

A Work Project, presented as part of the requirements for the Award of a Master Degree in Economics/ Finance/Management from the NOVA–School of Business and Economics.

EQUITY RESEARCH ON SOUTHWEST AIRLINES CO.

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A Project carried out on the Master in Finance Program, under the supervision of:

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Abstract

The objective of this Equity Research is to present a detailed analysis of Southwest Airlines Co, as well as the sector in which the company operates and its competitors to a potential investor. The Discounted Cash Flow (DCF) valuation method was used to reach the target price of the company shares.

Keywords: Southwest, Airlines, Valuation, DCF.

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SOUTHWEST AIRLINES Co.

AIRLINE INDUSTRY

STUDENT: PEDRO RODRIGUES

COMPANY REPORT

16 MAY 2020

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A journey between a reality and an expectation

- The report begins with a **BUY recommendation** for the shares of Southwest Airlines Co. and a target price of \$ 36.73 for EF 2021, which represents an expected return of 17.5% for shareholders. Thus, the company is **undervalued by the market**.
- Southwest's revenue is expected to worsen for the year 2020 due to the low flight demand caused by COVID-19. However, from the year 2021, it is expected improvement for the sector.
- The return to economic activities after COVID-19 will increase the demand for oil, which will increase the price of fuel. This may increase the sector's fares.
- Southwest Airlines continues to expand its aircraft fleet, even after the restructuring between 2014 and 2017. The company already has more than 380 orders for the new Boeing 737 MAX aircraft by 2026. However, the grounding of the MAX model negatively impacted the result of the exercise.
- S&P has reduced credit ratings on all US airlines, ranking the actions taken to reflect the weakened financial situation and high risk. Thus, Southwest Airlines fell from BBB+ to BBB.

Company description

Southwest Airlines has the premise of air passenger transportation, with low costs in the USA and "almost international" markets, providing point-to-point service. In December 2019, Southwest was already operating a total of 747 Boeing 737 aircraft, serving 101 destinations in 40 states of the U.S. and 10 Central American countries, operating primarily on short to medium-haul flights.

Recommendation: BUY

Vs Previous Recommendation

Price Target FY21: \$36,73

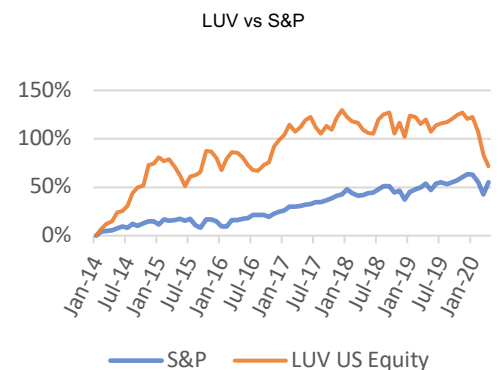
Vs Previous Price Target

Price (as of 22-May-20) \$31,25

Reuters: LUV.N, Bloomberg: LUV

52-week range (\$)	31,25-57,64
Market Cap (\$m)	16.218,75
Outstanding Shares (m)	519

Source: Bloomberg



Source: Bloomberg

(Values in \$ millions)	2019	2020E	2021F
Revenues	22,431	21,555	22,477
EBIT	2,960	2,793	3,097
Net Profit	2,303	2,149	2,396
EPS (\$)	4.28	4.14	4,62
EBIT Margin	13.2%	12.2%	13.1%
Operating Margin	13.2%	13.0%	13.8%
Profitability Margin	10.3%	10.0%	10.7%
ROIC	19.5%	21.5%	22.4%

Source: Company Annual Report, Analyzed estimates

THIS REPORT WAS PREPARED EXCLUSIVELY FOR ACADEMIC PURPOSES BY PEDRO RODRIGUES, A MASTER IN FINANCE STUDENT OF THE NOVA SCHOOL OF BUSINESS AND ECONOMICS. THE REPORT WAS SUPERVISED BY A NOVA SBE FACULTY MEMBER, ACTING IN A MERE ACADEMIC CAPACITY, WHO REVIEWED THE VALUATION METHODOLOGY AND THE FINANCIAL MODEL. (PLEASE REFER TO THE DISCLOSURES AND DISCLAIMERS AT END OF THE DOCUMENT)

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Executive summary

Southwest Airlines is an air carrier founded in 1967 in Dallas and headquartered in the United States of America. Over the years, the company has registered some growth, occupying a prominent position in terms of the number of passengers transported. The company is considered a low-cost carrier (LCC), a fact that allows it to differentiate itself from other companies that carry out air travel, influencing the competitive environment inherent to the company.

The business model of Southwest Airlines has a leadership strategy based on cost. On the other hand, mention should be made of the existence of a point-to-point architecture network, focused on short and medium-haul flights. In terms of aircraft, the company uses a single type of aircraft, Boeing 737, to reduce their costs. The combination of the different strategies mentioned allows Southwest to create value and achieve annual profits in the market in which it operates.

The air transport sector has grown exponentially, thus increasing the number of passengers carried, as well as the number of domestic departures. That way, lower prices are possible. Even so, it must be taken into account that the sector presents high volatility, as it is influenced by different external factors that cannot be controlled by the company but can significantly influence it, such as the price of oil.

