FitchRatings

Public Finance
Local and Regional Governments
Germany

State of Berlin

This report does not constitute a new rating action for this issuer. It provides more detailed credit analysis than the previously published Rating Action Commentary, which can be found on www.fitchratings.com.

Ratings

Foreign Currency

Long-Term IDR	AAA
Short-Term IDR	F1+

Local Currency

Long-Term IDR	AAA
Short-Term IDR	F1+

Outlooks

Long-Term Foreign-Currency IDR	Stable
Long-Term Local-Currency IDR	Stable

Issuer Profile Summary

State of Berlin, one of three German city states, is the capital city of Germany with a services-oriented economy.

Financial Data Summary

State of Berlin (EURm)	FY21	FY26rc
Economic liability burden (%)	78.0	68.8
Payback ratio (x)	21.9	35.4
Synthetic coverage (x)	0.6	0.4
Actual coverage (x)	0.3	0.3
Fiscal debt burden (%)	188.5	174.3
Net adjusted debt	65,923	69,574
Operating balance	3,010	1,964
Operating revenue	34,970	39,916
Debt service	6,799	5,721
Mortgage-style debt annuity	5,054	5,214

rc: Fitch's rating-case scenario
Source: Fitch Ratings, Fitch Solutions, State of Berlin

Applicable Criteria

International Local and Regional Governments Rating Criteria (September 2021)

Related Research

Fitch Affirms 11 German Laender at 'AAA'; Outlook Stable (October 2022)
Fitch Affirms Germany at 'AAA'; Outlook Stable (October 2022)

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Key Rating Drivers

Ratings Affirmed: The affirmation of and Stable Outlook on the State of Berlin's ratings reflect the unchanged assumptions of the rating approach of Fitch Ratings for the German Laender, under which the ratings are equalised with those of the Federal Republic of Germany (Bund; AAA/Stable/F1+).

Rating Derivation Summary: Berlin's Issuer Default Ratings (IDRs) are linked to the Bund's. We assess its Standalone Credit Profile (SCP) at 'aa'. The SCP results from a 'Stronger' risk profile and debt sustainability that Fitch assesses as 'a' under its rating-case scenario. No other factors affect the rating. Equalisation of the German Laender's ratings with the Bund's is driven by the stability of the solidarity system underpinning the creditworthiness of all Laender, irrespective of the key risk factors and debt sustainability assessment.

The solidarity system is enshrined in the German constitution and reflects the institutional framework of the Laender. Under the constitution, all member states of the federal republic are jointly responsible for supporting a Land in financial distress. If a Land experiences "extreme budgetary hardship", it is entitled to financial assistance from all other Laender and the Bund. This principle has been reaffirmed by the constitutional courts on more than one occasion, most recently in 2006.

'Stronger' Risk Profile: Fitch assesses all of Berlin's key risk factors at 'Stronger'. The 'Stronger' risk profile also reflects Berlin's very good access to capital markets, corresponding strong refinancing capacity and appropriate treasury facilities preventing any temporary delays in the provision of liquidity and support.

Debt Sustainability at 'a': In Fitch's rating-case scenario, Berlin's economic liability burden will decline to 68.8% in 2026 (2021: 78.0%). Debt service coverage (Fitch's synthetic calculation) will decline to 0.4x (2021: 0.6x), and the fiscal debt burden will decrease to 174.3% (2021: 188.5%) in the coming years. Our rating case is based on conservative GDP growth assumptions to test rating resilience through the economic cycle and also assumes additional stress due to the energy crisis and the global supply chain disruptions.

Neutral Additional Rating Factors: Berlin's Long-Term IDR is rated on a par with the sovereign, reflecting its SCP of 'aa' and the specific approach Fitch applies for the German Laender. Its rating does not take into account any other extraordinary support from the Bund. No additional risk factors have been identified.

ESG Considerations: The highest ESG score is '3', meaning that ESG issues are credit neutral. These issues are minimally relevant to the rating due to the mission of the issuer and the institutional framework.

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

The ratings are at the highest level on Fitch's rating scale and cannot be upgraded.

