FitchRatings

Deutsche Lufthansa AG

Ratings

Deutsche Lufthansa AG	
Long-Term IDR	BBB-
Senior Unsecured Debt - Long-Term Rating	BBB-
Subordinated Long-Term Rating	BB
Outlook	
Long-Term Foreign-Currency IDR	Stable

Click here for the full list of ratings

2035 Climate Vulnerability Signal: 43

The assignment of Deutsche Lufthansa AG's (Lufthansa) ratings reflects its leadership in the aviation industry as the largest European network carrier, and credit-positive diversification into maintenance, repair, and overhaul (MRO) and cargo businesses, where the company also holds global leading market positions. The rating factors in moderate EBITDAR net leverage in 2022-2023 (between 1.5x and 1.9x), healthy liquidity and subdued profitability, which is lagging behind that of its main European peers.

We foresee some deleveraging (especially on a gross debt basis) and moderate profitability improvement over the forecast period to 2025, as the airline fully recovers its pre-pandemic capacity and cost-reduction measures consolidate, more than offsetting the expected fall in cargo earnings.

Industry-wide risks around the post-pandemic recovery remain, but we believe that Lufthansa is well positioned to defend its strong market share in Europe and protect its financial profile to remain within the sensitivities for the 'BBB-' rating.

Key Rating Drivers

Leading Airline in Europe: Lufthansa benefits from a leading market position in Europe and a fourth position globally, based on revenues and fleet size.

It has built an extensive multi-brand network (Lufthansa German Airlines, Swiss International Air Lines, Austrian Airlines, Brussels Airlines, low-cost carrier (LCC) Eurowings and a number of regional airlines) largely through acquisitions, operating a multi-hub strategy (Frankfurt, Munich, Zurich, Vienna and Brussels) that secures a large and wealthy catchment area in western Europe and allows a focus on flight 'premiumisation' and long-haul. Eurowings is relatively small compared with the dominant LCCs in Europe.

Extensive Network: Lufthansa operates one of the world's largest route networks, with strong position in its various hubs. Lufthansa is more focused to European traffic (43% of passenger airlines traffic revenue in 2022) than main peers Air France-KLM and International Consolidated Airlines Group S.A. (IAG), while the competitors are stronger in the Americas and Africa. We expect Lufthansa to improve its geographical balance once China gradually reopens and through external growth. Lufthansa is also a founding member of Star Alliance, which supports flight optimisation among partner airlines.

Synergistic Aviation Operations: Lufthansa also runs the world's leading cargo and maintenance, repair and overhaul (MRO) sectors, which enhance its strong market positioning in Europe. Together these businesses contributed 26% of group revenues in 2022 and provide synergies with the group airlines (i.e. cargo uses belly space in passenger flights and Lufthansa Technik is the preferred MRO for the group's airlines).

Cargo/MRO Eases Cyclicality: Cargo helped stabilise earnings during the pandemic, benefiting from exceptionally high freight rates. The recovery in passenger airline profitability is offsetting the normalisation in air freights rates and decline in cargo earnings. MRO is also well placed to benefit from supply chain constraints in the wider industry, which require older aircraft to be operational for longer, and from recent issues related to the Pratt & Whitney geared turbofan engines.

Applicable Criteria

Climate Vulnerability in Corporate Ratings Criteria (July 2023)

Corporate Rating Criteria (October 2022)

Corporate Hybrids Treatment and Notching Criteria (November 2020)

Sector Navigators: Addendum to the Corporate Rating Criteria (May 2023)

Related Research

Global Corporates Macro and Sector Forecasts (September 2023)

Analysts

Pilar Auguets
+34 93 467 8747
pilar.auguets@fitchratings.com

Raman Singla
+44 20 3530 1728
raman.singla@fitchratings.com

Gradual Post-Pandemic Recovery: Lufthansa's airline operations are gradually recovering, although at a slower pace than European air travel, mainly due to the lag in long-haul travel (especially with Asia) and softer German demand. Capacity measured by available seat kilometres (ASK) in 2022 was 72% of 2019 levels (88% for the industry in Europe) and we forecast Lufthansa will achieve full 2019 ASK capacity in 2025, one year later than its main peers.

Notwithstanding the lower capacity, we expect Fitch-defined 2023 EBITDA (fully expensing lease costs) to be marginally higher than in 2019, at EUR3.3 billion, given industry-wide higher ticket prices since 2Q22 and despite the sharp decline in air cargo earnings.

Post-Pandemic Risks Remain: We run conservative sensitivities in our forecasts to account for risks related to operational constraints (delays in aircraft deliveries and slower capacity uptick), demand fatigue (due to macro weakness and geopolitical shocks, although bookings seem to be supportive for the next couple of quarters) and slightly increasing unitary costs (largely staff costs following signed collective labour agreements and persisting inflation). Lufthansa has not been meaningfully affected by the Pratt & Whitney geared turbofan engines issues.

Subdued but Improving Profitability: Lufthansa's profitability remains relatively weak compared with pre-pandemic levels and relative to peers. The company targets reaching an adjusted EBIT margin (as reported by the company) of 8% by 2024, which would bring it in line with the industry average. This target implies a steep improvement from recent (4.6% in 2022) and pre-pandemic (5.6% in 2019) performance. We forecast the same metric at 6% in 2024, factoring in some execution risk.

The main drivers of profitability improvement will be the recovery of pre-pandemic capacity that allows for cost optimisation, a lower cost-base following the EUR3.2 billion cost savings achieved as of end-2022 (out of total EUR3.5 billion in the savings plan) and new orders for more efficient new generation, replacement aircraft.

Expected Deleverage: In 2022, net debt was already at a similar level to before the pandemic, and the company's reported adjusted EBITDA/net debt ratio stood at 2.3x (2019: 2.8x). Based on our definitions and rating case, we expect EBITDAR gross and net leverage to be consistently below the 3.5x and 2.5x negative guidelines, respectively, for the BBB- rating, with an average of 2.8x and 1.3x, respectively, for 2023-25.

