Double crisis effect on Finnair’s network strategy plan

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Abstract

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This bachelor thesis investigates the impact of the double crisis on Finnair's network strategy plan, with a focus on the airline's dependency on Asia traffic revenue. The double crisis refers to the COVID-19 pandemic beginning in 2020 and the Russian airspace closure resulting from the Russo-Ukraine war in 2022. The study examines Finnair's Financials, with focus on key metrics from 2017 to 2022 to analyse the implications of these crises on the company's financial performance and overall network strategy. As this research is mainly compiled from key metrics gathered from Finnair’s Annual Reports 2017-2022 the results are presented visually in graphs.

Key words
Finnair, Network Strategy, COVID-19, Russian Airspace closure

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1 Introduction

History has shown the aviation industry's vulnerability to various economic downturns and shocks but no crisis has hit harder than COVID-19 (PhD 2021). These past three years have proved to be difficult due to the double crisis COVID- 19 and the ongoing geopolitical crisis in Ukraine. This double crisis has great impact on European carrier's operations due to the Russian airspace closure.

Finnair, the largest airline in Finland, has faced unprecedented challenges in recent years, chiefly the double crisis consisting of the COVID-19 pandemic from 2020 onwards and the Russian airspace closure in 2022 due to the Russo-Ukraine war. These crises have profoundly disrupted global aviation, with airlines such as Finnair having to adapt swiftly to survive. Finnair's network strategy plan, which has largely depended on Asia traffic, was particularly impacted, necessitating a comprehensive reevaluation of its strategy.

This research will analyze Finnair’s short and long-haul operations, based on Finnair’s financials and traffic performance data. This research will adopt a quantitative approach, focusing on the analysis of key financial metrics such as traffic revenue, EBIT (Earnings Before Interest and Taxes), and net debt from 2017 to 2022. To analyze the effects of the COVID-19 pandemic and the Russian airspace closure on Finnair's financial performance, with a focus on traffic categories. These above-mentioned metrics will help assess Finnair's financial health and the effectiveness of its network strategy plan during the double crisis period.

This research aims to critically analyze the impact of the double crisis on Finnair's network strategy plan. This leads to the research question: How did the double crisis affect Finnair's traffic networks revenue, EBIT, RPK, ASK, RASK, and net debt from 2017 to 2022? From this research recommendations for strategic adjustments for Finnair to mitigate similar future crises and maintain financial stability will be made.

This research focuses on Finnair's Asia traffic as a critical part of its network strategy plan. While Finnair operates in other regions, including Europe and North America, the Asia traffic has been chosen due to its strategic importance to the airline. Furthermore, the study is delimited by the time period of 2017 to 2022, which provides a comprehensive view of Finnair's performance before, during, and after the onset of this double crisis.

2 Commercial aviation in general

Unlike previous transportation systems, which evolved over centuries, aviation developed in less than a hundred years (Linden 2002). Commercial aviation can be said to have begun with air mail services. Early airlines expanded as a result of the United States Postal Service's establishment of the first regular airmail service in 1918 (Leary 1985). Passenger services ramped up as well in the 1920s. International passenger flights began during this era. The first regular international passenger flight between London and Paris was launched by British Airways, then known as Aircraft Transport and Travel Limited, in 1919 (Davies 2004)

With the debut of all-metal monoplanes like the Douglas DC-3 and the Boeing 247, commercial aviation experienced tremendous breakthroughs in aircraft technology during the 1930s (Davies 2004). These aircraft contributed to the expansion of the business by providing enhanced performance, larger passenger capacity, and greater operational efficiency (Taneja 2010). The development of commercial aviation was momentarily halted by World War II. The availability of surplus military aircraft and the emergence of new markets led to the industry's explosive rise after the war (Heppenheimer 1995). The regulatory framework controlling international air transport was established with the signing of the Chicago Convention on International Civil Aviation in 1944, thus fostering the growth of the sector (Havel 2009).

Jet engines were first used in commercial aviation in the 1950s, revolutionizing it and enabling quicker and more effective air travel. The Jet Age officially began in 1952 with the de Havilland Comet, the first commercial jet aircraft in history (Davies 2004). Airlines were able to offer long-haul flights at faster speeds and with more comfort thanks to later jet-powered aircraft like the Boeing 707, Sud Aviation Caravelle, and the Douglas DC-8 (Heppenheimer 1995).

Significant changes to the regulatory framework controlling commercial aviation occurred in the 1970s and 1980s. In the United States, the Airline Deregulation Act of 1978 removed numerous governmental limits on travel options and costs, fostering competition and paving the way for the emergence of low-cost airlines like Southwest Airlines (Borenstein 2011). Similar deregulatory policies were put in place in Europe in the 1990s, which aided in the expansion of low-cost airlines like Ryanair and easyJet.

The last few decades have seen a steady evolution of the commercial aviation sector. Leaps in aircraft variety such as the Airbus A380 and Boeing 787 Dreamliner have improved operational effectiveness and passenger comfort since they were introduced. The industry has also undergone significant consolidation due to mergers and acquisitions and the establishment of international airline

alliances like Star Alliance, oneworld, and SkyTeam that have increased route networks and provided passengers with better connectivity (Gudmundsson 2001)

With the dawn of regulatory changes during the jet age, many differing airline business models were created. Having a well-defined business strategy can provide many positive benefits to a company. A clear strategy provides a direction and focus for the organization, enabling it to align its resources and efforts toward achieving its goals. A good business strategy can also present a competitive advantage. A well-adjusted business model also helps anticipate potential risks and improve risk management.

2.2 Airline business strategy

Historically the airline business strategies developed during the 70s and 80s. This was the time aviation business was developing fast and carriers were focused to open new destinations. As demand increased and traveling became more affordable for people to fly Countries started to open their skies and airlines were able to increase flying. Firstly, passenger airline strategies in the US evolved into national and international operations. Historically flying was considered a luxury but as the years went by competition in the sector drove airlines to adapt thus forming different types of airline business strategies

2.2.1 Legacy carrier – full-service carrier

Legacy carrier is a term used in the airline industry to refer to established and older airlines that have been operating for a long time, typically having a strong brand and a wide network of routes. These carriers often have a significant market share, larger fleets, and a more extensive range of services compared to newer airlines. They are also usually associated with full-service airline practices, such as offering meals, drinks, and in-flight entertainment as part of the ticket price. Full-service carriers offer a large variety of amenities as incentives to attract customers.

2.2.2 Low-cost carrier – no-frills

A low-cost carrier (LCC) is an airline with a business strategy that focuses on giving customers cheap tickets and bare basic amenities. LCCs often provide a basic service, with extra fees charged for amenities like checked baggage, meals, and seat assignments. To the consumer low-cost carrier business model aims to provide reasonably priced air travel by lowering operating costs and maximizing efficiency. There are a couple of ways LCCs manage to lower their operating costs compared to other airlines. LCCs fly point-to-point to secondary airports. What this means is that LCCs typically focus on direct flights between specific city pairs, rather than routing passengers through hub airports. LCCs also utilize their aircraft more. Higher aircraft usage maximizes

efficiency and revenue. Traditionally LCCs operate one type of aircraft in their fleet to simplify pilot training costs as well as maintenance costs.

