Land of North Rhine-Westphalia

Rating Report

Rating rationale and Outlook

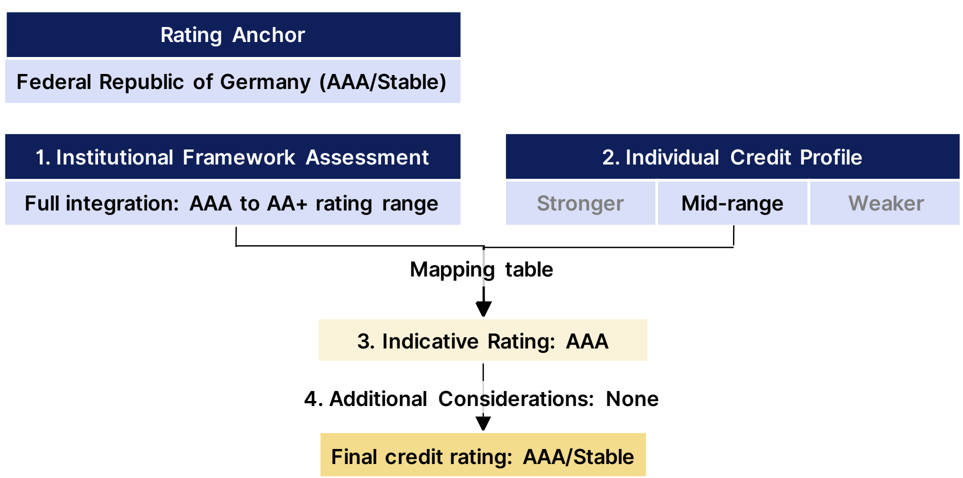
The Land of North Rhine-Westphalia's (NRW) AAA rating is driven by:

A highly integrated Institutional Framework characterised by a strong revenue equalisation system and the federal solidarity principle, which results in a close alignment of the Länder's creditworthiness with the German federal government's AAA/Stable ratings.

A 'mid-range' Individual Credit Profile underpinned by: i) an outstanding market access and funding flexibility as a European benchmark sub-sovereign issuer, leading to low funding costs; ii) very strong financial, liquidity and debt management with a favourable debt profile; iii) forward-looking management of pension provisions via its well-equipped pension fund; and iv) sound economic fundamentals as Germany's largest regional economy, although exposure to energy-intensive industries entails transition costs.

Credit challenges relate to: i) a relatively high debt burden; ii) moderate budgetary performance and flexibility, and limited budgetary reserves, mitigated by strong budgetary management and a commitment to the debt brake; and iii) some exposure to contingent liability risks, including via its municipalities' legacy short-term debt burden ('Kassenkredite').

Figure 1: NRW's rating drivers



Note: For further details, please see Scope's Sub-sovereigns Rating Methodology.
Source: Scope Ratings

Foreign currency

Long-term issuer rating/Outlook

AAA/Stable

Senior unsecured debt

AAA/Stable

Short-term issuer rating/Outlook

S-1+/Stable

Local currency

Long-term issuer rating/Outlook

AAA/Stable

Senior unsecured debt

AAA/Stable

Short-term issuer rating/Outlook

S-1+/Stable

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Credit strengths and challenges

Credit strengths	Credit challenges
• Integrated institutional framework • Outstanding capital market access and funding flexibility as benchmark sub-sovereign issuer, low funding costs • Very strong liquidity and debt management • Forward-looking management of pension provisions via well-equipped pension fund • Largest subnational economy, robust economic fundamentals	• Relatively high debt levels • Moderate budgetary performance and flexibility, limited budgetary reserves, mitigated by strong budgetary management • Some exposure to contingent liabilities, structurally indebted municipalities

Outlook and rating triggers

The Stable Outlook reflects our view that risks to the ratings are balanced.

Positive rating-change drivers	Negative rating-change drivers
• N/A	• Downgrade of Germany's sovereign rating • Changes in the institutional framework, resulting in notably weaker support • Deterioration of individual credit profile

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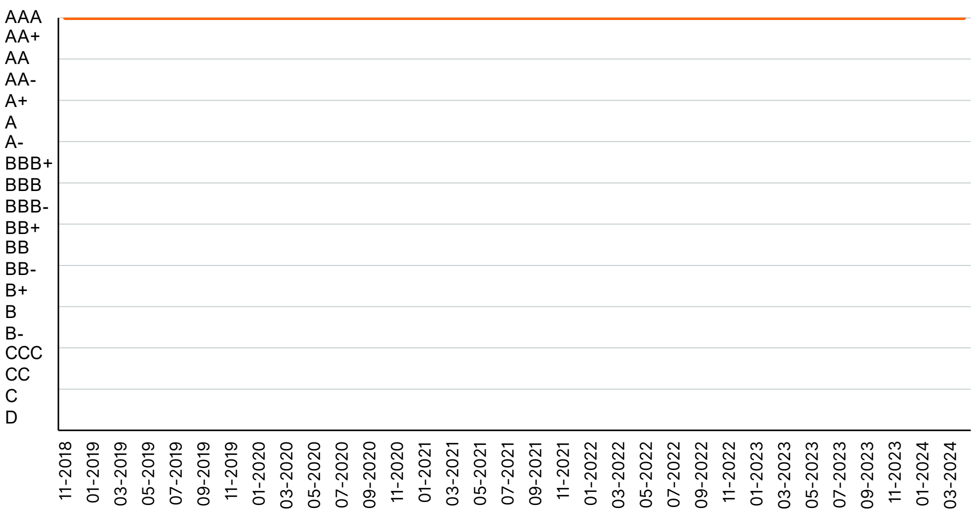


Source: Scope Ratings

[1] Foreign-currency long-term issuer rating. Positive/Negative Outlooks are treated with a +/-0.33-notch adjustment. Credit Watch positive/negative with a +/-0.67-notch adjustment

Institutional framework

German Länder[2] benefit from a mature, highly predictable, and integrated institutional framework. The key elements are: i) a strongly interconnected revenue equalisation mechanism enshrined in the constitution; ii) strict fiscal rules and monitoring, iii) wide-ranging participation and veto-rights of the federal states in the national legislation; iv) equal entitlement of federal states regarding negotiations on federal reforms; and v) a solidarity principle that ensures extraordinary system support during budgetary emergencies.

