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

Debt Ratings

Senior Unsecured Debt - LT Rating	AAA
Senior Unsecured Debt - ST Rating	F1+

Issuer Profile Summary

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

Financial Data Summary

State of Berlin

(EURm)	FY22	FY27rc
Economic liability burden (%)	77.6	65.3
Payback ratio (x)	14.5	16.3
Synthetic coverage (x)	0.9	0.8
Actual coverage (x)	0.7	0.6
Fiscal debt burden (%)	180.4	158.8
Net adjusted debt	65,904	64,852
Operating balance	4,544	3,986
Operating revenue	36,540	40,829
Debt service	6,706	6,549
Mortgage-style debt annuity	4,977	5,161

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

Applicable Criteria

International Local and Regional Governments Rating Criteria

Related Research

Fitch Affirms State of Berlin at 'AAA'; Outlook Stable (September 2023)

German Laender – Peer Review 2023 (October 2023)

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Key Rating Drivers

Ratings Affirmed: The affirmation of the State of Berlin's ratings reflects Fitch's unchanged rating approach for the German Laender, under which they 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 (KRFs) as 'Stronger', reflecting the state'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 (ELB) will improve to 65.3% in 2027 (2022: 77.6%) and its payback ratio will rise to 16.3x (2022:14.5x). Debt service coverage (Fitch's synthetic calculation) will fall to 0.8x (2022: 0.9x), and the fiscal debt burden will decrease to 158.8% (2022: 180.4%). Our rating case is based on conservative GDP growth assumptions to test rating resilience through the economic cycle.

Neutral Additional Rating Factors: Berlin's Long-Term IDR is rated on a par with the sovereign, reflecting its SCP and the specific approach Fitch applies for the German Laender. Its rating does not account for 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.

