

## CREDIT OPINION

21 February 2025

Update



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### RATINGS

#### Deutsche Lufthansa Aktiengesellschaft

Domicile	Koeln, Germany
Long Term Rating	Baa3
Type	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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# Deutsche Lufthansa Aktiengesellschaft

## Update to credit analysis

### Summary

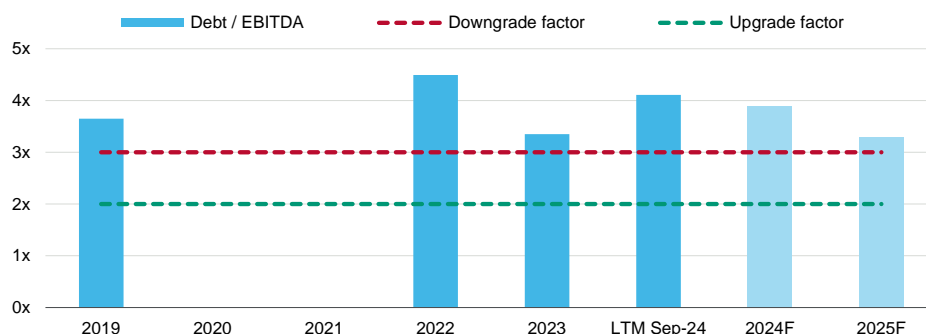
The Baa3 senior unsecured rating with a stable outlook reflects Lufthansa's solid business profile and currently good liquidity on the one hand, and weak credit metrics on the other hand.

The ratings are supported by its leading position in the European airlines sector which was recently strengthened by the minority stake acquisition of ITA approved by the European Commission. The acquisition will provide a cost competitive hub in Rome and new routes towards African and South American destinations in a context of strong competition coming from Asia. In addition, the ratings are backed up by a strong liquidity.

The company is committed to reduce its financial indebtedness whilst maintaining its public liquidity corridor of €8 to 10 billion, including a committed RCF of €2.5 billion. On the other side, we expect Lufthansa's performance to be weaker than anticipated for the fiscal year 2024. For the last twelve months ended in September, Moody's adjusted gross leverage is 4.1x because of very weak results in the Lufthansa Airlines due to severe strikes primarily in the first quarter of 2024, pressure on yields, strong competition on Asian routes and by inefficiencies in flight operations. Lufthansa recently announced a turnaround program which the company expects to bring gross Adj. EBIT benefits of EUR 1.5 billion by 2026 from revenue effects and an optimization of the cost base. We anticipate leverage to improve in the next 12-18 months. However, this will be dependent on the effectiveness of its turnaround program to align the Lufthansa Airlines segment to the rest of the Group targeted Adj. EBIT margin of 8%.

Exhibit 1

**Absent a reversal in the current recovery in passenger traffic we expect leverage to reduce towards 3.0x over the next 12 to 18 months**



Our forecasts assume that Revenue Passenger Kilometres (RPK) will not recover to 2019 levels before 2024 at the earliest. Debt metrics for 2020 and 2021 are heavily distorted by the impact of the pandemic, hence we do not show them on the chart above. All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months. Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

## Credit strengths

- » Leading market position in Europe, with diverse global network and product offerings
- » Critical element of the transportation infrastructure in Germany, Austria, Switzerland and Belgium
- » Strategic importance for the German government demonstrated in 2020 with material liquidity and equity injection amid the pandemic
- » Economies of scale from different business segments and some degree of earnings visibility because of business diversification
- » Sizeable unencumbered fleet

## Credit challenges

- » Very strong passenger yield environment potentially normalising once more capacity is being restored and supply chain constraints are easing
- » Investment needs to modernize fleet dampen free cash flow generation
- » The relatively low Moody's-adjusted EBIT margin compared with that of other investment-grade-rated airlines reflects strong competition, but also a still high cost base
- » Execution risk on cost optimization efforts

## Rating outlook

The stable outlook on the ratings reflects Moody's view that Lufthansa's financial profile will gradually strengthen further over the next 12-18 months, supported by strong demand in the European airline market and the benefits from Lufthansa's structural progress in terms of cost reductions supported by strong MRO contribution. The stable outlook also encompasses the expectation that Lufthansa will maintain its prudent financial policy and focus on deleveraging.

## Factors that could lead to an upgrade

The rating could come under positive pressure if:

- 1) gross adjusted leverage falls sustainably below 2.0x;
- 2) the retained cash flow (RCF)/debt metric increases materially above 35%; and
- 3) the adjusted EBIT margin is maintained at least double-digit in percentage terms, indicating resilience to competitive pressures, and
- 4) the company maintains its strong liquidity.

