NOVA SCHOOL OF BUSINESS & ECONOMICS

A Work Project, presented as part of the requirements for the Award of a Master's degree in Management from the Nova School of Business and Economics, titled:

Mayday: is TAP Air Portugal worth saving? At what extend should the national flag carrier be a state-owned company?

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Abstract

This theses seeks to analyze the evolution of TAP Air Portugal current situation while evaluation the role that the government had in it. In the process there will be a focus on the current state of the industry, company profitably in the privatization and government era, strategy decisions and while evaluating at what extend the flag carrier should be a state-owned company. Furthermore, this study will give a recommendation for the future of TAP, reaching a conclusion of either is worth saving or not the company, while evaluating the best path to successfully recover the Portuguese flag carrier.

Agenda - Research Questions and Methodology

Sections	Research questions	Methodology
1 Context	**1.0. What is the current state of Aviation Industry focusing on flag carrier and low-cost carrier?** **1.1.** How did the Covid-19 pandemic affect the travel and tourism industry? **1.2.** How is the aviation market segmented and how to differ low cost and flag carrier? **1.3.** What are the competitive dynamics, and which are the key profitability KPIs ? **1.4.** What is the current profitability situation of flag carriers and low-cost carriers?	• Exploratory Research • Market Analysis • Financial Statement Analysis • Benchmarking
2 TAP Struggle	**2.0. How did TAP got to the current situation and what was the government role on it?** **2.1.** How did TAP Air Portugal privatization and the new strategy turned out? **2.2.** How did COVID-19 challenge and affect the organizations strategy? **2.3.** Is TAP Air Portugal better or worse off today after being nationalized again? **2.4.** Is the role of the state as owner of TAP an advantage or a disadvantage for the airline?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey
3 Alternative Scenarios Analysis	**3.0. Is TAP worth saving? What are alternative scenarios to turn around TAP Air Portugal?** **3.1.** What are the key dimensions to be considered while assessing potential alternatives? **3.2.** Which alternative scenarios are conceivable? **3.3.** What effects did the cases have on their home countries? **3.4.** What are the key takeaways from the cases for TAP Air Portugal?	• Literature Review • Expert Interviews • Benchmarking • Exploratory Research
4 To save or not to save	**4.0. Is it worth to save TAP if they follow the strategy proposed on chapter three?** **4.1.** How does the new strategy affect TAPs structure and the success factors? **4.2.** How will TAP become more profitable and competitive with the new strategy? **4.3.** Is it worth for the government to save TAP and keep investing resources in it?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey

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Agenda - Chapter 1

Sections	Research questions	Methodology
1 Key question	**Who is coming on top on an adapting aviation industry, flag carriers or low-cost airlines?** Keywords: Flagship airlines, low-cost airlines, covid-19, profitability	
1.1 Industry context	**How did the Covid-19 pandemic affect the travel and tourism industry?** • Travel and Tourism industry overview • Aviation industry overview	• Exploratory Research • Market Analysis
1.2 Aviation context	**How is the aviation market segmented and how differ low cost and flag carrier?** • Main players of aviation industry • Flag carrier definition • Comparison of the two business models	• Exploratory Research • Market Analysis
1.3 Competition and KPIS	**What are the competitive dynamics, and which are the key profitability KPIs?** • Competition aspects and overview • Analysis of industry KPIs	• Exploratory Research • Market Analysis
1.4 Profitability analysis	**What is the current profitability situation of flag carriers and low-cost carriers?** • Selection process of a representative sample • Selection of suitable KPIS • Evaluation of the sample's profitability	• Financial Statement Analysis • Benchmarking

Sources:

TAP Air Portugal - Record holder in making negative headlines and receiving government financial aid injections

The situation of TAP Air Portugal is currently being discussed as heatedly as ever before in Portugal and Worldwide, and it is one of the most polarizing topic of debate in the Portuguese business world.

Sources: Portugal news, Elliot, Euroactiv, Reuters.

TAP Air Portugal, the government owned flag carrier of Portugal, has been through many crises and is at a crossroads with more debt and problems than ever before.

Introduction to TAP Air Portugal and key figures

TAP PORTUGAL

TAP Air Portugal - the Portuguese flag carrier has been struggling over years and could only survive due to of financial state aid.

- For more then **70 years,** TAP has been pioneer in connect Portugal to the rest of the world **since 1945.**
- In the **early years** the company went through changes in fleet and was **one of the first** European airlines to explore **beyond the Atlantic to Rio De Janeiro and East towards Goa.**
- **In 1974** there is a revolution on the ground and in the air. With Portugal going through **the revolution of 25 of April**, TAP changes headquarters, **is nationalized** and enters in an accelerated process **of modernization** with use of Jets.
- In the next two decades TAP went through the **crisis of oil, technologically advances** until the airbus era and is set of **world stage for the EXPO 98.**
- **From 2000 to 2010** TAP was presented with a lot of challenges with the **September attacks, the 2008 financial crisis and digitalization.**
- Today the company has once again adapted to where the world is going by becoming **more digital** and by always **transforming and innovating**.

Key facts and figures in 2019

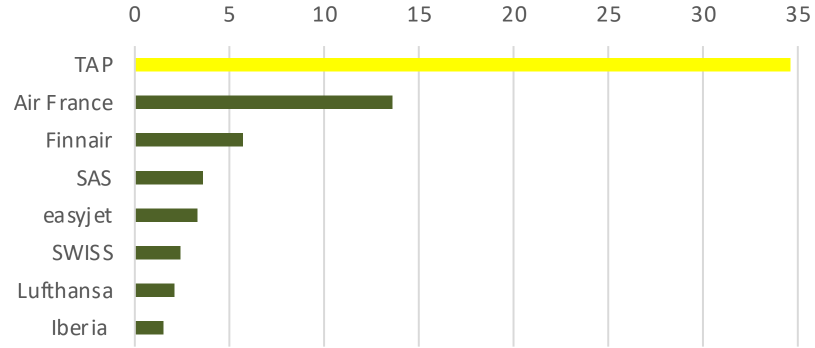
3.060 B€ - TAP Air Portugal Revenue

110 Aircrafts – TAP Air Portugal's fleet size

c. 10.000 – direct employees at TAP Air Portugal

17 million - passengers transported in 2019

Number of years needed to accumulate operating (EBIT) equivalent to the state support received (considering the best result of the 5 pre-pandemic years)



Source: Expresso

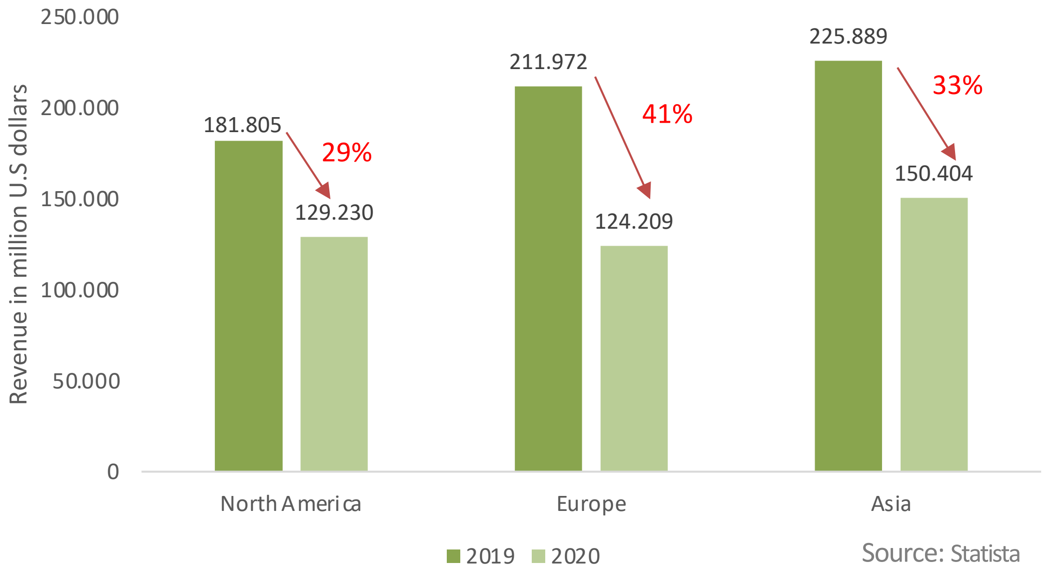
The Covid-19 pandemic put the travel and tourism industry in crisis

The industry of tourism and travel is one of the most impacted by the coronavirus pandemic because of measurements made by the government of closing down the borders as well as the increasing health risks associated to travelling.

Change in revenue from the travel and tourism industry due to the coronavirus by region

Europe was the most impacted region with a 41% decrease

Total industry value (in millions US$)[1]

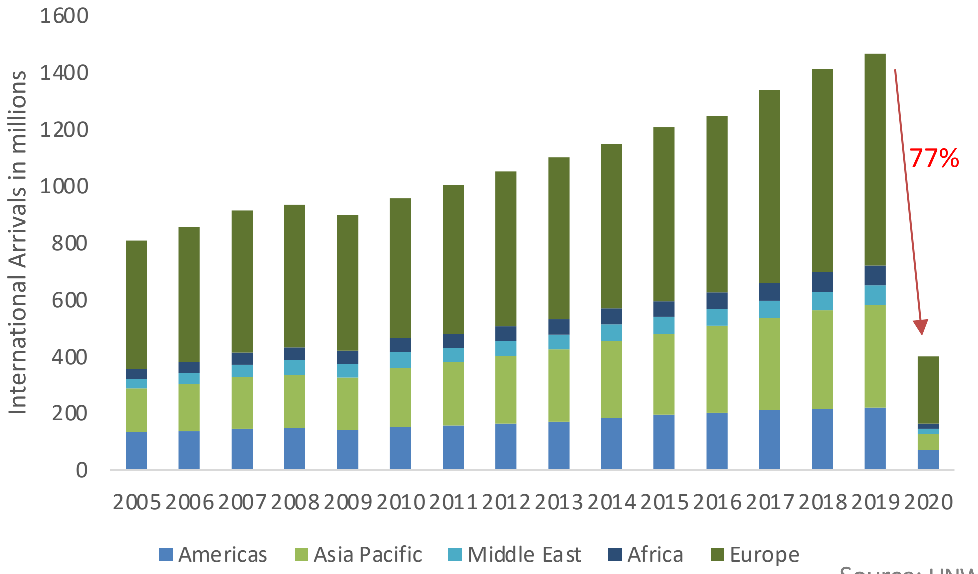


Source: Statista

International tourist arrivals worldwide in the different regions of the world

The pandemic resulted in a decrease of 77% of international arrivals

(in millions)[2]



Source: UNWTO

The aviation industry has had global revenues of 838 billion in 2019 and employed over 32 million.

Profitability has been increasing with the regulatory changes and all the advancements of technology that make the industry more

The key facts of 2019 the best year of the aviation industry:

Aviation global revenues of **838 billion $** in 2019

Aviation supports **4.1%** of global GDP

Aviation provides **42 million** jobs around world

Over **4.5 billion** passengers transported in 2019

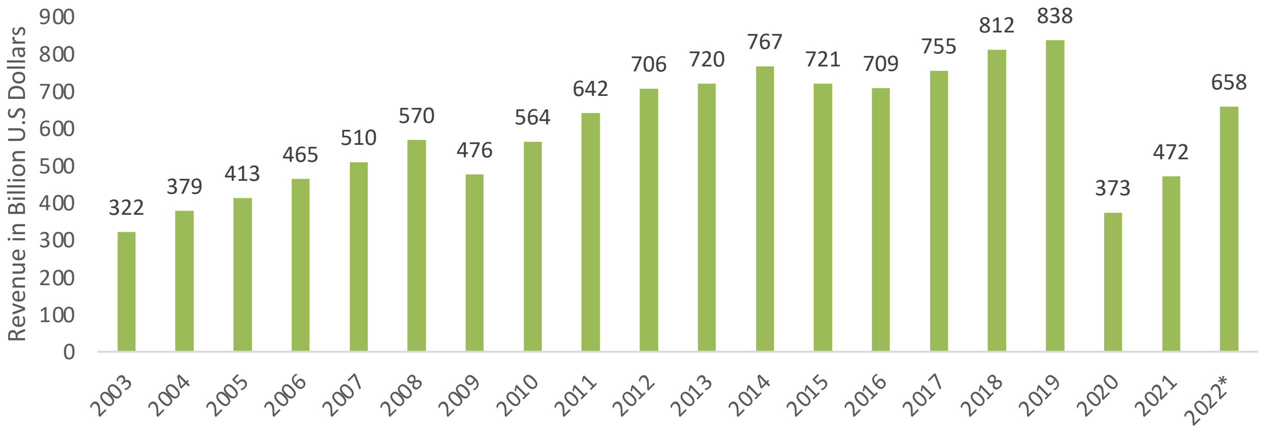
The aviation industry:

- **Aviation industry** is defined as a global network of aircraft operators, airports, air navigation service providers and the manufactures of aircraft components.
- The industry is the one responsible for connecting global economy, providing jobs and making a globalised world possible.
- It has has growth over years and is today one of the most important industries for economic growth.

Brief history of the industry:

- The idea of flight attempts came from the **Montgolfier** brothers using hot air balloons in the **18th century.**
- A gliding attempt was made in the **19th century** by Otto Lilenthal.
- Finally in the **20th century** there was the constructions of the first powered aircrafts by the Wright Brothers.
- From there one the industry was **revolutionized with the creation of jets** and being viable to travel around the world.
- Only in recent years profitability has risen with technological evolution.

Revenue of commercial airlines worldwide from 2003 to 2021



Source: Statista

Sources:
Iata, Revfine, Statista

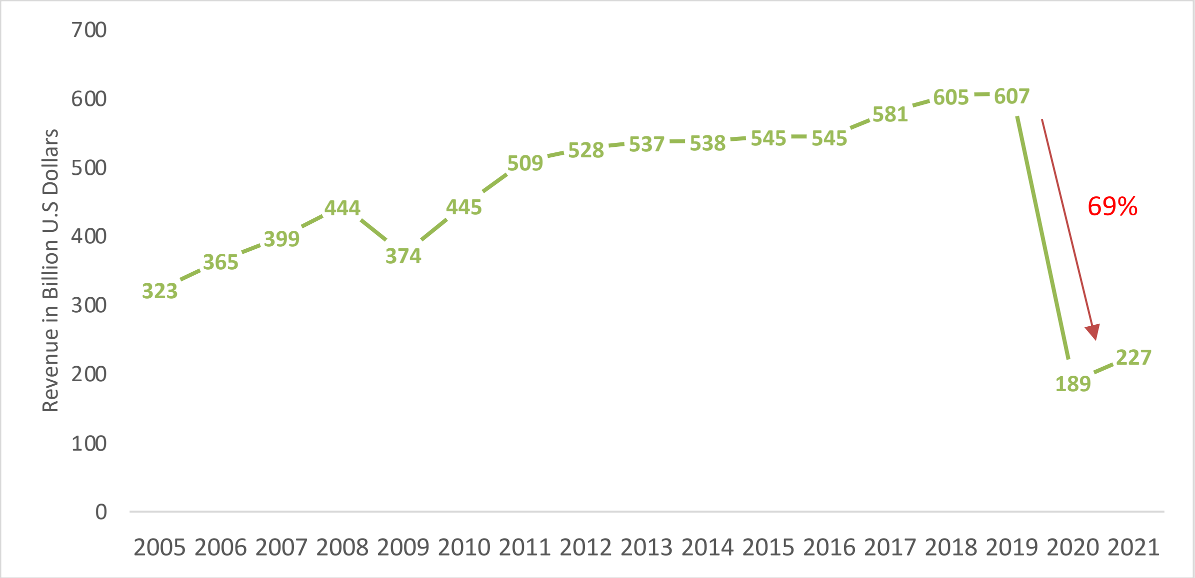
2020 was the worst year in the history of the airline industry with record drop of passengers, revenues and profitability

In April 2020 in the depth of the crisis 66% of the global commercial fleet was grounded as governments closed borders and imposed strict quarantines.

Worldwide revenue with passengers

Worldwide revenue made with passengers suffered a drop of 69% due to the pandemic

(in billion US$)[3]



Source: Statista

The key facts of the 2020 crisis for the airline industry

60.2%
decrease in passangers who flew in 2020 compared to 2019

65.9%
drop in industry air travel demand that is measured in revenue passenger kilometer (RPK)

75.6%
decrease in international passengers demand in 2020

48.9%
decrease in domestic passengers demand in 2020

69%
Fall in total passenger revenues in 2020 to 189 billion.

126B$
Billion in total losses in 2020

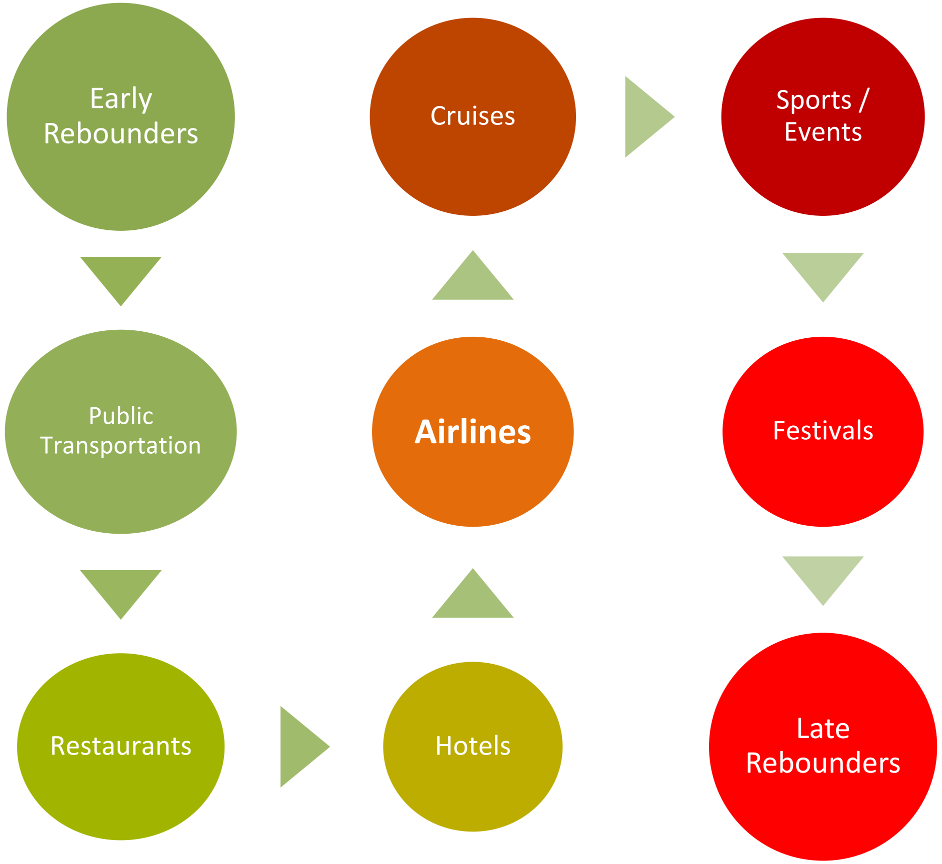
The net losses **of 126 billion** that have incurred in 2020 are more than **five times** of those faced during the 2008 / 2009 global financial crisis and more then **ten times higher** then the losses incurred after the 9/11 attacks.
The year of 2020 was the **worst year** of the airline industry and it could take more than **seven years** to go back to 2019 levels.