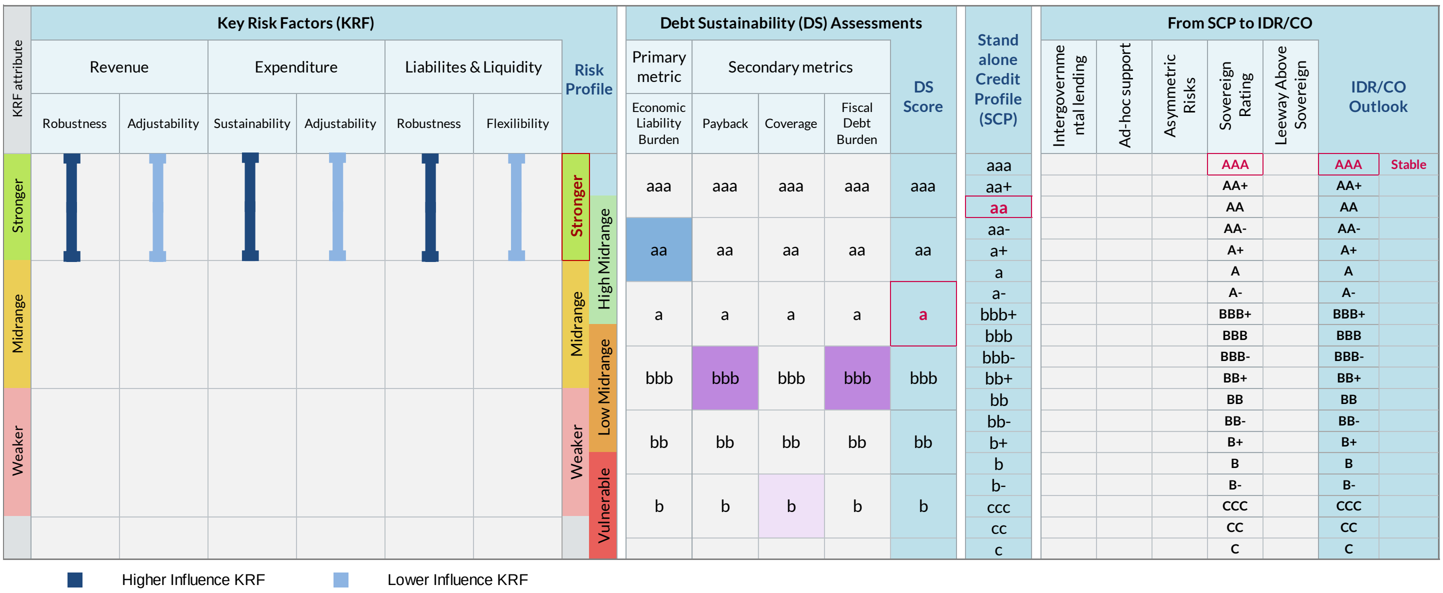
Rating Sensitivities

No Upgrade possible: The ratings are at the highest level on Fitch's rating scale and cannot be upgraded.

Sovereign 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 Fitch views as unlikely, could also lead to a downgrade of Berlin.

Rating Synopsis

State of Berlin IDR/CO Derivation Summary



The six KRFs, combined according to their relative importance, collectively represent the Risk Profile of a local and regional government (LRG). Fitch assesses all six KRFs as 'Stronger' for Berlin, resulting in a 'Stronger' risk profile. The debt sustainability assessment, which measures the LRG's debt burden and debt service requirements amid a reasonable economic or financial downturn over the rating horizon, are combined in an SCP.

Berlin's ELB (primary metric) is assessed at 65.3%, according to our updated rating case for 2023-2027, corresponding to the 'aa' category. However, on the basis of the weaker assessment of the secondary metrics, which are assessed at 'bbb' (Payback and Fiscal Debt Burden) and 'b' (Coverage), we assess Berlin's overall debt sustainability in the 'a' category. This results in combination with a 'Stronger' risk profile in a SCP of 'aa'.

Issuer Profile

Berlin is the capital of Germany and by far its largest city. It had a population of 3.8 million at end-2022, according to extrapolated data from to the population census for 2011. It remains an attractive destination and its population has steadily increased due to net migration. In 2022, the population rose by over 75,000, mainly due the arrival of refugees from Ukraine. In the past year, Berlin has made good progress and vastly increased its GDP per capita, which has been above the national average since 2018. This was driven by the capital's steady population increase and its attractiveness for new business. Furthermore, many companies have relocated their headquarters to Berlin in the last years.

Berlin's GDP rose by 4.9% in real terms to a nominal EUR179.4 billion in 2022 and exceeded Germany's 1.8% on the basis of a strong and resilient economy, driven broad services. Tourism, which was heavily affected by pandemic-related lockdowns, is an important part of Berlin's economy. After a decline in overnight stays to 12 million in 2020, from 34 million in 2019, the recovery was ongoing in 2022, with 26.5 million stays (78% of its pre-pandemic levels).

However, high inflation, rising interest rates and the skilled worker shortages had an adverse effect on the national and Berlin's economy and lowered GDP growth expectations for 2023 and beyond. Fitch anticipates -0.4% real GDP growth for Germany for 2023, 0.7% for 2024 and 2.0% for 2025 (no data available for the state). The unemployment rate in Berlin was 9.3% in October 2023 (Germany 5.7%). Unemployment in Berlin has declined greatly recently – in line with the national trend – but rose from 8.6% at end-2022, mainly due to the increased number of refugees.

Socioeconomic Indicators

	Berlin	Sovereign
Population, 2022 (m)	3.8	84.4
GDP per capita, 2022 (EUR)	48,147	45,993
GRP growth, 2022 (%)	4.9	1.8
Inflation, 2022 (%)	7.9	8.1
Unemployment rate, October 2023 (%)	9.3	5.7

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

The assessment reflects Fitch's view of a low risk relative to international peers that Berlin's ability to cover debt service with the operating balance may weaken unexpectedly over the forecast horizon (2023-2027) due to lower revenue, higher expenditure, or an unexpected rise in liabilities or debt or debt service requirements.

