



Deutsche Lufthansa AG (LHA)

HOLD: €5.68 (-10.13%)

Equity Research Division

30th April 2025

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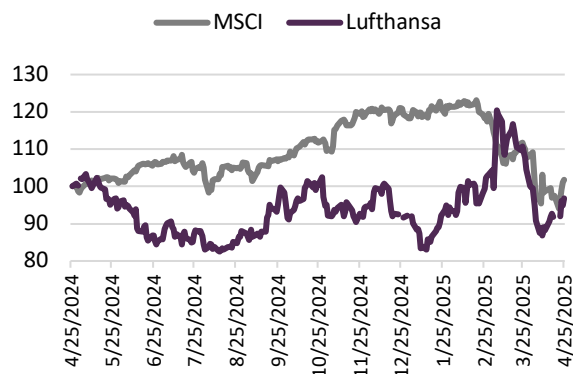
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Basic Information

Last Closing Price	€6.32
Target Price	€5.68
+/- Potential	-10.13%
Bloomberg Ticker	LHA:GRA
GICS Sector	Industrials
GICS Sub-Industry	Airlines

1Y Cumulative Returns (re-based to 100)



Market Cap	€7,568 mn
Basic Shares O/S	1,200 mn
52-Wk High	€8.16
52-Wk Low	€5.38
Fiscal Year End	31 Dec. 2024

€ million	FY21	FY22	FY23	FY24
Gross profit	2,181	6,033	7,429	7,079
EBITDA	125	3,114	3,921	3,173
EBIT	(1,646)	1,237	2,125	1,264
Net Income	(2,191)	791	1,673	1,380

Key Executives

Carsten Spohr	Group CEO
Till Streichert	Group CFO
Michael Niggemann	Group CLO, Secretary

Investment Thesis

Lufthansa is a leader in the European full-service carrier market, offering a wide range of premium services and an extensive network spanning over 300 destinations globally. The company benefits from diversified revenue streams across passenger airlines, cargo, and maintenance services, as well as its strong market position and operational scale.

While the airline industry is on a recovery trajectory post-pandemic, supported by strong demand for both leisure and business travel, Lufthansa faces challenges including high operational costs, competitive pressures from low-cost carriers, and regulatory requirements for sustainability.

Given Lufthansa's positioning within the airline industry, its focus on premium services, and ongoing efficiency measures, we assess the risk-reward profile as moderately favorable. Accordingly, we recommend a HOLD rating for Lufthansa.

Valuation

We are valuing Lufthansa using a 50/50 blend of intrinsic value (DCF) and relative valuation, arriving at a target price of €5.68, a 10.13% decrease from its last close price.

Key Risks

Downside risks: Lufthansa is exposed to fuel price volatility, stricter environmental regulations, and fierce competition from low-cost carriers, all of which could pressure profitability and erode market share.

Upside risks: Lufthansa stands to gain from the recovery in long-haul travel demand, its acquisition of ITA Airways, and its sustainability initiatives, including fleet modernization and the adoption of Sustainable Aviation Fuels (SAF).

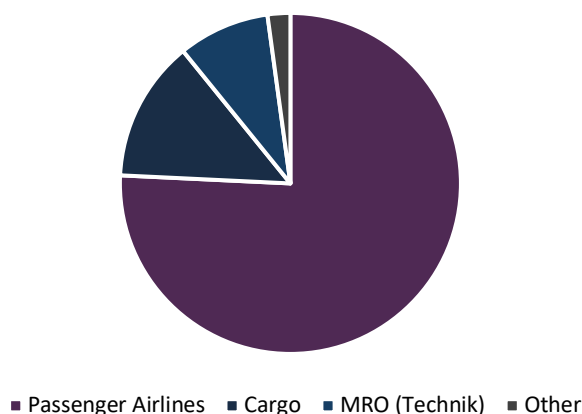
Company Overview

Founded in 1954 as West Germany's flagship carrier, through a series of acquisitions in the 1990s and 2000s Lufthansa became the second largest carrier (by number of passengers) in the European market. Through ownership of multiple airline brands, the group offers connectivity on regional, short-haul, and long-haul routes. Known for the quality of service and robust premium offering for individual and corporate clients, the airline positions itself as a full-service carrier. It employs over 100,000 people and operates 735 aircraft flying to over 300 destinations in more than 100 countries.

Business Breakdown

The group is structured into 3 business segments, with the passenger airlines being the dominant one, accounting for 76% of revenue.

Figure 1.1: Lufthansa Group Revenue breakdown by segment

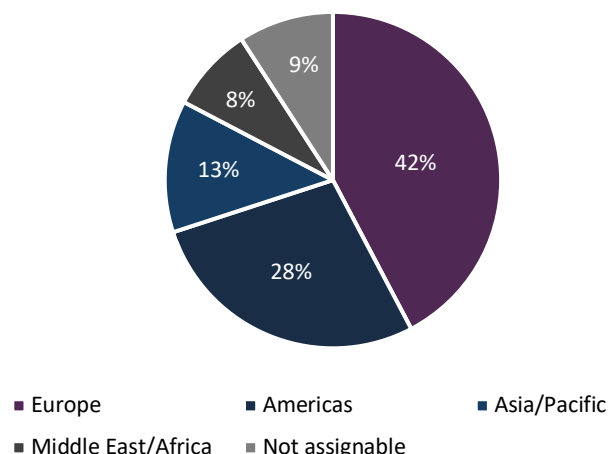


Passenger Airlines: The segment comprises full-service airlines Lufthansa Airlines, SWISS, Austrian Airlines, and Brussels Airlines. Following a multi-hub strategy, the group offers a broad range of connections from global and national hubs in Frankfurt, Munich, Zurich, Vienna, and Brussels. Regional short-haul routes are operated by Lufthansa CityLine, Air Dolomiti, and Discover Airlines. Additionally, through Eurowings, focused on point-to-point traffic, the group offers a low-cost option for short-haul routes.

Logistics: The segment consists of Lufthansa Cargo AG which offers traditional cargo services, and a range of subsidiaries offering services in urgent shipments, airfreight container management, and e-commerce solutions. The segment historically contributed to around 9% of revenue.

