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IT ALL STARTS HERE

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ESCP Working Paper

No. 72 – June 2024

Lufthansa

A Century of International Growth

Stefan SCHMID Zhengtian XIA





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© ESCP Europe Wirtschaftshochschule Berlin e.V. Heubnerweg 8-10, 14059 Berlin, Germany T: +49 (0) 30 / 3 20 07-0 F: +49 (0) 30 / 3 20 07-111 library-berlin@escp.de www.escp.eu **ABSTRACT**: Over the last century, the passenger airline industry has undergone a series of transformations, with Lufthansa being a key player not only in Europe, but also worldwide. This case study traces Lufthansa's development, from its origins up until its current status, and outlines its expansion by adding destinations, its role in establishing the Star Alliance and engaging in joint ventures, as well as its acquisitions and minority stakes in airlines such as Air Dolomiti, Swiss International Air Lines, Austrian Airlines, and Brussels Airlines. The case study not only explains Lufthansa's internationalization strategy, but it also discusses its efforts to optimize its portfolio. Finally, the case study ends with the sustainability challenges Lufthansa faces, opening up questions of how the company will address environmental concerns.

KEYWORDS: Acquisitions, Airline Industry, Case Study, Export, Internationalization, Joint Ventures, Lufthansa, Market Entry, Minority Stake, Passenger Airlines, Portfolio Optimization, Star Alliance, Strategic Alliances, Sustainability

J.E.L. CLASSIFICATION CODES: A20, F23, G34, L21, L22, L25, L93, M16, Q56

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NOTE: This case study was written in 2023 and 2024 and contains information collected up until May 2024.

Contents

List of Tables	
List of Figures	IV
List of Textboxes	V
1. Industry and Company Background	1
1.1 The Passenger Airline Industry	1
1.2 Lufthansa	3
1.2.1 Overview	3
1.2.2 Origin of Lufthansa: 1920s-1940s	3
1.2.3 A New Beginning: 1950s-1960s	3
1.2.4 Developments in the 1970s-1990s	5
1.2.5 Adaptation and Growth in the 21st Century	6
2. Lufthansa's Expansion with Flight Destinations	8
3. Lufthansa's Expansion Through Partnerships	11
3.1 Star Alliance	11
3.2 Joint Ventures	14
4. Lufthansa's Expansion through Acquisitions and Minority Stakes	16
4.1 Air Dolomiti	16
4.2 Swiss International Air Lines	16
4.3 Austrian Airlines	19
4.4 Brussels Airlines	22
4.5 Additional Minority Stakes and Acquisitions	24
5. Does Lufthansa have a Clear Strategy?	26
5.1 Internationalization	26
5.2 Portfolio Optimization	28
5.2.1 Rebranding of Discover Airlines	28
5.2.2 Refocusing on the Airline Business	
6. Sustainability Challenges	
Questions	
Bibliography	

List of Tables

Table 1:	The leading players in the airline industry in 2022 (according to	
	annual revenue).	2
Table 2:	Lufthansa's CEOs over time (after World War II)	9
Table 3:	Overview of the major airline alliances in 2022.	13
Table 4:	Lufthansa's most important joint ventures in the passenger airline	
	business	15
Table 5:	Overview of the Lufthansa Group fleet as of December 2022	25

List of Figures

Figure 1:	Revenue breakdown for the Lufthansa Group in 2022	4
Figure 2:	Enterprise value (billion euros) of major European airline groups since 2005	7
Figure 3:	Operating results (million euros) for SWISS: 2002 to 2022.	.19
Figure 4:	Operating results (million euros) for Austrian Airlines: 2004 to 2022	.21
Figure 5:	Operating results (million euros) for Brussels Airlines: 2008 to 2022	24
Figure 6:	Passenger airline brands in the Lufthansa Group in 2023	29
Figure 7:	Carbon dioxide emissions worldwide in 2022, by country (%)	30
Figure 8:	Carbon dioxide emissions worldwide in 2022, by sector	.31

List of Textboxes

Textbox 1:	International flights and export	.8
Textbox 2:	Joint ventures in the airline industry	14
Textbox 3:	IATA net-zero carbon emissions by 2050	32

Lufthansa

A Century of International Growth

1. Industry and Company Background

1.1 The Passenger Airline Industry

The history of passenger airlines dates back to the early 20th century. Among the pioneers in the airline business, we find Delta Air Lines, KLM, and Lufthansa.¹ In the 1920s and 1930s, the industry experienced a "golden age of travel", characterized by luxury and glamour,² and following World War II, it went through significant growth. Demand for air travel rose significantly, jet-powered aircraft offered additional opportunities for long-haul flights, and new airlines emerged.³

For many decades, the passenger airline industry was subject to strict government regulation rather than being guided by market forces. In the regulated era, airlines were extremely limited in how they could choose their routes or set prices. They could only operate within the constraints set by civil aviation authorities, such as the Civil Aeronautics Board⁴ in the U.S. and the European Civil Aviation Conference⁵ in Europe, which controlled not only market entry, but also route allocation and pricing.⁶ While the U.S. spearheaded deregulation through the 1978 "Airline Deregulation Act", largely abolishing the economic regulation of American air transport, Europe saw a more gradual process starting in the 1980s, whereby the European Commission incrementally introduced a series of changes to loosen rules on the European air travel market in areas like market access, fares, and capacity.⁷ Among the consequences were new competitors, such as low-cost airlines, reduced fares, and an increase in available routes and their frequency.⁸

Since the deregulation phase, the passenger airline industry has been characterized by intense competition. This is due to many factors, for instance the large number of airlines and the difficulties in differentiating products and services. Nowadays, the

¹ See Cook (1996); Klußmann & Malik (2007), p. 394. Delta Air Lines was called Delta Air Services in 1928 and was renamed Delta Air Lines in 1945. Lufthansa was named Deutsche Luft Hansa in 1926 and re-named Deutsche Lufthansa in 1933. The name Lufthansa was adopted in 1954.

² See Lyth (2000), p. 874; Hadaway (2013), p. 5; Lauria-Blum (2021).

³ See Barsness (1978); Bailey & Singh (2019).

⁴ See O'Connor (1982); Fu & Oum (2014), p. 14. The Civil Aeronautics Board was established in 1938 and was responsible for regulating economic aspects of U.S. aviation, including market entry, route allocation, and pricing. It was abolished in 1984 as part of the airline deregulation process.

⁵ See Henrich-Franke (2007). The European Civil Aviation Conference was established in 1955; it is an intergovernmental organization that promotes cooperation on civil aviation matters among its European member states.

⁶ See Gönenç & Nicoletti (2000); Rajshekar & Kumar (2004).

⁷ See Fu & Oum (2014), pp. 15 and 19; National Air and Space Museum (2021).

⁸ See Fu & Oum (2014), pp. 15, 19, 22, and 29.

industry is dominated by several prominent players, including Delta Air Lines, American Airlines, United Airlines, Lufthansa, Emirates, and Air France-KLM. Table 1 presents the revenues, passenger numbers, and fleet sizes of the main airline groups as of 2022. Besides major players, the industry comprises regional airlines, such as Air Malta in Southern Europe or SkyWest Airlines in the U.S., focusing on specific geographical areas and connecting smaller cities to hubs. In addition, the industry also has low-cost carriers, for instance Ryanair or AirAsia, targeting budget-conscious travelers, offering basic services, and charging lower fares.⁹ As Table 1 reveals, Southwest Airlines, a pioneer in the low-cost carriers, has made its way onto the list of the largest airlines worldwide.¹⁰

Airline groups	Country of origin	Annual revenue	Number of passengers per year	Fleet size	Main companies/ subsidiaries owned (selection)
Delta Air Lines	U.S.	\$50.58 bn.	141.6 mm	915	Delta Air Lines, Endeavor Air
American Airlines	U.S.	\$48.97 bn.	151.0 mm	940	American Airlines, American Eagle
United Airlines	U.S.	\$44.96 bn.	104.0 mm	860	United Airlines
Lufthansa	Germany	\$34.44 bn.	102.0 mm	710	Lufthansa, Swiss, Austrian Airlines, Brussels Airlines, Eurowings
Emirates	UAE	\$29.30 bn.	43.6 mm	400	Emirates
Air France -KLM	France, Netherlands	\$27.57 bn.	83.3 mm	520	Air France, KLM, Transavia, HOP!
IAG	UK, Spain	\$24.22 bn.	94.0 mm	550	British Airways, Iberia, Vueling, Aer Lingus, Level
Southwest Airlines	U.S.	\$23.80 bn.	126.0 mm	740	Southwest Airlines
Turkish Airlines	Turkey	\$18.43 bn.	71.8 mm	390	Turkish Airlines
Qatar Airways	Qatar	\$14.28 bn.	18.5 mm	260	Qatar Airways

Table 1: The leading players in the airline industry in 2022 (according to annual revenue).

Source: Based on Kolmar (2023) and airlines' annual reports.

⁹ See O'Connell & Williams (2005); Cento (2009), p. 19.

¹⁰ See Knorr (2007), p. 77.

1.2 Lufthansa

1.2.1 Overview

Founded in 1926, Lufthansa has grown to become an industry leader, and as of 2022, it was the world's fourth-largest airline group based on revenues. Over the years, the Lufthansa Group has built up an impressive fleet of almost 700 aircraft.¹¹ Today, the group comprises a diverse portfolio of subsidiaries and brands, including Lufthansa, SWISS, Austrian Airlines, and Brussels Airlines, as well as Eurowings, positioned rather as a low-cost airline, and Discover Airlines, the new (long-haul) leisure airline.¹² Figure 1 provides an overview of the different subsidiaries and businesses of the Lufthansa Group and their contribution to its revenues. Over the past century, the company has navigated many challenges, such as economic turbulence, strong and increased competition, and technological changes.¹³ How exactly has Lufthansa Group evolved, and how has it developed over time?

1.2.2 Origin of Lufthansa: 1920s-1940s

In the early stages of aviation development in Germany, the government aimed to support the creation of national airlines, which led to the establishment of Junkers-Luftverkehr in 1919 and Deutscher Aero Lloyd in 1923.¹⁴ However, the German government soon realized that the industry needed consolidation, leading to the merger of Deutscher Aero Lloyd and Junkers-Luftverkehr in 1926. This gave birth to Deutsche Luft Hansa AG¹⁵, a state-controlled airline serving both domestic and international routes.¹⁶ During World War II, the company was tasked by the Nazi regime to provide services such as transportation flights and technical operations, for instance maintaining and repairing aircraft.¹⁷ Access to other countries was limited, and the situation worsened when Lufthansa's primary airport, Berlin-Tempelhof, had to be temporarily evacuated in the early 1940s. In 1945, following Germany's defeat in World War II, Deutsche Luft Hansa AG ceased all business operations.¹⁸

1.2.3 A New Beginning: 1950s-1960s

Following World War II, Germany aimed to restore its status as a leading economic power. A revitalized airline industry played a key role in this effort. In 1954, the traditional name "Deutsche Lufthansa Aktiengesellschaft" was revived, heralding a new chapter for the German airline industry,¹⁹ and it is since then that Lufthansa has had

¹¹ In this case study, we concentrate on Lufthansa's passenger airline business (and not on other activities such as cargo, technical maintenance, catering, etc.).

¹² See Faibis et al. (2021); Kiani-Kreß (2023).

¹³ See Hild (2004); Steger & Tywuschik (2007).

¹⁴ See Klußmann & Malik (2007), p. 394.

¹⁵ AG is an abbreviation for *Aktiengesellschaft*, a type of company in German law. It refers to a company whose shares are publicly traded and can be bought and sold on a stock exchange.

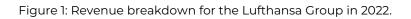
¹⁶ See Klußmann & Malik (2007), p. 394; Britannica (2023).