Federal framework results in close rating alignment…

The federal system under which the Länder operate is the most integrated among the European sub-sovereign systems we cover. This is driven by our assessments of 'full integration' for extraordinary support and bailout practices, ordinary budgetary support and fiscal equalisation, fiscal rules and oversight, and revenue and spending powers. We assess funding practices as 'medium integration' (see Appendix I for an overview).

The framework assessment for the German Länder results in an **indicative downward rating adjustment of up to one notch** from Germany's AAA/Stable rating.

…, with distance of up to one notch from the sovereign rating.

Extraordinary support and bail-out practices

Our framework assessment acknowledges a record of extraordinary financial support. Länder have been granted exceptional financial support from the federal government in five instances: Bremen (1992, 2006), Saarland (1992, 2005) and Berlin (2002). The court approved claims on the grounds of the solidarity principle, or *Bundestreueprinzip*, under which the Länder and the federal government are required to support each other in the event of a budgetary emergency. A claim by Berlin was denied in 2006, with the court arguing that the city-state was not in an extreme budgetary situation. However, the judges noted that federal emergency support would still be possible as a last resort if the budget and/or debt situation were later assessed as extreme. We consider the *Bundestreueprinzip* to be an implicit bail-out rule, as it requires the provision of federal support in times of budgetary stress.

Strong solidarity principle ensures extraordinary support

More recently, the federal government confirmed its role as a primary countercyclical shock absorber during the Covid-19 and energy crises in 2020-2023. Over these years, the federal government financed most anti-crisis measures and direct grants to the Länder to mitigate the impact on their finances. This led to federal budget deficits of an average 3.3% of GDP over 2020-2022, compared with an average deficit of the Länder of 0.14% over the same period.

Federal government as shock absorber during recent crises

Ordinary budgetary support and fiscal equalisation

The federal financial equalisation system strongly aligns different fiscal capacities across the Länder. A reformed equalisation system took effect in 2020, with horizontal distribution occurring via deductions and top-ups to collected VAT, as well as vertical transfers from the federal government. The net effect of the system change is positive for all Länder as contributions from the federal government are greater under the reformed system.

Comprehensive fiscal equalisation system

NRW is a beneficiary with total transfers received of around EUR 1.7bn in 2023, or 1.7% of operating revenue. The Land's relative financial strength, or 'Finanzkraftmesszahl', lies close to the Länder average (100%) with 98% in 2023.

NRW was a marginal beneficiary of the system in 2023

Funding practices

Länder governments have broad autonomy in their funding choices. There is no use of sovereign on-lending, and Länder can decide autonomously on their borrowing programmes within the framework of the debt brake. Short-term liquidity is available via access to shared liquidity among the Länder and the federal government, essentially eliminating liquidity risk. Basel III risk-weights for

Autonomous borrowing, access to shared liquidity

[2] We use the term 'Land' (or collectively 'Länder') and 'state' interchangeably to refer to German federal states.

Länder debt securities are aligned at 0% with the central government. The Länder have a history of joint bond issuance, having issued such instruments on 64 occasions, although not all of the 16 Länder participated. NRW has not participated in any of the past issues.

Fiscal rules and oversight

Debt brake anchors borrowing; stability council conducts oversight

Since 2020, the Länder have to comply with debt brakes under which they cannot run structural financing deficits unless, for example, hit by a severe economic downturn or a natural disaster.[3] The federal debt brake caps the structural annual deficit of the central government at 0.35% of GDP. The German federal parliament used the emergency clause of the debt brake in 2020-2023 in response to the Covid-19 and energy crises. NRW invoked the safeguard clause of its debt brake for 2020-22 to implement credit authorisations of up to EUR 25bn to mitigate the impact of Covid-19 (special fund 'NRW-Rettungsschirm'). For the fiscal year 2023, NRW similarly invoked its debt brake's safeguard clause to enact credit authorisations of up to EUR 5bn to mitigate the budgetary impact of the energy shock and repercussions of the war in Ukraine (special fund 'NRW-Krisenbewältigung').

Compliance with the debt brake and Länder finances are monitored by the Stability Council. The Council was established in 2010 to monitor restructuring programmes and compliance with budgetary targets and comprises the finance ministers of each Land and the federal ministers of finance and economic affairs. If the Council determines that a Land is threatened with a budgetary emergency, it agrees on a restructuring programme with the affected authority.

2023 constitutional court ruling had implications for the Länder…

In late 2023, Germany's constitutional court ruled the Second Supplementary Budget Act 2021 of the federal government as unconstitutional. Crucially, the ruling effectively limits the previously commonly used budgetary practice of using emergency credit authorisations to create budgetary reserves for spending in future years, thus also impacting budgetary practices of the Länder.

…but no impact on NRW's financial planning.

The ruling did not affect NRW's budgetary planning, since both the Land's special funds set up since 2020 are closed since YE 2023. The Land had already reacted to requirements set out by its Court of Audit (LRH) in late 2022 and had separated credit authorisations and funds borrowed between its two special funds. Funds borrowed under the Covid-19 related special fund, but not expensed, will be used to redeem around EUR 4.6bn in debts in 2023-24.

Revenue and spending powers

Shared tax authority with the federal government

The Länder and the federal government share a taxation authority and jointly decide on rates and revenue distribution for high-revenue common taxes (income and VAT). The latest reform of federal financial relations took effect in 2020 and resulted in a higher share of VAT being distributed among the Länder. The VAT distribution fully compensates for the variation in taxing powers, replacing the previous process of horizontal payments between the Länder. Alongside shared taxes, the federal government and the Länder have separate taxation authorities for lower revenue-generating taxes.

Federal reforms strengthen political coherence

Under the reform agreed in 2017, the Länder have assigned limited executive and legislative rights to the central government in certain policy areas, including physical and digital infrastructure and the higher education system, in return for higher payments from the equalisation system. In line with earlier reforms (*Föderalismusreformen II*), we observe that the higher the share of common national legislation (*konkurrierende Gesetzgebung*), the more integrated the system becomes.

Political coherence and multi-level governance

The German federal system is very predictable and supportive. Major reforms are discussed and agreed upon well in advance and in consultation with the Länder, which can directly influence national policymaking via the upper house of parliament.

[3] The debt brake is a legal framework that prohibits structural deficits for the Länder from 2020 onwards; article 109 (3) of the Basic Law stipulates that the Länder may incur deficits in a case of, for example, a recession or a natural disaster provided they pass respective legislation at the state level.

