Germany

Key Rating Drivers

Exceptional Credit Strength: Germany's 'AAA' rating reflects its diversified, high value-added economy, strong institutions and record of sound public finances. Its position as the primary benchmark issuer in the eurozone ensures significant financing flexibility and its structural current account surplus (CAS) supports its net external creditor position.

Significant Hit from Energy Shock: Fitch Ratings believes that Germany is likely to avoid widespread energy rationing over the coming winter, due to swift diversification of energy sources and substantial cuts to domestic consumption. Nevertheless, we forecast an economic contraction this winter due to the severe energy shock triggered by the war in Ukraine.

Recession and Very High Inflation: Our annual GDP growth forecast is 1.4% in 2022, -0.5% in 2023 and 2.3% in 2024, a significant downward revision from the last rating review in April 2022. The very high inflation environment will be more prolonged than previously expected, despite the recession. Our HICP inflation forecast is 8.5% in 2022 and 6.4% in 2023. The GDP deflator inflation will be lower than HICP inflation, due to the imported energy price shock, but it will be above 4% in 2022 and 2023.

Large, Temporary Fiscal Stimulus: The German government has implemented various measures since February 2022 to mitigate the energy shock for the private sector, including a maximum EUR200 billion (5.3% of projected 2022 GDP) for energy subsidies until early 2024, financed from the economic stabilisation fund that was set up in 2020. The government strategy is to maintain a sound underlying fiscal position – consistent with its domestic fiscal rule – and to provide temporary stimulus through the economic stabilisation fund.

Moderate but Persistent Budget Deficits: Fitch forecasts the budget deficit, in European System of Accounts (ESA) terms, to be around 3% of GDP in 2022, compared with 3.6% in 2021 and 4.3% in 2020. Despite the weak real economy, central government tax revenue grew 14% yoy in 8M22. We forecast the deficit will widen to 3.5% in 2023, assuming that less than half of the maximum EUR200 billion funds will be spent on energy subsidies.

Medium-Term Fiscal Uncertainty: We expect the underlying general government deficit, on an ESA basis, to narrow only gradually and remain above 2% of GDP until 2025 due to expenditure pressures and their off-budget financing. In our view the debt-brake rule will be less binding for the underlying fiscal stance in the coming years and the large off-budget programmes erode the transparency of the public finance framework. In our assessment it could, over the medium term, also undermine Germany's outstanding fiscal credibility.

Stable Public Debt Ratio: General government debt was 69% of GDP in 2021, compared with the pre-pandemic low of 59% reached in 2019. The German public debt level is above the 'AAA' median of 44% of GDP and, according to our baseline scenario, it will stabilise at about 67% over the medium term.

Resilient External Position: Germany has a strong external position, which was resilient to the pandemic shock in 2020 and 2021, underpinned by its large, competitive and export-oriented manufacturing sector. Its trade surplus has narrowed more recently due to a surge in imported energy prices, so Fitch forecasts the CAS to decline to below 4% of GDP in 2022 from 7.4% in 2021. We expect the CAS to stabilise at around 5% over the medium term.

Sound Banking Sector: The German banking sector scores 'a' on Fitch's banking system indicator, reflecting resilient asset quality, sound capitalisation and funding and liquidity. This should limit the impact on German banks' credit profiles from the expected recession, which will also weaken loan demand, dampening business prospects for banks and leading to higher loan impairment charges (LICs).

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+

Country Ceiling AAA

Outlooks

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

Rating Derivation

Component	
Sovereign Rating Model (SRM)	AA+
Qualitative Overlay (QO)	+1
Structural features	0
Macroeconomic	+1
Public finances	0
External finances	0
Long-Term Foreign-Currency IDR	AAA

Source: Fitch Ratings

Data

	2022F
GDP (USDbn)	4,009
Population (m)	83.6

Source: Fitch Ratings

Applicable Criteria

Sovereign Rating Criteria (July 2022)
Country Ceilings Criteria (July 2020)

Related Research

Fitch Affirms Germany at 'AAA'; Outlook Stable (October 2022)
Global Economic Outlook (September 2022)
Interactive Sovereign Rating Model
Fitch Fiscal Index – Analytical Tool
Click here for more Fitch Ratings content on Germany

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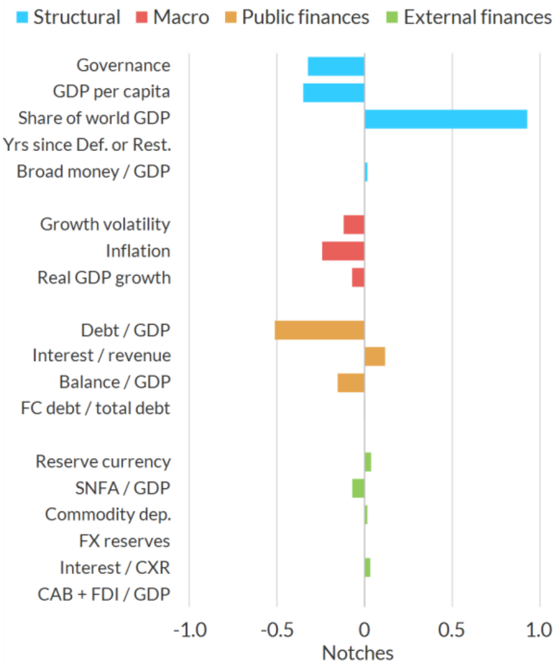
Rating Summary

Long-Term Foreign-Currency Issuer Default Rating: AAA

Sovereign Rating Model: AA+

Contribution of variables, relative to AAA Median



Note: See Peer Analysis table for summary data, including rating category medians; see the Full Rating Derivation table for detailed SRM data.
Source: Fitch Ratings

Qualitative Overlay: +1

Adjustments relative to SRM data and output

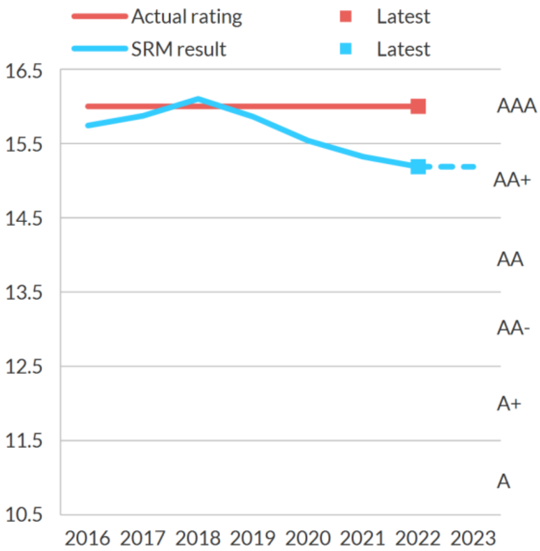
Structural Features: No adjustment.

Macroeconomic Outlook, Policies and Prospects: +1 notch to offset the deterioration in the SRM output driven by volatility from the pandemic shock, including on GDP growth.

Public Finances: No adjustment.

External Finances: No adjustment.