## Factors that could lead to a downgrade

The rating could come under negative pressure if:

- 1) gross adjusted leverage is sustained above 3.0x, or
- 2) the RCF/debt metric falls below 25%, or
- 3) Funds from operations plus interest-to-interest is sustained below 6x, or
- 4) Any deterioration in its liquidity profile below the defined corridor between €8.0-10.0 billion or weakening of its prudent financial policy.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

## Key indicators

Exhibit 2

### Deutsche Lufthansa Aktiengesellschaft

(in € billions)	2019	2020	2021	2022	2023	LTM Sep-24	2024F	2025F
Revenue	36.4	13.6	16.8	30.9	35.4	36.9	37.1	37.5
EBIT Margin %	5.4%	-34.5%	-13.7%	5.8%	7.9%	4.8%	5.0%	6.5%
Debt / EBITDA	3.6x	-11.7x	-556.0x	4.5x	3.3x	4.1x	3.9x	3.3x
(FFO + Interest Expense) / Interest Expense	11.5x	-3.9x	-0.3x	4.7x	6.5x	4.9x	5.1x	6.0x
RCF / Net Debt	26.1%	-17.1%	-6.0%	33.4%	46.4%	33.8%	32.5%	39.6%

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

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Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

## Profile

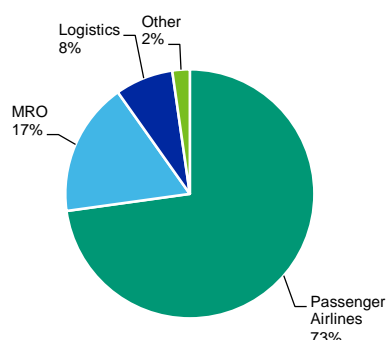
Deutsche Lufthansa Aktiengesellschaft, headquartered in Cologne, Germany, is the leading European airline in terms of revenue. During the 12 months ended September 2024, it generated revenue of €36.9 billion and a Moody's adjusted EBITDA of €4.1 billion.

The company's revenue is derived principally from three business segments: Passenger Airlines (Lufthansa German Airlines, Swiss, Austrian Airlines, Brussels Airlines and low cost airline Eurowings); Logistics, a cargo provider focusing on the airport-to-airport business; MRO, a supplier of maintenance, repair and overhaul services for civil aircraft.

In the first nine months 2024, Lufthansa carried 101 million passengers on 755k flights. Pre-pandemic the route network of the company's Network Airlines comprised around 273 destinations in 86 countries. As of September 2024, the company's fleet consisted of 731 aircraft, with an average age of around 14 years.

Exhibit 3

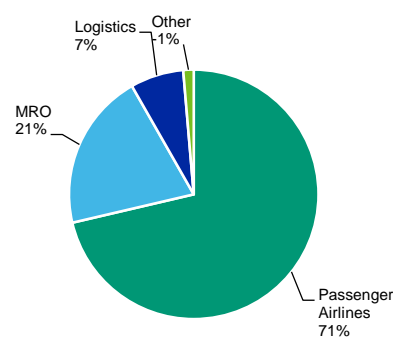
### Lufthansa's revenue by business segment (LTM Sep-24)



Source: Company information

Exhibit 4

### Lufthansa's Adj. EBITDA by business segment (LTM Sep-24)



Source: Company information

## Detailed credit considerations

### Operating performance expected to improve following weak 2024

Lufthansa's operating performance was weaker than expected during 2024. While revenue growth until September 2024 was broadly in line with expectations. The company faced meaningful headwinds on the cost side throughout the year. This included several strikes at the beginning of the year which resulted in a first profit warning as well as ongoing operational issues resulting in a second profit warning in the third quarter.

The company has concluded several collective labour agreements with meaningful wage increases over the next years which need to be compensated. In response to the weak performance and ongoing cost pressure, Lufthansa initiated a cost savings and operational

improvement program eyeing to achieve €1.5 billion gross effect on company adjusted EBIT by 2026. While the program will incur some initial costs, we expect it to contribute positively to the long-term profitability.