Sources:
Statista, IATA

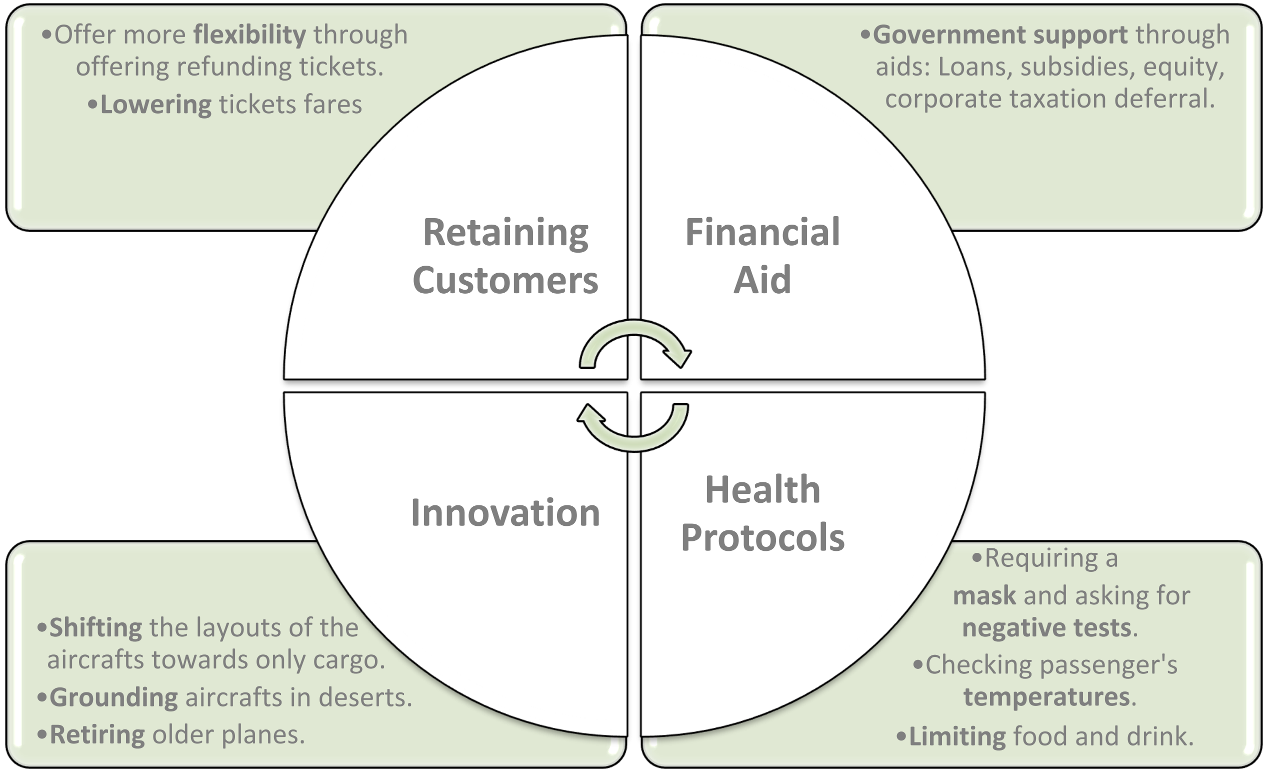
Every business in the tourism and travel industry has been affected by the pandemic and adaptation is key

The speed at which business rebound from the pandemic depend on how they adapted to the new COVID-19 regulations. The ones with low perceived risk and activities with less human contact will be the ones suffering the least

The main players impacted by the industry:



The airline industry immediately reacted into four fronts in order to react to the crisis:



Sources:
Iata, Statista, Neves

This study will focus on the sector of commercial aviation focusing on low-cost carrier and flag carrier

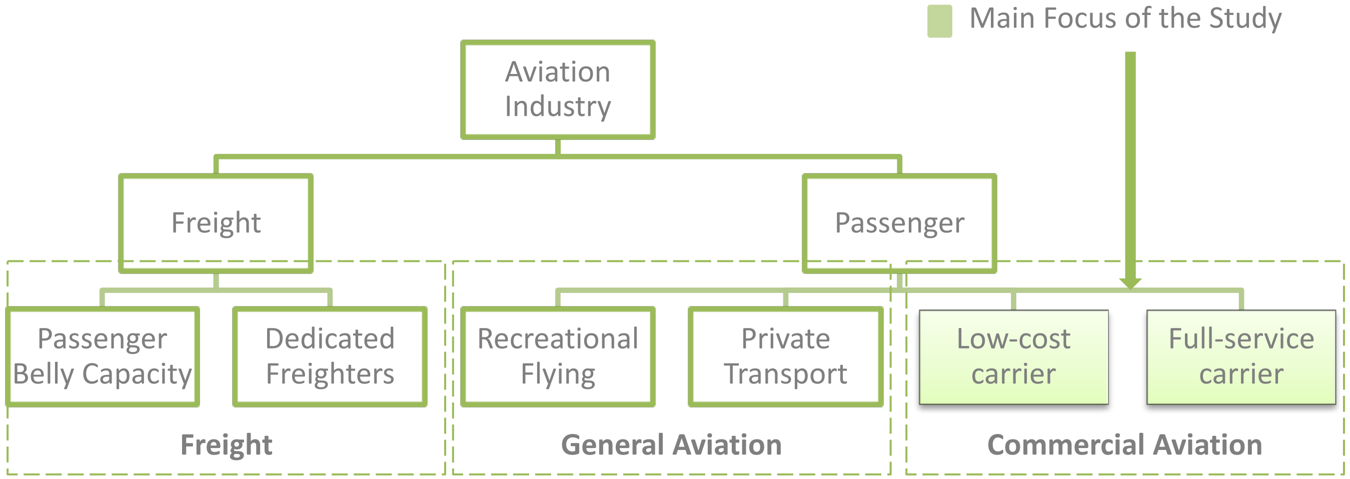
Civil aviation industry is having a huge economical impact in worlds GDP

The structure of the aviation industry:

- The aviation industry can be separated into two main pillars **civil aviation** and **military aviation.**
- Because of the complex nature of the industry only civil aviation will be taken into consideration of this study as it the ones that has **more economical impact**.
- An illustrative graph on the right shows the structure of the industry having two main categories **freight** and **passengers.**

Freight aviation:

- Freight aviation is when companies operate the **aircrafts only to transport goods.**
- It is divided into **passenger belly capacity** and **dedicated freighters.**
- **Passenger belly capacity** is the goods that are placed in the **remaining space of the luggage compartment** of passenger aircrafts.
- The **dedicated freighters** are transportation companies such as DHL or Fedex or even Cargo converted planes from airlines that are used **for the purpose of transporting goods only**.



Passenger aviation:

- Passenger aviation is the use of the aircraft to **transport people.**
- This section can be divided into **general aviation** and **commercial aviation.**
- General aviation includes **executive private transportation** and **recreational flying which is for leisure**.
- Commercial aviation has **the low-cost carriers** which is typically companies which **offer lower prices with a simpler service. Full-service carrier** companies offer more **comfort** and more options for **well-being of the passengers.**

Glossary:

Point-to-point: Used by low-cost airlines when they travel directly to a destination without going through a hub airport.
Legacy Carrier: Airlines that fly interstate routes.

Hub-and-spoke network: Airlines that operate flights from a central airport, through layovers.

Sources:
Av Jobs, Aeronautics, Neves

There is no official definition what makes a flagship carrier, but this study will only take majority state-invested carrier into consideration

Some full-service carriers are flagship carriers as they are associated with the national identity of the country and are either privately owned or owned and governed by the state

Flagship airlines:

- An airline company that is **subsided or registered** to a given country that enjoys the **preferential rights and management** of the carrier.
- Years ago, a national airline was **owned** by the government, however, today it can refer to an airline that has a strong connection to its country. Therefore, **not all flagship carriers are government owned.**

The importance of flagship airlines:

- Flagship airlines have a lot of **importance** in the aviation industry being **financial or symbolically.**
- A country having a national carrier can be great for the **international trade and national defence**. Many passengers also prefer to fly these airlines as **sense of pride and security** as they recognize the airline and trust that it is less likely that they are in financial difficulties.

Why would a government own a flagship airline?

- Having state ownership or majority would mean that the government has **full control** of the airline. They can control the **brand image** and adapt the **model to increase trade** or peruse strategy that suits them best.
- Another reason for having majority is the **financial benefits** they have. Not only with **dividends** but also the increase in **tourism** the company can bring to a country.

Examples of airlines that government has majority or owns:

TAP AIR PORTUGAL

Emirates

FINNAIR

AIR NEW ZEALAND

AIR CHINA

SINGAPORE AIRLINES

CATHAY PACIFIC

The definition of flagships in this study:

- The flagships carriers that are going to be analysed in this study must comply with the requirement **of being state-owned meaning that the state has over 50% ownership.**
- This will increase the **reliability and consistency** of our study as if the governments have majority the major decisions need to be run by them and makes them have full control.

Sources:
Iata, alternative airlines

The business models of flagship and low-cost are very distinct and over the years we have seen full-service carriers losing market share

Flagship Airlines		Low-Cost Airlines	
Core Business	Passenger, cargo and maintenance.	Passenger air service.	Core Business
Hub-and-Spoke Network	Major objective of having full coverage in all demand categories.	Network is developed from one or few airports where carrier operates to the main destinations.	Point to Point Network
Global Player	Domestic, international and intercontinental markets are covered.	They operate mainly from secondary airports which are cheaper, to reduce costs.	Secundary Airports
Alliances	No individual airline develops a truly global network, this is enlarged through interlining with partners.	Normally operate one type of aircraft with one configuration to reduce training and maintenance costs.	Single Aircraft Fleet
CRM	Every flagship Airlines has a loyalty program. This makes it easier to interact and manage customers.	The aircraft is in the air on average more hour a day compared to flagship airlines.	Aircraft Utilization
Yield Manage- ment and Pricing	Use of sophisticated price and yield management to maximize network revenue.	The product is not differentiated as they don't offer additional services (in-flight service, lounges…)	No Frills Service
Multi-Channel Sales	Divided into indirect, direct offline and indirect and direct online.	All tickets and distribution system is implemented via the internet to reduce intermediary costs.	Minimised reservation costs
Vertical Product Differentiation	In-flight, ground and electronic service that each company has.		

Sources: Amadeus, Neves

Alliances and joint ventures are key factors for competitive advantage in the airline industry forecasted to gaining even more importance in the future

Knowing the dynamics of betting is essential to understand the following analyses

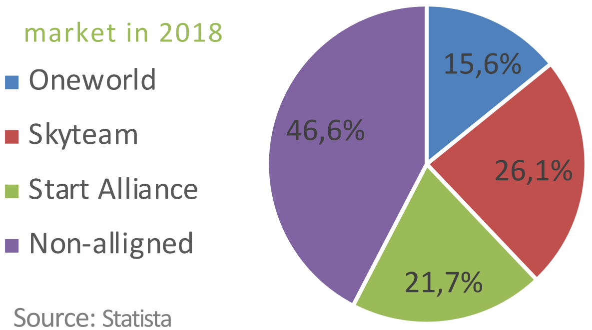
Alliances allow airlines to increase their network and create agreements for specific travel routes that allow an increase of their profit margins

- **Alliances** and **joint ventures** a key competition strategy in the airline industry.
- Whereas **alliances** involve limited cooperation in areas like marketing, branding and customer service, **joint ventures** are highly complex bespoke arrangements which dealing with matters such as governance and revenue sharing on a contractual basis
- **Both, alliances and joint ventures** affect the degree of competition between airlines and give rise to issues under competition laws

3 major joint ventures dominate the transatlantic market

1. Delta, Virgin Atlantic, Air France-KLM
2. British Airways, Iberia, American Airlines Finnair
3. Lufthansa, United and Air Canada

3 largest alliances own more than 53% of the market in 2018



Source: Statista

Future predictions

The pandemic affected airlines, therefore new collaboration may appear to help consolidate recovery plans and the future of some airlines.

The pandemic and trends are likely to increase the need for collaboration and consolidation. Unless nationality O&C requirements are relaxed further, which would run counter to current trends in other sectors, contractual joint ventures are likely to remain one of the best ways for airlines to achieve competitive advantage

Three driving trends

Flag carriers are becoming hybrid by adopting some low-cost practices. Airlines networks are gaining importance, such as the high financial distress exposure and its influence in profitability

The **hybridisation of business models** makes it harder to distinct between low-cost, full-service or flag carrier.

The **consolidation through airline networks and alliances** jeopardizes competition. This includes extensive joint-ventures and co-operating agreements between airlines.

High financial distress exposure has a huge influence on strategy and profitability. Main aspects are high price transparency and the ongoing debate if it is warranted for states to financially support certain airlines.

Entry barriers

Competitive slots market, alliances already created, and drip pricing strategies makes it difficult for new players to thrive in the market

Airport slot access: major strategy to become more profitable is to aim for as many slots as possible for an airport as it allows to increase prices due to decreased competition.

Loyalty schemes: earn and redeem strategies are one on the most important tool to capture passengers in a brand and eliminate risk of loosing customers to competition

Drip pricing strategies: a pricing technique that advertises only parts of the actual price for a product or services with holding mandatory fees that are only added later in the buying process.

→ **Consequence:** Being part of an alliance or a joint venture is a major competitive advantage

Sources: Evans & Kessides, Neves, Randall, Statista

Profitability in the Airline Industry is mainly driven by labor costs, aircraft utilization and airport dominance

The Airline industry is historically a low margin industry. In the past most airlines were state-owned loss-makers and nowadays intense competition, and cut-throat pricing strategies keep margins lows. The high price transparency and competition causes profitability to be driving by two major factors **costs** and **network and airline dominance.**

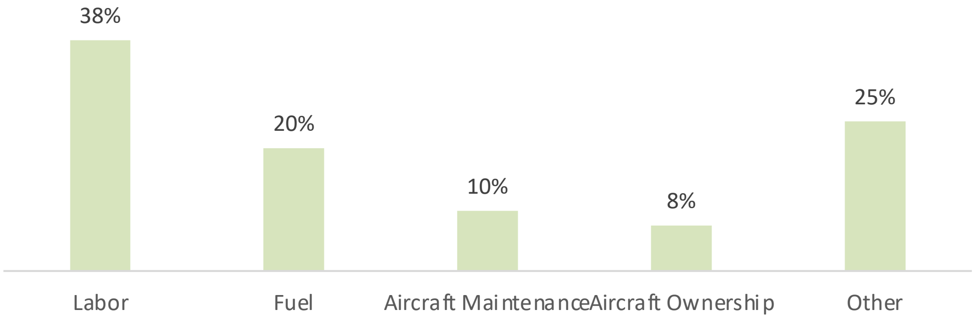
Costs

Labor (pilot) Costs

Aircraft Utilization (Fuel and Maintance Costs)

Percentage of Total Costs

The labour and fuel account for 58% of the total cost's airlines have



- Costs are mainly driven by labor and aircraft utilization
- Airlines with the lowest labor costs as well as a high aircraft utilization rate are the most profitable in the industry

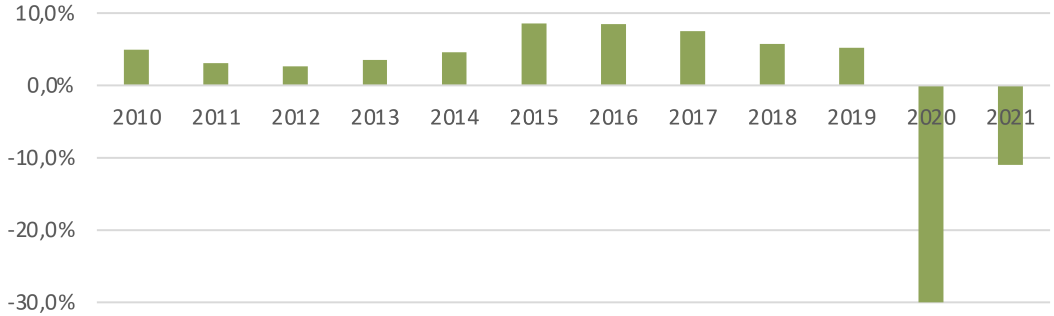
Network and Airport Dominance

Airport dominance gives the ability to increase prices and therefore margins

Airport dominance refers to an airline's ability to charge higher fares for travel to/from an airport, where it enjoys a dominant position, relative to the fares it charges for travel elsewhere within its network .This ability to charge higher fares for flights to/from airports where they possess a dominant position is a key driver for profitability.

EBIT margin of commercial airlines worldwide from 2010 to 2022

EBIT margins experienced a sharp drop in 2020 reaching -30%, which as been already partial recovered in 2021



Sources: Neves, Statista, Lopes & Ferraz & Rodrigues, Evans & Kessides,

Industry performance and profitability is commonly measured and compared using EBITDA, Leverage, RASK and CASK

A use of combination of financial and industry related ratios will help us analyse and compare the low-cost and flagship business model

Profitability Ratios

Profitability ratios studies a company efficiency at making profit and building value for shareholders

Facilitated us in comparing and evaluating ratios across airlines operating under similar and dissimilar business models in the aviation industry. Allowing us to assess a company's efficiency at making profit and building value for shareholders, while also acquiring a deeper grasp of the company's own history, which in our case includes the last five years activity from the airlines we examined.

EBITDA: this metric allows an analysis of company's financial performance while excluding any rent expenses associated , allowing a clearer view of the company cash generation capability.

Net-Debt-to-EBITDA Leverage: this indicator measure the ability of a company to pay off incurred debt usually expressed in years. In the Airline industry any value above 5 is considered alarming

Net-debt: $\textbf{Net debt} = \boldsymbol{Cash - bankdebt - aircraft\ lease * 7\ (multipler)}$
whereas the multiplier 7 is an industry standard amplifying the effect of several other variables

Valuation: $\boldsymbol{Enterprise\ Value = multiplier\ x * EBITDA}$
although there are several options to calculate enterprise value the presented one is the most used method to assess the value of an airline

Equity: $\boldsymbol{Equity = Enterprise\ Value - Netdebt}$

Industry-Specific Ratios

Industry ratios allows a more comparative study among performances across the industry

Assist us in determining how well airlines perform in their own industry. The first ratio we used was the load factor, which is a metric commonly used in the airline industry to determine the percentage of available seating capacity that has been filled with passengers. Additionally, we used average revenue per seat and available seat miles to gain a more detailed understanding of where the revenue comes from. Together these ratios allowed us to conduct a more in-depth analysis of the airline's profitability.