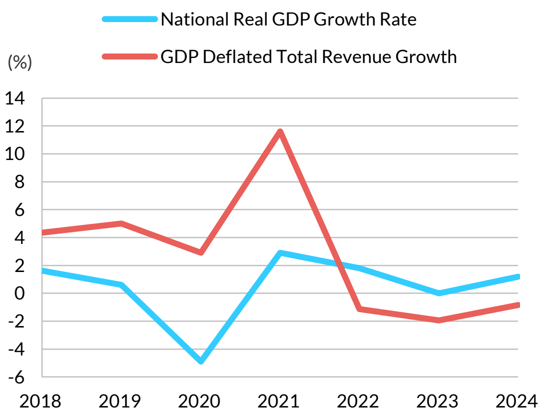
Revenue Robustness: Stronger

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 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 2022, the share was 51.2% for the Laender, 45.1% for the Bund and 3.7% for the municipalities.

In 2022, tax revenue accounted for 72.8% of Berlin's total revenue, with PIT and VAT the largest contributors, at 16.1% and 28.4%, respectively.

Real Total Revenue and GDP Growth



Source: Fitch Ratings, FitchRatings - International Public Finance

Revenue Breakdown, 2022

	Operating revenue (%)	Total revenue (%)
PIT	16.4	16.1
VAT	29.1	28.4
Other taxes	29.0	28.3
Transfers	20.3	19.8
Other operating revenue	5.2	5.1
Operating revenue	**100.0**	**97.6**
Interest revenue	-	0.0
Capital revenue	-	2.3
Total revenue	**-**	**100.0**

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 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. Fitch views this as credit positive.

Berlin is a net receiver regarding the financial equalisation system and received EUR3.6 billion in 2022 (about 9.6% of its total revenue) based on preliminary figures.

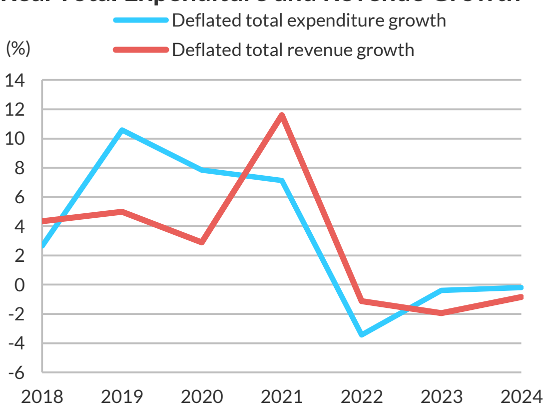
Expenditure Sustainability: Stronger

The Laender have a prudent record of control of operating expenditure (opex). The main spending items are education and science, security and infrastructure. In times of economic stress, the Bund carries out anti-cyclical measures. The 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 of the German Stability Board.

Berlin, in line with all 16 German States, is in a tight exchange with the Bund in times of crisis, most recently proved during the pandemic and within the ongoing refugee crisis.

Additional burden stemming from the refugee crisis has been largely covered by specific grants from the Bund to the Laender. This means that, even if expenditure increases due to a sudden need, the additional burden is usually met by an adequate revenue stream.

Real Total Expenditure and Revenue Growth



Source: Fitch Ratings, FitchRatings - International Public Finance

Expenditure Breakdown, 2022

	Opex (%)	Totex (%)
Staff cost	34.2	29.8
Goods and services	35.4	30.9
Operating subsidies	30.4	26.5
Transfers to other budgets	0.0	0.0
Other opex	0.0	0.0
Operating expenditure	**100.0**	**87.2**
Interest expenditure	-	2.6
Capital expenditure	-	10.1
Total expenditure	**-**	**100.0**

Source: Fitch Ratings, Fitch Solutions, State of Berlin

Expenditure Adjustability: Stronger

The Laender have effective budget rules in place and have demonstrated a strong ability to limit expenditure growth ahead of the debt brake. They have a moderate share of inflexible spending items. Despite the limited flexibility in adjusting capital expenditure (capex), Berlin has a good record of cost consolidation.

The Laender are legally obliged to run their budgets without taking on new net debt from 2020, which Fitch views positively for expenditure adjustability. However, since the pandemic was declared as an extraordinary emergency situation ("außergewöhnliche Notsituation") beyond the government's control, the additional debt load the Laender faced during 2020 and 2021 was not a breach of the debt brake rules.