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

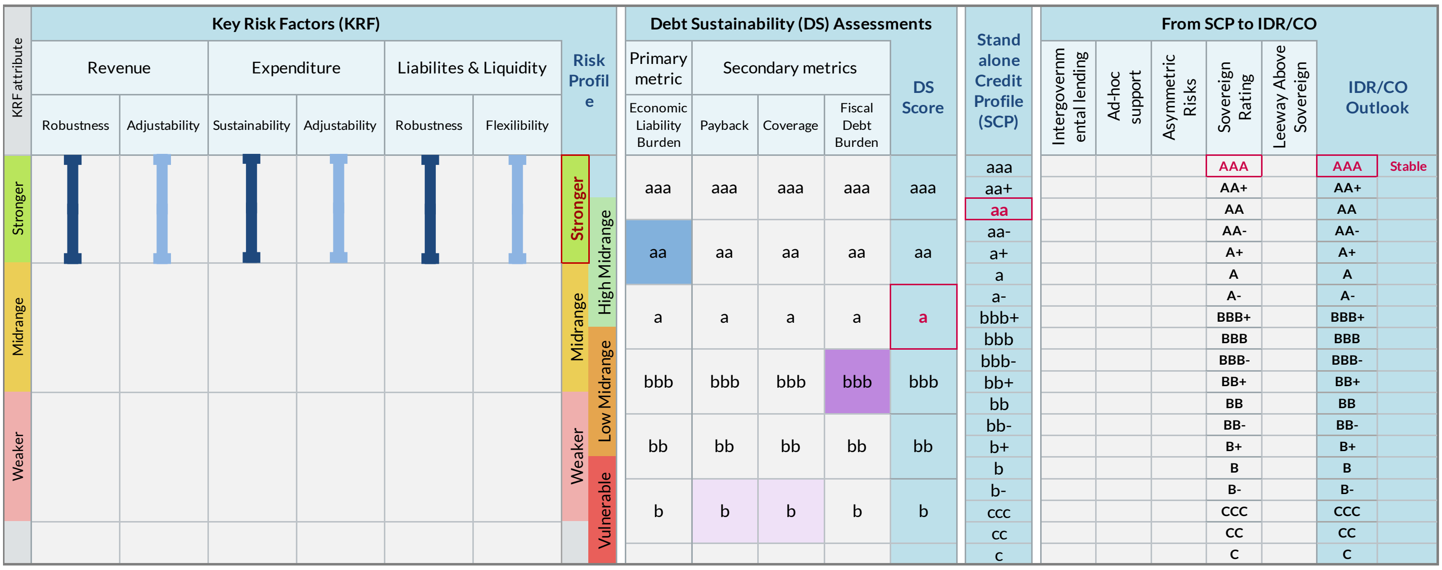
A downgrade of the sovereign ratings would lead to a downgrade of Berlin. An adverse change to the most important institutional feature – the solidarity principle – which is unlikely in Fitch's view, could also lead to a downgrade of Berlin.

Rating Synopsis

Rating Building Blocks Overview

Berlin's Long-Term IDR of 'AAA' is linked to the rating of the Bund. Fitch assesses its SCP at 'aa'. This reflects the combination of a 'Stronger' risk profile (see Risk Profile: Stronger) and debt sustainability that Fitch assesses as 'a' under its rating-case scenario (see Debt Sustainability of 'a'), and no other rating factors affect the rating (see Other Rating Factors).

State of Berlin IDR/CO Derivation Summary



Issuer Profile

Berlin is the capital of Germany and by far the largest city in the country. It had a population of 3.7 million at end-2021 according to the population census for 2011. Berlin remains an attractive destination and its population has steadily increased due to net migration. After a net loss of inhabitants during the pandemic in 2020, the first decrease after two decades of growth, Berlin's population increased again in 2021 (by 13,400). In the first six months of 2022 Berlin recorded a strong population growth of 48,200 inhabitants, mainly due to immigration as a consequence of the Ukraine war.

Berlin's GDP increased by 3.3% in real terms to a nominal EUR163.0 billion in 2021 and exceeded Germany's 2.6% growth on the basis of Berlin's strong economy, which is driven by a broad services sector and is less volatile than that of other German states. However, tourism, which was heavily affected by pandemic-related lockdown measures, is an important part of Berlin's economy. After a decline in overnight stays to 12 million in 2020 from 34 million in 2019, there was a slight recovery in 2021 to 14 million overnight stays. Tourism nearly reached 70% of its pre-pandemic levels in 1H22 (11 million overnight stays).

Berlin expects GDP growth of 2.3% in 2022 and 0.0% in 2023. The war in Ukraine, the energy crisis, high inflation rates and global supply-chain disruptions have had an adverse impact on the national and Berlin's economy and represent a high level of uncertainty for projections.

The rate of unemployment in Berlin was 8.9% in September 2022 (Germany 5.4%). Unemployment in the capital had declined significantly in recent years – in line with the national trend – but rose again in relation to the pandemic and increased number of immigrants due to the Ukraine war.

Socioeconomic Indicators

	Berlin	Germany
Population, 2021 (m)	3,677	83,237
GDP per capita, 2021 (EUR)	44,473	42,953
GRP growth, 2021 (%)	3.3%	2.9%
Inflation, 2021 (%)	2.8%	3.1%
Unemployment rate, December 2021 (%)	8.8%	5.1%

Source: Fitch Ratings, national statistics, State of Berlin

Risk Profile Assessment

Risk Profile: Stronger

Fitch assesses Berlin's risk profile at 'Stronger', as all six sub-factors of the risk profile have been assessed as 'Stronger'.

Risk Profile Assessment

Risk profile	Revenue Robustness	Revenue Adjustability	Expenditure Sustainability	Expenditure Adjustability	Liabilities & Liquidity Robustness	Liabilities & Liquidity Flexibility
Stronger	Stronger	Stronger	Stronger	Stronger	Stronger	Stronger

Source: Fitch Ratings

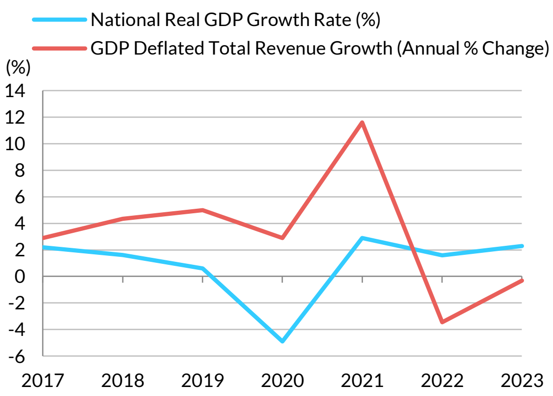
Revenue Robustness: Stronger

The 'Stronger' assessment is driven by the high share of stable revenue sources due to the strong and diversified tax base and stable transfers from the Bund. We view the Laender as resilient to any potential shocks, mitigating the risk of a shrinking revenue base.