The company was valued using the discounted cash flow method (DCF) to estimate Southwest's present value. Based on the company's financial statements from 2014 to 2019, the reformulation was conducted by dividing the business into Core, non-Core and Financial activities. It provides a better understanding of the business and its value to isolate the operating cash flow used to get the terminal value of the company. Therefore, a target stock price of \$ 36.73 and an expected return of 17.5% was found to shareholders.

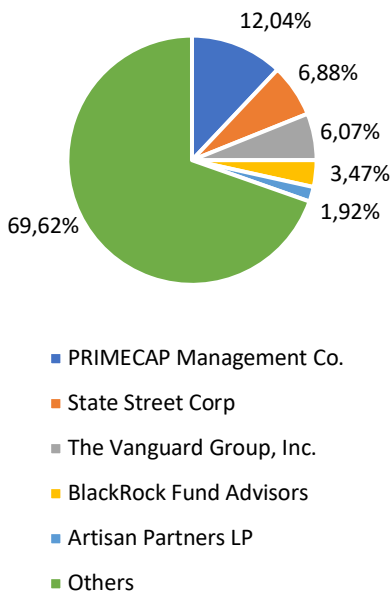
Company overview

Company description

Founded by Herbert Kelleher and Rolling King in 1967 and headquartered in Dallas, Texas, Southwest Airlines Co. is currently one of the leading passenger airlines providing scheduled air transportation in the United States and some “almost international” destinations. Southwest began its service on June 18, 1971, with only three Boeing 737s serving three cities in Texas: Dallas, Houston, and San Antonio. In December 2019, Southwest already operated with a total of 747 Boeing 737 aircraft, serving 101 destinations in 40 states and 10 Central American countries, operating mainly on short and medium-haul flights, with approximately 60,000 employees across the team. Currently, the company is the third-largest domestic airline in the United States in the number of passengers, accounting for 16.9% market share, according to Statista. Since 2010, Southwest has returned more than \$ 12.2 billion to shareholders through dividends and shares repurchased programs.



Figure 01. Shareholder Structure



Source: Nasdaq Website

Shareholder structure

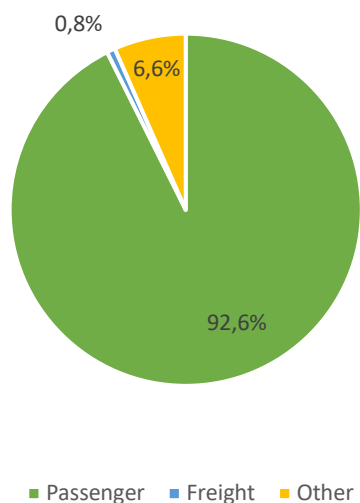
The Southwest's shares are traded on the New York Stock Exchange (NYSE) under the code LUV. The company held its initial public offering (IPO) on June 8, 1971, offering 650,000 shares at a price close to \$ 11. The main subscribers were Thomson McKinnon Auchincloss, Inc. and Model, Roland & Co., Inc. The offer was made on February 10, 1992, for 2,175,000 common shares in the U.S. \$ 36.

Institutional investors currently hold an 66.49% stake in the company's outstanding shares, which on the one hand can bring more credibility to investors in general and, on the other hand, these institutions together are likely to strongly influence board decisions. This interest is also higher than in almost any other aviation company. The three main institutions holding LUV shares are Primecamp Management CO (with more than 68 million shares, representing 12.04%); State Street Corporation. (with more than 38 million shares, representing 6.88%) and The Vanguard Group, INC. (with more than 34 million shares, representing 6.07%).

Company Operations

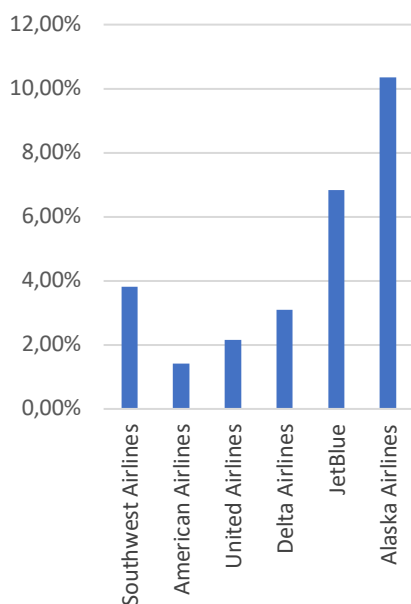
- Route Structure

Figure 02. Revenue Structure



Source: Southwest 2019's Fourth Quarter - 10K

Figure 03. Total Operating Revenue CAGR (2014 - 2019)



Source: Southwest Airlines, American Airlines, United Airlines, Delta Airlines, JetBlue, Alaska Airlines Annual Reports

Unlike most major U.S. airlines who use the service "hub-and-spoke", Southwest offers its service point to point. The hub-and-spoke method concentrates most airline operations in a limited number of central cities and serves most other destinations in the system, providing one-stop or connection service through a hub. A point-to-point route structure adopted by Southwest allowed for more direct routing compared to the "hub-and-spoke" structure, as it does not focus on operations at one or more central transfer points. In this way, a company can deepen the scheduling of offers in some important cities, which obtain economic operational benefits and offer customers additional options to reach their final destination. Approximately 77% of the company's customers flew nonstop during 2019¹.