Personnel costs and transfers accounted for 64.6% of Berlin's opex in 2022, while capex accounted for a low of 10.1% of total spending. Operating revenue growth usually outpaces the rise in operating expenditure.

However, for 2018-2022, Berlin's operating revenue increased by an average of 6.5%, while the rise in opex was 7.3% on average, but this was driven by the pandemic.

Berlin's operating margin declined to 3.2% in 2020 due to the pandemic, which resulted in higher operating costs and, in particular, transfers, a large part of which was provided by the Bund. This was a temporary measure to cope with the crisis. Due to a strong increase in operating revenue, mainly due to a large rise in tax revenue, Berlin's operating margin reached 8.6% in 2021 and 12.4% in 2022.

Liabilities and Liquidity Robustness: Stronger

German Laender operate in a solid national framework for debt and liquidity management and show strict market discipline, which Fitch views as credit positive. As one of the largest subnational and frequent issuers, the Laender enjoy strong access to international capital markets, which allows the issuance of bonds in benchmark size.

However, following the most recent interest rate increases from the ECB, the interest burden of the Laender is likely to rise, in contrast to the previous long period of reductions. This risk has been mitigated by the Laender extending their maturity profiles in most recent years.

In general, the Laender also face large contingent liabilities in the form of debt guarantees on behalf of their development banks and former Landesbanken, as well as their largely unfunded pension liabilities. The risk stemming from their commitments provided to banks is mitigated by adequate assets and the conservative business profiles of their development banks. However, contingent liabilities stemming from the deficiency guarantees provided to former Landesbanken are largely generally declining.

To cope with the pandemic, Berlin took on EUR7.3 billion of new debt in two supplementary budgets in 2020. This was sufficient to cover the deficit for that year, with the remainder put into a reserve fund. Berlin made use of the reserve, with withdrawals in 2021-2023. This emergency credit (Notfallkredit) will be repaid from 2023, with annual instalments of EUR270 million and a tenor of 27 years.

At end-2022, Berlin's net adjusted debt of EUR65.9 billion included direct debt of EUR60.1 billion and the internal loan of EUR5.8 billion. Berlin remained within the debt frame that was widened 2020, but made use of the reserve which increased the amount of the internal loan.

Berlin has very good access to the capital markets. There is no concentration risk due to the maturity profiles. Berlin has a very low share of foreign-currency debt denominated in Swiss francs and Japanese yen, accounting for a negligible euro equivalent amount of about 0.2% of its total debt.

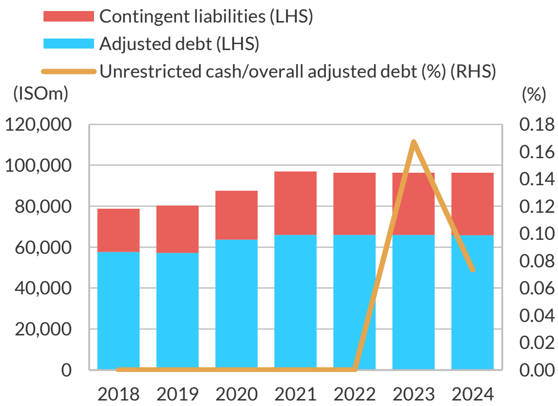
Floating-rate issues are hedged to a large extend. Berlin is therefore not exposed to market volatility.

Berlin has prudent debt management, predominantly funding its maturing debt with bond issues in 2022; its average lifetime of capital market debt was 8.28 years at end-2022. It funded EUR5.39 billion in 2022, with nine new bonds amounting to EUR3.25 billion, and six taps of existing issues, amounting to EUR2.05 billion; the reminder was funded though loans.

Berlin's frequent refinancing needs average about EUR5 billion to 6 billion a year in 2023- 2027 (below 10% of its net adjusted debt) and has extended its maturity profiles, including the issuance of a 30-year bond.