The Laender's main revenue sources consist of common tax revenues (corporate income tax (CIT), VAT and personal income tax (PIT) between the Bund, the Laender, and to a lesser extent, the municipalities. By law the Laender receive 50.0% of CIT and 42.5% of PIT. Their shares of VAT have a more complex allocation process and marginally vary. In 2021, the share was 45.2% for the Laender, 52.8% for the Bund and 2.0% for the municipalities. The common tax revenues of the Laender accounted for 87% of their total tax revenues collected in 2021.

In 2021, tax revenue accounted for 65.3% of the Laender's total revenue (2020: 70%), with PIT and VAT the largest contributors, at 47.4% and 37.4%, respectively. Over the past five years, Laender tax revenue growth was above the level of the national economy.

Real Total Revenue and GDP Growth



Source: Fitch Ratings

Revenue Breakdown, 2021

(%)	Operating revenue	Total revenue
PIT	16.3	16.0
VAT	26.8	26.1
Other taxes	27.4	26.7
Transfers	24.6	24.0
Other operating revenue	4.9	4.7
Operating revenue	**100**	**97.5**
Interest revenue	-	0
Capital revenue	-	2.5
Total revenue	**-**	**100**

Source: Fitch Ratings, Fitch Solutions, State of Berlin

Revenue Adjustability: Stronger

The 'Stronger' assessment is supported by a strong record of revenue equalisation, an essential part of Fitch's rating approach, which links the Laender's ratings to the Bund's. An extensive equalisation system and a broad-based solidarity pact compensate for financial disparity. This equalisation framework requires financially stronger Laender to transfer part of their above-average tax proceeds to financially weaker members. The framework partly offsets the differences among Laender's tax revenue base and their financial strength.

The most recent reform of the financial equalisation system (Bund-Laender-Finanzbeziehungen) confirms the stability of revenue equalisation. This is likely to increase transfers from the Bund to financially weaker Laender and lower the burden of net donor states among the Laender. Fitch views this as credit positive.

Berlin is a net receiver from the system and received EUR3.6 billion in 2021 based on preliminary figures.

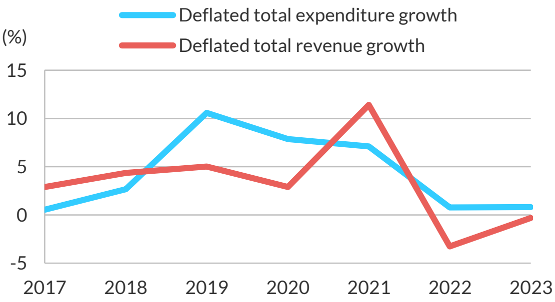
Expenditure Sustainability: Stronger

The Laender have a prudent record of control of opex. The main spending items consist of administration costs for tax authorities, education and science and social security, which are counter-cyclical in nature. In times of economic stress, the Bund carries out anti-cyclical measures.

Laender have been applying cost-consolidation measures since 2010 to comply with the debt-brake rule starting in 2020. They have shown strong spending restraint since 2010 to keep opex growth below that of operating revenue. Cost-consolidation measures are subject to the supervision and – if a Land is identified as facing a fiscal emergency according to the benchmarks set by the board – control of the German Stability Board (Stabilitaetsrat).

The pandemic has hampered the budgets of the Laender, which were exempted from complying with the debt brake rule to cope with the crisis in 2020 and 2021.

Real Total Expenditure and Revenue Growth



Source: Fitch Ratings, Berlin, State of

Expenditure Breakdown, 2021

(%)	Operating expenditure	Total expenditure
Staff cost	32.9	29.2
Goods and services	33.5	29.7
Operating subsidies	33.5	29.7
Other operating expenditure	0.1	0.1
Operating expenditure	**100**	**88.7**
Interest expenditure	-	3.0
Capital expenditure	-	8.3
Total expenditure	**-**	**100**

Source: Fitch Ratings, Fitch Solutions, State of Berlin

Expenditure Adjustability: Stronger

The Laender have effective budget rules and demonstrated a strong ability to limit expenditure growth ahead of the debt brake. The Laender have a moderate share of inflexible spending items; personnel costs and operating subsidies accounted for 66.4% of Berlin's opex in 2021, while capex accounted for a low of 8.3% of total spending. This share had decreased nominally during the pandemic to 6.7% in 2020 because the pandemic necessitated a substantial increase in other current spending, in particular, medical expenditures (including vaccinations) and economic support to households and companies negatively affected by the pandemic. Berlin has a good record of cost consolidation to achieve balanced budgets. Pre-pandemic, Berlin kept growth in opex below that of operating revenue and improved its operating margin to 15.2% in 2019 from 8.1% in 2010.