Moderate Growth Plans: Lufthansa has the largest fleet in Europe, with 716 aircraft at June 2023. At end-2022, orders stood at 174 aircraft, evenly distributed between narrow and wide body, of which nine are large capacity freighters. We expect a large part of this orderbook to replace existing aircraft, increasing efficiency.

Commitment to Solid Credit Profile: Lufthansa aims to further reduce net indebtedness, decreasing leverage far below its stated target of 3.5x net debt/adjusted EBITDA (as reported by Lufthansa). Net debt was already at a similar level in 2022 as it had been before the pandemic. Based on our definitions and rating case, we expect EBITDAR gross and net leverage to be consistently below the respective 3.5x and 2.5x negative guidelines for the 'BBB-' rating, with an average of 2.8x and 1.3x for 2023-2025.

ITA Positive Strategic Fit: We see the recent agreement to acquire a 41% stake in ITA Airways, the Italian airline that emerged from the restructuring of Alitalia, as positive for Lufthansa's business profile. The integration of ITA's main hub in Rome–Fiumicino and the access to corporate travellers in Milan-Linate should strengthen the group's South of Europe hub and support long-haul connection with the Americas, Africa and Asia. The financial impact is limited (EUR 325 million, injected as a capital increase in ITA) and there is no commitment to purchase the remaining shares, in the absence of a turnaround for the airline.

Broader Consolidation Opportunities: We view Lufthansa as an active participant in the consolidation of European aviation. It has also communicated its interest in TAP, the Portuguese flag carrier, while announcing an exit from non-core businesses (with the sale of Airplus and LSG catering) to increase focus. Separately, we view the announced interest in selling a minority stake in its MRO business would support the financing of MRO's expected growth although this remains a core business for Lufthansa.

Financial Summary

(EURm)	2019	2020	2021	2022	2023F	2024F	2025F
EBITDAR	4,381	-4,528	-59	3,509	4,434	4,997	5,329
EBITDAR margin (%)	12.0	-33.3	-0.4	10.7	10.9	11.4	11.5
FCF margin (%)	-2.8	-32.4	-12.2	4.9	—	—	—
EBITDAR leverage (x)	2.1	-3.4	-322.0	4.2	3.3	2.8	2.4
EBITDAR net leverage (x)	1.4	-2.2	-174.9	1.9	1.5	1.2	1.1
EBITDAR fixed-charge coverage (x)	3.8	-3.7	-0.0	2.9	3.2	3.1	2.9

F — Forecast
Source: Fitch Ratings, Fitch Solutions, Lufthansa

Rating Derivation Relative to Peers

Lufthansa is the largest EMEA airlines in fleet size and revenues and benefits from a strong position in cargo and MRO, mainly in Europe and North America. As a multi-brand group, Lufthansa compares well with IAG and Air France-KLM due to its diversified hub structure and extensive route network.

British Airways Plc (BA; BB+/Stable, SCP bb) is Lufthansa's closest rated peer due to its strong hub position in Europe and diversified network. We view Lufthansa's business profile as stronger because of its larger size and better business mix, geographies and activities or integration.

Both companies' recovery from the pandemic has suffered from higher exposure to intercontinental and corporate travel, coupled with big disruption in their respective hubs. Lufthansa's more robust financial profile, with lower leverage and higher liquidity, leads to its Issuer Default Rating (IDR) being one notch above BA (which benefits from IAG support).

Air France-KLM and Lufthansa share strong respective hub positions with geographic proximity. Both companies operate passenger, cargo and MRO businesses, but Lufthansa remains the leader in each. However, Air France-KLM has reported a faster recovery from the pandemic, better profitability and higher geographic diversification globally. We view their business profiles as comparable.

Turk Hava Yollari Anonim Ortakligi (Turkish Airlines; B+/Stable; SCP: bb-) also operates passenger, cargo and MRO, businesses but remains a smaller player than the German airline. Lufthansa has a stronger business profile thanks to its more favourable geographic position with a better operating environment. Turkish Airlines is rated one notch above Turkiye's Country Ceiling.

Navigator Peer Comparison

	IDR/Outlook	Operating Environment	Management and Corporate Governance	Diversification	Market Position	Management Strategy/Effectiveness	Cost Position	Profitability	Financial Structure	Financial Flexibility
American Airlines Group, Inc.	B+/Stable	aa-	a	bbb	bb	bb	bb-	b	ccc	b
British Airways Plc	BB+/Stable	aa-	a	bbb	bbb-	bbb	bb+	bb-	b+	bbb-
Delta Air Lines	BB+/Stable	aa	a+	bbb	bb+	bbb-	bb	bb	bb-	bbb-
Deutsche Lufthansa AG	BBB-/Stable	aa-	a	bbb+	bbb-	bbb-	bb+	bb-	bbb-	bbb
Ryanair Holdings plc	BBB+/Stable	aa-	a-	bbb	bbb	bbb	bbb	bbb	bbb+	bbb+
Turk Hava Yollari Anonim Ortakligi (Turkish Airlines)	B+/Stable	bb+	bbb	bbb-	bb	bb+	bb+	bb	b+	bb+
Wizz Air Holdings Plc	BBB-/Negative	a-	a-	bbb-	bbb	bbb-	bbb	bbb-	bb+	bbb-

Source: Fitch Ratings.

