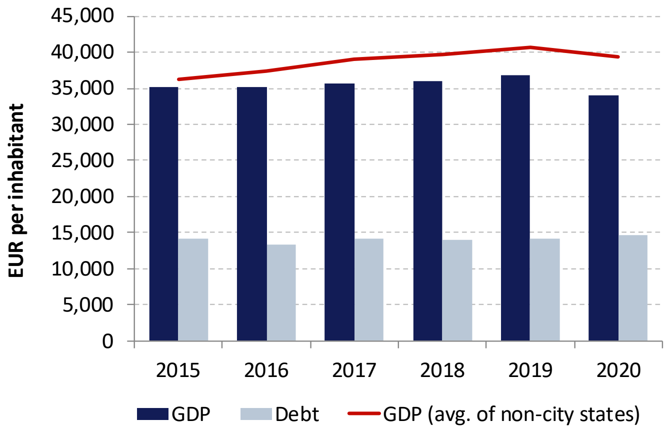


	2015	2016	2017	2018	2019	2020
Operating expense	4,003	4,133	4,291	4,277	4,378	4,825
Staff expenditure	1,481	1,525	1,578	1,598	1,656	1,725
Grants to municipals	656	718	820	802	850	925
Capital expenditure	290	363	291	377	356	403
Interest expense	428	394	379	365	320	292
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

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 Markets Strategy & Floor Research

Strengths

+ Improved budgetary performance
+ Manufacturing industries as key pillar of the economy

Weaknesses

– Long history of budget deficits
– High-level dependency on industrial sector
– Below-average debt sustainability and interest coverage

Bundesland and politics

Link to the Ministry of Finance

[Homepage]

Number of inhabitants (2020)

4,063,400

State capital

Dresden

Government

CDU/Greens/SPD

Minister-President

Michael Kretschmer (CDU)

Expected next election date

Summer 2024

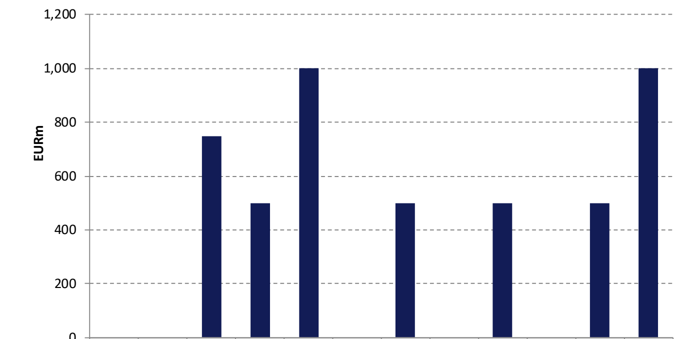
Ratings

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

Saxony

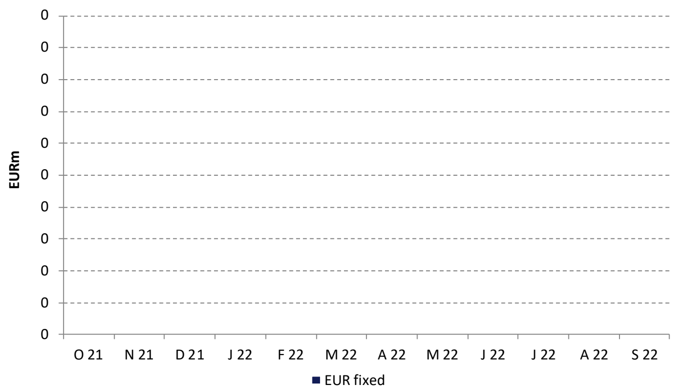
Covering an area of 18,419 km^2 and with a population of nearly 4.1 million inhabitants, Saxony is the most densely populated of the East German Laender with the exception of the city state of Berlin. Since it was established on 3 October 1990, the Free State of Saxony has also been the strongest of the new 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, real estate and corporate services (III). The latter sector has become increasingly important in recent decades. Since reunification, a large number of companies from various economic sectors have settled in Saxony. Particularly companies from the microelectronics and electro-technology sectors as well as mechanical engineering and automotive industry have relocated to Saxony. In order to consolidate 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. In order 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 Laender and additionally boasts a relatively well-educated population. For example, the percentage of persons in employment without vocational training stands at just under 7%, significantly lower than the German average of around 15%. In 2021, Saxony also gained first place in the overall assessment in the Education Monitor (Bildungsmonitor). 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 2020, the economy in Saxony generated GDP of EUR 125.6bn, which equated to 3.8% of total economic output across Germany as a whole. Traditionally, Saxony was one of the largest recipients within the federal financial equalisation system, although at the same time it boasted one of the best budgetary situations too. Saxony enjoys huge financial flexibility as a result of posting the lowest debt level across all Laender.

Overall maturity profile



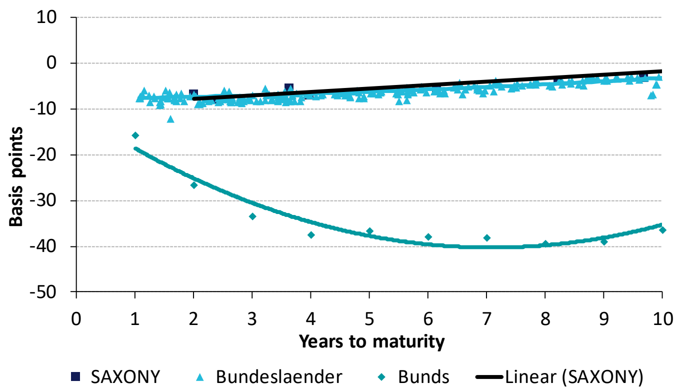
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR fixed	0	0	750	500	1,000	0	500	0	500	0	500	1,000

Bond amounts maturing in the next 12 months

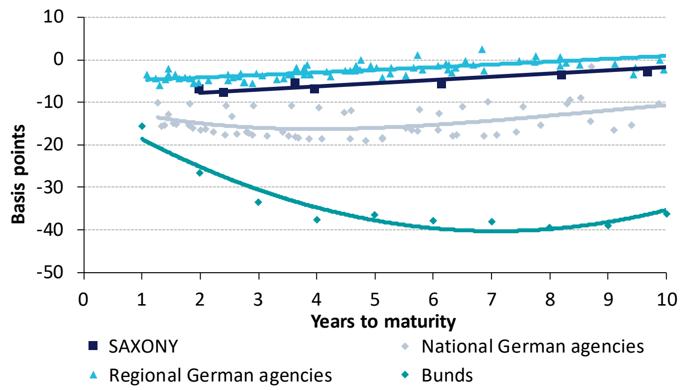


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market

Debt level* (ranking)**
EUR 5.1bn (1st)

Outstanding bonds
EUR 4.8bn

Bloomberg ticker
SAXONY

Economy 2020

GDP (ranking)
EUR 125.6bn (8th)

GDP per capita (ranking)
EUR 30,903 (12th)

Real GDP growth (ranking)
-4.4% (6th)

Unemployment (ranking)
6.1% (8th)

Key figures 2020

Tax-interest coverage (ranking)
171.4x (1st)

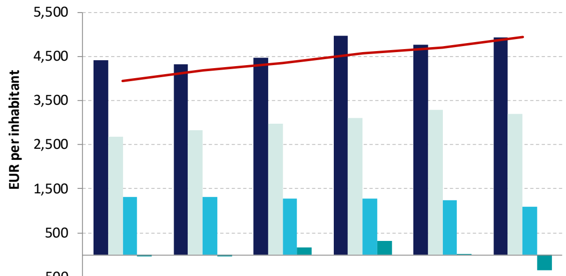
Total revenue/interest paid (ranking)
264.5x (1st)

Debt/GDP (ranking)
4.0% (2nd)

Debt/revenue (ranking)
0.25x (1st)

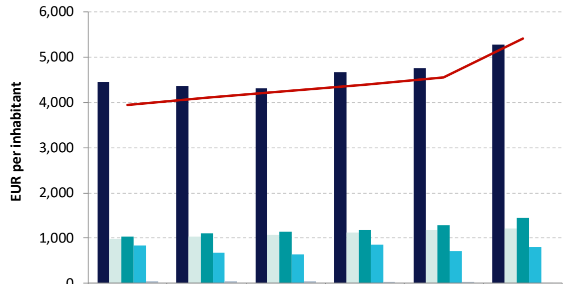
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



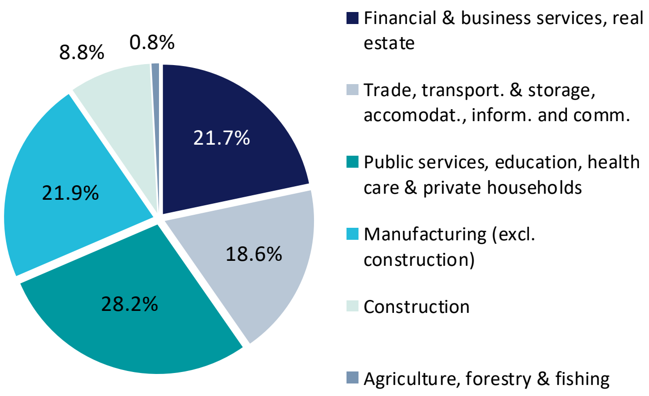
	2015	2016	2017	2018	2019	2020
Operating revenue	4,417	4,322	4,475	4,970	4,761	4,928
Tax revenue	2,679	2,833	2,980	3,108	3,282	3,194
Equalisation mechanism (net)	1,314	1,313	1,277	1,281	1,236	1,089
Deficit/surplus	-37	-35	167	307	0	-351
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

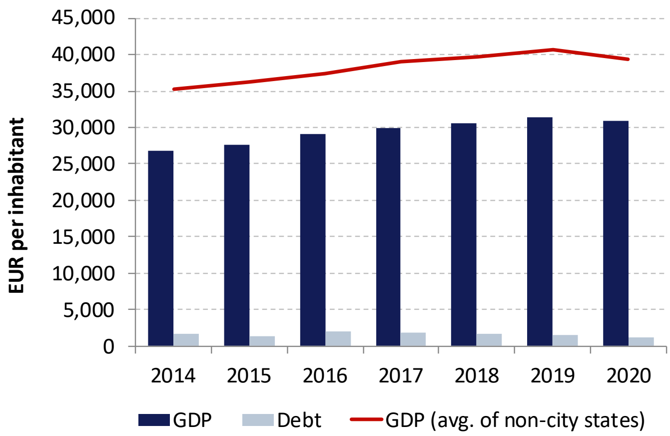


	2015	2016	2017	2018	2019	2020
Operating expense	4,454	4,356	4,308	4,663	4,760	5,279
Staff expenditure	979	1,043	1,067	1,130	1,169	1,218
Grants to municipals	1,031	1,112	1,141	1,187	1,289	1,450
Capital expenditure	847	682	636	864	709	810
Interest expense	54	47	43	39	30	19
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

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 Markets Strategy & Floor Research

Strengths

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

Weaknesses

– Economic output and tax revenues below average in per capita terms
– Demographic trend as a risk factor

Bundesland and politics

Link to the Ministry of Finance

[Homepage]

Number of inhabitants (2020)

2,186,684

State capital

Magdeburg

Government

CDU/SPD/FDP

Minister-President

Reiner Haseloff (CDU)

Expected next election date

Summer 2026

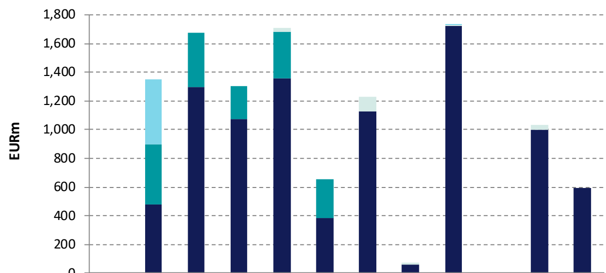
Ratings

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

Saxony-Anhalt

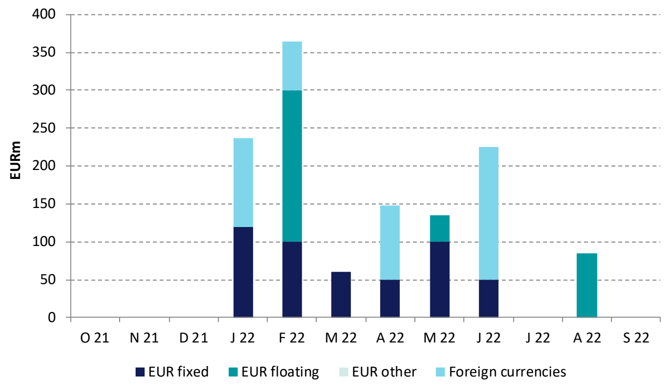
With a population of just under 2.2 million people living across an area of 20,450 km^2, Saxony-Anhalt has the third-lowest population density of all Laender. As is the case with the other new Laender, Saxony-Anhalt came into existence on 3 October 1990. Key sectors of the economy include manufacturing industries, transport and services in particular. According to the data from the NORD/LB Sector Strategy department (formerly Regional Research), almost three quarters of employees at the 100 largest companies in Saxony-Anhalt (according to employee numbers) operate in these three economic sectors. The Bundesland's 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. Agriculture and forestry only account for a larger share of gross value added in Mecklenburg-Western Pomerania. In addition to the traditional industries, the service sector and new sectors such as biotechnology, information and communication technologies, renewable resources, wind energy and photovoltaics have become established as key economic pillars. The relative structural weakness of this sparsely populated sub-sovereign has been countered the reunification of Germany through the massive expansion of infrastructure in particular. In this regard, the industrial port at Magdeburg will be connected to the European waterway network by 2023 at a cost of EUR 40m. Saxony-Anhalt is also committed to developing the scientific structure in the areas of engineering, environmental and life sciences. In 2020, 1.9% of total German economic output originated from Saxony-Anhalt. As is the case with the other new Laender, Saxony-Anhalt has been particularly affected by the issue of demographic change: at 27.0%, 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 (4.9%) is the lowest in a comparison of the Laender. Since its inception, Saxony-Anhalt was at all times a net recipient within the federal financial equalisation system.