Sovereign Rating Model Trend



Recent Rating Derivation History

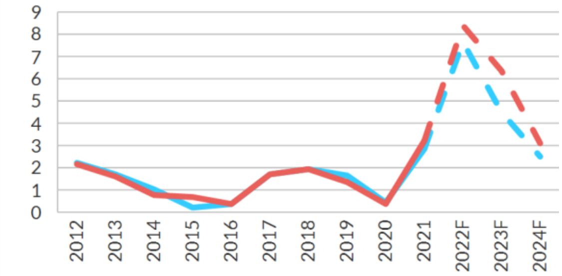
Review Date	LT FC IDR	SRM Result[ab]	QO S	M	PF	EF
Latest	AAA	AA+	0	1	0	0
29 Apr 22	AAA	AA+	0	+1	0	0
29 Oct 21	AAA	AA+	0	+1	0	0
30 Apr 21	AAA	AA+	0	+1	0	0
6 Nov 20	AAA	AA+	0	+1	0	0
12 Jun 20	AAA	AAA	0	0	0	0
17 Jan 20	AAA	AAA	0	0	0	0
19 Jul 19	AAA	AAA	0	0	0	0
25 Jan 19	AAA	AAA	0	0	0	0
3 Aug 18	AAA	AAA	0	0	0	0

[a] The latest rating uses the SRM result for 2022 from the chart. This will roll forward to 2023 in July 2023.
[b] Historical SRM results in this table may differ from the chart, which is based on our latest data, due to data revisions.
Abbreviations: LT FC IDR = Long-Term Foreign-Currency Issuer Default Rating; SRM = Sovereign Rating Model; QO = Qualitative Overlay
Source: Fitch Ratings

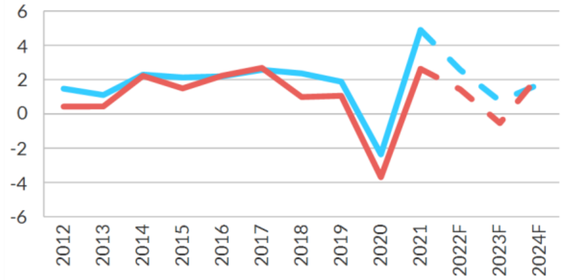
Peer Analysis

Germany AAA Median

Consumer Price Inflation
(annual avg, %)

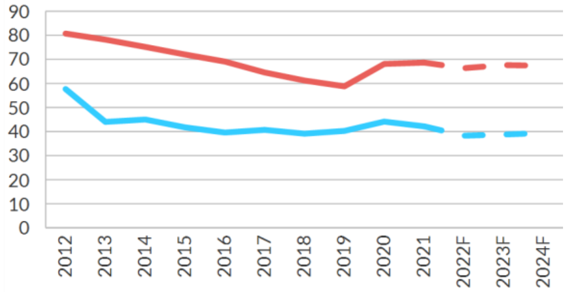


Real GDP Growth
(%)

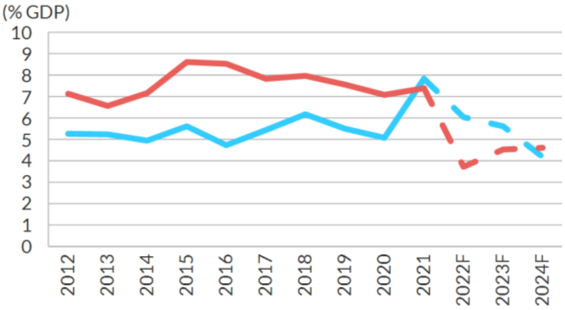


General Government Balance
(% GDP)

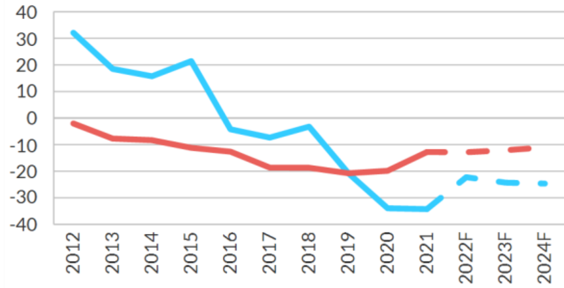
Gross General Government Debt
(% GDP)



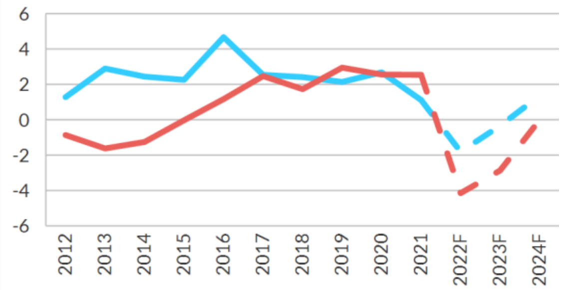
Current Account Balance
(% GDP)



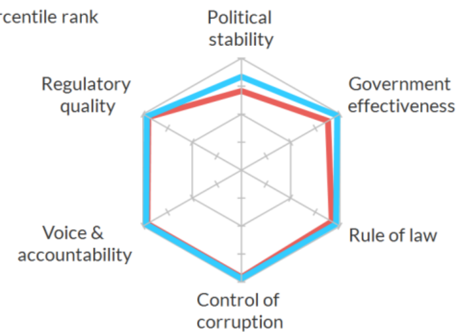
Net External Debt
(% GDP)



Real Private-Sector Credit Growth
(%)



Governance Indicators
Percentile rank



Source: Fitch Ratings, Statistical Office, Ministry of Finance, IMF, World Bank

Peer Analysis

2022F[a]	Germany	AAA median	AA median	A median
Structural features				
GDP per capita (USD) [SRM]	47,942	70,720	48,649	28,618
Share in world GDP (%) [SRM]	4.2	0.0	0.0	0.0
Composite governance indicator (percentile, latest) [SRM][b]	89.4	93.8	84.5	75.6
Human development index (percentile, latest)	95.7	95.6	88.7	81.9
Broad money (% GDP) [SRM]	101.6	93.3	100.3	89.2
Private credit (% GDP, 3-year average)	80.7	121.6	104.2	73.6
Dollarisation ratio (% bank deposits, latest)	-	16.7	12.2	10.3
Bank system capital ratio (% assets, latest)	18.6	15.0	16.1	15.7
Macroeconomic performance and policies				
Real GDP growth (%, 3-year average) [SRM]	1.2	2.1	2.2	3.7
Real GDP growth volatility (complex standard deviation) [SRM]	2.2	1.9	2.3	2.9
Consumer price inflation (%, 3-year average) [SRM]	6.0	1.8	2.1	2.3
Unemployment rate (%)	3.2	5.4	4.9	6.4
Public finances (general government)[c]				
Balance (% GDP, 3-year average) [SRM]	-3.4	-0.2	-0.7	-2.3
Primary balance (% GDP, 3-year average)	-2.9	1.1	0.8	-0.5
Interest payments (% revenue, 3-year average) [SRM]	1.1	3.8	3.7	4.6
Gross debt (% revenue, 3-year average)	143.8	113.5	137.5	138.4
Gross debt (% GDP, 3-year average) [SRM]	67.5	44.1	39.6	42.8
Net debt (% GDP, 3-year average)	55.5	37.8	27.9	38.6
FC debt (% gross debt, 3-year average) [SRM]	0.6	0.0	1.0	10.5
External finances[c]				
Current account balance (% GDP, 3-year average)	5.2	4.9	1.2	0.9
Current account balance + net FDI (% GDP, 3-year avg.) [SRM]	2.3	2.1	0.7	2.4
Commodity dependence (% CXR) [SRM]	10.3	14.1	14.9	11.5
Gross external debt (% GDP, 3-year average)	187.0	173.8	117.1	64.9
Net external debt (% GDP, 3-year average)	-12.6	15.3	-3.4	-7.9
Gross sovereign external debt (% GXD, 3-year average)	35.9	12.1	17.2	18.9
Sovereign net foreign assets (% GDP, 3-year average) [SRM]	-10.7	-4.9	4.9	11.7
External interest service (% CXR, 3-year average) [SRM]	2.2	7.3	4.6	2.4
Foreign-exchange reserves (months of CXP) [SRM]	1.1	1.4	2.9	4.4
Liquidity ratio	34.3	50.3	54.3	107.4