Individual credit profile (ICP)

We assess NRW's ICP as 'mid-range' among German Länder. This places the Land's indicative rating at AAA given our mapping table. For details, see Appendix II and Appendix III.

'Mid-range' ICP, leading to indicative AAA rating

NRW's individual credit strengths are: i) an outstanding market access and funding flexibility as a European benchmark sub-sovereign issuer, leading to low funding costs; ii) very strong financial, liquidity and debt management with a favourable debt profile; iii) forward-looking management of pension provisions via its well-equipped pension fund; and iv) sound economic fundamentals as Germany's largest regional economy, although some exposure to energy-intensive industries entails transition costs.

Credit challenges relate to: i) a relatively high debt burden; ii) moderate budgetary performance and flexibility, and limited budgetary reserves, but mitigants are strong budgetary management and a commitment to the debt brake; and iii) some exposure to contingent liability risks, including via its municipalities' legacy short-term debt burden ('Kassenkredite').

Debt and liquidity

Debt burden and trajectory

NRW's debt-to-operating revenue ratio is higher than the Länder average, but associated risks are mitigated by a robust debt profile, very high funding flexibility and excellent debt affordability.

NRW's debt is relatively high, but debt affordability is excellent

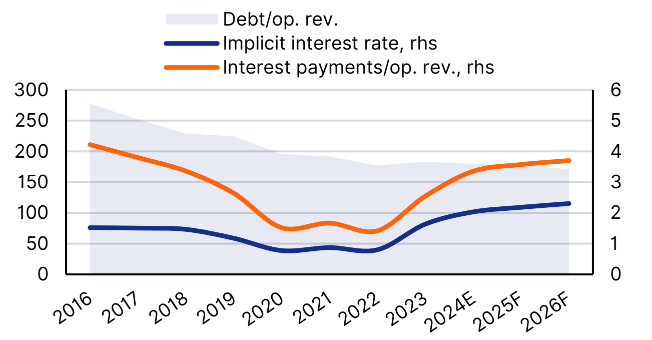
The Land's debt of around EUR 177bn amounted to 183% of operating revenue at YE 2023 (**Figure 3**), above the Länder average of 144% in 2022. This includes core budget debt of EUR 163bn and extra-budgetary debt of around EUR 14bn. NRW's debt as a share of operating revenue has been falling substantially from 278% in 2016 to 183% in 2023. While debt in nominal terms declined to EUR 170bn by YE 2019, it rose to EUR 177bn until YE 2023, due to net borrowing under the Land's two special funds (**Figure 4**), under which it borrowed an aggregate EUR 22.5bn between 2020-23 (it also redeemed EUR 1.6bn in 2023 already). At the same time, operating revenue stood 28% above its 2019 level in 2023, supporting a drop in the debt-to-operating revenue ratio.

NRW's debt-to-operating revenue ratio has fallen, despite crisis-related borrowings in 2020-23…

We expect the debt-to-operating-revenue ratio to fall to around 170% by YE 2026, due to expected net debt redemptions in 2024-2026 of around EUR 4bn and a simultaneous rise in operating revenue to around EUR 100bn. This is driven by the Land's commitment to the debt brake with no net borrowing and debt redemptions in line with financial planning of EUR 3bn in 2024, representing leftover funds borrowed, but not expensed, under the Covid-19 special fund, and EUR 430m annually from 2025 in line with mandatory debt redemption rules under the state's debt brake.

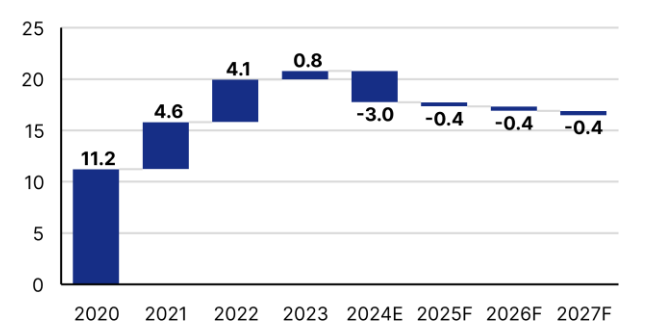
…and is projected to decline further.

Figure 3: Debt and interest burden, %



Sources: NRW, Destatis, Scope Ratings

Figure 4: Net borrowing under special funds*, EUR bn



* Covid-19 special fund ('NRW-Rettungsschirm') and 2023 special fund ('NRW-Krisenbewältigung'). Sources: NRW, Scope Ratings

Debt profile and affordability

NRW's debt profile and affordability are excellent

Risks associated with NRW's relatively high debt are significantly mitigated by strong debt management, resulting in a favourable debt profile, and low funding costs.

Annual debt service (redemptions plus interest payments) averaged around EUR 17bn in the past five years, amounting to around 18% of operating revenue. In the next years, redemptions are smooth and range between EUR 9bn and 14bn per year (**Figure 5**).

Debt stock with limited interest-rate risks…

The Land's debt profile limits interest-rate and foreign-exchange risks and increases predictability for budgetary planning. Exposure to interest rate risk is limited as most of the Land's debt is at fixed rates, with 84% at the end of March 2024. The Land uses interest-rate derivatives to steer and hedge interest-rate risks. Additionally, any unhedged variable rate interest costs are hedged to an extent via variable-rate interest revenues, as seen by interest income of EUR 464m in 2023, up from an average EUR 26m between 2018-22.

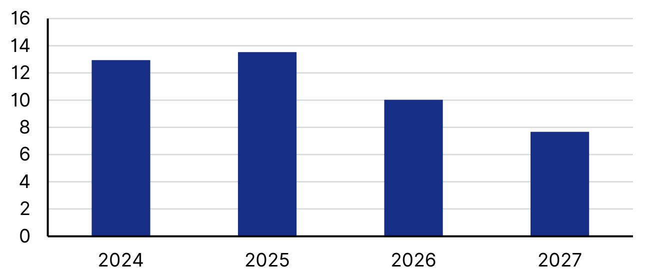
…very long average maturity and no unhedged exchange-rate risks.