MRO: Lufthansa Technik is a global provider of maintenance, repair, and overhaul services (MRO). In FY24, it serviced 4,800 aircrafts for passenger carriers, private clients, and armed forces, generating €7.4bn in revenue, €5.0bn of which was external, as Lufthansa remains to be Technik's largest client. The MRO segment has historically accounted for roughly 13% of revenue, and displayed significantly lower seasonality of earnings, due to long-term servicing contracts.

Figure 1.2: Lufthansa generates over 60% of its revenues in Europe
Lufthansa's Air Transport revenue by geography (FY24)



Recent Developments

LHA was severely impacted by the lockdowns during COVID-19, with the revenue falling 64% YoY in FY20 and the load factor collapsing from 82.6% in FY19 to barely above 60% in FY20 and FY21. In 2024, the company's total revenue finally recovered as it surpassed that of FY2019 for the first time: FY24 revenue is €37,581 billion compared to €36,424 billion in FY2019.

In June 2023, the company announced the sale of AirPlus – its payment service business – for €450m as an effort to concentrate the group's activity on air transport.

In November 2023, Lufthansa divested from its catering business LSG Group. The sale saw around 20,000 leave, which we view as Lufthansa's efforts to further shift the group's focus closer to the core air transport business.

In July 2024, the group announced a turnaround program targeting a €1.5bn EBIT effect by 2026: 35% coming from revenue drivers and 65% from cost control. Notable plans include updates to premium seating offerings in the hope of increasing profitability, reduction in aircraft type number in the long-haul fleet, and realization of synergies within the group to close the productivity gap compared to 2019.

In June 2024, the group announced the purchase of a 41% stake in the long-troubled Italian carrier ITA Airways, funded with a capital increase of €325m. The company will have joint operational control together with the Ministry of Economy and Finance. Notably, the acquisition structure grants LHA the right to a complete takeover in the medium term.

FY24 has been marked by a slow recovery of ASK (+10% YTD) towards pre-pandemic levels but also the continuation of cost-management problems caused predominantly by Boeing's repeated aircraft delivery delays and poor punctuality across the group's airlines. On a positive note, the company recorded

a 83.1% load factor in FY24 and upon publication of its annual results, it had its BBB-/Stable rating reaffirmed by Fitch.

Soon after publication of Q3 results, information surfaced that Lufthansa's newest "Allegris" Cabin seats, which have already been installed in some of the Boeing 787-Dreamliners the group expects to receive in 2025, haven't yet received the necessary FAA certification. It's not confirmed whether the seats have not yet undergone the designated crash tests or have failed them, but if the latter turns out to be true this may be yet another blow to the group's cost-cutting plans as the planes will have to be refurbished.

Industry Outlook

Airline Industry

The global airline industry has emerged from a challenging period of significant change and innovation, reshaping how airlines connect people, economies, and cultures in a rapidly evolving landscape. Following the COVID-19 pandemic, which drastically affected operations on an unprecedented scale, the industry has shown resilience, fueled by a robust recovery in passenger demand. According to the International Air Transport Association (IATA), global passenger numbers are expected to reach 4.35 billion in 2024, surpassing pre-pandemic levels. This recovery has been driven by "revenge travel," where pent-up consumer demand for air travel, particularly for leisure and short-haul routes, has translated into strong bookings. At the same time, business travel is steadily rebounding as global economic activity stabilizes.

Key metrics highlight the scale of this recovery: in 2023, the global market size reached \$762.8 billion, marking a 4.6% increase from the previous year. Passenger revenues are expected to hit \$720 billion in 2024, while cargo revenues, though declining from pandemic peaks, remain a critical segment, contributing \$150 billion. This will see the Asia-Pacific region as expected to lead growth, projected to account for 46% of global air travel by 2042, while Europe and North America collectively contributed 38%. This regional shift underlines the growing significance of emerging markets and the need for strategic positioning.

Consumer preferences are evolving, with low-cost carriers (LCCs) capturing a significant share of the market. Their no-frills, cost-efficient model continues to resonate with price-sensitive travelers, particularly on short-haul routes in Europe and North America. Conversely, full-service carriers (FSCs) like Lufthansa are capitalizing on premium offerings and long-haul capabilities to differentiate themselves and sustain profitability. Industry consolidation is further reshaping the competitive landscape, as major players seek economies of scale and operational efficiencies.

Despite these promising developments, the industry faces several challenges. Geopolitical tensions, including conflicts that disrupt airspace and drive-up operational costs, remain a persistent challenge for the industry. Elevated jet fuel prices,

which made up 32% of airline expenditures in 2023, further compound these difficulties. At the same time, supply chain disruptions have delayed new aircraft deliveries, creating hurdles for carriers aiming to expand their capacity and modernize their fleets. Meanwhile, sustainability is a critical priority, with airlines committing to ambitious net-zero emissions targets by 2050. Meeting these goals will require scaling up Sustainable Aviation Fuel (SAF) production and advancing hydrogen and electric propulsion technologies.

Porter's 5 Forces

Threat of Entrants: Moderate. Entering the airline industry poses significant challenges due to high capital requirements, stringent regulatory standards, and the dominance of established players with strong networks and brand recognition. While the liberalization of air travel policies and the success of low-cost carriers (LCCs) have lowered some barriers, new entrants still face financial and operational hurdles, particularly in meeting EU environmental and safety regulations.

Although new competitors target niche markets and underserved routes, their impact on major players like Lufthansa is limited. **Scale, advanced systems, and alliances like Star Alliance enable Lufthansa to maintain its competitive edge in premium services and high-demand hubs.**

Bargaining Power of Suppliers: High. The airline industry relies heavily on a concentrated supplier base, with Airbus and Boeing dominating over 90% of the global commercial aircraft market. This consolidation gives aircraft manufacturers significant pricing power, leaving airlines with limited alternatives. Lufthansa is particularly exposed to supply chain disruptions and production delays, which have already affected its fleet modernization plans. For instance, delays in Airbus A350 deliveries have extended timelines by up to 12 months, creating operational and financial challenges.