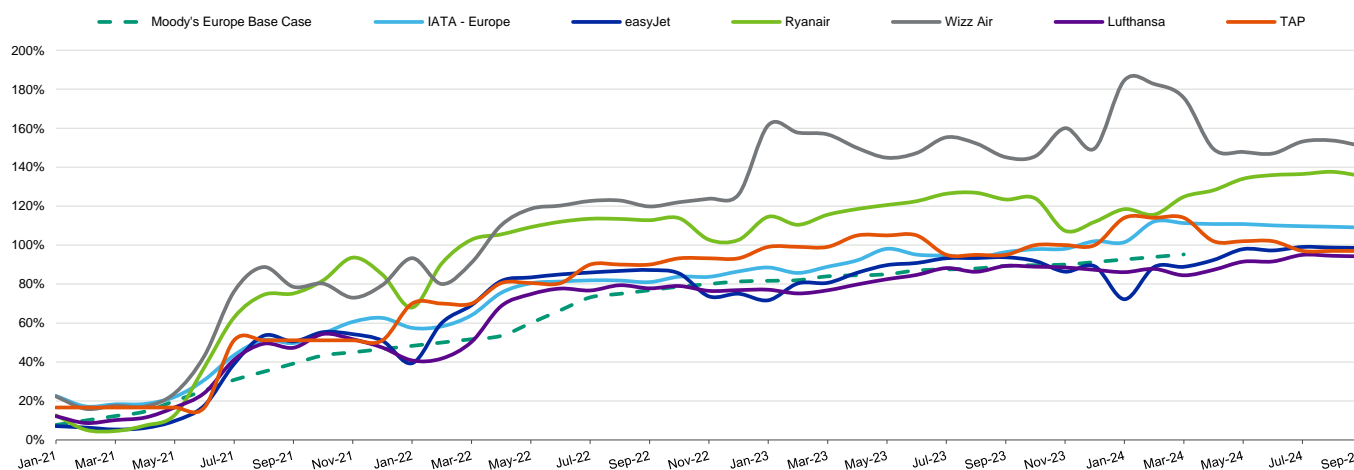
### Passenger traffic and yield environment robust as capacity is constrained but weaker macro-sentiment could result in pricing pressure

Passenger traffic has recovered from the pandemic but Lufthansa's remains slightly behind its European competitors. The company has been able to operate close to 90% of its capacity as measured by Available Seat Kilometers at its network airlines versus pre-pandemic levels. Demand continued to exceed supply due to operating challenges across the air travel value chain (airport and air traffic control bottlenecks, lack of pilots, amongst other) as well as high level of groundings, e.g. from the GTF engine issue. The tight supply / demand balance led to a very significant increase in ticket fares and yields versus pre-pandemic levels but Lufthansa recently experienced some decline in yield from cost headwinds.

The macroeconomic uncertainties and the high inflationary pressures persist in Europe but has not lead to any slowdown in passenger traffic as expected by us previously. We expect the yield level to remain elevated in the next 12-18 months as constraints in the global commercial aviation supply chain, as well as labor shortages at the airlines and at key service providers like airports, will keep the industry's capacity below demand, sustaining its ability to sell tickets at prices that exceed its costs. We nevertheless factor in a slightly declining pattern as a reflection of potential competitive pressures given the weak macro sentiment. We also note that the lagging recovery in business travel (only back to around 60% of pre-pandemic level by passenger numbers) is exacerbating the seasonal nature of Lufthansa's passenger airline business with stronger volatility between off and peak season. Lufthansa may also benefit from a gradual recovery of the Asian market over that period as this region has not yet strongly recovered. Asia accounted for 19% of the network airline traffic revenue in 2019 versus 14% in 2023.

Exhibit 5

**European passenger traffic has been broadly aligned with our forecasts so far; traffic still expected to recover to pre-pandemic level by 2024**  
Revenue Passenger Kilometers or flight numbers (Eurocontrol) for Europe



Sources: Company, IATA, Eurocontrol and Moody's Ratings

### Lufthansa's diversification supports earnings stability

Lufthansa's various divisions benefit from mutual synergies and economies of scale. For example, its Logistics division transports a large proportion of freight in the belly capacity of Lufthansa's airlines businesses, while the MRO business maintains and repairs the group's sizeable fleet and provides MRO services to many other airlines. The Network Airlines and Eurowings divisions also complement each other, with Network Airlines operating medium- to long-haul routes with a strong premium positioning, while Eurowings is more focused on point-to-point traffic and customers, which are price sensitive.