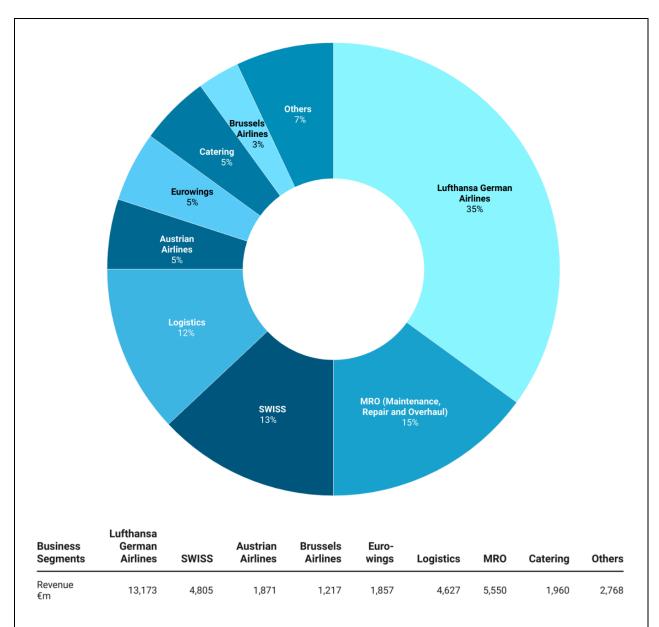
¹⁷ See Klußmann & Malik (2007); Budrass (2016), p. 373.

¹⁸ See Klußmann & Malik (2007), pp. 395–396; Lufthansa Group (2023).

¹⁹ See Klußmann & Malik (2007), p. 396.

the crane in its logo, leading to the nickname "Kranich-Airline", often used in the German-speaking world.²⁰





Lufthansa German Airlines also includes the regional airlines Lufthansa CityLine, Air Dolomiti and Eurowings Discover, the group's leisure airline. Lufthansa Group's logistics segment includes its air freight airline, Lufthansa Cargo, and related logistics services companies. Its MRO (Maintenance, Repair and Overhaul) segment consists of Lufthansa Technik and its worldwide network.

Source: Data from Lufthansa Annual Report 2022.

²⁰ See Klußmann & Malik (2007); Baruah (2016).

In the post-war period, Lufthansa began to modernize and enlarge its fleet of aircraft as well as expand its route network. During the 1960s and 1970s, it started to incorporate state-of-the-art, fuel-efficient jet aircraft into its fleet, such as the Boeing 707 and the Douglas DC-8,²¹ which enabled the airline to increase its capacity, reduce travel times, and improve overall passenger experience. With these enhancements, Lufthansa expanded its domestic and international route network, connecting Germany to major cities worldwide.²² But despite these efforts, it was only in 1964 that Lufthansa declared its first profitable year after World War II.²³

1.2.4 Developments in the 1970s-1990s

In the 1970s, Lufthansa continued to expand its fleet, albeit in the face of major challenges, such as the oil crisis, which quadrupled fuel prices. The airline was also confronted with new competition, for instance Laker Airways' Skytrain service, commencing in 1971, which offered low-cost transatlantic flights at almost half the price of a standard economy fare. Despite these difficulties, Lufthansa grew, as it was able to exploit growing demand and target less price-sensitive customers.²⁴ The company was one of the first to fly the Boeing 747, allowing it to capitalize on the jumbo jet's range and capacity for long-haul flights. Lufthansa also took a chance on the new Airbus A300, becoming an early adopter of the twin-engine wide-body for more fuel-efficient medium-distance flights.²⁵ In 1975, for the first time in history, Lufthansa managed to hit a new milestone by transporting over 10 million passengers in one year.²⁶

As Lufthansa entered the 1980s, with new competition emerging, the airline industry was rapidly changing. To adapt effectively to this dynamic environment, the company focused on customer service, technology, and efficiency by installing more spacious cabins, reducing plane turnaround times, and opening new airport lounges to improve customer satisfaction. Lufthansa also outfitted aircraft with winglets to cut fuel use, thereby helping to maintain its position as a market leader in Germany, facilitated by the fact that it was the only major airline in the country.²⁷

During the 1990 Gulf War, however, international travel demand declined sharply, and Lufthansa canceled nearly all flights to the Gulf region.²⁸ The Gulf War induced a general decrease in global travel, which, aligned with a rise in fuel prices, led to a roughly 6% decline in revenue, i.e., a drop from \in 5.2 billion in 1990 to \in 4.9 billion in 1991. Passenger numbers also fell by around 10% compared to the previous year.²⁹ To offset these losses, Lufthansa cut costs through unpopular measures such as salary cuts and enforcing part-time employment.³⁰

²¹ See Klußmann & Malik (2007), pp. 396-397.

²² See Klußmann & Malik (2007), pp. 397-399; Baruah (2016).

²³ See Lufthansa Group (n.d.).

²⁴ See IATA (2008).

²⁵ See Rieger (2005), pp. 53-55; Klußmann & Malik (2007), pp. 399-400.

²⁶ See Klußmann & Malik (2007), p. 400.

²⁷ See Klußmann & Malik (2007), p. 401; Button (2008).

 $^{^{\}rm 28}$ See Chan (2000); Hätty & Hollmeier (2003); Mukund & Subhadra (2003).

²⁹ See Ito & Lee (2005); Mbemap (2005); Klußmann & Malik (2007), p. 401.

³⁰ See Lufthansa Group (n.d.); Kiani-Kreß (2015).

Soon thereafter, the company rebounded by focusing on growth and by further expanding its international routes. In 1993, the airline launched its frequent flyer program, "Miles & More", making it an early European adopter of customer loyalty initiatives.³¹ Lufthansa also deepened commercial partnerships with leading airlines from other countries, such as United Airlines, Thai Airways, and All Nippon Airways. From 1990 to 2000, the airline company expanded from annually serving 30 million to nearly 50 million passengers, thereby cementing its position as Europe's largest carrier (measured by passenger numbers).³²

For a long period of time, since its rebirth after World War II, Lufthansa was majorityowned by the German state. From the end of 1980s, the stake held by the state started to decrease gradually, reducing to 35% by 1994. Three years later, in 1997, the government sold its remaining share, making Lufthansa a fully privatized company with no state ownership.³³

1.2.5 Adaptation and Growth in the 21st Century

In the early 2000s, following the September 11 attacks, Lufthansa faced challenges from declining air travel demand and increased costs, such as for measures against terrorist attacks.³⁴ Meanwhile, the airline took steps to maintain performance and to expand further. In 2002, it acquired a 19% stake in Turkish Airlines (which was sold again later in 2008). Facing rising competition from low-cost airlines such as Ryanair and easyJet, Lufthansa acquired a 24.9% stake in Eurowings in 2001 and took over Germanwings in 2002. Both companies operated independently until 2010, when Lufthansa decided to integrate Germanwings into Eurowings.³⁵ By 2007, Lufthansa had placed orders for new long-haul aircraft like the Airbus A380 to refresh its wide-body fleet.³⁶ Over the following years, the company continued to modernize its fleet and expand its operations. By 2021, through key acquisitions (see Chapter 4 of this case study for more details) and fleet growth (see Table 5 for more information on the fleet), the group was serving over 300 destinations around the world.³⁷

In 2020, the COVID-19 pandemic had a devastating impact on the passenger airline industry, resulting in a financial loss of \$168 billion, as evaluated by McKinsey analysts.³⁸ Like nearly all players, Lufthansa was affected by the pandemic and had to require a €9 billion governmental bailout to survive the crisis.³⁹ Towards the end of 2022, its recovery was underway, and by July 2023, capacity had already grown to 80% of the 2019 pre-pandemic level, with around 5,200 weekly connections – an increase of 13% from 2021.⁴⁰ This rebound enabled Lufthansa to pay back the loans previously received from the German state earlier than expected.⁴¹

³¹ See Klußmann & Malik (2007), p. 402.

³² See Chan (2000).

³³ See The New York Times (1994); Flight Global (1997); Bruch (2003).

³⁴ See Ito & Lee (2005); Klußmann & Malik (2007), p. 403; Steger & Tywuschik (2007).

³⁵ See Klußmann & Malik (2007), p. 403; Müller and Bidault (2015).

³⁶ See Klußmann & Malik (2007), pp. 401-403.

³⁷ See Polek (2010); Lufthansa Group (2011).

³⁸ See Bouwer et al. (2022).

³⁹ See Sweney (2020); Mussler & Kotowski (2023).

⁴⁰ See Lufthansa Group (2022); Koenen (2023d).

⁴¹ See Bundesministerium der Finanzen (2021).

While we have so far provided a general overview of Lufthansa's development (see Figure 2 for the development of its enterprise value over time, contrasting Lufthansa with Air France-KLM and IAG⁴²), we will now focus on internationalization.

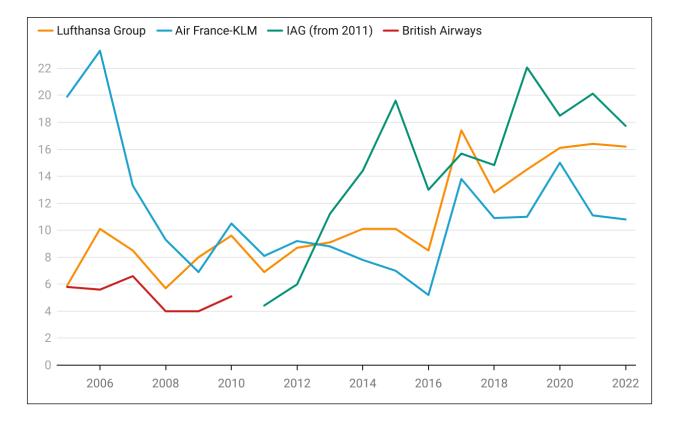


Figure 2: Enterprise value (billion euros) of major European airline groups since 2005.

Source: Based on Finance Charts (2023).

⁴² The International Airlines Group (IAG) was created in 2011 as a result of the merger between British Airways and Iberia. The data provided by IAG covers the period from 2011 onwards, while the data for the years 2005 to 2010 is specific to British Airways.

2. Lufthansa's Expansion with Flight Destinations

When Lufthansa was reborn and launched domestic flights in 1955, international flights followed quickly. For an airline, providing international flights can be considered a form of export (see Textbox 1). In May 1955, Lufthansa started to offer flights to Paris, Madrid, and London, connecting passengers between Germany and other European destinations. It did not take long for the inaugural long-haul routes to be introduced. On June 8th, 1955, the first flight to another continent – from Hamburg, via Dusseldorf and Shannon (in Ireland), to New York – took place.⁴³

Over the years, Lufthansa established new routes to destinations within and outside of Europe and also added more flights to existing destinations. During the early 1960s, Lufthansa introduced new routes to Asia, including a service from Germany to Bangkok in 1960, which was then extended to Hong Kong and Tokyo in 1961.⁴⁴ This allowed Lufthansa to connect passengers between Europe and major Asian destinations.

Textbox 1: International flights and export.

The United Nations System of National Accounts (SNA) classifies international transportation services, such as air transport services, as trade in services. The SNA defines trade in services as the exchange of services between residents and non-residents of an economy. When an airline provides an international flight service to a non-resident of the country of origin, it offers a service that is consumed outside its home territory. Therefore, the revenue generated from this service can be classified as an export of services. The World Trade Organization (WTO) also recognizes the cross-border supply of services, such as air transport, as a form of trade in services. The WTO's General Agreement on Trade in Services (GATS) covers trade in all services sectors, including air transport services.

Source: World Trade Organization (1995) and United Nations Department of Economic and Social Affairs (2013).

Lufthansa experienced a rapid expansion of its international operations in the 1970s and 1980s. This period also saw significant growth in global trade and tourism in Germany. In 1970, exports from Germany totaled \$32.65 billion, and by 1980 they had increased fivefold to \$176.96 billion.⁴⁵ Tourism also played a vital role in (former) West Germany's economic recovery after World War II, since the government invested heavily in promoting scenic areas such as the Bavarian Alps and the Black Forest, leading to flights to Munich, Frankfurt, and Stuttgart.⁴⁶ During this period, West Germany became a popular destination for tourists from all over the world, with cities like Hamburg attracting large numbers of visitors.⁴⁷ In addition, Germans also

⁴³ See Klußmann & Malik (2007), P. 396.

⁴⁴ See Klußmann & Malik (2007), p. 398.

⁴⁵ See World Bank (2023).

⁴⁶ See Kopper (2009).

⁴⁷ See Bleile (1983).

discovered tourism, and unlike people in some other countries, such as France, Germans often spend their holidays outside their home country.⁴⁸

However, Lufthansa also faced fierce competition, especially on North Atlantic routes. To survive in an era of global competition, the company adopted a policy of "growth through own strength" in the second half of the 1980s under the leadership of its then-CEO⁴⁹ Heinz Ruhnau (see Table 2 on Lufthansa's CEOs over time). Ruhnau believed that only the largest airlines would survive, and so he committed the airline to a program of rapid fleet expansion to capture market share.⁵⁰

Name of the CEOs	Tenure
Hans M. Bongers	1954 – 1964
No designated CEO; all board members had equal rights	1964 – 1972
Herbert Culmann	1972 – 1982
Heinz Ruhnau	1982 – 1991
Jürgen Weber	1991 – 2003
Wolfgang Mayrhuber	2003 – 2010
Dr. Christoph Franz	2011 – 2014
Carsten Spohr	since 2014

Table 2: Lufthansa's CEOs over time (after World War II).