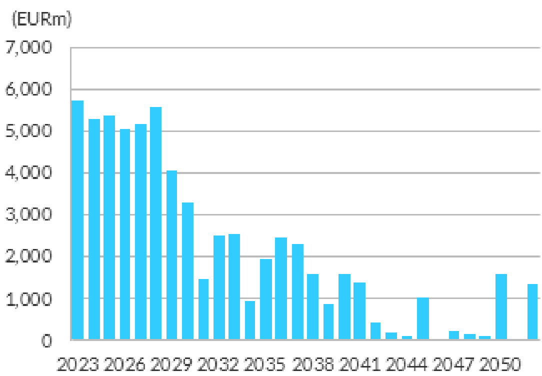
In February 2023, Berlin issued its first sustainable bond of EUR750 million, with a maturity of 10 years.

Overall Adjusted Debt Structure



Source: Fitch Ratings, FitchRatings - International Public Finance

Direct Debt Maturity Profile, End-2022



Source: Fitch Ratings, Berlin, State of

Liabilities and Liquidity Flexibility: Stronger

German Laender operate in a strong framework for emergency liquidity support provided by the national government with counterparty risk of 'AAA'. This established and active liquidity management system, together with Laender's strong access to capital markets and corresponding strong refinancing capacity and appropriate treasury facilities, should prevent delays in the provision of liquidity and support.

The liquidity risk of a single Land is avoided through bilateral and mutual agreements linking all Laender as well as the Bund, ensuring their ability to assist one another.

Liquidity would only fail to be forthcoming for any given Land in the 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 to Fitch's rating approach for the German Laender.

Debt Analysis

	2022
Fixed rate (% of direct debt)	96
Issued debt (% of direct debt)	99
Apparent cost of debt (%)	1.6
Weighted average life of debt (years)	8.28

Source: Fitch Ratings, State of Berlin

Liquidity

(EURm)	2022
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 Issuer
Source: Fitch Ratings

Fitch classifies Berlin as Type A local and regional governments (LRG) as the state has the ability to incur structural deficits and as the German Laender share some key attributes of sovereignty with the central government.

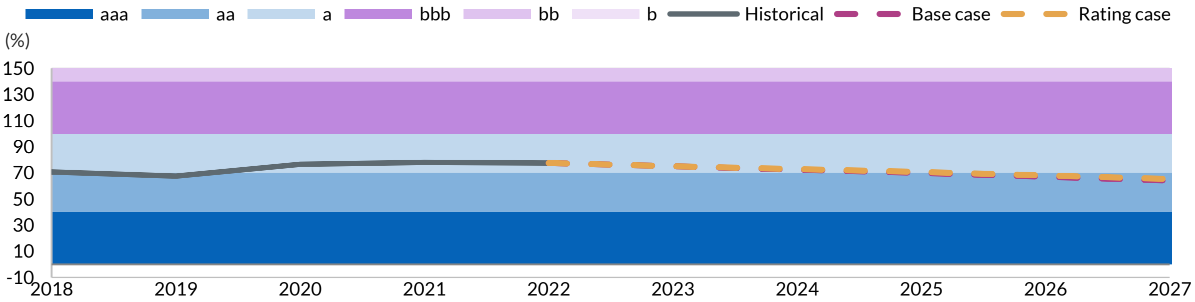
Berlin's ELB (primary metric) is assessed at 65.3% according to our rating case for 2027 (2022: 77.6%), which corresponds to the 'aa' category.

However, on the basis of a weaker assessment of the secondary metrics - the Debt Payback ratio is assessed at 16.3x ('bbb' category), the Synthetic Debt Service Coverage at 0.8x ('b') and the Fiscal Debt Burden at 158.8x ('bbb') - we assess Berlin's overall debt sustainability in the 'a' category.

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.

Berlin has prudent, forward-looking and well-experienced debt- and cash-management, reviewing its daily funding and deposit needs. This should prevent any unexpected cash shortfall.

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



Source: Fitch Ratings, Berlin, State of

Fitch's base-case scenario considers the assumptions that are primarily derived from economic data, including Fitch's Global Economic Outlook and Germany's sovereign report, as well as the issuer's forecast.

Fitch's assumptions for cash flow for 2023-2027 are primarily based on economic data, in particular national nominal GDP growth and inflation forecasts.