Overall maturity profile



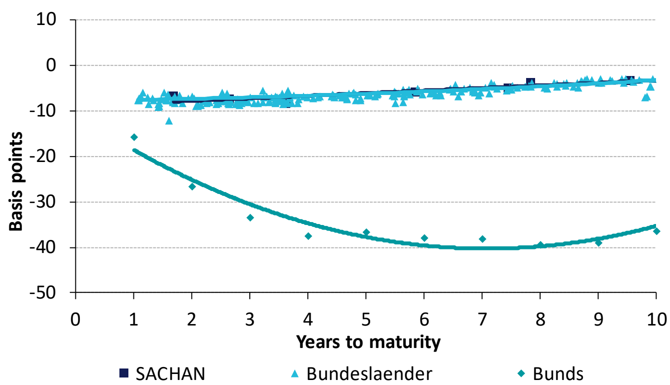
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Foreign currencies	0	454	0	0	0	0	0	0	9	0	0	0
EUR other	0	0	0	0	30	0	102	10	10	0	30	0
EUR floating	0	420	375	230	325	270	0	0	0	0	0	0
EUR fixed	0	480	1,300	1,075	1,355	385	1,130	60	1,720	0	1,000	595

Bond amounts maturing in the next 12 months

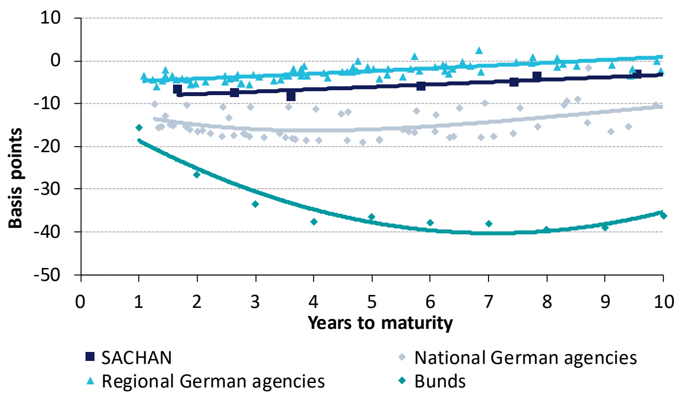


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks



Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

NORD/LB

Capital market

Debt level* (ranking)**

EUR 21.2bn (7th)

Outstanding bonds

EUR 11.4bn

Bloomberg ticker

SACHAN

Economy 2020

GDP (ranking)

EUR 62.7bn (12th)

GDP per capita (ranking)

EUR 28,652 (15th)

Real GDP growth (ranking)

-3.9% (5th)

Unemployment (ranking)

7.7% (13th)

Key figures 2020

Tax-interest coverage (ranking)

21.5x (13th)

Total revenue/interest paid (ranking)

35.1x (13th)

Debt/GDP (ranking)

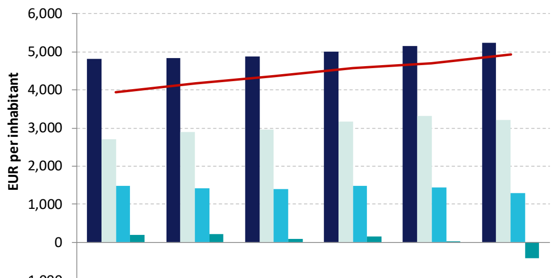
33.9% (13th)

Debt/revenue (ranking)

1.9x (10th)

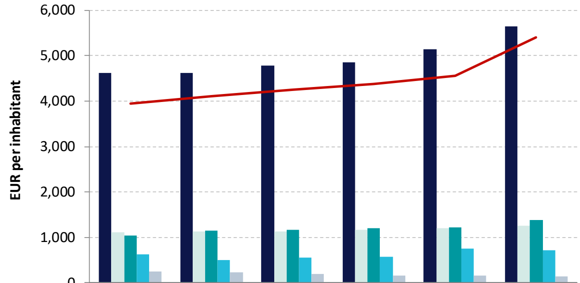
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



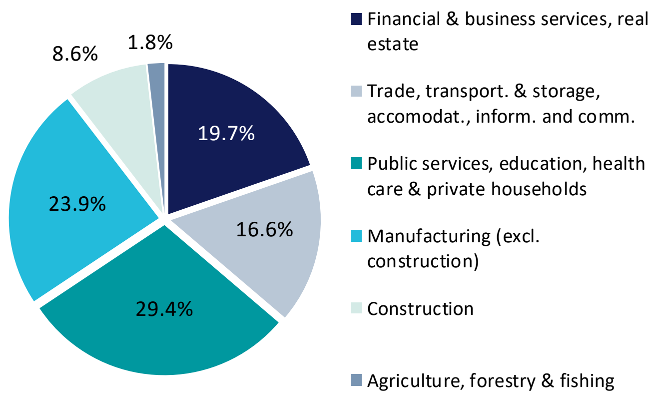
	2015	2016	2017	2018	2019	2020
Operating revenue	4,808	4,835	4,869	4,996	5,155	5,239
Tax revenue	2,695	2,905	2,966	3,173	3,318	3,208
Equalisation mechanism (net)	1,474	1,421	1,388	1,477	1,442	1,282
Deficit/surplus	190	207	83	142	20	-410
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

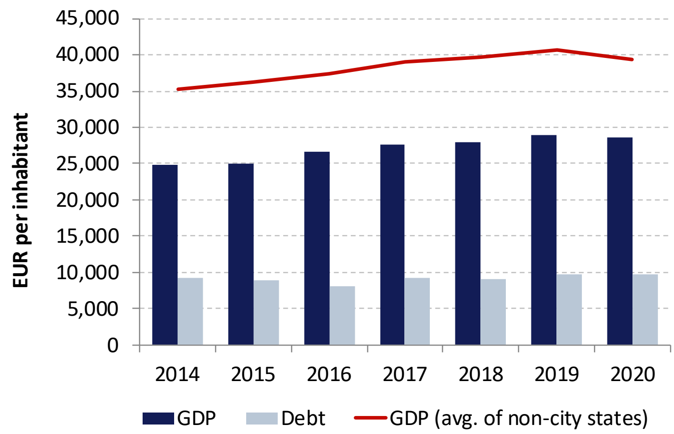


	2015	2016	2017	2018	2019	2020
Operating expense	4,618	4,627	4,786	4,854	5,135	5,648
Staff expenditure	1,110	1,136	1,140	1,165	1,201	1,254
Grants to municipals	1,045	1,145	1,165	1,210	1,216	1,388
Capital expenditure	628	503	549	579	752	713
Interest expense	245	228	203	166	164	149
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

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 Markets Strategy & Floor Research

Strengths

+ Very solid budget development
+ Manufacturing industries prominent
+ Low personnel expenses and pension liabilities

Weaknesses

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

Schleswig-Holstein

Covering a total area of 15,799 km^2, Schleswig-Holstein is the smallest non-city state in Germany with the exception of Saarland. Founded on 23 August 1946, Schleswig-Holstein was the first sub-sovereign to ratify its own state constitution after the promulgation of the Basic Law. Traditionally, fishing is an important area of the economy. SchHol accounts for approximately two thirds of the Germany fishery sector. Tourism is also of crucial importance to the state's economy. The proportion of GDP attributable to the tourism sector is very high compared with the overall German average. Prior to the coronavirus pandemic, around three quarters of gross value added was generated via the service sector, slightly above the national average. SchHol's economic development activities are concentrated, in particular, on the food industry, information technology, telecommunications and media, life sciences, logistics, aviation in addition to microtechnology and nanotechnology. Its location between the North Sea and the Baltic Sea means that attention is also focused on the maritime economy, tourism and the renewable energies sector. The latter is an essential element of future economic planning. For example, SchHol has ambitions of becoming an exporter of green energy. In 2020, just under 175% of the Bundesland's gross electricity consumption was obtained from "green" sources. This represents a marked increase on the figure of approximately 150% registered in the previous year and is also significantly above the national average of around 46%. The state government has underlined its ambitions to become a more sustainable energy economy by recently adopting the Energy Transformation and Climate Protection Law, which supplements existing aims in the area of wind power with an expansion of photovoltaic facilities and plans to establish municipal heating networks. In 2020, its economy contributed a share of around 2.9% to the national GDP of Germany. Following a budget surplus in the prior year, Schleswig-Holstein registered a cash deficit again in the 2020 budget year. In 2010, the Stability Council identified an impending budget emergency. A restructuring programme was consequently adopted, compliance with which was monitored by the Stability Council before being completed in 2016, with the result that the budgetary crisis was successfully averted.

Bundesland and politics

Link to the Ministry of Finance

Homepage

Number of inhabitants (2020)

2,906,316

State capital

Kiel

Government

CDU/Greens/FDP

Minister-President

Daniel Günther (CDU)

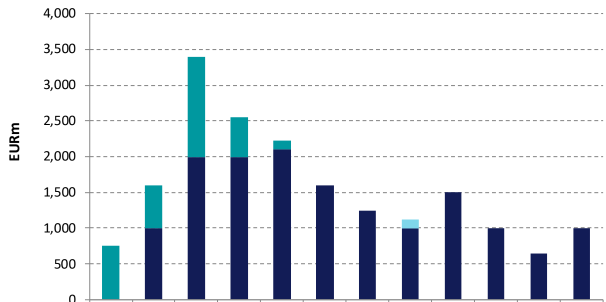
Expected next election date

Spring 2022

Ratings

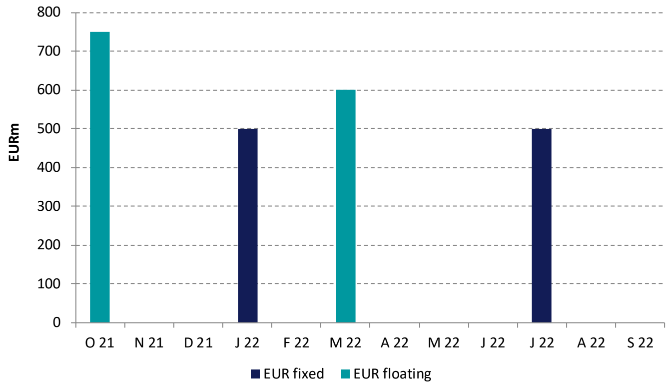
	Long-term	Outlook
Fitch	AAA	stab
Moody's	-	-
S&P	-	-

Overall maturity profile



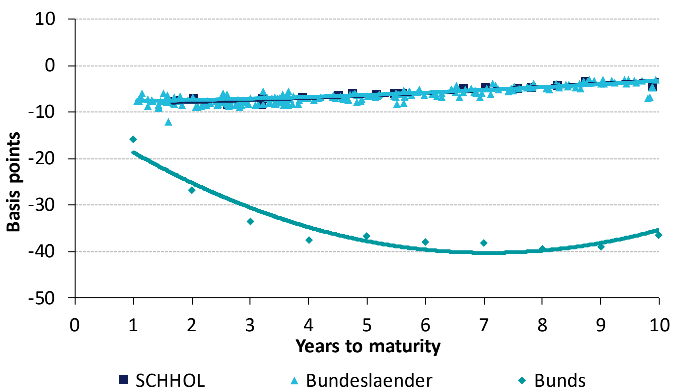
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
Foreign currencies	0	0	0	0	0	0	0	123	0	0	0	0
EUR floating	750	600	1,400	550	125	0	0	0	0	0	0	0
EUR fixed	0	1,000	2,000	2,000	2,100	1,600	1,250	1,000	1,500	1,000	650	1,000

Bond amounts maturing in the next 12 months

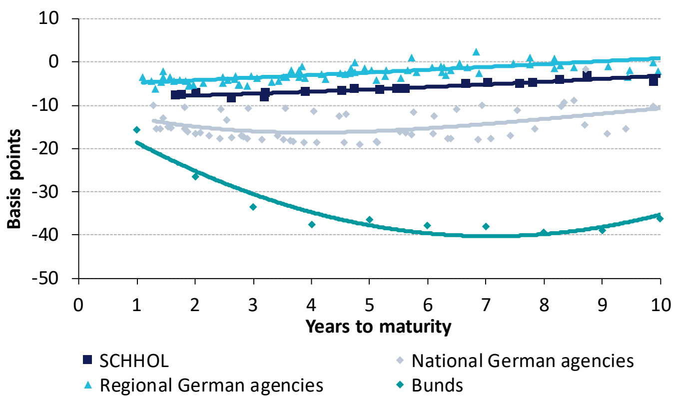


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks

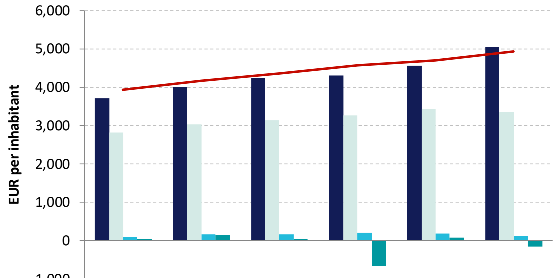


Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market	Economy 2020	Key figures 2020
Debt level* (ranking)**	**GDP (ranking)**	**Tax-interest coverage (ranking)**
EUR 32.0bn (9th)	EUR 97.2bn (10th)	30.0x (11th)
Outstanding bonds	**GDP per capita (ranking)**	**Total revenue/interest paid (ranking)**
EUR 18.6bn	EUR 33,452 (11th)	45.2x (9th)
Bloomberg ticker	**Real GDP growth (ranking)**	**Debt/GDP (ranking)**
SCHHOL	-3.4% (4th)	32.9% (12th)
	Unemployment (ranking)	**Debt/revenue (ranking)**
	5.8% (5th)	2.2x (13th)