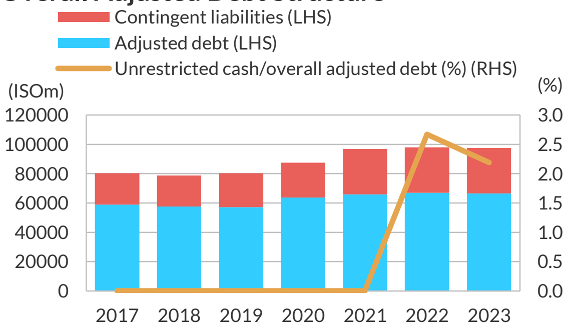
Since 2020, Berlin has committed to run a structurally balanced stipulating structural new debt being zero, which Fitch views as rating positive. The margin had declined to 3.2% in 2020 due to the pandemic, which resulted in higher operating costs and, in particular, transfers. A large part of these was provided by the Bund. This was a temporary measure to cope with the crisis. Due to a strong growth (14%) of operating revenue, the operating margin reached 8.6% in 2021.

Liabilities and Liquidity Robustness: Stronger

Berlin, like the other Laender, operates within a solid national framework for debt and liquidity management and has shown strict market discipline, which Fitch views as credit positive. As part of one of the largest subnational issuer groups, Berlin has very good access to the capital markets, with a strong record of access. Berlin regularly taps the markets with benchmark issues and has an even maturity profile. There is no concentration risk due to the maturity profiles and a negligible exposure to foreign-currency debt. Floating-rate issues are hedged to a large extend. Berlin is therefore not exposed to market volatility.

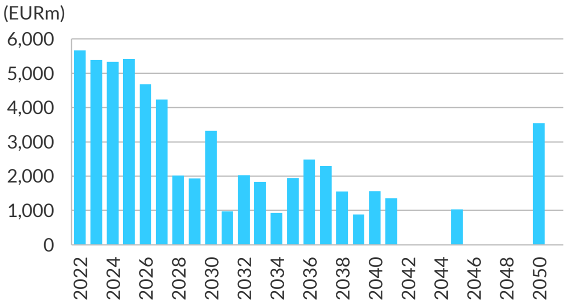
Berlin has prudent debt management, predominantly funding its maturing debt with bond issues in 2021; its average lifetime of capital market debt was 8.49 years at end-2021. Berlin funded EUR5.7 billion in 2021, consisting of seven new bond issues amounting to EUR3.75 billion, and five taps of existing issues amounting to EUR1.75 billion, while the reminder was funded via loans. Berlin has frequent refinancing needs, averaging about EUR5 billion a year in 2023-2027 and has extended its maturity profiles, including the issuance of a 30-year bond. Berlin has a very low share of foreign-currency debt in Swiss francs and Japanese yen, accounting for a negligible euro equivalent amount of below 0.2% of its total debt.

Overall Adjusted Debt Structure



Source: Fitch Ratings, Berlin, State of

Direct Debt Maturity Profile



Source: Fitch Ratings, Berlin, State of

Liabilities and Liquidity Flexibility: Stronger

There is a strong framework for emergency liquidity support from upper-tier governments with 'AAA' counterparty risk. Berlin's well-established and active liquidity management system, together with its sound access to capital markets and corresponding strong refinancing capacity and appropriate treasury facilities, should prevent any temporary delays in the provision of liquidity and support. Its liquidity risk is largely offset through bilateral and mutual agreements linking all Laender and the Bund, and ensuring their ability to assist one another. Liquidity would only fail to be forthcoming for Berlin in the very unlikely event of a complete federal breakdown, in which neither the Laender nor the Bund itself could provide liquidity.

All the liquidity provision facilities underline the strong financial support mechanism that is anchored in the German financial constitution, which requires the Bund and the Laender to support any single state in financial distress. This sub-factor is core for Fitch's rating approach to the German Laender.

Debt Analysis

	2021
Fixed rate (% of direct debt)	97
Issued debt (% of direct debt)	99
Apparent cost of dbt (%)	2
Weighted average life of debt (years)	8.5

Source: Fitch Ratings, State of Berlin

Liquidity

(EURm)	2021
Total cash, liquid deposits and sinking funds	0
Restricted cash	0
Cash available for debt service	0
Undrawn committed credit lines	0