2.2.3 Hybrid carrier – hub and spoke

The competitive nature of the airline industry has forced some legacy airlines to cut services and introduce ancillary revenue streams. Like the name suggests hybrid carrier has elements from low-cost carriers but still have some legacy carrier services. Hybrid carriers aim to offer passengers a more comfortable and convenient travel experience than traditional low-cost carriers, while still maintaining a focus on cost efficiency Like legacy carrier hybrid carriers typically operate on a hub-and-spoke system. This business strategy involves routing flights through one or more central airports (hubs) to connect passengers to a wider range of destinations.

3 Finnair

Located in Finland, Finnair is the flagship carrier of Finland. Finnair is a premium airline that has thrived by the airline's strategy centered on leveraging Helsinki's geographical advantage as a transit hub for passengers traveling between Europe and Asia. This has historically resulted in higher passenger volumes, translating to increased revenue and profitability for the company.

3.1 History

The progression of commercial aviation can be seen throughout Finnair's history as Finnair is one of the oldest airlines still operating. In the 1920s Finnair, then known as Aero oy began its operations by delivering mail from Helsinki to Tallinn. Like other airlines, Finnair's operations during world war I were limited since its aircraft were on military duty and operated only flights from Vaasa to Stockholm. After the war, the Finnish government became the majority shareholder of Aero oy.

During World War II, Finnair played a vital role in transporting supplies and personnel between Finland and Germany (Finnair 2021). After the war, the airline focused on expanding its international routes and modernizing its fleet. The 1950s and 60s marked the start of the jet age. The jet age in commercial aviation was a gigantic leap forward fueled by the technological advancements of the second world war. Finnair's first jet aircraft was the Sud Aviation Caravelle and this expanded the carriers' European reach. In 1968, the company changed its name from Aero O/Y to Finnair, reflecting its growing status as a global airline (Finnair 2021). Finnair began to offer transatlantic flights and became one the first airlines in Europe to operate the Douglas DC-8 jetliner.

Throughout the 70s and 80s, Finnair continued to expand its operations, opening new routes to Asia and investing in more modern aircraft. The airline expanded its network of foreign routes by introducing modern aircraft including the Douglas DC-8 and DC-9 (Finnair 2021). Finnair launched a connection between Helsinki and Beijing in 1980, becoming one of the first European airlines to start direct flights to China during this time (Air Transport World 2014). In addition, Finnair profited from the European aviation market's deregulation by growing its network of flights within Europe and adding additional routes to North America (Airliner World 2017).

3.2 Asia strategy

Finland's geographic location plays a crucial role in Finnair's Asia network strategy. Situated in the northern part of Europe, Finland serves as a strategic gateway between the continents of Europe and Asia. Helsinki, the capital city of Finland, is positioned almost directly between major European and Asian cities. This allowed Finnair to provide shorter and more direct routes between these two continents. This advantageous location enabled Finnair's hub and spoke model to offer competitive

and efficient travel options for passengers and businesses, as well as capitalize on the growing demand for air travel between Europe and Asia.

Finnair's Asia strategy benefited from this unique location in several ways. First, the shorter flight routes lead to reduced travel times, making Finnair a preferred choice for time-sensitive travellers. The convenient location also resulted in lower fuel consumption, leading to cost savings and a reduced environmental impact.

Second, the airline can utilize more fuel-efficient aircraft for its long-haul flights, further enhancing its competitive edge and sustainability efforts.

3.3 Financials

Finnair's financial data shows that the airline has been impacted by the COVID-19 pandemic. In 2020, Finnair reported revenue of €0.5 billion, which was a 74% decrease from the previous year (Finnair 2020). The airline also reported an operating loss of 464,50 million, which was a significant decline from the €162,8 million operating profit reported in 2019 (Finnair 2020). Finnair's passenger traffic decreased by 83.5% in 2020 due to travel restrictions and a decline in demand for air travel.

Finnair's financials reflect the overall airline market situation during the COVID-19 pandemic (Dube 2021). Airlines around the world have been hit hard by the pandemic, with travel restrictions and reduced demand for air travel. According to the International Air Transport Association (IATA), the global airline industry lost $126 billion in 2020 due to the pandemic. The industry is expected to continue to face challenges in 2021, with IATA forecasting a net loss of $47.7 billion for the year (IATA, 2022).

To mitigate the impact of the pandemic, Finnair has taken several measures to reduce costs and preserve cash. The airline has reduced its capacity by 85% compared to 2019 levels and implemented a cost-saving program that aims to save €200 million annually (Finnair 2020). Finnair has also secured financing to strengthen its liquidity position, including a €400 million hybrid bond issuance from the state of Finland and a €150 million loan from the Nordic Investment Bank (Finnair 2021).

Finnair's financials indicate that the airline is taking the necessary steps to navigate the challenging airline market situation. The airline's cost-saving program is expected to help it reduce costs and improve its financial performance.

In conclusion, Finnair's financials reflect the challenging airline market situation during the COVID-19 pandemic. The airline has been impacted by reduced demand for air travel and travel restrictions. Finnair's financial performance has declined significantly, with the airline reporting an operating loss of €757 million in 2020. However, Finnair is taking the necessary steps to navigate the crisis, including reducing costs and improving its liquidity position. These measures should help Finnair to improve its financial performance as the airline industry recovers from the pandemic.

3.4 SWOT and business model canvas

SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats. It's a strategic planning tool used to identify and analyze these four key elements in a project or business context. It's widely used to develop strategic plans by assessing the organization's internal capabilities as well as its external environment. For this research, it's important to build a SWOT to better analyze Finnair's network strategy's internal capabilities and its external environment.

Strengths • Strategic Geographical Position: Finnair's location in Northern Europe is ideal for flights between Europe and Asia, leading to shorter routes and fuel efficiency. • High-Quality Service: Finnair is known for its high-quality service, which enhances its reputation and customer loyalty. • Strong Brand: Finnair is a well-recognized brand in the aviation industry, especially in the Nordic region.	Weakness • Dependency on Asia Traffic: Finnair's network strategy is heavily dependent on Asia traffic, making it susceptible to disruptions in this region. • High Operational Costs: Like most airlines, Finnair has high operational costs, which can be challenging during periods of reduced demand. • Increased Debt: The double crisis has led to an increase in Finnair's net debt, affecting its financial health.
Opportunities • Diversification of Network Strategy: Finnair can diversify its network strategy to include other profitable regions, reducing its dependency on Asia traffic. • Sustainability Initiatives: Given increasing environmental concerns, Finnair	Threats • Double Crisis: The COVID-19 pandemic and the Russian airspace closure have drastically reduced travel demand and disrupted Finnair's operations.

can capitalize on its sustainability initiatives to attract environmentally conscious customers. • Digitalization: Finnair can further invest in digitalization to improve customer service and operational efficiency.	• Geopolitical Tensions: Geopolitical issues, like the Russo-Ukraine war, lead to airspace closures, affecting Finnair's network strategy. • Increasing Competition: The aviation industry is highly competitive, and Finnair faces competition from both traditional airlines and low-cost carriers.

Figure 1. SWOT analysis of Finnair's network Strategy (adapted from Finnair Annual Reports 2017-2022)

Like the SWOT strategic planner, another strategic management template can be used to further understand and analyze Finnair's network. The Business Model Canvas provides a comprehensive view of Finnair's business and is a useful tool for aligning activities and illustrating potential trade-offs. Figure 2 contains a business model canvas of Finnair.