[a] 3-year averages are centred on this year. Fitch does not forecast indicators labelled ‘latest’, meaning data may be lagging.
[b] Composite of all six World Bank Worldwide Governance Indicators (see chart on the previous page).
[c] See Appendix 2: Data Notes and Conventions for details of data treatment for public finances and external finances.
Source: Fitch Ratings, Statistical Office, Ministry of Finance, IMF, World Bank, United Nations

Supplementary Information

BSI / MPI = a / 3. About the BSI and MPI: Fitch’s bank systemic indicator (BSI) equates to a weighted average Viability Rating. The macro-prudential risk indicator (MPI) focuses on one potential source of financial stress, ranging from ‘3’ – high potential vulnerability to financial stress over the medium term based on trends in credit expansion, equity and property prices and real exchange rates – to ‘1’ – low likelihood. For more information, refer to Fitch’s most recent Macro-Prudential Risk Monitor report.

Year cured from the most recent default or restructuring event, since 1980 = No event.

The de facto exchange rate regime, based on the latest IMF Annual Report on Exchange Arrangements and Exchange Restrictions report, is 'Free floating (EMU)'.

Rating Factors

Strengths

- Germany has a high-value-added, diversified and open economy with a competitive manufacturing sector, and effective political and social institutions.
- Public debt management in Germany is sound and the sovereign's modern debt repayment record is unblemished.
- Germany is the primary benchmark issuer for the eurozone, which affords it significant financing flexibility following a prolonged period of extremely low yields across the curve.
- Resilient CAS, in line with the 'AAA' median, reflect Germany's competitiveness and high income from foreign assets. Germany has a strong international investment position.
- The interest payment/revenue ratio is only 1.1%, well below the 'AAA' median.

Weaknesses

- Governance indicators are below the rating peer median.
- Germany has an MPI score of '3' (high vulnerability), the only developed market according to the latest Macroprudential Risk Monitor (August 2022).

Rating	Sovereign
AAA	**Germany**
	Australia
	Denmark
	Luxembourg
	Netherlands
	Norway
	Singapore
	Sweden
	Switzerland
	United States of America
AA+	Austria
	Canada
	Finland
	New Zealand

Source: Fitch Ratings

Rating Sensitivities

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

- **Macro/Public Finances:** A more severe and persistent macroeconomic shock from the energy crisis resulting in a failure to stabilise gross general government debt over the medium term, for example, due to sustained expenditure pressures.
- **Structural:** A material increase in fiscal risk-sharing at the EU level leading to a further marked increase in public debt/GDP, without offsetting benefits from greater eurozone resilience and institutional strength. As a core member of the monetary union, Germany is financially exposed to the broader liabilities of the eurozone .

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

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

Forecast Summary

	2019	2020	2021	2022F	2023F	2024F
Macroeconomic indicators and policy						
Real GDP growth (%)	1.1	-3.7	2.6	1.4	-0.5	2.3
Unemployment (%)	3.0	3.7	3.6	3.2	3.5	3.4
Consumer price inflation (annual average % change)	1.4	0.4	3.2	8.4	6.4	3.1
Policy interest rate (annual average, %)	0.0	0.0	0.0	0.7	2.0	1.8
General government balance (% GDP)	1.5	-4.3	-3.6	-3.1	-3.5	-2.5
Gross general government debt (% GDP)	58.8	68.1	68.7	66.3	67.6	67.3
EUR per USD (annual average)	0.9	0.9	0.8	1.0	1.0	1.0
Real private credit growth (%)	2.9	2.6	2.5	-4.1	-2.9	-0.0
External finance						
Merchandise trade balance (USDbn)	241.2	218.0	227.9	153.5	183.5	194.1
Current account balance (% GDP)	7.6	7.1	7.4	3.7	4.5	4.6
Gross external debt (% GDP)	164.1	203.3	180.6	186.0	194.5	193.0
Net external debt (% GDP)	-20.8	-19.8	-12.8	-12.9	-12.1	-11.0
External debt service (principal + interest, USDbn)	715.8	736.3	857.0	828.8	783.7	839.7
Official international reserves including gold (USDbn)	224.0	268.4	256.5	203.6	174.1	155.7
Gross external financing requirement (% int. reserves)	189.0	187.8	187.7	241.0	267.3	337.2
Real GDP growth (%)						
US	2.3	-3.4	5.7	1.7	0.5	1.7
China	6.0	2.2	8.1	2.8	4.5	4.7
Eurozone	1.3	-6.4	5.4	2.9	-0.1	2.3
World	2.6	-3.3	5.8	2.4	1.7	2.8
Oil (USD/barrel)	64.1	43.3	70.6	100.0	85.0	65.0

Source: Fitch Ratings

Sources and Uses

Public Finances (General Government)

(EURbn)	2022	2023
Uses	**482.9**	**522.7**
Budget deficit	119.0	139.0
MLT amortisation	363.9	383.7
Domestic	350.1	369.2
External	13.7	14.5
Sources	**482.9**	**522.7**
Gross borrowing	443.5	522.7
Domestic	430.8	508.3
External	12.7	14.5
Privatisation	0.0	0.0
Other	39.4	0.0
Change in deposits (- = increase)	0.0	-0.0

Source: Fitch Ratings

External Finances

(USDbn)	2022	2023
Uses	**618.2**	**544.3**
Current account deficit	-149.2	-179.7
MLT amortisation	767.4	724.1
Sovereign	15.2	16.0
Non-sovereign	752.2	708.0
Sources	**618.2**	**544.3**
Gross MLT borrowing	1,457.7	1,384.4
Sovereign	390.7	361.5
Non-sovereign	1,067.0	1,022.8
FDI	-120.1	-120.1
Other	-719.4	-720.4
Change in FX reserves (- = increase)	0.0	0.5

Source: Fitch Ratings

Credit Developments

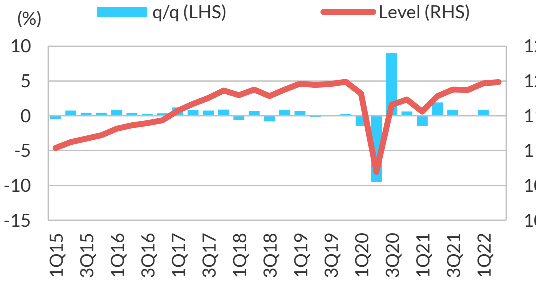
Significant Hit from the Energy Shock

The post-pandemic recovery of the German economy ended in 1H22 due to the energy shock triggered by the war in Ukraine. GDP growth slowed to 0.1% qoq in 2Q22 from 0.8% in 1Q22, well below the eurozone figure of 0.8% in both quarters. Over a longer horizon, the 2019-2022 GDP path of the German economy is similar to the eurozone performance, as the level of GDP in 2Q22 is practically back to its pre-pandemic value.

The energy shock is not only a significant supply shock to the German economy, but it also has adverse indirect effects through the fall in business and household confidence reinforced by the strong aversion to higher inflation. For example, the IFO sentiment index has declined sharply over the past six months and its current value is comparable to the trough during the pandemic shock.