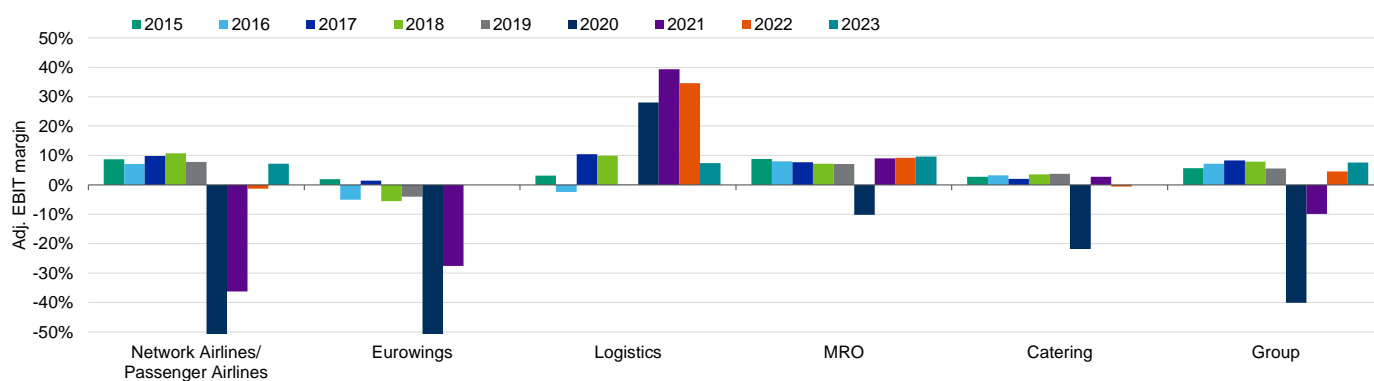
Diversification across divisions has also supported earnings predictability to some degree. The Network Airlines business segment has stayed relatively robust in terms of margins and EBIT growth pre-pandemic, largely because of its strong market positions in economically strong domestic markets (mainly Germany), and its premium market positioning, especially in long-haul markets.

As illustrated in the chart below, Lufthansa's Logistics business has offered a strong hedge against the collapse in passenger traffic during the pandemic. This business generated a series of record EBIT since the onset of the pandemic in 2020 mainly supported by a surge in cargo yields. While cargo yields have eased meaningfully during 2023, we nevertheless expect a stabilization over the medium term while the passenger business of Lufthansa continues to recover from the pandemic hence mitigating the weakening of the cargo business.

The MRO business is set to benefit from an unusually high demand for maintenance and repair as an unusual high amount of groundings is recently experienced in the airline industry leading to MRO capacity constraints until 2026. Additionally, Lufthansa's decision to divest the remaining catering business and its AirPlus operations supports profitability as both segments were dilutive to the group's margins.

Exhibit 6

**EBIT of the Network Airlines and MRO businesses have offset the more cyclical and volatile earnings of its Eurowings and Logistics businesses pre pandemic; Logistics business has posted record performance since the onset of the pandemic**



Passenger Airlines business segment comprises both Network Airlines and Eurowings from 2022 onwards. Catering business has been discontinued in Q1-23.

Sources: Company and Moody's Ratings

### **Solid strategic rationale for the acquisition of minority stake in ITA but turnaround risk is considered high, further consolidation cannot be ruled out**

On 17 January 2025, Lufthansa announced the finalization of the acquisition of a stake in ITA Airways. Under the terms and conditions agreed with the Italian Ministry of Finance (MEF), Lufthansa acquired a 41% stake in ITA for €325 million through a capital increase rather through a payment to the MEF whilst the MEF has injected €250 million in the airline prior to the closing of the transaction. Lufthansa has an option to acquire the remaining shares in ITA at its discretion and / or dependent on a jointly agreed business plan for ITA. The aim of Lufthansa is to ultimately fully own and control the company.

The strategic rationale for the transaction is sound. The acquisition of ITA offers Lufthansa access to a strong long haul hub to reinforce its traffic to Latin America and the African continent, two relative weaknesses of Lufthansa in the past also relative to peers. Lufthansa intends to reduce the exposure of ITA to the very competitive point-to-point domestic Italian market and to increase the fleet of long haul. The strategic rationale is also underpinned by Italy being the 3rd largest economy in Europe and the 3rd largest airline market in Europe. Italy is already Lufthansa's fifth largest market. On a more negative note ITA is a newly created airline from the legacy of Alitalia that still needs to prove that it can become a profitable airline. ITA has been fully restructured with new pilot and crew labor contracts. Lufthansa expects ITA to become profitable in 2025 and has structured the proposed transaction in such a way that it has the right but not the obligation to buy the remaining capital in ITA and only if a commonly agreed business plan has been met. However the acquisition of a 41% stake in ITA will be dilutive to Lufthansa's earnings as long as ITA is not achieving at least break even. The capital injection of €325 million is small in the context of Lufthansa's cash position but the risk also remains that additional equity injection might be required if ITA is not turning around its operating performance quickly enough.

While the acquisition of ITA will tie up management resources and will give Lufthansa access to a hub in Southern Europe with good access to the African and Latin American markets, we cannot rule out that Lufthansa will also be amongst the bidders for TAP once it

becomes available for sale. This acquisition will further reinforce Lufthansa's market access to Latin America and notably Brazil, will give the company access to a modern fleet but will come at a significantly higher price tag than ITA.