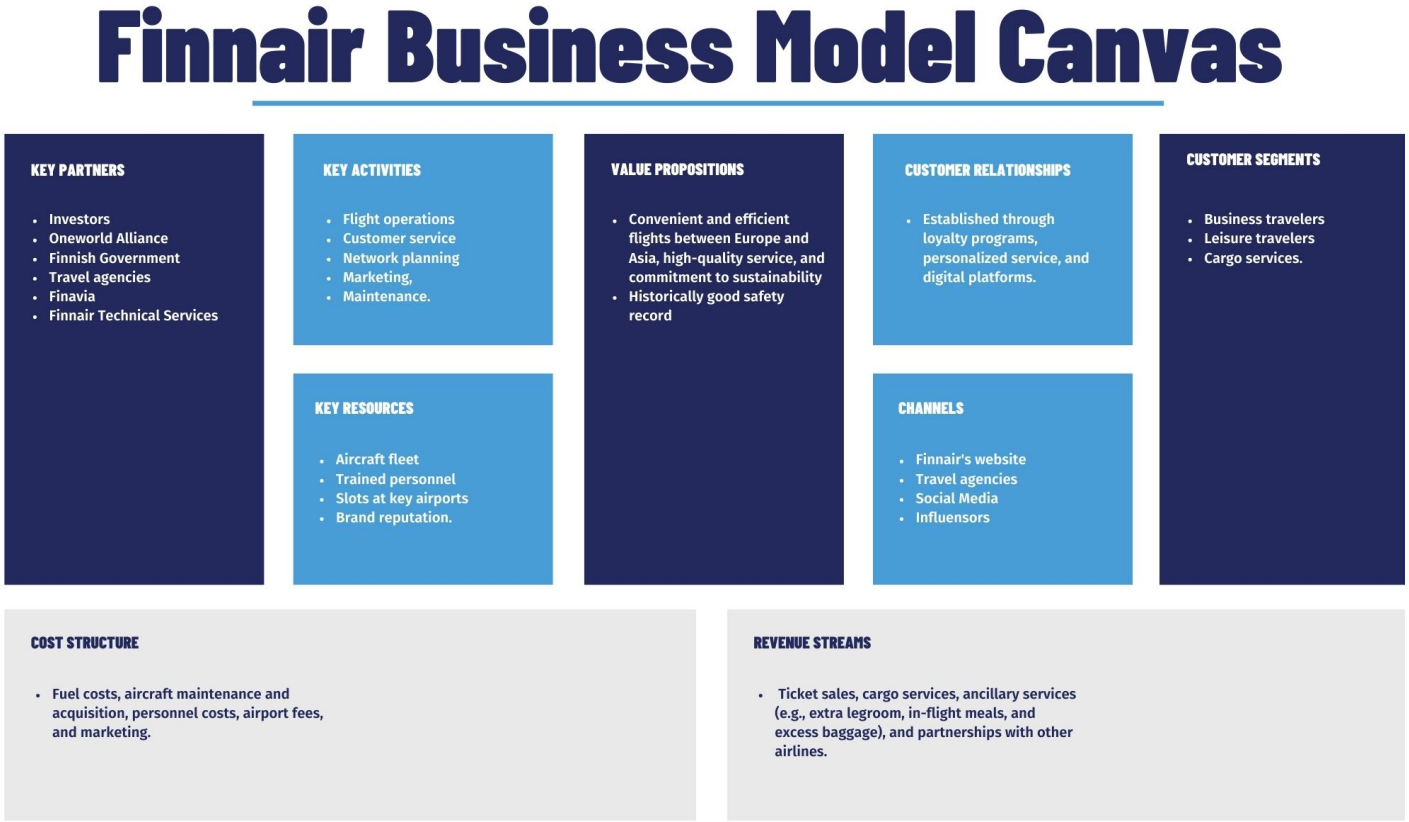


Figure 2. Finnair Business Model Canvas (adapted from Finnair Annual Reports 2017-2022)

4 Double crisis effect on airline business

The airline industry, known for its resilience in the face of numerous economic downturns and systemic shocks, has encountered an unprecedented 'double crisis' that has severely impacted its operational fabric. In the ensuing sections, we delve deeper into these twin crises and their implications for the airline business.

4.1 Definition

History has demonstrated the vulnerability of the aviation industry to various catastrophes and crises (Ph.D. 2021). Being a key component in global trade and transport leaves the aviation industry open to external challenges beyond the industry's control. These challenges can vary anywhere from global financial crisis, to biosecurity hazards and wars. The aviation industry faced challenges from the 1973 oil crisis, the Iran-Iraq War in the early 80s, the Gulf Crisis in the early 90s, the 1997 Asian Financial Crisis, the 9/11 terrorist attacks, and the 1998-1999 financial crisis (PhD 2021). Notably, biosecurity threats have also frequently affected the aviation industry.

The term "double crisis" refers to the combined impact of two major events that have significantly affected the global aviation industry in recent years. The first crisis emerged in the form of the COVID-19 pandemic, which began in late 2019 and intensified throughout 2020, leading to widespread travel restrictions, lockdowns, and a severe reduction in demand for air travel. The second crisis arose in 2022 due to the Russo-Ukraine war, which resulted in the closure of Russian airspace, forcing airlines to seek alternative routes and further disrupting the already struggling aviation industry

4.2 Global Airline performance

The COVID-19 pandemic resulted in widespread lockdowns, travel restrictions, and reduced demand for air travel, leading to a significant decline in global airline performance. The International Air Transport Association (IATA) reported a revenue loss of over $370 billion in 2020, with passenger traffic plummeting by 66% (IATA 2021). Airlines worldwide struggled to adapt to the new reality, implementing cost-cutting measures, fleet optimization, and government aid-seeking strategies.

In addition to the financial impact, the double crisis led to widespread operational disruptions. The COVID-19 pandemic forced airlines to ground large portions of their fleets. The subsequent closure of Russian airspace further exacerbated these disruptions, as airlines had to adjust their routes, resulting in increased flight durations, operational costs, and reduced flight frequency.

4.3 Outlook for future

Despite the severe challenges posed by the double crisis, the global airline industry has shown signs of recovery, supported by the gradual reopening of borders, the rollout of vaccines, and the adaptation of airlines to new operational realities.

However, the recovery is expected to be uneven, with varying degrees of success among different regions and business models. For example, airlines from China are not affected by the Russian air-space closure but most other Asian airlines are affected.

The short- to medium-term outlook for the global airline industry remains uncertain. In 2021 IATA forecasting a return to pre-pandemic traffic levels by 2023-2024 (IATA 2021) but in 2022 IATA fore-casts a slightly slower return to pre-pandemic levels. The chart below has IATA's forecast on global air passengers.