Hit from Energy Shock

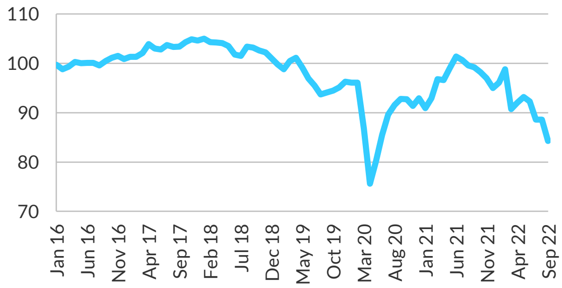
GDP Level and q/q Dynamics



Source: Fitch Ratings, Haver

Falling Business Sentiment

IFO Index, 2015=100



Source: Fitch Ratings, Haver

Recession in 2023

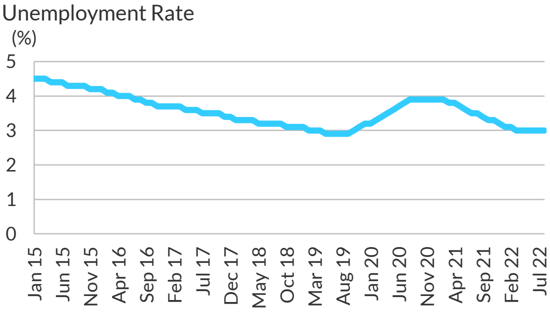
Fitch believes that Germany is likely to avoid widespread energy rationing over the coming winter, due to swift diversification of energy sources and substantial cuts to domestic consumption. Nevertheless, we forecast an economic contraction during the 2022-2023 winter due to the severe energy shock triggered by the war in Ukraine, while growth will be further weakened by slower growth in China, Germany's second-largest export market.

Our annual GDP growth forecast is 1.4% in 2022, -0.5% in 2023 and 2.3% in 2024, a significant downward revision compared to the April 2022 rating review. Fitch's latest GDP growth forecast for the eurozone is -0.1% in 2023, which means the German economy will underperform that of the eurozone in both 2022 and 2023. We expect the labour market to remain resilient, preserving most of the gains of the previous years. According to our forecast the unemployment rate will increase by only 0.3pp in 2023 and remain below 4%, the temporary peak during the pandemic. Furthermore, we do not expect a persistent wage-price spiral to take hold in Germany.

Notwithstanding the energy shock, domestic fundamentals are sound, as illustrated by the resilient labour market, and could support growth over the medium term. In particular, the high household savings rate, which peaked at close to 25% of disposable income in 2021, could translate into higher consumption growth over the forecast horizon. German households traditionally have higher savings rate than the eurozone average, providing a buffer to adverse shocks, like the energy shock, to smooth consumption.

Resilient Labour Market

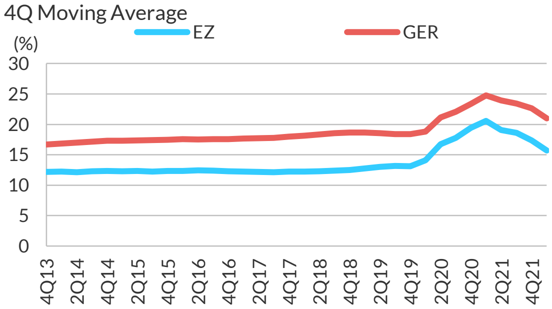
Unemployment Rate



Source: Fitch Ratings, Haver

High Savings Rate

4Q Moving Average



Source: Fitch Raitngs, Eurostat

In light of the current energy shock it is worth noting that the German economy has improved its energy efficiency significantly over the past three decades. Total annual energy consumption has declined by more than 10% between

1990 and 2019. This was a better performance than the EU average and also the best among the three largest EU economies. Furthermore, the real GDP has increased by more than 50% over this period, meaning that energy intensity (output/energy) improved by more than 60%.

Very High and Persistent Inflation

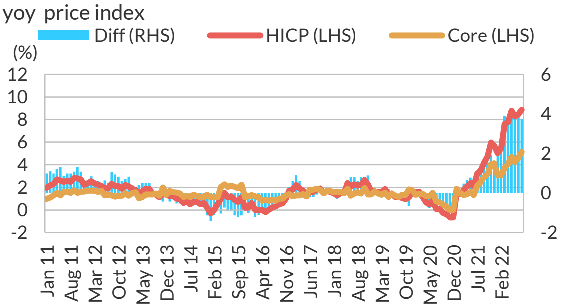
Inflation has continued to increase since the last rating review due to the energy shock and the HICP index reached 11% in September. The transport subsides, in particular the EUR9 monthly public transport pass and the petrol duty cuts, helped to mitigate the inflation shock during the summer, when HCP inflation was 8%-9%. Core inflation, HICP excluding energy and unprocessed food, is on a steady upward path and reached 5.5% in August 2022 from 2.4% in January. The gap between HICP and core indices has stabilised at about 4pp in recent months after a sharp increase earlier. The stable HICP-core gap could indicate that price increases are becoming more widespread in the German economy and thus the underlying inflation is becoming more persistent.

The very high inflation environment will be more prolonged than previously expected, despite the recession. Our HICP inflation forecast is 8.5% in 2022 and 6.4% in 2023. The German public has historically had a strong aversion to high inflation. The current period of high inflation is therefore likely to have aggravated the shock to economic confidence.

The GDP deflator has followed a similar trend to the consumer price inflation indicators in recent quarters and reached a record 5.9% in 2Q22. While HICP in Germany is similar as the eurozone average, the GDP deflator is almost 2pp higher than the eurozone average of 4.2%. The high GDP deflator partly reflects the strong price increases in the construction sector, while the surge in imported energy prices has a dampening effect on the GDP deflator, through the deterioration in the term of trade. Our GDP deflator inflation forecast is 5.4% in 2022 and 4% in 2023. This implies that despite the weak real economy the cumulative nominal growth of the German economy in 2022 and 2023 will be close to 10%.

High, Persistent Inflation

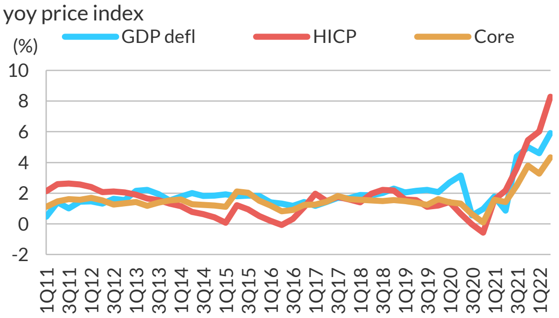
yoy price index



Source: Fitch Ratings, Haver

Broad-Based Price Pressure

yoy price index



Source:Fitch Ratings, Haver

Large Temporary Fiscal Stimulus

The German government has implemented various measures since February 2022 to mitigate the energy shock for the private sector. According to the latest plans, up to EUR200 billion (5.3% of projected 2022 GDP) will be available for energy subsidies until early 2024. This programme will be financed from the economic stabilisation fund that was set up outside the core budget after the pandemic shock in 2020.

The government strategy is to maintain a sound underlying fiscal position, consistent with its domestic fiscal rule, the debt break – which requires the structural budget deficit to be below 0.35% of GDP. But provide well-specified and temporary stimulus through the economic stabilisation fund or the EUR100 billion military investment announced shortly after the war started in Ukraine.