Jet fuel, another critical input, accounted for 32% of Lufthansa's expenditures in 2023. Price volatility further amplifies supplier power in this area, although Lufthansa mitigates some risks through comprehensive hedging strategies covering up to 80% of its fuel consumption. Despite these efforts, dependency on global fuel suppliers underscores the industry's vulnerability to market shifts.

To reduce exposure, Lufthansa has invested in sustainable aviation fuel (SAF) and strengthened partnerships with key suppliers. While these initiatives align with long-term environmental goals, the airline remains significantly influenced by the pricing power and production capabilities of its concentrated supplier network.

Bargaining Power of Buyers: High. Passengers, particularly in the short-haul market, have become increasingly price-sensitive, with low-cost carriers (LCCs) capturing over 40% of the European market. Online fare comparison tools have further empowered travellers to seek the best deals,

intensifying buyer power. Lufthansa counters this by emphasizing premium services and its loyalty program, Miles & More, which has over 36 million members and helps reduce price sensitivity, especially in long-haul and business segments.

Corporate clients, accounting for about 30% of Lufthansa's revenue, remain less price-sensitive but demand high levels of service and reliability, offering a stable revenue stream. To adapt to evolving consumer expectations, Lufthansa has invested in digital booking tools, flexible fare options, and expanded premium economy offerings, ensuring it stays competitive while addressing passenger preferences. **However, the growing influence of LCCs and the ease of fare comparisons highlight the need for continued innovation and service differentiation to maintain its competitive edge and secure customer retention.**

Rivalry among Existing Competitors: **High.** The European airline industry is intensely competitive, particularly between full-service carriers (FSCs) and low-cost carriers (LCCs). Lufthansa, Europe's second-largest airline with 122.54 million passengers in 2023, faces significant price pressure on short-haul routes dominated by LCCs like Ryanair, where fares are substantially lower. At the same time, premium and long-haul markets remain fiercely contested, with FSCs such as Air France-KLM and British Airways vying for market share, particularly on transatlantic routes.

The competition has intensified with the recovery of passenger volumes, reaching 90% of pre-pandemic levels by 2023, and through consolidation trends like Lufthansa's acquisition of ITA Airways. These dynamics have driven airlines to seek operational efficiencies and market dominance. Lufthansa differentiates itself by emphasizing premium services, expanding its long-haul capacity, and leveraging its Star Alliance membership to enhance customer loyalty and route efficiency. **As competition continues to evolve, Lufthansa's ability to balance cost pressures with premium positioning will be critical for sustaining its market leadership.**

Threat of Substitutes: **Moderate to High.** High-speed rail is an increasing competitor on short-haul routes in Europe, offering cost-effective and environmentally friendly travel. In countries like Germany and France, rail has captured up to 25% of market share on some domestic routes, and initiatives like the European Green Deal aim to shift more traffic from air to rail. Partnerships between airlines and rail operators, such as Lufthansa's Rail&Fly, further encourage intermodal travel and heighten substitution risks.

However, air travel remains essential for long-haul routes, where substitutes are not viable. Lufthansa's focus on regional connectivity and sustainability initiatives, including its leadership in SAF adoption, helps mitigate the impact of substitutes while maintaining its competitive edge. **These measures ensure that Lufthansa stays relevant despite growing competition from alternative modes of transport.**

Tailwinds	Headwinds
Recovery in European leisure travel to 90% of pre-pandemic levels.	Rising fuel costs (32% of expenses)
Strong brand in premium travel	Competition from low-cost carriers
ITA Airways acquisition	Stricter carbon taxes and regulations.
Star Alliance boosts loyalty	Rail substitution on short-haul routes
Modern, fuel-efficient fleet	Price-sensitive short-haul passengers

SWOT Analysis

Strengths

Market Leadership in Europe. Lufthansa Group holds a significant position in European air travel with a 34% share of the German themarket, making it a preferred choice for leisure and business travelers. However, Ryanair leads in passenger numbers, driven by its low-cost model that attracts price-sensitive customers. Lufthansa's extensive network, supported by subsidiaries such as Austrian Airlines and Swiss International Air Lines, ensures broad market coverage and access to key destinations.

Diversified Revenue Streams. The Group benefits from multiple revenue sources beyond passenger flights, with Lufthansa Cargo and Lufthansa Technik providing stability against fluctuations in demand. These divisions generated around €8.3 billion in 2024, underscoring their strategic importance in balancing overall performance.

Premium Services. Lufthansa's investments in advanced aircraft like the Airbus A350 and upgraded Allegris cabins reflect its commitment to enhancing efficiency and passenger experience. These initiatives support the Group's strategy of maintaining its premium market position while driving cost reductions through fleet modernization.

Sustainability Leadership. Lufthansa is a leader in environmental initiatives, including the adoption of Sustainable Aviation Fuels (SAF) and carbon offset programs. Recognized by organizations like CDP, these efforts strengthen its reputation as an environmentally conscious airline while addressing the rising demand for sustainable travel options.

Weaknesses

Operational Disruptions. Labor strikes in early 2024 led to operational disruptions, resulting in an estimated €350 million loss. These disruptions highlight vulnerabilities in workforce management and their ripple effects on service reliability during peak travel periods.

High fuel costs. Fuel expenses, accounting for over 30% of Lufthansa's operating costs, expose the airline to great price volatility. Inflation further increased maintenance and staffing costs, intensifying financial pressures. While hedging strategies provide some protection, rising costs remain a critical challenge.

Limited Low-Cost Market Presence. Lufthansa's Eurowings subsidiary faces challenges competing with agile low-cost carriers such as Ryanair and Wizz Air. This hampers Lufthansa's ability to capture the expanding budget travel segment in Europe, limiting its presence in this high-growth market.

Opportunities

Advances in Technology. Advances in AI-driven route optimization, predictive maintenance, and dynamic pricing are boosting Lufthansa's efficiency and customer satisfaction. These technologies align with the airline's focus on cost reduction, reliability, and staying competitive in a rapidly evolving, digital-first travel market.