Source: Fitch Ratings, State of Berlin

Debt Sustainability Assessment

Debt Sustainability: 'a' category

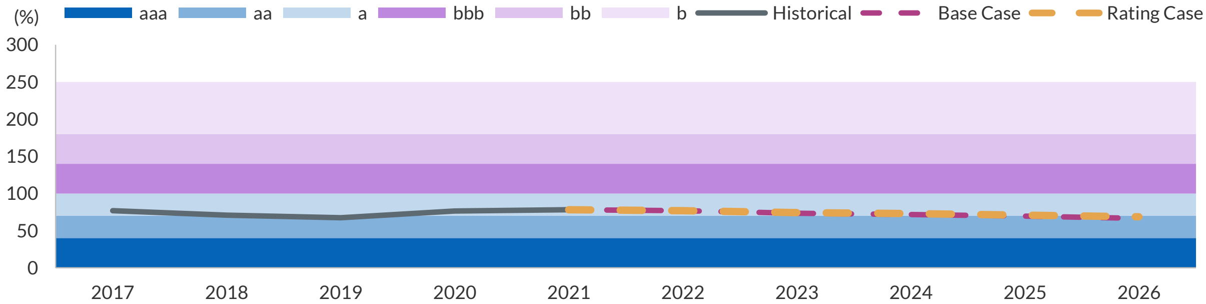
Debt Sustainability Metrics Summary

	Primary metric	Secondary metrics		
	Economic liability burden (%)	Payback ratio (x)	Coverage (x)	Fiscal debt burden (%)
aaa	X ≤ 40	X ≤ 5	X >= 4	X ≤ 50
aa	**40 < X ≤ 70**	5 < X ≤ 9	2 ≤ X < 4	50 < X ≤ 100
a	70 < X ≤ 100	9 < X ≤ 13	1.5 ≤ X < 2	100 < X ≤ 150
bbb	100 < X ≤ 140	13 < X ≤ 18	1.2 ≤ X < 1.5	**150 < X ≤ 200**
bb	140 < X ≤ 180	18 < X ≤ 25	1 ≤ X < 1.2	200 < X ≤ 250
b	X >180	**X > 25**	**X < 1**	X >250

Note: Yellow highlights show metric ranges applicable to the issuer
Source: Fitch Ratings

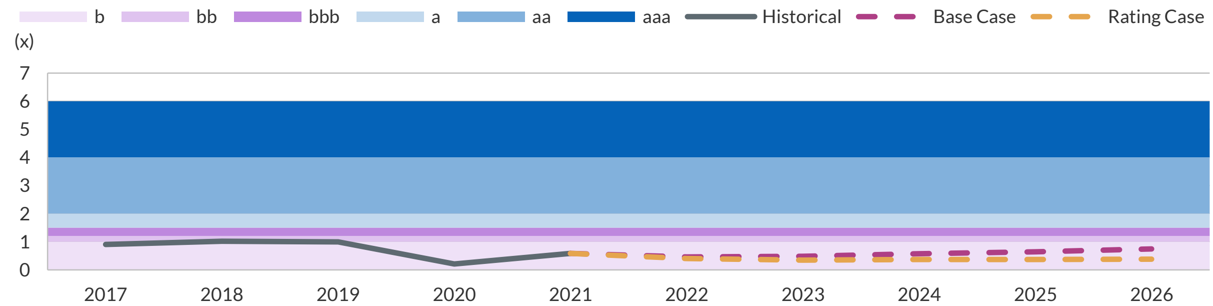
We assess Berlin's debt sustainability at 'a'. Our rating case anticipates some small improvements by the end of our rating case in 2026 compared with 2021, which was still partially influenced by the pandemic but also takes into account lower GDP growth rates. The states' economic liability burden, which is Fitch's primary metric for a 'Type A' issuer, will decline to 68.8% (2021: 78.0%) by 2026, corresponding to a debt sustainability of 'aa'. Our assessment further considers a slightly deteriorated payback ratio of 35.4x (21.9x) and coverage ratio (Fitch's synthetic calculation) of 0.4x (0.6x), which both remain weak, corresponding to a 'b' assessment. We further expect the state's fiscal debt burden to decline to 174.3% at end-2026 from 188.5% in 2021, which would still correspond to an assessment of 'bbb'. Overall, on the basis of the strong influence of the economic liability burden as primary metric, the debt sustainability of Berlin is assessed at 'a'.

Economic Liability Burden - Fitch's Base and Rating Case Scenarios



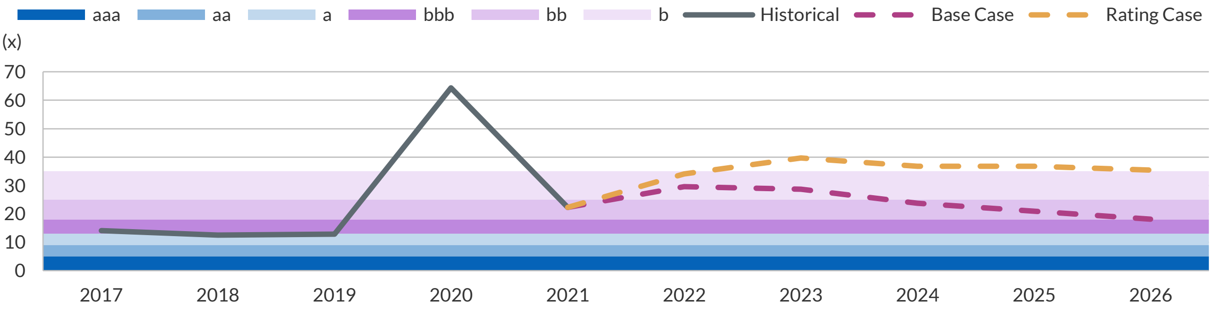
Source: Fitch Ratings, Berlin, State of

Synthetic Debt Service Coverage Ratio - Fitch's Base and Rating Case Scenarios



Source: Fitch Ratings, Berlin, State of

Payback Ratio - Fitch's Base and Rating Case Scenarios



Source: Fitch Ratings, Berlin, State of

Fitch's rating-case scenario ends in 2026 and is based on conservative assumptions as reflected in the table below.