Return per seat kilometer (RPSK): Revenue each seat kilometer has generated for the airline. To assess the RASK of an airline the airline's revenue generated during a period is divided by the same period's ASK**.**

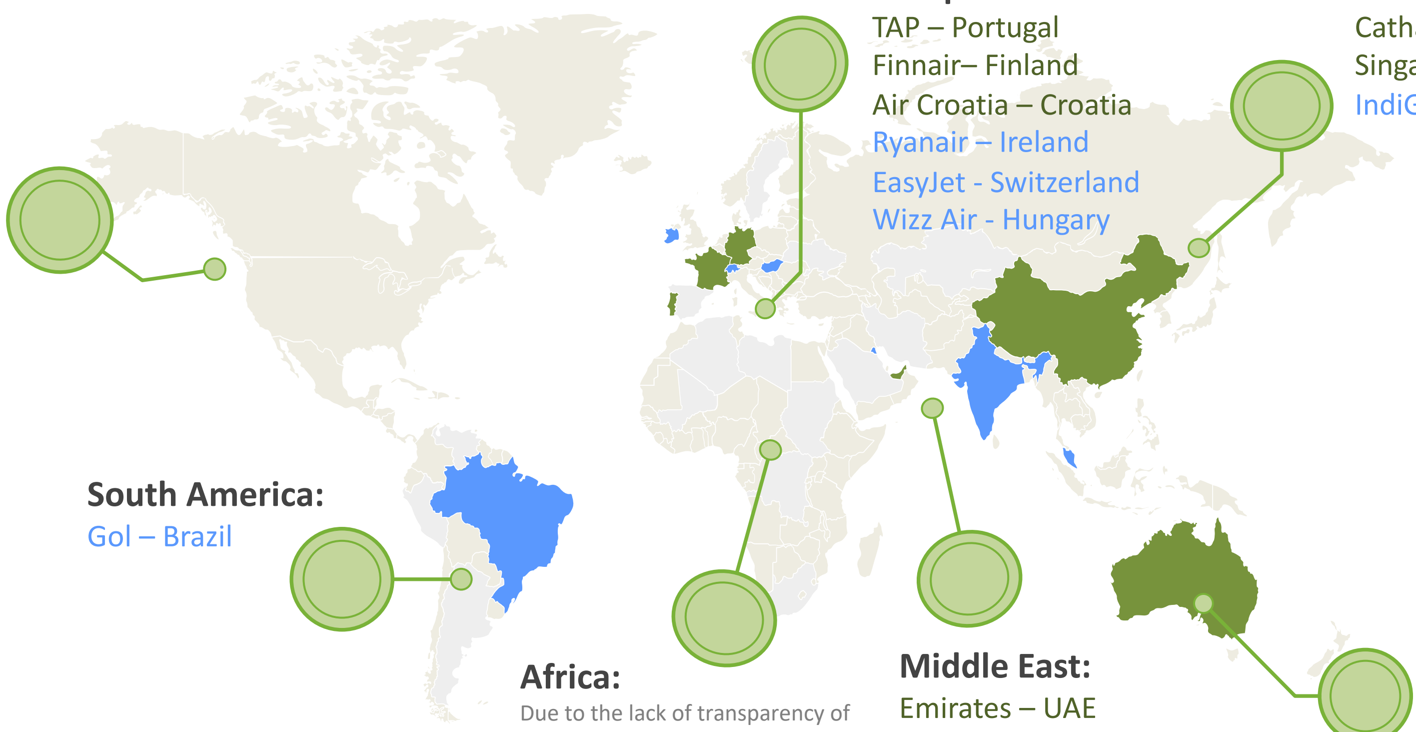
Cost per seat kilometer (CPSK): Measures unit cost expressed to operate each seat for every kilometer. A lower value indicates that it's easier to earn revenue. To get the CASK, direct operational cost is divided by the available seat per kilometer.

Load-factor: indicates the percentage of available seating capacity that has been filled with passengers. Although this is an often-seen indicator it's a controverse one as it implies a well-defined price. A higher load factor can be achieved if prices go down and vice versa. Therefore, this ratio won't be used as it is not necessary an indicator for airline success or profitability alone but includes price setting.

Sources: Neves, Morell

Selecting airlines for a profitability analysis comparing low cost and flag carrier is based on geographical and market share coverage

Six low-cost and seven flag carriers were selected to perform a profitability analysis. In addition to the mentioned definitions, importance was placed on covering all geographical continents as far as possible and on selecting representative carriers with a high market significance.



North America:
In North America, no flag carrier exists that meets the definition of this work.

Europe:
TAP – Portugal
Finnair– Finland
Air Croatia – Croatia
Ryanair – Ireland
EasyJet - Switzerland
Wizz Air - Hungary

Asia:
Cathay Pacific– China
Singapore Airlines - Singapore
IndiGo - India

South America:
Gol – Brazil

Africa:
Due to the lack of transparency of public financial data, no airlines from Africa were considered

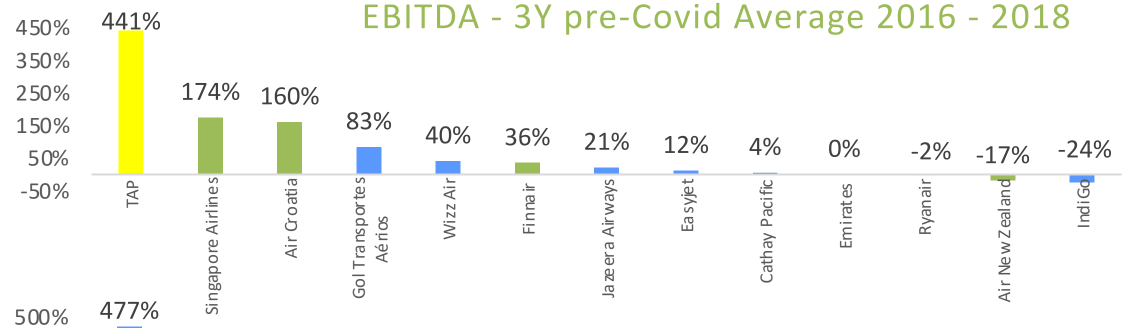
Middle East:
Emirates – UAE
Jazeera Airways - Kuwait

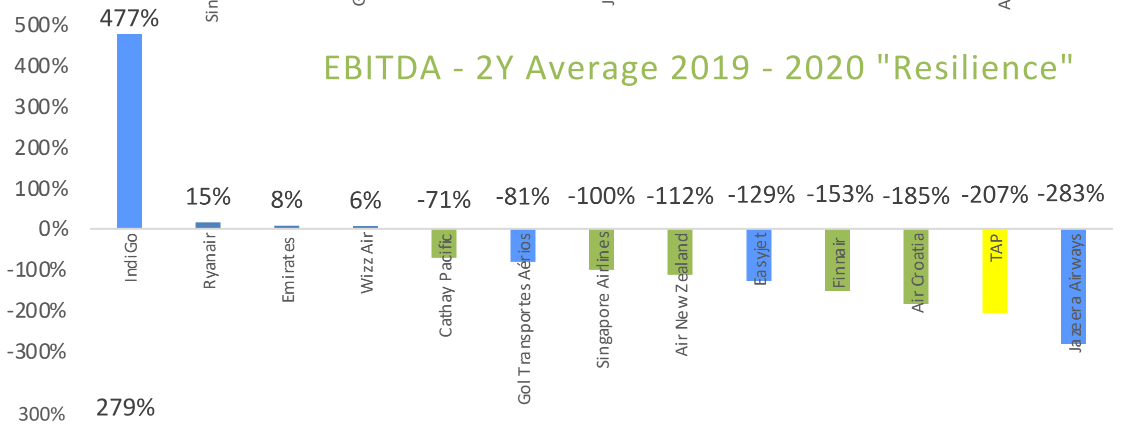
Oceania:
Air New Zealand – New Zealand

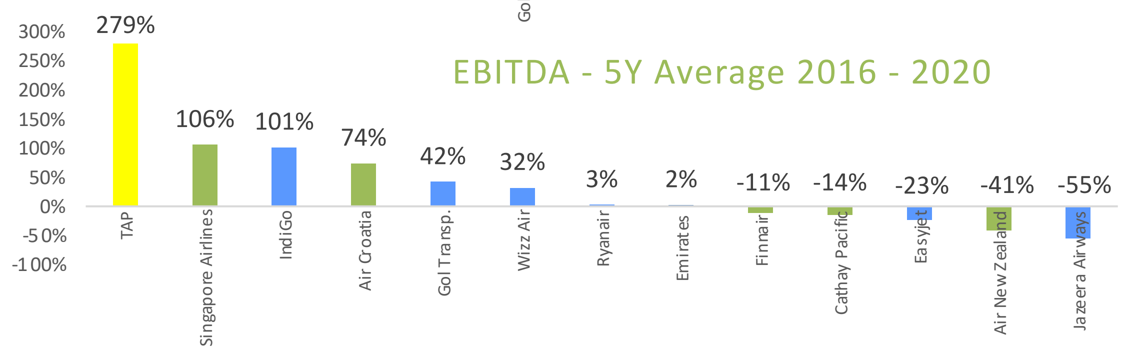
Low-cost carrier
Flag carrier

TAP Portugal's profitability development changes from one of the bests pre-covid to one of the worst during covid

TAP were increasing their performance, but when the pandemic hit, they weren´t ready and was the second worst in the resilience period







TAP shows a high increased EBITDA in a pre-covid period due to the strategy change included in the privatization process. However, when covid arrived TAP performance went in a different direction occupying the second last place.

In the 3-year average of EBITDA changes per airline before Covid's, shows no clear trend in favour of flag carriers or low-cost carriers can be identified. However, **TAP shows an exorbitantly high increase in EBITDA** in the years 2016-108 which can be attributed to a **strategy** change including a **privatization period**.

In the two-year average of the EBITDA changes from 2019-2020 shows the profitability resilience. The last places are predominantly occupied by flag carriers and therefore **low-cost carriers can be attributed a higher resilience during covid.** It is striking that TAP, in contrast to pre-covid, occupies the second last place. This could be due to poor crisis management or due to a change in strategy in 2020 by reversing the privatization. The exact reasons for this development of TAP Air Portugal will be analysed later .

Looking at the last five years, no clear trend in favour of low-cost or flag carriers can be identified. **TAP Air Portugal shows the best development**, which demonstrates that the positive development before the occurrence of Covid and the reversal of the privatization in 2019 covers the negative developments after these events.

The development of TAP Air Portugal's profitability

- While TAP had the best EBITDA performance among the airlines studied in the pre-Covid period, the company has one of the worst performances from 2019-2020.
- The exact reasons for this development and the connection to an attempted privatization of the company during this period will be discussed in chapter 2.

Low-cost carrier Flag carrier TAP

Sources: Annual Reports

Sustaining CASK reductions is critical if RASKs are persistently trending downward. There is a clear gap between the CASK for low-cost carrier and flag carrier

Analysing the unit returns and costs is used to derive strategical success and profitability

(Return per Available Seat Kilometer RASK)						
	2020	2019	2018	2017	2016	Average
Air New Zealand	9,30	7,12	7,48	7,54	7,25	7,74
Finnair	7,32	7,35	7,90	7,87	7,56	7,60
Easyjet	6,19	7,02	7,52	6,79	7,21	6,95
Emirates	6,82	6,82	6,67	6,30	6,94	6,71
Gol Transportes Aérios	4,91	6,88	6,50	6,93	6,15	6,27
Cathay Pacific	4,22	5,64	6,01	5,67	5,90	5,49
TAP	5,33	5,23	5,52	5,28	not published	5,34
Singapore Airlines	2,03	6,01	6,23	6,09	6,09	5,29
Wizz Air	4,51	4,31	4,44	4,24	4,54	4,41
IndiGo	0,05	0,05	0,05	0,05	0,06	0,05

(Cost per Available Seat Kilometer CASK)						
	2020	2019	2018	2017	2016	Average
IndiGo	0,05	0,05	0,05	0,05	0,05	0,05
Wizz Air	3,93	3,81	3,77	3,56	3,80	3,77
Gol Transportes Aérios	4,93	5,57	5,70	6,89	5,71	5,76
Emirates	6,35	6,64	6,37	6,12	6,26	6,35
Easyjet	8,81	6,55	6,95	6,28	6,45	7,01
Air New Zeland	8,13	7,38	6,92	6,75	6,34	7,11
TAP	7,97	7,82	8,24	not published	not published	8,01
Finnair	12,57	6,97	7,30	7,34	7,38	8,31
Singapure Airlines	8,70	8,80	8,90	8,70	8,69	8,76
Cathay Pacific	not published	not published	not published	not published	not published	not published

There isn´t a clear trend in terms of RASK but there is slowly appearing a trend where this ratio is decreasing over the years. In terms of CASK there is a clear trend that low-cost airlines have lower costs when compared to flag carriers.

The long-term history of the global airline industry is one of falling unit revenue in real terms (RASK). The only way that the industry has ever made a positive margin has been through lowering its CASK. This remains vitally the case as economic conditions remain soft. **Maintaining CASK reductions is essential where RASK is trending persistently downwards.**

Apart from a few outliers, the unit return of all airlines examined has fallen in recent years. Focusing on TAP Portugal, from 2016 until the entry of Covid or the renewed change in strategy and reversal of the privatization, the unit return suffered some changes over the years.

While the difference between low-cost and flag carriers is very clear in unit revenues, the **unit cost comparison clearly shows the strengths of low-cost carriers.**

To be profitable, cutting CASK is essential to combat long term real decline in RASK.
There is a clear gap when it comes to unit costs between low cost and flag carrier.

Sources: Annual Reports, centre for aviation

Although it is nearly impossible to compete with the cost structure of low-cost carriers, TAP was able to report very good developments between 2016 and 2020

Theoretical Background

Aviation

2020 worst year in aviation history regarding passengers, revenues and profitability

Freight	**Passenger**	
	Low-cost carrier	**Full-service / Flag carrier**
		TAP AIR PORTUGAL

Research Focus

How is TAP performing in comparison to its low-cost and flag ship competitors?

Theoretical Background

Competitive dynamics

- Consolidation through alliances and joint ventures
- Hybridization of business models
- Financial distress exposure

Profitability

- Key drivers: labor cost, aircraft utilization, airport dominance
- KPIs: EBITDA, net-debt –EBITDA ratio, RASK, CASK

Profitability Analysis to see where TAP Air Portugal stands

- Analysis six low-cost and seven flag representative carriers with a high market significance carriers

Key Results

- Low-cost carrier outperform flag carrier better **cost structure** and **airport domination**
- **TAP** had **the best EBITDA development** pre-Covid BUT one of the **worst** performances from 2019-2020.
- To be profitable, **cutting CASK is essential – TAP** amongst **worst**

→ Why did TAP Air Portugal lost track after a time of constant improvement? (Chapter 2)

Chapter 1 – Key Takeaways

NOVA SCHOOL OF BUSINESS & ECONOMICS

1.1 **Industry Context - The Covid-19 pandemic brought the worst year in history of the travel and tourism industry**

- The travel and tourism industry was one of the most covid affected industries losing more than 76% of clients from 2019 to 2020.
- The year of 2020 was the worst year in the history of airline industry, including high double digit percentage decrease in revenue, passengers and profitability.
- TAP Air Portugal, accumulating debt, state aid as well as by strategic mistakes, is at a crossroad needing changes to ensure future success.

1.2 **Aviation Context – This study investigates flag carriers that are state-owned and understand how that impacts results**

- The Aviation industry can be separated into freight, general, and commercial aviation. Focusing on commercial aviation this study concentrates on low-cost carrier and flag-carrier. As there is no standardized definition for flag carrier this study is using the criterion of been majority state-owned for an airline to be considered a flag carrier.
- The business models of flagship and low-cost are very distinct and over the years full-service carriers have been losing market share while low-cost airlines increased their market positions.

1.3 **Competition and KPIS - The aviation industry has complicated competitive dynamics, and key profitability KPIs**

- The airlines industry is a low margin sector. Due to high price transparency and competition profitability is mainly driven by labor costs, aircraft utilization and airport dominance.
- Key profitability performance are Earnings Before Interested, Taxes, Depreciation and Amortization (EBITDA), Net-debt to EBITDA leverage, Return per seat kilometer (RPSK) and Costs per seat kilometer (CPSK).
- Alliances and joint ventures are key tool to gain competitive advantage

1.4 **Profitability Analysis – Low-cost airlines prove to be more profitable than flag-carriers that are losing market share year after year**

- Analyzing profitability KPIS shows that TAP Air Portugal's profitability transformed from having on of the best pre-covid developments to one of the worst during the last 2 years. There might be two reasons for this phenomenon. Strategic changes that were implemented during the last two years and the pandemic.

→ To assess to which extent strategic decisions are responsible for the desolate situation TAP Air Portugal is in currently an analysis of the past strategies and the respective results is made in the next chapter

Agenda - Research Questions and Methodology

Sections	Research questions	Methodology
1 Context	**1.0. Who is coming on top on an adapting aviation industry, flag carriers or low-cost airlines?** **1.1.** How did the Covid-19 pandemic affect the travel and tourism industry? **1.2.** How is the aviation market segmented and how differ low cost and flag carrier? **1.3.** What are the competitive dynamics, and which are the key profitability KPIs ? **1.4.** What is the current profitability situation of flag carriers and low-cost carriers?	• Exploratory Research • Market Analysis • Financial Statement Analysis • Benchmarking
2 TAP Struggle	**2.0. How did TAP got to the current situation and what was the government role on it?** **2.1.** How did TAP Air Portugal privatization and the new strategy turned out? **2.2.** How did COVID-19 challenge and affect the organizations strategy? **2.3.** Is TAP Air Portugal better or worse off today after being nationalized again? **2.4.** Is the role of the state as owner of TAP an advantage or a disadvantage for the airline?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey
3 Alternative Scenarios Analysis	**3.0. Is TAP worth saving? What are alternative scenarios to turn around TAP Air Portugal?** **3.1.** What are the key dimensions to be considered while assessing potential alternatives? **3.2.** Which alternative scenarios are conceivable? **3.3.** What effects did the cases have on their home countries? **3.4.** What are the key takeaways from the cases for TAP Air Portugal?	• Literature Review • Expert Interviews • Benchmarking • Exploratory Research
4 To save or not to save	**4.0. Is it worth to save TAP if they follow the strategy proposed on chapter three?** **4.1.** How does the new strategy affect TAPs structure and the success factors? **4.2.** How will TAP become more profitable and competitive with the new strategy? **4.3.** Is it worth for the government to save TAP and keep investing resources in it?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey

Agenda - Chapter 2

Sections		Research questions	Methodology
2	Key Question	**How did TAP got to the current situation and what was the government role on it?** Keywords: TAP, privatization, government, strategy	
2.1	Privatization strategy	**How did TAP Air Portugal privatization and the new strategy turned out?** • What were the main factors that triggered the need for a privatization and a new strategy? • How did the privatization process developed and what it meant? • 2016 – "Growth Route" strategy	• Exploratory Research • Market Analysis
2.2	Covid-19 strategy	**How did COVID-19 challenge and affect the organizations strategy?** • New strategy and major company changes • Why the 2016 strategy didn´t work? • COVID-19 and the new challenges it brought to TAP	• Exploratory Research • Market Analysis • Financial Analysis
2.3	Private vs Government Management	**Is TAP Air Portugal better or worse off today after being nationalized again?** • Strategy comparison • Costumer perception	• Exploratory Research • Market Analysis • Financial Analysis
2.4	Role of government	**Is the role of the state as owner of TAP an advantage or a disadvantage for the airline?** • Investment analysis • Incentives	• Exploratory Research • Benchmarking

TAP Air Portugal in numbers and through the lens of customer perception

Today TAP is state owned with 72.5% being from the government, 22.5% from businessmen Humberto Pedrosa and 5% by workers of the company.

TAP PORTUGAL

17 million passenger flew with TAP in 2019.

More than **80 tons of cargo** transported in 2018

More than **100 aircrafts**

More than **14 thousand** employees in TAP group

Flying to **4** different continents and over **80 destinations**

More than **4 million** registered in TAP loyalty program

More than **470 thousand** stopover in Portugal by end of 2019.

More than **20 prizes** awarded in 2019

"First word that comes to your mind when you think about TAP"

Money
Quality
Delays
Price/quality
Premium Service
Expensive
Old
Debt
Bankrupcy
Problems
Overpriced
Safe
Overated
Bad
Holidays
Governmentt
Confusion
History
Portugal
Problems

Sources:
TAP, survey

Antonoaldo Neves the Ex-CEO of TAP talks about his experience leading the Portuguese company and tells his view on the aviation industry and the future.

Antonoaldo's Biography:

- Antonoaldo is 45 years old and has a double nacionality, Portuguese and Brazilian.
- In his early years he started in McKinsey, eventually becoming a global partner.
- After a few years of being a global partner he decided to leave and move on to the aviation industry as the CEO of Azul a brazilian carrier.
- In 2015 he was already involved in the negotiations of privatization of TAP, becoming the CEO in 2016.

Interview thinking process:

The low-cost industry **outperforming** the flagship airline business model. It is **impossible to compete** as legacy carriers have higher cost structures.