Additionally, Lufthansa announced on 29 January 2025 to have entered a strategic partnership with Latvian airBaltic via a 10% stake in form a convertible shares. The transaction will foster the collaboration as airBaltic already being wet lease partner of Lufthansa and strengthen Lufthansa's network across the Baltic Sea. The overall purchase price of €14 million is considered being manageable.

#### Lufthansa remains committed to further improve its credit profile and to maintain a minimum liquidity corridor

The company is committed to reduce its financial indebtedness whilst maintaining its public liquidity corridor of €8 to 10 billion, which comprises both cash on balance sheet and the company's €2.5 billion sustainability-linked revolving credit facility. Lufthansa's liquidity corridor was set up after the pandemic and is calibrated to cover certain short term liabilities on balance sheet including unflown ticket liabilities. The recently issued hybrid instrument that refinances the existing instrument maturing in 2026 further fosters the investment grade commitment.

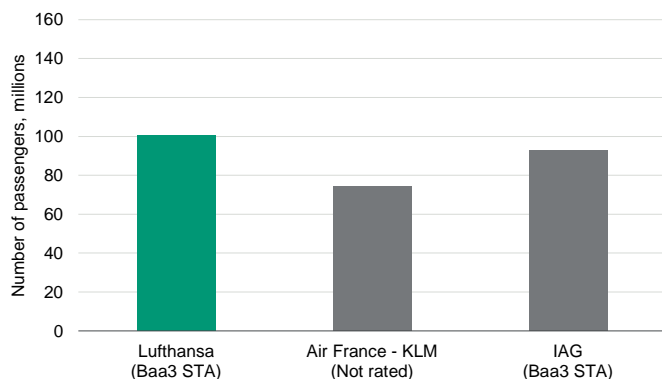
We expect Lufthansa to use excess cash flow to further reduce its financial indebtedness over time. Whilst the company has announced a restoration of a dividend payout we expect the company to exert caution and to use a conservative dividend payout ratio. Lufthansa's strategy to start hedging its net pension deficit by investing in a portfolio of long term assets with an interest rate mirroring the discount rate of its pension liabilities should reduce the volatility of its net pension deficit and hence the volatility of our Moody's adjusted debt.

#### Strong European market position and extensive network as a result of Lufthansa's participation in market consolidation

With revenue of around €36.9 billion as of LTM September 2024, Lufthansa Group is one of the largest airlines globally and the largest in Europe. Passenger numbers of around 101 million the first nine month 2024 and revenue seat kilometres of around 206 billion compare favourably with those of the [International Airlines Group](#) (IAG, Baa3 stable) and Air France-KLM (see Exhibits 7 and 8).

Exhibit 7

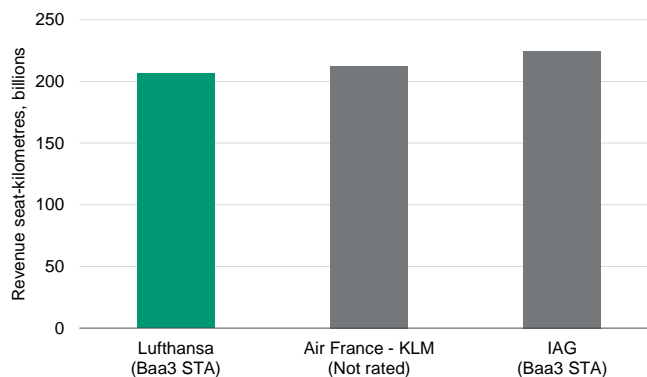
**Lufthansa's passenger numbers are greater than those of its closest European peers (9M 2024)**



Source: Company information

Exhibit 8

**Lufthansa's revenue seat kilometre slightly lower than peers (9M 2024)**



Source: Company information

The scale of Lufthansa's business and its leading market positions, especially in Germany, Austria, Switzerland and Belgium (DACHB markets), reflect the several acquisitions made over the last 10-15 years. These included Swiss Airlines in 2005, Austrian Airlines in 2009, the remaining 55% stake that it did not own in Brussels Airlines in 2017, LGW in early 2018 and its acquisition of most of Air Berlin's fleet in 2017-18. Besides strengthening the company's network and increasing its market shares in these markets (as of June 2019, Lufthansa accounted for 80% of intra-DACHB traffic and around 35% of DACHB-EU and DACHB-world traffic), these acquisitions have helped consolidate the still highly fragmented European aviation market compared with, for example, the US market.