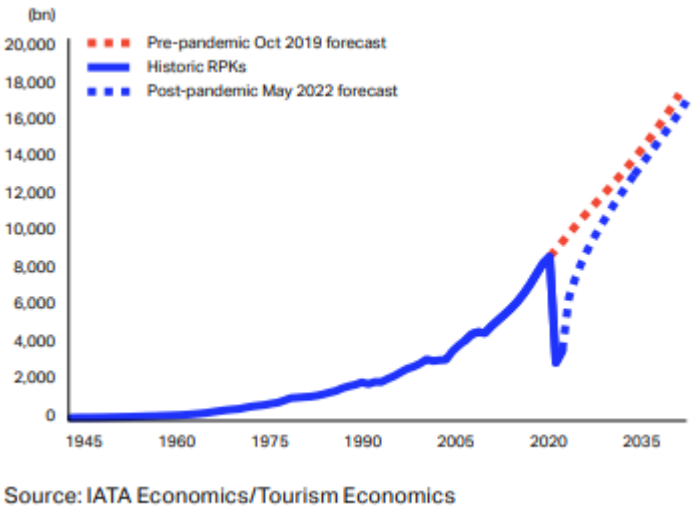


Figure 3. Global Air Passenger Traffic: Historical RPK and Forecasts. (IATA Global Outlook for Air Transport 2022)

Multiple factors are influencing this outlook including the pace of vaccination rollouts, the effective-ness of government support measures, and the adaptability of airlines to ongoing operational and financial challenges. Also, worldwide big picture changes like the slowing of global GDP growth, worries of a global recession, and war in Europe (IATA 2022).

In the long term, the global airline industry is expected to continue growing. The airline industry is one of the fastest-growing industries driven by the increasing demand for air travel, particularly in emerging markets. However, the double crisis has underscored the need for airlines to adapt their business models and operations to enhance resilience against future crises. Key areas of focus for

the industry include embracing digitalization, pursuing sustainability initiatives, and adopting more flexible and agile network strategies. While the outlook for the industry remains uncertain in the short to medium term, the long-term prospects for growth remain positive, albeit with the need for airlines to adapt to new realities and enhance their resilience against future crises.

5 Double Crisis Effect on Finnair’s Performance

This chapter aims to shed light on this dual-pronged crisis faced by Finnair, which started with the global spread of COVID-19 in 2020 and was subsequently exacerbated by the Russo-Ukraine war, leading to the closure of Russian airspace in 2022.

5.1 Analysis on financials

To effectively analyze Finnair’s financials, it’s important to chart a historical graph to see changes take place. The analysis will be conducted with historical graphs supported by the airline's financial data focusing on key metrics such as Available Seat Kilometers (ASK), Revenue Passenger Kilometers (RPK), Passenger Load Factor (PLF), Earnings before interest and taxes (EBIT) and net debt levels while providing detailed explanations of these business terms and their influence on an airline's performance. All data used in the graphs are retrieved from Finnair’s annual reports.

5.1.1 ASK

ASK is a measure of an airline's passenger carrying capacity. It is calculated by multiplying the number of seats available for passengers by the total number of kilometers flown. Higher ASK values indicate greater capacity, which can lead to increased revenue if demand is high.

5.1.2 RPK

RPK measures the total number of kilometers flown by airline's paying passengers. It is calculated by multiplying the number of revenue-generating passengers by the distance they travel. Higher RPK values indicate stronger demand for the airline's services and higher potential revenue.

5.1.3 PLF

Passenger Load Factor is a crucial performance indicator in the aviation industry, representing the percentage of available seating capacity occupied by passengers on an aircraft (Belobaba, 2019). It is calculated by dividing the number of Revenue Passenger Kilometres (RPKs) by the number of Available Seat Kilometers (ASKs) and multiplying the result by 100. A high PLF indicates that the airline is efficiently managing its network and capacity, leading to lower unit costs and higher profitability (Belobaba 2019). Conversely, a low PLF suggests that the airline is struggling to match its supply with demand, which results in increased costs and decreased profitability.

5.1.4 Debt

Debt represents the amount of money an airline owes to external parties, such as banks and investors. High levels of debt can negatively impact an airline's financial performance, as it increases interest payments and reduces financial flexibility.

5.2 Analysis by traffic category

Finnair's reliance on its Asia traffic means that we must analyze the airline's performance based on traffic categories. Analysis by traffic categories incorporates three regions that Finnair flies to, excluding domestic travel since it's operated by Nordic Regional Airlines (NORRA). From Finnair's annual reports, it's possible to see passenger revenue by traffic category. Traffic category revenue plotted together with ASK and RPK gives us an understanding of the performance and importance of each traffic category for the airline.

5.2.1 Finnair Asia Traffic

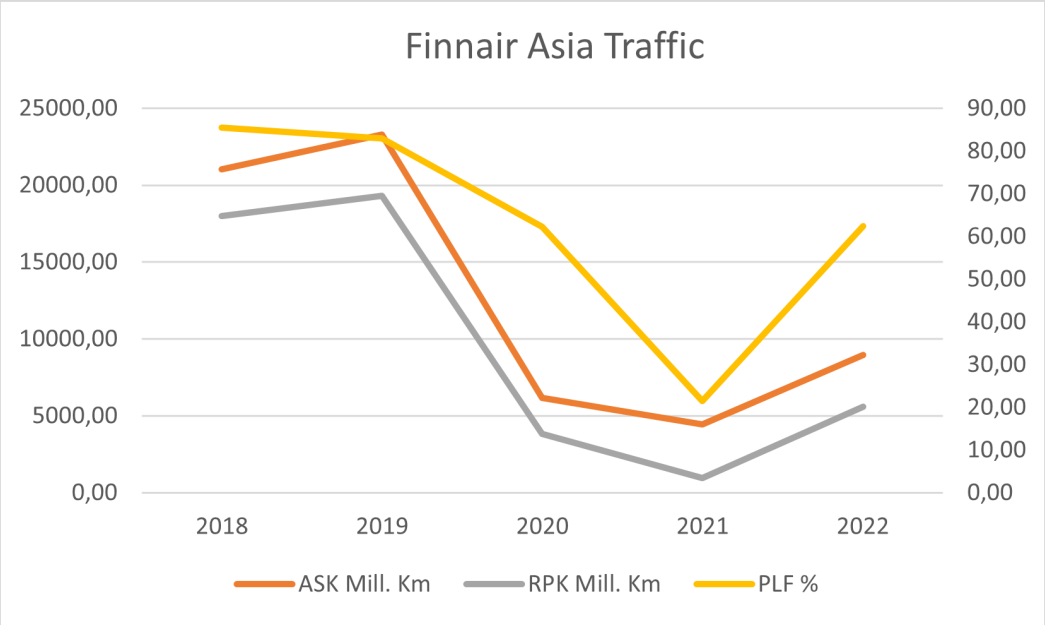


Figure 4. Finnair Asia traffic is illustrated with ASK, RPK, and PLF (adapted from Finnair Annual Reports 2017-2022).

In Figure 4, it is evident that Finnair's Asia traffic experienced a significant decline during the period of the double crisis, which started with the COVID-19 pandemic in 2020 and was exacerbated by the Russo-Ukraine war in 2022. In 2020, ASK dropped to 6,155 million km, a decline of approximately 74% compared to 2019. Similarly, RPK fell to 3,837 million km, a reduction of around 80%

compared to the previous year. As a result, PLF decreased to 62%, reflecting the reduced demand for air travel during the pandemic.

The impact of the crisis intensified in 2021, with ASK further decreasing to 4,463 million km and RPK plunging to 956 million km, a decline of approximately 95% compared to 2019. Consequently, PLF reached an all-time low of 21%, indicating the airline's inability to fill its aircraft and the severe mismatch between demand and supply.