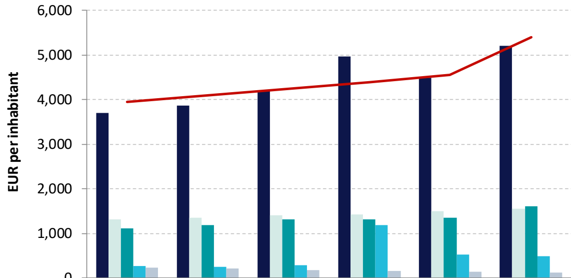
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



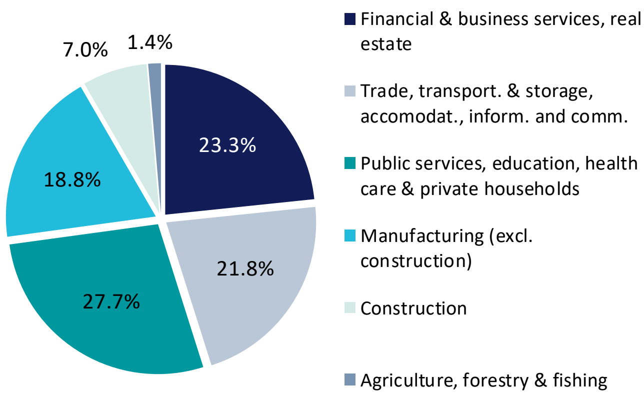
	2015	2016	2017	2018	2019	2020
Operating revenue	3,725	4,006	4,241	4,313	4,565	5,060
Tax revenue	2,825	3,034	3,150	3,262	3,449	3,360
Equalisation mechanism (net)	112	174	160	204	185	131
Deficit/surplus	30	133	43	-662	82	-147
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

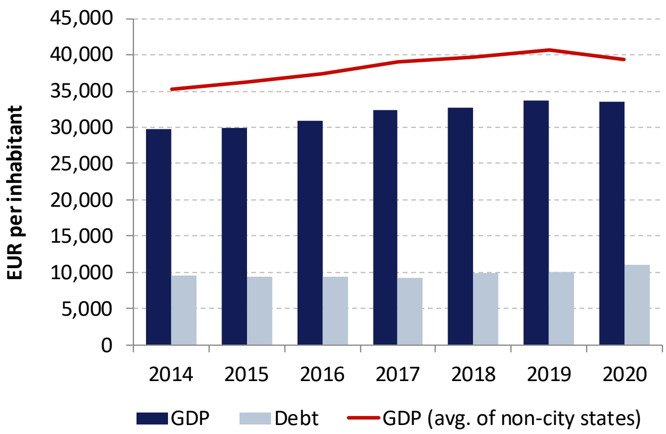


	2015	2016	2017	2018	2019	2020
Operating expense	3,695	3,872	4,198	4,974	4,484	5,207
Staff expenditure	1,314	1,349	1,408	1,432	1,495	1,550
Grants to municipals	1,116	1,189	1,306	1,305	1,346	1,616
Capital expenditure	263	254	280	1,192	517	478
Interest expense	228	205	171	159	142	112
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

Gross value added by economic sector



Trend in GDP and total debt



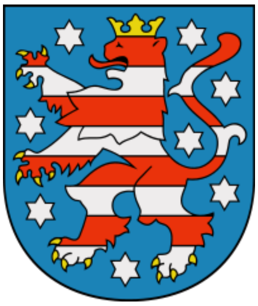
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Strengths

+ Solid budget performance
+ High growth in real GDP
+ Low unemployment rate

Weaknesses

– Below-average debt sustainability and interest coverage
– High level of pension commitments
– Below-average economic output in per capita terms
– Above-average debt per capita



Bundesland and politics

Link to the Ministry of Finance

[Homepage]

Number of inhabitants (2020)

2,125,406

State capital

Erfurt

Government

Linke (the Left Party)/SPD/Greens

Minister-President

Bodo Ramelow (Linke)

Expected next election date

26 September 2021

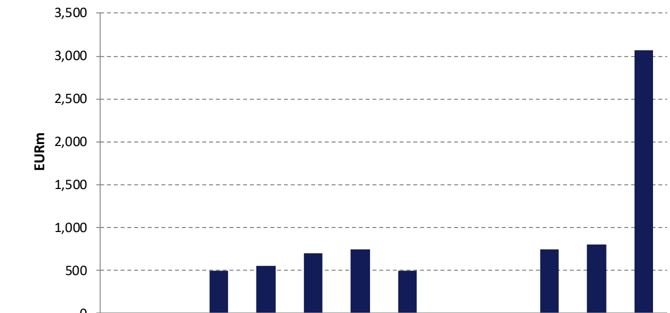
Ratings

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

Thuringia

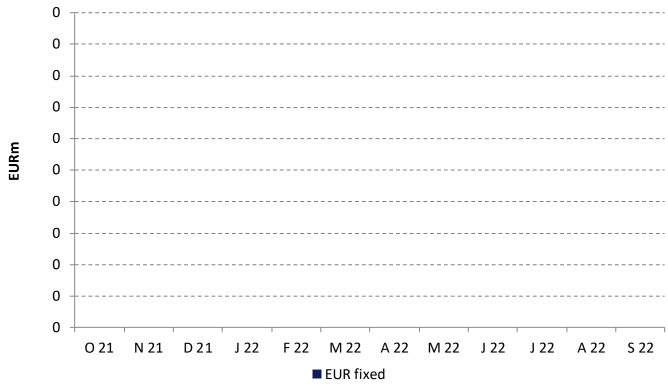
At 16,172 km^2, Thuringia is the smallest of the eastern German Laender (excluding the city state of Berlin) in terms of area. With a population of around 2.1 million, only the Free State of Saxony is more densely populated among the new (non-city state) Laender than Thuringia. The economy of the Free State of Thuringia, which was established in 1990, is dominated by manufacturing industries in particular, which account for a greater proportion of gross value added than in any other eastern German sub-sovereign. Including the construction sector, which accounts for a higher proportion of gross value added in only three other Laender, manufacturing industries are responsible for nearly one third of the gross value added generated by Thuringia. A large part of its economic output is attributable to the region around the chain of cities extending from Erfurt to Jena via Weimar in particular. The automotive and mechanical engineering sectors as well as the optical and medical technology sectors are of particular significance here. Other key areas are the food industry, information and communications technology, the creative economy, the plastics industry, logistics, the solar industry as well as energy and environment technologies. The local economy is also distinguished by relatively high capacity for innovation. Within Thuringia, a discrepancy between the planning region in the south-west and the rest of the sub-sovereign 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. In the Education Monitor 2021, Thuringia was ranked in fourth place behind Saxony, Bavaria and Berlin, having been regularly ranked in the top three for several years. However, in fundamental terms, this continues to represent a good basis from which the sub-sovereign can strive to counteract a lack of qualified experts and reverse the demographic trend, factors which also represent a major challenge for Thuringia. At 6.0%, Thuringia has the lowest unemployment rate among the new Laender. Thuringia was at all times a net recipient since its inclusion in the federal financial equalisation system.

Overall maturity profile



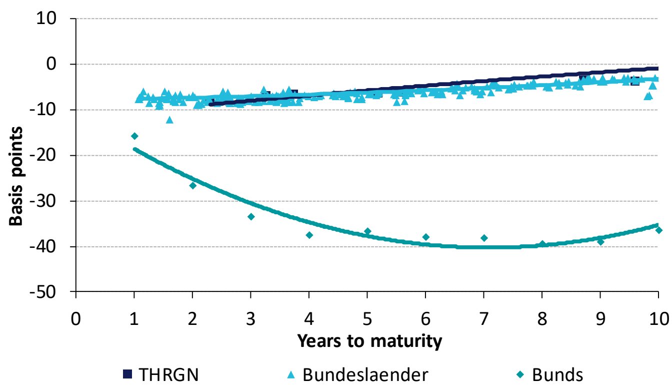
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR floating	0	0	0	0	0	0	0	0	0	0	0	0
EUR fixed	0	0	500	550	700	750	500	0	0	750	800	3,065

Bond amounts maturing in the next 12 months

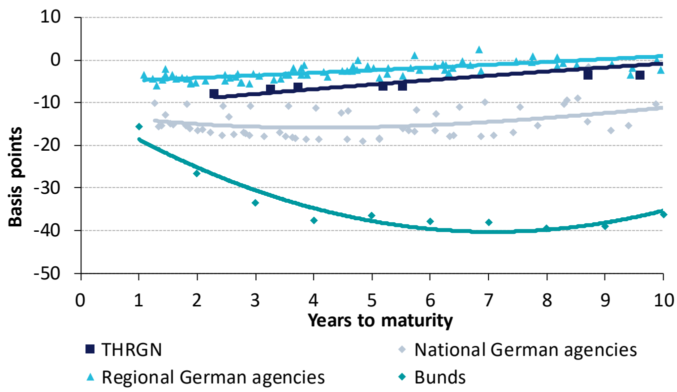


Foreign currencies (where applicable) are converted into EUR at rates as at 21 September 2021 Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. Bunds & peers



ASW spreads vs. German promotional banks

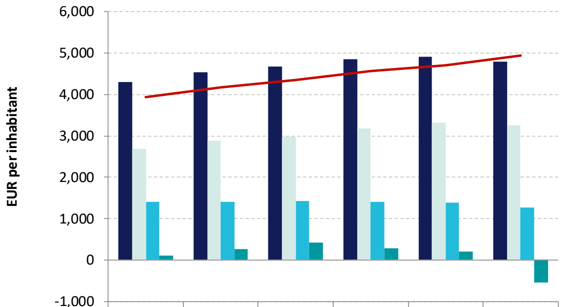


Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Capital market	Economy 2020	Key figures 2020
Debt level* (ranking)**	**GDP (ranking)**	**Tax-interest coverage (ranking)**
EUR 15.7bn (4th)	EUR 61.5bn (13th)	24.0x (12th)
Outstanding bonds	**GDP per capita (ranking)**	**Total revenue/interest paid (ranking)**
EUR 7.6bn	EUR 28,953 (14th)	35.4x (12th)
Bloomberg ticker	**Real GDP growth (ranking)**	**Debt/GDP (ranking)**
THRGN	-4.6% (9th)	25.4% (9th)
	Unemployment (ranking)	**Debt/revenue (ranking)**
	6.0% (7th)	1.5x (7th)

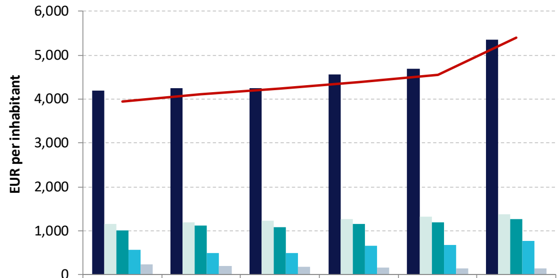
* As reported at the end of the previous year.
**Ranking of the Bundesland among the Laender for the respective key figure, where 1 is the best figure in the comparison of the Laender.
Source: Federal Statistical Office, Federal Ministry of Finance, national accounts produced by the Laender, NORD/LB Markets Strategy & Floor Research

Development of revenue in EUR per capita



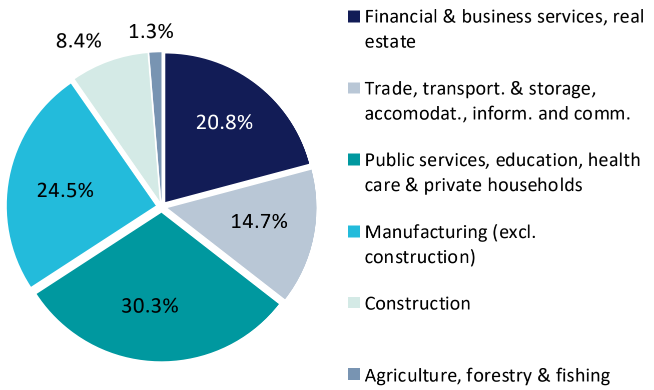
	2015	2016	2017	2018	2019	2020
Operating revenue	4,304	4,528	4,674	4,852	4,909	4,796
Tax revenue	2,690	2,881	2,987	3,175	3,320	3,250
Equalisation mechanism (net)	1,404	1,411	1,417	1,410	1,381	1,262
Deficit/surplus	109	274	425	291	210	-549
Ø of operating revenues (non-city states)	3,944	4,178	4,357	4,572	4,699	4,941

Development of expenditure in EUR per capita

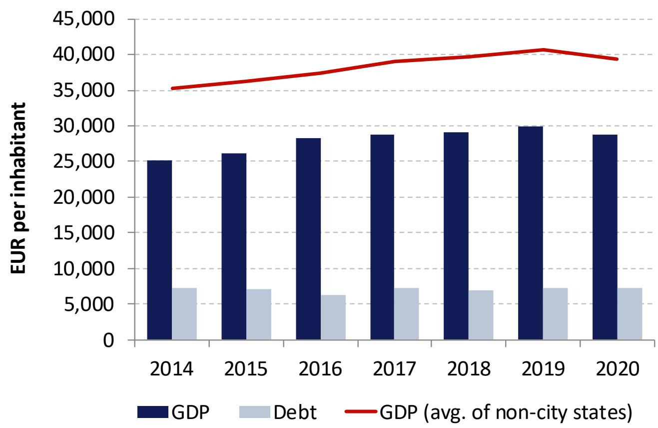


	2015	2016	2017	2018	2019	2020
Operating expense	4,195	4,254	4,249	4,561	4,699	5,346
Staff expenditure	1,147	1,192	1,225	1,257	1,312	1,370
Grants to municipals	1,009	1,107	1,083	1,160	1,191	1,266
Capital expenditure	565	490	483	652	672	762
Interest expense	231	201	179	155	147	136
Ø of operating expenses (non-city states)	3,943	4,104	4,246	4,385	4,558	5,408