Source: Based on Lufthansa Group (n.d.) and Schmitz (2000).

As part of this strategy, Lufthansa added destinations in Africa, the Middle East, and South America, and began offering non-stop flights to many long-haul destinations in North America, such as Vancouver and Montreal. At the same time, it invested in new aircraft, such as the Boeing 747 jumbo jet, which allowed it to provide more comfortable and cost-effective flights over longer distances. A major milestone was achieved in 1970 when Lufthansa completed the first nonstop flight from Frankfurt to New York, using the new Boeing 747.⁵¹

Following Germany's reunification in 1990, Lufthansa added Berlin to its service hubs. In the following years, the airline launched new routes to Eastern Europe, including Tallinn (capital of Estonia), Ekaterinburg (4th largest city in Russia), Baku (capital of

⁴⁸ See Oppermann & Chon (1995).

⁴⁹ We use the term CEO, although the "Vorstandsvorsitzender" in the German corporate governance system is not identical to the CEO in the Anglo-American corporate governance system.

⁵⁰ See Mintzberg (2003), pp. 125-126.

⁵¹ See Lufthansa Group (n.d.); Singh (2020).

Azerbaijan), Minsk (capital of Belarus), and Ashgabat (capital of Turkmenistan).⁵² Moreover, the airline successfully broadened and further expanded its intercontinental routes to Asia, Africa, and South America. For the first time, the airline operated its own flights to new international destinations, including Shanghai, China (Asia); Asmara, Eritrea (Africa); and Lima, Peru, and Quito, Ecuador (both in South America).⁵³

Lufthansa's expansion was not without challenges, though. Starting in 1992, in its home market Germany and Europe, the company faced competition from British Airways and its subsidiary Deutsche BA, which directly attacked Lufthansa on domestic and European routes.⁵⁴ To respond, Lufthansa reduced fares on key domestic routes, such as Frankfurt to Munich, while simultaneously increasing its international flight offerings.⁵⁵

In the 21st century, the rise of the main Gulf airlines, such as Emirates, Etihad, and Qatar Airways, posed another threat to Lufthansa. Through their main hubs in Dubai (UAE), Abu Dhabi (UAE), and Doha (Qatar), the Gulf airlines reshaped the global airline market by offering one-stop connections between any two points in the world and by striving for high-quality service.⁵⁶ Due to intense competition from these rivals, as well as rising fuel costs, Lufthansa had to reduce its services to destinations in the Middle East and Asia.⁵⁷

In February 2009, Lufthansa launched flights under the Lufthansa Italia brand from Milan Malpensa Airport in order to better tap into the Northern Italian market. By 2011, Lufthansa Italia was intended to become an independent Italian subsidiary of Lufthansa. However, without disclosing any major reasons, Lufthansa discontinued the operations of Lufthansa Italia in October 2011.⁵⁸ Rather than operating separately, Lufthansa incorporated the services of the Lufthansa Italia brand, consolidating its Italian market presence through the regional carrier Air Dolomiti, which had been fully acquired by Lufthansa in 2003.⁵⁹

Despite the aforementioned challenges and difficulties, Lufthansa has managed to maintain a robust international presence. As of 2023, it offered connections to more than 300 destinations worldwide across four continents.⁶⁰

⁵² See Lufthansa Group (n.d.); Klußmann & Malik (2007), pp. 401-402.

⁵³ See Klußmann & Malik (2007), pp. 401-402.

⁵⁴ See Hardiman (2021).

⁵⁵ See Hild (2004).

⁵⁶ See Ulrichsen (2015).

⁵⁷ See Fioretti & Weir (2017); Douglas (2019).

⁵⁸ See Airliners (2011).

⁵⁹ See Kaufmann et al. (2004).

⁶⁰ See Pickett (2022). The four continents are Africa, America, Asia and Europe.

3. Lufthansa's Expansion Through Partnerships

3.1 Star Alliance

Since the 1980s, Lufthansa has been pursuing bilateral partnerships with other airlines, forming codeshare agreements with other carriers, such as Air France and Cathay Pacific.⁶¹ These agreements allowed Lufthansa to extend its reach and offer more routes and flights to its customers, albeit they were limited in scope and did not provide any benefits beyond the code-sharing of flights.⁶²

In the mid-1990s, Lufthansa's then-CEO Jürgen Weber felt that a more integrated, multi-airline alliance could unlock greater advantages for both the airlines and their customers. He envisioned an alliance that would offer customers more choices and allow the group to optimize networks and operations on a larger scale; in addition, he was convinced that an alliance could increase revenues and market share for each of the partners. Weber believed that cooperation between airlines could provide customers with expanded routes and easier booking, while also helping to increase loyalty by granting access to partners' frequent flyer programs.⁶³

In 1996, Weber initiated talks with potential partners who had similar ideas about a deeper partnership. He approached United Airlines, SAS (Scandinavian Airlines), Air Canada, and Thai Airways International, which had already established cooperation agreements with Lufthansa or with each other.⁶⁴ In 1997, Weber and the CEOs of these companies officially formed the Star Alliance, the first large multilateral alliance in the industry. This alliance allowed partners to share each other's networks and systems, providing their customers with more destinations and better connections without merging their companies.⁶⁵

Star Alliance soon attracted additional members from different regions of the world. In 1998, another four companies joined, namely Varig from Brazil, Air New Zealand Limited from New Zealand, Ansett Australia from Australia, and All Nippon Airways from Japan. Since then, Star Alliance has continued to expand its global reach and diversify its partner portfolio. For instance, over the years, many other airlines have added to its ranks. Examples include Air China in 1999, Singapore Airlines in 2004, or Air India in 2007. As of 2022, Star Alliance had 26 member airlines as well as two connecting partners⁶⁶ and provided service to at least 1,300 destinations in more than 195 countries (for more details, see Table 3).

Although Star Alliance was the first multilateral alliance in the airline industry, it was and still is not the only one. Two other major alliances emerged in the late 1990s and early 2000s, challenging Star Alliance's dominance and competing with each other.

⁶¹ See Rieger (2005), pp. 150-151.

⁶² See Schmid et al. (2013), pp. 449-451; Never & Suau-Sanchez (2020).

⁶³ See Cento (2009), p. 38.

⁶⁴ See Andal-Ancion & Yip (2003).

⁶⁵ See Rieger (2005), pp. 150-151; Klußmann & Malik (2007), p. 402.

⁶⁶ As of November 2023, the two connecting partners were Juneyao Airlines (China) and Thai Smile. The connecting partner model enables airlines to connect to the Star Alliance network without being members. Passengers enjoy benefits when connecting between member airlines and a connecting partner. Baggage can be checked through, and Star Alliance Silver and Gold status holders receive tailored privileges.

These alliances are oneworld and SkyTeam.⁶⁷ Oneworld was launched in 1999 by four founding members: American Airlines from the U.S., British Airways from the UK, Cathay Pacific from Hong Kong, and Qantas Airways from Australia. SkyTeam was formed in 2000 by four members: Delta Air Lines, Air France, Czech Airlines, and Korean Air.⁶⁸

Like Star Alliance, the other strategic alliances in the airline industry have grown and added new members over time, becoming the second and the third largest airline alliances in the world, respectively.⁶⁹ According to the global travel data provider OAG, in 2022, the three alliances accounted for 43 percent of the industry's total seating capacity.⁷⁰ Table 3 provides an overview and compares Star Alliance to SkyTeam and oneworld.

Lufthansa's current CEO Carsten Spohr stated: "We would never be as big as we are if we didn't have the Star Alliance feed and de-feed."⁷¹ While Star Alliance has provided many benefits, challenges also come with the partnership. Examples include complexities in aligning policies and operations across member airlines, limitations to offering a truly seamless experience for passengers travelling on multi-airline itineraries, non-aligned reservations systems, and no full-service consistency in areas like cabin service policies.⁷²

⁶⁷ See Schmid et al. (2013), p. 450.

⁶⁸ See Schmid et al. (2013), pp. 450-451.

⁶⁹ See Kleymann & Seristö (2001); Wald et al. (2010), p. 204; Gomes-Casseres & Judd (2021).

⁷⁰ See Grant (2022).

⁷¹ See Ganesh (2022).

⁷² See Migdadi (2022).

Table 3: Overview of the major airline alliances in 2022.

	Star Alliance	SkyTeam	oneworld
Foundation	1997	2000	1999
Partner Airlines	Aegean Airlines, Air Canada, Air China, Air India, Air New Zealand, ANA, Asiana Airlines, Austrian Airlines, Avianca, Brussels Airlines, Copa Airlines, Croatia Airlines, Egypt Air, Ethiopian Airlines, EVA Air, LOT Polish Airlines, Lufthansa, SAS, Shenzhen Airlines, Singapore Airlines, South African Airways, Swiss International Air Lines, TAP Air Portugal, Thai Airways, Turkish Airlines, United Airlines	Aerolíneas Argentinas, Aeroméxico, Air Europa, Air France, Alitalia (now ITA Airways), China Airlines, China Eastern Airlines, Delta Air Lines, Garuda Indonesia, Kenya Airways, KLM, Korean Air, Middle East Airlines (MEA), Saudia, TAROM, Vietnam Airlines, Virgin Atlantic, Xiamen Air	Alaska Airlines, American Airlines, British Airways, Cathay Pacific, Finnair, Iberia, Japan Airlines, Malaysia Airlines, Qantas, Qatar Airways, Royal Air Maroc, Royal Jordanian, SriLankan Airlines
Number of Airlines	26	19	13
Countries Served	195	184	170
Destinations	1,330	1,100	900
Daily Departures	19,000	10,100	9,000
Annual Number of Passengers	762 m	588 m	450 m
Number of Lounges	1,000	750	620
Fleet Size	5,000	3,600	2,250

Source: Based on AltexSoft (2023), Rowland (2023), SkyTeam (2023), Star Alliance (2023), and oneworld (2024).

3.2 Joint Ventures

In addition to its membership of Star Alliance, Lufthansa also cooperates with partner airlines in the form of joint ventures.⁷³ In many cases, these are formed with airlines who, like Lufthansa, are partners of Star Alliance. Table 4 presents an overview of Lufthansa's major joint ventures.⁷⁴

In 1989, Lufthansa and Turkish Airlines formed SunExpress, with the former initially holding a 40% share (now 50%). Positioned as a leisure airline, SunExpress provides passenger services mainly between Germany and Turkey, but also to holiday destinations such as the Red Sea, Greece, Bulgaria, Italy, and the Canary Islands.⁷⁵

Another very important joint venture is the Atlantic Joint Venture, previously known as A++. Formed in 2009 within the Star Alliance, it was originally created by Lufthansa, United Airlines, and Air Canada. This joint venture covers routes across the North Atlantic and associated connecting flights. It was later expanded to include Lufthansa's subsidiaries Austrian Airlines, Brussels Airlines, Eurowings, and SWISS.⁷⁶ In 2013, after receiving approval from European Union regulators, the partnership was officially renamed the Atlantic Joint Venture.⁷⁷ Textbox 2 illustrates the rationale behind joint ventures.

Textbox 2: Joint ventures in the airline industry.

Joint ventures like the Atlantic Joint Venture offer airlines opportunities to achieve strategic objectives that go beyond the possibilities of traditional strategic alliances. These objectives encompass cooperative measures, such as revenue sharing, joint pricing, and coordinated capacity management, leading to benefits like enhanced network connectivity, improved marketing and sales, and a more profound level of cooperation. The creation of some joint ventures enables member airlines to share ownership and control, engage in strategic decision-making, adapt more efficiently to market fluctuations, and finally reduce costs, increase profits, and boost operational efficiency across the transatlantic network.

Source: CAPA - Centre for Aviation (2019).

In addition to the Atlantic Joint Venture, Lufthansa has established several other major joint ventures over the past decade to expand its global network reach and strategic positioning. In 2012, for instance, it launched the Europe-Japan Joint Venture with All Nippon Airways (ANA), a member of Star Alliance since 1999, and focused on Europe-Japan routes. In 2015, Lufthansa joined forces with Singapore Airlines to establish the Europe Singapore Pacific Joint Venture. By providing access to Singapore Airlines'

⁷³ See Lufthansa Group (n.d.).