In 2022, following the Russo-Ukraine war and the subsequent closure of Russian airspace, Finnair's Asia traffic showed some recovery with ASK and RPK increasing to 8,953 and 5,586 million km, respectively. PLF also rebounded to 62%, similar to the 2020 level. However, the airline's performance was still far from its pre-crisis numbers. With the Russian Airspace closure having no end in sight it seems to be that Finnair's Asia traffic will continue to stray far from its pre-crisis numbers.

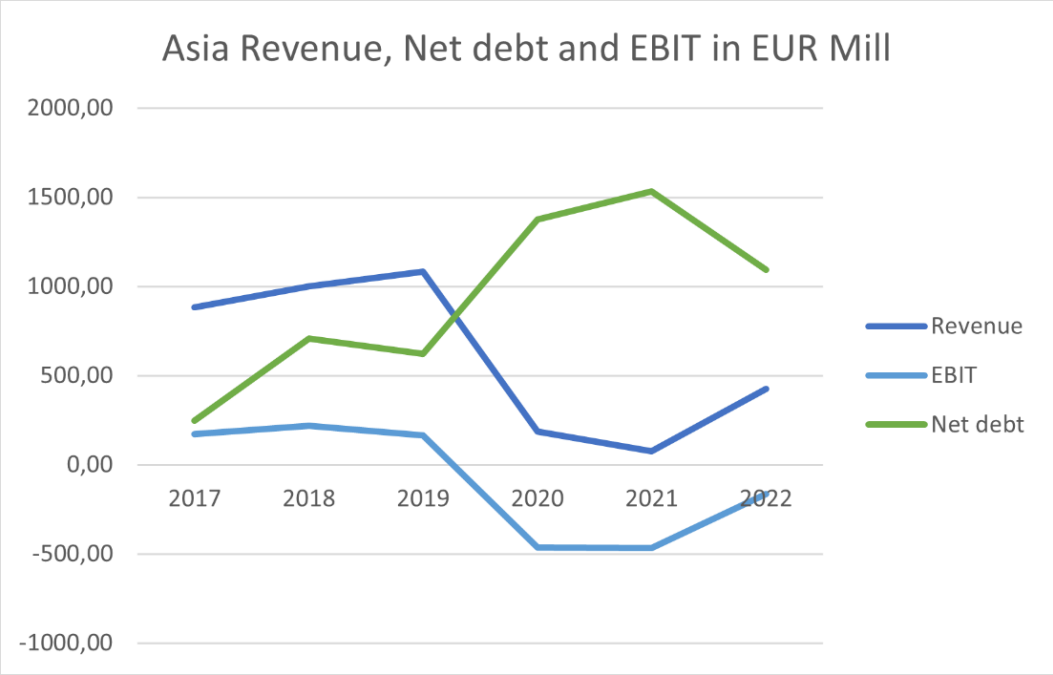


Figure 5. Finnair Asia Revenue illustrated with Net debt and EBIT. (adapted from Finnair Annual Reports 2017-2022).

Figure 5 reveals that from 2017 to 2019, Finnair experienced steady growth in its Asia traffic revenue, increasing from 882 million in 2017 to 1083 million in 2019. However, in 2020, due to the COVID-19 pandemic, Asia traffic revenue plummeted to 186 million and further declined to 75 million in 2021. In 2022, with the Russian airspace closure, revenue increased slightly to 425 million, but still remained far below pre-pandemic levels. This can be attributed to the increased operating costs that flying around Russian Airspace causes since in 2022 PLF of Asia traffic was 62%.

EBIT was positive between 2017 and 2019, but turned negative in 2020 and 2021, indicating substantial operating losses. This deterioration in EBIT can be attributed to the drastic decrease in Asia traffic revenue during the COVID-19 pandemic and the Russian airspace closure.

Net debt, which represents the company's overall indebtedness, increased significantly between 2017 and 2021. While net debt was 246 million in 2017, it soared to 1531 million in 2021, indicating the company's increased reliance on borrowing to finance its operations. In 2022, net debt decreased to 1094 million but remained at an elevated level compared to pre-pandemic years.

5.2.2 Finnair North America Traffic

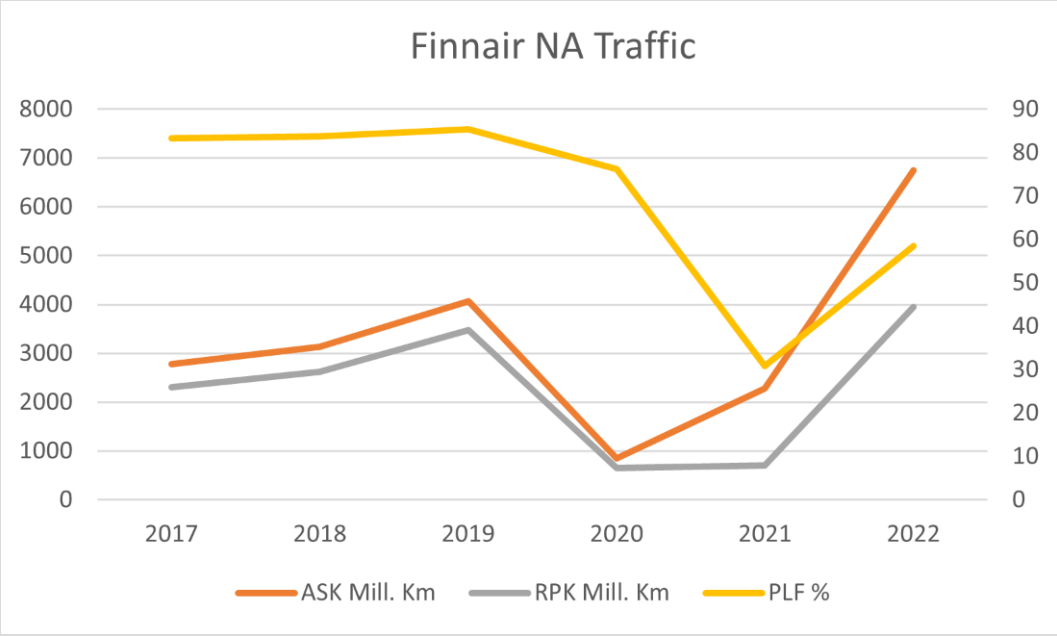


Figure 6. Finnair North America traffic is illustrated with ASK, RPK, and PLF (adapted from Finnair Annual Reports 2017-2022).

In Figure 6. Similar to the trends observed in Finnair's Asia traffic, the double crisis, starting with the COVID-19 pandemic in 2020 and further exacerbated by the Russo-Ukraine war in 2022, has had a significant impact on the airline's North American traffic.

In 2020, ASK and RPK decreased to 848 million km and 647 million km, respectively, representing a decline of approximately 79% and 81% compared to 2019. Despite this sharp decline, PLF remained relatively stable at 76%. In 2021, ASK remained at the same level as in 2020 (848 million km), while RPK increased marginally to 704 million km. However, PLF dropped significantly to 30%, indicating a severe decline in seat utilization and a continued mismatch between supply and demand. In 2022, ASK rebounded to 6,743 million km, a significant increase compared to the

previous years. RPK also increased to 3,946 million km, although it was still below the pre-crisis level. PLF rose to 58%, which is lower than Finnair's Asia traffic PLF in the same year (62%).

However, Figure 4 shows a relatively high PLF for North American traffic during the crisis suggesting an opportunity for Finnair to adjust its Asia-dependent network strategy to mitigate risks and enhance its resilience in the face of external challenges.