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 Markets Strategy & Floor Research

Strengths

+ Solid budget performance
+ Manufacturing industries prominent
+ Low level of pension liabilities

Weaknesses

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

Link to bond overview

Homepage

Ratings

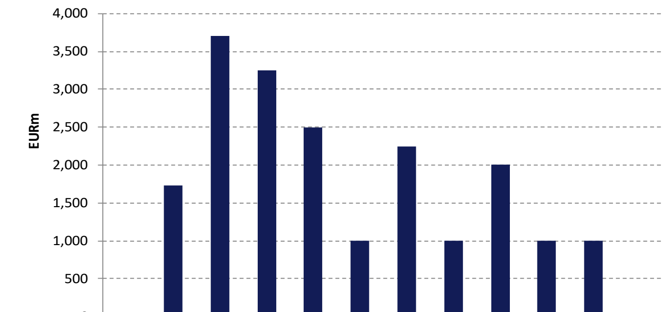
	Long-term	Outlook
Fitch	AAA*	-
Moody's	-	-
S&P	-	-

*** Issuer rating not available. However, Fitch awards a rating for each individual bond.**

Gemeinschaft deutscher Laender (Joint Laender)

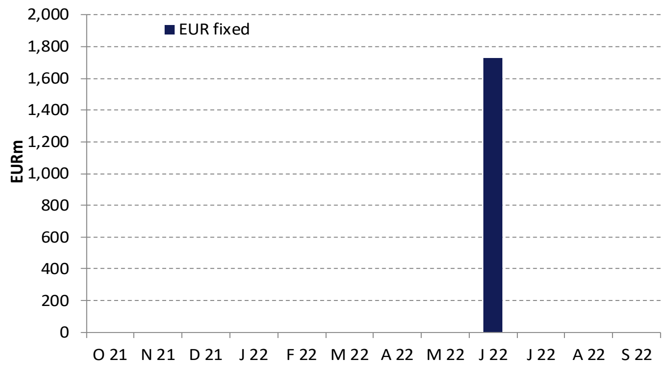
An idiosyncrasy of the bond market in general, and one specific to the German sub-sovereign market, is the Gemeinschaft deutscher Laender issuance vehicle. Within this framework, several Laender issue joint bonds (known as "Laender jumbos"; issuance volumes starting from EUR 1bn), whereby each sub-sovereign 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 such a joint bond was in 1996. Since then, the Joint Laender has become an established issuer on the bond market, with several Laender placing joint bonds on a semi-regular basis. The large-volume Laender jumbos enable these Laender, which – prior to the pandemic – otherwise had or still have comparatively low refinancing requirements, to generate economies of scale that are reflected in lower interest expenses. A total of eight Laender participated in the bond issuances currently in circulation. While Saxony-Anhalt, Hesse and North Rhine-Westphalia (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 body since 2002, the following Laender have at times made use of Laender jumbos as key funding instruments (prior to the coronavirus pandemic): Brandenburg, Bremen, Hamburg, Mecklenburg-Western Pomerania, Rhineland-Palatinate, Saarland, Schleswig-Holstein and Thuringia. In fact, these Laender have raised substantial amounts of their funding volume via bonds from the joint issuing body currently in circulation. As a result of the particular structure of the Joint 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 series No. 11, Fitch has awarded a rating of AAA to all Laender jumbos. As justification for the rating, Fitch cites the system comprising the principle of federal loyalty and the new system of federal financial equalisation payments (VAT distribution calculated on a per capita basis in full), in which it generally sees an exceptionally low default risk (AAA). In total, an outstanding volume of EUR 19.4bn is attributable to the 17 Joint Laender bonds, making it an important player within the German Laender bond market. 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 Joint Laender has subsequently refrained from using this instrument for joint refinancing. Here, too, the coupon has long since been in region of between 0.0% and 0.01%. The first year in which a zero preceded the decimal point was 2015. The series of bond issuances on the part of the Joint Laender has now reached No. 60. At present, the longest outstanding bond is set to fall due in February 2031 (No. 60), while the largest bond comprises a volume of EUR 1.725bn (No. 40). In 2021, there are no further bonds set to fall due under this ticker (LANDER).

Overall maturity profile



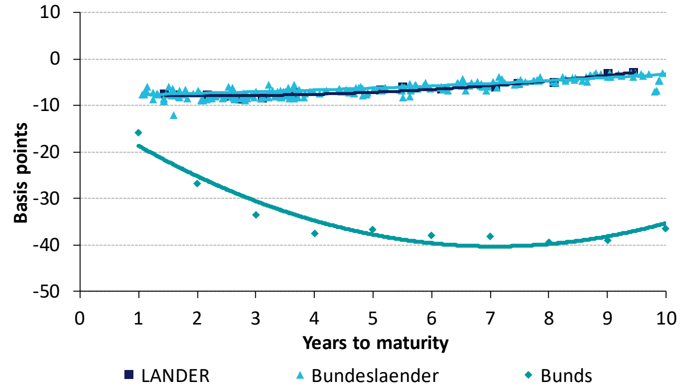
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	>2031
EUR fixed	0	1,725	3,700	3,250	2,500	1,000	2,250	1,000	2,000	1,000	1,000	0

Bond amounts maturing in the next 12 months

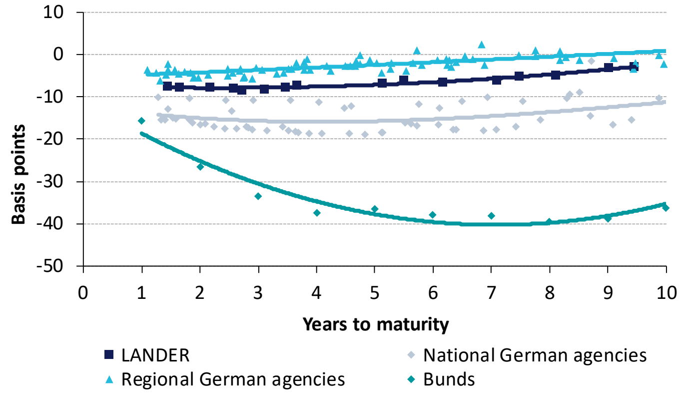


Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

ASW spreads vs. individual Bundeslaender vs. Bunds

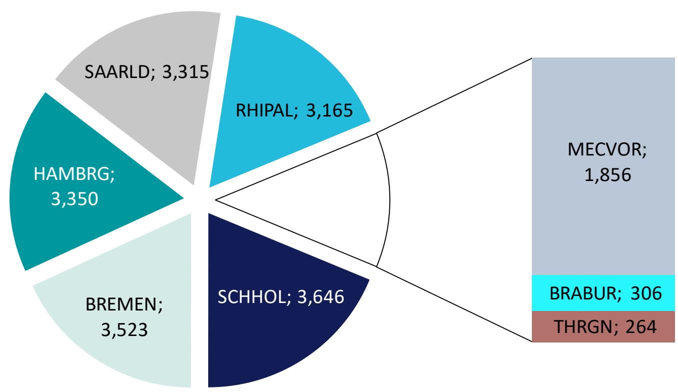


ASW spreads vs. German promotional banks vs. Bunds

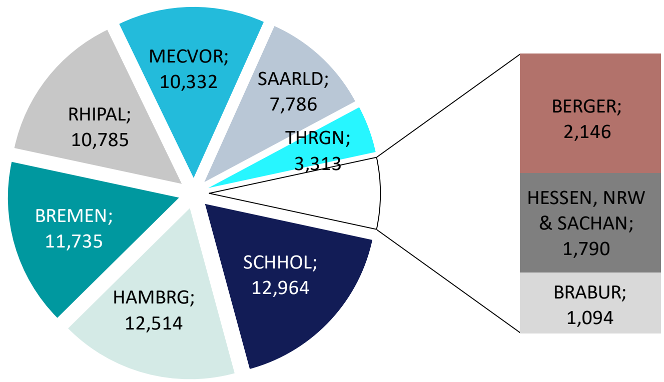


Source: Bloomberg, Markit, NORD/LB Markets Strategy & Floor Research

Share of current outstanding volume attributable to the Bundeslaender (EURbn)



Cumulative share of total volume issued since 1996 (EURbn)



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

Strengths

+ Includes smaller issuers
+ More liquid bond volumes

Weaknesses

– Participants are primarily 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 levels, Kassenkredite, SSD and bonds

Issuer	Ticker	Debt level* (EURbn)	Of which outstanding Kassenkredite and SSD volumes** (EURbn)	And of which outstanding bond volumes (EURbn)	Number of benchmark bonds
Baden-Wuerttemberg	BADWUR	48.0	25.7	22.3	9
Bavaria	BAYERN	17.8	7.6	10.2	3
Berlin	BERGER	59.7	15.1	44.7	22
Brandenburg	BRABUR	18.6	5.4	13.2	0
Bremen	BREMEN	39.3	17.6	21.7	10
Hamburg	HAMBRG	35.3	20.5	14.8	2
Hesse	HESSE	45.9	9.4	36.5	15
Mecklenburg-Western Pomerania	MECVOR	8.4	6.1	2.3	0
Lower Saxony	NIESA	64.9	15.0	50.0	33
North Rhine-Westphalia	NRW	178.5	49.5	129.0	52
Rhineland-Palatinate	RHIPAL	30.9	7.4	23.5	10
Saarland	SAARLD	14.5	10.2	4.3	0
Saxony	SAXONY	5.1	0.3	4.8	0
Saxony-Anhalt	SACHAN	21.2	9.9	11.4	6
Schleswig-Holstein	SCHHOL	32.0	13.3	18.6	6
Thuringia	THRGN	15.7	8.0	7.6	0
Gemeinschaft deutscher Laender	LANDER	-	-	19.4	17
Bund-Laender bond	BULABO	-	-	Fell due: 15 July 2020	0
Sum total	**-**	**635.8**	**221.0**	**434.3**	**185**

* As reported at the end of the previous year.
** Estimated in part.
Source: Bloomberg, issuers, Federal Ministry of Finance, NORD/LB Markets Strategy & Floor Research

Appendix Ratings overview

Issuer (Bloomberg ticker)	Fitch		Moody's		S&P	
	Rating	Outlook	Rating	Outlook	Rating	Outlook
BW (BADWUR)	-	-	Aaa	stab	AA+	stab
BY (BAYERN)	-	-	Aaa	stab	AAA	stab
BE (BERGER)	AAA	stab	Aa1	stab	-	-
BB (BRABUR)	-	-	Aaa	neg	-	-
HB (BREMEN)*	AAA	stab	-	-	-	-
HH (HAMBRG)	AAA	stab	-	-	-	-
HE (HESSEN)	-	-	-	-	AA+	neg
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	AA	stab
SH (SCHHOL)	AAA	stab	-	-	-	-
TH (THRGN)*	AAA	stab	-	-	-	-
Gemeinschaft deutscher Laender (LANDER)**	AAA	-	-	-	-	-

* Ratings for individual bonds (see respective Bundesland profile)).
** Ratings for all bonds currently in circulation; no outlook provided.
Source: Bloomberg, NORD/LB Markets Strategy & Floor Research

Appendix Key figures 2020 – at a glance

Key metrics as at year-end 2020 (EUR m)	Adjusted income	Adjusted expenses	Balance	Debt	GDP	Debt/GDP (in %)	Balance/GDP (in %)
Baden-Wuerttemberg	55,139	58,430	-3,291	47,989	500,790	9.58	-0.66
Bavaria	62,468	68,602	-6,135	17,840	610,217	2.92	-1.01
Berlin	31,116	32,889	-1,773	59,723	154,634	38.62	-1.15
Brandenburg	12,572	13,313	-741	18,602	73,931	25.16	-1.00
Bremen	6,288	6,598	-310	39,296	31,577	124.45	-0.98
Hamburg	16,211	16,868	-657	35,339	118,135	29.91	-0.56%
Hesse	31,937	32,775	-838	45,882	281,418	16.30	-0.30
Mecklenburg-Western Pomerania	9,284	12,382	-3,098	8,445	46,012	18.35	-6.73
Lower Saxony	35,494	40,405	-4,911	64,949	295,895	21.95	-1.66
North Rhine-Westphalia	93,192	104,807	-11,615	178,499	697,125	25.61	-1.67
Rhineland-Palatinate	18,984	20,329	-1,346	30,853	141,905	21.74	-0.95
Saarland	4,728	4,752	-24	14,514	33,608	43.19	-0.07
Saxony	20,025	21,449	-1,425	5,053	125,571	4.02	-1.13
Saxony-Anhalt	11,455	12,351	-896	21,221	62,654	33.87	-1.43
Schleswig-Holstein	14,706	15,133	-427	31,976	97,222	32.89	-0.44
Thuringia	10,195	11,362	-1,167	15,650	61,536	25.43	-1.90
Total	**433,793**	**472,444**	**-38,652**	**635,831**	**3,332,229**	**19.08**	**-1.16**