Southwest's point-to-point service provides frequent flights at convenient times and low fares. For example, the company currently offers 21 round trips during the week between Dallas Love Field and Houston Hobby, 13 round trips between Burbank and Oakland, 16 round trips between San Diego and San Jose, eight round trips between Denver and Chicago Midway and 10 round trips between Los Angeles International and Las Vegas. To optimize the route network and travel schedule, Southwest flies frequently to the main markets (Baltimore, Denver, and Houston), adding new routes to provide greater regional and international connectivity.

Also, Southwest complements its high-frequency short-haul routes with nonstop service, including flights between California and Hawaii and between markets such as Los Angeles and Nashville, Las Vegas and Orlando, San Diego and Baltimore, Houston, and New York LaGuardia, and Oakland and Baltimore².

■ Revenue Structure

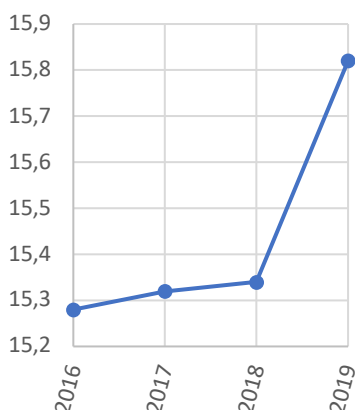
Southwest's revenues are divided into three different segments, which are: passenger revenue, other revenue, and freight. The total operating revenue from 2014 to 2019 increased from \$ 18.6 billion to \$ 22.4 billion, that is, a CAGR of 3.81%.

The Passenger Revenue between 2014 and 2019 had a CAGR of 3.31%, representing an average of 92.6% of total revenue, being the company's main business. The 2018 result included negative revenue effects due to the accident of Southwest Airlines flight 1380 from New York-LaGuardia to Dallas Love Field in April 2018, in which the plane suffered an engine failure, resulting in customer fatality. In 2019, passenger revenue increased by US \$ 321 million, or 1.6% compared to 2018. The increase in this revenue is due to an increase in the

¹ Source: Southwest 2019's Fourth Quarter – 10K.

² Source: Southwest 2019's Fourth Quarter – 10K.

Figure 04. Passenger Revenue yield per RPM (cents)



Source: Southwest Annual Report

passenger revenue yield per RPM (Figure 04), as well as the replacement of Boeing 737-300 aircraft for Boeing 737-800. The 737-800 and 737 MAX aircraft allowed Southwest to expand its fleet, increasing the seats available for travel and, consequently, the number of seats available per mile (Figure 05).

During 2019, the nominal increase in the U.S. Dollar was partially offset by negative and unexpected events such as unscheduled maintenance interruptions, the grounding of the MAX model, and the U.S. government shutdown in the first quarter.

The second-largest revenue stream is Other Revenue, which accounted for 6.6% of revenue during 2019. Compared to 2018, Other Revenue increased \$ 145 million, or 10.9%. This increase was mainly due to the increase in revenues associated with the expenses of the Chase Visa credit card owner, with the associated company. Southwest is expanding its loyalty program and offering extra benefits, thereby increasing the incentive for customers to use the card. Since 2014, this revenue had a CAGR of 13.9%.

Although the company's main business is passenger transport, it also does Freight to have another source of revenue. These revenues in 2019 decreased \$ 3 million or 1.7% compared to 2018, mainly due to lower demand. Since 2014, the freight revenue has been very steady, averaging US \$ 174 million.

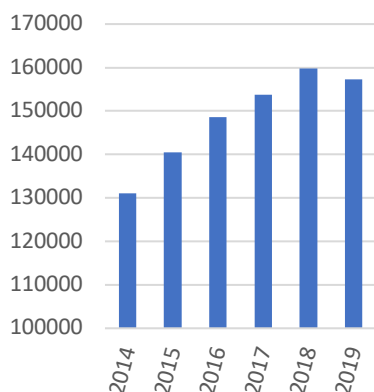
▪ Cost Structure

As a business strategy, Southwest focuses on cost discipline and profitably charging competitively low fares when compared to other major domestic airlines.

One of the strategic pillars is the use of a single type of aircraft, the Boeing 737. Thus, (i) it allows the reduction of aircraft maintenance costs due to the similarities between them, and the costs of training pilots and cabin crew are also significantly lower when compared to competitors; (ii) the efficient structure of the point-to-point route using secondary airports, in which aircraft can be programmed to minimize ground time, as these airports are generally less congested. Thus, the company would be able to reduce the number of aircraft and gate installations that would be needed, allowing (iii) high employee productivity.

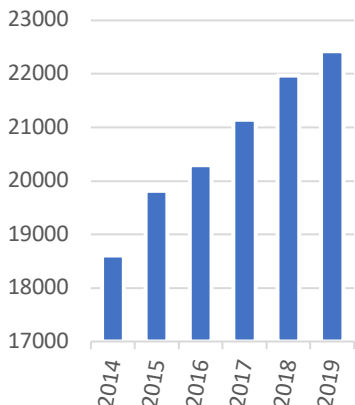
Southwest's cost structure is composed of six segments: Wages, Salaries and Benefits; Fuel and Oil; Maintenance and Repair Materials; Landing Fee and Other Rentals; Depreciation and Amortization; and Other Operating Expenses. And the main two are Wages, Salaries and Benefits, and Fuel and Oil, which are detailed below.