Moderate, but Persistent Budget Deficits

We expect the 2022 budget deficit, in ESA terms, to fall to about 3% of GDP from 3.6% in 2021 and 4.3% in 2020, the peak of the pandemic. Despite the weak real economy, tax revenue growth is broad-based and reached 14% in January-August 2022. The deficit could widen to 3.5% of GDP in 2023, when we assume that less than half of the maximum EUR200 billion fund will be spent on energy subsidies to the household and corporate sectors, partly through a price cap on up to 80% of their gas consumption.

Although Germany has under-spent previous support packages, the fiscal cost of the subsides is highly uncertain, not least as it will depend on the actual market gas price during next year. The risks around the baseline deficit projection are tilted to the downside.

According to the government's draft budget the ESA deficit will be 2% of GDP in 2023 but this does not include the impact from the EUR200 billion package. In light of the expenditure pressures and their off-budget financing we expect the underlying general government deficit, on an ESA basis, to decline only gradually and not to fall below 2% of GDP until 2025. According to the latest government projection the ESA deficit will fall to 1.25% of GDP in 2025 and 1% in 2026.

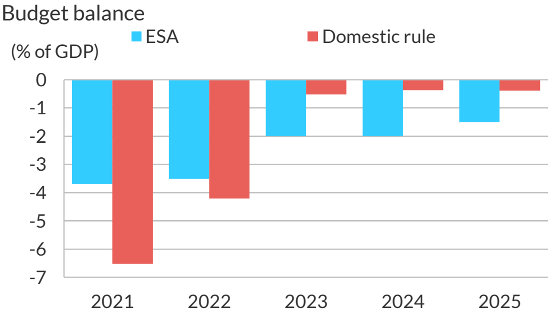
The gap between cash-flow-based fiscal indicators (Nettokreditaufnahme), used for the domestic debt break and accrual (ESA2010) figure on which the European fiscal rules are built will widen due to the large stimulus programmes, financed by extra budgetary funds. The disconnect between the deficit metrics started in 2020 due to the pandemic and as it becomes more prolonged, it erodes the fiscal framework's transparency.

Against this background, the debt-brake rule will be less binding for the underlying fiscal stance in the coming years and the large off-budget programmes erode the transparency of the public finance framework. In our assessment it could, over the medium run, also undermine Germany's outstanding fiscal credibility.

The upward shift of the yield curve has continued since our last rating review in April 2022. The 10-year German yield has reached 2.3% in October 2022. The higher yields will only lead to gradual increase in interest costs, given the almost seven years' average maturity of central government debt. Due to the combination of long period of ultra-low yields and falling debt/GDP ratio until the pandemic, Germany's interest expenditure declined to 0.6% of GDP in 2021 from 2.5% of the GDP in 2010.

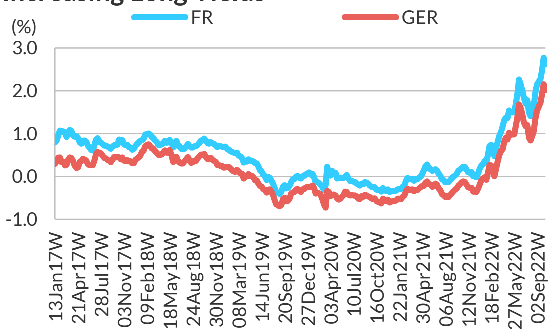
Mind the Gap

Budget balance



Source: Fitch Ratings,Ministry of Finance

Increasing Long Yields



Source: Fitch Ratings, Haver

Resilient External Position

Germany has a strong external position, which was resilient to the pandemic shock in 2020 and 2021, underpinned by its large, competitive and export-oriented manufacturing sector. The trade surplus has narrowed more recently due to the surge in imported energy prices, so the CAS is forecast to decline below 4% of GDP in 2022 from 7.4% in 2021. We forecast the CAS to stabilise around 5% of GDP over the medium term.

Sound Banks, Macroprudential Risks

The German banking sector scores 'a' on Fitch's banking system indicator, reflecting the sector's resilient asset quality, sound capitalisation, funding, and liquidity profile. This should limit the impact on German banks' credit profiles from the forecast deterioration in the macroeconomic outlook.

Banks in Germany are among the most exposed in western Europe to a full shut-off of Russian gas supplies, which is a key risk for the German economy. The expected recession in Germany is likely to weaken loan demand, dampening business prospects for banks and leading to higher LICs. Temporary valuation losses on securities, driven by rising interest rates, are also likely to lower 2022 profits and to affect capital ratios.

German banks should benefit from improving pre-impairment operating profitability in 2023 due to rising interest rates, which will provide additional buffers for higher LICs. Poor profitability has been the key weakness of the German banking sector for many years. However, the improvements are likely to be gradual as a significant proportion of lending is fixed-rate, particularly for residential mortgages.

Germany's MPI score of '3' (high vulnerability) reflects the combination of a jump in the credit/GDP ratio in 2020 and sustained strong increases in home prices. The drivers of the credit/GDP move were similar to other developed markets: real credit growth was supported by monetary and fiscal policy measures and demand for liquidity from business, while GDP contracted sharply. We expect the credit/GDP ratio to fall in 2022 due to the economic slowdown. The post-pandemic increase in credit ratios is unlikely to be a robust signal of elevated financial vulnerability.

Public Debt Dynamics

General government debt was 69% of GDP in 2021 and forecast to decline to 66% in 2022, mainly due to the 'denominator effect', the strong growth in nominal GDP. The German public debt level is above the 'AAA' median of 44% of GDP and, according to our baseline scenario, is unlikely to decline meaningfully until 2025. Although the deficit is expected to narrow from 2024, GDP growth is also expected to slow towards the 1% medium-term potential rate and GDP deflator inflation rate falls back and stabilise at the ECB's 2% price stability objective. The debt dynamics would be fairly resilient to GDP, fiscal or interest rate shocks until 2026.

Debt Dynamics - Fitch's Baseline Assumptions

	2020	2021	2022	2023	2024	2025	2026
Gross general government debt (% of GDP)	68.1	68.7	66.3	67.5	67.4	67.4	67.4
Primary balance (% of GDP)	-3.7	-3.1	-2.6	-3.1	-2.1	-1.5	-1.0
Real GDP growth (%)	-3.7	2.6	1.4	-0.5	2.3	1.5	1.0
Average nominal effective interest rate (%)	1.0	0.9	0.7	0.8	1.0	1.3	1.5
EUR/USD (annual average)	0.9	0.8	1.0	1.0	1.0	1.0	1.0
GDP deflator (%)	1.4	3.0	5.4	4.0	2.0	2.0	2.0
Stock-flow adjustments (% of GDP)	0.0	0.0	1.1	0.1	0.1	0.0	0.0

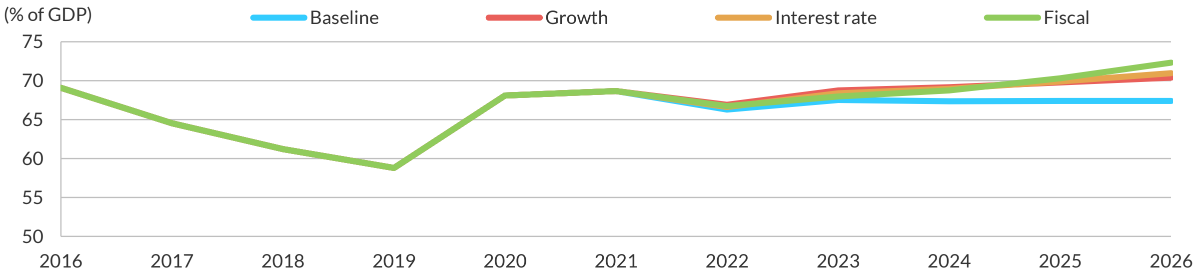
Source: Fitch Ratings

Debt Sensitivity Analysis: Fitch's Scenario Assumptions

Growth	GDP growth 0.9% lower (half standard deviation lower)
Interest rate	Marginal interest rate 250bp higher
Fiscal	Primary balance deficit of 3% of GDP from 2022