→ Explaining TAP privatization process and how the company was before 2015. **Financial situation overview** on how the TAP was entering bankruptcy.

→ The new strategy of TAP in 2016. Implementation of the **new fleet** and **opening the new destinations.**

→ How the new management **increased the profitability** of the company and how that **opened doors** to new negotiations.

→ Covid Outlook, how the company reacted and what happened with the management of the company. The government stepping in and **taking control.**

→ The **future of TAP**, with a **proposed solution** and overview.

Over the years TAP have been under government and private management, but which one has brought the best results for the airline?

TAP Government Governance

Poor investments, dangerously **negative equity,** and continuously **negative income** results showed that TAP was struggling and needed a change

February 4, 2015 - The Government appoints the special commission charged with monitoring the TAP **privatization process.**

June 24, 2015 – Atlantic Gateway **acquires 61%** of TAP

The recovery plan was mainly focused on **dominating hubs, focusing on long haul, upgrade the fleet and customer service,** among other.

António Costa becomes Portugal prime minister **reverts the privatization process**

February 6, 2016 – the government reacquires part of the company and stays with 50% of TAP´s Capital, **leaving Atlantic Gateway with 45%**

The "growth route" strategy was having good results, with **leverage coming down from 10,5 to 4,** and other financial ratios improving

Then in 2020 a global pandemic provokes panic in all industries and tests the company's capabilities to **quickly adapt** across sectors

TAP Private Governance

Between March-April TAP cancels more than **1.000 flights** due to the pandemic. There is a huge **impact on demand and revenues.**

In 2020 during the pandemic the government reinforces again its position with enough 22,5% of **TAP, reaching a majority of 72,5% of TAP´s Capital.**

Problematic: How did TAP got to such poor results in 2014, the change that the privatization brought to the company and how the company is doing now?

Sources: TAP, Neves, Expresso

Throughout the government management losses were accumulating, TAP was on the verge of insolvency in 2014, something had to be done…

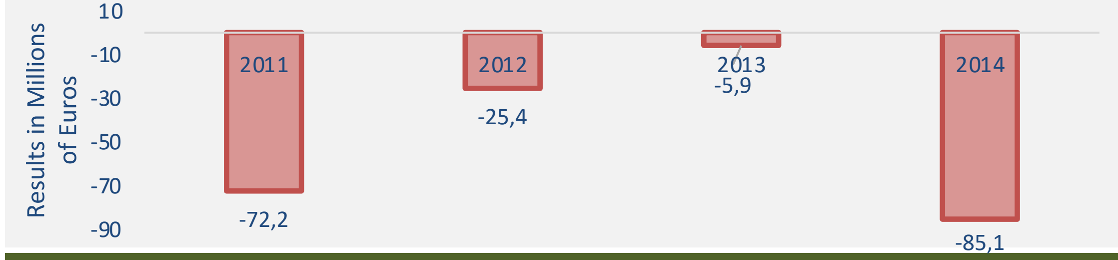
…that's why in 2015 the government had no choice than to start the privatization process of TAP to prevent an insolvency process.

TAP Government Governance

TAP – Net Income Results 2011-2014

Continuous negative results pushed TAP in even deeper problems

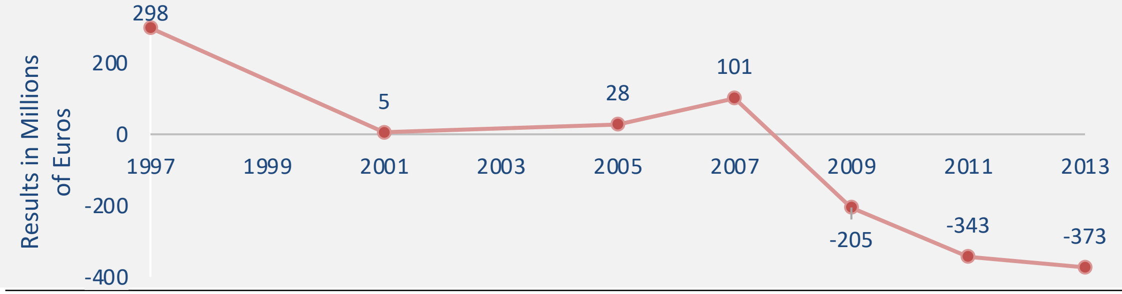
- TAP registered losses for the **4 years prior to the beginning of the privatization** process reaching the breaking point in 2014 by having more than **85 million euros in losses.**



TAP Total Equity

Since 1997 TAP has been continually losing equity reaching dangerous values in 2013

- In 1997 TAP underwent a recapitalization process, leaving the company with a positive equity position of **+298 million euros.**
- Starting in 2007, as a result of poor investments and the industry's expansion of low-cost airlines, TAP's financial situation reached a total equity of **-372 million euros in 2013.**



TAP – Brazil Maintenance – Financial Liquid Results

Government bad investment in Brazil maintance resulted in more than 477M€ in losses over the last 12 years

- TAP's investment in a company called Varig resulted in the acquisition of "Manutenção Brasil" with TAP supporting its losses over the years.
- This investment was a good opportunity for TAP to establish itself as the largest foreign airline in Brazil, but over the years, it generated over **477 million euros in losses.**

TAP Employees Strikes

Just in 2014 22 strikes had a negative impact of 110 million euros on TAP

- In 2014 alone, **22 strikes** impacted TAP;
- Each day of strike resulted in an average loss of around **5 million euros, totalling around 110 million euros** the impact that these strikes had for TAP.

Sources: TAP, Neves, Expresso, anual reports

The privatization brought in a new strategy for the company hoping to improve company performance and achieve better results in the future

The new strategy was focused on a new era of innovation and renovation, with a refocus from short-haul flights to long-haul flights

TAP current strategy: "GROWTH ROUTE"

A new strategy focused on innovation, renovation and strength relationships

In 2016 the company took a step back to look at the **big picture** and understand what had to be done to **succeed in the future**. A new era of **innovation and renovation began**. Since then, TAP became a more **modern airline** that is in line with the **customer satisfaction** of today. This new strategy consisted of 3 pillars; **revolutionising the fleet, reaching far beyond and strengthening their relationships.**

"TAP costs can be lower than all the other hub-spoke carriers in Europe" – Antonoaldo

Focus on long-haul flights and take advantage of Portugal geographic position

- One of the reasons for the acquisition of TAP was because the analysis showed that the company could be **very profitable in the long-haul flights.**
- The decision was therefore, to focus on the **Atlantic competition** and not on to fight low-cost carriers such as Easyjet or Ryannair.
- The **geographical position** of Portugal gives a **big advantage to TAP** as it is closer than any other country in Europe to the America's, as we can see by the charts below.
- In addition to that there is **not a lot competition** as it is mainly joint venture such as KLM and Air France or Lufthansa and United. This means they choose the same prices meaning there are only **3 big players in the Atlantic.** The idea was then to be the fourth one with much lower costs.

Lisbon – Rio De Janeiro

4778 Miles	7690 Kilometers	4152 Nautical miles
9 h 32 min Flight duration	3 h Time difference	555 kg CO2 emissions

Frankfurt – Rio De Janeiro

5930 Miles	9544 Kilometers	5153 Nautical miles
11 h 43 min Flight duration	4 h Time difference	707 kg CO2 emissions

Strategy intention was to grow on the long-haul:

Strategy focused on "attacking" the Americas market

- TAP already dominated brazil with about **30% of the seats and 82 flights per week.**
- The strategy was then to **"attack" the United States** and get as much market share as possible like they were doing for Brazil by opening new destinations like Toronto, San Francisco, Los Angeles.

Profitability of the destinations:

No short-all is profitable but long-haul destinations started paying off

- At the beginning when the privatization was made only **5 destination in brazil were profitable and 0 in the North Americas.**
- **At the beginning of Covid all 10 destination to Brazil and the 7 to North America's were profitable.**
- **NO SHORT-HAULD DESTINATION WAS PROFITABLE**
- TAP will **never** be able to compete with the low-cost of EasyJet and Ryanair as they don't have the cost base for that.

The Cost base of TAP:

TAP salaries are too high and old aircrafts increase maintance costs

- A Ryanair Pilot makes **40 thousand dollars** a year a TAP pilot makes **90 thousand dollars** and that is very hard to change.
- The types of aircrafts used also make the cost structure more **expensive** as they operate more models meaning they need more **specialized engineers increasing the overall cost.**

Sources: TAP, Neves, air miles

The new strategy brought a new approach to the fleet of the company and a new digital ecosystem

NOVA SCHOOL OF BUSINESS & ECONOMICS

Big investments had to be made in the TAP's fleet and digital platforms in order to make the company more updated and increase competitiveness.

TAP Private Governance

New strategy, new fleet:

Old planes "falling apart" the company required investments in a new fleet

- In 2016 the fleet that TAP had was **very old and "falling apart"** as Antonoaldo said.
- Some planes were flying with only **20 cycles** in each engine before they had to be changed which is **very dangerous.**
- A lot of orders were made for new planes and deliveries were late creating a problem were the company almost had **no planes to fly** leading to delays and cancellations.

The choice of the new fleet:

The new airplanes would increase profitability and improve the carbon footprint

- TAP chose the new airbus NEO aircrafts that consisted in the **A320, A321LR and A330.** The planes were ordered not only to **increase profitability** but also to improve **carbon footprint** and provide **more comfortable** cabin space for passengers.
- Some older planes that were in good conditions were also **retrofitted** to be similar to the current fleet by **refurbishing** interiors to provide more space and comfort in all classes.

The strategy behind the new aircrafts:

Cost reduction in maintance and fuel consumption and new airplanes for long-haul destinations

- The new NEO aircrafts were a **big investment** made by TAP but also brought a lot of profitability to the company.
- An A330 NEO brings a **12% fuel consumption** reduction than a normal A330 meaning TAP can save millions and increase the routes profitability.
- In addition to that the choice of buying the new **A321LR** that would make **30%** of the flights to the Americas was a strategic decision **to increase profitability**. This was because nobody in Europe could be using it to make the flights cross Atlantic. The trip cost of a A321LR **is half the cost** of a A330. So, for example TAP could do **daily flights** to Washington with the plane and if the competitors put a daily flight, they will **lose money** as the plane will not be full and costs will be higher.

TAP also decided to design a new digital ecosystem:

Increasing customer experience and promoting the airline heritage

- Completely **new digital ecosystem** offering better browsing experience, tailored formats and a new personal area. Also introducing TAP corporate for business travellers allowing companies to earn balance in cash in exchange for flights.
- Proudly **promoting Portugal** by only serving Portuguese products aboard.

Sources:
TAP, Neves , expresso

NOVA SCHOOL OF BUSINESS & ECONOMICS

The effectiveness of the new strategy is clear by analyzing the financial data from TAP, the airline entered in an upper trend over this period

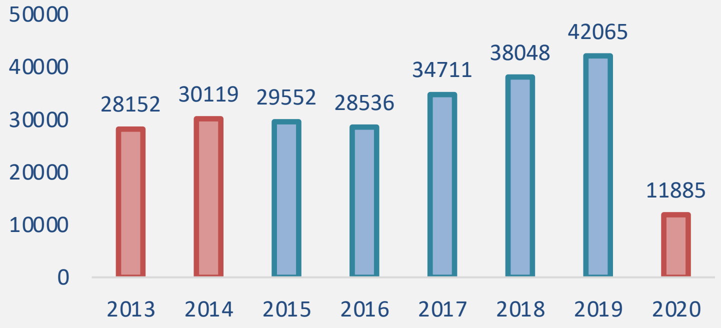
The new strategy increased profitability, decreased the company debt, among many other variants, but overall increased TAP competitive advantage and it reminded that the airline could perform well and not be a company that will always generate losses…

TAP Private Governance

TAP – RPK results 2013-2020

TAP started increasing consistently their RPK results reaching values the company never saw before

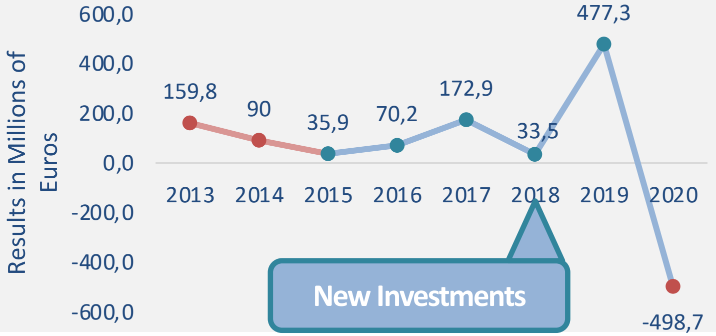
- From 2013 to 2016 the RPK was suffering major changes over the period. Although small between 2014 and 2016 there was a small decrease of the ratio;
- From 2017 to 2019 with the new strategy coming into play the **RPK started increasing reaching 42065 millions** in 2019 a new high value for the metric;
- 2020 once again due to the coronavirus pandemic plunged the **RPK to 11885 million.**



TAP - EBITDA results 2013-2020

EBITDA also increase and was kept positive even with the new investments in 2018

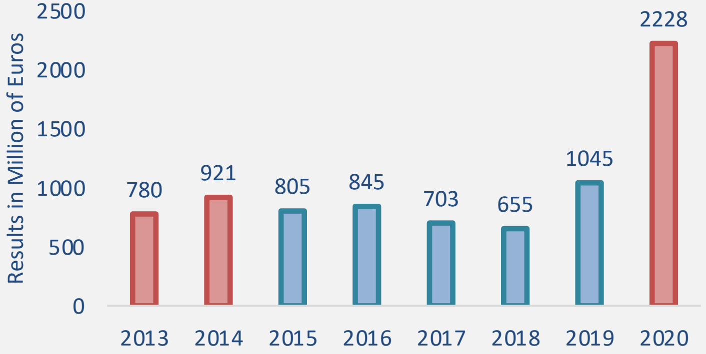
- From 2013 to 2015 there is evidence of a **continuous plunge of EBITDA** reaching 35,9 million euros at the time of the privatization;
- Since 2015 with exception of 2018, we can see that there is an **upper trend** in the EBITDA reaching an astonishing **477,3 million euros in 2019** values that the company didn´t manage to keep for too long.
- 2020 brought the pandemic and a dark era to the aviation industry as a whole and TAP wasn´t an expectation reaching a negative EBITA of **-498,7 million euros.**



TAP – Liquid Debt 2013-2020

Liquid debt started decreasing but covid skyrocketed the value to an all-time high

- Since the privatization in 2015 TAP was able to **decrease** their liquid debt from **805 Million** euros to **655 Million** euros in 2018;
- In 2019 there is an increase of liquid debt to the **renew of TAP fleet.**
- 2020 brought the need for external money in order to help TAP survive and unprecedent situation, therefore the liquid debt reached a record value of **2.228 Billion Euros;**



Sources: Annual reports, TAP, Neves

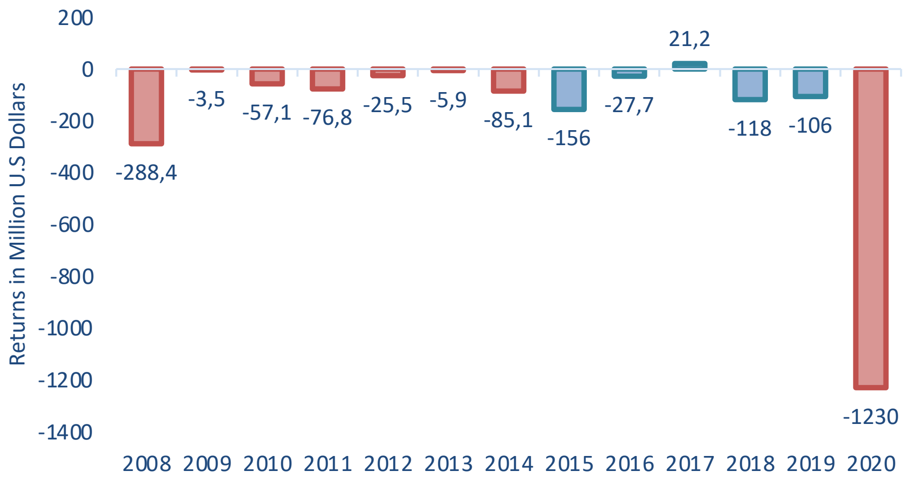
The pandemic brought losses of 1.2billion to TAP, leading them to their worst year ever and making them request financial support from the government

TAP Government Governance

TAP Private Governance

TAP was the first airline in Europe to stop operations by grounding their planes and took early measures to reduce company costs and losses.

TAP returns over the last 12 years



- The pandemic caught the world and the aviation sector off guard, and with that come huge amounts of **uncertainty**, **huge losses** for companies and **strategy shifts**;
- TAP registered in 2020 their worst year ever reaching **losses of -1230 Million U.S. Dollars;**
- This result was **4x worse** than the results from the **2008 crisis**.

Main strategy and health decisions that were made during the pandemic

Airplanes on the ground

- The pandemic led to almost the full **grounding** of the entire fleets of airlines;
- TAP had **90%** of its 107 fleet on the **ground.**
- TAP had to move a lot of the planes across different Portuguese airports to have sufficient space and **to avoid high costs** of the Lisbon airports. Alternatives were, Porto, Beja and Faro.

Layoffs

With flights being cancelled and airplanes on the ground TAP needed to **save money** and therefore created a plan of **lay-off.**

- TAP went trough various **renewals of lay-off** periods;
- The first one was in April 2020 **with 90%** of the workers going into lay-off while receiving **2/3** of their fixed salary.

Cancelled flights and restrictions

- Uncertainty led airlines to **cancel** most of its flights specially in the beginning of the pandemic;
- **Travel restrictions** from other countries made it difficult for people to travel and restart the sector

Health measures

The pandemic generated a need for better and stricter health measures when travelling, such as:

- Health screening
- New cleaning standards;
- Increased ticket flexibility;
- Biometric tech;
- New mobile apps

Sources: Expresso, TAP, Publico, Neves

Atlantic Gateway wanted state support as Lufthansa received, but the Portuguese government had other plans

The government would provide aid and receive a % of the airline shares in return as a guarantee. However, when TAP started repaying back the financial aid, the government would start selling their shares back to the company that they received as a guarantee for the repayment.

TAP Private Governance

Lufthansa

- Lufthansa received state aid of **9 Billion euros** to help the company survive the difficulties that the pandemic is bringing to the aviation industry;
- Due to this aid the **German government acquired 15%** of Lufthansa shares, however this position has been **already reduced and it will be zero** if Lufthansa **complies** with the contract and reimburse all the capital aid;
- Lufthansa has now **already repaid all the financial aid to the government ahead of time**, showing that the government helped the company **survive and thrive** in an uncertainty scenario where the industry is certainty struggling to recover.

TAP PORTUGAL

- TAP wanted a similar contract with the Portuguese government, where they would help TAP with capital to save the company, **proportionally to the size of TAP;**
- However, the **decision power would still be from Atlantic Gateway**, there was **no interest** in the government to have a say in the strategy decisions and therefore money allocation of the company.
- But instead, the Portuguese government **expelled Atlantic Gateway** from the management and made them **sell 22,5%** of their TAP ownership. With the government acquired for **55 Million euros.** From June 2020 the government was in control.

TAP Government Governance

GOVERNO DE PORTUGAL

The State help in 2020 was…

1.2 Bilion Euros

- The Portuguese government in 2020 have already injected more **than 1 Billion into saving TAP**;
- Since they are now the **main shareholder** of the company this money doesn´t need to be payback to the government.
- While if TAP would still be in control of a **private entity,** such as Atlantic Gateway the company would **need to payback,** and would go through a similar situation as Lufthansa;
- The governments are **not efficient** and don´t share the **same incentives,** and therefore will never be **align with what the businesses in aviation requires.** This will be discussed in further slides.