Figure 05. Available Seat Miles (ASM) (000s)



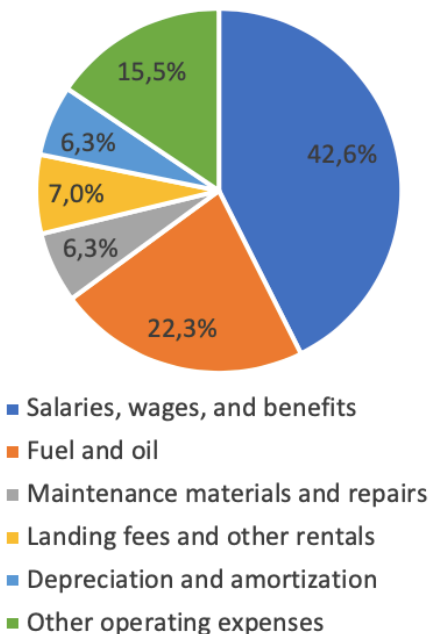
Source: Southwest Annual Report

Figure 06. Operating Revenue (in millions)



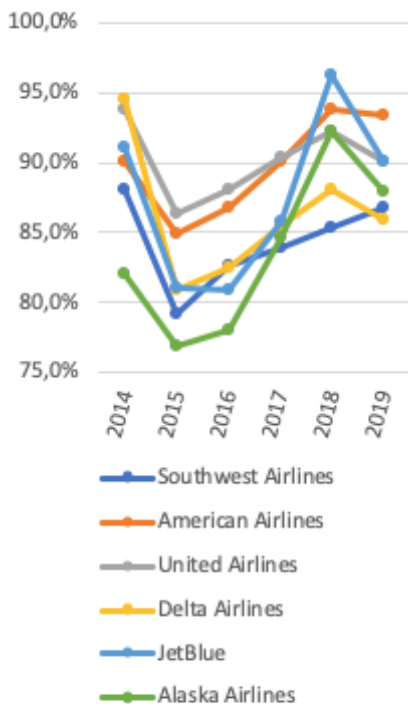
Source: Southwest Annual Report and Southwest 2019's Fourth Quarter - 10K

Figure 07. Costs Structure



Source: Southwest 2019's Fourth Quarter - 10K

Figure 08. Operational Cost as % of Revenues



Source: Southwest Airlines, American Airlines, United Airlines, Delta Airlines, JetBlue, Alaska Airlines Annual Reports

The first segment, Wages, Salaries, and Benefits, was the highest operating cost in 2019, constituting approximately 42.6% of the company's operating cost. This cost, from 2014 to 2019, had a CAGR of 8.82%. Increases in labor costs have negatively impacted the competitive advantage since the company has a limited ability to control labor costs due to the terms of its collective bargaining agreements.

The second factor refers to Fuel and Oil. Although the company's operating expenses have decreased in 2019 compared to 2018, due to lower prices of aviation fuel in the market, it remained the second largest cost in 2019, representing 22.3% of operating costs. According to Southwest, the company focuses on reducing fuel consumption and improving efficiency through fleet modernization and other initiatives, such as replacing some of its Boeing 737-300 aircraft with Boeing 737 MAX 8 aircraft, which are more efficient in terms of economy.

When comparing Operating Costs as a percentage of Revenue, Southwest presents, on average, better results than its competitors (Figure 8). Thus, it is possible to see a competitive advantage for the company, considering that Southwest has an ongoing effort to reduce costs and increase efficiency.

The Sector

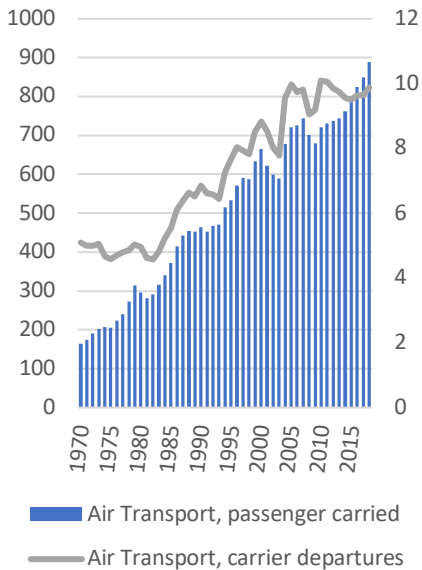
The air transport sector can be described as being challenging in terms of operations, manpower, capital, and technology. And it is still highly regulated and taxed. Adding to this, the characteristic of being cyclical and extremely competitive is very susceptible to harmful external events, such as economic recessions, fuel price volatility, unscheduled maintenance interruptions, bad weather, natural disasters, among others.

Due to the Airline Deregulation Act of 1978, in the USA, airlines were allowed to decide on the entry, exit, and/or frequency of services, in addition to fares prices³. Thus, it was possible to increase the number of passengers flying, as well as the number of departures (Figure 09), leading to a reduction in the average fare price.

According to data from Airlines for America, the US air transport sector currently transports 2.5 million passengers a day to approximately 80 countries; providing 28,000 flights per day worldwide; transporting around 58,000 tons of cargo per

³ Source: The History of Airline Industry, <https://traveltips.usatoday.com/history-airline-industry-100074.html>

Figure 09. US Air Transport Passenger Carried vs US Air Transport Departures (in millions)



Source: The World Bank

day to more than 220 countries; and has approximately 750,000 direct employees⁴.