## ESG considerations

### Deutsche Lufthansa Aktiengesellschaft's ESG credit impact score is CIS-3

Exhibit 9

#### ESG credit impact score

# CIS-3

Score



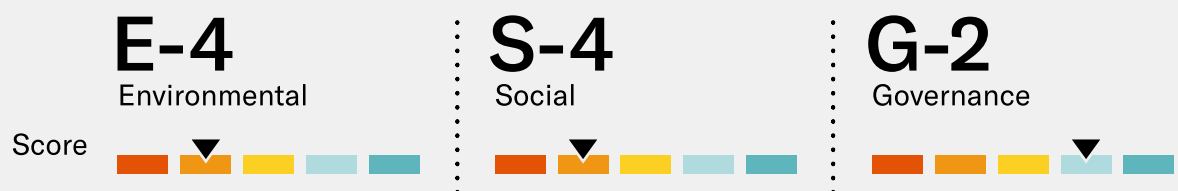
ESG considerations have a limited impact on the current rating, with potential for greater negative impact over time.

Source: Moody's Ratings

Lufthansa's ESG Credit Impact Score reflects limited credit impact to date, but the potential for carbon transition and related social risk factors to pressure the rating over time. Carbon transition risk reflects that current aircraft propulsion technologies and very limited supply of sustainable aviation fuel will not support a rapid carbon transition scenario for the airline industry. Potential policy responses including more onerous regulations are possible and a social risk. However, the credit risk to airlines is long-term in nature. Lufthansa will address the increasing carbon transition risk for the airline industry through capital investments in new aircraft and a rejuvenation of its fleet. Given the company's sizeable fleet it will take time to markedly reduce the average fleet age of the airline group. Lufthansa's investment grade capital structure and its strong access to debt and equity capital markets will make it easier than for more levered airlines to make necessary investments to mitigate carbon transition risk. Lufthansa is also exposed to high Human Capital risk from a strongly unionised workforce. Labor disputes have had a financial impact on the company in recent years.

Exhibit 10

#### ESG issuer profile scores



Source: Moody's Ratings

### Environmental

Lufthansa faces environmental risk due to carbon transition. This will depend on evolving decarbonization policies around the globe and regulations which may increase operating costs for airlines. Further, the desire by some to reduce carbon emissions may lead to reduced travel, in particular, corporations seeking to reduce their carbon footprints. Point-in-time the average fleet age and efficiency is lower than for low cost peers that have smaller fleets and have a shorter corporate history. This exposes Lufthansa to higher carbon transition risk than certain low cost carriers such as Wizz Air.

### Social

Social risks across the industry and for Lufthansa reflect our view of a linkage between carbon transition and demographic and societal trends. The score indicates the potential for policies and/or trends that lead to lower travel volumes or higher costs, or both. Lufthansa also has higher human capital risk than some of its US or low cost peers due to a higher level of unionisation, which has led to labor disruption events in the past. Lufthansa, like other airlines is also exposed to a potential shortfall in skilled labor (pilots and mechanics),

which would negatively affect operations and or increase costs. However the strength of Lufthansa's brand in Europe has enabled to recruit skilled staff without difficulties across its network of airlines in the past.

### Governance

Lufthansa has good corporate governance practices. The company maintains conservative financial policies in line with its investment grade rating and has reduced financial risks since the pandemic. The company is publicly listed on the German stock exchange. Its capital structure is straightforward with most of the group's debt being raised at the parent company level.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

### Liquidity

Lufthansa's liquidity position is strong. The company had approximately €8.9 billion of cash on balance sheet at September 2024 and full availability under its €2.5 billion sustainability-linked revolving credit facility. Total liquidity (excluding credit lines) accounts for around 31% of LTM September 2024 revenue. This compares to €3.4 billion of cash (unused credit lines of €800 million) as per December 2019 or 9.3% of revenue (excluding credit lines) at that time. The company is expected to generate negative Moody's adjusted FCF in the coming years primarily driven by fleet investments. Lastly, Lufthansa has a well spread maturity profile.



## Rating methodology and scorecard factors

The principal methodology used in these ratings was Passenger Airlines.

The scorecard indicated outcome is Baa3 in our forward view, in line with the current rating assigned reflecting the expected improvements in credit metrics.