Our rating-case is a "through-the cycle" scenario, which incorporates a combination of revenue and cost stresses. It is based on 2018-2022 actual figures and 2023-2027 projected ratios.

The rating case ends in 2027 and relies on the assumptions in the table below.

Scenario Assumptions Summary

		2023 - 2027 average	
Assumptions	5-year historical average	Base case	Rating case
Operating revenue growth (%)	6.5	2.4	2.2
Tax revenue growth (%)	12.0	3.7	3.5
Current transfers received growth (%)	-5.1	-2.9	-2.9
Operating expenditure growth (%)	7.3	2.7	2.9
Net capital expenditure (average per year; m)	-2,285	-2,470	-2,370
Apparent cost of debt (%)	1.9	1.9	1.9

		2027	
Outcomes	2022	Base case	Rating case
Economic liability burden (%)	77.6	64.1	65.3
Payback ratio (x)	14.5	13.3	16.3
Overall payback ratio (x)	21.2	19.8	23.9
Actual coverage ratio (x)	0.7	0.7	0.6
Synthetic coverage ratio (x)	0.9	0.9	0.8
Fiscal debt burden (%)	180.4	150.8	158.8

Source: Fitch Ratings, State of Berlin

The state's net adjusted debt was EUR65.9 billion at end-2022: EUR59.5 billion of capital market debt, EUR600 million of public debt and a EUR5.8 billion internal loan.

Berlin's net overall debt of EUR96.8 billion also includes the state's guarantees (2022: EUR4.3 billion) and the debt of its majority-owned government-related entities and other contingent liabilities (2022: EUR26.6 billion). The high number of shareholdings and public sector entities results from the state's dual status as a Land and a city, which means it has to provide city-like utility services (e.g. transport, water and waste management). Fitch views the risk stemming from Berlin's contingent liabilities as low.

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

Peer Comparison

	Risk profile	Primary metric (x)	SCP	ID	Outlook/watch
Berlin, State of	Stronger	65.3	aa	AAA	Sta
Saxony-Anhalt, State of	Stronger	65.9	aa	AAA	Sta
Schleswig-Holstein, State of	Stronger	64.4	aa	AAA	Sta
Hamburg, State of	Stronger	38.8	aaa	AAA	Sta
Bremen, State of	Stronger	84.0	a	AAA	Sta
North Rhine-Westphalia, State of	Stronger	54.4	aa+	AAA	Sta
Rhineland-Palatinate, State of	Stronger	50.8	aa+	AAA	Sta

Source: Fitch Ratings

Fitch rates 11 German states publicly, of which one has a SCP at 'aaa', five of which have SCPs assessed at 'aa+', three have SCPs at 'aa', one at 'aa-' and one at 'a'.

Berlin's closest peers are the State of Saxony-Anhalt and Schleswig-Holstein, whose ELBs (at 65.9% and 64.4% respectively) are close to Berlin's (65.3%), they also have a SCP of 'aa'.

Long Term Rating Derivation

From SCP to IDR/CO: Factors Beyond the SCP

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

Source: Fitch Ratings

The German Laender 'AAA' IDRs are linked to the rating of the Bund.

The SCP of Berlin is assessed at 'aa', which reflects a combination of a 'Stronger' risk profile for Berlin and debt sustainability of 'a'.

Berlin' IDRs are primarily driven by the stability of the solidarity system that underpins the state's creditworthiness, 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. According to 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 in the past, most recently in 2006.

Short Term Rating Derivation

Berlin's short-term ratings of 'F1+' are in line with its long-term ratings of 'AAA'.

National Ratings

N/a

Transaction and Securities

Berlin's senior unsecured debt ratings are in line with its Long- and Short-Term IDRs.