Scenario Assumptions Summary

		2022 - 2026 average	
Assumptions	**5-year historical average**	**Base case**	**Rating case**
Operating revenue growth (%)	6.4	3.1	2.7
Tax revenue growth (%)	10.8	3.9	3.4
Current transfers received growth (%)	-2.4	1.0	1.0
Operating expenditure growth (%)	7.9	3.0	3.5
Net capital expenditure (average per year; EURm)	-2,089	-2,791	-2,791
Apparent cost of debt (%)	2.0	1.3	1.3

		2026	
Outcomes	**2021**	**Base case**	**Rating case**
Economic liability burden (%)	78.0	66.5	68.8
Payback ratio (x)	21.9	18.1	35.4
Overall payback ratio (x)	32.2	26.8	51.3
Actual coverage ratio (x)	0.4	0.6	0.3
Synthetic coverage ratio (x)	0.6	0.7	0.4
Fiscal debt burden (%)	188.5	159.6	174.3

Source: Fitch Ratings, State of Berlin

Operating Performance and Debt Ratios

In 2017-2019, Berlin had a sound operating performance record and reported operating surpluses with operating margins ranging from 15.7% in 2017 to 15.2% in 2019, ensuring sufficient pre-financing for the state's investments. In 2020, Berlin's operating balance dropped to EUR989 million (2019: EUR4,452 million) due to the pandemic, corresponding to an operating margin of 3.2%. Despite the pandemic, the operating balance and operation margin increased to EUR3,010 million and 8.6% in 2021. After a drop of Germany's GDP growth in 2020, it recovered by 2.6% (in real terms) in 2021. Mainly due to the energy crisis as a consequence of the Ukraine war and global supply-chain disruptions, Fitch expects Germany's GDP to grow at only 1.4% (in real terms) in 2022 and a decline of 0.5% in 2023.

Given the uncertainty surrounding these crisis further revisions to this forecast are possible and differences in the expected progress of Germany's GDP and longer recovery cannot be ruled out. Our rating-case scenario for 2022-2026 adopts the former and this should translate into a gradual recovery of tax revenue from 2022. The rating case further considers an average increase of the state's operating revenue (expenditure) of 2.7% (3.5%) in 2022-2026. This results in a slight recovery of the state's operating margin to 4.9% in 2026, but not yet back to the pre-crisis level.

To cope with the Covid-19 crisis, Berlin took on EUR7.3 billion in new debt via two supplementary budgets in 2020. This was sufficient to cover the EUR1.7 billion deficit for that year, and the remainder was put into a reserve fund. In 2021, Berlin withdrew EUR1.28 billion from the reserve. Due to this, Berlin has declared only 2020 as an emergency year ("Notlagenjahr") and it expects to make use of the reserve in 2022-2023, with expected withdrawals of EUR2.3

and EUR3.0 billion in 2022 and 2023. This emergency credit ("Notfallkredit") will be repaid starting in 2023, with annual instalments of EUR270 million with a tenor of 27 years.

The state's debt subsequently increased to EUR65,923 million at end-2021 from EUR63,705 million at end-2020. This consisted of EUR59,788 million of capital market debt, EUR619 million of public debt and EUR5,515 million of an internal loan. Berlin will remain within the debt frame that was widened 2020, but made use of the reserve which increased the amount of the internal loan.

In 2021, Berlin placed EUR5.7 billion (after EUR11 billion in 2020) of new and maturing in the capital market. Berlin further extended its maturity profile to 8.49 years and has a prudent maturity profile, with no large refinancing risk. Berlin's average refinancing needs amount to roughly EUR5 billion in 2023-2027 (below 10% of its current debt).

At end-2021, the state's economic liability burden was 78.0%, at the lower end of the 70%-100% band, corresponding to an 'a' assessment. Under Fitch's rating case, this ratio may decrease to 76.9% in 2022 and then further decline to 68.8% in 2026. The state's secondary metrics – the fiscal debt burden and its synthetic debt-servicing coverage ratio – are weaker. They were 188.5% and 0.6x, respectively, in 2021, corresponding to a 'bbb' and 'b' assessment. The fiscal debt burden may start improving in 2022 to 177.5% and to 174.3% in 2026, while the coverage ratio will be stable in 2022-2026 at around 0.4x.

We view the state's fairly weak coverage of its debt servicing as mitigated by its record of capital market access and its ability to gain liquidity even at short notice. However, Berlin has prudent, forward-looking and well-experienced debt- and cash-management, reviewing its daily funding and deposit needs. This should prevent any unexpected shortfall of cash.