Exhibit 11

### Rating factors

Deutsche Lufthansa Aktiengesellschaft

Passenger Airline Industry Scorecard			Current LTM Sep-24		Moody's 12-18 month forward view	
Factor 1 : Scale (10%)	Measure	Score	Measure	Score	Measure	Score
a) Revenue (\$ billions)	40.0	A	40.0	A	40.0 - 42.0	A
Factor 2 : Business Profile (25%)						
a) Market Position and Network Strength	Baa	Baa	Baa	Baa	Baa	Baa
Factor 3 : Profitability and Efficiency (10%)						
a) EBIT Margin	4.8%	Caa	6.0%	B	6.0% - 7.0%	B
Factor 4 : Leverage and Coverage (40%)						
a) Debt / EBITDA	4.1x	Ba	3.0x - 3.5x	Ba	3.0x - 3.5x	Ba
b) (FFO + Interest Expense) / Interest Expense	4.9x	Ba	5.5x - 6.5x	Ba	5.5x - 6.5x	Ba
c) RCF / Net Debt	33.8%	Baa	35.0% - 40.0%	Baa	35.0% - 40.0%	Baa
Factor 5 : Financial Policy (15%)						
a) Financial Policy	Baa	Baa	Baa	Baa	Baa	Baa
Rating:						
a) Scorecard-Indicated Outcome		Ba1		Baa3		Baa3
b) Actual Rating Assigned				Baa3		Baa3

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Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

## Appendix

Exhibit 12

### Peer comparison

#### Deutsche Lufthansa Aktiengesellschaft

	Deutsche Lufthansa Aktiengesellschaft Baa3 Stable			British Airways, Plc Baa3 Stable			Int'l Consolidated Airlines Group, S.A. Baa3 Stable			United Airlines Holdings, Inc. Ba2 Stable			American Airlines Group Inc. B1 Stable		
	FY	FY	LTM	FY	FY	LTM	FY	FY	LTM	FY	FY	LTM	FY	FY	LTM
(in \$ millions)	Dec-22	Dec-23	Sep-24	Dec-22	Dec-23	Jun-24	Dec-22	Dec-23	Jun-24	Dec-22	Dec-23	Sep-24	Dec-22	Dec-23	Sep-24
Revenue	32,561	38,327	40,009	13,645	17,809	18,263	24,310	31,850	33,094	44,955	53,717	55,994	48,971	52,788	53,613
Operating Profit	1,667	2,534	1,454	398	1,798	1,869	1,331	3,588	3,627	2,753	4,506	4,879	2,394	3,624	2,717
EBITDA	4,040	5,439	4,449	1,984	3,806	3,968	3,620	6,515	6,583	6,215	8,917	9,128	5,927	7,462	6,448
Total Debt	18,378	18,600	18,802	12,770	10,842	10,378	21,559	17,958	17,459	37,191	37,711	34,331	45,840	42,642	41,152
Cash & Cash Equivalents	8,853	8,826	9,903	3,027	1,497	3,125	10,209	7,518	8,269	7,211	6,089	8,848	440	578	834
EBIT / Interest Expense	2.2x	3.7x	2.3x	1.0x	3.3x	3.7x	1.4x	3.9x	4.3x	1.4x	2.3x	2.5x	0.9x	1.4x	1.2x
Debt / EBITDA	4.5x	3.3x	4.1x	6.6x	2.8x	2.6x	5.9x	2.7x	2.7x	6.0x	4.2x	3.8x	7.7x	5.7x	6.4x
RCF / Net Debt	33.4%	46.4%	33.8%	14.6%	30.1%	43.3%	27.7%	54.7%	70.9%	14.1%	20.7%	23.4%	7.6%	11.1%	7.7%
FCF / Debt	12.0%	4.9%	-2.4%	-1.4%	-5.3%	-10.5%	-2.3%	-2.2%	-1.0%	3.0%	-1.5%	0.0%	-1.2%	2.4%	-1.3%

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Source: Moody's Financial Metrics™

Exhibit 13

### Moody's-adjusted debt reconciliation

#### Deutsche Lufthansa Aktiengesellschaft

(in € millions)	2019	2020	2021	2022	2023	LTM Sep-24
<b>As reported debt</b>	<b>10,030.0</b>	<b>15,368.0</b>	<b>16,670.0</b>	<b>15,151.0</b>	<b>13,943.0</b>	<b>13,952.0</b>
Pensions	6,947.0	9,531.0	6,682.0	2,069.0	2,895.0	2,895.0
Hybrid Securities	(250.0)	-	-	-	-	-
Non-Standard Adjustments	302.0	-	-	-	-	-
<b>Moody's-adjusted debt</b>	<b>17,029.0</b>	<b>24,899.0</b>	<b>23,352.0</b>	<b>17,220.0</b>	<b>16,838.0</b>	<b>16,847.0</b>

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Source: Moody's Financial Metrics™