Long average maturities and no exposure to unhedged exchange rate risk further strengthen NRW's debt profile. The average maturity stood at 19.9 years, which is the longest among peers. 50% of outstanding debt comes due in the next ten years, with the other 50% due between 2034 and 2122. Only around 8% of debt comes due within a year or less (**Figure 6**). A stand-out feature of NRW's issuer profile are its 100-year bonds, which it first issued in 2019. To diversify its funding mix, the Land issues in several currencies other than euros (around 94% of debt stock at YE 2023), including US dollars (2.4%) and British pounds (1.9%). The Land hedges any foreign-exchange risk.

Excellent funding costs and low, although rising, interest costs

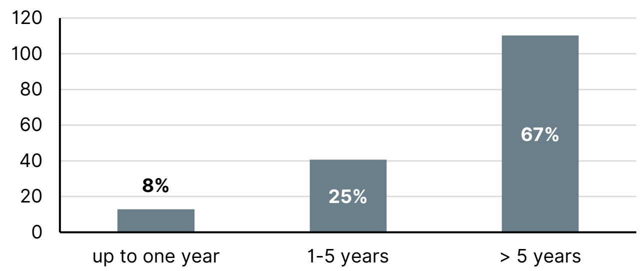
Finally, we deem debt affordability to be exceptionally strong, although interest costs have risen in line with higher prevailing monetary policy rates by the ECB. Interest payments were on a declining trend between 2016 and 2022, and interest costs relative to operating revenue and NRW's implicit interest rate are low in a peer comparison, at 2.5% and 1.7% in 2023, respectively.

Figure 5: Annual debt redemptions, EUR bn



Sources: NRW, Scope Ratings

Figure 6: Debt maturity profile; EUR bn, % of total



Sources: NRW, Scope Ratings

Contingent liabilities

Some exposure to contingent liabilities…

NRW is exposed to some contingent liability risks, although we deem the overall impact on its individual credit profile to be low. Main contingent liabilities stem from: i) the former state bank's wind-down units Erste Abwicklungsanstalt (EAA, NRW holds 48.2%) and Portigon AG (100%); ii) outstanding guarantees, mostly for self-supporting entities such as NRW.Bank; iii) pension provisions, which are partly funded by a well-equipped pension fund; and iv) municipalities' legacy short-term debt ('Kassenkredite'), with the Land exploring debt relief.

… arising from EAA and Portigon AG.

First, contingency risks arise from EAA and Portigon AG, both entities created in relation to the wind-down of the former WestLB. Remaining risks for NRW are overall moderate at this stage and sufficiently provisioned for.

EAA was set up to wind-down asset positions of WestLB, with around 96% of assets wound-down by YE 2023. Remaining risks stemming from EAA and other contingent liabilities assumed by NRW in connection with the financial market crisis are assessed as limited and sufficiently provisioned for via special funds totalling around EUR 400m.

Portigon AG is the legal successor of WestLB and was set up to reduce WestLB's remaining balance sheet and number of employees, close foreign subsidiaries and return banking licenses. While the wind-down process is progressing, with Portigon AG's balance sheet standing at around EUR 1.5bn at YE 2023, NRW provided EUR 160m in fresh capital in 2021, due to unforeseen risks amounting to around EUR 1bn in 'Cum-Ex' interest and tax claims. Additionally, a credit facility of EUR 192m was extended until YE 2028, which can be converted (partially) into equity under certain conditions.

Limited risks from shareholdings…

Another major entity among the Land's 57 direct shareholdings is its wholly-owned development bank NRW.BANK. NRW guarantees NRW.BANK's debt and provides additional liability support mechanisms. Due to NRW.BANK's strong capital and liquidity position and asset quality, and low-risk business profile, risks to NRW are limited. In 2023, NRW.BANK added EUR 150m to a new investment fund ('Förderfonds') within its *§340g HGB reserves* to strengthen its development banking product range. Other important shareholdings include Köln/Bonn airport (31%), Duisburg port (66.7%), Messe Düsseldorf GmbH (20%) and Koelnmesse GmbH (20%), and several hospitals. Overall, we assess risks stemming from the Land's shareholding as low.

…and guarantees.

Contingent liabilities in form of guarantees stood at EUR 10.5bn at YE 2023, or 11% of operating revenue. These are mostly towards financial institutions and economic policy.

EUR 14.7bn pension fund partially covers pension liabilities

Additionally, and in line with other Länder, NRW faces unfunded pension provisions related to its civil servants. To partially cover these, the Land's pension fund ('Pensionsfonds des Landes Nordrhein-Westfalen') held assets worth EUR 14.7bn at YE 2023, invested roughly equally in stocks and fixed income. From 2024, contributions to the fund cease and an annual amount limited to the realised return of the portfolio can be withdrawn to ease the pension burden during years of high projected pension payments, which are expected to reach their maximum in 2028. The return measure stood at 2.6% at YE 2022 and a first withdrawal of EUR 343m is planned in 2024, or around 2.3% of the fund's assets. The fund's forward-looking management will ensure the assets do not fall below their 2022-level of EUR 13.1bn. The fund adheres to sustainability criteria, for example stocks are invested according to the STOXX ESG Länder Eurozone PAB (Paris-Aligned Benchmark) and STOXX ESG Länder Global Ex-Eurozone PAB.

High legacy municipal short-term debt could lead to debt relief, with federal support

Finally, some contingent liability risk arises from NRW's municipal sector. Municipalities in NRW hold high legacy short-term borrowings ('Kassenkredite' above a certain limit) of around EUR 20bn in 2022. NRW is exploring debt relief for highly-indebted municipalities together with the federal government, which would shift half of the borrowings onto the Land's balance sheet and the other half onto the balance sheet of the federal government. To support its municipalities and ease administrative burden, as well as support a reduction in fresh short-term borrowings, the Land has amended rules of municipal budgetary management ('3. NKFWG NRW').

Liquidity position and funding flexibility

NRW's liquidity and funding positions are excellent

NRW's liquidity management and holdings are very strong. Its capital market access and funding flexibility are assessed as the strongest among peers and constitute a key credit strength.

Ample liquidity, ensured access to liquidity

We view NRW's liquidity management as conservative and prudent due to comprehensive inter-year cash planning and the availability of numerous sources of liquidity, as well as sizeable available cash buffers. We expect liquidity holdings to decline somewhat, as they are drawn down to redeem debt associated with its Covid-19 special fund in 2024-25. Cash flows are prone to seasonal variability driven by the tax calendar. Additional access to liquidity to bridge intraday needs, if required, is available through credit facilities from financial institutions. An additional source of liquidity is provided by commercial cash transactions between German Länder, which lend excess liquidity to each other. In combination with excellent market access, the risk of liquidity shortages is negligible.