ITA Airways Acquisition. The acquisition of ITA Airways strengthens Lufthansa's position in Italy, Europe's fourth-largest aviation market. This move boosts the Group's presence on Mediterranean routes and unlocks synergies through shared fleets and codeshare agreements, enhancing overall connectivity and operational efficiency.

Green Aviation. Lufthansa's adoption of Sustainable Aviation Fuels (SAF) and alignment with regulatory support for green initiatives reinforce its leadership in sustainable aviation. Investments in fuel-efficient aircraft address environmental challenges while attracting eco-conscious travelers, ensuring the Group remains at the forefront of green aviation.

Threats

Economic uncertainty. Rising inflation, higher interest rates, and economic slowdowns pose risks to discretionary travel spending, impacting both leisure and corporate segments. Weaker demand for premium services in such conditions could further pressure Lufthansa's financial performance.

Regulatory Pressure. EU environmental initiatives like Fit for 55 and CORSIA demand substantial investments in SAF, emissions reductions, and fleet modernization. While these measures are crucial for long-term competitiveness, they impose significant short-term financial challenges on Lufthansa.

Low-Cost Carrier Competition. Budget airlines like Ryanair and Wizz Air are rapidly expanding with highly cost-efficient models that enable lower fares. Their aggressive growth into key

markets heightens competition and pressures Lufthansa to retain price-sensitive customers.

Exhibit 4.1: Lufthansa SWOT Analysis

S STRENGTHS	Market Leadership in Europe Diversified Revenue Streams Premium Services Sustainability Leadership
W WEAKNESSES	Operational Disruptions High fuel costs Limited Low-Cost Market Presence
O OPPORTUNITIES	Advances in technology ITA Airways Acquisition Green Aviation
T THREATS	Economic uncertainty Regulatory Pressure Low-Cost Carrier Competition

Source: Minerva Investment Management Society

Financial Analysis

Over the past few years, Lufthansa has faced a challenging financial landscape, with the pandemic heavily disrupting the global aviation industry. Despite these difficulties, the group has recovered, mainly driven by the rising passenger demand, strategic cost control, and operation improvements. As of 2023 fiscal year, Lufthansa's financial performance reflected sign of stabilization, although liquidity metrics highlight areas that still require attention to reinforce resilience.

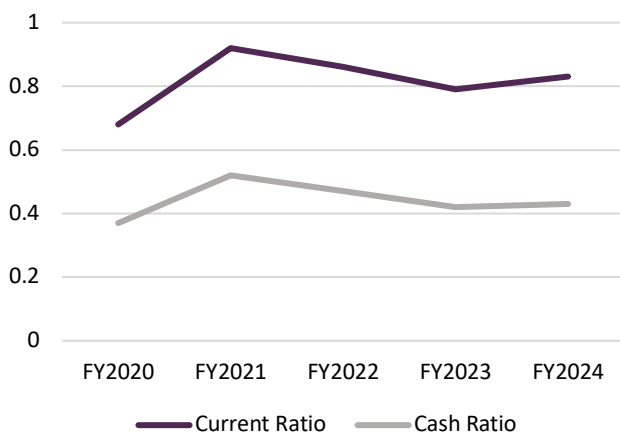
Liquidity

The liquidity analysis of Lufthansa aims to evaluate the company's ability to meet short-term obligations and has been performed with measures such as current ratio and cash ratio. The group's liquidity position has shown a declining trend over the past three years, reflecting the residual effects of the pandemic. The current ratio has shown a gradual decline, reflecting growing pressure on short-term financial flexibility. Similarly, cash ratio has decreased, showing that cash reserves have decreased while short-term obligations have grown.

The drop in liquidity highlights challenges related to managing working capital and maintaining cash reserves. While recovering revenues have helped stabilize operations, less cash on hand and higher short-term liabilities point to the need for careful cash flow planning. Lufthansa has made steady progress in its recovery since the pandemic. However, improving liquidity is essential to maintaining financial stability and ensuring the company can effectively address potential risks.

Figure 5.1: Lufthansa liquidity ratios

Lufthansa current and cash ratios (FY2020 - FY2024)



Source: Minerva Investment Management Society

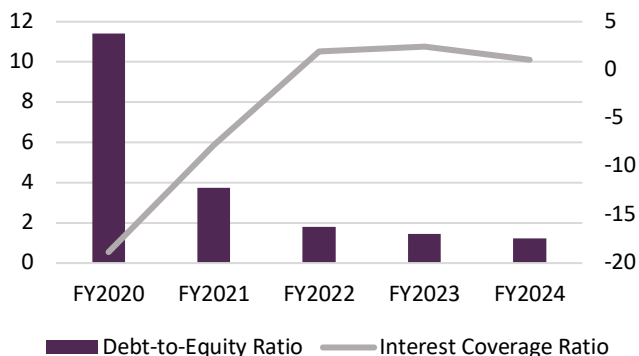
Capital Structure

Lufthansa maintains a balanced capital structure, reflecting the financial demands of a capital-intensive industry. Over the past five years, the company has made steady progress in lowering its debt-to-equity ratio, reducing it from high levels during the pandemic to a more sustainable position by FY2024.

The interest coverage ratio has similarly improved. After a sharp drop in FY2020 due to the COVID pandemic, the ratio increased drastically in FY2022 and has remained stable since, reflecting the company's recovering operational performance and increased capacity to manage its financial obligations effectively. These trends indicate Lufthansa's progress in improving solvency and strengthening financial resilience in the face of challenging market conditions.