⁷⁴ Lufthansa also has joint ventures outside the passenger airline business. For instance, it has a cargo joint venture with United Airlines linking Europe and the U.S. Lufthansa also partnered with Air China in 1989 to create the joint venture Aircraft Maintenance and Engineering Corporation (Ameco) in Beijing, which has served as a technical support for Lufthansa flights to China.

⁷⁵ See Casey (2018); Eiselin (2020).

⁷⁶ Lufthansa has fully owned SWISS since 2007, Eurowings since 2011, Austrian Airlines since 2012, and Brussels Airlines since 2016. See sections 4.2, 4.3, and 4.4 of this case study for more details.

⁷⁷ See Journal of Commerce (2013); CAPA - Centre for Aviation (2019).

networks in its region, this agreement strengthened Lufthansa's ability to compete with Gulf carriers on routes between Europe, Southeast Asia, and Australia. Most recently, in 2016, Lufthansa formed the Europe China Joint Venture with Air China, coordinating services and optimizing schedules between major airports in Germany and China.

Lufthansa's strategic expansion through joint ventures was also achieved by including firms acquired by the company, such as Austrian Airlines and SWISS, in joint venture agreements. These airlines joined the ventures at various stages, thereby strengthening shared efforts and expanding network reach. Specifically, Austrian Airlines and SWISS became part of the Europe-Japan Joint Venture in 2013, the Europe Singapore Pacific Joint Venture shortly thereafter, and the Europe China Joint Venture in 2017.⁷⁸

Joint venture	Partner airlines	Focus	Year of Foundation
SunExpress	Turkish Airlines and Lufthansa	Leisure airline	1989
Atlantic Joint Venture	Air Canada, United Airlines, Austrian Airlines, Lufthansa, SWISS, Brussels Airlines and Eurowings	Transatlantic flights	2009
Europe Japan Joint Venture	All Nippon Airways, Austrian Airlines, Lufthansa and SWISS	Flights between Europe and Japan	2012
Europe Singapore Pacific Joint Venture	Austrian Airlines, Lufthansa, SWISS and Singapore Airlines	Flights between Europe, Southeast Asia, and the Southwest Pacific	2015
Europe China Joint Venture	Air China, Austrian Airlines, Lufthansa and SWISS	Flights between Europe and China	2016

Table 4: Lufthansa's most important joint ventures in the passenger airline business.

Source: Based on Lufthansa Group (n.d.), ANA (2012), Aviation Week (2016), and CAPA - Centre for Aviation (2019).

⁷⁸ See ANA (2012); CAPA - Centre for Aviation (2013b); Aviation Week (2016).

4. Lufthansa's Expansion through Acquisitions and Minority Stakes

4.1 Air Dolomiti

When internationalizing, Lufthansa did not restrict its activities to export, strategic alliances, and joint ventures – it also began acquiring companies abroad or taking stakes in foreign companies to expand further.

Air Dolomiti was founded in 1989 in Northern Italy and started service in 1991, operating flights from the country to European regional markets. In 1999, Lufthansa acquired an initial 31% stake in Air Dolomiti to gain access to the Italian market. This minority stake provided benefits without requiring full acquisition, in that, first, Lufthansa could assess the partnership before further commitment, and second, it avoided regulatory scrutiny of a full takeover.⁷⁹

After several years of successful partnership, Lufthansa recognized Air Dolomiti's strategic importance to its Munich hub and took a bold step in 2003 by fully acquiring the Italian regional airline, purchasing the remaining shares.⁸⁰ This move allowed the German airline group to harness the full potential of Air Dolomiti's well-established brand and reputation in the Northern Italian market. Lufthansa saw that Air Dolomiti's intimate understanding of the Italian market dynamics and its loyal customer base represented a potent competitive advantage. This understanding enabled the airline to tailor its services more precisely to the nuanced preferences and needs of Italian passengers, thereby strengthening its foothold in the region.⁸¹ While some critics voiced concerns about the potential risks inherent in acquiring a smaller, regionally focused airline, Lufthansa believed that the benefits of the acquisition would outweigh any potential concerns.⁸²

As of 2023, Air Dolomiti operated around 20 aircraft, continuing to serve as a regional feeder to Lufthansa hubs in Germany, with a focus on connecting Italian destinations.⁸³ According to Steffen Harbarth, the CEO of Air Dolomiti, fleet size is expected to increase by the beginning of 2025, to boost regular services to Frankfurt and Munich from Northern Italy.⁸⁴

4.2 Swiss International Air Lines

Swiss International Air Lines (SWISS) was launched in 2002, succeeding the bankrupt Swissair and absorbing operations from Crossair, a regional airline from Switzerland.⁸⁵ It inherited debt and infrastructure problems from Swissair and faced increasing competition from low-cost carriers, which eroded its market share. Between 2002 and

⁷⁹ See Kaufmann et al. (2004); Kewes (2007).

⁸⁰ See Kaufmann et al. (2004); CAPA - Centre for Aviation (2013a).

⁸¹ See Kaufmann et al. (2004).

⁸² See CAPA - Centre for Aviation (2013a).

⁸³ See McDermott (2023).

⁸⁴ See Molyneaux (2023).

⁸⁵ See Frey (2002); Vermooten (2020).

2005, SWISS accumulated losses of over €1 billion and required capital injections from the Swiss government and other investors to stay afloat, as it desperately needed cash to maintain operations after the Swissair bankruptcy.⁸⁶ However, these short-term capital injections did not lead to long-term profitability, and while they allowed SWISS to avoid insolvency, later investments by the company itself into improving the business did not achieve the goal of profitability, leaving SWISS eager to find new ways and resources to turn the situation around.⁸⁷

In 2004, SWISS pursued negotiations with British Airways about joining the oneworld alliance, but negotiations failed due to disagreements about the terms.⁸⁸ With dim prospects for SWISS's survival as an independent player, the airline entered into acquisition negotiations with Lufthansa and its then-CEO Wolfgang Mayrhuber. In March 2005, Lufthansa announced a plan to invest in the financially struggling smaller company.⁸⁹ According to Mayrhuber, "SWISS was definitely the first option. [...] Apart from its weak financial statements, it offered everything for a partnership: a strong quality-focused brand, a solid home market, reliable framework conditions, and above all, expertise and an appreciative basic attitude towards its employees".⁹⁰ The talks were held in strict secrecy, but the Swiss government, with 20.4% of shares, the largest shareholder at the time, was involved from the beginning.⁹¹

On March 22nd, 2005, the supervisory board ("Aufsichtsrat") of Deutsche Lufthansa AG and the board of directors ("Verwaltungsrat") of Swiss International Air Lines AG approved the takeover and the integration of SWISS into Lufthansa Group.⁹² The acquisition was Lufthansa's largest at the time and a major development in the European airline industry.

Lufthansa's rationale for acquiring SWISS was to consolidate its position as Europe's leading airline by eliminating a competitor and gaining access to the Swiss market and premium business travelers. Through the acquisition, Lufthansa wanted to diversify its route portfolio and customer base, thus complementing its routes with SWISS's Zurich hub and corporate clients.⁹³ During the 2nd German Aviation Days (German: "2. Deutsche Luftfahrt Tage") held in Munich in December 2007, Stephan Gemkow, then-CFO of the Lufthansa Group, expressed his opinion that SWISS was an ideal acquisition, stressing that it met important criteria, such as opening up new markets, creating synergies, providing a good strategic fit, and coming at the right moment.⁹⁴

Due to air traffic and antitrust regulations, Lufthansa had to conduct the takeover in steps, starting with a minority stake of 11%.⁹⁵ In a first move, SWISS shares were placed into a Swiss-based holding company called AirTrust, of which Lufthansa owned 11%. In the third quarter of 2005, after approval of all relevant competition authorities, Lufthansa increased its share in AirTrust to 49%⁹⁶. This gave Lufthansa partial

⁸⁶ See SWI (2005a); Kreiser (2011).

⁸⁷ See Manda (2005); Vermooten (2020).

⁸⁸ See Langley (2003); SWI (2004).

⁸⁹ See Suen (2002); Kreiser (2011).

⁹⁰ Mayrhuber cited in Vogt (2018), p.60.

⁹¹ See Deutsche Welle (2005).

⁹² See SWI (2005a); SWISS (2005a).

⁹³ See SWI (2005b); AviationPros (2007).

⁹⁴ See Neue Zürcher Zeitung (2008a).

⁹⁵ See AviationPros (2005).

⁹⁶ See NBC News (2005).

ownership in the form of a minority stake while allowing SWISS to continue independent operations.⁹⁷ This approach reduced risk for Lufthansa, since SWISS's losses did not have to be integrated in its own balance sheet, with Lufthansa only owning minority stakes.⁹⁸ Two years later, after negotiations on international traffic rights had been concluded, Lufthansa obtained the necessary antitrust and aviation approvals and decided to increase its ownership stake. Effective on July 1st, 2007, it acquired the remaining 51% shares through AirTrust, achieving 100% ownership of SWISS.⁹⁹

After gaining control of SWISS, Lufthansa gradually integrated the airline's operations into the Lufthansa Group, believing that joining the group and Star Alliance would give SWISS several benefits, such as more network connections as well as access to a larger customer loyalty program. On April 1st, 2006, Lufthansa integrated the "Swiss Travel Club" of SWISS into their own "Miles & More" offering, following which customers were able to earn and redeem miles on flights from both airlines.¹⁰⁰ On the same date, SWISS became a member of Star Alliance, which allowed the Swiss airline to cooperate with other member airlines and benefit from additional codeshare opportunities.¹⁰¹

The integration of SWISS into the Lufthansa Group and Star Alliance produced positive results. Figure 3 demonstrates the development of the operating profit of SWISS following its acquisition. In 2006, SWISS reported its first full year of profit after consecutive losses in the years before.¹⁰² Lufthansa's projected annual synergies from integrating SWISS surpassed expectations, totaling over €200 million during 2006. SWISS's profitability contributed to Lufthansa's overall financial performance in 2009, and the airline also regained its reputation for service excellence, winning the "Best European Airline" award in 2007 and again in 2009.¹⁰³ It seems that Lufthansa was satisfied with the SWISS deal, since Lufthansa's CEO Wolfgang Mayrhuber commented in 2009 that the acquisition would serve as a model for future acquisitions in the airline industry.¹⁰⁴

⁹⁷ See SWISS (2005b).

⁹⁸ See Koenen (2023b).

⁹⁹ See AviationPros (2007).

¹⁰⁰ See Pfenniger (2006).

¹⁰¹ See AviationPros (2007); Vogt (2018), p.60.

¹⁰² See SWI (2007).

¹⁰³ See SWISS (2009); Lufthansa (2010).

¹⁰⁴ See Friese (2009).

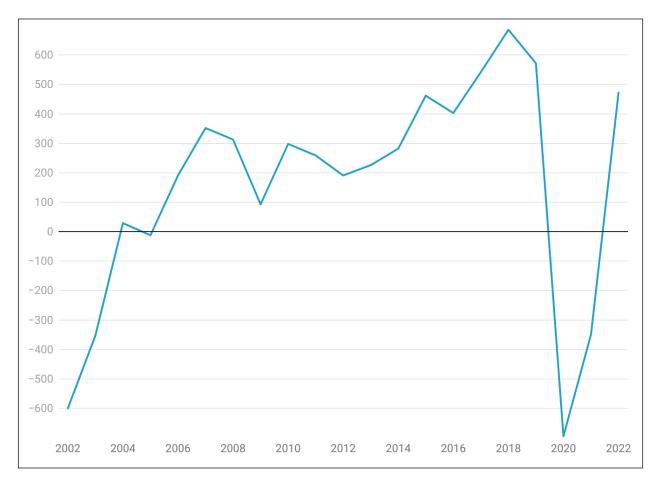


Figure 3: Operating results (million euros) for SWISS: 2002 to 2022.

Source: Data compiled from Orbis Database, SWISS (2006), Lufthansa Group (2010, 2012, 2013), and Statista (2024).