NRW's standing as the largest sub-sovereign issuer in Europe and its benchmark issuer status afford it with excellent funding flexibility and conditions, a key credit strength. In 2023, the Land issued EUR 14.1bn in new debt. The Land's issuance programme for 2024 amounts to EUR 10.1bn. Higher issuance volumes, a more liquid curve, higher issuance sizes and bigger investor tickets lead to lower aggregate funding costs via-a-vis other Länder. NRW's average weighted coupon on fixed rate debt is 1.84%.

NRW's benchmark issuer status is a key credit strength

Further, NRW is a pioneer with respect to ESG capital market issuance. In 2015, it was the first among German Länder to issue an ESG bond and has since regularly issued sustainability bonds, having issued its tenth issue with a maturity of ten years and a volume of EUR 2bn in 2023. With over EUR 20bn in sustainability bonds outstanding, NRW is the largest seller of ESG bonds among German Länder and among the largest in the European SSA capital debt markets. We generally view ESG-labelled bond issuance as credit positive, as it increases the capital market presence and visibility as an issuer and also widens the Land's investor base.

Pioneering role in ESG debt issuance

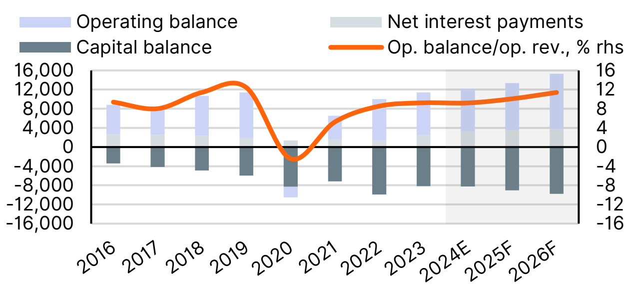
Budget

Budgetary performance and outlook

NRW displayed robust budgetary performance between 2016 and 2019, with operating margins of an average of 10% of operating revenues (**Figure 7**), in line with other Länder given an accommodative monetary and economic backdrop and consolidation efforts before the implementation of the debt brake at state level in 2020.

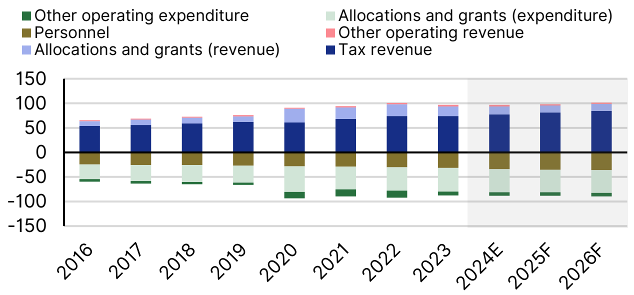
Track record of solid budgetary performance

Figure 7: Budgetary performance, EUR m (lhs); % (rhs)



Sources: NRW, Destatis, Scope Ratings

Figure 8: Components of operating balance, EUR bn



Sources: NRW, Destatis, Scope Ratings

From 2020, the Covid-19 shock heavily impacted budgetary planning and fiscal outcomes. To finance any Covid-19 related measures, NRW created the special fund 'NRW Rettungsschirm' with credit authorisations of up to EUR 25bn under the state's debt brake's emergency safeguard clause. Overall, about EUR 20bn of credit authorisations were used. The fund is closed since 2023, and any funds borrowed but not expensed are used for debt redemptions and interest payments.

Covid-19 crisis led to a substantial deficit in 2020

NRW's operating balance, including Covid-19 budgetary effects, turned to a deficit of EUR 2.2bn (2.4% of operating revenue) in 2020. This was mostly driven by an increase in operating expense of over 40% YoY, driven mostly by transfer expenditure, which was not fully offset by crisis-related transfers from the federal government. In addition to increased spending, tax revenues declined moderately by around 2%. The deficit before debt movement amounted to EUR 11.9bn in 2020. The deficit was mainly financed by net borrowing (EUR 11.4bn in 2020).

Budgetary performance recovered in 2021-22. A rebound in operating revenue was largely driven by higher tax revenue, growing an average 10% YoY. Any outperformance vis-à-vis budgeted levels in 2021/22 was used to lower net borrowing requirements under the Land's Covid-19 special fund. The operating balance turned to a surplus of EUR 5bn in 2021 (5.2% of operating revenue) and EUR 8.6bn in 2022 (8.5%). The balance after capital accounts remained negative at EUR 3.8bn (3.9%

Operating performance recovered in 2021/22...

of total revenue) in 2021 and EUR 2.7bn (2.6%) in 2022, and the Land's net borrowing totalled EUR 8.7bn under its Covid-19 special fund for both fiscal years.

Net borrowing in 2023 limited to energy special fund, no borrowing in core budget

In 2023, the budgetary outcome slightly outperformed budgeted levels, by EUR 94m. For the year, the Land had also created a special fund dedicated to the energy crisis with credit authorisations of up to EUR 5bn. Operating revenues declined by 4.2%, driven by broadly stable tax revenues (although around EUR 390m lower than budgeted), in contrast to healthy growth rates during 2021-22 due to subdued economic performance and some revenue-reducing federal policies, and lower transfer revenue. Operating expenditure decreased by 5% compared to 2022. Overall, the operating surplus improved to 9.2% of operating revenue and the deficit after capital accounts improved to around 1.7% of total revenues. In terms of net borrowing, the Land redeemed EUR 1.6bn in Covid-19 related borrowings, while net borrowing amounted to EUR 2.3bn within the 2023 special fund. NRW also withdrew nearly all funds in its budgetary reserve ('Allgemeine Rücklage') of around EUR 1bn.

2024-26 with spending pressures, average deficits of 2.4%, commitment to debt brake

For 2024-27, NRW is returning to budgetary normalcy, without resorting to special funds as in the previous four years, as laid out in its financial planning. At the same time, operating spending pressures will persist, predominantly on personnel spending. Together with a moderate rise in tax revenue, operating margins should remain robust at around 10% of operating revenue. However, gradually rising interest costs and high planned capital expenditure should weigh on the Land's final budgetary balance, which we expect at around -2.4% of total revenue on average. Given that the Land's budgetary reserves were nearly exhausted at YE 2023, balancing future budgets will be challenging, as seen by budgeted but unidentified lower expenditure ('Globale Minderausgaben') and higher revenue ('Globale Mehreinnahmen') of a total EUR 2.9bn, or 3% of operating revenue. Overall, the Land's commitment to its debt brake and corresponding budgetary management should limit any net borrowing as outlined in latest financial planning.