Sources: Neves, Expresso, Publico

The customer perception of TAP today is very different then what it was in 2020 before the pandemic during the privatization attempt and restructuring

Customer perception is a very important factor when passengers are thinking about booking their tickets. Before the new strategy of 2016 TAP was suffering with there customer perception, but studies made in late 2019 show that they managed to recover. However, today a surveys and interviews show it went back to what it was before.

TAP Government Governance

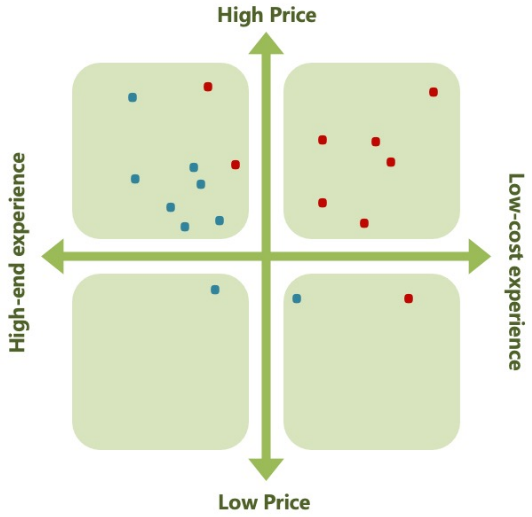
TAP Private Governance

Frequent flyers place TAP as having a high price a low-cost experience in a positioning map.

There is a clear change of view from when a private entity was in charge to when the government regained the decision-making process

- Customer perception of 2016

- Customer perception of 2021



After the **government take-over** the customer perception of TAP frequent flyers changed. The airline is **not supposed** to be a low-cost carrier but in frequent flyers minds the service offered is **comparable to one**. Prices **are high** and **quality is low** therefore the company might be wrongly positioned. In the past the company was seen as affordable and good experience.

Some problems that the customers raised during the interviews:

	1	**Service quality**	Onboard service is perceived as low regarding flight attendants and catering.
	2	**Low comfort**	Cabin comfort is criticized and compared to low-cost airlines.
	3	**Delays**	Majority of interviewees say it is very common for flights to be delayed.
	4	**Price / Value**	The price / value of the tickets is low and passengers pay don't seem get an added value.
	5	**Customer Service**	Numerous complaints about poor customer service that is slow and unwilling to help

Sources: Survey, Neves

Consumer Perception of TAP improved during the period that the company was privatized and got worst during the time the government had control

TAP Government Governance

TAP Private Governance

The customer perception of the respondents is that the quality of the service offered by TAP has gotten much worst after the pandemic and from experience from the past that has only happened when the carrier was nationalized. 92% think it should be aviation experts controlling the company and not the Portuguese government.

275
Survey answers

82
Respondents that do more than 12 flights a year with TAP which makes them frequent flyers

88%
Frequent flyers said the quality improved since the privatization until covid.

72%
Frequent flyers said flying with TAP from 2016-2020 brought more prestige

92%
Frequent flyers said service is better than low-cost before the pandemic

81%
Frequent flyers said the quality become worst after the pandemic

66%
Frequent flyers said that TAP is having a service similar to a low-cost

72%
Frequent flyers said that they are now open to flying with other airlines

84%
Survey respondents want TAP privatised again.

8%
Of the survey respondents think the Portuguese government should be the one controlling TAP

Sources: Survey

The problems of TAP already came from the past, but are reinforced by the government management

From the analysis conducted it was understood that the reason TAP was struggling is partially because of these 4 main factors controlled by the government.

TAP Government Governance

Investments

Bad investments increased losses

- Over the years the investments that the government decided to make **didn't bring profit**.
- TAP maintenance one of the branches of the company was one of the failures as too much was invested in Brazil as a result of a bad market study and had over **477,5 million in losses**.
- Another example of bad government investments were **the routes that they were flying at a loss.** Macau and Sau Paulo are two profitable routes that were losing because of bad planning.

The Market

Bad strategy focus led to the same results

- The Portuguese market is **very small** therefore the strategy of TAP **cannot** be focused on the Portuguese.
- As the main cities Lisbon and Porto are **not hubs** there are less business travelers and the flagship **only brings 30%** of the tourists, meaning to be profitable it needs to rely on another strategy such as the one of being a **hub-spoke carrier** implemented during privatization of 2016.

Competition

No innovation decreases competitive advantage

- The product that is offered has always been **inferior** but that has started to change with the new 2016 strategy.
- However, since the pandemic big **shifts in service quality** occurred by changing in-flight service, reducing staff and try to minimize costs at all costs, changing the customer perception negatively. Having now the perception that TAP is becoming a **low-cost** is exactly the opposite of the 2016 strategy. This is opening the door for competitors to gain market share.

Location

Conflict of interest lead to non-profitable decisions

- The **location of the Lisbon airport** leaves no room for expansion.
- **Mismanagement** of the airport leads to huge delays as it is operating beyond capacity during activity peaks.
- **Conflict of interests** between the state and TAP in the area of **slot management.** The state has the incentive to create and allocate as many slots as possible to attract passengers to the country. TAP, on the other hand, has the **incentive to own** as many slots as possible and not to give any new ones to other airlines in order to **increase profitability.**

Sources: Neves, Expresso, Publico

The growth route strategy implemented by Atlantic Gateway was working but the government once again interfered negatively

The future of TAP under government controls looks uncertain as the company will most likely go into bankruptcy in the next years if there is not a change in management, specially at this time of crisis.

TAP Private Governance

The strategy under private-owner control and decision making:

- The new strategy of TAP seemed to be **working** until the **unexpected** Covid-19 pandemic arrived.
- Management of the company **was effective,** and results were beginning to follow and **upward trend.**
- The company had **the first positive year in 2017**.
- The restructuring plan was working so well that competitors like Lufthansa, started to worry about **TAP gaining their market share.**
- Customer satisfaction **was high** and many people **"rediscovered**" a new TAP.
- Decision making was always **fast paced** and taken from a **strategic perspective.**

"Competitors were scared of us for the first time as we were stilling their market share and making millions of dollars at the end everyone wanted to be our partners"

VS

TAP Government Governance

TAP Air Portugal has the potential to be a profitable solid company with the right management. However, at this time alternative solutions need to be found and analysed to understand the best possible outcome for the future of the company.

Chapter 2 – Key Takeaways

2.1 **TAP Air Portugal context – Interview with former CEO as key methodology to analyze the past strategies**

- To analyse the past strategies and the respective results of TAP Portugal next to financial result analyses a comprehensive interview with former CEO of TAP Air Portugal Antonoaldo Neves was executed.
- Mr. Neves was involved in the negotiations of the privatization of the company and also as a consultant for TAP Air Portugal during the transition phase to a new CEO in 2020
- After years of losses (accumulated over €190 million 2010 - 2014) privatization was initiated to prevent insolvency in 2014

2.2 **Privatization and new strategy - The privatization and new strategy increased TAP performance**

- The privatization strategy brought a new approach to the fleet of the company and a new digital ecosystem.
- Strategic changes and privatization (2016-2019) increased profitability including EBITDA results, liquid debts, Return per seat kilometres and costumer perception improved likewise.

2.3 **New strategy analysis - COVID-19 came to reinforce TAP passed struggles with the government taking over**

- After government take over and strategic changes financials of decreased dramatically. One part can be clearly attributed to influences of the pandemic but analysing the strategic decision at this time it gets clear that mismanagement and strategic mistakes are major reasons for the decreased performance as well.
- Consumer Perception of TAP Air Portugal improved during the period that the company was privatized and got worst during the time the government had control

2.4 **Current situation – The government is taking decisions that are putting the company at risk**

- Today TAP Air Portugal is worse off than ever before concerning debt, future outlook and costumer perception.

Concluding the problems of the Portuguese flag-carrier already came from the past but are reinforced by the government management inducing bad investment decision by the government like focusing on unprofitable routes or the investment into TAP Maintenance. Governmental decision on competing with low-cost carrier without having an adequate cost structure and having conflicts of interests regarding slot management are reinforcing financial and strategic issues as well.

Agenda - Research Questions and Methodology

Sections	Research questions	Methodology
1 Context	**1.0. Who is coming on top on an adapting aviation industry, flag carriers or low-cost airlines?** **1.1.** How did the Covid-19 pandemic affect the travel and tourism industry? **1.2.** How is the aviation market segmented and how differ low cost and flag carrier? **1.3.** What are the competitive dynamics, and which are the key profitability KPIs ? **1.4.** What is the current profitability situation of flag carriers and low-cost carriers?	• Exploratory Research • Market Analysis • Financial Statement Analysis • Benchmarking
2 TAP Struggle	**2.0. How did TAP got to the current situation and what was the government role on it?** **2.1.** How did TAP Air Portugal privatization and the new strategy turned out? **2.2.** How did COVID-19 challenge and affect the organizations strategy? **2.3.** Is TAP Air Portugal better or worse off today after being nationalized again? **2.4.** Is the role of the state as owner of TAP an advantage or a disadvantage for the airline?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey
3 Alternative Scenarios Analysis	**3.0. Is TAP worth saving? What are alternative scenarios to turn around TAP Air Portugal?** **3.1.** What are the key dimensions to be considered while assessing potential alternatives? **3.2.** Which alternative scenarios are conceivable? **3.3.** What effects did the cases have on their home countries? **3.4.** What are the key takeaways from the cases for TAP Air Portugal?	• Literature Review • Expert Interviews • Benchmarking • Exploratory Research
4 To save or not to save	**4.0. Is it worth to save TAP if they follow the strategy proposed on chapter three?** **4.1.** How does the new strategy affect TAPs structure and the success factors? **4.2.** How will TAP become more profitable and competitive with the new strategy? **4.3.** Is it worth for the government to save TAP and keep investing resources in it?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey

Agenda - Chapter 3

Sections		Research questions	Methodology
3	Key Question	**Is TAP worth saving? What are alternative scenarios to turn around TAP Air Portugal?** Keywords: Portugal, Government Involvement in Business, TAP, Aviation, Government, Privatization, Flag Carrier	
3.1	Dimensions of analysis	**What are the key dimensions to be considered while assessing potential alternatives?** • Performance of other flag carriers • Direct, indirect, inferred and catalytic impacts • Influence of aviation industry on Portugal	• Literature Review • Expert Interview • Market Analysis • Benchmarking
3.2	Alternative scenarios	**Which alternative scenarios are conceivable?** • Four alternatives based on use cases • Introduction of cases for benchmarking	• Literature Review • Expert Interview • Exploratory Research
3.3	Case analysis	**What effects did the cases have on their home countries?** • Benchmarking four alternative scenarios • Effects on the four dimensions	• Expert Interview • Secondary Data • Benchmarking
3.4	Results	**What are the key takeaways from the cases for TAP Air Portugal?** • Key takeaways • Conflict of interests between government as owner and flag carrier	

TAP Air Portugal is not the only flag carrier that is struggling, but there are alternatives

To gain further perspective and check if other flag carriers have similar problems as TAP, the current status of other flag carriers was examined.

Airline		Ownership	Facts
South African Airways		Government	No profit generation since 2011. Over $700 million losses in the last two fiscal years. There are recent plans to privatize the airline by selling 51% to a private investor.
Air India		Government	After years of losses (over $800 million in 2017) during government ownership, the company was taken over by TATA in 2021.
Aerolineas Argentina		Government	Aerolíneas Argentinas has had continued yearly negative earnings accumulating $4.53 billion since 2008.
Thai Airways		Government	Currently within a process of a bankruptcy-protected restructuring. On November 1, the head of the airline's restructuring committee confirmed plans to sell 42 planes and cut a third of its workforce. The airlines has been losing money since 2012.
Kenya Airways		Government	The airline has ben accumulating losses since 2013 and is currently in a restructuring change aiming to target the high-end segment of the market.
Tarom		Government	The Rumanian flag carrier has been generating losses since 2007 and currently does not operate any profitable route.
Pakistan Airlines		Government	PKI has been generating losses since 2004. Currently restructuring plans are pursued to prepare for possible privatizations in the future.
Cayman Airways		Government	The airline is producing constant losses but is kept alive by the government for prestige and advertising reasons.

Most flag-carriers that are majority owned by government are cash-burning loss makers but there a examples of successful alternatives that will be studied in the course of this chapter to provide a suggestion for TAP Air Portugal

Sources: Shahid, Badley, Lacqua & Burkhardt, Srinivasan, Businesstech

The contribution of an airline to the economy of a country can be differentiated into direct, indirect, induced and catalytic effects

Which dimensions should be considered when analysing potential scenarios based on real life cases?

Direct Effects	Indirect Effects	Induced Effects	Catalytic Effects
• Direct employment refers to people working **directly in an airline**. There are two perspectives. • Functional view: employees of airport operators, airlines and security are included • Spatial view: all working on an airport site are included, regardless of whether their activity is specific to air traffic or not. • To examine the influences of TAP Air Portugal a functional view is taken. • This includes all jobs directly serving passengers in the airline's operations, but also check-in	• Indirect impacts include **employment** and economic activity **generated by suppliers.** • E.g. aviation fuel suppliers; construction companies, suppliers of goods sold in airport retail outlets and a huge variety of activities in the business service sector. • Flag carriers are often considered as carriers of **national identity** and **prestige**. • This is used as a key argument to justify negative NPV ventures and state aid. • There is no clear proof in existing literature that prestige has quantifiable influences.	• Induced employees are employees of companies where the direct and indirect employees spend their income • The induced employees have hardly any special relation to the aviation industry. • They supply household goods, food, clothing, etc., i.e. everything that people typically purchase with their income.	• Catalytic effect refers to the effects generated by improved accessibility. • Passenger-side catalytic effect: income generated as a result of spending by foreign passengers • Company-side catalytic effect: sales market expansions and opportunities for cooperation among existing or newly established companies that benefit from air traffic • The main beneficiary of the catalytic effects of aviation is usually the tourism industry
Direct Jobs at an airline	**Employment & GDP generated by airline suppliers**	**Effects of income spending of direct & indirect employees**	**Impacts on other industry, here mainly Tourism**

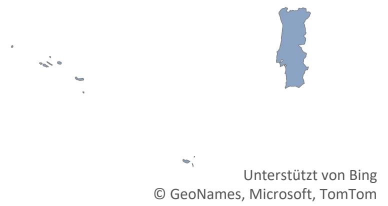
It should be emphasized that the economic catalytic contribution of air transport to GDP is bigger than its combined direct, indirect and induced impact.

Sources: ATAG, Neves

TAP is one of the biggest employers of Portugal and accounts for more than 110 000 direct and indirect jobs. A possible insolvency is expected to have huge spill-over effects

To evaluate potential alternative scenarios the importance of the aviation industry and the contribution of TAP Air Portugal to Portugal's economic has to be analysed

Portugal



Tourism makes up 16,5 % of Portugal's GDP

The aviation industry plays an important role in driving economic growth within the country of Portugal. This is mainly due to the important catalytic impacts aviation has on the tourism industry. Making up 16,5 % of Portugal's GDP tourism is one on the single most important industries that is heavily relying on aviation.

The aviation industry has huge impacts on Portugal

- The aviation industry generated round about 330 000 jobs in Portugal and contributed $17bn the countries GDP
- TAP AIR Portugal is contributing approximately 110 100 direct , indirect, induced and catalytic jobs which is a third of the overall impact of the aviation industry in Portugal

29,5 million	217 200	19
Passengers transported (2019)	Flights performed (2019)	commercial airports (2019)

	Direct	Indirect	Induced	Catalytic
GDP	24% $4 bn	16% $2.8 bn	11% $1.8bn	49% $8.4bn
Jobs	52 000 16%	55 000 17%	35 000 11%	190 000 56%

Σ **$17bn** total GDP contribution by aviation industry

Σ **332 000** total jobs by aviation industry

Sources: ATAG

There are four scenarios to turn TAP Air Portugal profitable again: Insolvency and Founding, Controlled Insolvency , Reorganization & Chapter 11 , Acquisition

NOVA SCHOOL OF BUSINESS & ECONOMICS

To analyse possible scenarios for TAP Air Portugal past cases are examined and the learnings applied as well as recommendations made

1. Insolvency & new flag carrier

Old flag carrier is discontinued, and main assets transferred into a new flag carrier

- By going bankrupt and having the healthy assets bought up by a newly founded state-owned airline, a flag carrier can be established that is debt free.
- At the same time, the airline remains in the hands of the respective country.

1. Case: Alitalia

Alitalia

2. Controlled insolvency

The flag carrier ends operations

- By stopping the flow of government money, a controlled insolvency can be initiated.
- Assets including fleet and route licenses can be sold to the highest bidder.
- The flag carrier ceases to exist, and competitors can take its place. The respective country no longer operates a flag carrier.

2. Case: Malév

MALÉV

3. Reorganization & chapter 11

Cast off ballast and restructure restructured

- Voluntary bankruptcy is a method that has been used in the past by flag carriers to shed legacy liabilities while preserving and reorganizing an airline's business.
- The bankruptcy process (also known as Chapter 11 in the U.S.) governs a court-supervised reorganization of the company's finances and strategy.

3. Case: Avianca

Avianca

4. Acquisition

The flag carrier is acquired by another airline

- Synergies could be exploited through an acquisition by another airline or an aviation group in order to lead a struggling flag carrier into a profitable future.
- The state would no longer be an owner and there would no longer be a flag carrier in the classic sense.

4. Case: SWISS

SWISS

Sources: European Commission, Reuters, Ray

Alitalia that has not made a profit since 2002 and has received several bailout loans from government is now succeeded by the new flag carrier Ita

Case 1: Alitalia - Insolvency & founding new flag carrier

Although the success of the transformation of Alitalia into Ita cannot yet be conclusively measured, but several takeaways can be deduced

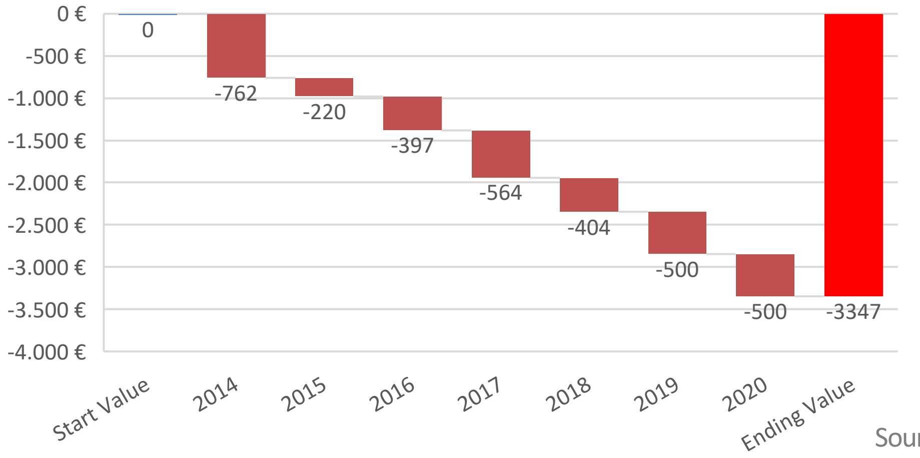
Alitalia – The Insolvent

- Italian flag carrier founded in 1946
- The airline has not made a profit for 17 years
- It had to be rescued with state money several times. Over the years Italian government has invested more than 10 billion euros to bolster the airline.

Italia Trasporto Aereo (Ita) -The Successor

- Ita, which is 100 percent state-owned, bought the Alitalia brand in 2021 for 90 million euros.
- It is regarded as the successor to Alitalia, but according to the EU Commission it is not its economic successor → It is therefore debt-free.