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

Appendix Bundeslaender budgets 2020

2020 (EUR m)	BW	BY	BE	BB	HB	HH	HE	MV
Adjusted income	**55,139**	**62,468**	**31,116**	**12,572**	**6,288**	**16,211**	**31,937**	**9,284**
Tax income	37,628	44,471	20,732	8,196	3,846	11,684	21,315	5,427
as a % of total income	68.24%	71.19%	66.63%	65.20%	61.16%	72.07%	66.74%	58.46%
General BEZ	-	-	513	-	539	621	-	121
as a % of total income	-	-	1.65%	-	8.57%	-	-	1.30%
Special-need BEZ	-	-	131	-	105	-	-	48
as a % of total income	-	-	0.42%	-	1.67%	-	-	0.52%
Financial equalisation between the Laender	-	-	3,454	1,139	712	-	-	1,177
as a % of total income	-	-	11.10%	9.06%	11.32%	-	-	12.68%
VAT equalisation	-	-	-	-	-	-	-	-
as a % of total income	-	-	-	-	-	-	-	-
Total equalisation payments	-	-	4,098	1,139	1,356	-	-	1,346
as a % of total income	-	-	13.17%	9.06%	21.57%	-	-	14.50%
Adjusted expenses	**58,430**	**68,602**	**32,889**	**13,313**	**6,598**	**16,868**	**32,775**	**12,382**
Personnel expenditure	18,747	24,742	9,858	3,115	1,929	4,942	10,523	2,233
in % of total expenditure	32.08%	36.07%	29.97%	23.40%	29.24%	29.30%	32.11%	18.03%
Interest expenditure	1,169	479	970	200	612	401	878	193
in % of total expenditure	2.00%	0.70%	2.95%	1.50%	9.28%	2.38%	2.68%	1.56%
Grants to municipalities	18,117	16,326	3.8	4,814	13	11.9	8,822	2,717
in % of total expenditure	31.01%	23.80%	0.01%	36.16%	0.20%	0.07%	26.92%	21.94%
Investment expenditure	5,016	7,629	2,165	2,286	605	1,641	2,013	1,543
in % of total expenditure	8.58%	11.12%	6.58%	17.17%	9.17%	9.73%	6.14%	12.46%
Financial equalisation between the Laender	3,674	7,771	-	-	-	172	2,531	-
in % of total expenditure	6.29%	11.33%	-	-	-	1.02%	7.72%	-
VAT equalisation	-	-	-	-	-	-	-	-
in % of total expenditure	-	-	-	-	-	-	-	-
Total equalisation payments	-	-	-	-	-	-	-	-
in % of total expenditure	-	-	-	-	-	-	-	-
Budget balance	**-3,291**	**-6,135**	**-1,773**	**-741**	**-310**	**-656**	**-838**	**-3,098**
Total debt	**47,989**	**17,840**	**59,723**	**18,602**	**39,296**	**35,339**	**45,882**	**8,445**

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

Appendix Bundeslaender budgets 2020 (continued)

2020 (EUR m)	NI	NW	RP	SL	SN	ST	SH	TH
Adjusted income	**35,494**	**93,192**	**18,984**	**4,728**	**20,025**	**11,455**	**14,706**	**10,195**
Tax income	26,419	61,034	13,637	3,340	12,978	7,014	9,764	6,907
as a % of total income	74.43%	65.49%	71.84%	70.64%	64.81%	61.23%	66.40%	67.75%
General BEZ	421	533	166	86	498	274	125	213
as a % of total income	1.20%	0.70%	0.90%	1.90%	2.60%	2.40%	0.90%	2.50%
Special-need BEZ	-	-	46	63	734	477	53	445
as a % of total income	-	-	0.20%	1.40%	3.80%	4.20%	0.40%	4.20%
Financial equalisation between the Laender	1,471	-	334	411	2,708	1,619	172	1,576
as a % of total income	4.14%	-	1.76%	8.69%	13.52%	14.13%	1.17%	15.46%
VAT equalisation	-	-	-	-	-	-	-	-
as a % of total income	-	-	-	-	-	-	-	-
Total equalisation payments	1,892	533	546	560	3,940	2,370	350	2,234
as a % of total income	5.33%	0.57%	2.88%	11.84%	19.68%	20.69%	2.38%	21.91%
Adjusted expenses	**40,405**	**104,807**	**20,329**	**4,752**	**21,449**	**12,351**	**15,133**	**11,362**
Personnel expenditure	13,375	28,311	7,062	1,699	4,951	2,741	4,505	2,913
in % of total expenditure	33.10%	27.01%	34.74%	35.75%	23.08%	22.19%	29.77%	25.64%
Interest expenditure	604	1,384	373	287.3	75.7	326.8	325.3	288.3
in % of total expenditure	1.49%	1.32%	1.83%	6.05%	0.35%	2.65%	2.15%	2.54%
Grants to municipalities	11,630	27,445	5,588	911	5,890	3,034	4,697	2,690
in % of total expenditure	28.78%	26.19%	27.49%	19.17%	27.46%	24.57%	31.04%	23.68%
Investment expenditure	1,532	8,393	1,002	351	2,888	1,650	1,502	1,433
in % of total expenditure	3.79%	8.01%	4.93%	7.39%	13.46%	13.36%	9.93%	12.61%
Financial equalisation between the Laender	-	624	-	-	-	-	-	-
in % of total expenditure	-	0.60%	-	-	-	-	-	-
VAT equalisation	-	-	-	-	-	-	-	-
in % of total expenditure	-	-	-	-	-	-	-	-
Total equalisation payments	-	-	-	-	-	-	-	-
in % of total expenditure	-	-	-	-	-	-	-	-
Budget balance	**-4,911**	**-11,615**	**-1,346**	**-24**	**-1,424**	**-895**	**-427**	**-1,167**
Total debt	**64,949**	**178,499**	**30,853**	**14,514**	**5,053**	**21,221**	**31,976**	**15,650**

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

Appendix Overview by key economic indicators

Development of nominal GDP (EURbn)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	405.6	414.6	425.4	442.7	464.2	474.9	496.3	514.4	522.6	500.8	3
Bavaria	483.5	496.5	511.9	534.1	555.5	577.7	604.5	618.4	636.2	610.2	2
Berlin	108.1	109.8	112.9	118.5	125.0	133.2	140.5	149.4	156.8	154.6	6
Brandenburg	57.5	58.9	60.5	63.7	65.4	67.5	70.4	72.6	74.8	73.9	11
Bremen	**27.2**	**28.5**	**28.8**	**29.8**	**30.5**	**31.4**	**32.3**	**32.8**	**33.4**	**31.6**	16
Hamburg	94.7	97.0	101.1	103.4	108.4	110.5	116.2	118.5	123.6	118.1	9
Hesse	236.9	238.0	243.5	253.8	260.9	271.2	279.5	285.6	294.0	281.4	5
Mecklenburg-Western Pomerania	36.2	36.4	37.6	39.4	40.2	41.1	44.0	44.3	46.6	46.0	14
Lower Saxony	239.7	244.8	247.9	259.1	261.5	280.6	287.4	296.7	306.7	295.9	4
North Rhine-Westphalia	**577.1**	**582.7**	**594.4**	**617.5**	**637.5**	**653.4**	**677.7**	**701.1**	**717.5**	**697.1**	1
Rhineland-Palatinate	117.3	120.5	123.0	127.5	133.2	136.3	139.8	143.0	146.4	141.9	7
Saarland	31.8	32.0	31.7	33.3	34.1	34.3	35.3	35.7	35.4	33.6	15
Saxony	99.4	101.3	104.1	109.3	113.6	117.2	121.6	124.9	128.9	125.6	8
Saxony-Anhalt	52.0	54.1	55.0	56.3	57.5	59.0	60.8	62.0	64.1	62.7	12
Schleswig-Holstein	75.9	78.8	80.0	82.9	84.9	87.5	92.4	94.9	98.7	97.2	10
Thuringia	50.6	51.4	53.4	56.2	57.6	59.0	61.1	62.1	63.3	61.5	13
Federal government	2,693.6	2,745.3	2,811.3	2,927.4	3,030.1	3,134.7	3,259.9	3,356.4	3,449.1	3,332.2	

Development of nominal GDP in EUR per capita

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	38,584	39,228	40,011	41,308	42,665	43,391	45,215	46,383	47,235	45,115	4
Bavaria	38,854	39,659	40,617	42,080	43,248	44,689	46,544	47,158	48,222	46,494	2
Berlin	32,505	32,523	32,988	34,157	35,510	37,266	38,957	39,932	41,774	42,140	6
Brandenburg	23,426	24,048	24,717	25,934	26,332	26,923	28,006	28,625	29,474	29,316	13
Bremen	41,775	43,552	43,846	45,020	45,483	46,297	47,437	48,076	49,358	46,355	3
Hamburg	**55,095**	**55,936**	**57,918**	**58,675**	**60,625**	**61,138**	**63,745**	**64,585**	**66,732**	**63,952**	1
Hesse	39,529	39,550	40,272	41,643	42,241	43,703	44,801	45,618	46,831	44,754	5
Mecklenburg-Western Pomerania	**22,503**	**22,758**	**23,568**	**24,643**	**24,930**	**25,458**	**27,189**	**27,760**	28,957	28,612	15
Lower Saxony	30,836	31,472	31,818	33,099	32,993	35,274	36,034	37,244	38,410	37,016	8
North Rhine-Westphalia	32,894	33,195	33,824	35,008	35,686	36,460	37,645	38,747	39,640	38,843	7
Rhineland-Palatinate	29,404	30,196	30,797	31,790	32,861	33,551	34,355	35,168	35,419	34,663	9
Saarland	31,858	32,202	32,013	33,623	34,241	34,429	35,335	36,052	36,735	34,055	10
Saxony	24,519	25,018	25,736	26,959	27,817	28,674	29,618	30,499	31,458	30,838	12
Saxony-Anhalt	22,832	23,953	24,525	25,192	25,601	26,385	27,103	27,965	**28,953**	**28,547**	16
Schleswig-Holstein	27,096	28,066	28,412	29,273	29,706	30,352	31,859	32,682	33,667	33,481	11
Thuringia	23,205	23,665	24,713	26,056	26,554	27,434	28,287	29,041	29,937	28,844	14
Federal government	33,532	34,093	34,808	36,053	36,873	37,979	39,323	40,284	41,312	40,077	

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

Real GDP growth Y/Y in %

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	4.7	0.4	0.7	2.0	3.3	1.2	2.3	1.5	0.1	-5.5	11
Bavaria	5.9	1.1	1.2	2.2	2.2	1.7	2.8	1.4	0.5	-5.5	11
Berlin	3.6	0.0	0.0	2.3	3.3	3.2	3.1	3.1	3.0	-3.3	3
Brandenburg	0.8	0.7	0.7	3.0	1.2	1.2	1.4	1.4	0.8	-3.2	1
Bremen	2.4	2.7	-0.9	1.1	1.1	1.7	3.3	2.1	0.2	-7.0	16
Hamburg	0.7	0.4	3.0	0.2	1.7	1.5	2.4	1.7	2.2	-5.8	14
Hesse	2.9	-0.4	0.6	1.6	0.1	2.3	2.2	2.2	1.1	-5.6	13
Mecklenburg-Western Pomerania	1.9	-0.4	0.5	1.4	1.2	0.4	1.8	0.7	1.5	-3.2	1
Lower Saxony	4.4	0.6	-0.5	1.9	0.6	5.5	2.5	1.1	0.9	-4.9	10
North Rhine-Westphalia	2.7	0.0	0.3	1.7	1.1	1.6	1.7	0.9	0.2	-4.4	6
Rhineland-Palatinate	3.3	1.1	-0.2	2.0	2.5	0.8	2.5	1.7	-1.3	-4.5	8
Saarland	4.6	-1.3	-2.3	3.0	0.4	-1.2	1.2	-0.8	-0.6	-6.7	15
Saxony	3.3	0.6	0.1	3.0	2.7	2.1	1.4	1.2	0.5	-4.4	6
Saxony-Anhalt	-0.9	2.4	-0.7	0.7	1.6	0.9	0.8	0.9	0.2	-3.9	5
Schleswig-Holstein	2.5	3.1	-0.4	1.6	1.3	2.2	2.1	1.8	1.1	-3.4	4
Thuringia	4.3	-0.3	1.4	3.6	1.5	1.3	1.6	0.5	0.2	-4.6	9
Federal government	3.7	0.5	0.5	1.9	1.7	1.9	2.2	1.4	0.6	-4.9	

Unemployment in %

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	4.0	3.9	4.1	4.0	3.8	3.8	3.5	3.2	3.2	4.1	2
Bavaria	3.8	3.7	3.8	3.8	3.6	3.5	3.2	2.9	2.8	3.6	1
Berlin	13.3	12.3	11.7	11.1	10.7	9.8	9.0	8.1	7.8	9.7	15
Brandenburg	10.7	10.2	9.9	9.4	8.7	8.0	7.0	6.3	5.8	6.2	9
Bremen	11.6	11.2	11.1	10.9	10.9	10.5	10.2	9.8	9.9	11.2	16
Hamburg	7.8	7.5	7.4	7.6	7.4	7.1	6.8	6.3	6.1	7.6	12
Hesse	5.9	5.7	5.8	5.7	5.5	5.3	5.0	4.6	4.4	5.4	4
Mecklenburg-Western Pomerania	12.5	12.0	11.7	11.2	10.4	9.7	8.6	7.9	7.1	7.8	14
Lower Saxony	6.9	6.6	6.6	6.5	6.1	6.0	5.8	5.3	5.0	5.8	5
North Rhine-Westphalia	8.1	8.1	8.3	8.2	8.0	7.7	7.4	6.8	6.5	7.5	11
Rhineland-Palatinate	5.3	5.3	5.5	5.4	5.2	5.1	4.8	4.4	4.3	5.2	3
Saarland	6.8	6.7	7.3	7.2	7.2	7.2	6.7	6.1	6.2	7.2	10
Saxony	10.6	9.8	9.4	8.8	8.2	7.5	6.7	6.0	5.5	6.1	8
Saxony-Anhalt	11.6	11.5	11.2	10.7	10.2	9.6	8.4	7.7	7.1	7.7	13
Schleswig-Holstein	7.2	6.9	6.9	6.8	6.5	6.3	6.0	5.5	5.1	5.8	5
Thuringia	8.8	8.5	8.2	7.8	7.4	6.7	6.1	5.5	5.3	6.0	7
Federal government	7.1	6.8	6.9	6.7	6.4	6.1	5.7	5.2	5.0	5.9	