Revenue flexibility

Limited revenue flexibility

As for all German Länder, NRW's revenue flexibility is generally limited, as a large share of operating revenue stems from shared taxes. In line with constitutional arrangements, the Länder receive shared taxes, largely revenues from personal income taxes, VAT and corporate taxes. These revenues are initially collected by regional tax offices but are later redistributed at a national level in accordance with revenue-sharing agreements and additional transfer mechanisms.

Expenditure flexibility

Limited expenditure flexibility, spending pressures over forecast horizon

In line with other Länder, expenditure flexibility is also generally limited. A large share of NRW's expenditure is relatively rigid, including on personnel (36% of operating expenditure in 2023), and transfers (55%), including to municipalities. Given inflationary trends, the Land's expenditure will remain high. In 2023, and together with 14 Länder, NRW reached an agreement with its employees for pay rises over 2024 and 2025, which were also applied to its civil servants. Additional expected expenditure of EUR 1.8bn in 2024 and EUR 3.0bn in 2025 were already budgeted for in its financial planning for 2023-27. Finally, the Land's capital expenditure ratio stands at around 10% of total expenditure, broadly in line with peers. Given high investment needs, including for NRW's industrial transition, we see limited leeway to adjust capital expenditure, which is planned to increase by around 5% annually on average between 2024-26.

Economy

Wealth levels and economic resilience

NRW has Germany's largest regional economy

NRW's sound economic profile is characterised by its position as the country's largest regional economy and wealth levels slightly below the national average. In 2023, the Land's GDP made up 20.4% of national output. GDP per capita stood at 94.8% of national average in 2023 (**Figure 8**). This is less than one percentage point below pre-pandemic levels as its regional economy has developed largely in line with the national average since 2020, also due to the considerable weight of NRW in national aggregate statistics. However, NRW's output contraction in 2023 was more pronounced at 1% than the 0.3% recorded in Germany, highlighting structural features of NRW's economy.

Broadly diversified economic structure, some exposure to energy-intensive industry

NRW's economic structure is highly diversified and the sectoral contribution of services to overall gross value added has grown to over 70%, but NRW also remains relatively more reliant on energy-intensive industry, including basic chemicals, basic metals and steel-making. In addition, the region 'Rheinisches Revier' remains an important hub for lignite extraction until the planned phaseout by 2030. The importance of energy-intensive industrial production poses transition challenges and left the regional economy more exposed to high and volatile energy prices since 2022. This also partly necessitated the Land's 2023 budgetary special fund, with budgeted measures of around EUR 400m for businesses and to increase energy resilience.

Economic sustainability

NRW plans to become first carbon-neutral industrial hub in Europe by 2045

While NRW's energy and sectoral mix are relatively more exposed to transition costs, the state is addressing these challenges, with support from the federal government, highlighting the country's solidarity principle. A core element of the Land's economic and energy policy is to become Europe's first carbon-neutral industrial hub by 2045. Core elements of the strategy are increased investment into renewable energy and hydrogen production, including to facilitate green steelmaking. Finally, the state's exit from coal was brought forward to 2030, from 2038, with significant federal transfers of EUR 14.8bn supporting the affected region's transition.

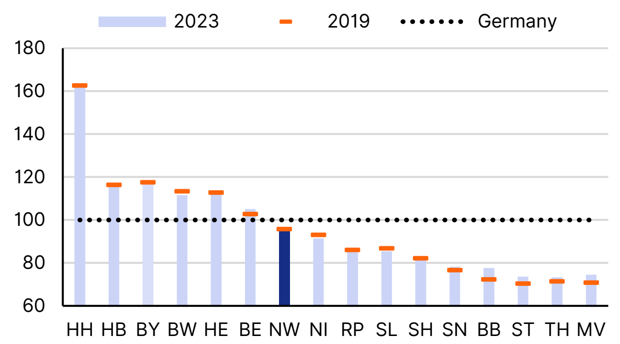
The labour market remains robust

Second, the labour market remains robust. While the unemployment rate lies slightly above the national average in 2023 (**Figure 10**), the growth in employed persons is in line with the national average. Overall, NRW's economic outlook and growth potential is assessed as broadly in line with the German average, also given NRW's importance in terms of economic output and population.

Key risks for regional economy are further disruptions in energy markets, skilled labour supply

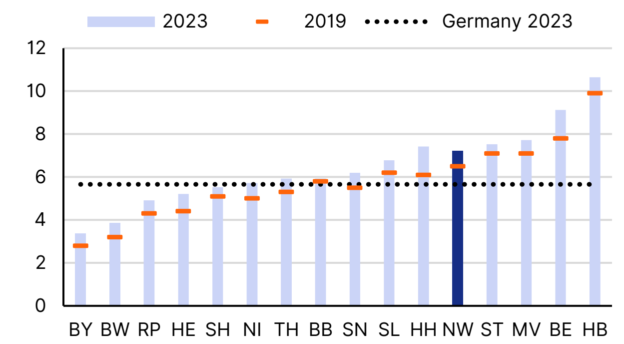
Key challenges relate to further disruptions in energy markets in the near term, interrupting the industry's nascent recovery, and energy supply security and cost competitiveness in the medium-term as the state's green and energy transition progresses. Second, a shrinking working age population, in line with peers, is set to intensify the shortage of skilled workers and limit the state's growth potential.

Figure 9: GDP per capita, % of national average



Sources: Statistische Ämter des Bundes und der Länder, Scope Ratings

Figure 10: Unemployment rate, %



Sources: Destatis, Scope Ratings

Governance

Governance and financial management

CDU-led coalition since 2022

After latest elections in May 2022, the CDU formed a coalition with the Greens as junior partner, with Hendrik Wüst (CDU) as minister president. We expect policy continuity in the coming years.

NRW is committed to the debt brake, limiting new net borrowing. We view this stance as overall credible, although challenges remain given spending pressures and high investment needs.