Since Southwest Airlines' operation is focused on low-cost flights, mainly in the United States and some neighboring Caribbean countries, it is acceptable to analyze this work to focus on the North American aviation sector. According to data from the Department of Transportation (DOT) in the period 2010 to 2018, the real price of US domestic rates adjusted for inflation fell in the last four years at about 6.9%⁵, as shown in Figure 10.

In recent years, the airline industry has continued to be impacted by the significant growth of “ultra-low-cost carriers” (ULCCs). These carriers offer “unbundled” service, that is, they allow to offer relatively lower rates to customers, charging separately for services and products. The growth of the ULCCs category in the sector has led to a change in the segmentation strategy of the main US airlines.

Therefore, a new product, “Basic Economy”, was introduced to compete with the tariffs of these companies. According to data from Airlines.org, ULCC airlines are expected to carry about a third of U.S. passengers by 2030⁶.

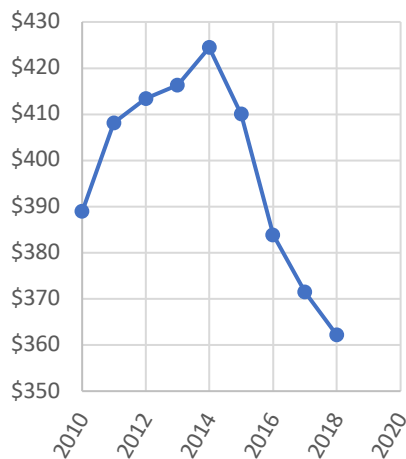
Current scenario: A brief analysis of the impacts caused by COVID-19

According to data from the International Air Transport Association (IATA), the sector grew by approximately 2% in February 2020, but in the following weeks, US airlines saw passenger volumes drop by more than 90% in all regions, directly affecting the load factor of the airlines.

The global economy was severely affected by the spread of the new coronavirus (COVID-19). The sector has suffered a drastic drop in passenger traffic, due to the fear that people will be infected and by government regulations. In April, approximately 311 million people in the United States, or 94% of the population, were subject to requests to stay at home. Because of the outbreak, companies had to reduce flights and temporarily cancel some routes. Changing the situation in the first quarter of 2020 negatively. The American aviation recorded only in the first seven days of April 1258 about inactive aircraft⁷.

The United Nations Organization for International Civil Aviation has encouraged governments to ensure that they maintain at least part of their routes even

Figure 10. Round-Trip Ticket Price



Source: U.S. passenger airlines to the U.S. Department of Transportation (DOT)

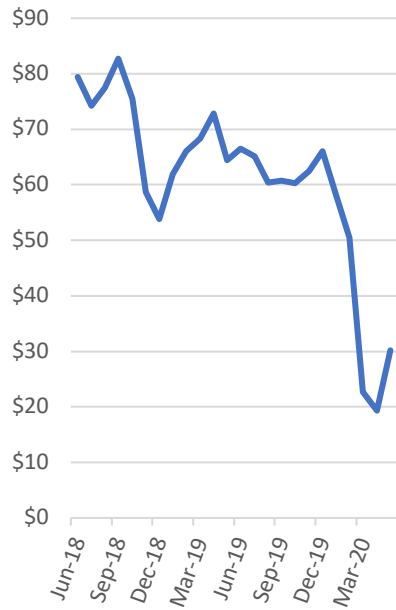
⁴ Source: A4A Presentation: Industry Review and Outlook, <https://www.airlines.org/dataset/a4a-presentation-industry-review-and-outlook/>

⁵ Source: U.S. Airline Traffic and Capacity, <https://www.airlines.org/dataset/annual-results-u-s-airlines-2/>

⁶ Source: A4A Presentation: Industry Review and Outlook, <https://www.airlines.org/dataset/a4a-presentation-industry-review-and-outlook/>

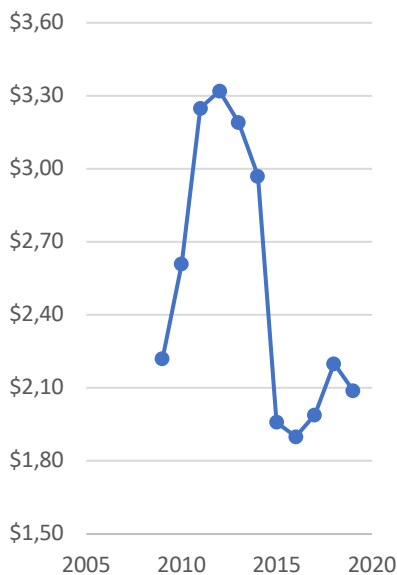
⁷ Source: A4A Presentation: Impact of COVID-19: Data Updates, <https://www.airlines.org/dataset/impact-of-covid19-data-updates/>

Figure 11. Price of barrel of Brent oil



Source: Investing.com

Figure 12. Southwest average cost of jet fuel (per gallon)



Source: Southwest 2019's Fourth Quarter - 10K

without a demand. Using these routes to transport cargo to maintain the availability of medicines, materials for hospital use, and equipment. This situation allows carriers to reverse their strategy and receive some rewards from the government for air transport of these medical products.

According to the United Nations Conference on Trade and Development (UNCTAD), this health crisis has already caused an estimated loss of US \$ 50 billion in the world economy⁸. Airlines had to use available resources to increase liquidity, including debt financing. As such, S&P has reduced credit ratings on all US airlines, ranking the actions taken to reflect the weakened financial situation and high risk. Thus, Southwest Airlines fell from BBB + to BBB⁹.