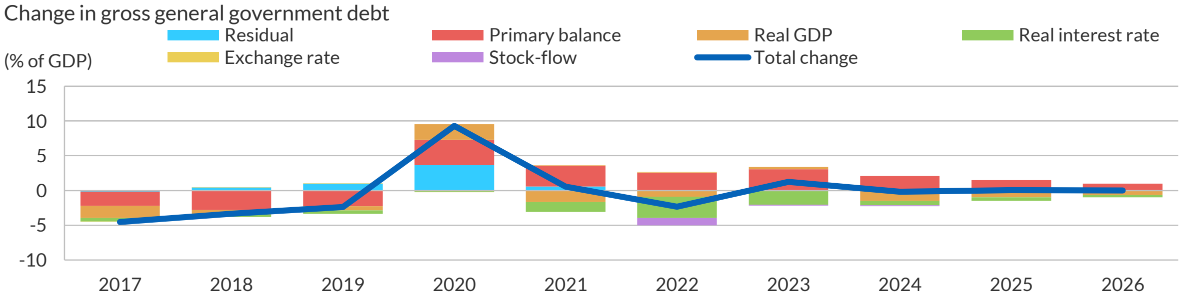
Source: Fitch Ratings

Sensitivity Analysis
Gross general government debt



Source: Fitch Ratings, Fitch Debt Dynamics Model

Baseline Scenario: Debt Creating Flows
Change in gross general government debt



Source: Fitch Ratings, Fitch Debt Dynamics Model

About the Public Debt Dynamics

Fitch uses stylised projections for a sovereign's gross general government debt/GDP ratio to illustrate the sustainability of its debt burden and its sensitivity to economic growth, the cost of borrowing, fiscal policy and the exchange rate.

Data Tables

General Government Summary

(% of GDP)	2016	2017	2018	2019	2020	2021	2022F	2023F	2024F
Revenue	45.6	45.5	46.2	46.4	46.1	47.5	46.8	46.6	46.6
Expenditure	44.4	44.1	44.3	44.9	50.4	51.2	49.9	50.1	49.1
o/w interest payments	1.2	1.0	0.9	0.8	0.6	0.6	0.5	0.4	0.4
Interest payments (% revenue)	2.6	2.3	2.0	1.7	1.3	1.2	1.0	0.9	0.9
Primary balance	2.1	2.1	2.8	2.3	-3.7	-3.1	-2.6	-3.1	-2.1
Overall balance	1.2	1.3	1.9	1.5	-4.3	-3.6	-3.1	-3.5	-2.5
Gross government debt	69.1	64.5	61.2	58.8	68.1	68.7	66.3	67.6	67.3
% of government revenue	151.5	142.0	132.5	126.8	147.7	144.6	141.8	145.1	144.5
Domestic debt	68.8	64.3	61.0	58.6	67.9	68.4	66.1	67.4	67.1
External debt	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Local currency	68.6	64.1	60.8	58.4	67.7	68.2	66.0	67.2	67.0
Foreign currency	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Central government deposits	10.4	10.8	10.8	10.8	13.4	12.7	11.9	11.5	11.0
Net government debt	58.7	53.7	50.4	48.0	54.7	55.9	54.4	56.1	56.3
Financing		-1.3	-1.9	-1.5	4.3	3.6	3.1	3.5	2.5
Domestic borrowing		-1.5	-1.4	-0.5	7.9	4.2	2.1	3.5	2.5
External borrowing		0.0	-0.0	-0.0	0.0	-0.0	-0.0	-0.0	0.0
Other financing		0.2	-0.5	-1.0	-3.6	-0.6	1.0	-0.0	0.0
Change in deposits (- = increase)		-0.9	-0.3	-0.3	-2.4	-0.0	0.0	-0.0	0.0
Privatisation		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other		1.1	-0.1	-0.7	-1.2	-0.6	1.0	0.0	-0.0

Source: Fitch Ratings, Ministry of Finance

Balance of Payments

(USDbn)	2016	2017	2018	2019	2020	2021	2022F	2023F	2024F
Current account	295.2	288.6	316.9	294.4	274.1	313.8	149.2	179.7	190.9
% GDP	8.5	7.8	8.0	7.6	7.1	7.4	3.7	4.5	4.6
Goods	279.8	288.0	263.3	241.2	218.0	227.9	153.5	183.5	194.1
Services	-23.3	-27.4	-18.6	-20.1	3.1	0.7	-12.8	-12.3	-11.7
Primary income	83.8	85.2	131.5	129.1	113.5	149.1	60.5	60.5	60.5
Secondary income	-45.1	-57.2	-59.3	-55.8	-60.5	-63.9	-52.0	-52.0	-52.0
Capital account	2.4	-3.5	0.9	-1.0	-6.9	-1.6	-1.6	-1.6	-1.6
Financial account	286.9	314.1	292.2	208.9	251.4	335.6	145.6	175.6	194.6
Direct investment	47.1	36.3	29.1	85.0	-4.2	120.0	120.1	120.1	120.1
Portfolio investment	220.1	232.2	180.0	77.0	56.9	299.9	125.9	125.9	124.9
Derivatives	31.6	12.7	26.8	27.6	108.3	72.1	72.1	72.1	72.1
Other investments	-11.9	32.9	56.3	19.3	90.4	-156.4	-172.5	-142.5	-122.5
Net errors and omissions	-8.8	27.5	-25.1	-85.1	-15.9	60.9	-2.0	-3.0	5.0
Change in reserves (+ = increase)	1.9	-1.5	0.5	-0.6	-0.1	37.5	-0.0	-0.5	-0.3
International reserves, incl. gold	185.5	200.0	198.0	224.0	268.4	256.5	203.6	174.1	155.7
Liquidity ratio (%)	45.1	45.4	39.5	43.1	43.2	34.9	34.3	34.2	32.7
Memo									
Current external receipts (CXR)	1,906.4	2,051.4	2,248.5	2,173.8	2,006.1	2,389.4	2,359.1	2,403.2	2,473.8
Current external payments (CXP)	1,611.2	1,762.8	1,931.6	1,879.4	1,732.0	2,075.6	2,209.9	2,223.4	2,282.9
CXR growth (%)	1.4	7.6	9.6	-3.3	-7.7	19.1	-1.3	1.9	2.9
CXP growth (%)	1.2	9.4	9.6	-2.7	-7.8	19.8	6.5	0.6	2.7
Gross external financing requirement	347.3	332.7	377.6	374.2	420.7	503.8	618.2	544.3	587.0
% International reserves	199.6	179.4	188.8	189.0	187.8	187.7	241.0	267.3	337.2
Net external borrowing	126.5	81.1	156.4	35.2	443.2	563.3	648.0	618.0	599.0