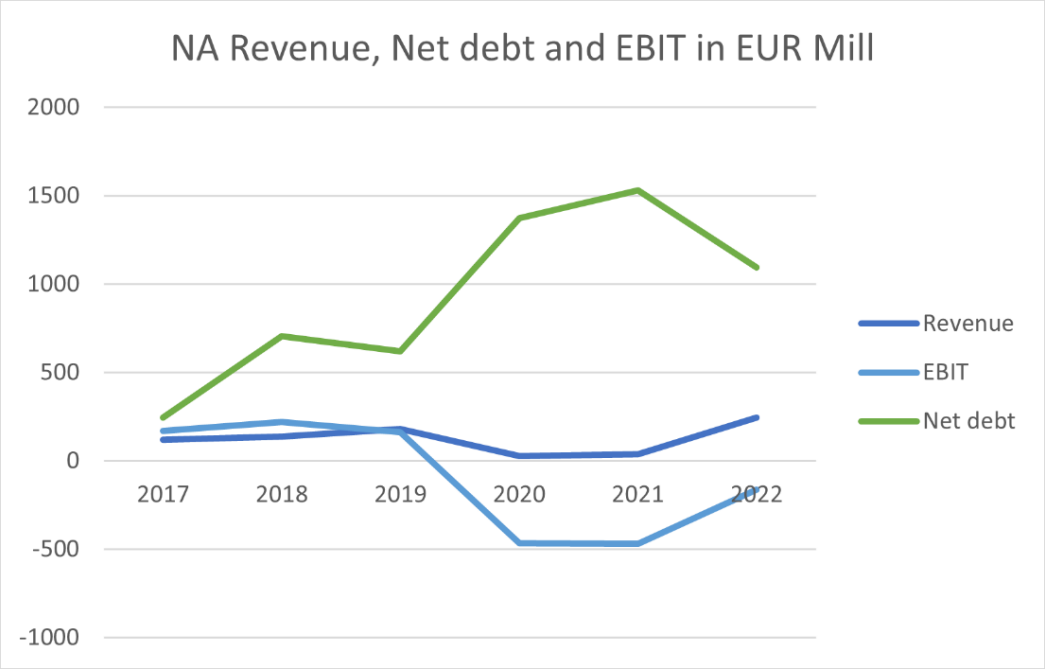


Figure 7. Finnair North America Revenue is illustrated with Net debt and EBIT (adapted from Finnair Annual Reports 2017-2022).

Figure 7 displays that Finnair's North American traffic revenue has always been considerably lower than its Asia traffic revenue. In 2017, North American traffic revenue was 119 million, increasing to 137 million in 2018 and 180 million in 2019. However, due to the COVID-19 pandemic, North American traffic revenue fell to 26 million in 2020 before slightly increasing to 39 million in 2021. In 2022, revenue increased to 244 million which is considerably higher than other years. This might reflect Finnair’s effort to decrease Asian reliance by diversifying its network strategy by opening new routes to cities like Dallas in North America (Finnair 2022).

5.2.3 Finnair Europe Traffic

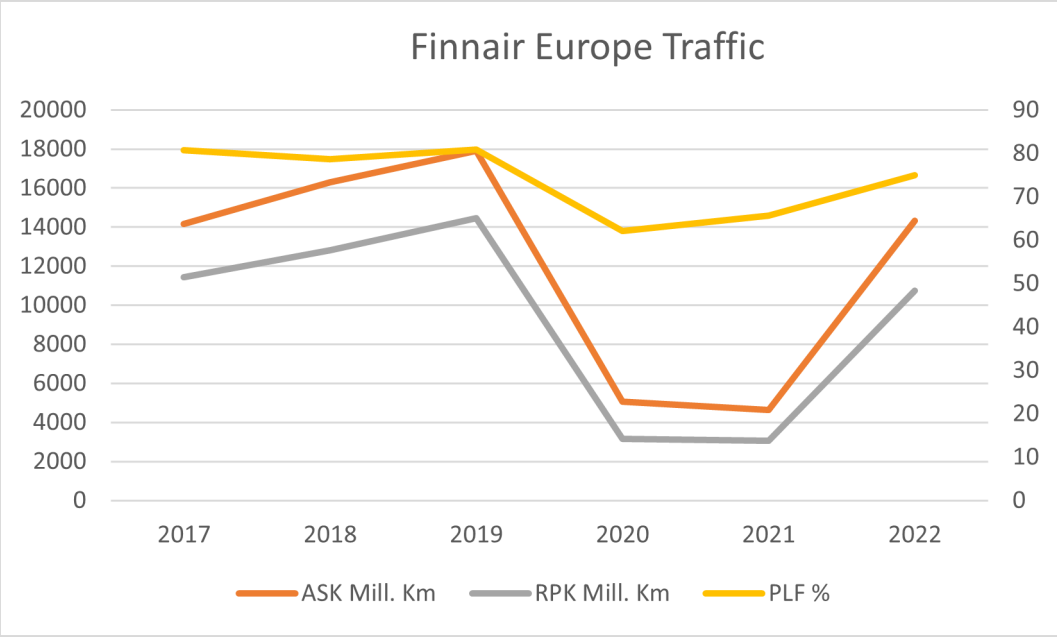


Figure 8. Finnair Europe traffic is illustrated with ASK, RPK, and PLF (adapted from Finnair Annual Reports 2017-2022).

Figure 8 points out the double crisis have had a significant impact on Finnair's Europe traffic. In 2020, ASK and RPK fell to 5,061 million km and 3,140 million km, respectively, representing a decline of approximately 72% and 78% compared to 2019. Consequently, PLF dropped to 62%, indicating reduced demand and seat utilization during the pandemic. In 2021, ASK further decreased to 4,644 million km, while RPK remained relatively stable at 3,054 million km. This reflects the slow recovery of the European market in 2021. PLF improved slightly to 65%, but it was still below pre-crisis levels.

In 2022, ASK and RPK experienced a recovery, reaching 14,330 million km and 10,730 million km, respectively. This recovery can be attributed to the gradual reopening of borders and easing of travel restrictions within Europe. PLF also increased to 74%, showing a positive trend in demand and seat utilization.