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

Appendix Overview by budget indicators

Debt level (EURbn)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	44.5	44.4	46.1	47.3	42.0	42.5	40.2	38.1	37.9	48.0	13
Bavaria	30.3	29.2	27.5	26.1	23.6	20.3	17.8	15.4	14.3	17.8	5
Berlin	62.5	61.9	61.3	60.6	59.4	59.4	58.9	57.6	59.2	59.7	14
Brandenburg	17.9	18.0	17.2	16.7	16.7	16.3	15.9	15.4	16.4	18.6	6
Bremen	18.4	19.3	19.8	19.7	21.3	22.1	22.0	22.8	29.8	39.3	11
Hamburg	21.2	20.9	23.2	23.2	23.2	23.2	22.4	25.7	25.3	35.3	10
Hesse	39.5	40.9	40.3	41.4	43.0	43.9	43.2	43.5	43.5	45.9	12
Mecklenburg-Western Pomerania	9.7	9.6	9.5	9.4	9.2	8.7	8.2	9.0	9.7	8.4	2
Lower Saxony	56.8	56.0	57.1	57.8	58.7	57.8	58.9	58.3	58.0	64.9	15
North Rhine-Westphalia	**130.0**	**133.8**	**137.5**	**140.1**	**139.7**	**140.9**	**143.0**	**139.4**	**146.5**	**178.5**	16
Rhineland-Palatinate	29.4	32.9	33.4	33.3	37.1	37.9	32.2	31.5	30.7	30.9	8
Saarland	11.6	13.3	13.8	14.0	14.1	14.2	14.1	13.8	14.0	14.5	3
Saxony	**9.5**	**8.6**	**7.9**	**6.9**	**5.8**	**8.5**	**7.8**	**7.2**	**6.3**	**5.1**	1
Saxony-Anhalt	20.7	20.6	20.4	20.5	20.1	20.4	21.0	19.9	21.4	21.2	7
Schleswig-Holstein	27.0	27.3	26.7	27.1	27.0	26.7	26.4	28.7	29.1	32.0	9
Thuringia	16.3	16.2	15.9	15.7	15.6	15.1	15.7	14.8	15.5	15.7	4

Debt per capita in EUR

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	4,210	4,180	4,337	4,414	3,862	3,879	3,674	3,444	3,418	4,323	3
Bavaria	2,420	2,319	2,182	2,057	1,836	**1,570**	**1,377**	**1,178**	**1,093**	1,359	2
Berlin	18,503	18,085	17,906	17,454	16,862	16,629	16,474	15,790	16,125	16,276	14
Brandenburg	7,317	7,333	7,028	6,802	6,719	6,533	6,382	6,145	6,496	7,376	7
Bremen	**28,030**	**29,290**	**30,189**	**29,830**	**31,744**	**32,561**	**32,420**	**33,421**	**43,780**	**57,686**	16
Hamburg	12,249	11,944	13,292	13,176	12,993	12,826	12,377	13,942	13,712	19,131	15
Hesse	6,561	6,760	6,669	6,800	6,955	7,064	6,954	6,939	6,912	7,297	5
Mecklenburg-Western Pomerania	6,040	6,001	5,938	5,860	5,735	5,386	5,117	5,572	6,036	5,251	4
Lower Saxony	7,298	7,190	7,330	7,385	7,405	7,280	7,415	7,307	7,258	8,125	9
North Rhine-Westphalia	7,403	7,613	7,823	7,942	7,819	7,877	7,992	7,774	8,160	9,946	11
Rhineland-Palatinate	7,372	8,246	8,360	8,294	9,157	9,317	7,909	7,701	7,505	7,536	8
Saarland	11,634	13,382	13,885	14,136	14,187	14,275	14,127	13,934	14,144	14,707	13
Saxony	**2,343**	**2,124**	**1,953**	**1,699**	**1,426**	2,074	1,911	1,772	1,557	**1,241**	1
Saxony-Anhalt	9,146	9,192	9,086	9,179	8,930	9,144	9,388	9,030	9,746	9,669	10
Schleswig-Holstein	9,616	9,693	9,489	9,575	9,428	9,261	9,168	9,894	10,016	11,012	12
Thuringia	7,516	7,485	7,346	7,279	7,170	6,983	7,268	6,908	7,269	7,336	6

NB: Lowest values in blue, highest values in orange
Source: Federal Ministry of Finance, NORD/LB Markets Strategy & Floor Research

Debt level as a % of GDP

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	10.98	10.78	10.96	10.79	9.12	8.91	8.16	7.43	7.24	9.58	3
Bavaria	**6.33**	**5.95**	**5.45**	**5.00**	**4.29**	**3.57**	**3.00**	**2.50**	**2.27**	**2.92**	1
Berlin	57.78	56.53	54.54	51.64	47.80	45.92	43.11	39.54	38.60	38.62	14
Brandenburg	31.04	30.50	28.52	27.01	25.57	23.79	23.03	21.47	22.04	25.16	8
Bremen	**65.99**	**66.31**	**67.46**	**65.30**	**67.48**	**68.51**	**65.37**	**69.52**	**88.70**	**124.45**	16
Hamburg	22.15	21.38	23.34	22.52	21.25	20.98	19.06	21.59	20.55	29.91	11
Hesse	16.79	17.28	16.62	16.54	16.31	16.29	15.48	15.21	14.76	16.30	4
Mecklenburg-Western Pomerania	26.54	26.17	25.41	24.36	23.19	20.94	19.26	20.07	20.84	18.35	5
Lower Saxony	24.10	23.29	23.15	22.79	22.70	21.90	20.46	19.62	18.90	21.95	7
North Rhine-Westphalia	22.10	22.42	22.68	22.42	21.64	21.04	20.68	20.06	20.59	25.61	10
Rhineland-Palatinate	24.55	26.90	26.88	26.07	28.12	27.17	22.28	21.90	21.19	21.74	6
Saarland	36.09	40.88	42.24	41.68	40.32	40.53	39.89	38.65	38.50	43.19	15
Saxony	9.56	8.47	7.55	6.34	5.17	7.15	6.41	5.81	4.95	4.02	2
Saxony-Anhalt	39.72	38.33	37.29	36.89	35.67	34.44	34.59	32.29	33.66	33.87	13
Schleswig-Holstein	35.24	34.26	32.87	32.26	31.48	29.91	28.30	30.27	29.75	32.89	12
Thuringia	32.07	31.32	30.18	28.90	27.39	24.77	25.34	23.79	24.28	25.43	9

Debt level/tax income

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	1.63x	1.50x	1.53x	1.49x	1.27x	1.17x	1.07x	0.94x	0.93x	1.28x	3
Bavaria	**0.90x**	**0.83x**	**0.73x**	**0.66x**	0.56x	**0.44x**	**0.38x**	**0.30x**	**0.28x**	0.40x	2
Berlin	5.77x	5.33x	5.14x	4.61x	4.36x	4.03x	3.82x	3.38x	3.38x	2.88x	10
Brandenburg	3.25x	3.10x	2.78x	2.72x	2.50x	2.26x	2.09x	1.89x	1.97x	2.27x	8
Bremen	**8.03x**	**8.42x**	**8.24x**	**7.70x**	**7.85x**	**7.25x**	**7.03x**	**6.82x**	**8.85x**	**10.22x**	16
Hamburg	2.44x	2.34x	2.56x	2.35x	2.29x	2.15x	1.93x	2.03x	1.95x	3.02x	12
Hesse	2.46x	2.49x	2.30x	2.24x	2.19x	1.99x	1.90x	1.89x	1.78x	2.15x	5
Mecklenburg-Western Pomerania	2.76x	2.52x	2.43x	2.23x	2.10x	1.92x	1.71x	1.78x	1.81x	1.56x	4
Lower Saxony	3.32x	2.96x	2.87x	2.87x	2.67x	2.43x	2.44x	2.27x	2.13x	2.46x	9
North Rhine-Westphalia	3.16x	3.08x	3.08x	3.02x	2.80x	2.62x	2.57x	2.35x	2.36x	2.92x	11
Rhineland-Palatinate	3.32x	3.39x	3.27x	3.15x	3.38x	3.16x	2.51x	2.47x	2.21x	2.26x	6
Saarland	5.05x	5.71x	5.60x	5.33x	5.15x	4.89x	4.65x	4.31x	4.25x	4.35x	15
Saxony	1.06x	0.89x	0.79x	0.67x	**0.53x**	0.73x	0.64x	0.57x	0.47x	**0.39x**	1
Saxony-Anhalt	4.00x	3.81x	3.65x	3.62x	3.31x	3.15x	3.16x	2.85x	2.94x	3.03x	13
Schleswig-Holstein	4.31x	4.03x	3.65x	3.78x	3.34x	3.05x	2.89x	3.03x	2.90x	3.27x	14
Thuringia	3.37x	3.16x	2.96x	2.84x	2.67x	2.42x	2.43x	2.18x	2.19x	2.27x	7

NB: Lowest values in blue, highest values in orange
Source: Federal Ministry of Finance, Federal Statistical Office, NORD/LB Markets Strategy & Floor Research

Tax income/interest expenditure

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	14.9x	17.7x	17.4x	20.1x	21.5x	24.7x	27.2x	29.1x	33.3x	32.2x	7
Bavaria	**31.3x**	**33.8x**	**39.6x**	**44.8x**	**50.5x**	**60.9x**	65.2x	**86.3x**	98.5x	92.9x	2
Berlin	4.9x	5.5x	6.2x	7.5x	8.5x	10.7x	11.8x	13.8x	15.1x	21.4x	14
Brandenburg	9.1x	10.1x	13.3x	14.4x	18.4x	21.7x	25.5x	29.1x	30.8x	41.1x	5
Bremen	**3.6x**	**3.5x**	**3.8x**	**4.6x**	**4.2x**	**5.1x**	**5.1x**	**5.7x**	**5.6x**	**5.3x**	16
Hamburg	9.9x	10.8x	11.9x	14.4x	17.0x	19.5x	23.3x	28.1x	29.1x	29.1x	9
Hesse	11.8x	11.7x	13.8x	15.6x	16.7x	21.6x	22.7x	23.9x	27.0x	24.3x	11
Mecklenburg-Western Pomerania	9.6x	10.4x	11.4x	13.3x	15.5x	18.1x	21.4x	23.6x	27.1x	28.1x	10
Lower Saxony	8.9x	10.0x	12.0x	13.2x	15.8x	18.8x	20.9x	24.2x	27.6x	43.8x	4
North Rhine-Westphalia	9.5x	10.5x	11.3x	13.0x	15.0x	19.2x	21.0x	24.2x	31.0x	44.1x	3
Rhineland-Palatinate	8.7x	10.0x	10.4x	11.2x	13.4x	14.6x	17.1x	22.1x	29.4x	36.6x	6
Saarland	4.9x	4.6x	5.1x	5.6x	6.4x	7.4x	8.0x	8.9x	10.4x	11.6x	15
Saxony	26.6x	29.4x	33.2x	40.0x	50.0x	60.8x	**69.9x**	79.7x	**108.2x**	**171.4x**	1
Saxony-Anhalt	6.7x	7.6x	8.8x	9.5x	11.0x	12.8x	14.6x	19.1x	20.3x	21.5x	13
Schleswig-Holstein	6.7x	7.5x	8.5x	9.3x	12.4x	14.8x	18.4x	20.5x	24.3x	30.0x	8
Thuringia	7.6x	8.3x	9.3x	10.1x	11.6x	14.3x	16.7x	20.5x	22.7x	24.0x	12

Adjusted income (EUR m)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	37,419	38,977	40,478	42,952	44,054	47,670	49,888	53,335	54,999	55,139	3
Bavaria	44,633	45,244	48,869	51,786	54,048	56,989	59,917	63,792	65,949	62,468	2
Berlin	20,794	22,569	22,746	23,799	24,713	26,283	27,701	29,340	29,812	31,116	6
Brandenburg	10,056	10,074	10,829	10,537	10,764	11,198	11,612	12,279	12,334	12,572	11
Bremen	3,953	4,136	4,368	4,658	4,839	5,277	5,491	5,734	5,961	6,288	15
Hamburg	11,105	11,188	11,219	12,297	12,851	13,757	14,541	15,641	16,200	16,211	9
Hesse	20,372	20,478	22,004	23,011	24,512	27,083	28,043	28,826	29,936	31,937	5
Mecklenburg-Western Pomerania	7,273	7,284	7,335	7,394	7,737	7,863	8,063	8,301	8,583	9,284	14
Lower Saxony	23,692	25,730	26,352	27,140	28,893	30,131	30,753	33,420	34,188	35,494	4
North Rhine-Westphalia	**52,837**	**54,574**	**56,770**	**59,881**	**63,688**	**68,432**	**71,801**	**75,534**	**78,369**	**93,192**	1
Rhineland-Palatinate	12,367	13,349	13,819	14,578	15,284	16,343	17,287	17,289	18,470	18,984	8
Saarland	**3,323**	**3,273**	**3,425**	**3,590**	**3,745**	**3,968**	**4,265**	**4,381**	**4,438**	**4,728**	16
Saxony	18,177	17,318	17,156	17,318	18,041	17,640	18,268	20,268	19,385	20,025	7
Saxony-Anhalt	9,879	9,921	10,118	9,986	10,795	10,811	10,888	11,033	11,313	11,455	12
Schleswig-Holstein	8,561	9,129	9,760	9,621	10,649	11,544	12,223	12,493	13,256	14,706	10
Thuringia	9,061	9,107	9,297	9,143	9,344	9,772	10,087	10,399	10,473	10,195	13