Relative Importance of Factor: Higher | Moderate | Lower

Name	IDR/Outlook	Operating Environment	Management and Corporate Governance	Diversification	Market Position	Management Strategy/Effectiveness	Cost Position	Profitability	Financial Structure	Financial Flexibility
American Airlines Group, Inc.	B+/Stable	+12	+10	+7	+4	+4	+3	+1	-2	+1
British Airways Plc	BB+/Stable	+7	+5	+2	+1	+2	0	-2	-3	+1
Delta Air Lines	BB+/Stable	+8	+6	+2	0	+1	-1	-1	-2	+1
Deutsche Lufthansa AG	BBB-/Stable	+6	+4	+2	0	0	-1	-3	0	+1
Ryanair Holdings plc	BBB+/Stable	+4	+1	-1	-1	-1	-1	-1	0	0
Turk Hava Yollari Anonim Ortakligi (Turkish Airlines)	B+/Stable	+3	+5	+4	+2	+3	+3	+2	0	+3
Wizz Air Holdings Plc	BBB-/Negative	+3	+3	0	+1	0	+1	0	-1	0

Source: Fitch Ratings.

Factor Score Relative to IDR: Worse positioned than IDR | Within one notch of IDR | Better positioned than IDR

Rating Sensitivities

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

- EBITDAR margin sustained above 15%.
- EBITDAR net leverage below 1.5x and EBITDAR leverage below 2.5x, also backed by a financial policy commensurate with these ratios.

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

- EBITDAR margin falling consistently below 11%.
- EBITDAR net leverage above 2.5x and EBITDAR leverage above 3.5x.
- EBITDAR fixed-charge coverage sustainably below 2.8x.
- Weaker than expected business recovery or aggressive external growth materially beyond our expectations.

Liquidity and Debt Structure

Strong Liquidity: As of 30 June 2023, Lufthansa had Fitch-adjusted available liquidity of EUR8.2 billion. This comprised EUR1.2 billion of cash and equivalents (excluding cash held for sale in June 2023 for Airplus and LSG) and EUR7.0 billion of Fitch-adjusted securities. A EUR2 billion revolving credit facility (RCF) and EUR0.1 billion of bilateral credit lines are also available. The three-year RCF was signed in April 2022 and has two, one-year extension options.

Lufthansa Group's available liquidity is EUR10.3 billion, which provides about 24 months of liquidity compared to upcoming debt maturities of around EUR3 billion and positive free cash flow for the same period. In November 2023, Lufthansa provided the Q3 update on the liquidity position at EUR11.1 billion.

Lufthansa upgraded its liquidity policy to EUR8 billion-10 billion (from EUR6 billion-8 billion previously) in 2022 given the business growth. Available unencumbered assets (largely aircraft) representing 1.3x of unsecured debt by end-2022 add to the group's financial flexibility.

Group and Debt Structure: The group structure is complex due to the number of subsidiaries. About 80% of debt is held at holdco level (Deutsche Lufthansa AG) and 46% is secured (including leases), ranking above unsecured and subordinated debt. We do not expect any subordination issues in the debt structure.

ESG Considerations

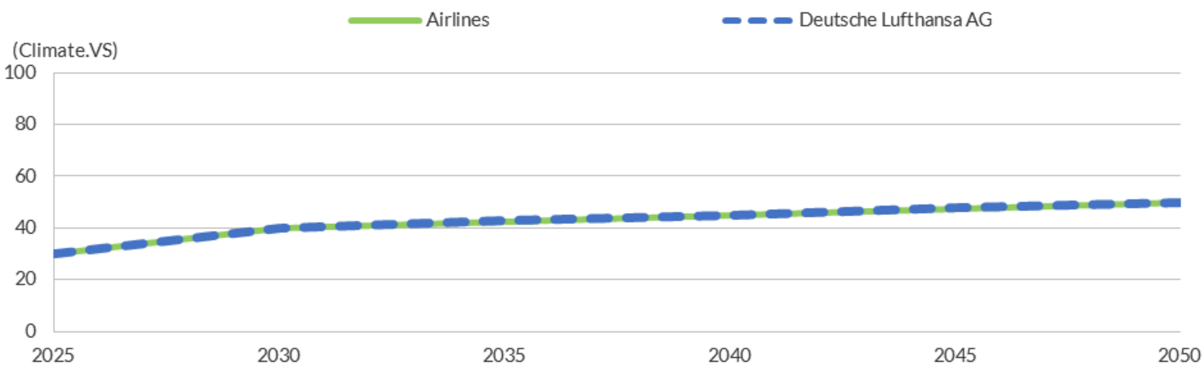
The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit https://www.fitchratings.com/topics/esg/products#esg-relevance-scores.

Climate Vulnerability Considerations

Fitch's *Climate Vulnerability in Corporate Ratings Criteria* report describes how we use Climate Vulnerability Signals (Climate.VS) as a screening tool to identify sectors and Fitch-rated issuers that are potentially most exposed to credit-relevant climate transition risks and, therefore, require additional consideration of these risks in rating reviews. Climate.VS range from 0 (lowest risk) to 100 (highest risk). Click here for the criteria.

The FY22 revenue -weighted Climate Vulnerability Score (Climate.VS) for Lufthansa for 2035 is 43 out of 100, suggesting moderate exposure to climate -related risks in that year. For further information on how Fitch perceives climate-related risks in the airlines sector, see Transportation – Long -Term Climate Vulnerability Scores.