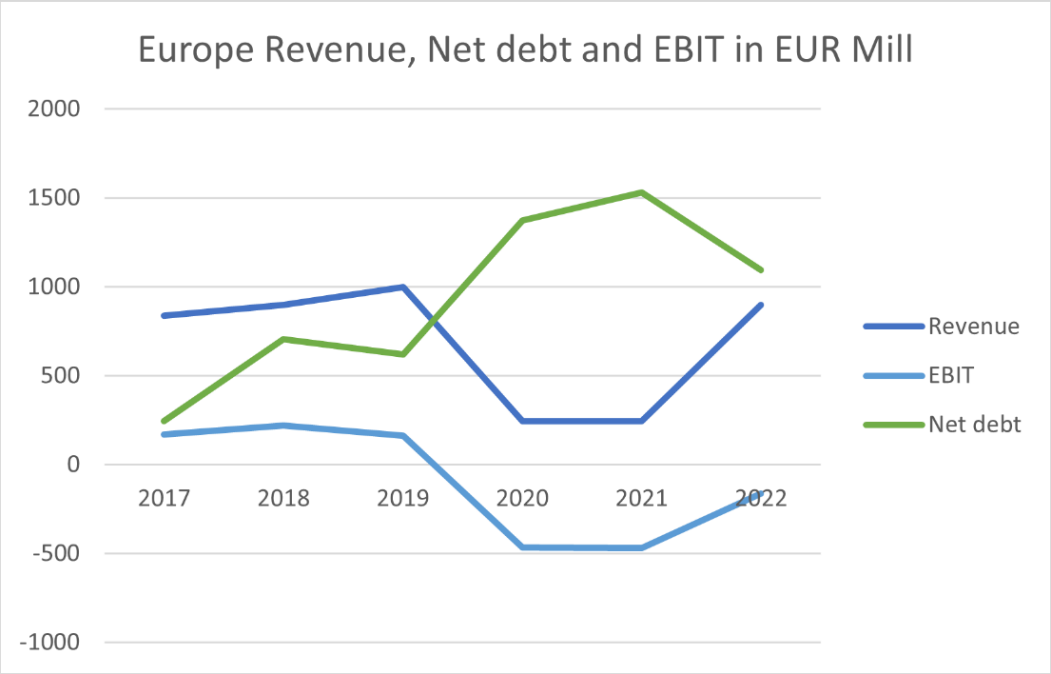


Figure 9. Finnair Europe Revenue is illustrated with Net debt and EBIT (adapted from Finnair Annual Reports 2017-2022).

Figure 9 we can see that Finnair's Europe traffic revenue experienced growth from 2017 to 2019, increasing from 839 million in 2017 to 998 million in 2019. However, due to the COVID-19 pandemic, Europe traffic revenue dropped to 245 million in 2020 and slightly decreased to 244 million in 2021. In 2022, Europe traffic revenue rebounded to 898 million, this can be attributed to travel restrictions being lifted and the limited effect of Russian Airspace closure on European traffic. However, 2022 revenue is still below pre-pandemic levels.

5.3 Outlook for future

Overall recent financials show signs of recovery from the worst. Although Finnair’s network strategy is historically focused on leveraging Helsinki's geographical advantage as a transit hub for passengers traveling between Europe and Asia, it is sure to keep hurting the financials of the company as long as Russian Airspace stays closed. As well as the overall increase in net debt shows the company's increased reliance on borrowing to finance its current operations.

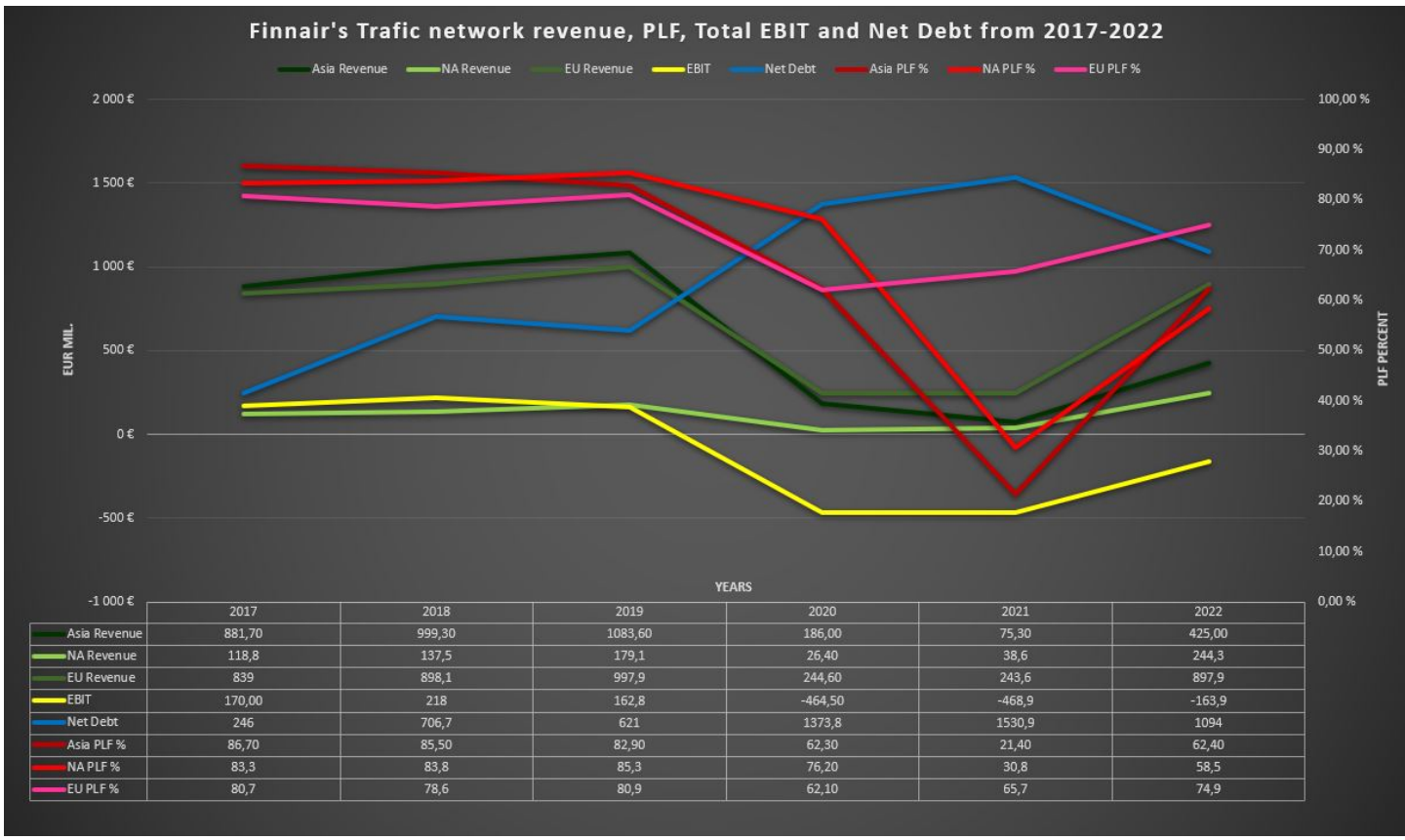
6 Conclusion

The two successive crises, the global COVID-19 pandemic from 2020 onward and the Russian airspace closure due to the Russo-Ukraine war in 2022, have left an indelible imprint on the aviation industry at large, and on Finnair's network strategy specifically. This 'double crisis' presented Finnair with a complex set of challenges that disrupted its operations, financial health, and strategic positioning in a profoundly interconnected global aviation market. This chapter will visualize the effect of these two successive crises on Finnair's network strategy by compiling all important metrics into one graph divided into Finnair's traffic sectors.