Figure 5.2: Lufthansa solvency progression in the past years

Lufthansa D/E ratio (left) and Interest Coverage Ratio (right)

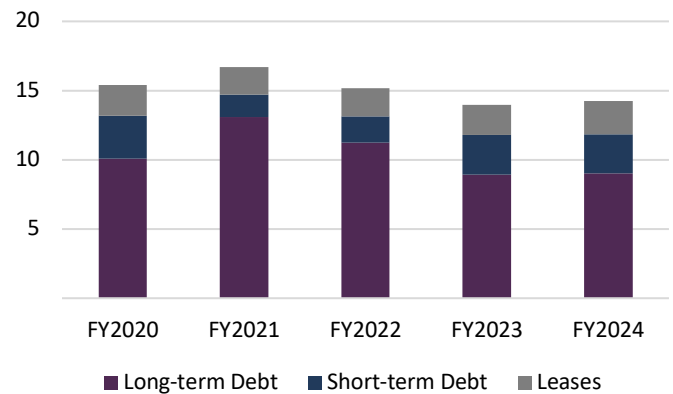


Source: Minerva Investment Management Society

Lufthansa's borrowings include a mix of short-term and long-term debt, along with lease liabilities. Long-term debt has decreased over the years, with short-term borrowings experiencing reductions as the company prioritized extending debt maturities. Lease liabilities, meanwhile, have remained steady, reflecting their integral role in Lufthansa's capital structure.

Figure 5.3: Lufthansa's composition of Total Debt

Lufthansa's total debt (€bn)



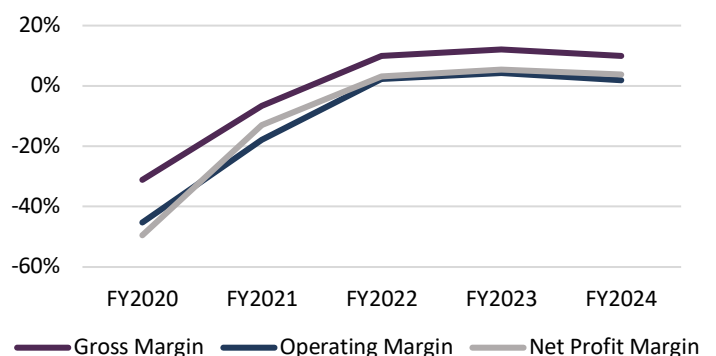
Source: Minerva Investment Management Society

Profitability

Lufthansa's profitability metrics in FY2024 highlight a significant improvement compared to the pandemic years, driven by recovering passenger demand and effective cost management. The Group's gross margin improved to 9.94% in FY2024, up from -31.12% in FY2020, reflecting better management of direct operating costs. Similarly, the operating margin recovered to 1.95% in FY2024, compared to -45.25% in FY2020, reflecting the effectiveness of cost-control measures and increased revenue generation. The net profit margin also improved, reaching 3.69% in FY2024 after a challenging period marked by significant losses in earlier years.

Figure 5.4: Lufthansa has recovered Gross, Operating, and Profit Margins after the pandemic

Lufthansa gross, operating, and net margins (FY2020 - FY2024)



Source: Minerva Investment Management Society

In addition to margin improvements, Lufthansa's return on assets (ROA) increased from -16.11% in FY2020 to 2.94% in FY2024, indicating more efficient use of its asset base. Return on equity (ROE) showed a notable rise from -117.02% in FY2020 to 13.08% in FY2024, driven by the recovery in profitability and effective use of shareholder equity.

Operating expenses rose by 72% during the period due to the rise in fuel consumption and staff costs. These increases reflect

the impact of inflation and expanded operations as the Group ramped up capacity to meet recovering demand. However, efficiency advances helped offset higher expenses, enabling the Group to strengthen its overall financial performance.

Valuation: Discounted Cash Flow

Cost of Equity: Assumptions

The Capital Asset Pricing Model (CAPM) was utilized to estimate the cost of equity. The risk-free rate was assumed to be the current 10-year German government bond yield (2.47%). German yields were chosen due to Lufthansa's headquarters location in Cologne, Germany and their alignment with the company's primary operating currency and macroeconomic conditions in the Eurozone.

For the equity risk premium (ERP), the market return of the 2024 global airline industry according to the International Air Transport Association (IATA) was used (6.80%). This resulted in a premium of 4.33%.

Beta

A bottom-up approach was employed to determine Lufthansa's beta. Given that the revenue originates from the airline industry, the unlevered beta calculated was an average of the unlevered betas of the competitors in the European airline industry.

By applying capital structure re-leverage, considering Lufthansa's debt-to-equity ratio, marginal tax rate (30.0%), and significant short-term liabilities, the resulted beta is 1.19, which is in line with other analyst's estimates.

The cost of equity was then calculated as follows:

$$\text{Cost of Equity} = R_f + \beta \times (R_m - R_f)$$

Arriving at a value of the Cost of Equity of **7.60%**.

Cost of Debt

We adopted the Credit Rating Approach, taking the average between the 10-year German bond yield of 2.47% and the corresponding spread from the ICE BofA BBB Index of 1.31%. We then arrived at a rate of **3.78%** for the Cost of Debt.

Weighted Average Cost of Capital (WACC)

Finally, the WACC was calculated by applying weights to the cost of equity and cost of debt:

$$WACC = \frac{E}{D + E} \times k_e + \frac{D}{D + E} \times k_d \times (1 - t)$$

Based on the chosen assumptions outlined above, the WACC for Lufthansa is estimated to be **5.96%**. Again, this estimate is strongly dependent on beta adjustments. Sensitivity analysis should be relied upon to make the results more accurate and reliable (Figure 4.3).

Figure 4.1: The discount rate (WACC) calculation

WACC	
Cost of Equity - CAPM	
Risk-Free Rate (10Y)	2.47%
Beta	1.19
ERP	4.33%
WACC Calculations	
Cost of Equity	7.60%
Net Debt	5,744,000
Total Equity	11,594,000
E/(D+E)	66.87%
Cost of Debt	3.78%
D/(D+E)	33.13%
Tax Rate	30.0%
WACC	5.96%

Source: Minerva Investment Management Society

Sales Forecast

Predicting net sales is an essential component of any Discounted Cash Flow analysis. Our methodology integrates the expectations of management, the estimates from financial analysts on Wall Street, and the anticipated industry. The historical data is largely unreliable due to the significant disruptions caused by the Covid pandemic, which has rendered the data from the years 2021 to 2022 largely irrelevant.