Cumulative loss of Alitalia in the last 7 years in million euros



Source: Statista

The Deal

Ita owned by Italian government acquired Alitalia for 90 million euro.

Ita took over 52 of 110 aircraft from Alitalia as well as branding rights

Ita took over 2,800 of 10,000 employees. Italian government will pay salaries of laid off workers until mid 2022

The union expects heavy economic losses in the next two years. Ita itself aims to break even in 2023, according to President Altavilla

Sources: Statista

Alitalia that has not made a profit since 2002 and has received several bailout loans from government is now succeeded by the new flag carrier Ita

Case 1: Alitalia - Insolvency & founding new flag carrier

Regardless of the success of the strategic decisions, there are already players who want to take over slots, routes and passengers

Creation of a new flag carrier

Direct Impacts ↘

Direct job losses recovered by 2030

- 7 200 direct jobs will be lost short-term, but the Italian government expect to **recover all lost direct jobs** from Alitalia long-term until the year of 2030.

Indirect Impacts →

Prestige and jobs are conserved

- Losses in prestige and publicity cannot be predicted. As the airline operates under a different name but the **same brand** and continues to operate as a government-owned flag carrier, no fundamental changes are expected.
- Supplier jobs are not affected as the new airline stated to take over supplier contracts,

Induced Impacts →

Induced effects are secured

- Since the salaries of the laid-off employees will be taken over by the Italian state until the end of 2022, the probability of a **decline in the induced effects is low**, at least in the short term.
- After 2022, it depends on whether the growth strategy of the new company is implemented as announced and to what extent other market participants compensate for job losses.

Catalytic Impacts →

Step ins are in the starting blocks

- With a GDP share of c. 13%, tourism has a large impact on the economy of Italy. The catalytic effects of tourism can be estimated at about $22,7bn.
- ITA announced to only cover 39 of Alitalia's 100 routes. It will only take over 85% of the former Alitalia slots in Milan Linate and 43% of in Rome Fiumicino.
- This will certainly affect the number of tourists in the short term, but **other market participants** such as Ryanair have already **announced** their intention **to take over** a large part of the newly available slots and routes.

Sources: ATAG, Neves, O'Leary

Flag-carrier Malév Hungarian Airlines went bankrupted in 2012 after several state investment but was successfully succeeded by low-cost carriers

Case 2: Malév - Controlled insolvency

Malév represents an industry-wide example of the impacts of the demise of a flag carrier on a country.

Malév Hungarian Airlines – The sunken flag carrier

- Hungarian flag carrier founded in 1946
- The airline suffered from constant losses and strategical mistakes
- The company had been privatized twice without success, in 1992 and in 2007, each time the Hungarian state had to step in to keep the airline in business. In 2012 the airline was sill 95% owned by the state
- Malév ceased operations in February 2012 due to insolvency, over 230 million euros in debt and a European Commission decision to repay illegal government subsidies of about €350 million.
- 2060 out of 2600 employees lost their jobs

Wizz Air & Ryanair - The Jump-Ins

- Wizz Air a Hungarian low-cost carrier founded in 2003 immediately stepped in taking over routes and creating more than 700 new jobs.
- Ryanair, a low-cost carrier from Ireland, made Budapest a new base taking over flight routes and creating approximately 2000 new jobs including pilots, ground personal and cabin crew

The Deal

Insolvency of Malév with competitors to step in

No Assets were directly transferred to the jump-ins. Malev Assets were divested in the insolvency

2060 direct employees of Malév lost their jobs. But the jump-ins created over 2700 new jobs

The stepping in low-cost airlines drastically increased the number of passengers in Hungary.

Sources: European Commission, ATAG

The direct, indirect, induced and catalytic influences of Malév on Hungary's economy were largely mitigated by the step-ins, and in some cases even improved.

Case 2: Malév - Controlled insolvency

Impact of the end of Malév and thus of the Hungarian flag carrier on the Hungarian economy

Elimination of Hungarian flag carrier

Direct Impacts ↑

Jump-ins created more new jobs than jobs being lost

- Following Wizzair, 20 other company took over to the new empty slots on Budapest airport
- some initiated new routes to/from Budapest, others increased their already scheduled weekly flights to/from Budapest.
- 2060 direct employees of Malév lost their jobs. But the jump-ins created over 2700 new jobs

Indirect Impacts ↑

Indirect Jobs were increased Passengers not valuing flag carrier

- According to an EU analysis the step-ins including could even increase the number of indirect jobs that were previously connected to Malév
- Wizzair as main replacement is not a perfect substitute in terms of the of Prestige.
- However, one market development positively counters this. The average age of travellers is quite young. They are not brand loyal. They do not have preferences regarding airline prestige. The most important thing for them is the price and a direct flight.

Induced Impacts ↑

Induced effect were kept short and increased long-term

- Since the direct and indirect job losses could be more than compensated by other market participants in the long run, the long-term induced effects such as the expenditures of wage earners of those working in direct or indirect jobs in the aviation industry can be considered constant.

Catalytic Impacts ↑

Step-ins recovered tourism fast

- With a GDP share of about 9%, tourism has a large impact on the economy of Hungary. The catalytic effects of tourism can be estimated at about $1bn.
- One of the main concerns in the abolition of the national airline was the loss of passengers and thus tourists.
- In retrospect, these concerns can be considered unnecessary.
- Budapest airport, which served as the central airport for Malév, regained about 40 percent of its lost capacity within three months, and within eight months, 95 percent returned.

Sources: European Commission, ATAG, CNN

Aviance used a Chapter 11 and restructuring strategy to get rid of the effects of legacy issues, strategic mismanagement and covid-19

Case 3: Avianca - Reorganization & chapter 11

Avianca, a former flag-carrier, was still suffering from legacy issues years after breaking ties with the government

Avianca – The former flag-carrier

- Colombian flag carrier founded in 1919
- In May 2020 the airline filed for Chapter 11 due to financial struggles caused by financial legacy issues, strategic mismanagement and direct covid 19 effects.

Note: After several ownership changes during the past decades the airline can not be declared a flag- carrier according to the definition used in this project anymore. Nevertheless, as a former flag-carrier the airline deals with many flag carrier typical problems. That is why an analyses of Avianca has been considered as appropriate and supportive .

#	Scenario	Airline	Direct	Indirect	Induced	Catalytic
3	Reorganization & chapter 11	Avianca	→	→	→	→

As the scenario focuses rather on financial restructuring the effects on the 4 dimensions are neutral

A fresh start with relieved conditions

- On 1 December Avianca successfully reached agreements with its creditors, and raised in $1.0 billion in fresh capital
- The new strategy includes four major pillars:
  - a new holding company, "Avianca Group International Limited," was created with headquarters in the United Kingdom, in which new shareholders are to invest. This new company is to unite the company's holdings in all subsidiaries., a focus on network dominance by nearly doubling their network and
  - Focus on network dominance by doubling of the network
  - Streamlining of the fleet to a single type widebody fleet
  - Cost reduction

The Deal

Avianca filed for chapter 11 eliminate approximately $3 billion of debt

The entire fleet and other infrastructure is kept

No major lay-offs were performed

Debt could be significantly reduced and the liquidation could be increased by $1.0 billion

Sources:
Iata, Statista

The acquisition of Swiss by Lufthansa Group was a turnaround for the loss suffering swiss flag carrier

Case 4: SWISS - Aquisition

Although Swiss is strictly speaking not a flag-carrier anymore Switzerland still benefits from the prestige and association factors

SWISS

SWISS (Swissair until 2002)– The former flag-carrier

- Swiss flag carrier founded in 1931
- After years of losses swissair went insolvent in 2002
- Again, under government ownership but without financial legacies a new national airline operating under the name of SWISS was established
- The new flag carrier struggled to be profitable and the swiss government decided to stop putting money into the company but rather bet on a privatization strategy in terms of an acquisition of the airline by the Lufthansa Group in 2005

#	Scenario	Airline	Direct	Indirect	Induced	Catalytic
4	Acquisition	SWISS	↗	↑	↗	↑
Routes and passenger volume was increased as well as the fleet and infrastructure retained. Brand conservation led to perception of SWISS as an “in official” flag carrier.						

LUFTHANSA GROUP

Lufthanse Group - The Savior

- In 2005, the Lufthansa Group and Swiss agreed on a phased acquisition and the continuation of the Swiss brand for a purchase price of 310 million euros
- The full acquisition was completed by 2007

The Deal

The Lufthansa group acquired swiss for approximately 310 million euros

The entire fleet, workforce, as well as the hub and home airport of Zurich were preserved

No known direct layoffs, however 1000 positions were eliminated in a restructuring attempt shortly before the acquisition

Swiss has become the Lufthansa Group's cash cow, generating one of the Group's highest profit margins pre-covid at 11%

Sources:
Ray, SWISS

As non of the cases can be directly transferred to TAP Air Portugal the best practices of all presented cases will be considered

What conclusions can TAP Air Portugal can take out of the presented cases? – Key Takeaways

All the cases analyzed are very different as the individual airlines operated from different home markets and the legacy issues were different in size. For these reasons, it is not appropriate to apply the approach of a specific case exactly to TAP Air Portugal. However, key learnings and success factors can be derived from all cases which, when combined, can form a suggestion as to which strategy could make TAP Air Portugal successful in the future.

#	Scenario	Airline	Direct	Indirect	Induced	Catalytic
1	Insolvency & new flag carrier	Alitalia	↘	→	→	→
2	Controlled insolvency	Malév	↑	↑	↑	↑
3	Reorganization & chapter 11	Avianca	→	→	→	→
4	Acquisition	SWISS	↗	↑	↗	↑

All cases show that, apart from the short-term direct effects, long-term negative developments of the 4 dimensions do not occur or are even positive.

Non-flag carrier are stepping in to fill gaps

Malév Case: The feared negative effects on indirect, direct and catalytic benefits did not materialize according to the European Union. Market competitors are able and willing to compensate for or absorb these influences. Lost Capacity of Budapest Airport was almost fully recovered after only eight months.

Most passengers are not paying value to flying with a flag carrier

All Cases: The average age of the travellers are quite young, and they are not brand loyal, and they don’t have an airline preference. Main decision criteria are a low price and direct connection.

Controlled insolvency and restructuring is an effective method to dump financial legacy issues

Alitalia Case: ITA did not amass the debts of Alitalia. Insolvency was used to drop off human resources.

Avianca Case: Avianca could obtain fresh capital and foreign subsidiaries were not forced into a subsequent insolvency. Debt and other financial legacies could be reduced significantly

Buyers of flag carriers are interested in existing infrastructure and brand

SWISS Case: entire fleet, workforce, as well as the hub and home airport of Zurich were preserved. Switzerland's flag carrier was acquired by Lufthansa which replaced the airline by a doppelganger with a similar name and brand.

Airlines as a business and the government as owner face a conflict of interest when it comes to route, slot and compensation management

What is good for a country is not necessarily good for an airline and vice versa – profit driven business vs. public service driven government

Airline → **Conflict of Interest** ← **Government as Owner**

Route Management

Slot Management

Compensation Management

Focusing on profitable routes…

- For financial reasons airlines are only interested in profitable routes and aiming to maximize profit for each route

Profitability driven

Slot control increases profitability…

- An Airline has incentives to own as many slots as possible at a certain airport as it allows profit maximization using higher ticket prices.
- An Increase of slot promotes possible new market entrants and is not desirable for an established airline.

Control slots

Keeping salaries low to control costs…

- Salaries are next to fuel expenses the highest cost drivers. To keep salaries and other compensations low in order to keep costs low is a main objective for airlines regarding cost management.

Minimize salaries

Focusing on prestige routes…

- In fact, high coverage and frequency, especially in the area of national routes, play a much more important role.

Coverage driven

Increasing slot numbers boosts tourism..

- The number of passengers play an important role especially for countries that are economically reliable on tourism. Therefore, governments aim to increase available slots and therefore total passenger transported to the country

Increase slots

Feeding social security system…

- Airline owning governments do not necessarily have the aim to keep salaries as low as possible as salaries are considered to have induced impacts on the overall economy of the country

Use Induced impacts

Sources: Neves, ICAO

Combining the performed analysis, it gets clear that there is potential for TAP Air Portugal to become future-proof by applying best practices

Combining the low-cost flag carrier comparison, TAP strategy analysis and the case analysis to derive suggestion for the future of TAP

TAP Air Portugal struggles

Past Strategy Analysis

Government side player

Strategy 2016 - 2020

- Focus on cost reduction and long-haul hub dominations
- Focus on profitable routes and fleet
- Increase in net incomes, EBITDA, decrease leverage

→ Strategy was working

TAP AIR PORTUGAL

Strategy before 2016 & 2020+

- Constant financial state aid
- Constant negative net incomes and equity
- Leverage on company risking level
- Focus on short haul, trying to compete with low-cost carrier

→ Strategy not working

Government owner decision maker

How to make TAP Air Portugal future-proof?

Most government owned flag carrier are struggling but why?

- Government inefficiency
- Conflicts of interests

But there are alternatives (case analysis).....

Alitalia MALEV Avianca SWISS

Main learnings from…

… low-cost flag carrier comparison
- Key profitability drivers are labour cost, fuel cost and airport domination
- Low-cost carrier outperform flag carrier especially on short-haul routes due to better cost structure and airport domination

… TAP past strategy analysis
- The privatization strategy seemed to be working but was abolished too early
- The ongoing conflict of interests between TAP and the government and government inefficiencies show that the government as single owner of TAP is not future-proof

… case analysis
- Non-flag carrier are stepping in to fill gaps
- Controlled insolvency is effective to get rid of financial legacy issues
- Buyers of flag carriers are interested in infrastructure and brand
- Most passengers are not paying value to flying with a flag carrier
- Catalytic contribution of air transport to GDP is bigger than its combined direct, indirect and induced impact but it's the least effected by strategy changes or even failing of flag carrier

Chapter 3 – Key Takeaways

3.1 Dimensions of Analysis –Four dimensions are used to assess the impact of a flag carrier transformation on a country

- Flag carrier are having major direct, indirect, induced and catalyst impacts on a country. These dimensions are used in assessing possible alternative scenarios for TAP.
- TAP Air Portugal is not the only flag carrier struggling.
- The Airline industry has major impacts on the Portuguese overall economy and job market

3.2 Alternative Scenarios – The cases of Alitalia, Malév, Avianca and Swiss provide best practices

- Years of putting state money and therefore taxpayer money into TAP always led to the same result: negative results and need for further financial state aid. To stop burning money. alternative strategies must be considered.
- Based on a best practices study four possible alternative scenarios to save TAP were identified: **Insolvency & new flag carrier, controlled insolvency, reorganization & chapter 11** or **Acquisition.** The scenarios were analyzed using case studies of **Alitalia, Malév, Avianca** and **Swiss.**

3.3 Case analysis – All cases are show rather neutral or positive effects on the four dimensions

- **Insolvency & new flag carrier:** Insolvency is used to get relieved of debts, but the dependence on the government does not seem very sustainable
- **Controlled insolvency :** Direct, indirect, induced and catalytic impacts could be compensated or even increased by other market participants
- **Reorganization & chapter 11:** Chapter 11 provides an effective method to get rid of financial legacy issues
- **Acquisition:** Buyers usually take over most assets, branding and infrastructure

3.4 Results – There is not one fit all scenario, but best practices could be derived from all cases

- According to our analysis the most feasible option for TAP Air Portugal is a privatization (using acquisition). Conflicting interests between airline and government could be solved. Some direct impacts mostly in terms of direct jobs would be lost due to usage of synergies but indirect, induced and catalytic impacts could mostly be retained or enhanced .

→ To assess to which extent strategic decisions are responsible for the desolate situation TAP Air Portugal is in currently an analysis of the past strategies and the respective results is made in the next chapter

Agenda - Research Questions and Methodology

Sections	Research questions	Methodology
1 Context	**1.0. Who is coming on top on an adapting aviation industry, flag carriers or low-cost airlines?** **1.1.** How did the Covid-19 pandemic affect the travel and tourism industry? **1.2.** How is the aviation market segmented and how differ low cost and flag carrier? **1.3.** What are the competitive dynamics, and which are the key profitability KPIs ? **1.4.** What is the current profitability situation of flag carriers and low-cost carriers?	• Exploratory Research • Market Analysis • Financial Statement Analysis • Benchmarking
2 TAP Struggle	**2.0. How did TAP got to the current situation and what was the government role on it?** **2.1.** How did TAP Air Portugal privatization and the new strategy turned out? **2.2.** How did COVID-19 challenge and affect the organizations strategy? **2.3.** Is TAP Air Portugal better or worse off today after being nationalized again? **2.4.** Is the role of the state as owner of TAP an advantage or a disadvantage for the airline?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey
3 Alternative Scenarios Analysis	**3.0. Is TAP worth saving? What are alternative scenarios to turn around TAP Air Portugal?** **3.1.** What are the key dimensions to be considered while assessing potential alternatives? **3.2.** Which alternative scenarios are conceivable? **3.3.** What effects did the cases have on their home countries? **3.4.** What are the key takeaways from the cases for TAP Air Portugal?	• Literature Review • Expert Interviews • Benchmarking • Exploratory Research
4 To save or not to save	**4.0. Is it worth to save TAP if they follow the strategy proposed on chapter three?** **4.1.** How does the new strategy affect TAPs structure and the success factors? **4.2.** How will TAP become more profitable and competitive with the new strategy? **4.3.** Is it worth for the government to save TAP and keep investing resources in it?	• Literature Review • Expert Interviews • Financial Statement Analysis • Survey

Agenda - Chapter 4

Sections		Research questions	Methodology
4	Key question	**Is it worth to save TAP if they follow the strategy proposed on chapter three?**	
4.1	A new strategy	**How does the new strategy affect the structure of the company and the success factors?** • Strategy / Fleet Management • What major business strategies would suffer changes? • Cost Structure including Human Resources / New start with zero debt	• Interview • Exploratory Research • Financial Statement Analysis
4.2	Fresh start	**How will TAP become more profitable and competitive with the new strategy?** • Flag carrier's best practices • Low-cost expansion and how TAP can adapt to the market	• Interview • Best Practices • Survey
4.3	To save or not to save	**Is it worth for the government to save TAP and keep investing resources in it?** • Reasoning and conclusion	

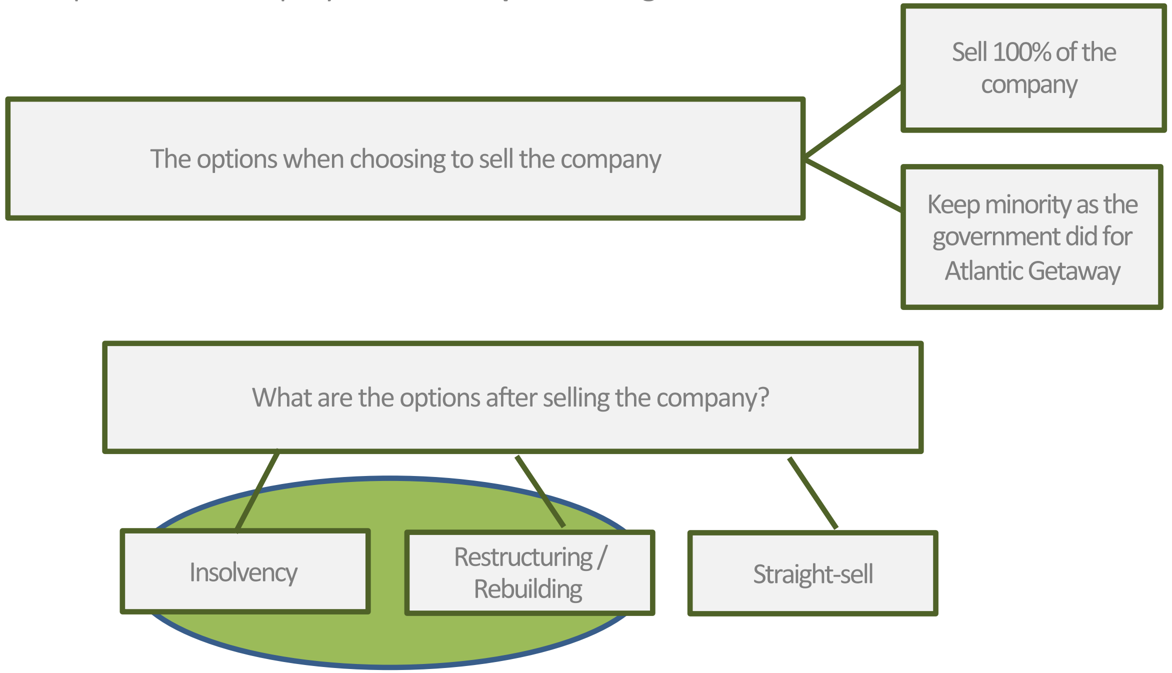
Privatization through insolvency and restructuring is the strategy that TAP should pursue in order to have more chances to succeed in the future

"If the government tries to restructure the company, in 5 years it will be in worse shape than it was 5 years ago because the stakes are higher now as there are more planes and more debt to deal with." Antonoaldo Neves

What needs to happen for TAP to be profitable again?