6.1 Results

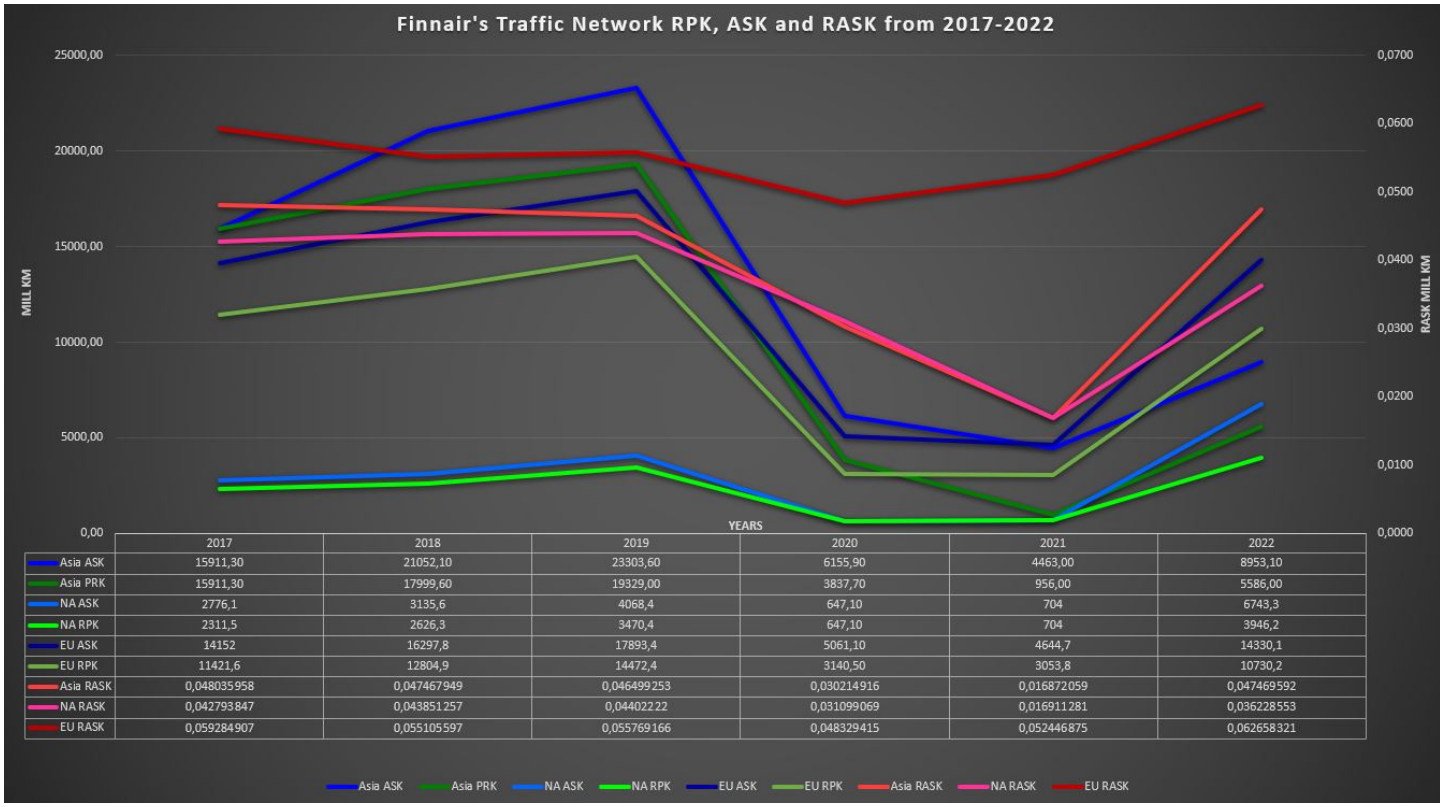
The research question of this thesis is "How did the double crisis affect Finnair's traffic networks revenue, EBIT, RPK, ASK, RASK, and net debt from 2017 to 2022?" it's important to visualize these metrics so that a conclusion can be formed. Two tables combining all the above-mentioned metrics were formed to best visualize the effect of the double crisis on Finnair and its traffic network from 2017 to 2022.

It is clear to see from both graphs (Figure 10 and 11) the dependency of Finnair to the Asian market. This dependency has left Finnair to struggle during these two successive crises.



	2017	2018	2019	2020	2021	2022
Asia Revenue	881,70	999,30	1083,60	186,00	75,30	425,00
NA Revenue	118,8	137,5	179,1	26,40	38,6	244,3
EU Revenue	839	898,1	997,9	244,60	243,6	897,9
EBIT	170,00	218	162,8	-464,50	-468,9	-163,9
Net Debt	246	706,7	621	1373,8	1530,9	1094
Asia PLF %	86,70	85,50	82,90	62,30	21,40	62,40
NA PLF %	83,3	83,8	85,3	76,20	30,8	58,5
EU PLF %	80,7	78,6	80,9	62,10	65,7	74,9

Figure 10. Finnair's Traffic network revenue, PLF, Total EBIT, and Net Debt from 2017-2022 (adapted from Finnair Annual Reports 2017-2022).



	2017	2018	2019	2020	2021	2022
Asia ASK	15911,30	21052,10	23303,60	6155,90	4463,00	8953,10
Asia PRK	15911,30	17999,60	19329,00	3837,70	956,00	5586,00
NA ASK	2776,1	3135,6	4068,4	647,10	704	6743,3
NA RPK	2311,5	2626,3	3470,4	647,10	704	3946,2
EU ASK	14152	16297,8	17893,4	5061,10	4644,7	14330,1
EU RPK	11421,6	12804,9	14472,4	3140,50	3053,8	10730,2
Asia RASK	0,048035958	0,047467949	0,046499253	0,030214916	0,016872059	0,047469592
NA RASK	0,042793847	0,043851257	0,04402222	0,031099069	0,016911281	0,036228553
EU RASK	0,059284907	0,055105597	0,055769166	0,048329415	0,052446875	0,062658321

Figure 11. Finnair's Traffic Network RPK, ASK, and RASK from 2017-2022 (adapted from Finnair Annual Reports 2017-2022).

Figure 10 and 11 shows clearly the effect of the double crisis on Finnair's traffic network. It's clear to see that no metric has quite recovered from the effects of this double crisis. Although it's positive to see that the path to recovery is already begun and ongoing.

6.2 Recommendations for Finnair network strategy

As the European market seems to recover faster than other traffic areas, Finnair should capitalize on the growing demand by increasing frequencies, expanding route networks, and enhancing connectivity within Europe. This will not only improve the airline's financial performance but also help balance the risks associated with an Asia-focused strategy. Finnair should analyze its traffic data to identify the most profitable routes and consider reallocating resources to capitalize on these opportunities.

Given the relatively higher PLF in North American traffic compared to Asia traffic during these crises, Finnair may consider adjusting its network strategy to diversify its market presence and reduce reliance on the Asia market. This could be achieved through the diversification of Markets.

Finnair could explore opportunities to expand its presence in the North American market by increasing frequencies or adding new routes, thereby reducing its dependency on the Asia market and spreading risks across different regions.

To strengthen its position in the market, Finnair can explore potential partnerships with other carriers, such as codeshare agreements or joint ventures. These partnerships can facilitate access to new markets, improve connectivity, and optimize network operations. Providing wet lease services could also help Finnair keep aircraft utilization high and increase revenue.

6.3 Final Words

The double crisis has highlighted the vulnerability of Finnair's Asia-dependent network strategy. The closure of Russian Airspace exposes Finnair's dependency on Asia traffic and the need for a more balanced network strategy.

Given the vulnerability of the aviation industry to various catastrophes, the future situation is hard to predict since it’s uncertain how long Russian Airspace will remain closed, not to mention other possible future crises that might affect Finnair’s performance.

Although these past events could be viewed as a wake-up call for Finnair to reduce its reliance on Asia traffic Finnair should strive to create a more balanced network that caters to these ever-evolving market dynamics.

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