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

Adjusted income in EUR per capita

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	3,559	3,688	3,807	4,008	4,049	4,353	4,555	4,818	4,955	6,896	4
Bavaria	3,587	3,614	3,877	4,080	4,208	4,407	4,634	4,878	5,025	4,760	14
Berlin	6,252	**6,687**	**6,647**	6,859	7,021	7,352	7,749	8,050	8,124	8,496	3
Brandenburg	4,099	4,112	4,421	4,287	4,332	4,489	4,655	4,888	4,891	4,979	10
Bremen	6,061	6,316	6,644	**7,037**	**7,206**	**7,774**	**8,090**	8,395	8,751	**9,253**	1
Hamburg	**6,463**	6,451	6,424	6,976	7,190	7,599	8,032	**8,495**	**8,770**	8,786	2
Hesse	3,399	3,404	3,640	3,776	3,969	4,359	4,514	4,601	4,761	5,078	8
Mecklenburg-Western Pomerania	4,526	4,551	4,594	4,623	4,799	4,882	5,006	5,157	5,337	5,769	5
Lower Saxony	3,048	3,308	3,383	3,468	**3,519**	**3,792**	**3,870**	**4,187**	**4,277**	**4,439**	16
North Rhine-Westphalia	**3,012**	**3,109**	**3,231**	**3,395**	3,565	3,825	4,013	4,212	4,367	5,197	7
Rhineland-Palatinate	3,100	3,345	3,460	3,634	3,771	4,019	4,251	4,232	4,511	4,638	15
Saarland	3,330	3,292	3,457	3,630	3,761	3,982	4,279	4,423	4,497	4,801	12
Saxony	4,484	4,276	4,240	4,271	4,417	4,322	4,475	4,970	4,761	4,928	11
Saxony-Anhalt	4,339	4,391	4,508	4,467	4,808	4,835	4,869	4,996	5,155	5,239	6
Schleswig-Holstein	3,055	3,253	3,466	3,399	3,725	4,006	4,241	4,313	4,565	5,060	9
Thuringia	4,153	4,196	4,303	4,239	4,304	4,528	4,674	4,852	4,909	4,796	13

Adjusted expenditure (EUR m)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking*
Baden-Wuerttemberg	37,824	39,047	40,688	42,254	44,050	47,483	48,173	50,312	51,608	58,430	-
Bavaria	44,350	43,879	46,759	50,178	51,966	55,178	56,938	59,579	64,680	68,602	-
Berlin	21,910	21,892	22,266	22,961	24,507	26,147	26,691	26,918	28,222	32,889	-
Brandenburg	9,933	10,066	10,119	10,210	10,527	10,778	11,114	11,619	13,350	13,313	-
Bremen	4,554	4,675	4,852	5,097	5,100	5,271	5,508	5,668	5,867	6,598	-
Hamburg	11,502	11,753	11,815	11,873	12,628	13,470	13,532	16,771	15,508	16,868	-
Hesse	21,716	22,242	22,512	23,677	24,738	26,609	27,827	27,750	28,389	32,775	-
Mecklenburg-Western Pomerania	7,028	7,124	7,017	7,131	7,402	7,546	7,387	8,064	8,557	12,382	-
Lower Saxony	26,035	26,551	26,733	27,346	28,049	29,155	29,917	30,631	32,391	40,405	-
North Rhine-Westphalia	**56,005**	**58,408**	**59,220**	**61,784**	**65,635**	**68,398**	**73,025**	**74,466**	**76,648**	**104,807**	-
Rhineland-Palatinate	14,417	14,492	14,364	15,192	15,852	16,019	16,430	16,422	17,211	20,329	-
Saarland	**3,725**	**3,964**	**3,883**	**3,891**	**3,986**	**4,119**	**4,227**	**4,236**	**4,321**	**4,752**	-
Saxony	16,144	16,022	16,334	16,655	18,193	17,782	17,585	19,017	19,383	21,449	-
Saxony-Anhalt	10,053	9,868	9,869	9,916	10,369	10,348	10,704	10,718	11,269	12,351	-
Schleswig-Holstein	9,251	9,299	9,645	9,865	10,563	11,160	12,099	14,409	13,019	15,133	-
Thuringia	9,324	8,813	8,956	8,957	9,106	9,181	9,171	9,776	10,025	11,362	-

NB: Lowest values in orange, highest values in blue. Reversed for adjusted expenditure figures.
* 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 Markets Strategy & Floor Research

Adjusted expenditure in EUR per capita

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking*
Baden-Wuerttemberg	3,598	3,694	3,827	3,943	4,049	4,336	4,399	4,545	4,649	7,307	-
Bavaria	3,564	3,505	3,710	3,954	4,046	4,267	4,403	4,556	4,928	5,227	-
Berlin	6,587	6,486	6,507	6,617	6,962	7,314	7,466	7,385	7,691	8,980	-
Brandenburg	4,049	4,109	4,131	4,154	4,237	4,320	4,455	4,626	5,294	5,273	-
Bremen	**6,982**	**7,140**	**7,380**	**7,701**	**7,594**	**7,766**	**8,115**	8,299	**8,613**	**9,710**	-
Hamburg	6,694	6,777	6,765	6,735	7,065	7,440	7,474	**9,109**	8,395	9,141	-
Hesse	3,623	3,697	3,724	3,885	4,005	4,283	4,479	4,429	4,515	5,212	-
Mecklenburg-Western Pomerania	4,374	4,452	4,395	4,459	4,591	4,685	4,586	5,010	5,321	7,694	-
Lower Saxony	3,349	3,413	3,431	3,494	**3,539**	**3,669**	**3,765**	**3,837**	**4,052**	5,053	-
North Rhine-Westphalia	**3,192**	3,327	**3,370**	3,503	3,674	3,823	4,082	4,153	4,271	5,845	-
Rhineland-Palatinate	3,613	3,632	3,596	3,787	3,911	3,940	4,041	4,020	4,204	4,967	-
Saarland	3,733	3,986	3,919	3,934	4,003	4,133	4,291	4,227	4,378	**4,825**	-
Saxony	3,982	3,956	4,037	4,107	4,454	4,356	4,308	4,663	4,760	5,279	-
Saxony-Anhalt	4,416	4,368	4,397	4,436	4,618	4,627	4,786	4,854	4,854	5,648	-
Schleswig-Holstein	3,301	**3,313**	3,425	**3,485**	3,695	3,872	4,198	4,974	4,484	5,207	-
Thuringia	4,274	4,060	4,145	4,153	4,195	4,254	4,249	4,561	4,699	5,346	-

Budget balance (EUR m)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	-405	-70	-210	697	4	187	1,715	3,023	**3,391**	-3,291	13
Bavaria	283	**1,366**	**2,110**	**1,608**	**2,081**	**1,811**	**2,979**	**4,213**	1,269	-6,135	15
Berlin	-1,116	677	480	838	206	137	1,009	2,422	1,590	-1,773	11
Brandenburg	123	8	710	327	237	420	498	660	**-1,016**	-741	5
Bremen	-601	-539	-484	-440	-266	5	-17	66	94	-310	2
Hamburg	-398	-565	-596	424	223	287	1,009	-1,130	692	-657	4
Hesse	-1,344	-1,764	-508	-666	-226	474	217	1,076	1,547	-838	6
Mecklenburg-Western Pomerania	245	160	318	263	335	317	676	237	26	-3,098	12
Lower Saxony	-2,343	-821	-381	-205	-156	976	836	2,789	1,798	-4,911	14
North Rhine-Westphalia	**-3,168**	**-3,834**	**-2,450**	**-1,903**	**-1,947**	34	**-1,225**	1,069	1,722	**-11,615**	16
Rhineland-Palatinate	-2,049	-1,143	-546	-614	-568	324	857	867	1,258	-1,346	9
Saarland	-402	-690	-458	-301	-241	-151	-12	145	117	**-24**	1
Saxony	**2,033**	1,295	822	663	-152	**-142**	683	1,251	**2**	-1,425	10
Saxony-Anhalt	-175	53	249	70	426	464	185	315	44	-896	7
Schleswig-Holstein	-690	-170	115	-244	87	384	125	**-1,917**	237	-427	3
Thuringia	-263	294	341	186	238	592	917	624	448	-1,167	8

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

* 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 Markets Strategy & Floor Research

Budget balance per capita in EUR

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	-39	-6	-20	65	3	22	160	273	305	-296	5
Bavaria	23	109	167	127	162	140	230	322	97	-467	11
Berlin	-336	201	140	**241**	59	38	283	**664**	**433**	-484	12
Brandenburg	50	3	**290**	133	95	168	200	163	**-403**	-293	4
Bremen	**-921**	**-823**	**-736**	**-664**	**-389**	8	-25	96	138	-456	10
Hamburg	-231	-319	-341	**241**	126	158	**558**	-614	374	-356	8
Hesse	-224	-293	-84	-109	-38	76	35	172	246	-133	2
Mecklenburg-Western Pomerania	152	100	199	164	**208**	197	420	147	16	**-1,925**	16
Lower Saxony	-301	-106	-49	-26	-20	123	105	349	225	-614	14
North Rhine-Westphalia	-181	-218	-139	-108	-109	2	**-68**	60	96	-648	15
Rhineland-Palatinate	-514	-287	-137	-153	-140	78	211	212	307	-329	6
Saarland	-403	-694	-462	-304	-242	**-151**	-11	147	119	**-24**	1
Saxony	**501**	**320**	203	163	-34	-30	173	307	0	-351	7
Saxony-Anhalt	-77	23	111	31	190	207	83	142	20	-410	9
Schleswig-Holstein	-246	-61	41	-86	30	133	43	**-662**	82	-147	3
Thuringia	-120	136	158	86	109	**274**	425	291	210	-549	13

Budget balance as a % of GDP

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Ranking
Baden-Wuerttemberg	-0.10	-0.02	-0.05	0.16	0.00	0.04	0.35	0.59	0.65	0.60	4
Bavaria	0.06	0.28	0.42	0.31	0.37	0.31	0.50	0.68	0.20	0.20	10
Berlin	-1.03	0.62	0.43	**0.71**	0.16	0.10	0.72	**1.66**	**1.04**	**1.00**	1
Brandenburg	0.21	0.01	**1.18**	0.53	0.36	0.62	0.71	0.92	**-1.37**	**-1.40**	16
Bremen	**-2.16**	-1.86	**-1.64**	**-1.45**	**-0.85**	0.02	-0.05	0.20	0.28	0.30	8
Hamburg	-0.41	-0.58	-0.60	0.41	0.21	0.26	0.87	-0.95	0.56	0.60	4
Hesse	-0.57	-0.75	-0.21	-0.27	-0.09	0.17	0.08	0.38	0.53	0.50	7
Mecklenburg-Western Pomerania	0.67	0.44	0.85	0.68	**0.83**	0.77	**1.54**	0.53	0.06	0.10	13
Lower Saxony	-0.99	-0.34	-0.15	-0.08	-0.06	0.35	0.29	0.94	0.59	0.60	4
North Rhine-Westphalia	-0.54	-0.64	-0.40	-0.30	-0.31	0.01	**-0.18**	0.15	0.24	0.20	10
Rhineland-Palatinate	-1.71	-0.93	-0.44	-0.48	-0.43	0.24	0.61	0.60	0.87	0.90	2
Saarland	-1.25	**-2.13**	-1.41	-0.90	-0.71	**-0.44**	-0.03	0.41	0.32	0.30	8
Saxony	**2.05**	**1.28**	0.79	0.61	-0.13	-0.12	0.56	1.01	0.00	0.00	15
Saxony-Anhalt	-0.34	0.10	0.46	0.13	0.74	0.79	0.30	0.51	0.07	0.10	13
Schleswig-Holstein	-0.90	-0.21	0.14	-0.29	0.10	0.44	0.14	**-2.02**	0.24	0.20	10
Thuringia	-0.52	0.57	0.65	0.34	0.41	**1.00**	1.50	1.00	0.70	0.70	3

NB: Highest values in blue, lowest values in orange.
Source: Federal Ministry of Finance, Federal Statistical Office, NORD/LB Markets Strategy & Floor Research

Appendix Age structure of the Laender populations

Share of different age groups in the population in %

	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%	8.2%	11.0%	25.7%	28.9%	20.4%
Bavaria	5.8%	7.9%	10.6%	25.9%	29.2%	20.5%
Berlin	6.3%	7.9%	9.5%	31.2%	25.9%	19.2%
Brandenburg	5.2%	8.0%	7.7%	22.2%	31.9%	24.9%
Bremen	5.9%	7.8%	11.3%	26.7%	27.2%	21.1%
Hamburg	6.4%	7.9%	10.4%	30.8%	26.3%	18.2%
Hesse	5.8%	8.2%	10.6%	25.4%	29.2%	20.8%
Mecklenburg-Western Pomerania	5.1%	7.7%	8.1%	22.8%	31.0%	25.3%
Lower Saxony	5.6%	8.1%	10.8%	23.5%	29.8%	22.1%
North Rhine-Westphalia	5.8%	8.1%	10.8%	24.6%	29.5%	21.2%
Rhineland-Palatinate	5.6%	7.9%	10.4%	23.9%	30.2%	22.0%
Saarland	5.0%	7.2%	9.7%	23.1%	30.8%	24.1%
Saxony	5.5%	7.9%	8.3%	23.8%	28.1%	26.5%
Saxony-Anhalt	4.9%	7.4%	8.0%	21.9%	30.8%	27.0%
Schleswig-Holstein	5.3%	8.0%	10.4%	22.8%	30.2%	23.2%
Thuringia	5.1%	7.6%	8.2%	22.5%	30.4%	26.2%
Federal government	5.7%	8.0%	10.3%	25.0%	29.3%	21.8%

Source: Federal Statistical Office, NORD/LB Markets Strategy & Floor Research

Appendix Landtag election calendar

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

Baden-Wuerttemberg	Spring 2026	5 years
Bavaria	Autumn 2023	5 years
Berlin	26 September 2021	5 years
Brandenburg	Autumn 2024	5 years
Bremen	Spring 2023	4 years
Hamburg	Spring 2025	5 years
Hesse	Autumn 2023	5 years
Mecklenburg-Western Pomerania	26 September 2021	5 years
Lower Saxony	Autumn 2022	5 years
North Rhine-Westphalia	15 May 2022	5 years
Rhineland-Palatinate	Spring 2026	5 years
Saarland	27 March 2022	5 years
Saxony	Autumn 2024	5 years
Saxony-Anhalt	Summer 2026	5 years
Schleswig-Holstein	08 May 2022	5 years
Thuringia	Autumn 2024	5 years

Source: German Federal Council (Bundesrat), NORD/LB Markets Strategy & 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 Laender budgets for financial year 2020. It should be noted that these figures do not necessarily reflect the actual budgets. Rather, the cash statistics relate to payments actually made in 2020. In our opinion, this does not appropriately illustrate the movements in funds connected to system of financial equalisation among the Laender (LFA) for the 2020 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 supplementary federal grants (BEZ) are similar in this regard, which is why we use the provisional annual financial statements for 2020 of the Federal Ministry of Finance to illustrate the figures relating to the federal financial equalisation system. The historical data for the Laender budgets is based on the final results of the development of the 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 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 sub-sovereign 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 sub-sovereign, 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 by our NORD/LB Sector Strategy team (formerly known as Regional Research).