4.3 Austrian Airlines

Austrian Airlines, the national carrier of Austria, faced challenges in the late 2000s. Beyond the growing rivalry in the industry, it experienced particular difficulties due to its aging fleet, outdated technologies, expensive infrastructure, and costly specialist staff. Furthermore, the company's limited financial resources made it difficult to invest in new equipment and technology. Over time, Austrian Airlines lost market share, partly due to low-cost airlines like easyJet offering reduced fares and increasing their flight services to and from Austria. In 2008, the Austrian government, still the majority owner of Austrian¹⁰⁵, provided a €500 million subsidy in the hope that it could prepare the airline, which was €900 million in debt, for sale.¹⁰⁶ By 2009, Austrian Airlines was on the edge of bankruptcy with no obvious path to profitability.¹⁰⁷

¹⁰⁵ The majority shares of Austrian Airlines were held by the Austrian government through the state-owned holding company ÖIAG (Österreichische Industrieholding Aktiengesellschaft). In 2019, ÖIAG was rebranded as ÖBAG (Österreichische Beteiligungs AG), which continues to manage Austria's industrial holdings.

¹⁰⁶ See Neue Zürcher Zeitung (2008b).

¹⁰⁷ See Prodhan (2012).

It was at this time that Lufthansa saw an opportunity to acquire the distressed company. Lufthansa had just completed the acquisition of SWISS as a wholly-owned subsidiary,¹⁰⁸ and although still digesting the SWISS deal, Lufthansa perceived numerous strategic reasons to go after Austrian Airlines. A major motive for Lufthansa was to gain access to the smaller carrier's valuable slots at Vienna International Airport and develop Vienna into another Lufthansa hub. Vienna's location provided connectivity advantages that even SWISS could not offer, especially for accessing destinations in Central and Eastern Europe.¹⁰⁹ Lufthansa felt an urgency to act quickly before competitors made a move or before Austrian Airlines failed entirely.¹¹⁰ Hence, the timing seemed opportune and the rationale clear for the takeover. Lufthansa's CEO Wolfgang Mayrhuber, himself an Austrian, envisioned the long-term value – Austrian Airlines would strategically complement the earlier SWISS deal, thus cementing Lufthansa's dominance in Central and Eastern Europe.¹¹¹ From the perspective of Austrian Airlines, the acquisition was seen as a lifeline. Facing the imminent danger of insolvency, its CEO Peter Malanik believed that Lufthansa's strength and resources could revive the national carrier. This takeover was viewed as a "win-win situation" for both companies, their customers, and the Austrian economy at large.¹¹²

After more than a year of negotiations, heated opposition from competitor airlines (such as Air France-KLM or Turkish Airlines), and concerns regarding competition on the part of the European Commission, in September 2009, Lufthansa acquired a 41.56% stake for €220 million.¹¹³ Its strategy was to first acquire partial ownership, similar to how it initially took a minority stake in SWISS in 2005.¹¹⁴ To consolidate its business interests, Lufthansa secured additional rights through a shareholder agreement that enabled it to appoint a majority of the members of the Austrian Airlines Executive Board ("Vorstand"), thereby giving it control despite its minority stake.¹¹⁵

In April 2012, Christoph Franz, who became CEO of Lufthansa in 2011, announced that the company would increase its stake and acquire the remaining 51% share in September 2012 to make Austrian Airlines a wholly-owned subsidiary.¹¹⁶ To reduce costs and improve the profitability of the financially struggling Austrian Airlines, Lufthansa restructured it, with Christoph Franz overseeing the restructuring plan. This involved optimizing Austrian's aging fleet, transferring flight operations to its regional subsidiary Tyrolean Airways,¹¹⁷ and downsizing office infrastructure and staff.¹¹⁸ For instance, in 2012, Austrian Airlines cut costs by eliminating 150 jobs out of 6,320. Trade unions, such as Vida, opposed this decision, which led to more than 1,000 employees going on strike and consequently disrupted some flight operations.¹¹⁹ This was not a single case, though; in fact, the airline industry has always strongly seen an influence of trade

¹⁰⁸ See AviationPros (2007).

¹⁰⁹ See Penfold (2009); Rijke (2012); Baumgartner (2013), p. 277.

¹¹⁰ See Prodhan (2012).

¹¹¹ See Penfold (2009).

¹¹² See Penfold (2009); Sheahan (2012).

¹¹³ See Wall (2008); France 24 (2009); Penfold (2009).

¹¹⁴ See Friese (2009); Baumgartner (2013), pp. 277-279.

¹¹⁵ See France 24 (2009); Koenen (2023b).

¹¹⁶ See Lufthansa Group (2013).

¹¹⁷ See Airliners (2014). In 2012, Austrian Airlines transferred its entire flight operations (including 80 aircraft and over 2,000 pilots and flight attendants) to its regional subsidiary Tyrolean Airways. This transfer was part of the restructuring program and continued until Tyrolean Airways was fully integrated into Austrian Airlines in 2015.

¹¹⁸ See Prodhan (2012).

¹¹⁹ See Austrian Wings (2013).

unions. In 2014, for example, a strike by 5,400 Lufthansa pilots led to the grounding of 3,800 flights and caused a loss of a "high double-digit million amount" for Lufthansa.¹²⁰

The financial results for Austrian Airlines have been disappointing since its acquisition by Lufthansa, as illustrated in Figure 4. In the short-term, Lufthansa succeeded in stemming Austrian Airlines' losses; however, Austrian Airlines continued to struggle to stay profitable, requiring capital injections from its parent company as late as 2015.¹²¹

Still, Austrian Airlines presented an attractive target that complemented the SWISS deal, enabling Lufthansa to cement its dominance not only in the so-called DACH region¹²² (Germany, Austria, Switzerland), but also across Europe's airline industry. The step-by-step acquisition proved wise, giving Austrian Airlines time to reform before complete integration. From March 2021 on, Austrian Airlines announced further restructuring measures in response to continued financial pressures exacerbated by the COVID-19 pandemic.¹²³ Hence, these measures included job cuts, fleet reduction, and route closures. It is still too early to say whether these measures will be successful in turning the company around fully.

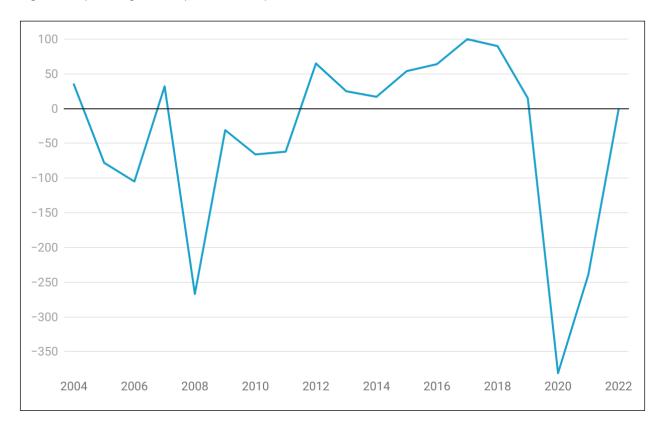


Figure 4: Operating results (million euros) for Austrian Airlines: 2004 to 2022.

Source: Data compiled from Orbis Database and Lufthansa Group (2011).

¹²⁰ See Spiegel (2014).

¹²¹ See General Court of the European Union (2015).

¹²² The term "Dach region" is often used by firms when referring to the countries Germany, Austria and Switzerland, using the abbreviations of the international country codes D for Germany, A for Austria and CH for Switzerland).

¹²³ See Austrian Airlines (2021).

4.4 Brussels Airlines

Brussels Airlines traces its roots back to Belgium's flag carrier, Sabena, which operated from 1923 until declaring bankruptcy in 2001. In 2002, the Belgian government acquired Sabena's assets and brand to establish SN Brussels Airlines as the country's new national airline. In 2006, it merged with the Belgian airline Virgin Express to form a new airline, Brussels Airlines.¹²⁴ However, just two years after the merger, during the worldwide financial crisis of 2007 and 2008, the company faced strong difficulties as a result of the recession, which intensified price competition amongst European airlines. As a mid-sized player, Brussels Airlines found itself overwhelmed by giants like Air France-KLM and low-cost carriers like Ryanair and struggled to survive.¹²⁵

In 2008, Brussels Airlines caught the attention of Lufthansa, which was looking to expand its presence further across Europe. Lufthansa had just invested in SWISS at that time and was specifically interested in Brussels Airlines' competitive cost structure and well-established routes to Africa.¹²⁶ As commented later by Carsten Spohr, Lufthansa's CEO since 2014, Brussels Airlines "brings a well-established long-haul network, especially to and from Africa," thereby complementing Lufthansa's portfolio.¹²⁷ While it was not immediately clear whether the acquisition would lead to a larger market share for Lufthansa, it was evident that it would at least enhance its flight offerings, particularly with respect to destinations in Africa.

After careful evaluation, Lufthansa made its move in 2008, announcing a 45% stake in Brussels Airlines for €65 million. The European Commission approved this transaction on June 22nd, 2009.¹²⁸ This secured a minority ownership position while providing an option to acquire the remaining shares in 2016.¹²⁹

Shortly after acquiring a 45% stake in Brussels Airlines in 2009, Lufthansa took steps to integrate the Belgian airline. For instance, aligning networks started with offering codeshare flights between Belgium and Germany.¹³⁰ By July 2009, Brussels Airlines officially joined the Lufthansa Group, but the integration did not stop there. Brussels Airlines discontinued its standalone frequent flyer program, "Privilege," and instead adopted the larger company's "Miles & More" offering.¹³¹ This series of integration efforts culminated on December 9th, 2009, when Brussels Airlines officially became the 26th member of the Star Alliance – a milestone celebrated with a ceremony at Brussels Town Hall.¹³²

In 2016, Lufthansa fully acquired Brussels Airlines, transforming it into a wholly-owned subsidiary. Originally, it positioned the Belgian carrier as an independent entity within the group, intended to operate autonomously while benefiting from the larger group's extensive network and resources.¹³³ It was in early 2018 that Lufthansa integrated

¹²⁴ See The Brussels Times (2023).

¹²⁵ See Dennis (2007); Macário & Van de Voorde (2009).

¹²⁶ See Bryan (2016); CAPA - Centre for Aviation (2016a).

¹²⁷ Spohr cited in Lemmes (2016).

¹²⁸ See European Commission (2009).

¹²⁹ See Deutsche Welle (2008).

¹³⁰ See Brussels Airlines (2009a).

¹³¹ See Brussels Airlines (2009b); Elliott (2011).

¹³² See Star Alliance (2009).

¹³³ See Bryan (2016).

Brussels Airlines into the Eurowings Group, at that time a low-cost airline owned by Lufthansa, to improve their competitiveness against low-cost carriers such as Ryanair and easyJet.¹³⁴ Brussels Airlines had already demonstrated its effectiveness in Belgium's cost-competitive market, making it a potential asset for Lufthansa to better compete with rivals offering low fares.¹³⁵ A mid-2018 announcement outlined plans for Brussels Airlines to serve as the long-haul competence center, while Eurowings would focus on short-haul routes across Europe and maintain its "umbrella" over Brussels Airlines.¹³⁶

Some critics feared the integration could dilute Brussels Airlines' unique brand identity within Eurowings and disrupt its network, which was considered vital for Belgium's export business.¹³⁷ Additionally, integrating an airline with a network model into a primary point-to-point service model like Eurowings presented obstacles, since the business models were just too different.¹³⁸ While not strictly low-cost, Brussels Airlines even had substantially lower unit costs than Eurowings.¹³⁹

Following its integration into Eurowings, Brussels Airlines faced challenges, including profitability issues and negative customer feedback regarding the underwhelming travel experience compared to other Lufthansa offerings.¹⁴⁰ Figure 5 showcases Brussels Airlines' profit situation over the last years, starting with Lufthansa's partial acquisition in 2008. After enduring four years of operating losses from 2011 to 2014, the company finally reported a profit in 2015, marking the first profitable year since its acquisition in 2009.¹⁴¹

In mid-2019, Lufthansa halted further integration of Brussels Airlines into Eurowings and instead aligned it more closely with Lufthansa and its other premium brands, namely SWISS and Austrian Airlines,¹⁴² which led to a period of instability in Brussels Airlines' leadership structure.

Since 2018, the airline has had five different CEOs. Bernard Gustin, who oversaw the initial integration efforts, led the company until early 2018. Next, Christina Foerster, an experienced executive familiar with the carrier, assumed the CEO role until handing over the position to Dieter Vranckx in 2020. However, Vranckx's tenure was brief, with Peter Gerber replacing him just one year later in 2021. When Gerber departed in January 2023, Foerster again stepped in, albeit on an interim basis.¹⁴³

In March 2023, Lufthansa appointed Dorothea von Boxberg, a seasoned executive from Lufthansa Cargo AG, to lead Brussels Airlines. Von Boxberg had previously served as executive board chair of Lufthansa Cargo AG.¹⁴⁴ However, the company's future still remains uncertain. How it will adapt to this new reality and what role it will play within the Lufthansa Group are questions that still need to be answered.