Exhibit 14

### Moody's-adjusted EBITDA reconciliation

#### Deutsche Lufthansa Aktiengesellschaft

(in € millions)	2019	2020	2021	2022	2023	LTM Sep-24
<b>As reported EBITDA</b>	<b>5,007.0</b>	<b>(3,844.0)</b>	<b>171.0</b>	<b>3,971.0</b>	<b>5,143.0</b>	<b>4,216.0</b>
Pensions	14.0	31.0	(85.0)	19.0	25.0	25.0
Unusual Items	(355.0)	1,692.0	(128.0)	(157.0)	(138.0)	(138.0)
<b>Moody's-adjusted EBITDA</b>	<b>4,666.0</b>	<b>(2,121.0)</b>	<b>(42.0)</b>	<b>3,833.0</b>	<b>5,030.0</b>	<b>4,103.0</b>

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Source: Moody's Financial Metrics™

Exhibit 15

Overview on selected historical and forecasted Moody's-adjusted financial data  
Deutsche Lufthansa Aktiengesellschaft

(in € millions)	2019	2020	2021	2022	2023	LTM Sep-24	2024F	2025F
<b>INCOME STATEMENT</b>								
Revenue	36,424	13,589	16,811	30,895	35,442	36,898	37,133	37,533
EBITDA	4,666	(2,121)	(42)	3,833	5,030	4,103	4,196	4,804
EBIT	1,974	(4,682)	(2,301)	1,790	2,797	1,783	1,857	2,440
Interest Expense	378	674	727	811	757	791	780	724
<b>BALANCE SHEET</b>								
Cash & Cash Equivalents	3,401	5,460	7,666	8,295	7,990	8,873	7,682	7,481
Total Debt	17,029	24,899	23,352	17,220	16,838	16,847	16,338	15,838
Net Debt	13,628	19,439	15,686	8,925	8,848	7,974	8,656	8,357
<b>CASH FLOW</b>								
Funds from Operations (FFO)	3,981	(3,299)	(923)	2,986	4,129	3,068	3,190	3,651
Cash Flow From Operations (CFO)	3,552	(2,663)	(83)	4,854	4,670	3,817	3,747	3,839
Capital Expenditures	(3,961)	(1,729)	(1,714)	(2,774)	(3,820)	(3,844)	(4,150)	(5,200)
Dividends	426	21	19	8	25	373	380	340
Retained Cash Flow (RCF)	3,555	(3,320)	(942)	2,978	4,104	2,695	2,810	3,311
RCF / Debt	20.9%	-13.3%	-4.0%	17.3%	24.4%	16.0%	17.2%	20.9%
Free Cash Flow (FCF)	(835)	(4,413)	(1,816)	2,072	825	(400)	(783)	(1,701)
FCF / Debt	-4.9%	-17.7%	-7.8%	12.0%	4.9%	-2.4%	-4.8%	-10.7%
<b>PROFITABILITY</b>								
% Change in Sales (YoY)	2.5%	-62.7%	23.7%	83.8%	14.7%	5.3%	4.8%	1.1%
EBIT margin %	5.4%	-34.5%	-13.7%	5.8%	7.9%	4.8%	5.0%	6.5%
EBITDA margin %	12.8%	-15.6%	-0.2%	12.4%	14.2%	11.1%	11.3%	12.8%
<b>INTEREST COVERAGE</b>								
(FFO + Interest Expense) / Interest Expense	11.5x	-3.9x	-0.3x	4.7x	6.5x	4.9x	5.1x	6.0x
EBIT / Interest Expense	5.2x	-6.9x	-3.2x	2.2x	3.7x	2.3x	2.4x	3.4x
EBITDA / Interest Expense	12.3x	-3.1x	-0.1x	4.7x	6.6x	5.2x	5.4x	6.6x
<b>LEVERAGE</b>								
Debt / EBITDA	3.6x	-11.7x	-556.0x	4.5x	3.3x	4.1x	3.9x	3.3x
Net Debt / EBITDA	2.9x	-9.2x	-373.5x	2.3x	1.8x	1.9x	2.1x	1.7x

All data based on adjusted financial data, which follow our Financial Statement Adjustments in the Analysis of Nonfinancial Corporations methodology. LTM = Last 12 months.

Moody's forecasts are Moody's opinion and do not represent the views of the issuer.

Sources: Moody's Financial Metrics™ and Moody's Ratings forecasts

## Ratings

Exhibit 16

Category	Moody's Rating
<b>DEUTSCHE LUFTHANSA AKTIENGESELLSCHAFT</b>	
Outlook	Stable
Issuer Rating -Dom Curr	Baa3
Senior Unsecured -Dom Curr	Baa3
Subordinate -Dom Curr	Ba1

Source: Moody's Ratings

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