Climate.VS Evolution
As of Dec. 31, 2022



Source: Fitch Ratings

Liquidity and Debt Maturities

Liquidity Analysis (Lease Treated as Operating Expense)

(EURm)	2023F	2024F	2025F	2026F
Available liquidity				
Beginning cash balance	8,070	7,645	6,660	5,180
Rating case FCF after acquisitions and divestitures	452	810	-13	189
Total available liquidity (A)	**8,522**	**8,454**	**6,648**	**5,369**
Liquidity uses				
Debt maturities (not including leases payments)	-877	-1,794	-1,468	-1,724
Total liquidity uses (B)	**-877**	**-1,794**	**-1,468**	**-1,724**
Liquidity calculation				
Ending cash balance (A+B)	7,645	6,660	5,180	3,645
Revolver availability	2,100	2,100	2,100	2,100
Ending liquidity	**9,745**	**8,760**	**7,280**	**5,745**
Liquidity score (x)	12.1	5.9	6.0	4.3

Source: Fitch Ratings, Fitch Solutions, Lufthansa

Key Assumptions

- Annual group network and Eurowings capacity down 13% in 2023, compared with 2019 (2022: -28% versus 2019), -6% in 2024, close to full recovery in 2025 and above 4% in 2026-2027.
- Load factor on average at 82.5% for 2023-2027.
- Strong yields compared with 2019-2021 and broadly stable over 2022-2027.
- Oil price of USD85/bbl in 2024-2027.
- Cargo EBITDA falling substantially in 2023-2027, in line with 2019 from a very strong 2020-2022.
- MRO (Technik) EBITDA stronger than historically, increasing to about EUR900 million by 2027.
- Capex (net of sale and leasebacks) about EUR15.5 billion in 2023-2027, or EUR3.1 billion on average a year.
- Acquisition of 41% of ITA for EUR325 million by end-2023, without further stakes expected.
- Disposals of the catering business (LSG) by end 2023 and Airplus in 2024, total inflow about EUR750 million.
- Reinstated dividends in 2023 (to be cashed out from 2024) for a total EUR1.4 billion for 2024-2027.
- EUR0.5 billion of hybrid debt with 50% equity credit remaining in place.
- Slight appreciation of the US dollar versus the euro between 2023 and 2027.

Financial Data

(EURm)	2019	2020	2021	2022	2023F	2024F	2025F
Summary income statement							
Gross revenue	36,424	13,589	16,811	32,770	40,548	43,733	46,271
Revenue growth (%)	1.6	-62.7	23.7	94.9	23.7	7.9	5.8
EBITDA before income from associates	3,143	-5,691	-1,146	2,426	3,250	3,735	3,859
EBITDA margin (%)	8.6	-41.9	-6.8	7.4	8.0	8.5	8.3
EBITDA after associates and minorities	3,353	-5,655	-1,138	2,488	3,295	3,780	3,904
EBITDAR	4,381	-4,528	-59	3,509	4,434	4,997	5,329
EBITDAR margin (%)	12.0	-33.3	-0.4	10.7	10.9	11.4	11.5
EBIT	1,494	-7,276	-2,547	1,016	1,776	2,084	2,245
EBIT margin (%)	4.1	-53.5	-15.2	3.1	4.4	4.8	4.9
Gross interest expense	-199	-230	-127	-272	-220	-356	-356
Pre-tax income including associate income/loss	1,860	-8,631	-2,606	1,050	1,704	1,891	2,076
Summary balance sheet							
Readily available cash and equivalents	3,188	5,364	7,501	8,070	8,137	8,117	7,083
Debt	3,387	9,106	9,514	8,113	7,736	6,942	5,975
Lease-adjusted debt	9,825	15,154	16,423	14,964	14,637	14,214	13,014
Net debt	199	3,742	2,013	43	-401	-1,175	-1,108
Summary cash flow statement							
EBITDA	3,143	-5,691	-1,146	2,426	3,250	3,735	3,859
Cash interest paid	17	-36	-43	-163	-220	-356	-356
Cash tax	-1,009	81	-101	-288	-399	-443	-487
Dividends received less dividends paid to minorities (inflow/outflow)	210	36	8	62	45	45	45
Other items before funds from operations (FFO)	168	2,802	-788	253	-30	-461	349
FFO	2,599	-2,742	-2,073	2,327	2,684	2,557	3,448
FFO margin (%)	7.1	-20.2	-12.3	7.1	6.6	5.8	7.5
Change in working capital	490	-683	1,347	1,633	750	600	350
Cash flow from operations (CFO) (Fitch-defined)	3,089	-3,425	-726	3,960	3,434	3,157	3,798
Total non-operating/non-recurring cash flow	—	—	—	—	—	—	—
Capex	-3,717	-973	-1,318	-2,365	—	—	—
Capital intensity (capex/revenue) (%)	10.2	7.2	7.8	7.2	—	—	—
Common dividends	-381	—	—	—	—	—	—
Free cash flow (FCF)	-1,009	-4,398	-2,044	1,595	—	—	—
FCF margin (%)	-2.8	-32.4	-12.2	4.9	—	—	—
Net acquisitions and divestitures	25	127	163	108	—	—	—
Other investing and financing cash flow items	518	-737	-706	-405	-8	-35	-54
Net debt proceeds	430	5,014	1,074	-1,817	-377	-794	-968
Net equity proceeds	—	306	2,091	—	—	—	—
Total change in cash	-36	312	578	-519	67	-20	-1,035
Leverage ratios (x)							
EBITDAR leverage	2.1	-3.4	-322.0	4.2	3.3	2.8	2.4
EBITDAR net leverage	1.4	-2.2	-174.9	1.9	1.5	1.2	1.1
EBITDAR net fixed-charge coverage	4.0	-4.0	-0.0	3.0	3.3	3.2	3.0
FFO-adjusted leverage	2.6	-9.4	-17.5	4.2	3.6	3.4	2.5
FFO-adjusted net leverage	1.8	-6.1	-9.5	2.0	1.6	1.5	1.1
Calculations for forecast publication							
Capex, dividends, acquisitions and other items before FCF	-4,073	-846	-1,155	-2,257	-2,982	-2,347	-3,811
FCF after acquisitions and divestitures	-984	-4,271	-1,881	1,703	452	810	-13
FCF margin after net acquisitions (%)	-2.7	-31.4	-11.2	5.2	1.1	1.9	-0.0