Committed to the debt brake

We deem financial planning and reporting, as well as debt and liquidity management as comprehensive and effective, in line with the high governance standards of the German Länder. Finally, we view the Land's efforts related to developing its budgetary management and reporting ('EPOS.NRW project') as positive.

Environmental and social considerations

Environmental factors and resilience

Federal framework supports NRW's climate transition

Regarding exposure to transition and physical risks, we see NRW as broadly in line with the nationwide average, also given NRW's size. The state is somewhat more exposed to transition risks, which is however mitigated by the federal institutional framework and significant federal transfers in support of NRW's transition. This stems from the fact that the state's economic structure is relatively more reliant on energy-intensive industry and faces costs related to the phase-out of coal until 2030. A full exit from electricity production from coal will significantly reduce carbon emissions and support the state's emissions reduction path. The central government is supporting the region's coal exit via significant grants in support of the economic transition.

Physical climate risks are broadly in line with the nationwide average. The supportiveness of the federal framework was also on display when the Ahrtal experienced flooding in 2021, with a EUR 30bn recovery fund set up by the federal government and Länder to share the financial burden. Another physical climate risk relates to droughts and low water-levels of the Rhein river, which runs through NRW and is an important transportation channel, especially for heavy industrial goods. Low water levels experienced in recent years slowed down goods transport and led to rising prices.

NRW is addressing challenges, ambitious climate goals in line with federal government

The Land is addressing these challenges and is striving to become the first carbon neutral industrial region in Europe. To promote climate protection and to adapt to the effects of climate change, the government has passed a climate law in 2021, which was the most ambitious among the German states up until that point. In 2023, the Land published its first climate protection act, with 68 concrete measures to enable the state's climate goals. The key commitment is to become carbon neutral until 2045, which is in line with the current nationwide goal.

Finally, the Land's administration aims to be carbon neutral by 2030, with its 542 administrative units and other institutions and around 172,000 persons in employment for the state.

Social factors and resilience

An ageing population is a key risk, similar to other Länder

A key risk related to social factors across Germany is the ageing population and shortage of skilled workers. NRW's demographic profile is assessed as in line with nationwide trends. Population changes via-a-vis peers are crucial for financial equalisation and other financial flows.

Significant costs relate to refugees

Further, the integration of refugees, especially from Ukraine in the recent past, is a key challenge. Associated spending needs weighted on the budget since the start of the war and are expected to put an additional strain on the budget at least throughout 2024. At the same time, immigration supports working age population growth and can support growth if integration is successful.

Education, security, and healthcare are important spending areas. These are also focus areas of the current government and reflected in NRW's financial planning for the coming years until 2027.

Sustainability bonds enhance reporting

Finally, proceeds from the Land's sustainability bonds contribute to several social and environmental projects. The latest bond was linked to over 50 such projects in the 2023 budget with a focus on education, research, and renewable energy investments.

Appendix I. Institutional Framework Assessment

To assess the institutional framework, we apply a Qualitative Scorecard (QS1) centred around 6 components. We assess each analytical component on a five-point scale ranging from a score of 0 for 'low' integration to 100 for 'full' integration. The institutional framework score, ranging from 0 to 100, is calculated as a simple average of these assessments. The score is then used to determine a rating range from the rating anchor level, within which the sub-sovereign's rating can be positioned.

Our assessment of intergovernmental integration between the Länder and the Federal Republic of Germany (AAA/Stable) results in an indicative **downward rating range of up to one notch** from the German sovereign, within which the Länder can be positioned according to their individual credit strengths.

Institutional Framework scorecard (QS1)

Analytical component	Full integration (100)	Strong integration (75)	Medium integration (50)	Some integration (25)	Low integration (0)
Extraordinary support and bail-out practices	●				
Ordinary budgetary support and fiscal equalisation	●				
Funding practices			●		
Fiscal rules and oversight	●				
Revenue and spending powers	●				
Political coherence and multilevel governance	●				

Integration score	**92**
Downward rating range	**0-1**

Institutional framework score	100 > x ≥ 90	90 > x ≥ 80	80 > x ≥ 70	70 > x ≥ 60	60 > x ≥ 50	50 > x ≥ 40	40 > x ≥ 30	30 > x ≥ 20	20 > x ≥ 10	10 > x ≥ 0
Indicative rating range	0-1	0-2	0-3	0-4	0-5	0-6	0-7	0-8	0-9	0-10

Appendix II. Individual Credit Profile

Risk pillar	Analytical component	Assessment		
Debt and liquidity	**Debt burden & trajectory**	Stronger	Mid-range	**Weaker**
	Debt profile & affordability	**Stronger**	Mid-range	Weaker
	Contingent liabilities	Stronger	**Mid-range**	Weaker
	Liquidity position & funding flexibility	**Stronger**	Mid-range	Weaker
Budget	**Budgetary performance & outlook**	Stronger	Mid-range	**Weaker**
	Revenue flexibility	Stronger	**Mid-range**	Weaker
	Expenditure flexibility	Stronger	**Mid-range**	Weaker
Economy	**Wealth levels and economic resilience**	Stronger	**Mid-range**	Weaker
	Economic sustainability	Stronger	**Mid-range**	Weaker
Governance	**Governance and financial management**	**Stronger**	Mid-range	Weaker

Additional environmental and social factors	Assessment		
Environmental factors and resilience	Positive impact	**No impact**	Negative impact
Social factors and resilience	Positive impact	**No impact**	Negative impact

ICP score	**55**
Indicative notching	**0**

Appendix III. Mapping table

We derive the indicative rating by mapping the result of the institutional framework assessment to the ICP score. For NRW, this results in an indicative rating aligned with the sovereign rating of AAA. No additional considerations apply.