Rather than relying on other methods, we've utilized the management's projections regarding Lufthansa's fleet expansion. This includes taking into account new aircraft orders and those being decommissioned. Based on this, we've forecast the anticipated rise in the number of passengers per aircraft, the growth in the total number of flights operated by Lufthansa, and the shift in average revenue generated per passenger. Leveraging all this data, we anticipate a significant revenue growth from €40 billion in 2025 to €65 billion by 2034. This trajectory suggests a CAGR of 4.87% over the upcoming decade.

Profitability

The projected profitability of Lufthansa was determined by individually forecasting costs associated with staff and operational efficiency, airport and handling charges, route fees, ownership and maintenance expenses, sales and marketing efforts, and fuel costs. Although we anticipate that certain costs will remain relatively stable, we believe that most of these expenditures will gradually increase over the next decade. Furthermore, we predict that enhanced fuel consumption efficiency will help the company achieve its net-zero emissions target. In the end, the EBIT margin, which stood at 2.2% in 2024, is expected to grow to 7.5% by 2034.

Financial Assumptions

Our 10-year financial objectives for various metrics are in close harmony with those set by management and industry analysts. In forecasting Capital Expenditures, we utilized an approach analogous to our revenue forecasting methodology. Considering the delivery schedules of new aircraft and the standard payment timelines, we anticipate a consistent rise in Lufthansa's Capital Expenditures over the entire forecast horizon.

The projection of changes in Net Working Capital was achieved by individually forecasting balance sheet components. The resultant figures suggest a modest decline in current assets, as Lufthansa is poised to allocate more resources towards operational expansion. However, this trend is expected to reverse after five years, once the fleet expansion phase is completed.

Aircraft constitute the primary source of Depreciation and Amortization expenses. Accordingly, we forecasted the D&A changes by considering the influx of new aircraft into the fleet, their acquisition costs, and an assumed useful life of 14 years. Additionally, we anticipate a rise in D&A stemming from other assets necessary for the operational expansion we foresee.

Free Cash Flow and Intrinsic Price

By summing up the FCFF for all the projected years calculated with the formula:

$$FCFF = EBIT \times (1 - t) + D\&A - CAPEX - \Delta NWC$$

We can bring the future cash flows to their present value by applying the WACC determined earlier. Similarly, we discount the terminal value and sum it up with the present value of the cash flows to reach an Enterprise Value of €19.43 billion. Following this, we adjust this value through the equity bridge calculation and then divide by the number of outstanding shares. This process yields an implied share price of €5.82 per share, which suggests a potential decrease of 10% compared to the most recent closing price.

Additionally, we conducted a sensitivity analysis on our DCF valuation. This analysis helps us gain a clearer insight into how the implied share price would be affected by fluctuations in the calculated discount rate or the terminal growth rate.

Figure 4.3: Price Sensitivity Analysis of the price

Variations in WACC (horizontal) or TGR (vertical)

	5.46%	5.71%	5.96%	6.21%	6.46%
0.8%	7.65	6.47	5.43	4.50	3.66
0.9%	7.90	6.70	5.62	4.67	3.81
1.0%	8.18	6.93	5.82	4.84	3.96
1.1%	8.46	7.17	6.03	5.02	4.11
1.2%	8.76	7.43	6.25	5.21	4.28

Source: Minerva Investment Management Society

Valuation: Multiples

To complement our assessment, we approached Lufthansa's valuation through the market multiples method, incorporating a set of comparable international companies.

These firms were selected primarily based on market capitalization and business model similarity, also taking into consideration overseas companies such as Qantas and China Airlines as well as European low-cost carriers like EasyJet and Ryanair. This ensures a comparative analysis that is as relevant and precise as possible.

In assessing Lufthansa's value, we examined industry benchmarks, specifically focusing on EV/Revenue, EV/EBITDA, EV/EBITDAR, EV/EBIT and P/E multiples. It needs to be noted that asset side multiples are generally lower than the peer group for Lufthansa, as the company's very positive cash situations pushes down net debt and therefore EV.

Figure 4.4: Comparable companies analysis

Company	Region	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Air France-KLM	EU	0.27x	1.93x	5.37x	8.21x
ICAG	EU	0.43x	2.09x	3.31x	5.52x
Turkish Airlines	TR	0.27x	1.47x	3.16x	3.14x
Ryanair Holdings	EU	1.54x	7.42x	12.43x	12.92x
easyJet	EU	0.26x	1.77x	4.04x	8.38x
Qantas Airways	APAC	0.67x	3.63x	6.69x	9.17x
LATAM Airlines Group	LATAM	0.84x	3.58x	6.87x	8.99x
China Airlines	APAC	0.69x	2.94x	7.70x	8.35x
Average		0.6x	3.1x	6.4x	7.8x
Median		0.4x	2.9x	6.7x	8.4x

Source: Minerva Investment Management Society

When considering the EV/Revenue multiple, Lufthansa's figure is 0.34x, between one-half and two-thirds of the group average and mean of 0.6x. The average EV/EBITDA multiple among the peer group is 3.1x, while Lufthansa's is slightly higher at 3.18x, suggesting a premium valuation compared to its peers. Similarly, the average EV/EBIT multiple among the peer group is 6.4x, while the median is 6.7x; Lufthansa's EV/EBIT of 7.70x reflects a relatively modest valuation. The average P/E multiple in the group is 7.8x, while the median is 8.4x. Lufthansa's P/E multiple is at 5.64x: lower than the median, but proportionally more in line with its peers if compared with asset-side multiples.

Final Valuation Methodology

In the valuation of Lufthansa, we secured our assessment of the company's last reported numbers when applying the industry's average EV/EBITDA multiple. This choice ensures that our valuation leverages a financial metric that incorporates both Lufthansa's revenue performance and its operational efficiency, yielding a valuation that reflects the company's profitability more holistically. By multiplying the EV/EBITDA multiple by Lufthansa's reported EBITDA, we obtained the

Enterprise Value of the company. We then subtracted the net debt to arrive at the equity value. Finally, by dividing this equity value by the total number of diluted shares outstanding, we determined an intrinsic share price. This calculation provides a clear view of the company's value from an earnings perspective, which is particularly relevant in the industry with low margins.