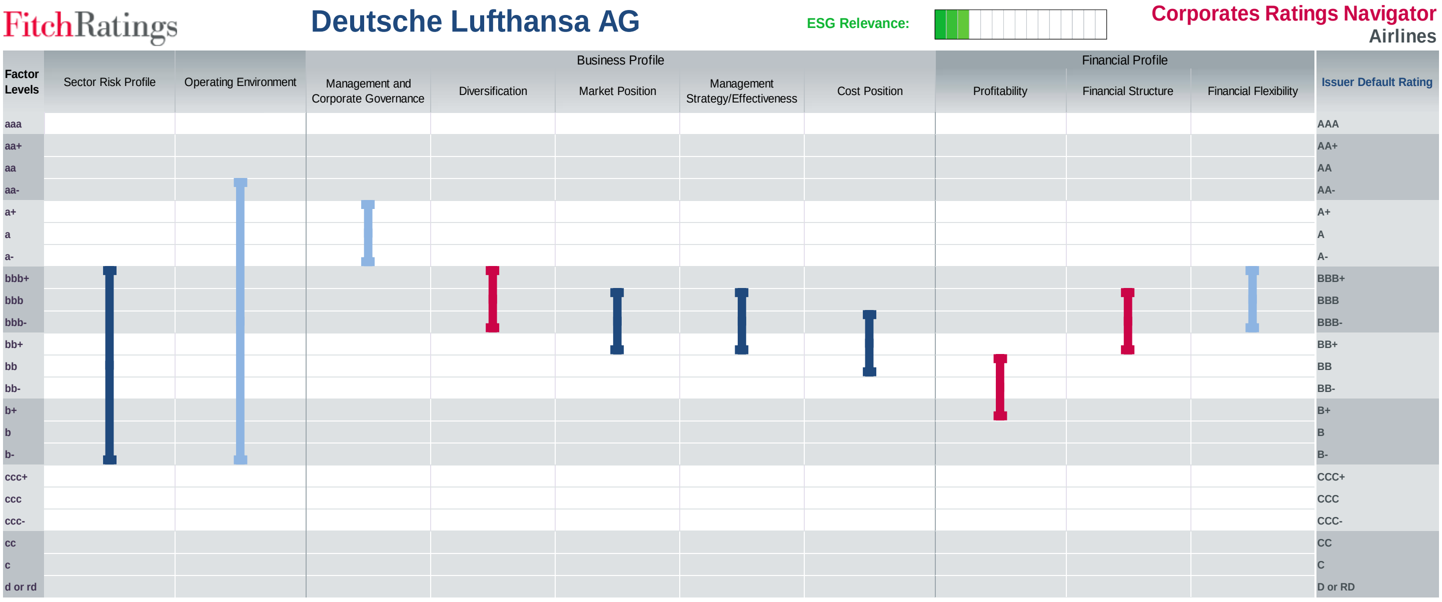
(EURm)	2019	2020	2021	2022	2023F	2024F	2025F
Coverage ratios (x)							
FFO interest coverage	-147.8	-77.0	-47.1	15.0	13.0	8.1	10.6
FFO fixed-charge coverage	3.1	-1.3	-0.8	2.8	2.9	2.6	2.9
EBITDAR fixed-charge coverage	3.8	-3.7	-0.0	2.9	3.2	3.1	2.9
EBITDA interest coverage	-197.2	-157.1	-26.5	15.3	15.0	10.6	11.0
Additional metrics (%)							
CFO-capex/debt	-18.5	-48.3	-21.5	19.7	8.1	7.3	4.9
CFO-capex/net debt	-315.6	-117.5	-101.5	3,709.3	-156.3	-43.4	-26.3
CFO/capex	83.1	-352.0	-55.1	167.4	122.3	119.3	108.3

F - Forecast
Source: Fitch Ratings, Fitch Solutions, Lufthansa

How to Interpret the Forecast Presented

The forecast presented above is based on Fitch Ratings' internally produced, conservative rating case forecast. It does not represent the forecast of the rated issuer. The forecast set out above is only one component used by Fitch Ratings to assign a rating or determine a rating outlook, and the information in the forecast reflects material but not exhaustive elements of Fitch Ratings' rating assumptions for the issuer's financial performance. As such, it cannot be used to establish a rating, and it should not be relied on for that purpose. Fitch Ratings' forecasts are constructed using a proprietary internal forecasting tool, which employs Fitch Ratings' own assumptions on operating and financial performance that may not reflect the assumptions that you would make. Fitch Ratings' own definitions of financial terms such as EBITDA, debt or free cash flow may differ from your own such definitions. Fitch Ratings may be granted access, from time to time, to confidential information on certain elements of the issuer's forward planning. Certain elements of such information may be omitted from this forecast, even where they are included in Fitch Ratings' own internal deliberations, where Fitch Ratings, at its sole discretion, considers the data may be potentially sensitive in a commercial, legal or regulatory context. The forecast (as with the entirety of this report) is produced strictly subject to the disclaimers set out at the end of this report. Fitch Ratings may update the forecast in future reports but assumes no responsibility to do so. Original financial statement data for historical periods is processed by Fitch Solutions on behalf of Fitch Ratings. Key financial adjustments and all financial forecasts credited to Fitch Ratings are generated by rating agency staff.