SCP Positioning and Peer Comparison

SCP Positioning Table

Risk profile	Debt sustainability					
Stronger	aaa or aa	a	bbb	bb	b	
High Midrange	aaa	aa	a	bbb	bb	b
Midrange		aaa	aa	a	bbb	bb or below
Low Midrange			aaa	aa	a	bbb or below
Weaker				aaa	aa	a or below
Vulnerable					aaa	aa or below
Suggested analytical outcome (SCP)	**aaa**	**aa**	**a**	**bbb**	**bb**	**b**

Source: Fitch Ratings

Berlin's final IDR is driven by the state's SCP that Fitch assesses at 'aa' due to the 'Stronger' risk profile and the Debt Sustainability corresponding to 'a'. The equalisation of its ratings with those of the Bund is driven primarily by the stability of the solidarity system that underpins the creditworthiness of all Laender, irrespective of the key risk factors and debt sustainability assessment. No other rating factor affects the final rating.

Peer Comparison

	Risk Profile	Primary Metric (x)	SCP	ID	Outlook/ Watch
Berlin, State of	Stronger	68.8	aa	AAA	Sta
Hamburg, State of	Stronger	43.7	aaa	AAA	Sta
Bremen, State of	Stronger	89.4	a	AAA	Sta
Rhineland-Palatinate, State of	Stronger	50.7	aa+	AAA	Sta
Thuringia, State of	Stronger	64.0	aa+	AAA	Sta
Saxony-Anhalt, State of	Stronger	71.4	aa-	AAA	Sta
Mecklenburg-Western Pomerania, State of	Stronger	61.5	aa+	AAA	Sta

Source: Fitch Ratings

Long Term Rating Derivation

From SCP to IDR/CO: Factors Beyond the SCP

		Support						
SCP	Sovereign	Intergovern. financing	Ad-hoc support	Floor	Asymmetric risks	Cap	Notches above the sovereign	IDR
aa	AAA	-	-	AAA	-	-	-	AAA

Source: Fitch Ratings

Short Term Rating Derivation

Not applicable

National Ratings

Not applicable

Transaction and Securities

Not applicable

Criteria Variation

Not applicable

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Appendix A: Financial Data

State of Berlin

(ISOm)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Fiscal performance										
Taxes	15,425	17,054	17,569	20,761	24,653	25,911	26,714	27,569	28,313	29,134
Transfers received	9,636	9,797	9,562	8,348	8,616	7,959	8,039	8,119	8,201	8,283
Fees, fines and other operating revenues	1,663	1,631	2,204	1,499	1,700	2,402	2,426	2,451	2,475	2,500
Operating revenue	26,724	28,482	29,335	30,608	34,970	36,272	37,179	38,139	38,989	39,916
Operating expenditure	-22,536	-23,865	-24,882	-29,619	-31,959	-34,385	-35,554	-36,336	-37,135	-37,952
Operating balance	4,187	4,617	4,452	989	3,010	1,887	1,625	1,803	1,853	1,964
Interest revenue	10	12	13	10	14	10	10	10	10	10
Interest expenditure	-1,306	-1,229	-1,161	-980	-1,085	-751	-788	-866	-947	-1,039
Current balance	2,891	3,400	3,304	18	1,939	1,146	847	946	916	935
Capital revenue	967	846	1,460	853	914	855	885	695	620	645
Capital expenditure	-2,827	-2,695	-4,685	-2,303	-2,975	-3,746	-3,965	-3,509	-3,382	-3,055
Capital balance	-1,859	-1,850	-3,225	-1,450	-2,061	-2,891	-3,080	-2,814	-2,762	-2,410
Total revenue	27,701	29,340	30,808	31,470	35,897	37,137	38,074	38,844	39,619	40,571
Total expenditure	-26,669	-27,789	-30,728	-32,902	-36,019	-38,882	-40,307	-40,711	-41,464	-42,046
Surplus (deficit) before net financing	1,032	1,551	79	-1,431	-122	-1,745	-2,233	-1,868	-1,846	-1,475
New direct debt borrowing	5,425	5,677	4,081	8,227	3,470	0	0	0	0	0
Direct debt repayment	-7,403	-7,292	-4,557	-6,79	-5,714	0	0	0	0	0
Net direct debt movement	-1,979	-1,615	-476	1,430	-2,244	4,365	1,749	227	1,761	1,460
Overall results	-947	-65	-397	-1	-2,366	2,620	-484	-1,641	-85	-15
Debt and liquidity										
Short-term debt	0	0	0	0	0	0	0	0	0	0
Long-term debt	58,994	54,508	54,102	59,802	59,788	64,153	65,902	66,129	67,890	69,350
Intergovernmental debt	0	0	0	631	619	619	619	619	619	619
Direct debt	58,994	54,508	54,102	60,433	60,408	64,772	66,521	66,749	68,510	69,970
Other Fitch-classified debt	0	3,092	3,016	3,271	5,515	2,219	0	0	0	0
Adjusted debt	58,994	57,600	57,119	63,705	65,923	66,991	66,521	66,749	68,510	69,970
Guarantees issued (excluding adjusted debt portion)	5,152	4,255	3,295	3,007	4,616	4,616	4,616	4,616	4,616	4,616
Majority-owned GRE debt and other contingent liabilities	16,180	16,866	19,935	20,862	26,480	26,480	26,480	26,480	26,480	26,480
Overall adjusted debt	80,326	78,721	80,349	87,574	97,019	98,087	97,617	97,845	99,606	101,066
Total cash, liquid deposits, and sinking funds	0	0	0	0	0	2,620	2,137	496	411	396
Restricted cash	0	0	0	0	0	0	0	0	0	0
Unrestricted cash	0	0	0	0	0	2,620	2,137	496	411	396
Net adjusted debt	58,994	57,600	57,119	63,705	65,923	64,371	64,384	66,253	68,099	69,574
Net overall debt	80,326	78,721	80,349	87,574	97,019	95,467	95,480	97,349	99,195	100,670
Enhanced net adjusted debt	58,994	57,600	57,119	63,074	65,303	63,752	63,765	65,634	67,479	68,954
Enhanced net overall debt	80,326	78,721	80,349	86,943	96,399	94,848	94,861	96,730	98,575	100,050