¹³⁴ See Lemmes (2016).

¹³⁵ See CAPA - Centre for Aviation (2016a).

¹³⁶ See Brussels Airlines (2018).

¹³⁷ See Fioretti & Koester (2018).

¹³⁸ See Fioretti & Koester (2018).

¹³⁹ See CAPA - Centre for Aviation (2016b).

¹⁴⁰ See Aero.de (2019); Lufthansa Group (2019).

¹⁴¹ See CAPA - Centre for Aviation (2016b).

¹⁴² See Eiselin (2019).

¹⁴³ See Orban (2023).¹⁴⁴ See Brussels Airlines (2023).

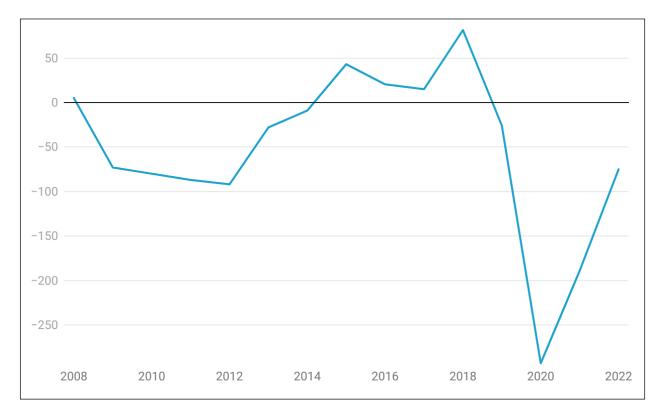


Figure 5: Operating results (million euros) for Brussels Airlines: 2008 to 2022.

Source: Data complied Orbis Database and CAPA - Centre for Aviation (2016b).

4.5 Additional Minority Stakes and Acquisitions

In addition to fully acquiring Air Dolomiti, SWISS, Austrian Airlines, and Brussels Airlines, Lufthansa has also made strategic minority investments and acquisitions in other international airlines. Two notable examples are British Midland International Airways (BMI) and JetBlue Airways.

In 1999, SAS Scandinavian Airlines decided to sell half of its 40% stake in BMI to Lufthansa. Over the years, Lufthansa acquired all remaining shares and became the sole owner of BMI by 2009. However, despite efforts to turn it around, BMI continued to operate at a loss. As a result, in September 2011, Lufthansa made the decision to put the airline up for sale, eventually, in 2012, selling its stake to International Airlines Group (IAG), which was formed in 2011 through the merger of British Airways and Iberia.¹⁴⁵

In 2007, Lufthansa also made a strategic investment by acquiring a minority stake of 19% in JetBlue Airways, a low-cost carrier based in the United States. As part of this partnership, it entered into a codeshare agreement with JetBlue; however, in March 2015, it decided to sell its stake through the early redemption of convertible Lufthansa bonds that could be exchanged for JetBlue shares.¹⁴⁶

¹⁴⁵ See Gopal et al. (2008); Hayward (2021); Cross (2023).

¹⁴⁶ See Sorkin & Bailey (2007); Gopal et al. (2008); Schlangenstein & Weiss (2015).

As of 2022, after all organic and inorganic growth, the Lufthansa Group's fleet amounted to more than 700 aircraft. Table 5 provides an overview of the group's fleet composition.

Table 5: Overview of the Lufthansa Group fleet as of December 2022.

Manufacturer/Type	LH	LX	os	SN	EW	LCAG	Group Fleet	of which lease	of which temporarily decom- missioned
Airbus A220		30					30		
Airbus A319	37			15	36		88	19	
Airbus A320	94	31	31	16	59		231	30	5
Airbus A321	78	9	6		1	2	96	3	4
Airbus A330	25	16		9			50	4	7
Airbus A340	34	9					43		7
Airbus A350	21						21	5	
Airbus A380	14						14		10
Boeing 747	27						27		
Boeing 767			3				3		
Boeing 777		12	6				18	2	
Boeing 787	2						2		
Boeing 777F						16	16	5	
Bombardier CRJ	28						28		
Embraer	26		17				43		
Total aircraft	386	107	63	40	96	18	710	68	33

LH - Lufthansa German Airlines, including regional airlines Germanwings and Discover

LX – SWISS, including Edelweiss

OS - Austrian Airlines

SN - Brussels Airlines

EW - Eurowings

LCAG - Lufthansa Cargo

Source: Lufthansa Annual Report 2022.

5. Does Lufthansa have a Clear Strategy?

5.1 Internationalization

In its 2022 annual report, Lufthansa stressed its objective to maintain its position as a leading European airline group by continuously expanding internationally. This expansion includes strengthening partnerships and further developing the global network.¹⁴⁷

In terms of export, Lufthansa, as well as its subsidiaries, always optimizes its portfolio of destinations by developing new routes and/or adding flights to already existing destinations. An example of this is SWISS's intention to add Košice in Slovakia and Cluj-Napoca in Romania as new routes from Zurich for the 2024 summer timetable.¹⁴⁸ In addition, Lufthansa resumed flights to Minneapolis and Raleigh-Durham in the U.S. in 2023, after a temporary suspension due to the COVID-19 pandemic.¹⁴⁹ Other routes, such as the connection from Frankfurt to Erbil in Iraq, have faced instability over the last decade, with services being periodically suspended and terminated.¹⁵⁰

Lufthansa's strategic alliance, Star Alliance, is also undergoing some changes. In an announcement in April 2024, SAS Scandinavian Airlines will leave Star Alliance and officially become a member of SkyTeam from September 2024.¹⁵¹ This move comes after Air France-KLM took a minority stake of around 20% in SAS in October 2023.¹⁵² This trend is set to continue, as Korean Air, a SkyTeam member, plans to acquire Star Alliance's Asiana Airlines. The acquisition has received approval from several countries, including Singapore, United Kingdom, China, and Japan, and won antitrust approval from the EU in February 2024.¹⁵³ However, regulatory approval in the U.S. is still required. Korean Air's CEO aims to finalize the deal in 2024, which would potentially result in Asiana Airlines moving from Star Alliance to SkyTeam.¹⁵⁴

Furthermore, Lufthansa plans to enhance the role of existing international joint ventures as well as establishing new joint ventures. With Asia still growing, Lufthansa aims to expand its presence further into the Asian markets, for instance in China and India.¹⁵⁵ In June 2023, Lufthansa and Air India confirmed that they were working towards a joint venture on the India-Frankfurt route. This partnership has the potential to create heightened competition for Middle Eastern airlines such as Emirates, Etihad, and Qatar Airways. These carriers have been successful in attracting transit passengers between Asia and Europe through their hubs in Dubai, Abu Dhabi, and Doha.¹⁵⁶

Following its previous international acquisitions, Lufthansa is also not stopping its appetite for growth. Currently, it is in the process of acquiring a minority stake in ITA

¹⁴⁷ See Lufthansa Group (2023).

¹⁴⁸ See Travelnews (2023).

¹⁴⁹ See Orban (2023).

¹⁵⁰ See AeroRoutes (2023).

¹⁵¹ See SAS (2024); SkyTeam (2024).

¹⁵² See Kotowski (2023b).

¹⁵³ See Korean Air (2024).

¹⁵⁴ See Chee (2024); Joshi (2024).

¹⁵⁵ See Business Standard (2023); Graue (2023).

¹⁵⁶ See Business Standard (2023); Majumder (2023).

Airways, the successor to Italy's loss-making airline Alitalia. In May 2023, Lufthansa agreed to purchase a 41% stake in ITA for €325 million, with an option to acquire full control between 2025 and 2026, should the latter achieve operational breakeven.¹⁵⁷ However, the deal still requires approval from the European Commission.¹⁵⁸ In March 2024, the Commission issued a statement of objection, expressing concerns such as reduced competition on specific routes and the potential strengthening of ITA's dominant position at Milan Linate Airport.¹⁵⁹ Lufthansa has since submitted a revised proposal, which is expected to be re-evaluated by July 2024.¹⁶⁰ In the meantime, the trade unions recognize the importance of this acquisition for business continuity and job security. By the end of May 2024, eleven trade unions, including Verdi and UFO¹⁶¹, had signed a letter urging the Commission to approve the takeover.¹⁶²

Fully acquiring ITA would give Lufthansa an even stronger foothold in the Italian market, which is its second largest foreign market after the U.S. While in the past, Air Dolomiti helped Lufthansa serve customers from Italy and connect them to hubs such as Frankfurt and Munich, the Lufthansa Group could in the future add Rome as an additional hub to its portfolio, thus strengthening its position in the global airline industry.¹⁶³ However, integrating ITA may also pose challenges as it has been struggling with high costs, low profitability, and competition from low-cost rivals, such as Ryanair.¹⁶⁴ Moreover, acceptance into Star Alliance will likely take some time, as ITA is currently part of SkyTeam – one of the two biggest rival alliances.¹⁶⁵ Additionally, some Lufthansa shareholders have criticized this diversified and complex brand strategy, with the passenger airlines business (i.e., Lufthansa and its subsidiary airlines) making a loss rather than a profit in 2022.¹⁶⁶

Lufthansa stressed that it is constantly scrutinizing the market, should other airlines be put up for sale. In September 2023, for example, the Portuguese government announced its plan to sell part of TAP's shares. Lufthansa is currently (at the time of writing this case study) one of the potential bidders, along with British Airways' parent group IAG and Air France-KLM.¹⁶⁷ One of TAP's strengths is its network of routes between Europe and Latin America, particularly in Brazil. This network could complement Lufthansa, which is still not as strong in Latin America as rivals such as IAG (particularly its subsidiary Iberia). The outcome of the TAP bid remains to be seen, but it is just one of several options for Lufthansa and its next internationalization steps.

¹⁵⁷ See Boon (2023); Koenen (2023b).

¹⁵⁸ See FAZ (2024); Koenen et al. (2024)

¹⁵⁹ See European Commission (2024).

¹⁶⁰ See Arvai (2024).

¹⁶¹ Verdi (die Vereinte Dienstleistungsgewerkschaft) is the German United Services Trade Union, which represents a wide range of service sectors, including aviation. UFO (Unabhängige Flugbegleiter Organisation e.V.) is a German trade union representing cabin crew.

¹⁶² See WirtschaftsWoche (2024).

¹⁶³ See Lufthansa Group (n.d.); Kotowski (2023a).

¹⁶⁴ See Koenen (2023a).

¹⁶⁵ See Koenen (2023b).

¹⁶⁶ See Koenen (2023a).

¹⁶⁷ See Koenen (2024a).

5.2 Portfolio Optimization

5.2.1 Rebranding of Discover Airlines

In parallel to its internationalization, Lufthansa also needs to take other strategic decisions. Does it wish to strengthen its activities in the leisure market? In the past, it took the decision to divest, selling, for instance, its subsidiary Condor in 2010¹⁶⁸, but it is currently taking a different route. Discover Airlines is now Lufthansa's leisure airline, focusing on long-haul vacation routes, as the parent company wants to fill a gap in its previous portfolio.¹⁶⁹ Previously called Eurowings Discover, the airline has never been part of Eurowings, but it was always a direct subsidiary of Lufthansa.¹⁷⁰

To distinguish Discover from Eurowings, in early 2023, Lufthansa rebranded the airline "Discover Airlines"¹⁷¹ in an attempt to clarify its brand identity and position it more clearly in the leisure market as a full-service airline competing directly with other leisure carriers, such as the former subsidiary Condor.¹⁷² Discover Airlines plans to expand its fleet, add more long-haul and short-haul routes, and develop Munich as a second hub in addition to Frankfurt.¹⁷³ Through this rebranding exercise, Lufthansa wishes to differentiate its offerings in order to serve the budget-conscious market through Eurowings and the leisure market through Discover Airlines.¹⁷⁴ However, both passengers and market observers feel that the positioning of the two companies and their brands is not fully clear. The situation may become even more confusing, since the Lufthansa Group declared that it could switch more routes in Germany and Europe away from Lufthansa crews. Instead, it may use Eurowings or, alternatively, a newly founded subsidiary airline, City Airlines, which would have lower cost structures similar to the former Lufthansa CityLine.¹⁷⁵

5.2.2 Refocusing on the Airline Business

In recent years, Lufthansa has refocused on its airlines business and its intention to sell activities other than passenger and cargo, such as the corporate business travel payment unit AirPlus.¹⁷⁶ In 2019, it sold LSG Sky Chef's European activities to Gategroup, a Swiss travel services company. In 2023, the remaining non-European part of the LSG group was sold to Aurelius, a European private equity firm.¹⁷⁷ The Lufthansa Group is also considering the sale of a minority stake in its technical services division, Lufthansa Technik,¹⁷⁸ even though it wishes to keep a foothold in this highly profitable business. Additionally, in August 2023, the group disclosed that it was seeking buyers for its

¹⁷¹ See Kotowski (2023c); Russel (2023).