We then combined this share price with our DCF valuation, giving equal weight to both the intrinsic value calculated from the company's cash flows and the market-based value indicated by the multiples analysis. This synthesized valuation method captures the nuances of both Lufthansa's present financial standing and its expected future performance. The equal weighting of DCF and multiples valuation in our final computation allows us to capture a comprehensive view of Lufthansa's worth, both from an intrinsic standpoint and relative to its peers. This methodologically robust approach led us to a target price that, when contrasted with the closing price of Lufthansa on April 30th, 2025, reveals the potential for an overvaluation in the market.

DCF Valuation	5.82€	50%
Multiples Valuation	5.54€	50%
Final Valuation	5.68€	

Source: Minerva Investment Management Society

Investment Risks

Downside Risk Factors

Regional Market Dependency: Lufthansa's reliance on Europe as its primary market makes it particularly vulnerable to regional economic slowdowns or geopolitical instability. With key hubs in Frankfurt, Munich, and Zurich, the airline could face significant disruptions if demand weakens in its core markets, especially for both premium and leisure travel.

Regulatory risks: Stricter EU environmental regulations, including Fit for 55 and CORSIA, require significant investments in sustainable fuels, fleet upgrades, and emissions reductions. These measures, while essential for long-term success, impose considerable short-term financial burdens. New passenger compensation rules and potential increases in carbon taxes could further drive up operating costs.

Fuel Price Volatility: Fuel costs account for over 30% of Lufthansa's operating expenses, making it highly vulnerable to fluctuations in jet fuel prices. While hedging strategies provide some relief, the rising cost of Sustainable Aviation Fuels (SAF) adds additional financial pressure.

Upside Risk Factors

Market consolidation opportunities: Lufthansa's strong financial position allows it to capitalize on market consolidation opportunities. The acquisition of ITA Airways strengthens its presence in Italy and enhances synergies, particularly on Mediterranean routes, bolstering its competitive edge.

Growing Long-Haul Demand: Post-pandemic recovery in transatlantic and Asian travel offers Lufthansa a chance to expand high-margin revenue streams. With its strategically located hubs and premium services, the airline is well-positioned to capture this growth.

Sustainability Leadership: Lufthansa's investments in SAF and a fleet of over 250 fuel-efficient aircraft reinforce its leadership in sustainability. These initiatives align with regulatory trends and cater to growing demand for eco-conscious travel, strengthening its brand and competitive position.

Appendix

Exhibit 1: Restated Balance Sheet

Balance sheet (€ million)	2020	2021	2022	2023	2024
Cash and Short-Term Investments	5,460	7,666	8,301	8,265	8,488
Receivables	3,217	4,100	4,547	4,311	4,796
Inventory	726	675	812	961	1,606
Other Current Assets	637	1,034	1,595	2,012	1,426
Total Current Assets	10,040	13,475	15,255	15,973	16,316
Property, Plant & Equipment	19,502	18,278	18,322	18,129	19,025
Long-Term Investments	709	717	665	718	884
Intangibles	1,497	1,512	1,322	1,260	1,204
Loan Receivables Long-Term	273	319	179	323	352
Deferred Tax Assets	4,833	4,661	2,928	3,059	2,682
Deferred Charges	91	74	88	N/A	N/A
Other Long-Term Assets	2,539	3,502	4,576	5,859	6,589
Total Non-Current Assets	29,444	29,063	28,080	29,772	30,736
Total Assets	39,484	42,538	43,335	45,321	47,052
Accounts Payable	2,087	2,881	4,041	4,125	4,472
Short-Term Borrowings	14	19	21	4	9
Current Portion of Long-Term Debt	2,662	1,221	1,478	2,469	2,299
Current Portion of Leases	454	408	403	419	511
Current Income Taxes Payable	689	705	545	675	594
Accrued Expenses, Unearned Revenue and Other Current Liabilities	8,753	9,448	11,220	12,058	11,696
Total Current Liabilities	14,659	14,682	17,708	19,750	19,581
Long-Term Debt	10,069	13,079	11,229	8,906	9,037
Long-Term Leases	2,183	1,962	2,041	2,149	2,376
Other Non-Current Liabilities	11,186	8,325	3,883	4,807	4,464
Total Non-Current Liabilities	23,438	23,366	17,153	15,862	15,877
Common Stock	1,530	3,060	3,060	3,063	3,068
Retained Earnings	(1,857)	(1,700)	2,859	4,187	5,477
Comprehensive Inc. and Other	1,674	3,090	2,486	2,409	2,997
Total Equity	1,347	4,450	8,405	9,659	11,542
Total Equity and Liabilities	39,484	42,538	43,335	45,321	47,052

Exhibit 2: Restated Income Statement

Income Statement	2020	2021	2022	2023	2024
Revenue	13,623	16,843	30,936	35,475	37,624
Cost of Goods Sold	14,481	14,662	24,903	28,046	30,545
Selling, General & Administrative	225	136	229	281	324
Depreciation and Amortization	2,580	2,268	2,202	2,237	2,364
Other Operating Expenses	1,636	1,423	2,365	2,786	3,127
Operating Profit	(5,299)	(1,646)	1,237	2,125	1,264
Interest Expenses	(320)	(357)	(394)	(516)	(496)
Interest Income	83	2	68	245	441
Pretax Income	(8,631)	(2,606)	1,249	2,317	1,576
Taxes	(1,865)	(413)	239	380	176
Earnings of Discontinued Op.	0	0	(206)	(248)	(7)
Minority Interest	41	2	(13)	(16)	(13)
Net Income	(6,725)	(2,191)	791	1,673	1,380