Due to the forced closure of the world economy to contain the COVID-19, the demand for petroleum products fell sharply, leading refiners to reduce the purchase of crude oil to be turned into fuel, thus increasing the global supply of oil, which leads to a reduction in oil prices. The fuel used by US airlines is Jet Fuel, which is a kerosene-based on petroleum-derived products. Thus, Jet Fuel is very susceptible to the volatility of the price of a barrel of oil that may be affected by natural disasters or political tensions, which makes it very unpredictable.

The price of a barrel of Brent oil was quoted in January 2020 at \$ 66 and in April of the same year, it was traded at \$ 20. The prospects for the oil market will depend on how quickly governments act to contain the outbreak of this virus, the success of its efforts, and the remaining impact of the global health crisis on economic activity.

Depending on the type of aircraft used, fuel can represent about 40% to 50% of operating costs on a single flight. In 2010, fuel prices were six times the level seen in the 1990s¹⁰. Therefore, for airlines to do long-term planning, it is very complex. Thus, companies are focusing on having more efficient and economical aircraft in terms of fuel in their fleets. While in the 1990s the price of jet fuel was more stable, the beginning of the 21st century is marked by an increase in prices and volatility. Between 2015 and 2019, fuel prices ranged between 20% and 35% of an airline's operating costs.

⁸ Source: BBC: "Coronavírus: o impacto sem precedentes da doença sobre as companhias aéreas – e os preços das passagens". <https://www.bbc.com/portuguese/internacional-51777795>

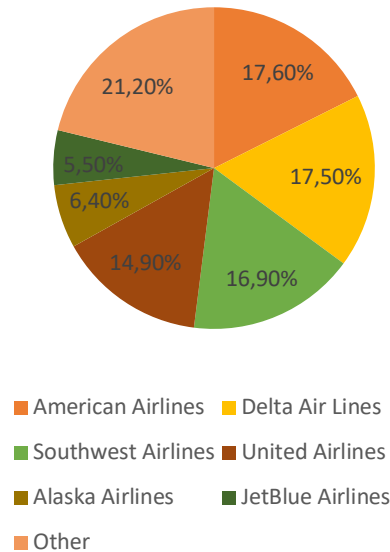
⁹ Source: A4A Presentation: Impact of COVID-19: Data Updates, <https://www.airlines.org/dataset/impact-of-covid19-data-updates/>

¹⁰ The Geography of Transport Systems, "Jet Fuel Prices, 1990-2019", https://transportgeography.org/?page_id=5572

Comparables

As previously mentioned, the main source of income of Southwest Airlines is carrying passengers. In 2018, the company was considered the largest national airline, carrying more passengers than all other companies operating in the US (carried 163.6 million passengers). In 2019, Southwest accounted for 16.9% of the US domestic market share, lagging behind competitors American Airlines (17.6%) and Delta Airlines (17.5%) and ahead of United Airlines (14.9%), Alaska Airlines (6.4% market share) and JetBlue (5.5% market share)¹¹.

Figure 13. Domestic Market Share of leading US airlines (2019)



American Airlines is an airline-owned by American Airlines Group Inc (AAG). According to data from the company's annual report, American Airlines carried approximately 215 million passengers in 2019, operating an average of 6,800 flights per day with its 942 aircraft in more than 365 destinations and 61 countries¹². The company had an operating income of \$ 45,761 million in 2019.

The second company with the largest share of the US domestic market, Delta Airlines, unlike Southwest, adopted the "hub-and-spoke" service model. The company has agreements and partnerships with several other airlines in the world to better serve its customers. Delta covers more than 300 destinations in 50 countries, with 898 aircraft, with an average of 5,000 flights per day and 15,000 flights in their affiliates¹³. In 2019, the company recorded an operating profit of \$ 47,007 million.

United Airlines, Inc. is the principal subsidiary of United Continental Holdings Inc. United is another competitor to Southwest and one of the largest airlines based in the United States. According to the annual report, the company operates through the hub and spoke model, on more than 4,900 flights per day to 362 airports on six continents. During 2019, the company operated with 788 aircraft, with operating revenue of \$ 43,259 million¹⁴.

The Alaska Air Group is a Delaware corporation organized in 1985 which operates two airlines, Alaska and Horizon, but they operate separately. Alaska Airlines flies to 115 destinations, making about 1300 flights per day between the US, Mexico, Canada, and Costa Rica. During 2019, the company carried 47 million passengers, earning \$ 8,781 million. The company has 237 aircraft in its fleet¹⁵.

Source: Statista Website

¹¹ Source: Statista, "Domestic Market Share of Leading US airlines, <https://www.statista.com/statistics/250577/domestic-market-share-of-leading-us-airlines/>

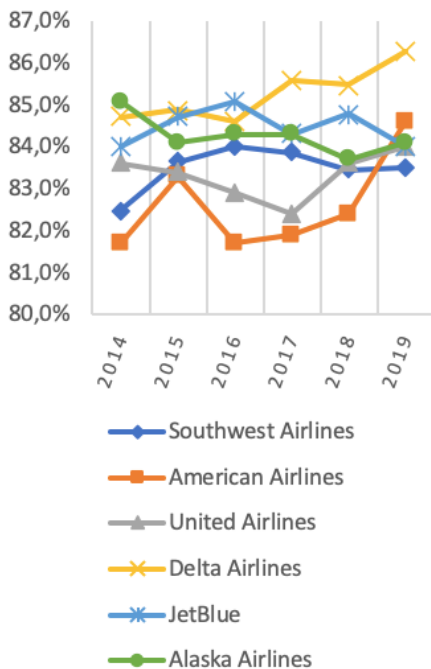
¹² Source: American Airlines 2019's Fourth Quarter – 10K.