Source: Fitch Ratings, Fitch Solutions, State of Berlin

Appendix B: Financial Ratios

State of Berlin

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Fiscal performance ratios										
Operating balance/operating revenue (%)	15.7	16.2	15.2	3.2	8.6	5.2	4.4	4.7	4.8	4.9
Current balance/current revenue (%)	10.8	11.9	11.3	0.1	5.5	3.2	2.3	2.5	2.4	2.3
Operating revenue growth (annual % change)	4.2	6.6	3.0	4.3	14.3	3.9	2.5	2.6	2.2	2.4
Operating expenditure growth (annual % change)	3.2	5.9	4.3	19.0	7.9	7.6	3.4	2.2	2.2	2.2
Surplus (deficit) before net financing/total revenue (%)	3.7	5.3	0.3	-4.6	-0.3	-4.7	-5.9	-4.8	-4.7	-3.6
Surplus (deficit) before net financing/GDP (%)	0.8	1.1	0.1	-0.9	-0.1	-1.0	-1.2	-1.0	-0.9	-0.7
Total revenue growth (annual % change)	4.5	5.9	5.0	2.2	14.1	3.7	2.5	2.0	2.0	2.4
Total expenditure growth (annual % change)	2.1	4.2	10.6	7.1	9.5	8.0	3.7	1.0	1.9	1.4
Debt ratios										
Primary metrics (%)										
Economic liability burden – not relevant for type B LRGs	76.7	70.6	67.5	76.5	78.0	76.9	74.1	72.8	70.9	68.8
Enhanced economic liability burden	76.7	70.6	67.5	76.1	77.6	76.6	73.7	72.5	70.6	68.5
Secondary metrics										
Payback ratio (x) (net adjusted debt/operating balance)	14.1	12.5	12.8	64.4	21.9	34.1	39.6	36.8	36.7	35.4
Overall payback ratio (x)	19.2	17.1	18.0	88.5	32.2	50.6	58.8	54.0	53.5	51.3
Fiscal debt burden (%) (net debt/operating revenue)	220.8	202.2	194.7	208.1	188.5	177.5	173.2	173.7	174.7	174.3
Synthetic debt service coverage ratio (x)	0.9	1.0	1.0	0.2	0.6	0.4	0.3	0.4	0.4	0.4
Actual debt service coverage ratio (x)	0.5	0.5	0.8	0.1	0.4	0.3	0.3	0.3	0.3	0.3
Other debt ratios										
Liquidity coverage ratio (x)	0.5	0.5	0.8	0.1	0.4	0.3	0.7	0.6	0.4	0.4
Direct debt maturing in one year/total direct debt (%)	12.6	13.4	9.3	8.8	9.4	0.0	0.0	0.0	0.0	0.0
Direct debt (annual % change)	-0.9	-7.6	-0.7	11.7	0.0	7.2	2.7	0.3	2.6	2.1
Apparent cost of direct debt (interest paid/direct debt) (%)	2.2	2.2	2.1	1.7	1.8	1.2	1.2	1.3	1.4	1.5
Revenue ratios (%)										
Tax revenue/total revenue	55.7	58.1	57.0	66.0	68.7	69.8	70.2	71.0	71.5	71.8
Current transfers received/total revenue	34.8	33.4	31.0	26.5	24.0	21.4	21.1	20.9	20.7	20.4
Interest revenue/total revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital revenue/total revenue	3.5	2.9	4.7	2.7	2.5	2.3	2.3	1.8	1.6	1.6
Expenditure ratios (%)										
Staff expenditure/total expenditure	30.8	31.9	30.3	30.0	29.2	-	-	-	-	-
Current transfers made/total expenditure	26.3	26.3	25.0	30.5	29.8	-	-	-	-	-
Interest expenditure/total expenditure	4.9	4.4	3.8	3.0	3.0	1.9	2.0	2.1	2.3	2.5
Capital expenditure/total expenditure	10.6	9.7	15.3	7.0	8.3	9.6	9.8	8.6	8.2	7.3

Source: Fitch Ratings, Fitch Solutions, State of Berlin

Appendix C: Data Adjustments

Net Adjusted Debt Calculations

- Net adjusted debt calculation (including unrestricted cash calculation if applicable).

Synthetic Coverage Calculation

Fitch's synthetic coverage calculation assumes a mortgage-style amortisation over 15 years of the entity's net adjusted debt, using its average cost of debt. This synthetic calculation is used to assess the German state's LRGs' debt sustainability.

Specific Adjustments

None.

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.