¹⁶⁸ See Rieger (2005), p. 114; Airliners (2019).

¹⁶⁹ See Pearson (2021); Russel (2023).

¹⁷⁰ See Koenen (2023c).

¹⁷² See Koenen (2023e).

¹⁷³ See Kiani-Kreß (2023); Villamizar (2023).

¹⁷⁴ See Schasche (2023); Kotowski (2023c).

¹⁷⁵ See Nowack (2022); FAZ (2023b).

¹⁷⁶ See FAZ (2023a); Koenen (2023c).

¹⁷⁷ See Lufthansa Group (n.d.); FAZ (2023c).

¹⁷⁸ See Koenen (2023a).

insurance subsidiaries, namely the aviation insurance provider Delvag and the insurance broker Albatros.¹⁷⁹

While focusing on the airline business and divesting other businesses or even entire business units. Lufthansa is executing its multi-brand strategy in passenger airline business. The company's CEO, Carsten Spohr, has reiterated his commitment to the multi-brand strategy, commenting that it allowed the company to maintain market share during the pandemic.¹⁸⁰ Although the global airline industry regained 88% of its pre-pandemic capacity by mid-2023, airlines like Lufthansa continue to struggle to achieve profitability due to sustained reductions in air travel, particularly business travel, driven by a shift towards online meetings and other virtual collaboration tools as well as growing competition on long-haul routes.¹⁸¹ Despite these external challenges, Lufthansa Group plans to leverage its multi-brand portfolio to compete effectively across various market segments. Lufthansa as well as SWISS (and partially Austrian) concentrate on premium long-haul travel, while Eurowings caters to short-haul pointto-point flights. Additionally, the recently rebranded Discover Airlines and SunExpress, the latter of which is still a joint venture with Turkish Airlines, continue to operate in the leisure travel sector. Figure 6 displays brands within the Lufthansa Group, including Edelweiss Air – a subsidiary of SWISS.

Figure 6: Passenger airline brands in the Lufthansa Group in 2023.



Source: Based on Lufthansa Group (n.d.).

¹⁷⁹ See Krieger & Flottau (2023); FAZ (2023a).

¹⁸⁰ See Koenen (2023a); Lufthansa Group (2023).

¹⁸¹ See Albers & Rundshagen (2020); Koenen (2023d); Müller & Wittmer (2023).

6. Sustainability Challenges

Responding to sustainability challenges in general, as well as reducing carbon emissions, has become a pressing issue for airlines, in particular in some parts of the world. Figure 7 illustrates CO_2 emissions by country in 2022. Historically, the aviation industry has been exempted from climate mitigation efforts under the Kyoto Protocol, an international treaty that aimed to reduce greenhouse gas emissions.¹⁸² However, aviation now produces around 2.5% of global CO_2 emissions (see also Figure 8 on global CO_2 emissions in 2022, by sector), which is expected to rise to 3% by 2050 if no action is taken.¹⁸³

Ohine	20.7
China	30.7
United States	13.6
India	7.6
Russia	4.4
Japan	2.8
Indonesia	2.0
Iran	1.9
Saudi Arabia	1.8
Germany	1.8
South Korea	1.6
Canada	1.5
Mexico	1.4
Brazil	1.3
Turkey	1.2
South Africa	1.1
Australia	1.1
Italy	0.9
Poland	0.9
United Kingdom	0.9
Vietnam	0.9
Rest of the world	20.6

Figure 7: Carbon dioxide emissions worldwide in 2022, by country (%).

Source: Based on Statista (2023).

¹⁸² See Petersen (2008).

¹⁸³ See Abeyratne (2019); Ellerbeck (2022).

As such, the airline industry, as part of the broader aviation sector, is under increasing pressure to reduce CO_2 emissions.¹⁸⁴ The international airline association IATA has set a binding target for airlines to achieve net-zero carbon emissions by 2050 (see also Textbox 3).¹⁸⁵ However, this goal is not without challenges, particularly due to airlines' heavy reliance on fossil-based kerosene fuel.¹⁸⁶

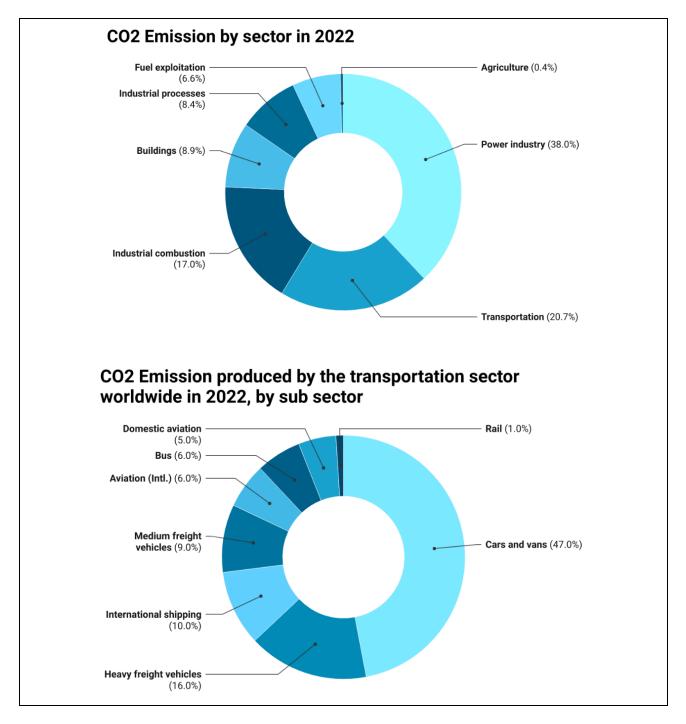


Figure 8: Carbon dioxide emissions worldwide in 2022, by sector.

Source: Based on Crippa et al. (2023) and IEA (2023).

¹⁸⁴ See Schwarz (2023).

¹⁸⁵ See IATA (2021); Nick & Thalmann (2022).

¹⁸⁶ See Jain et al. (2021); IATA (2023).

At the 77th Annual General Meeting of the International Air Transport Association (IATA) in Boston, U.S., on October 4th, 2021, a significant resolution was approved by IATA members. This resolution urges the global air transport industry to achieve netzero carbon emission by 2050. The approval of this resolution demonstrates the industry's commitment to aligning with the Paris Agreement, which aims to limit global warming to a maximum of 1.5°C.

"The world's airlines have taken a momentous decision to ensure that flying is sustainable. The post-COVID-19 re-connect will be on a clear path towards net zero. That will ensure the freedom of future generations to sustainably explore, learn, trade, build markets, appreciate cultures and connect with people the world over. With the collective efforts of the entire value chain and supportive government policies, aviation will achieve net zero emissions by 2050," said Willie Walsh, IATA's Director General.

Achieving net zero emissions will be a huge challenge. The aviation industry must progressively reduce its emissions while accommodating the growing demand of a world that is eager to fly. To be able to serve the needs of the ten billion people expected to fly in 2050, at least 1.8 gigatons of carbon must be abated in that year. Moreover, the net zero commitment implies that a cumulative total of 21.2 gigatons of carbon will be abated between now and 2050.

One important factor that can facilitate immediate action is the implementation of the International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). This scheme aims to stabilize international emission at 2019 levels in the short-to-medium term. The resolution approved by IATA emphasizes the continued support for CORSIA, a crucial step towards achieving net-zero emissions.

Source: IATA (2021).

One of the key challenges to overcome is the lack of regulatory frameworks and price incentives to support the widespread production and use of sustainable aviation fuels (SAFs). In response, the European Union has proposed the taxation of fossil-based kerosene fuel and the implementation of minimum SAF blending levels by 2025.¹⁸⁷ However, achieving unanimity among all member states on these plans has proven difficult. Without subsidies to bring down the production costs of SAFs and make them more competitive with kerosene prices, the large-scale adoption of sustainable fuels remains a challenge. Thus, it may become imperative for governments to provide coordinated policy support to encourage investments throughout the SAF supply chain.¹⁸⁸

Analysts from McKinsey evaluate the 2050 goal as "very ambitious" for the industry, citing challenges such as the high costs and scalability issues of sustainable aviation fuels, given their development lead times. "We need to accelerate sustainable fuel development and efficient aircraft while investing in novel propulsion", said Robin Riedel from McKinsey's Future Mobility Center, noting uncertainties but emphasizing

¹⁸⁷ See Brandt et al. (2022).

¹⁸⁸ See Stawski (2023).

the need for faster innovation across fuels, designs, and technologies working together.¹⁸⁹

Lufthansa, as a leading player in the airline industry, has proactively taken steps to address the challenge of reducing emissions. The company has made a commitment to utilize only SAFs by 2050 and has set a target to source over 800,000 tons annually by 2030 through strategic partnerships with fuel producers.¹⁹⁰ Additionally, it has introduced commercial initiatives to curb emissions, such as offering Green Fares from February 2023 to allow passengers to offset their carbon emissions and achieve carbon-neutral travel.¹⁹¹

While praised for their potential contribution to emission reduction efforts¹⁹², Lufthansa's Green Fares have faced criticism from environmental groups, who argue that offsetting is ineffective in terms of tackling climate change, as it often fails to deliver promised reductions, can increase emissions, and allow airlines to continue polluting without changing practices.¹⁹³ Some accuse Lufthansa of "greenwashing" with Green Fares – using them as a marketing ploy to appear more eco-friendly than they really are.¹⁹⁴

Despite these initiatives, Lufthansa faces a crucial challenge in terms of internationalizing its sustainable efforts. While SAFs are currently more readily available and affordable for short-haul flights, it is essential for Lufthansa to make them accessible for long-haul flights, which represents a significant share of its international airline business.¹⁹⁵

In addition to emissions and fuels, Lufthansa must also address other environmental challenges, including noise pollution, waste management, and resource consumption.¹⁹⁶ Considering these multifaceted challenges, the following question arises: Will Lufthansa truly overcome the sustainability hurdles? Or, to be more provocative, should airlines like Lufthansa cease to exist?

¹⁹¹ See Lufthansa Group (n.d.); Martiny (2023).

¹⁸⁹ See McKinsey & Co. (2023).

¹⁹⁰ See Merkur (2023).

¹⁹² See Airliners (2023); Caswell (2023).

¹⁹³ See Globetrender (2023); Shadel (2023).

¹⁹⁴ See Caswell (2023).

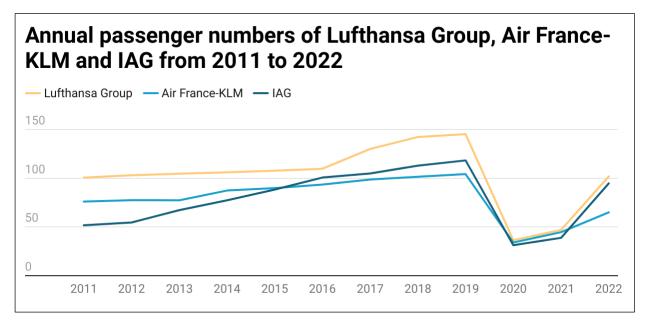
¹⁹⁵ See Hepher et al. (2023); Massy-Beresford (2023).

¹⁹⁶ See Paraschi & Poulaki (2021), p. 31.