¹³ Source: Delta Airlines 2019's Fourth Quarter – 10K.

¹⁴ Source: United Airlines 2019's Fourth Quarter – 10K.

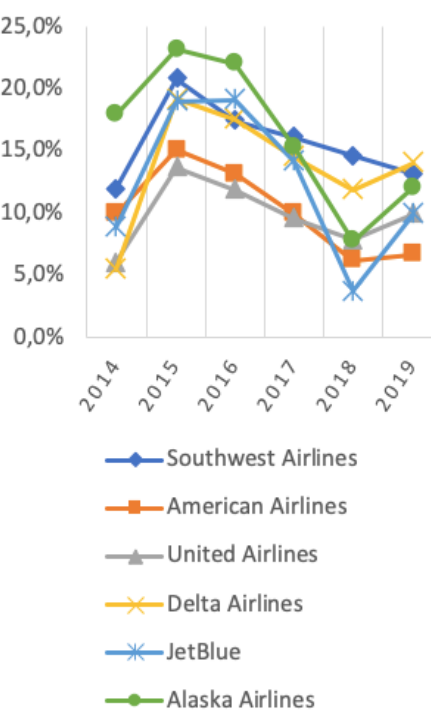
¹⁵ Source: Alaska Airlines 2019's Fourth Quarter – 10K.

Figure 14. Load Factor



Source: Companies Annual Report

Figure 15. Operating Margin



Source: Companies Annual Report

After the incorporation in Delaware in 1998, JetBlue started operations in 2000. Based on the number of miles per seat available (ASM), it was the sixth-largest passenger carrier in the USA by the end of 2018. JetBlue transported in 2018 more than 42 million passengers with approximately 100 daily flights to 105 different destinations in America, the Caribbean, and Latin America. Its fleet was 250 aircraft, with operating revenue of US \$ 7,658 million¹⁶.

One way to analyze the performance of Southwest Airlines is to compare its metrics with the competitors mentioned above to understand where the company has a competitive advantage. Therefore, it is possible to compare the evolution of the load factor, operating margin, and profitability over the past five years.

▪ Load Factor

The main element for increasing price competition has been the operation of new routes and the increase in the number of flights. The increased demand for passenger transport has brought benefits by adding the company's capacity.

Southwest Airlines is the company with the lowest load factor in the industry, due to its strategy (point to point). The company focuses on reducing the response time to maximize the use of the aircraft, thereby reducing the load factor.

JetBlue also operates on low-cost flights, has a higher load factor than the southwest, as it operates with planes with less transport capacity, and also has fewer routes. Delta Airlines and American Airlines were able to increase the load factor in 2019, leading to a competitive advantage compared to its industry competitors (Figure 14).

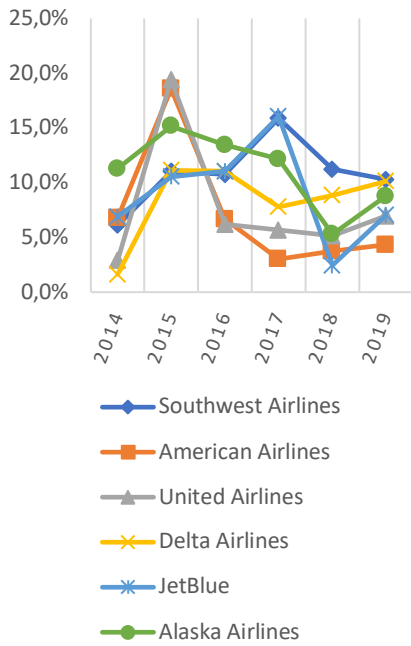
▪ Operating Margin and Profitability Margin

Observing the operating margin of the companies, a reduction is noticed in most of them. This reduction occurred because the operating costs increased in the sector because of the increase in fuel prices. One of the airlines that suffered the most was American Airlines, as it has more planes in its fleet. The Southwest had one of the smallest declines compared to competitors, going from 20.8% in 2015 to 13.2% in 2019 (Figure 15).

American Airlines and Delta Airlines, in 2015, had a peak in profitability margins, as these two companies received tax benefits, which caused net revenue to increase. However, in subsequent years, the sector's profit margins contracted. Southwest has practically maintained its profitability margin since 2015, being the company with the highest margin in the sector for the last two consecutive years (Figure 16). JetBlue, which followed Southwest's profitability margins until 2017,

¹⁶ Source: JetBlue 2018's Fourth Quarter – 10K.

Figure 16. Profitability Margin



Source: Companies Annual Report

saw its profit decrease as it experienced a significant increase in fuel costs without having a proportional increase in the average fare.