In order to be profitable TAP should be sold as a whole or sell the majority to a private-owner after this first step the company should pursue an insolvency and restructuring process

- For the company to be profitable again they **must sell to a private entity** as if the government keeps control to company will **never be profitable again**.



The new privatization through insolvency and restructuring:

The privatization will eliminate conflict of interests and increase the decision-making process

Privatization: With the privatization of the company, it would implicate that a **private owner** would be **operating** the company. This will increase the speed of the decisions and **reduce the conflicts of interest** between the government and the airline. The airline would be managed in a completely **independent way.**

The insolvency will reduce the debt ratio and allow the company to sell older assets that need to be substantiated

Insolvency: TAP will benefit from an insolvency process giving them the opportunity to **reduce their debt ratio** and start debt free. It will also give the government the chance to **recover cash a reallocate the airline's budget** to other national activities. The insolvency procedure will also help in **selling the older assets** that the company has specially some of the older planes that are still in operating and need to be substantiated.

The restructuring process would allow a re-negotiation of salaries and work in the direction to reduce their cost-structure

Restructuring: TAP would need to maintain the **hub-spoke mode**l and keep their fleet at a **minimum of 110 planes** to be efficient. **Airport domination** is another important factor in which TAP needs to maintain their dominance in Lisbon and slowly start to have dominance in Porto's airport has they increase their fleet size. All jobs would be reviewed and contracts with pilots need to be **re-negotiated** in order to decrease the **high cost-structure** of the company. Cost saving techniques would also need to be applied such as **hedging jet fuel** as the volatility and high prices in Portugal make it difficult for the airline to have stable forecasts.

Sources: Neves

The new strategy will bring improvements to TAP and allow the government to allocate their funds in other national projects

Having the company privatized would not bring any disadvantage to Portugal, it would instead bring a more stable airline with steady growth.

What are the main effects of the new strategy?

Direct Impacts

- All jobs needs to be reviewed and contracts with pilots need to be re-negotiated, since more than **1500 pilots** are earning **+80.000€** per year.
- No other company in Portugal is has this many employees receiving such salaries.
- TAP will renegotiate these contracts in order to decrease the high cost-structure of the company.
- TAPs contribution for the social security system in Portugal would be impacted but by far less than a bankruptcy would cause.

Indirect Impacts

- Company prestige will improve since TAP will no longer be connected to the government.
- TAP will be connected (depending on whoever acquires the company) to another airline increasing the brand recognition and impact worldwide.
- The common practice of keeping acquired brands will sustain the marketing connection between TAP and the country of Portugal.

Induced Impacts

- Contracts renegotiations and new management can bring some **uncertainty** among employees and there is a chance of some of the pilots to leave and change TAP for other airline.
- Renegotiated compensation may minimally reduce the overall purchasing power of TAP or supplier employees, but this would not have a significant impact on induced jobs.

Catalytic Impacts

- This strategy would allow the government to **recover** some money from their previous aid packages implemented at TAP.
- The government would no longer have the duty to step in **financially.** This way they could invest in other national projects related to **tourism** that would influence positively TAP and the tourism itself.
- As the airline would continue to have its main airport in Portugal the tourism industry is not affected negatively.

Overall, the impacts of the new strategy are extremely positive for the future of TAP, since they would increase **profitability, liquidity more efficiency** and a more **data-based decision** process instead of using personal interests for main strategy decisions as the Portuguese government many times did in the past due to the **conflict of interest** of running a country and an airline.

Sources: Neves, Expresso, Publico

The cost-structure under government governance increases costs as the decisions taken do not follow the best possible strategy.

The conflicts of interest make the government take decisions for the company that lead them to a bad path for the future.

The cost structure of labor under government governance:

TAP pays the one of the highest salaries of the industry and the government doesn't take decisions to reduce this costs that are damaging the airline´s future

- Portugal and TAP are both suffering economically and pay one of the **highest salaries** for the flight crews.
- Average TAP pilot salary goes from **84k€ to 260k€ a year**. This is more than **double** than what Iberia and Air Europa pays to their pilots.

	Official Pilot (OP) A320		OP A330	Pilot A320		Pilot A320-A330		
Time employed by the company	1 year	5 years	10 years	10 years	15 years	20 years	25 years	30+ years
TAP	84.000€	122.000€	150.000€	185.000€	207.000€	219.000€	241.000€	261.000€
Iberia	40.000 - 45.000€		85.000-110.000€	100.000€-115.000€		160.000 – 200.000€		
Air Europa	40.000 - 45.000€		90.000-125.000€	115-155.000€		175.000 – 245.000€		

Privatized labour cost-structure:

- With the company privatised and following the new restructuring plan there is the **opportunity to reduce** the salaries. As the company is being restructured there can be negotiations which is not the case the company remains state-owned.

The cost structure of the fleet under government governance:

Old fleet with high maintenance costs, and no concerns in renovating it. Strategies not focused on airport dominance and point-to-point strategies that proved not profitable, show that the government didn't knew what they were doing...

- The fleet of an airline has a big weight on their cost-structure. Before the company being privatized in 2015 the fleet was old, the planes were outdated and there were a lot of costs coming from **extensive maintenance repairs** that had to be made.
- There was no **scalability** of the company as it has under 90 planes meaning the company could never have a **competitive CASK.**
- Under government governance the airline followed a **point-to-point strategy** which did not bring necessary revenue to the company as they were not having **airport dominance** and were flying with inefficient planes.

Privatized fleet cost-structure:

- During the time of privatization TAP invested a lot of money on the new fleet. It was critical to operate **with bigger, more efficient planes** to increase TAP's margin, by increasing the **company scalability**.
- Critics were made at the time, but the planes are the most significant factor when trying to **reduce the CASK** of the company. It is important that a minimum scale is reached so that you can **dilute the costs** in bigger planes.
- Important to keep the **hub-and-spoke model** to maximise the company expansion and profits.

Sources: Eco, Expresso, Publico, Neves

TAP is worth saving but not with the government in control and having stakes on it because of the conflict of interests.

Two offers were already made to buy TAP and one of the conditions in the contract is the same which is that the Portuguese government remains with no stakes in the company showing that there is a problem of conflicts of interest.

TURKISH AIRLINES

1.9 Billion Euros

- The 1.9 Billion **offer is based on the TAP restructuring program**, from which the company already received 1.662 million euros from the state, but which could reach in the worst scenario 3.700 million euros. Turkish Airlines offers is the difference between both values;
- With this offer, Turkish Airlines wants to get a majority position of the company, **but the government has shown that it wants to keep the decision-making power** in the hands of the state;
- The Turkish company´s goal with this investment is to **create a cooperative and complementary environment** between the two airlines in order to increase their influence area not only to the East but now also to the West.

Lufthansa

?

- Negotiations with Lufthansa are also on the table. Prior to the pandemic the airline had already made an offer but because of the evolution of the pandemic the deal could not be closed.
- The airline wanted to acquire TAP for strategic reasons as **in the years of privatization they started to gain market share because of the lower prices to cross the Atlantic.**
- **The condition is for the government to remain out.**

TAP could be in a better financial position then what it is if it had accepted the CEO's rescue proposal:

- During the pandemic TAP asked the government the same debt in size percentage compared to Lufthansa. The forecast showed that it would take 5 to 7 years to payback in the worst possible case scenario.
- The government rejected this proposal, and now it could take up to 34,6 years to repay the debt.
- Lufthansa has already repaid the debt they took during the pandemic and according the forecasts the same could have happened to TAP if there was no management complications.

Sources: Eco, Expresso, Neves

Chapter 4 – Key Takeaways

4.1 A new strategy – Only by cutting ties with the government as main owner TAP Air Portugal can be successful

- TAP restructuring process would mean that TAP would be in worse shape in 5 years than in 2015 when the first privatization process happened;
- The proposed solution is a privatization using an acquisition and restructuring ;
- The new strategy would require the review and re-negotiation of contracts and it would increase TAP prestige and recognition worldwide since its no longer connected to the government.

4.2 Fresh start – A more competitive cost structure is key for future success

- Under government management the labor and fleet cost structure were extremely high, high salaries, old fleet that required high maintenance costs;
- With the privatization there is a chance to reduce salaries and optimize costs, there is opportunity to continue the investments in new fleet and more efficient planes that will increase TAP margins.

4.3 To save or not so save? – It is worth saving TAP Air Portugal but only without future involvement of the government

- TAP deserves to be saved but there is only a future for the company with the right strategy, and that's through a privatization with an insolvency and restructuring;
- There are already some airlines interested in acquiring majority stakes of TAP, such as Turkish Airlines and Lufthansa.

TAP is **worth saving**, but **not as a state-owned company**! There is a future for the Portuguese national flag carrier, but it passes by being acquired by a private third-party, which have more clear goals and knows better on how the aviation industry works and how to play with the difficult tight margins of the industry, bringing TAP back to profitable ways.

TAP Air Portugal is worth saving, but it is not recommended for the national carrier to be state-owned

"Mayday: is TAP Air Portugal worth saving? At what extend should the national flag carrier be a state-owned company?"

Yes, TAP Air Portugal is worth saving…

- Having a **profitable and functioning** airline in one' s own country is good, especially as far as direct impacts are concerned.
- The **strategic changes** from 2016 to 2020 show that TAP can be **successful**. In addition, the **acquisition** offers show that others also see **potential**.
- Reorienting the focus to long-haul should **not** have far-reaching consequences for the airline's **catalytic effects** on Portugal. Other market **players** are ready to **step in**.

… state ownership is counterproductive

- The billions of euros in **state aid** did **not** help TAP Air Portugal to **succeed**.
- There is a **conflict of interest** between the state and the airline in the area of slot, compensation and route management. These conflicts prevent win-win situations.
- The government is **inefficient** which is directly reflected in its state airline.

Success factors for TAP Air Portugal based on the performed analysis

- It is nearly **impossible** to **compete** with l**ow-cost** airlines in the short haul European market. Focus on **long-haul.**
- An **acquisition** of TAP Air Portugal would most likely bring in the needed expertise, **stop** the government **burning money**, while **keeping** direct, indirect, induced and catalytic **effects**.
- **Cost structure** is main **profitability driver.** Compensation costs, fuel costs and fleet cost structure have to be streamlined and adapted to a market level.

Bibliography: Chapter 1

1. *A further €990 million for Tap*. The Portugal News. (2021, October 5). Retrieved December 11, 2021, from https://www.theportugalnews.com/news/2021-10-05/a-further-990-million-for-tap/62784.
2. *What's going on with tap?* The Portugal News. (2021, October 28). Retrieved December 11, 2021, from https://www.theportugalnews.com/news/2021-10-28/whats-going-on-with-tap/63206.
3. *Is TAP Air Portugal finally sending the refunds it owes?*. Elliott Advocacy. (2021). Retrieved 11 December 2021, from https://www.elliott.org/the-troubleshooter/tap-air-portugal-refund-complaint/.
4. *TAP letting down customers*. Theportugalnews.com. (2021). Retrieved 11 December 2021, from https://www.theportugalnews.com/news/tap-letting-down-customers/54624.
5. *Portugal's crisis-hit flag carrier TAP could be back in the air by October*. www.euractiv.com. (2021). Retrieved 11 December 2021, from https://www.euractiv.com/section/politics/short_news/portugals-crisis-hit-flag-carrier-tap-could-be-back-in-the-air-by-october/.
6. (2021). Retrieved 11 December 2021, from https://www.reuters.com/article/us-portugal-tap-idUSKBN2AE0FL.
7. (2021). Retrieved 11 December 2021, from https://www.tapairportugal.com/pt/a-nossa-historia.
8. Costa, D. (2021). *TAP demoraria pelo menos 35 anos a gerar lucros para cobrir injeções do Estado*. ZAP Notícias. Retrieved 11 December 2021, from https://zap.aeiou.pt/tap-demoraria-pelo-menos-35-anos-a-gerar-lucros-para-cobrir-injecoes-do-estado-448287.
9. Www-statista-com.eu1.proxy.openathens.net. 2021. *Statista change in revenue from the travel and tourism industry due to the coronavirus (COVID-19) pandemic worldwide from 2019 to 2020 , by region*. [online] Available at: <https://www-statista-com.eu1.proxy.openathens.net/forecasts/1103431/covid-19-revenue-travel-tourism-industry-region-forecast> [Accessed 19 September 2021].
10. Statista. 2021. *International tourist arrivals by region | Statista*. [online] Available at: <https://www.statista.com/statistics/186743/international-tourist-arrivals-worldwide-by-region-since-2010/> [Accessed 19 September 2021].
11. *Airline Industry: All You Need to Know About The Airline Sector!*. Revfine.com. (2021). Retrieved 11 December 2021, from https://www.revfine.com/airline-industry/.
12. *Facts & figures*. Atag.org. (2021). Retrieved 11 December 2021, from https://www.atag.org/facts-figures.html.
13. *Refine your search*. Iata.org. (2021). Retrieved 11 December 2021, from https://www.iata.org/en/pressroom/searchresults/?ContentType=82#searchForm.

Bibliography: Chapter 1

14) www-statista-com.eu1.proxy.openathens.net. 2021. *Statista | Air traffic - worldwide revenue with passengers 2005-2021*. [online] Available at: <https://www-statista-com.eu1.proxy.openathens.net/statistics/263042/worldwide-revenue-with-passengers-in-air-traffic/> [Accessed 19 September 2021].

15) Shaw, A., 2021. *SWOT Analysis of the Airline Industry | Marketing Tutor*. [online] Marketing Tutor. Available at: <https://www.marketingtutor.net/swot-analysis-of-the-airline-industry/#Introduction-Airline-Business> [Accessed 20 September 2021].

16) Statista. 2021. *U.S. airline industry market share 2019 | Statista*. [online] Available at: <https://www.statista.com/statistics/250577/domestic-market-share-of-leading-us-airlines/> [Accessed 20 September 2021]

17) *Revenue of commercial airlines worldwide*. Www-statista-com.eu1.proxy.openathens.net. (2021). Retrieved 11 December 2021, from https://www-statista-com.eu1.proxy.openathens.net/statistics/278372/revenue-of-commercial-airlines-worldwide. / (Slide 3)

18) *Airline Industry Statistics Confirm 2020 Was Worst Year on Record*. Iata.org. (2021). Retrieved 11 December 2021, from https://www.iata.org/en/pressroom/pr/2021-08-03-01/.

19) Economic Impacts of COVID-19 on Civil Aviation. Icao.int. (2021). Retrieved 11 December 2021, from https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx.

20) Neves, A. (2021, November 13). Personal interview

21) *Structure of the Airline Industry*. Avjobs, Inc. (2021). Retrieved 11 December 2021, from https://www.avjobs.com/history/structure-of-the-airline-industry.asp.

22) Talk, I., & Flying, T. (2021). *The Airline Economics of the Bicycle Wheel: Point-to-Point vs Hub-and-Spoke Flying – Aeronautics*. Aeronauticsonline.com. Retrieved 11 December 2021, from https://aeronauticsonline.com/the-airline-economics-of-the-bicycle-wheel-point-to-point-vs-hub-and-spoke-flying/.

23) *A Guide to Legacy Carriers*. Alternativeairlines.com. (2021). Retrieved 11 December 2021, from https://www.alternativeairlines.com/legacy-carriers.

24) *Guide to low cost-cost carrier business models and strategy*. Amadeus IT Group SA. (2021). Retrieved 11 December 2021, from https://developers.amadeus.com/blog/low-cost-carrier-business-model-overview.

25) *Airline Business Models*. Aviation.itu.edu.tr. (2021). Retrieved 11 December 2021, from http://aviation.itu.edu.tr/img/aviation/datafiles/Lecture%20Notes/Aviation%20Economics%20and%20Financial%20Analysis%2020152016/Readings/Module%2007/Airline%20Business%20Models.pdf.

Bibliography: Chapter 1

26) *Evans, William and Kessides, Ioannis, (1993), Localized Market Power in the U.S. Airline Industry, The Review of Economics and Statistics, 75, issue 1, p. 66-75.*

26) *Morrell P. (2012), Airline Finance, Third Edition, Air Transport Economics and Planning, UK.*

26) *EBIT margin of airlines worldwide 2010-2022. (2021). Retrieved 11 November 2021, from https://www.statista.com/statistics/225856/ebit-margin-of-commercial-airlines-worldwide/*

26) *Lopes, Ilidio & Ferraz, Duarte & Rodrigues, Ana. (2016). The Drivers of Profitability in the Top 30 Major Airlines Worldwide. Measuring Business Excellence. 20. 10.1108/MBE-09-2015-0045.*

26) *Randall, C. (2021). Joint ventures in context: Expert interviews-airlines. Retrieved 12 October 2021, from https://www.nortonrosefulbright.com/en-af/knowledge/publications/552ef945/joint-ventures-in-context-expert-interviews--airlines*

26) *CASK: Europe's Full Service Airlines have the world's highest costs, US airlines the lowest. (2021). Retrieved 29 October 2021, from https://centreforaviation.com/analysis/reports/iata-cask-europes-full-service-airlines-have-the-worlds-highest-us-airlines-the-lowest-281609*

27) *Annual Reports*
    1) *Annual Reports of Cathay Pacific (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from http://www.cathaypacific.com/cx/en HK/about-us/investor-relations/interim-annual-reports.html*
    2) *Annual Reports of Air New Zealand (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://www.airnewzealand.co.nz/financial-information*
    3) *Annual Reports of Finnair (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://investors.finnair.com/en/reports-and-presentations*
    4) *Annual Reports of TAP Air Portugal (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://www.tapairportugal.com/en/about-us/annual-reports*
    5) *Annual Reports of Croatia Airlines (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://www.croatiaairlines.com/company/corporate-governance*
    6) *Annual Reports of Emirates (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://www.emirates.com/english/about-us/financial-transparency/annual-reports/*
    7) *Annual Reports of Singapore Airlines (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://www.singaporeair.com/en UK/sg/about-us/information-for-investors/annual-report/*
    8) *Annual Reports of easyJet (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://corporate.easyjet.com/investors/reports-and-presentations*
    9) *Annual Reports of Ryanair (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://investor.ryanair.com/results-centre/*
    10) *Annual Reports of Wizz Air (2016, 2017, 2018, 2019, 2020). Retrieved 29 October 2021, from https://wizzair.com/de-de/informationen-und-serviceleistungen/investor-relations/investoren/jahresberichte*

Bibliography: Chapter 2

1. *De prejuízo em prejuízo, TAP está há uma década em falência técnica*. ECO. (2021). Retrieved 11 December 2021, from https://eco.sapo.pt/2019/11/27/de-prejuizo-em-prejuizo-tap-esta-ha-uma-decada-em-falencia-tecnica/.