Source: Fitch Ratings, IMF

External Debt and Assets

(USDbn)	2016	2017	2018	2019	2020	2021	2022F	2023F	2024F
Gross external debt	5,711.6	6,323.3	6,104.6	6,393.2	7,873.9	7,674.1	7,457.4	7,726.7	7,996.0
% GDP	165.0	171.5	153.4	164.1	203.3	180.6	186.0	194.5	193.0
% CXR	299.6	308.2	271.5	294.1	392.5	321.2	316.1	321.5	323.2
Short-term debt (% of GXD)	45.6	45.1	45.2	45.7	48.1	50.0	51.5	49.7	48.0
By debtor									
Sovereign	2,026.3	2,215.5	2,134.8	2,035.9	2,531.2	2,535.9	2,737.2	2,938.5	3,139.8
Monetary authorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General government	2,026.3	2,215.5	2,134.8	2,035.9	2,531.2	2,535.9	2,737.2	2,938.5	3,139.8
Banks	2,150.0	2,286.5	2,079.7	2,351.6	2,866.7	2,640.6	2,708.6	2,776.6	2,844.6
Other sectors	1,535.2	1,821.3	1,890.1	2,005.7	2,476.1	2,497.7	2,011.6	2,011.6	2,011.6
Gross external assets (non-equity)	6,149.6	7,010.6	6,848.9	7,201.9	8,642.5	8,217.4	7,973.0	8,207.7	8,453.1
Sovereign	1,358.6	1,705.9	1,689.4	1,610.7	2,080.2	2,041.9	2,170.2	2,348.0	2,546.2
International reserves, including gold	185.5	200.0	198.0	224.0	268.4	256.5	203.6	174.1	155.7
Other sovereign assets	1,173.1	1,505.9	1,491.3	1,386.7	1,811.8	1,785.4	1,966.6	2,173.9	2,390.5
Banks	2,466.8	2,517.5	2,435.7	2,697.3	3,091.7	2,735.6	2,728.6	2,721.5	2,714.4
Other sectors	2,324.4	2,787.1	2,867.6	2,951.8	2,951.8	2,951.8	2,951.8	2,951.8	2,951.8
Net external debt	-438.0	-687.3	-744.3	-808.7	-768.5	-543.2	-515.6	-481.0	-457.1
% GDP	-12.7	-18.6	-18.7	-20.8	-19.8	-12.8	-12.9	-12.1	-11.0
Sovereign	668.0	509.5	445.2	425.4	450.6	454.5	444.6	404.2	352.9
Banks	-316.8	-231.1	-356.0	-345.7	-225.0	-95.1	-20.0	55.1	130.2
Other sectors	-789.2	-965.8	-819.1	-940.3	-940.3	-940.3	-940.3	-940.3	-940.3
International investment position									
Assets	8,730.3	10,241.6	10,052.1	10,786.7	12,815.5	12,798.9	12,418.2	12,783.7	13,166.0
Liabilities	7,435.8	8,507.8	7,937.2	8,433.3	10,195.4	10,035.5	9,752.0	10,104.2	10,456.4
Net	1,294.5	1,733.8	2,114.9	2,353.4	2,620.2	2,763.4	2,666.3	2,679.5	2,709.6
Net sovereign	-668.0	-509.5	-445.2	-425.4	-450.6	-454.5	-444.6	-404.2	-352.9
% GDP	-19.3	-13.8	-11.2	-10.9	-11.6	-10.7	-11.1	-10.2	-8.5
External debt service (principal + interest)	704.5	677.2	748.3	715.8	736.3	857.0	828.8	783.7	839.7
Interest (% CXR)	3.3	2.7	2.4	2.2	2.1	1.6	2.6	2.5	2.5

Source: Fitch Ratings, central bank, IMF, World Bank

Full Rating Derivation

Long-Term Foreign-Currency Issuer Default Rating (SRM + QO) AAA

Sovereign Rating Model — Applied Rating[d] AA+

Input Indicator	Weight (%)	2021	2022	2023	Adjustment to Final Data	Final Data	Coefficient	Output (notches)
					Model Result and Predicted Rating			15.19 = AA+
Structural features								**11.75**
Governance indicators (percentile)	20.3	n.a.	89.4	n.a.	-	89.4	0.074	6.60
GDP per capita (USD)	13.3	n.a.	47,942	n.a.	Percentile	82.2	0.042	3.42
Nominal GDP (% world GDP)	13.2	n.a.	4.20	n.a.	Natural log	1.4	0.596	0.86
Most recent default or restructuring	5.0	n.a.	None	n.a.	Inverse 0-1[a]	0.0	-2.017	0
Broad money (% GDP)	1.4	n.a.	101.6	n.a.	Natural log	4.6	0.188	0.87
Macroeconomic performance, policies and prospects								**-0.89**
Real GDP growth volatility	5.1	n.a.	2.2	n.a.	Natural log	0.8	-0.815	-0.64
Consumer price inflation	2.9	3.2	8.4	6.4	3-yr avg.[b]	6.0	-0.058	-0.34
Real GDP growth	2.4	2.6	1.4	-0.5	3-yr avg.	1.2	0.076	0.09
Public finances								**-1.69**
Gross general govt debt (% GDP)	8.3	68.7	66.3	67.6	3-yr avg.	67.5	-0.022	-1.48
General govt interest (% revenue)	4.5	1.2	1.0	0.9	3-yr avg.	1.1	-0.043	-0.05
General govt fiscal balance (% GDP)	2.6	-3.6	-3.1	-3.5	3-yr avg.	-3.4	0.048	-0.16
FC debt (% of total general govt debt)	2.4	0.6	0.6	0.6	3-yr avg.	0.6	-0.006	-0.00
External finances								**1.53**
Reserve currency (RC) flexibility	7.8	n.a.	3.1	n.a.	RC score 0 - 4.5[c]	3.1	0.549	1.71
SNFA (% of GDP)	7.3	-10.7	-11.2	-11.3	3-yr avg.	-11.1	0.011	-0.13
Commodity dependence	1.1	n.a.	10.3	n.a.	Latest	10.3	-0.004	-0.04
FX reserves (months of CXP)	1.8	n.a.	1.1	n.a.	n.a. if RC score> 0	0.0	0.036	0
External interest service (% CXR)	0.4	1.6	2.6	2.5	3-yr avg.	2.3	-0.006	-0.01
CAB + net FDI (% GDP)	0.1	4.6	0.6	0.4	3-yr avg.	1.9	0.001	0.00
Intercept Term (constant across all sovereigns)								**4.49**

[a] Inverse 0-1 scale, declining weight; [b] of truncated value (2%-50%); [c] Declining weight; [d] Sovereign rating committee can override SRM Predicted Rating if a marginal change in the Model Result leads to a notch change which is judged to be temporary or caused by a re-estimation of the SRM, a process that Fitch undertakes on at least an annual basis. Please refer to the Rating Action Commentary for further information when the Applied Rating differs from the Predicted Rating.
Note: This table contains data as at the date of the most recent rating action. There may be minor differences to data presented elsewhere in this report, which may have been updated where appropriate, for example in the event of subsequent data releases.
Source: Fitch Ratings

Qualitative Overlay (Notch Adjustment, Range +/-3)	+1
Structural features	0
Macroeconomic outlook, policies and prospects	+1
Public finances	0
External finances	0

About the SRM and QO

Fitch's SRM is the agency's proprietary multiple regression rating model that employs 18 variables based on three-year centred averages, including one year of forecasts, to produce a score equivalent to a Long-Term Foreign-Currency Issuer Default Rating (IDR). Fitch's QO is a forward-looking qualitative framework designed to allow for adjustment to the SRM output to assign the final rating, reflecting factors within our criteria that are not fully quantifiable and/or not fully reflected in the SRM.