Ratings Navigator



Bar Chart Legend:	
Vertical Bars = Range of Rating Factor	Bar Arrows = Rating Factor Outlook
Bar Colors = Relative Importance	⇧ Positive
Higher Importance	⇩ Negative
Average Importance	⇳ Evolving
Lower Importance	□ Stable

FitchRatings

Deutsche Lufthansa AG

Corporates Ratings Navigator
Airlines

Operating Environment

aa	Economic Environment	a	Strong combination of countries where economic value is created and where assets are located.
aa-	Financial Access	aa	Very strong combination of issuer specific funding characteristics and of the strength of the relevant local financial market.
	Systemic Governance	aa	Systemic governance (eg rule of law, corruption; government effectiveness) of the issuer's country of incorporation consistent with 'aa'.
b-			
ccc+			

Management and Corporate Governance

aa-	Management Strategy	a	Coherent strategy and good track record in implementation.
a+	Governance Structure	a	Experienced board exercising effective check and balances. Ownership can be concentrated among several shareholders.
a	Group Structure	a	Group structure shows some complexity but mitigated by transparent reporting.
a-	Financial Transparency	a	High quality and timely financial reporting.
bbb+			

Diversification

a	Network Diversity	bbb	Extensively diversified domestic and international network. History of successful network enhancement through joint ventures or partnerships.
a-	Hub Structure	bbb	Strong/rationalized hub structure. Hubs (or bases for point-to-point carriers) are profitable/located in strategic markets.
bbb+			
bbb			
bbb-			

Market Position

bbb+	Position in Key Markets	bbb	Strong/leading positions in key, cash flow generative and/or protected markets (reflected in market share and/or PRASK advantage over peers).
bbb	Cost Leadership	bb	Low cost carrier leader in some markets.
bbb-			
bb+			
bb			

Management Strategy/Effectiveness

bbb+	Fleet Strategy	bb	Adequate fleet management. Mostly efficient/young aircraft, some obsolete/inefficient models, heavy upcoming deliveries.
bbb	Fuel Hedging	bbb	Consistently employs effective strategies to mitigate fuel price risk (i.e. hedging, maintaining solid liquidity, fuel-efficient fleet).
bbb-	Growth Strategy	bbb	Conservative and/or sound growth strategy.
bb+			
bb			

Cost Position

bbb	Cost Structure	bb	Moderate fixed-cost structure. CASM in line with peers.
bbb-	Cost Flexibility	bb	Limited ability to quickly reduce costs, or cost flexibility generally in line with peers.
bb+	Pensions	b	Sizable/inflexible defined benefit obligations.
bb	Labor Relations	bb	Unionized and/or inflexible work rules, constructive relationship with labor groups.
bb-			

Profitability

bb+	EBITDAR Margin	b	10%
bb	EBIT Margin	b	7%
bb-	FFO Margin	b	7%
b+	FCF Margin	bbb	Positive across the cycle.
b	Volatility of Profitability	bbb	Volatility of profits in line with industry average.

Financial Structure

bbb+	EBITDAR Leverage	bbb	2.3x
bbb	FFO Adjusted Leverage	bb	3.3x
bbb-			
bb+			
bb			

Financial Flexibility

a-	Financial Discipline	a	Clear commitment to maintain a conservative policy with only modest deviations allowed.
bbb+	Liquidity as % of LTM Revenue	bbb	20%
bbb	EBITDAR Fixed Charge Coverage	bb	3.0x
bbb-	FX Exposure	bb	FX exposure on profitability and/or debt/cash flow match. Some hedging in place but only partly effective.
bb+	Capital Market Access; Unencumbered Asset Base	bbb	Demonstrated access to capital markets and/or sizable unencumbered asset base.

How to Read This Page: The left column shows the three-notch band assessment for the overall Factor, illustrated by a bar. The right column breaks down the Factor into Sub-Factors, with a description appropriate for each Sub-Factor and its corresponding category.

Credit-Relevant ESG Derivation

Overall ESG

Deutsche Lufthansa AG has 14 ESG potential rating drivers	key driver	0	issues	5
Emissions and noise pollution				
Fuel use in operations	driver	0	issues	4
n.a.	potential driver	14	issues	3
n.a.				
Extreme weather conditions (e.g. hurricanes, volcanoes) on operations	not a rating driver	0	issues	2
n.a.		0	issues	1
Showing top 6 issues				

FitchRatings

Deutsche Lufthansa AG

Corporates Ratings Navigator
Airlines

Credit-Relevant ESG Derivation

Deutsche Lufthansa AG has 14 ESG potential rating drivers

- Deutsche Lufthansa AG has exposure to emissions regulatory risk but this has very low impact on the rating.
- Deutsche Lufthansa AG has exposure to energy productivity risk but this has very low impact on the rating.
- Deutsche Lufthansa AG
- Deutsche Lufthansa AG
- Deutsche Lufthansa AG has exposure to extreme weather events but this has very low impact on the rating.
- Deutsche Lufthansa AG

Showing top 6 issues

			ESG Relevance to Credit Rating
key driver	0	issues	5
driver	0	issues	4
potential driver	14	issues	3
not a rating driver	0	issues	2
	0	issues	1

Environmental (E) Relevance Scores

General Issues	E Score	Sector-Specific Issues	Reference	E Relevance
GHG Emissions & Air Quality	3	Emissions and noise pollution	Management Strategy/Effectiveness	5
Energy Management	3	Fuel use in operations	Management Strategy/Effectiveness; Cost Structure; Profitability; Financial Flexibility	4
Water & Wastewater Management	3	n.a.	n.a.	3
Waste & Hazardous Materials Management; Ecological Impacts	3	n.a.	n.a.	2
Exposure to Environmental Impacts	3	Extreme weather conditions (e.g. hurricanes, volcanoes) on operations	Financial Flexibility	1

Social (S) Relevance Scores

General Issues	S Score	Sector-Specific Issues	Reference	S Relevance
Human Rights, Community Relations, Access & Affordability	3	n.a.	n.a.	5
Customer Welfare - Fair Messaging, Privacy & Data Security	3	Data security; safety regulations	Management Strategy/Effectiveness; Market Position; Profitability; Financial Flexibility	4
Labor Relations & Practices	3	Impact of labor negotiations and employee (dis)satisfaction; workforce diversity	Management and Corporate Governance; Cost Structure; Profitability; Financial Structure	3
Employee Wellbeing	3	Worker safety and accident prevention; prescriptive working conditions	Management and Corporate Governance; Cost Structure; Profitability; Financial Structure	2
Exposure to Social Impacts	3	n.a.	n.a.	1

Governance (G) Relevance Scores

General Issues	G Score	Sector-Specific Issues	Reference	G Relevance
Management Strategy	3	Strategy development and implementation	Management and Corporate Governance	5
Governance Structure	3	Board independence and effectiveness; ownership concentration	Management and Corporate Governance	4
Group Structure	3	Complexity, transparency and related-party transactions	Management and Corporate Governance	3
Financial Transparency	3	Quality and timing of financial disclosure	Management and Corporate Governance	2
				1

How to Read This Page

ESG relevance scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant to the credit rating and green (1) is least relevant.