Questions

- 1. Table 1 in the case study provides an overview of the 10 leading players in the airline industry.
 - a) The first three players hail from the U.S. Please find some reasons to explain the dominance of U.S. airlines at the top of the list.
 - b) Please carry out some additional research and complement the list by considering the next 10 players in the industry. When it comes to the countries of origin of the top 20 airlines, can you identify a pattern? Please explain your reasoning.
- 2. When analyzing an industry, Porter's famous Five Forces framework can be used. By drawing on Porter's framework, please:
 - a) Conduct an analysis of the airline industry in the U.S.
 - b) Conduct an analysis of the airline industry in Europe.
 - c) Compare your answers to a) and b) by drawing conclusions on the similarities and differences you have identified.
- 3. Lufthansa has a history of around 100 years.
 - a) Please summarize some key elements in Lufthansa's development between the 1920s and the 1990s.
 - b) Please argue in how far the past of a company, i.e., its history, can have an impact on its current situation, providing some examples from Lufthansa.
- 4. Lufthansa has become one of the largest passenger airline groups in the world.
 - a) Conduct a SWOT analysis of Lufthansa in its home market and in two other countries of your choice.
 - b) Please compare the results of your SWOT analyses and draw conclusions on the similarities and differences you have identified.
- 5. Discuss how deregulation in the airline industry, particularly in the U.S. and Europe, has impacted Lufthansa's international strategy. What adjustments did Lufthansa have to make to survive and develop?

6. While formerly the European airline industry was highly fragmented, in recent years, three main airline groups have emerged. The following graph shows the development of passenger numbers for Lufthansa and its competitors Air France-KLM and IAG in the period 2011 and 2022.



Source: Generated based on data from Statista.

- a) In 2011, IAG's annual passenger numbers were about half of Lufthansa Group's. However, IAG has experienced significant growth in annual passenger numbers over the past decade. As of 2022, its annual passenger numbers were similar to those of Lufthansa Group. What factors may have contributed to the substantial growth in annual passengers for IAG since its founding in 2011?
- b) Three major airline groups nowadays dominate the European airline industry. Please do your own research and discuss potential reasons for their dominance.
- 7. One of the market entry strategies used by the Lufthansa Group is export.
 - a) Please explain, in your own words, under what circumstances a flight offered by an airline, such as Lufthansa, can be considered an export.
 - b) What differences do you see between the export of physical goods and flight services, and how does this affect the internationalization of the Lufthansa Group? Please argue in detail.

- 8. Analyze the drivers behind Lufthansa's early expansion.
 - a) During its early expansion (1970s-1990s), Lufthansa faced various challenges. Identify a few of these challenges and analyze their impact on the airline's expansion strategy. Consider both the positive and negative consequences of these challenges.
 - b) How did external conditions and Lufthansa's internal capabilities influence its internationalization strategy during its early expansion?
- 9. Lufthansa was a founding member of the Star Alliance in 1997, partnering initially with United Airlines, SAS, Air Canada, and Thai Airways International.
 - a) What were the main motivations for Lufthansa to engage in such a strategic alliance?
 - b) Why did Lufthansa select these specific partners to launch Star Alliance?
 - c) In what way can a strategic alliance improve the performance of each member airline?
- 10. Strategic alliances can also have disadvantages and problems.
 - a) Please explain the disadvantages and problems related to strategic alliances in the airline industry.
 - b) Please develop some solutions on how, in a strategic alliance, these disadvantages could be weakened and how the problems could be partially overcome.
- 11. In early 2024, with Air France-KLM taking a minority stake in Scandinavian Airlines (SAS), rumors circulated that SAS might leave Star Alliance and become part of SkyTeam.
 - a) For Lufthansa, what implications could this move by SAS from Star Alliance to SkyTeam have?
 - b) Would you see any need for a reaction by Lufthansa? Please argue in detail.
- 12. In addition to strategic alliances, Lufthansa has created joint ventures with other airlines, primarily Star Alliance partners. Examples include SunExpress with Turkish Airlines and the Atlantic Joint Venture (for instance with Air Canada and United Airlines).
 - a) Please explain the general advantages and disadvantages of a joint venture as an international market entry strategy.
 - b) Please argue which of these advantages and disadvantages are also relevant in the case of Lufthansa's joint ventures.

- 13. Lufthansa has grown into one of the world's largest airline groups, partially through acquisitions of other airlines.
 - a) What are some of the general advantages and disadvantages of using acquisitions as a growth strategy in the airline industry?
 - b) What strategic reasons did Lufthansa have for acquiring SWISS? Please also relate these reasons to the advantages that acquisitions can have in general.
 - c) Initially, Lufthansa did not acquire SWISS outright but rather purchased a partial stake. What were the reasons for this approach?
- 14. Lufthansa acquired Austrian Airlines. If you had been a consultant to Lufthansa in 2008 and 2009, would you have recommended to prepare a transaction leading to a minority stake and later to an acquisition of Austrian Airlines? Please back up your answer with appropriate arguments.
- 15. Since 1999, Lufthansa has acquired several European airlines, including SWISS, Austrian Airlines, and Brussels Airlines.
 - a) Why did Lufthansa acquire these airlines (and not others)? What attributes qualified the companies as appropriate acquisition targets?
 - b) What role did national and corporate culture likely play in Lufthansa's acquisition and integration rationale?
- 16. In 2016, Lufthansa Group acquired full ownership of Brussels Airlines. By 2018, it aimed to integrate Brussels Airlines into its then low-cost segment, namely the Eurowings Group.
 - a) What strategic benefits did Lufthansa expect from having full control over Brussels Airlines?
 - b) Please critically evaluate the decision to integrate Brussels Airlines into the Eurowings Group.
 - c) Imagine you had been the CEO of Lufthansa Group in 2016 at the time of the Brussels Airlines acquisition. What strategies would you have proposed to optimize the integration process, ensuring strategic, operational, and cultural alignment while reinforcing Lufthansa Group's market presence?

- 17. With the rebranding of "Eurowings Discover" to "Discover Airlines", the Lufthansa Group aims to grow its market presence in the leisure market segment, distinguishing it from Eurowings' focus. However, industry experts argue that this could contribute further to brand confusion.
 - a) How does the Lufthansa Group position its core airlines (Lufthansa, Swiss, Austrian, Brussels Airlines)?
 - b) How does the Lufthansa Group position Eurowings and Discover Airlines? What specific strategies can be implemented to ensure clear differentiation for travelers?
- 18. The Lufthansa Group is also active in the cargo business. Please answer the following questions:
 - a) What are the reasons for an airline company not just serving as a passenger airline but also carrying out cargo business activities?
 - b) Please do your own research and find out how important the cargo business is for Lufthansa in comparison to its passenger business (for instance in terms of revenues and profits). How does Lufthansa compare to major competitors? You can focus on three competitors of your own choice.
- 19. The Lufthansa Group is streamlining its activities by divesting non-core businesses in order to refocus on its core airline business.
 - a) In your interpretation, what motivated Lufthansa to divest from non-core units like AirPlus, LSG, and insurance subsidiaries?
 - b) What does Lufthansa's refocus on core airline business tell us about its future strategic goals?
- 20. At the 70th Annual General Meeting in 2023, Lufthansa CEO ("Vorstandsvorsitzender") Carsten Spohr reaffirmed the group's dedication to its multi-brand strategy, which was integral to maintaining market share throughout the pandemic's disruptions to the industry.
 - a) Lufthansa CEO Carsten Spohr emphasizes the importance of the multi-brand strategy for maintaining market share. Please consider the current landscape in the airline industry and discuss the potential benefits and risks of this strategy as highlighted by Spohr.
 - b) How can Lufthansa improve and adapt its multi-brand strategy to compete in the airline industry more effectively? What recommendations would you have for the group?

- 21. The airline industry is heavily criticized for its environmental impact. This necessitates the careful integration of sustainability into Lufthansa's strategy.
 - a) Identify and discuss the three most pressing environmental sustainability challenges faced by firms in the global airline industry.
 - b) Propose three specific strategic initiatives that Lufthansa could implement to address these sustainability challenges in relation to the environment.
 - c) How does Lufthansa's approach to environmental sustainability compare to that of leading Gulf carriers?
- 22. As in Textbox 3, the International Air Transport Association (IATA) has set a target for the airline industry to achieve net-zero carbon emissions by 2050 a commitment that presents both challenges and opportunities for Lufthansa.
 - a) Please critically assess Lufthansa's strategies and actions in response to the IATA's commitment to achieving net-zero carbon emissions by 2050. Highlight the company's current efforts and any announced plans.
 - b) Identify potential challenges Lufthansa may encounter when striving to meet this target. Discuss strategies that could be employed to overcome these challenges.
- 23. Can Lufthansa continue its internationalization in the face of sustainability challenges? Analyze how the company can integrate sustainability into its international strategy.
 - a) What market entry strategy would be most suitable for internationalizing while ensuring sustainable practices? Please provide a detailed argument.
 - b) Analyze how Lufthansa can leverage its international presence to promote sustainable practices and contribute to global sustainability goals. Discuss specific initiatives and strategies Lufthansa could implement.
- 24. Please do some research and look for examples where a switch of market entry strategies took place. You can provide examples from any industry.
 - a) In the case of Lufthansa, was there a switch of market entry strategies? Please explain, using evidence from the case.

- 25. Lufthansa has also established new wholly-owned subsidiaries (greenfield investment) in foreign markets. For example, it founded a subsidiary in Italy in 2009, namely Lufthansa Italia, albeit it ceased operations in 2011, just two years later.
 - a) Analyze why Lufthansa may have initially decided to establish a greenfield subsidiary in Italy.
 - b) While Lufthansa did not provide detailed information, what could have been some potential reasons for it not continuing with its plans for Lufthansa Italia?
- 26. Dunning and Lundan (2008) differentiate four key motives that drive firms to internationalize: resource-seeking, market-seeking, efficiency-seeking, and strategic asset-seeking objectives.
 - a) Please provide specific examples of Lufthansa's market-seeking internationalization.
 - b) Please discuss whether and how Lufthansa's international moves have been motivated by resource-seeking.
 - c) Please explain where you see efficiency-seeking in Lufthansa's internationalization.
- 27. Ansoff's growth matrix outlines four core strategies for business expansion: market penetration, market development, product development, and diversification.
 - a) Briefly explain the four growth strategies in Ansoff's matrix.
 - b) Please apply Ansoff's strategies to Lufthansa and argue what strategies the company has used in the past.
 - c) You have the chance to provide recommendations for the further expansion of the Lufthansa Group. Would you recommend it to prioritize market penetration, product development, market development, or diversification in the future? Support your recommendation with logical reasoning.
- 28. Analyze the timing strategies that Lufthansa has chosen for its international expansion.
 - a) Briefly explain sequential and parallel strategies within timing strategies.
 - b) Has Lufthansa adopted a sequential or a parallel strategy, or both? Please provide examples in your answer.
 - c) Based on the historical evidence relating to Lufthansa's timing strategies, discuss their potential advantages and disadvantages.

- 29. The Lufthansa Group has become quite a complex organization.
 - a) Please identify the reasons why the group is more complex than a low-cost airline, such as easyJet or Ryanair.
 - b) Please develop some arguments to justify why greater complexity is warranted.
 - c) Please make suggestions relating to how to respond better and handle the complexities identified above.
- 30. As reported by *Handelsblatt* on February 12th, 2024 (pages 20-21), Lufthansa CEO Carsten Spohr declared at an internal conference, 'We can only counter these endeavors with one answer: premium. Premium is our only chance'.
 - a) In 2023, most airlines were attempting to rebound from the effects of the COVID-19 pandemic. Low-cost carriers such as Ryanair recovered more rapidly. Please explain why they were able to bounce back faster than full-service airlines like Lufthansa.
 - b) Given the (competitive) environment, what motivates Carsten Spohr to exploit the premium opportunity?
- 31. In 2017, Lufthansa was awarded a prestigious five-star rating by Skytrax, a renowned British airline rating company. However, in 2022, the German airline lost its coveted status, slipping to a Skytrax four-star rating.
 - a) To gain a broader perspective, research and list the current top ten airlines ranked by Skytrax.
 - b) Airlines such as Japan Airlines, Singapore Airlines, and Qatar Airways have consistently performed well in the Skytrax rankings. Compare Lufthansa with one of these top performers and identify areas where the chosen airline outperforms Lufthansa.
 - c) Lufthansa wants to regain its five-star rating. Please suggest specific strategies and initiatives that it could adopt to reach the five-star rating again.
- 32. Imagine that you are a consultant to the Lufthansa Group.
 - a) Evaluate Lufthansa's current strategic positioning in the global airline industry.
 - b) Propose a strategic roadmap for Lufthansa to enhance its competitive advantage and achieve sustainable growth in the next 5-10 years.
- 33. The case study ended by asking whether "airlines should cease to exist". Please answer this question by discussing arguments for and against this idea.

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