Institutional framework assessment		Individual credit profile score							
Score	Downward rating range	100 > x ≥ 80	80 > x ≥ 70	70 > x ≥ 60	60 > x ≥ 50	50 > x ≥ 40	40 > x ≥ 30	30 > x ≥ 20	20 ≥ x > 0
100 > x ≥ 90	0-1	0	0	0	0	0	0	-1	-1
90 > x ≥ 80	0-2	0	0	-1	-1	-1	-1	-2	-2
80 > x ≥ 70	0-3	0	-1	-1	-1	-2	-2	-3	-3
70 > x ≥ 60	0-4	0	-1	-1	-2	-2	-3	-3	-4
60 > x ≥ 50	0-5	0	-1	-1	-2	-2	-3	-4	-5
50 > x ≥ 40	0-6	0	-1	-1/-2	-2/-3	-2/-3	-3/-4	-4/-5	-6
40 > x ≥ 30	0-7	0	-1/-2	-1/-2	-2/-3	-3/-4	-4/-5	-5/-6	-7
30 > x ≥ 20	0-8	0	-1/-2	-2/-3	-3/-4	-4/-5	-5/-6	-6/-7	-8
20 > x ≥ 10	0-9	0	-1/-2	-2/-3	-3/-4	-4/-5	-5/-6	-7/-8	-9
10 > x ≥ 0	0-10	0	-1/-2	-2/-3	-3/-4	-5/-6	-7/-8	-9/-10	-10

Note: Mapping table under section 4 of Scope's Sub-sovereigns Rating Methodology, as applied to the rating anchor's AAA-ratings.

Appendix IV. Statistical table

From 2024, the table displays Scope Ratings' estimates and forecasts, which may deviate from the Land's projections.

	2018	2019	2020	2021	2022	2023	2024E	2025F	2026F
Budgetary performance (EUR m)									
Operating revenue	72,852	75,807	91,134	94,442	101,024	96,740	96,883	97,960	101,311
Operating revenue growth, %	5.4%	4.1%	20.2%	3.6%	7.0%	-4.2%	0.1%	1.1%	3.4%
Tax revenue	59,238	62,011	61,034	68,220	74,105	73,984	77,250	81,050	84,200
Allocations and grants	11,354	11,566	27,821	23,560	24,187	19,453	16,433	14,210	14,311
Other operating revenue	2,259	2,230	2,279	2,661	2,732	3,303	3,200	2,700	2,800
Operating expenditure	64,532	66,385	93,351	89,484	92,394	87,800	87,959	88,085	89,758
Operating expenditure growth, %	1.5%	2.9%	40.6%	-4.1%	3.3%	-5.0%	0.2%	0.1%	1.9%
Personnel	25,929	27,153	28,311	28,998	30,386	31,535	34,047	35,510	35,902
Allocations and grants	33,989	34,248	52,029	46,102	47,737	48,393	46,729	45,275	46,506
Other operating expenditure	4,613	4,983	13,011	14,384	14,271	7,872	7,183	7,300	7,350
Operating balance	8,320	9,422	-2,218	4,958	8,629	8,940	8,924	9,875	11,553
Interest received	54	31	14	8	25	464	350	300	250
Interest paid	2,448	2,002	1,384	1,576	1,432	2,925	3,600	3,800	4,000
Net interest paid	2,395	1,972	1,370	1,568	1,407	2,461	3,250	3,500	3,750
Current balance	5,925	7,450	-3,587	3,390	7,222	6,479	5,674	6,375	7,803
Capital balance	-4,922	-5,988	-8,301	-7,187	-9,905	-8,188	-8,269	-9,040	-9,788
Balance before debt movement	1,003	1,462	-11,888	-3,797	-2,683	-1,709	-2,595	-2,665	-1,985
New borrowing (credit market)	10,060	16,630	26,808	20,533	18,245	14,398	9,899	13,241	8,743
Debt redemption (credit market)	16,908	16,642	15,430	15,834	14,013	13,543	12,939	13,671	9,172
Net borrowing	-6,849	-12	11,379	4,699	4,232	855	-3,040	-430	-430
Debt (EUR m)									
Direct debt	167,168	170,186	178,552	180,984	179,021	177,159	174,119	173,689	173,259
Core budget debt	137,076	142,890	153,781	158,581	162,209	162,993			
Extra-budget debt	30,092	27,296	24,771	22,403	16,812	14,166			
Guarantees	9,155	7,382	8,704	8,148	7,202	7,202	7,202	7,202	7,202
Overall debt risk (direct debt plus guarantees)	176,323	177,568	187,256	189,132	186,223	184,361	181,321	180,891	180,461
Financial ratios									
Debt/operating revenue, %	229.5%	224.5%	195.9%	191.6%	177.2%	183.1%	179.7%	177.3%	171.0%
Debt/operating balance, years	20.1	18.1	N/A	36.5	20.7	19.8	19.5	17.6	15.0
Interest payments/operating revenue, %	3.4%	2.6%	1.5%	1.7%	1.4%	2.5%	3.4%	3.6%	3.7%
Implicit interest rate, %	1.5%	1.2%	0.8%	0.9%	0.8%	1.7%	2.1%	2.2%	2.3%
Operating balance/operating revenue, %	11.4%	12.4%	-2.4%	5.2%	8.5%	9.2%	9.2%	10.1%	11.4%
Balance before debt movement/total revenue, %	1.3%	1.9%	-12.8%	-3.9%	-2.6%	-1.7%	-2.6%	-2.6%	-1.9%
Transfers and grants/operating revenue, %	15.6%	15.3%	30.5%	24.9%	23.9%	20.1%	17.0%	14.5%	14.1%
Capital expenditure/total expenditure, %	10.1%	11.1%	9.8%	9.1%	11.7%	10.6%	10.4%	11.4%	11.7%
Economy and demographics									
Nominal GDP, EUR m	703,065	717,382	706,480	746,949	793,986	839,084			
GDP per capita, EUR	39,228	39,988	39,388	41,671	44,032	46,194			
GDP per capita, % of national GDP per capita	96.6%	95.6%	96.2%	95.8%	95.2%	94.8%			
Real GDP growth, %	1.3%	0.0%	-3.2%	2.3%	0.7%	-1.0%			
Population, '000s	17,933	17,947	17,926	17,925	18,139				
Unemployment rate, % labour force	6.8%	6.5%	7.5%	7.3%	6.8%	7.2%			

Source: NRW, Destatis, Statistische Ämter des Bundes und der Länder, Scope Ratings

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Related research

Scope affirms and publishes the Land of Hesse's AAA rating with Stable Outlook, 19 April 2024
Scope has completed a monitoring review for the Federal Republic of Germany, 12 April 2024
Scope affirms the Free State of Bavaria's AAA rating with Stable Outlook, 23 February 2024
Scope affirms and publishes the Land of Saxony-Anhalt's AAA rating with Stable Outlook, 12 January 2024
European Sub-Sovereign Outlook 2024, 5 February 2024

Applied methodologies

Sub-Sovereign Rating Methodology, October 2023

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