The Environmental (E), Social (S) and Governance (G) tables break out the ESG general issues and the sector-specific issues that are most relevant to each industry group. Relevance scores are assigned to each sector-specific issue, signaling the credit-relevance of the sector-specific issues to the issuer's overall credit rating. The Criteria Reference column highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis. The vertical color bars are visualizations of the frequency of occurrence of the highest constituent relevance scores. They do not represent an aggregate of the relevance scores or aggregate ESG credit relevance.

The Credit-Relevant ESG Derivation table's far right column is a visualization of the frequency of occurrence of the highest ESG relevance scores across the combined E, S and G categories. The three columns to the left of ESG Relevance to Credit Rating summarize rating relevance and impact to credit from ESG issues. The box on the far left identifies any ESG Relevance Sub-factor issues that are drivers or potential drivers of the issuer's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the relevance score. All scores of '4' and '5' are assumed to result in a negative impact unless indicated with a '+' sign for positive impact.

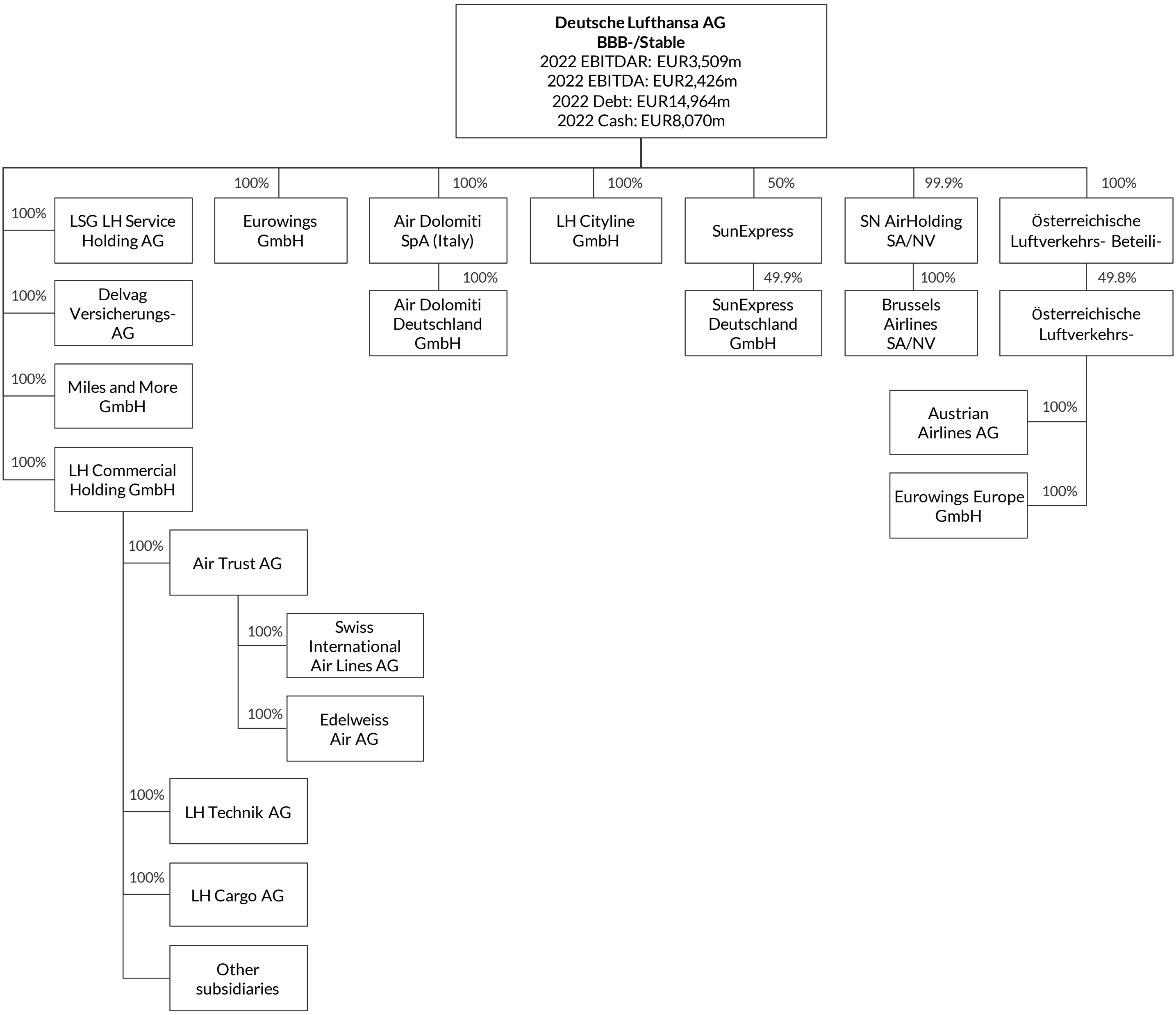
Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI), the Sustainability Accounting Standards Board (SASB), and the World Bank.

CREDIT-RELEVANT ESG SCALE

How relevant are E, S and G issues to the overall credit rating?

5	Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator.
4	Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator.
3	Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator.
2	Irrelevant to the entity rating but relevant to the sector.
1	Irrelevant to the entity rating and irrelevant to the sector.