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

(EURm)	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Fiscal performance										
Taxes	17,054	17,569	20,761	24,653	27,220	28,080	29,074	30,173	31,229	32,260
Transfers received	9,797	9,562	8,348	8,616	7,403	7,203	7,003	6,803	6,603	6,403
Fees, fines and other operating revenues	1,631	2,204	1,499	1,700	1,917	1,967	2,017	2,067	2,117	2,167
Operating revenue	28,482	29,335	30,608	34,970	36,540	37,249	38,094	39,043	39,949	40,829
Operating expenditure	-23,865	-24,882	-29,619	-31,959	-31,996	-33,673	-34,616	-35,343	-36,085	-36,843
Operating balance	4,617	4,452	989	3,010	4,544	3,576	3,478	3,700	3,864	3,987
Interest revenue	12	13	10	14	11	12	12	12	12	12
Interest expenditure	-1,229	-1,161	-980	-1,085	-966	-1,021	-1,021	-1,141	-1,201	-1,380
Current balance	3,400	3,304	18	1,939	3,590	2,568	2,470	2,571	2,675	2,618
Capital revenue	846	1,460	853	914	872	966	850	821	740	740
Capital expenditure	-2,695	-4,685	-2,303	-2,975	-3,711	-3,362	-3,400	-3,285	-2,960	-2,960
Capital balance	-1,850	-3,225	-1,450	-2,061	-2,840	-2,397	-2,550	-2,464	-2,220	-2,220
Total revenue	29,340	30,808	31,470	35,897	37,423	38,227	38,956	39,876	40,701	41,581
Total expenditure	-27,789	-30,728	-32,902	-36,019	-36,673	-38,056	-39,037	-39,768	-40,246	-41,183
Surplus (deficit) before net financing	1,551	79	-1,431	-122	750	171	-81	108	455	398
New direct debt borrowing	5,677	4,081	8,227	3,470	5,390	0	0	0	0	0
Direct debt repayment	-7,292	-4,557	-6,797	-5,714	-5,740	0	0	0	0	0
Net direct debt movement	-1,615	-476	1,430	-2,244	-350	-10	-10	-10	-10	-10
Overall results	-65	-397	-1	-2,366	400	161	-91	98	445	388
Debt and liquidity										
Short-term debt	0	0	0	0	0	5,312	5,397	5,065	5,169	5,502
Long-term debt	54,508	54,102	59,802	59,788	59,458	54,146	54,061	54,393	54,289	53,956
Intergovernmental debt	0	0	631	619	600	590	580	570	560	550
Direct debt	54,508	54,102	60,433	60,408	60,058	60,048	60,038	60,028	60,018	60,008
Other Fitch-classified debt	3,092	3,016	3,271	5,515	5,846	5,846	5,846	5,846	5,846	5,846
Adjusted debt	57,600	57,119	63,705	65,923	65,904	65,894	65,884	65,874	65,864	65,854
Guarantees issued (excluding adjusted debt portion)	4,255	3,295	3,007	4,616	4,283	4,283	4,283	4,283	4,283	4,283
Majority-owned GRE debt and other contingent liabilities	16,866	19,935	20,862	26,480	26,587	26,228	26,228	26,228	26,228	26,228
Overall adjusted debt	78,721	80,349	87,574	97,019	96,774	96,405	96,395	96,385	96,375	96,365
Total cash, liquid deposits, and sinking funds	0	0	0	0	0	161	71	168	613	1,002
Restricted cash	0	0	0	0	0	0	0	0	0	0
Unrestricted cash	0	0	0	0	0	161	71	168	613	1,002
Net adjusted debt	57,600	57,119	63,705	65,923	65,904	65,733	65,813	65,706	65,250	64,852
Net overall debt	78,721	80,349	87,574	97,019	96,774	96,244	96,325	96,217	95,762	95,364
Enhanced net adjusted debt	57,600	57,119	63,074	65,303	65,303	65,142	65,233	65,136	64,690	64,302
Enhanced net overall debt	78,721	80,349	86,943	96,399	96,174	95,654	95,745	95,647	95,202	94,814