Supplementary Ratings

Local-Currency Rating

As Germany's Long-Term Foreign-Currency IDR is 'AAA', there is no capacity for upward notching of the Long-Term Local-Currency IDR, which is therefore also 'AAA'.

Country Ceiling

Fitch assigns a Country Ceiling of 'AAA' to Germany. The agency views the risk of the imposition of capital or exchange controls within the eurozone as low but not negligible. Fitch therefore imposes a maximum Country Ceiling uplift of six notches above the Long-Term Foreign-Currency IDR for eurozone member states. Germany's 'AAA' Country Ceiling reflects minimal risk of capital controls being imposed that would prevent or materially impede the private sector's ability to convert local currency into foreign currency and make transfers to non-resident creditors.

Full Rating History

	Foreign-Currency Rating			Local-Currency Rating			
Date	Long-Term	Short-Term	Outlook/Watch	Long-Term	Short-Term	Outlook/Watch	Country Ceiling
22 Jul 16	AAA	F1+	Stable	AAA	F1+	Stable	AAA
17 Jun 04	AAA	F1+	Stable	AAA	-	Stable	AAA
21 Sep 00	AAA	F1+	Stable	AAA	-	Stable	-
26 Oct 95	AAA	F1+	-	AAA	-	-	-
10 Aug 94	AAA	-	-	-	-	-	-

Source: Fitch Ratings

Appendix 1: Environmental, Social and Governance (ESG)

Credit Relevance Scores

General Issues	Key Sovereign Issues	SRM	QO	Score[a]
Environmental (E)				
GHG Emissions and Air Quality	Emissions and air pollution as a constraint on GDP growth	2	2	2
Energy Management	Energy resource management, including potential for 'stranded assets', affecting exports, government revenues and GDP	3	3	3
Water Resources and Management	Water resource availability and management as a constraint on GDP growth	2	2	2
Biodiversity and Natural Resource Management	Natural resource management, including potential for 'stranded assets', affecting exports, government revenues and GDP	3	2	3
Natural Disasters and Climate Change	Impact of adverse climate trends, and likelihood of and resilience to shocks	3	2	3
Social (S)				
Human Rights and Political Freedoms	Social stability, voice and accountability, regime legitimacy	4	2	4 +
Human Development, Health and Education	Impact of human development, health and education on GDP per capita and GDP growth	3	2	3
Employment and Income Equality	Impact of unemployment and income equality on GDP per capita, GDP growth and political and social stability	3	2	3
Public Safety and Security	Impact of public safety and security on business environment and/or economic performance	3	2	3
Demographic Trends	Population decline or aging, rapidly rising youth population; pensions sustainability	3	2	3
Governance (G)				
Political Stability and Rights	Political divisions and vested interests; geopolitical risks including conflict, security threats and violence; policy capacity: unpredictable policy shifts or stasis	5	2	5 +
Rule of Law, Institutional & Regulatory Quality, Control of Corruption	Government effectiveness, control of corruption, rule of law, regulatory quality	5	2	5 +
International Relations and Trade	Trade agreements, membership of international organisations, bilateral relations; sanctions or other costly international actions	3	2	3
Creditor Rights	Willingness to service and repay debt	4	2	4 +
Data Quality and Transparency	Availability, limitations and reliability of economic and financial data, including transparency of public debt and contingent liabilities	3	2	3

Source: Fitch Ratings

About ESG Credit Relevance Scores

The scores signify the credit relevance of the respective E, S and G issues to the sovereign entity's credit rating, according to the following scale:

- 5 – Highly relevant to the rating, a key rating driver with a high weight.
- 4 – Relevant to the rating, a rating driver.
- 3 – Relevant, but only has an impact on the entity rating in combination with other factors.
- 2 – Irrelevant to the entity rating but relevant to the sector (sovereigns).
- 1 – Irrelevant to the entity rating and irrelevant to the sector (sovereigns).

The score for each 'General Issue' is comprised of a component SRM and QO score, and is simply the higher of the two. SRM scores are fixed across all sovereigns as the weights in the SRM are the same for all sovereigns; QO component scores vary across all sovereigns.

All scores of '4' or '5' result in a negative impact on the rating, unless indicated otherwise. Where a positive impact is occurring, the score of '4' or '5' is appended with a '+' symbol. Scores of '3', '2' and '1' do not have a direction of impact assigned.

Please refer to ESG Relevance Scores for Sovereigns for further information on the framework, including 'Sovereign Rating Criteria References' (which identify specific potentially related SRM variables and QO factors for each 'General Issue').

Credit-Relevant ESG Derivation

Germany has an ESG Relevance Score of '5[+]' for Political Stability and Rights as World Bank Governance Indicator (WBGI) have the highest weight in Fitch's SRM and are therefore highly relevant to the rating and a key rating driver with a high weight. As Germany has a percentile rank above 50 for the respective governance indicator, this has a positive impact on the credit profile.

Germany has an ESG Relevance Score of '5[+]' for Rule of Law, Institutional & Regulatory Quality and Control of Corruption as WBGI have the highest weight in Fitch's SRM and are therefore highly relevant to the rating and are a key rating driver with a high weight. As Germany has a percentile rank above 50 for the respective governance indicators, this has a positive impact on the credit profile.

Germany has an ESG Relevance Score of '4[+]' for Human Rights and Political Freedoms as the Voice and Accountability pillar of the WBGI is relevant to the rating and a rating driver. As Germany has a percentile rank above 50 for the respective governance indicator, this has a positive impact on the credit profile.

Germany has an ESG Relevance Score of '4[+]' for Creditor Rights as willingness to service and repay debt is relevant to the rating and is a rating driver for Germany, as for all sovereigns. As Germany has record of 20+ years without a restructuring of public debt, which is captured in our SRM variable, this has a positive impact on the credit profile.

Except for the matters discussed above, the highest level of ESG credit relevance, if present, is a score of '3'. This means ESG issues are credit neutral or have only a minimal credit impact on the entity(ies), either due to their nature or to the way in which they are being managed by the entity(ies). For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Appendix 2: Data Notes and Conventions

Acronyms

Acronyms used in the above table and elsewhere in report are: Gross Domestic Product (GDP), Current External Receipts (CXR), Current External Payments (CXP), Current Account Balance (CAB), Foreign Direct Investment (FDI), World Bank Worldwide Governance Indicators (WBGI), Sovereign Rating Model (SRM), Qualitative Overlay (QO). For a full list of indicator definitions, please refer to the most recent Sovereign Data Comparator.

Medians

Medians underlying the SRM relative to rating category chart on the Rating Summary page and as reported in the Peer Analysis table on page 4 are long-term historical medians. These are based on actual data since 2000 for all sovereign-year observations when the sovereign was in the respective rating category at year-end. Current year ratings and data are excluded.

Chart medians on page 3 are based on data for sovereigns in the respective rating category at the end of each year. Latest ratings are used for the current year and forecast period.

Notes for Germany

All data are on a calendar-year basis, which aligns with the domestic fiscal year for this sovereign.

Public finances data referenced in this report relate to the consolidated general government, as per our principal approach, unless specifically noted otherwise where cited.

The external balance sheet data referenced in this report are derived from the international investment position dataset, as per our principal approach.

The ratings above were unsolicited and have been provided by Fitch as a service to investors.