Simplified Group Structure Diagram



Note: Group structure is related to October 2023. Data is Fitch-adjusted and related to end-2022
Source: Fitch Ratings, Lufthansa

Peer Financial Summary

Company	Issuer Default Rating	Financial statement date	EBITDAR (EURm)	EBITDAR margin (%)	FCF margin (%)	EBITDAR leverage (x)	EBITDAR net leverage (x)	EBITDAR fixed-charge coverage (x)
Deutsche Lufthansa AG	BBB-							
		2022	3,509	10.7	4.9	4.2	1.9	2.9
		2021	-59	-0.4	-12.2	-322.0	-174.9	-0.0
		2020	-4,528	-33.3	-32.4	-3.4	-2.2	-3.7
		2019	4,381	12.0	-2.8	2.1	1.4	3.8
British Airways Plc	BB+							
		2022	1,591	12.7	-1.0	7.4	5.6	1.5
		2021	-1,088	-24.8	-21.1	-10.7	-8.8	-1.1
		2020	-1,381	-31.3	-94.6	-7.0	-6.0	-1.7
		2018	3,303	22.9	0.7	2.4	1.5	6.7
Turk Hava Yollari Anonim Ortakligi (Turkish Airlines)	B+							
		2022	4,543	26.3	19.5	2.9	1.9	3.5
		2021	3,027	32.0	13.4	4.3	3.5	2.3
		2020	1,154	20.8	-31.5	11.9	10.6	1.0
		2019	2,134	18.1	-3.1	5.4	4.5	1.8
Ryanair Holdings plc	BBB+							
		2022	380	7.9	17.0	13.4	3.9	2.7
		2021	-268	-16.4	-149.1	-20.2	-8.6	-2.0
		2020	1,876	22.1	8.0	2.2	0.2	13.4
		2019	1,741	22.6	6.1	2.4	0.6	12.1
Wizz Air Holdings Plc	BBB-							
		2022	-19	-1.1	-24.2	-209.1	-143.6	—
		2021	-183	-24.8	-110.7	-17.2	-9.1	-0.6
		2020	720	26.1	-11.7	2.8	1.0	2.0
		2019	720	31.0	12.2	3.2	1.4	2.2
Delta Air Lines, Inc.	BB+							
		2022	6,209	13.1	-0.2	5.0	3.5	2.8
		2021	199	0.8	-0.4	165.0	-21.9	0.1
		2020	-3,991	-28.4	-35.6	-7.8	-2.9	-2.5
		2019	9,103	21.8	5.1	1.7	0.9	6.4
American Airlines Group Inc.	B+							
		2022	5,797	12.6	-1.1	7.1	7.1	1.5
		2021	-1,041	-3.9	1.3	-39.6	-8.6	-0.3
		2020	-5,916	-41.5	-49.8	-5.8	-3.0	-2.4
		2019	7,243	17.8	-1.6	4.1	3.5	2.5

Source: Fitch Ratings, Fitch Solutions

Fitch Adjusted Financials

Fitch Adjusted Financials

(EURm as of 31 December 2022)	Notes and formulas	Standardised values	Other adjustments	Lease treatment	Factoring	Other adjustments	Adjusted values
Income statement summary							
Revenue		32,770	—	—	—	—	32,770
EBITDAR	(a) = (c-b)	3,509	—	—	—	—	3,509
Lease expense for capitalised leased assets	(b)	—	—	-511	—	-572	-1,083
EBITDA	(c)	3,509	—	-511	—	-572	2,426
Depreciation and amortisation		-2,277	—	427	—	440	-1,410
EBIT		1,232	—	-84	—	-132	1,016
Balance sheet summary							
Debt	(d)	14,903	—	-2,444	61	-4,407	8,113
Of which other off balance sheet debt		—	—	—	—	—	—
Lease-equivalent debt	(e)	—	—	2,444	—	4,407	6,851
Lease-adjusted debt	(f) = (d+e)	14,903	—	—	61	—	14,964
Readily available cash and equivalents	(g)	8,301	—	—	—	-231	8,070
Not readily available cash and equivalents		—	—	—	—	—	—
Cash flow summary							
EBITDA	(c)	3,509	—	-511	—	-572	2,426
Dividends received from associates less dividends paid to minorities	(h)	62	—	—	—	—	62
Interest paid	(i)	-379	—	84	—	132	-163
Interest received	(j)	37	—	—	—	—	37
Preferred dividends paid	(k)	—	—	—	—	—	—
Cash tax paid		-288	—	—	—	—	-288
Other items before funds from operations (FFO)		253	—	—	—	—	253
FFO	(l)	3,194	—	-427	—	-440	2,327
Change in working capital		1,694	—	—	-61	—	1,633
Cash flow from operations (CFO)	(m)	4,888	—	-427	-61	-440	3,960
Non-operating/non-recurring cash flow		—	—	—	—	—	—
Capex	(n)	-2,365	—	—	—	—	-2,365
Common dividends paid		—	—	—	—	—	—
FCF		2,523	—	-427	-61	-440	1,595
Gross leverage (x)							
EBITDAR leverage	f / (a+h)	4.2	—	—	—	—	4.2
(CFO-capex)/debt (%)	(m+n) / d	16.9	—	—	—	—	19.7
Net leverage (x)							
EBITDAR net leverage	(f-g) / (a+h)	1.8	—	—	—	—	1.9
(CFO-capex)/net debt (%)	(m+n) / (d-g)	38.2	—	—	—	—	3,709.3
Coverage (x)							
EBITDAR fixed-charge coverage	(a+h) / (-i-b)	9.4	—	—	—	—	2.9

Notes: The standardised items presented above are based on Fitch's taxonomy for the given sector and region. Reported items may not match the Fitch taxonomy, but they are captured into corresponding lines accordingly. Debt includes other off balance sheet debt.
Source: Fitch Ratings, Fitch Solutions, Lufthansa

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