Exhibit 3: Lufthansa Fleet Forecast

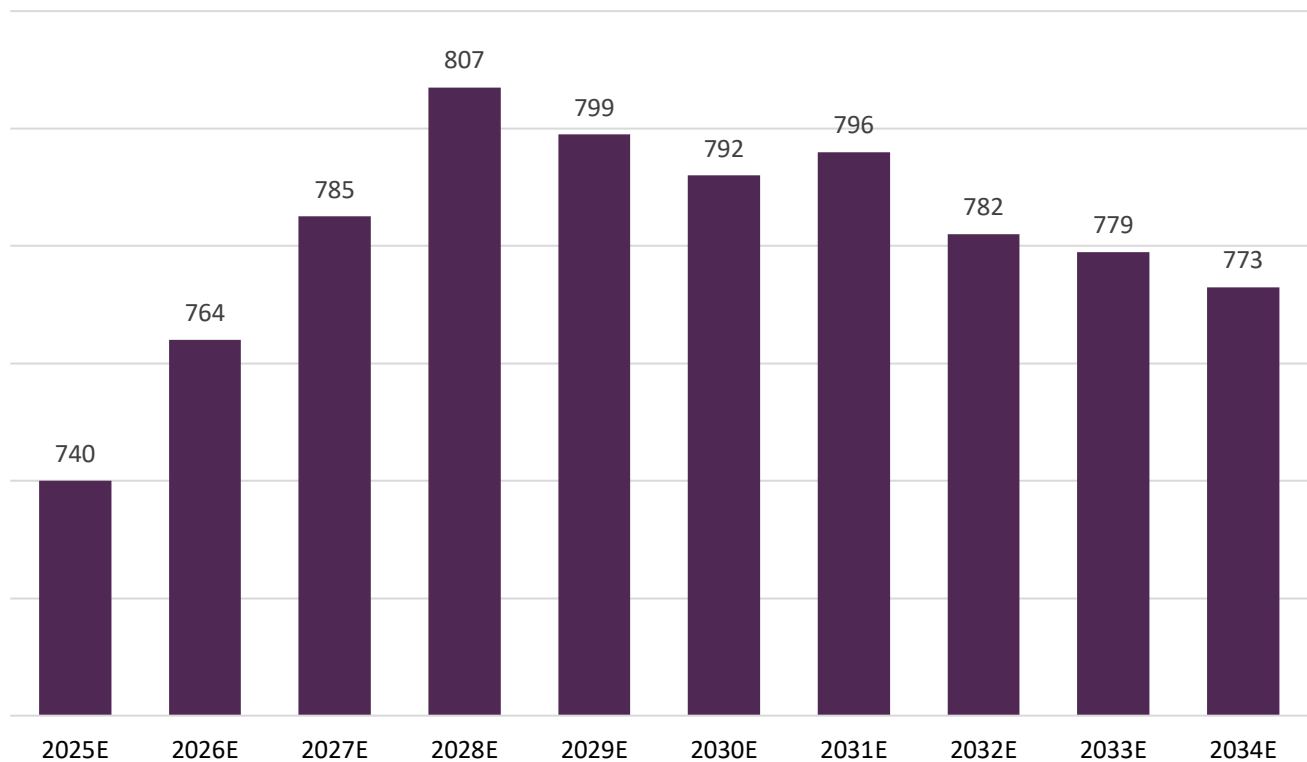


Exhibit 4: DCF Model - Summary

EUR mn	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	2034E
Sales	40,474	43,036	45,576	48,281	50,713	53,376	56,170	59,064	61,906	65,142
%growth	7.70%	6.33%	5.90%	5.93%	5.04%	5.25%	5.23%	5.15%	4.81%	5.23%
COGS&Opex	37,438	40,338	42,945	44,502	47,056	49,714	52,434	54,966	57,471	60,258
EBIT	3,036	2,698	2,631	3,779	3,656	3,662	3,736	4,098	4,434	4,884
EBIT Margin	7.5%	6.3%	5.8%	7.8%	7.2%	6.9%	6.7%	6.9%	7.2%	7.5%
Taxes	911	809	789	1134	1097	1099	1121	1229	1330	1465
% taxes	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%	30.0%
EBIT*(1-Taxes)	2,125	1,889	1,842	2,645	2,559	2,564	2,615	2,868	3,104	3,419
Change in WC	872	(388)	(346)	(182)	(382)	(383)	(370)	(286)	(252)	(270)
CapEx	3,849	4,368	4,840	5,326	5,386	5,282	5,587	5,682	5,905	6,124
D&A	2,482	2,915	3,301	3,696	3,674	3,747	3,971	3,983	4,125	4,250
FCFF	(113)	823	649	1,197	1,229	1,412	1,369	1,455	1,576	1,815

Exhibit 5: Multiple Analysis

Company	EV/Revenue	EV/EBITDA	EV/EBIT	P/E
Lufthansa	0,34x	3,18x	7,70x	5,64x
Air France-KLM	0.27x	1.93x	5.37x	8.21x
ICAG	0.43x	2.09x	3.31x	5.52x
Turk Hava Yollari	0.27x	1.47x	3.16x	3.14x
Ryanair Holdings	1.54x	7.42x	12.43x	12.92x
easyJet	0.26x	1.77x	4.04x	8.38x
Qantas Airways	0.67x	3.63x	6.69x	9.17x
LATAM Airlines Group	0.84x	3.58x	6.87x	8.99x
China Airlines	0.69x	2.94x	7.70x	8.35x
High	1.5x	7.4x	12.4x	12.9x
75th Percentile	0.8x	3.6x	7.7x	9.1x
Average	0.6x	3.1x	6.4x	7.8x
Median	0.4x	2.9x	6.7x	8.4x
25th Percentile	0.3x	1.8x	3.7x	5.6x
Low	0.3x	1.5x	3.2x	3.1x

Exhibit 6: Multiple Valuation

Lufthansa (Average)	EV/Revenue	EV/EBITDA	EV/EBIT	P/E
Implied Enterprise Value	22,161	12,387	10,468	16,527
Net Debt	5,744	5,744	5,744	5,744
Implied Market Value	16,417	6,643	4,724	10,783
Shares Outstanding (000)	1,200	1,200	1,200	1,200
Implied Value Per Share	13.68	5.54	3.94	8.99

Lufthansa (Median)	EV/Revenue	EV/EBITDA	EV/EBIT	P/E
Implied Enterprise Value	16,280	11,714	11,000	17,271
Net Debt	5,744	5,744	5,744	5,744
Implied Market Value	10,536	5,970	5,256	11,527
Shares Outstanding (000)	1,200	1,200	1,200	1,200
Implied Value Per Share	8.78	4.97	4.38	9.61

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