Source: Fitch Ratings, Fitch Solutions, State of Berlin

Appendix B: Financial Ratios

State of Berlin

	FY 18	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27
Fiscal performance ratios										
Operating balance/operating revenue (%)	16.2	15.2	3.2	8.6	12.4	9.6	9.1	9.5	9.7	9.8
Current balance/current revenue (%)	11.9	11.3	0.1	5.5	9.8	6.9	6.5	6.6	6.7	6.4
Operating revenue growth (annual % change)	6.6	3.0	4.3	14.3	4.5	1.9	2.3	2.5	2.3	2.2
Operating expenditure growth (annual % change)	5.9	4.3	19.0	7.9	0.1	5.2	2.8	2.1	2.1	2.1
Surplus (deficit) before net financing/total revenue (%)	5.3	0.3	-4.6	-0.3	2.0	0.5	-0.2	0.3	1.1	1.0
Surplus (deficit) before net financing/GDP (%)	1.1	0.1	-0.9	-0.1	0.4	0.1	0.0	0.1	0.2	0.2
Total revenue growth (annual % change)	5.9	5.0	2.2	14.1	4.3	2.2	1.9	2.4	2.1	2.2
Total expenditure growth (annual % change)	4.2	10.6	7.1	9.5	1.8	3.8	2.6	1.9	1.2	2.3
Debt ratios										
Primary metrics										
Economic liability burden (%) - not relevant for type B LRGs	70.6	67.5	76.5	78.0	77.6	75.2	72.9	70.6	67.9	65.3
Enhanced economic liability burden (%)	70.6	67.5	76.1	77.6	77.3	74.9	72.6	70.4	67.6	65.1
Secondary metrics										
Payback ratio (x) (net adjusted debt/operating balance)	12.5	12.8	64.4	21.9	14.5	18.4	18.9	17.8	16.9	16.3
Overall payback ratio (x)	17.1	18.0	88.5	32.2	21.2	26.9	27.7	26.0	24.8	23.9
Fiscal debt burden (%) (net debt/operating revenue)	202.2	194.7	208.1	188.5	180.4	176.5	172.8	168.3	163.3	158.8
Synthetic debt service coverage ratio (x)	1.0	1.0	0.2	0.6	0.9	0.7	0.7	0.7	0.8	0.8
Actual debt service coverage ratio (x)	0.5	0.8	0.1	0.4	0.7	0.6	0.5	0.6	0.6	0.6
Other debt ratios										
Liquidity coverage ratio (x)	0.5	0.8	0.1	0.4	0.7	0.6	0.6	0.6	0.6	0.7
Direct debt maturing in one year/total direct debt (%)	13.4	9.3	8.8	9.4	9.0	8.9	9.0	8.4	8.6	9.2
Direct debt (annual % change)	-7.6	-0.7	11.7	0.0	-0.6	0.0	0.0	0.0	0.0	0.0
Apparent cost of direct debt (interest paid/direct debt) (%)	2.2	2.1	1.7	1.8	1.6	1.7	1.7	1.9	2.0	2.3
Revenue ratios										
Tax revenue/total revenue (%)	58.1	57.0	66.0	68.7	72.7	73.5	74.6	75.7	76.7	77.6
Current transfers received/total revenue (%)	33.4	31.0	26.5	24.0	19.8	18.8	18.0	17.1	16.2	15.4
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 (%)	2.9	4.7	2.7	2.5	2.3	2.5	2.2	2.1	1.8	1.8
Expenditure ratios										
Staff expenditure/total expenditure (%)	31.9	30.3	30.0	29.2	29.8	n.a.	n.a.	n.a.	n.a.	n.a.
Current transfers made/total expenditure (%)	26.3	25.0	30.5	29.8	26.5	n.a.	n.a.	n.a.	n.a.	n.a.
Interest expenditure/total expenditure (%)	4.4	3.8	3.0	3.0	2.6	2.7	2.6	2.9	3.0	3.4
Capital expenditure/total expenditure (%)	9.7	15.3	7.0	8.3	10.1	8.8	8.7	8.3	7.4	7.2

Source: Fitch Ratings, Fitch Solutions, State of Berlin

Appendix C: Data Adjustments

Net Adjusted Debt Calculations

Berlin' s net adjusted debt was EUR65.9 billion at end-2022. This consisted of EUR59.5 billion of capital market debt, EUR600 million of public debt and EUR5.8 billion of an internal loan.

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.

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