Special thanks to Max Henß and Felix Fentzahn

We would like to thank Max Henß and Felix Fentzahn for their assistance in compiling this report. Their commitment and ideas have resulted in a highly differentiated presentation of the market for bonds issued by German Laender in a slightly adapted format.

Appendix
Contacts at NORD/LB

Markets Strategy & Floor Research

Melanie Kiene
Banks
+49 511 361-4108
+49 172 169 2633
melanie.kiene@nordlb.de

Dr Norman Rudschuck
SSA/Public Issuers
+49 511 361-6627
+49 152 090 24094
norman.rudschuck@nordlb.de

Dr Frederik Kunze
Covered Bonds
+49 511 361-5380
+49 172 354 8977
frederik.kunze@nordlb.de

Sales

Institutional Sales	+49 511 9818-9440
Sales Sparkassen & Regionalbanken	+49 511 9818-9400
Sales MM/FX	+49 511 9818-9460
Sales Europe	+352 452211-515

Trading

Covereds/SSA	+49 511 9818-8040
Financials	+49 511 9818-9490
Governments	+49 511 9818-9660
Länder/Regionen	+49 511 9818-9550
Frequent Issuers	+49 511 9818-9640

Origination & Syndicate

Origination FI	+49 511 9818-6600
Origination Corporates	+49 511 361-2911

Sales Wholesale Customers

Firmenkunden	+49 511 361-4003
Asset Finance	+49 511 361-8150

Treasury

Collat. Management/Repos	+49 511 9818-9200
Liquidity Management	+49 511 9818-9620 +49 511 9818-9650

NORD/LB and its affiliated companies may participate in transactions involving the financial instruments described in the present information or their underlying basis values for their own account or for the account of third parties, may issue other financial instruments with the same or similar features as those of the financial instruments presented in this information and may conduct hedging transactions to hedge positions. These measures may affect the price of the financial instruments described in the present information.

If the financial instruments presented in this information are derivatives, they may, depending on their structure, have an initial negative market value from the customer's perspective at the time the transaction is concluded. NORD/LB further reserves the right to transfer its economic risk from a derivative concluded with it to a third party on the market by means of a mirror-image counter transaction.

More detailed information on any commission payments which may be included in the selling price can be found in the "Customer Information on Securities Business" brochure, which is available to download at www.nordlb.de.

The information contained in the present report replaces all previous versions of corresponding information and refers exclusively to the time of preparation of the information. Future versions of this information will replace this version. NORD/LB is under no obligation to update and/or regularly review the data contained in such information. No guarantee can therefore be given that the information is up-to-date and continues to be correct.

By making use of this information, the Recipient shall accept the terms and conditions outlined above.
NORD/LB is a member of the protection scheme of Deutsche Sparkassen-Finanzgruppe. Further information for the Recipient is indicated in clause 28 of the General Terms and Conditions of NORD/LB or at www.dsgv.de/sicherungssystem.

Additional information for Recipients in Australia:
NORD/LB IS NOT A BANK OR DEPOSIT TAKING INSTITUTION AUTHORISED UNDER THE 1959 BANKING ACT OF AUSTRALIA. IT IS NOT SUPERVISED BY THE AUSTRALIAN PRUDENTIAL REGULATION AUTHORITY.
NORD/LB does not provide personal advice with this information and does not take into account the objectives, financial situation or needs of the Recipient (other than for the purpose of combating money laundering).

Additional information for Recipients in Austria:
None of the information contained herein constitutes a solicitation or offer by NORD/LB or its affiliates to buy or sell any securities, futures, options or other financial instruments or to participate in any other strategy. Only the published prospectus pursuant to the Austrian Capital Market Act should be the basis for any investment decision of the Recipient.
For regulatory reasons, products mentioned herein may not be on offer in Austria and therefore not available to investors in Austria. Therefore, NORD/LB may not be able to sell or issue these products, nor shall it accept any request to sell or issue these products to investors located in Austria or to intermediaries acting on behalf of any such investors.

Additional information for Recipients in Belgium:
Evaluations of individual financial instruments on the basis of past performance are not necessarily indicative of future results. It should be noted that the reported figures relate to past years.

Additional information for Recipients in Canada:
This report has been prepared solely for information purposes in connection with the products it describes and should not, under any circumstances, be construed as a public offer or any other offer (direct or indirect) to buy or sell securities in any province or territory of Canada. No financial market authority or similar regulatory body in Canada has made any assessment of these securities or reviewed this information and any statement to the contrary constitutes an offence. Potential selling restrictions may be included in the prospectus or other documentation relating to the relevant product.

Additional information for Recipients in Cyprus:
This information constitutes an analysis within the meaning of the section on definitions of the Cyprus Directive D1444-2007-01 (No. 426/07). Furthermore, this information is provided for information and promotional purposes only and does not constitute an individual invitation or offer to sell, buy or subscribe to any investment product**.**

Additional information for Recipients in the Czech Republic:
There is no guarantee that the invested amount will be recouped. Past returns are no guarantee of future results. The value of the investments may rise or fall. The information contained herein is provided on a non-binding basis only and the author does not guarantee the accuracy of the content.

Additional information for Recipients in Denmark
This Information does not constitute a prospectus under Danish securities law and consequently is not required to be, nor has been filed with or approved by the Danish Financial Supervisory Authority, as this Information either (i) has not been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market within the meaning of the Danish Securities Trading Act or any executive orders issued pursuant thereto, or (ii) has been prepared in the context of a public offering of securities in Denmark or the admission of securities to trading on a regulated market in reliance on one or more of the exemptions from the requirement to prepare and publish a prospectus in the Danish Securities Trading Act or any executive orders issued pursuant thereto.

Additional information for Recipients in Estonia
It is advisable to closely examine all the terms and conditions of the services provided by NORD/LB. If necessary, Recipients of this information should consult an expert.

Additional information for Recipients in Finland
The financial products described herein may not be offered or sold, directly or indirectly, to any resident of the Republic of Finland or in the Republic of Finland, except pursuant to applicable Finnish laws and regulations. Specifically, in the case of shares, such shares may not be offered or sold, directly or indirectly, to the public in the Republic of Finland as defined in the Finnish Securities Market Act (746/2012, as amended). The value of investments may go up or down. There is no guarantee of recouping the amount invested. Past performance is no guarantee of future results.

Additional information for Recipients in France
NORD/LB is partially regulated by the "Autorité des Marchés Financiers" for the conduct of French business. Details concerning the extent of our regulation by the respective authorities are available from us on request.
The present information does not constitute an analysis within the meaning of Article 24 (1) Directive 2006/73/EC, Article L.544-1 and R.621-30-1 of the French Monetary and Financial Code, but does represent a marketing communication and does qualify as a recommendation pursuant to Directive 2003/6/EC and Directive 2003/125/EC.

Additional information for Recipients in Greece
The information contained herein gives the view of the author at the time of publication and may not be used by its Recipient without first having confirmed that it remains accurate and up to date at the time of its use.
Past performance, simulations or forecasts are therefore not a reliable indicator of future results. Investment funds have no guaranteed performance and past returns do not guarantee future performance.

Additional information for Recipients in Indonesia
This report contains generic information and has not been tailored to the circumstances of any individual or specific Recipient. This information is part of NORD/LB's marketing material.

Additional information for Recipients in the Republic of Ireland
This information has not been prepared in accordance with Directive (EU) 2017/1129 (as amended) on prospectuses (the "Prospectus Directive") or any measures made under the Prospectus Directive or the laws of any Member State or EEA treaty adherent state that implement the Prospectus Directive or such measures and therefore may not contain all the information required for a document prepared in accordance with the Prospectus Directive or the laws.

Additional information for Recipients in Japan:
This information is provided to you for information purposes only and does not constitute an offer or solicitation of an offer to enter into securities transactions or commodity futures transactions. Although the actual data and information contained herein has been obtained from sources which we believe to be reliable and trustworthy, we are unable to vouch for the accuracy and completeness of this actual data and information.

Additional information for Recipients in South Korea
This information has been provided to you free of charge for information purposes only. The information contained herein is factual and does not reflect any opinion or judgement of NORD/LB. The information contained herein should not be construed as an offer, marketing, solicitation to submit an offer or investment advice with respect to the financial investment products described herein.

Additional information for Recipients in Luxembourg
Under no circumstances shall the present information constitute an offer to purchase or issue or the solicitation to submit an offer to buy or subscribe for financial instruments and financial services in Luxembourg.

Additional information for Recipients in New Zealand:
NORD/LB is not a bank registered in New Zealand. This information is for general information only. It does not take into account the Recipient's financial situation or objectives and is not a personalised financial advisory service under the 2008 Financial Advisers Act.

Additional information for Recipients in the Netherlands:
The value of your investment may fluctuate. Past performance is no guarantee for the future.

Additional information for Recipients in Poland
This information does not constitute a recommendation within the meaning of the Regulation of the Polish Minister of Finance Regarding Information Constituting Recommendations Concerning Financial Instruments or Issuers thereof dated 19 October 2005.

Additional information for Recipients in Portugal
This information is intended only for institutional clients and may not be (i) used by, (ii) copied by any means or (iii) distributed to any other kind of investor, in particular not to retail clients. The present information does not constitute or form part of an offer to buy or sell any of the securities covered by the report, nor should it be understood as a request to buy or sell securities where that practice may be deemed unlawful. The information contained herein is based on information obtained from sources which we believe to be reliable, but is not guaranteed as to accuracy or completeness. Unless otherwise stated, all views contained herein relate solely to our research and analysis and are subject to change without notice.

Additional information for Recipients in Sweden
This information does not constitute (or form part of) a prospectus, offering memorandum, any other offer or solicitation to acquire, sell, subscribe for or otherwise trade in shares, subscription rights or other securities, nor shall it or any part of it form the basis of or be relied on in connection with any contract or commitment whatsoever. The present information has not been approved by any regulatory authority. Any offer of securities will only be made pursuant to an applicable prospectus exemption under the EC Prospectus Directive (Directive (EU) 2017/1129), and no offer of securities is being directed to any person or investor in any jurisdiction where such action is wholly or partially subject to legal restrictions or where such action would require additional prospectuses, other offer documentation, registrations or other actions.

Additional information for Recipients in Switzerland
This information has not been approved by the Federal Banking Commission (merged into the Swiss Financial Market Supervisory Authority (FINMA) on 1 January 2009). NORD/LB will comply with the Directives of the Swiss Bankers Association on the Independence of Financial Research (as amended). The present information does not constitute an issuing prospectus pursuant to article 652a or article 1156 of the Swiss Code of Obligations. The information is published solely for the purpose of information on the products mentioned herein. The products do not qualify as units of a collective investment scheme pursuant to the Federal Act on Collective Investment Schemes (CISA) and are therefore not subject to supervision by FINMA.

Additional information for Recipients in Singapore:
This information is directed only at accredited investors or institutional investors under the Securities and Futures Act in Singapore. This information is intended for general distribution only. It does not constitute investment advice and does not take into account the specific investment objectives, financial situation or particular needs of the Recipient. It is recommended that advice be obtained from a financial adviser regarding the suitability of the investment product in light of the specific investment objectives, financial situation and special needs of the Recipient before agreeing to purchase the investment product.

Additional information for Recipients in the Republic of China (Taiwan)
This information is provided for general information only and does not take into account the individual interests or requirements, financial status and investment objectives of any specific investor. Nothing herein should be construed as a recommendation or advice for you to subscribe to a particular investment product. You should not rely solely on the information provided herein when making your investment decisions. When considering any investment, you should endeavour to make your own independent assessment and determination on whether the investment is suitable for your needs and seek your own professional financial and legal advice.
NORD/LB has taken all reasonable care in producing this report and trusts that the information is reliable and suitable for your situation at the date of publication or delivery. However, no guarantee of accuracy or completeness is given. To the extent that NORD/LB has exercised the due care of a good administrator, we accept no responsibility for any errors, omissions, or misstatements in the information given. NORD/LB does not guarantee any investment results and does not guarantee that the strategies employed will improve investment performance or achieve your investment objectives.

Information for Recipients in the United Kingdom:
NORD/LB is subject to partial regulation by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA). Details of the scope of regulation by the FCA and the PRA are available from NORD/LB on request. The present information is "financial promotion". Recipients in the United Kingdom should contact the London office of NORD/LB, Investment Banking Department, telephone: 0044 / 2079725400, in the event of any queries. An investment in financial instruments referred to herein may expose the investor to a significant risk of losing all the capital invested.

Time of going to press: Thursday, 23 September 2021 (11:58h)