2. *Pandemia arrasta TAP para um prejuízo recorde de 1,2 mil milhões em 2020*. Jornal Expresso. (2021). Retrieved 11 December 2021, from https://expresso.pt/economia/2021-04-22-Pandemia-arrasta-TAP-para-um-prejuizo-recorde-de-12-mil-milhoes-em-2020-75bb060e.

3. *Problemas da TAP vinham de trás e foram acentuados pela pandemia*. Notícias ao Minuto. (2021). Retrieved 11 December 2021, from https://www.noticiasaominuto.com/economia/1522196/problemas-da-tap-vinham-de-tras-e-foram-acentuados-pela-pandemia.

4. *TAP. O Estado fez bem ou mal em salvar a companhia aérea da falência?*. ionline. (2021). Retrieved 11 December 2021, from https://ionline.sapo.pt/artigo/723362/tap-o-estado-fez-bem-ou-mal-em-salvar-a-companhia-aerea-da-fal-ncia-?seccao=Dinheiro_i.

5. *Bruxelas reconhece importância de salvar a TAP mas sem distorcer concorrência*. DN. (2021). Retrieved 11 December 2021, from https://www.dn.pt/dinheiro/bruxelas-reconhece-importancia-de-salvar-a-tap-mas-sem-distorcer-concorrencia-14003193.html.

6. *Biggest employers of Portugal*. (2021). Retrieved 11 December 2021, from https://www.economias.pt/maiores-empregadores-em-portugal/.

7. *Ninguém quer deixar cair a TAP. Mas que peso tem na economia?*. ECO. (2021). Retrieved 11 December 2021, from https://eco.sapo.pt/2020/07/01/ninguem-quer-deixar-cair-a-tap-mas-que-peso-tem-na-economia/.

8. *TAP traz 50 por cento dos turistas verdadeiro ou falso*. (2021). Retrieved 11 December 2021, from https://poligrafo.sapo.pt/fact-check/pedro-nuno-santos-a-tap-traz-50-dos-turistas-para-portugal-verdadeiro-ou-falso.https://observador.pt/2020/12/12/pedro-nuno-santos-revela-salarios-de-pilotos-da-tap-que-vao-dos-84-mil-a-260-mil-euros-por-ano/

9. *Pilotos da TAP chegam a ganhar mais do dobro que os da Iberia e Air Europa*. ECO. (2021). Retrieved 11 December 2021, from https://eco.sapo.pt/2020/12/16/pilotos-da-tap-chegam-a-ganhar-mais-do-dobro-que-os-da-iberia-e-air-europa/.

10. *TAP in Numbers*. (2021). Retrieved 11 December 2021, from https://www.tapairportugal.com/pt/sobre-nos/tap-em-numeros.

11. Portugal, G. (2021). *Privatização da Tap*. Historico.portugal.gov.pt. Retrieved 11 December 2021, from https://www.historico.portugal.gov.pt/pt/o-governo/arquivo-historico/governos-constitucionais/gc19/os-temas/20150116-tap/tap.aspx#3.

Bibliography: Chapter 2

12. *A TAP em números e os outros negócios. (2021). Retrieved 14 December 2021, from https://www.dn.pt/economia/a-tap-em-numeros-e-os-outros-negocios-4618830.html*

13. *Estado português volta a ser o maior accionista da TAP. (2021). Retrieved 14 December 2021, from https://www.jornaldenegocios.pt/empresas/transportes/aviacao/detalhe/estado-portugues-volta-a-ser-o-maior-accionista-da-tap*

14. *Governo "dá" mais 2 mil milhões de euros à TAP em 2021 e 2022. (2021). Retrieved 14 December 2021, from https://www.publituris.pt/2021/10/13/governo-da-mais-2-mil-milhoes-de-euros-a-tap-em-2021-e-2022*

15. *Governo fecha acordo com privados. Estado fica com 72,5% da TAP. (2021). Retrieved 14 December 2021, from https://eco.sapo.pt/2020/07/02/governo-fecha-acordo-com-privados-estado-fica-com-725-da-tap/*

16. *Portugal, G. (2021). Privatização da Tap. Retrieved 14 December 2021, from https://www.historico.portugal.gov.pt/pt/o-governo/arquivo-historico/governos-constitucionais/gc19/os-temas/20150116-tap/tap.aspx*

17. *Portugal, G. (2021). Privatização da Tap. Retrieved 14 December 2021, from https://www.historico.portugal.gov.pt/pt/o-governo/arquivo-historico/governos-constitucionais/gc19/os-temas/20150116-tap/tap.aspx#3*

18. *TAP perdeu 343 milhões com 55 dias de greve. (2021). Retrieved 14 December 2021, from https://www.jn.pt/economia/tap-perdeu-milhoes-com-dias-de-greve-4536622.html*

19. *Lisbon Airport (LIS), L., & GIG), L. (2021). Lisbon to Rio De Janeiro distance (LIS to GIG) | Air Miles Calculator. Retrieved 16 December 2021, from https://www.airmilescalculator.com/distance/lis-to-gig/*

20. Personal inerviews on Customer perception:
    1. Pereira Coutinho, J. (2021, October 28). Personal interview
    2. Goudant, T. (2021, October 28). Personal interview
    3. Alvares, P. (2021, October 28). Personal interview
    4. Brito Cunha, P. (2021, October 28). Personal interview
    5. Beirão Veiga, F. (2021, October 28). Personal interview
    6. Melo, R. (2021, October 28). Personal interview
    7. Marques, M. (2021, October 28). Personal interview
    8. Villax, G. (2021, October 28). Personal interview
    9. Carmo, R. (2021, October 28). Personal interview

Bibliography: Chapter 3

1. European Commission (2012, Janurary 09). COMMISSION DECISION of n° SA.30584 (C 38/2010, ex NN 69/2010) ON THE STATE AID Implemented by HungaryIn favour of Malév Hungarian Airlines Zrt. https://ec.europa.eu/competition/state_aid/cases/238829/238829_1288793_183_2.pdf

2. European Commission (2021, September 11). State aid: Commission finds new air carrier ITA is not Alitalia's economic successor and Italy's capital injections into ITA are market conform. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_4665

3. Reuters (2021, November 02). Avianca says U.S. court approves bankruptcy reorganization plan. https://www.reuters.com/business/cop/avianca-says-us-court-approves-bankruptcy-reorganization-plan-2021-11-02/

4. Ray, K. G. (2016). Mergers & Acquisitions: Handbuch für Strategen, Analysten, Berater und Juristen (2nd ed.). Schäffer-Poeschel Verlag.

5. Aviation: Benefits Beyond Borders. (2021). Retrieved 19 November 2021, from https://aviationbenefits.org/media/167517/aw-oct-final-atag_abbb-2020-publication-digital.pdf

6. Net profit/loss of the Italian airline Alitalia 2014-2018 | Statista. (2021). Retrieved 17 October 2021, from https://www.statista.com/statistics/702898/total-net-profit-loss-of-the-italian-airline-alitalia/

7. Neves, A. (2021, November 13). Personal interview

8. SWISS startet mit Lufthansa in eine neue Zukunft. (2021). Retrieved 9 November 2021, from https://www.swiss.com/corporate/DE/medien/newsroom/medienmitteilungen/medienmitteilung-20050322

9. Battle for Budapest, life after Malev. (2012). Retrieved 17 November 2021, from http://edition.cnn.com/video/data/2.0/video/business/2012/06/14/business-traveller-budapest- malev.cnn.html

10. AIRPORT SLOT ALLOCATION. (2021). Retrieved 12 November 2021, from https://www.icao.int/Meetings/a39/Documents/WP/wp_340_en.pdf

11. Shahid, A. (2021). Why PIA will never go the way of Air India. Retrieved 11 November 2021, from https://profit.pakistantoday.com.pk/2021/10/31/why-pia-will-never-go-the-way-of-air-india/

12. Badley, E. (2021). Thai Airways to sell 42 jets, reduce workforce to 14,500. Retrieved 8 November 2021, from https://www.aerotime.aero/29337-thai-airways-to-sell-42-jets-reduces-workforce

Bibliography: Chapter 3

13. Lacqua, F., & Burkhardt, P. (2021). Bloomberg - Are you a robot?. Retrieved 19 November 2021, from https://www.bloomberg.com/news/articles/2021-11-26/south-africa-s-gordhan-sees-saa-sale-completed-by-early-2022

14. Srinivasan, S. (2021). Can the Tatas turn around Air India?. Retrieved 11 November 2021, from https://www.thehindubusinessline.com/opinion/can-the-tatas-turn-around-air-india/article37739643.ece

15. SAA counts R16 billion in losses over three years. (2021). Retrieved 6 November 2021, from https://businesstech.co.za/news/government/398403/saa-counts-r16-billion-in-losses-over-three-years/

Bibliography: Chapter 4

1. Turkish Airlines interessada no negócio da TAP. (2021). Retrieved 16 December 2021, from https://eco.sapo.pt/2021/11/29/turkish-airlines-interessada-no-negocio-da-tap/

2. Ministério das Infraestruturas desconhece interesse da Turkish Airlines na TAP. (2021). Retrieved 16 December 2021, from https://expresso.pt/economia/2021-11-29-Ministerio-das-Infraestruturas-desconhece-interesse-da-Turkish-Airlines-na-TAP-03262331

3. Neves, A. (2021, November 13). Personal interview

4. Pedro Nuno Santos: "A TAP traz 50% dos turistas para Portugal". Verdadeiro ou falso?. (2021). Retrieved 16 December 2021, from https://poligrafo.sapo.pt/fact-check/pedro-nuno-santos-a-tap-traz-50-dos-turistas-para-portugal-verdadeiro-ou-falso

5. Cunha, A. (2021). Porque não precisamos da TAP. Retrieved 16 December 2021, from https://observador.pt/opiniao/porque-nao-precisamos-da-tap/

6. Quanto vale a TAP para a economia de Portugal?. (2021). Retrieved 16 December 2021, from https://www.publico.pt/2020/07/08/opiniao/noticia/vale-tap-economia-portugal-1923465

7. Suspiro, A. (2021). Pedro Nuno Santos revela salários de pilotos da TAP que vão dos 84 mil a 260 mil euros por ano. Retrieved 16 December 2021, from https://observador.pt/2020/12/12/pedro-nuno-santos-revela-salarios-de-pilotos-da-tap-que-vao-dos-84-mil-a-260-mil-euros-por-ano/

8. Pilotos da TAP chegam a ganhar mais do dobro que os da Iberia e Air Europa. (2021). Retrieved 16 December 2021, from https://eco.sapo.pt/2020/12/16/pilotos-da-tap-chegam-a-ganhar-mais-do-dobro-que-os-da-iberia-e-air-europa/

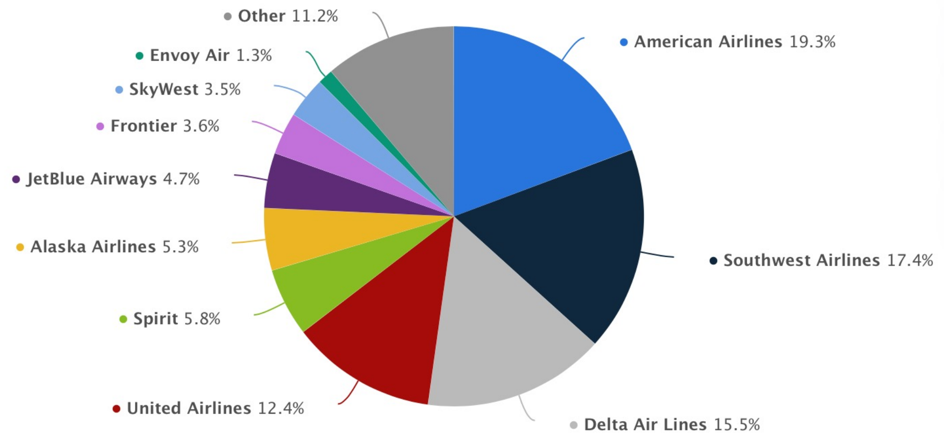
Appendix 1 – SWOT analysis and market share of US companies

Full-service carriers lead the market share but low-cost carriers have been gaining market share, increasing the competition.

The SWOT analysis of the airline industry

Strengths: • High Income • Growing Tourism Industry • Continued Growth • Safe & Speedy	**Weaknesses:** • Slow Rate of Infrastructure • High Spoilage Rate • Huge Investment • Competitive Market • Huge Workforce
Opportunities: • Inviting New Stakeholders • Worldwide Mailing Services • Use Technology to Minimize Cost • Market Expansion • Better Deals with Supplier • Timely Service	**Threats:** • Global Economic Crisis • Government Intervention • Environment Threats • Seasonal Threats • Pandemic

Domestic market share of U.S companies



One of the characterisitcs of the industry is the intense competiton where major players do not lead the market by a big percentage. An intresting fact is that the 10 biggest airlines only account for 28% of the market.

Sources:
Iata, Statista

Appendix 2 - Key Performance Indicator Analysis – An Overview

Key Performance Indicators	KPI's breakdown:	Capacity Measurement	Primary Drivers	Secondary Drivers	KPI

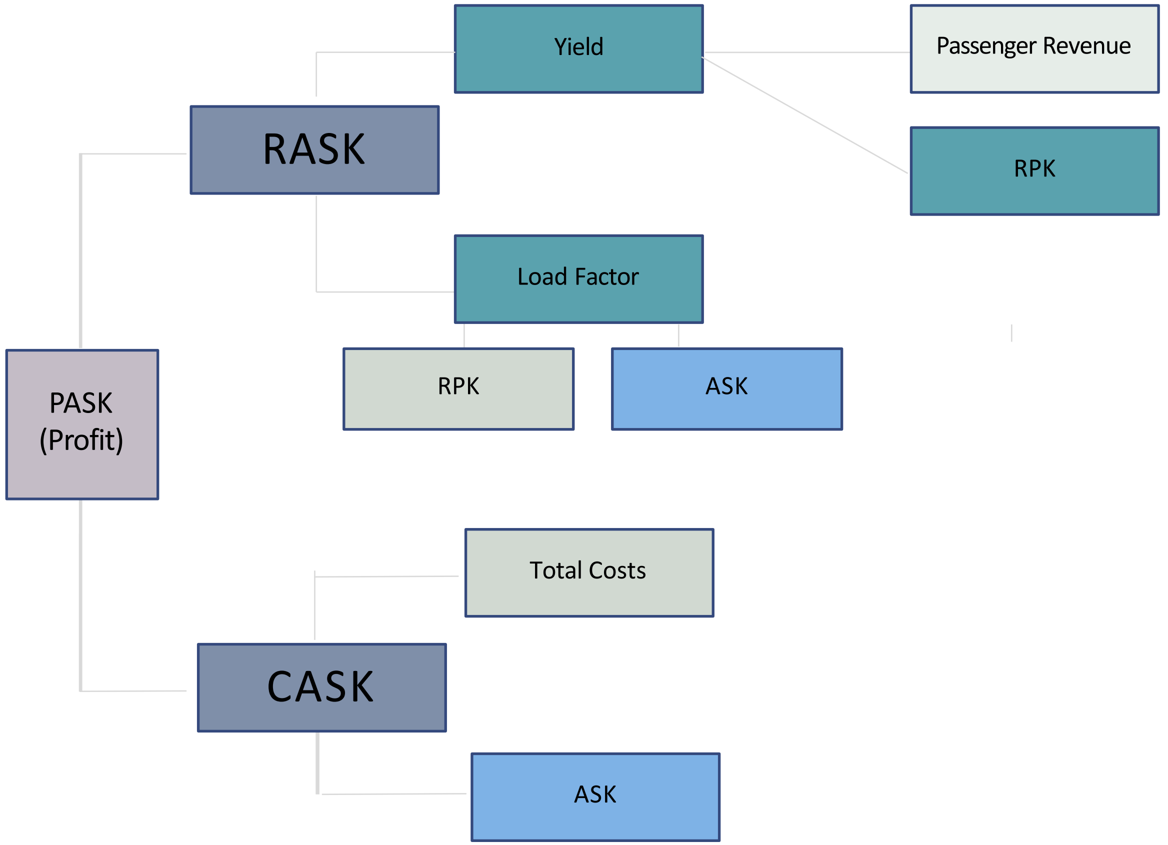
The following indicators are believed to be the most relevant in managing profitability and performance:

Passenger Revenue: represents airlines revenues obtained through ticket selling.

RPK: represents number of revenue passengers travelled times kilometers flown.
ASK: represents number of available seats travelled times kilometers flown.

Yield: represents airlines passenger revenues per ASK.

Load Factor: equals RPK divided by ASK measuring average percentage of seats occupied by revenue passengers.



Sources: ICAO

Appendix 3 - Key Performance Indicator Analysis

EBITDA in million USD	2020	%	2019	%	2018	%	2017	%	2016	2 Year Average	3 Year Average	5 Year Average
Air Croatia	$ -19	-185%	$ 22	521%	$ 4	-17%	$ 4	-24%	$ 6	-185%	160%	74%
Finnair	$ -287	-153%	$ 547	-10%	$ 605	51%	$ 400	65%	$ 243	-153%	36%	-11%
Air New Zealand	$ -52	-112%	$ 438	-28%	$ 611	-21%	$ 771	-3%	$ 795	-112%	-17%	-41%
Cathay Pacific	$ 679	-71%	$ 2.326	27%	$ 1.836	5%	$ 1.743	-19%	$ 2.141	-71%	4%	-14%
Singapore Airlines	$ 3	-100%	$ 1.823	0,05%	$ 1.822	611%	$ 256	-87%	$ 2.022	-100%	174%	106%
Emirates	$ 7.042	8%	$ 6.529	-4%	$ 6.799	17%	$ 5.790	-13%	$ 6.653	8%	0%	2%
TAP	$ -570	-207%	$ 535	1251%	$ 40	-80%	$ 195	152%	$ 78	-207%	441%	279%
Wizz Air	$ 822	6%	$ 775	71%	$ 453	32%	$ 344	17%	$ 293	6%	40%	32%
Ryanair	$ 2.142	15%	$ 1.856	-29%	$ 2.631	15%	$ 2.297	10%	$ 2.089	15%	-2%	3%
Jazeera Airways	$ -86	-283%	$ 47	104%	$ 23	-18%	$ 28	-24%	$ 37	-283%	21%	-55%
Easyjet	$ -353	-129%	$ 1.232	16%	$ 1.065	34%	$ 795	-14%	$ 920	-129%	12%	-23%
Gol Transportes Aérios	$ 211	-81%	$ 1.108	96%	$ 566	21%	$ 468	133%	$ 201	-81%	83%	42%
IndiGo	$ 502	477%	$ 87	-83%	$ 520	30%	$ 401	-19%	$ 496	477%	-24%	101%

EBITDA Change %	2 Year Average	3 Year Average	5 Year Average
IndiGo	477%	441%	279%
Ryanair	15%	174%	106%
Emirates	8%	160%	101%
Wizz Air	6%	83%	74%
Cathay Pacific	-71%	40%	42%
Gol Transp.	-81%	36%	32%
Singapore Airlines	-100%	21%	3%
Air New Zealand	-112%	12%	2%
Easyjet	-129%	4%	-11%
Finnair	-153%	0%	-14%
Air Croatia	-185%	-2%	-23%
TAP	-207%	-17%	-41%
Jazeera Airways	-283%	-24%	-55%