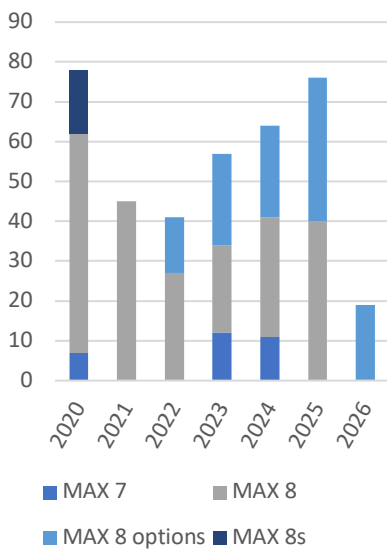
Valuation Model and Forecasting

In the equity research report considered, the Discounted Cash Flow (DCF) method was used to estimate Southwest's present value, estimating its future cash flows. Based on the company's financial statements from 2014 to 2019, the reformulation was conducted by dividing the business into Core, Non-Core and Financial activities, allowing a better understanding of the business and its value drivers, to isolate the Operating Cash Flow, in which it was used to obtain the terminal value of the company. To use this method, it is necessary to estimate future cash flows for a long period, so that the growth rate and the company's ROIC are stabilized, reaching the so-called "steady state", which in turn, allows the use of the formula of perpetuity. Thus, a projection was made for the next 12 years (2020-2031).

Business Drivers

- Aircraft

Figure 17. Deliveries and firm options for Boeing aircraft to Southwest



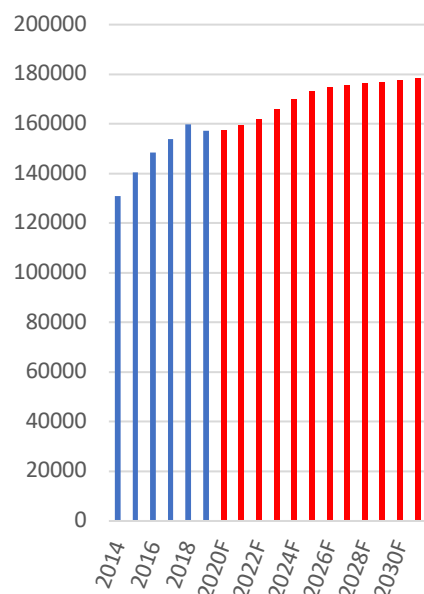
In December 2019, Southwest operated a total of 747 Boeing 737 aircraft, of which 52 were on operating leases and 70 on finance leases. The Boeing 737 aircraft has model variations, and, in the southwest fleet, it has three variations: Boeing 737-700, Boeing 737-800 and Boeing 737 MAX 8. The company has 506 aircraft of this first model, with an average of 15 years of use in the company, that can carry up to 143 passengers; Boeing 737-800 and Boeing 737 MAX 8 aircraft models are more modern and more efficient concerning fuel consumption. These last two models can carry up to 175 passengers per trip. Southwest maintains the 737-800 model aircraft in its fleet 4 years on average and the 737 MAX 8 model is in use for two years in the company. So, the next aircraft to be replaced in the fleet is the model 737-700.

According to the company's annual report for 2019, Southwest has aircraft to be delivered until 2026¹⁷. Therefore, these orders were adopted to supply the fleet for the following years. Although the company does not provide how many planes are removed per year, it was adopted in this paper that an average of 20 aircraft would be removed per year and there is an average of 53 new planes that will be added per year until 2026. Another reason for an increase in the fleet is that its

Source: Southwest 2019's Fourth Quarter - 10K

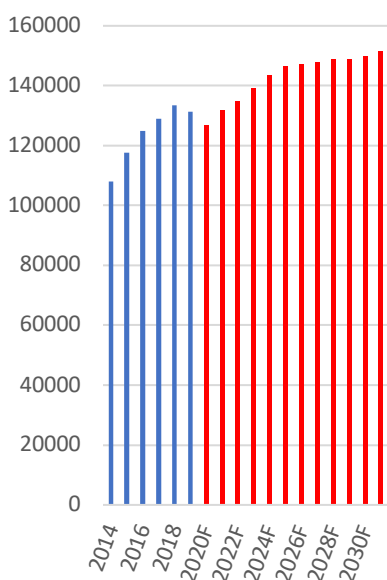
¹⁷ Source: Southwest 2019's Fourth Quarter – 10K.

Figure 18. Available Seat Mile (ASM) (In millions)



Source: Southwest Annual Reports and own creation

Figure 19. Revenue Passengers Mile (RPM) (In millions)



Source: Southwest Annual Reports and own creation

main competitors have a slightly larger fleet in operation. The aircraft ordered by the company are of the latest models of the Boeing 737 MAX.

- Available Seat Mile (ASM)

ASM is understood as an available seat (empty or full) that measures the space available for the transportation of passengers for a certain period. From 2014 to 2019, ASM had a CAGR of 3.7%, from 131 billion to 157.2 billion. As the company removed the entire fleet of the 737-300 aircraft and replaced it with the 737 Max in 2017, it generated an accelerated increase in ASM in that period. In 2019, ASM declined compared to 2018 due to the grounding of Boeing MAX aircraft. For the future projection of the ASM, purchases of new aircraft in the fleet have been considered over the years. Thus, it was possible to calculate the ASM by the number of available seats per aircraft added. During the projection period (2020 to 2031), there was an average growth of 1.2% per year.

- Revenue Passenger Miles (RPM)

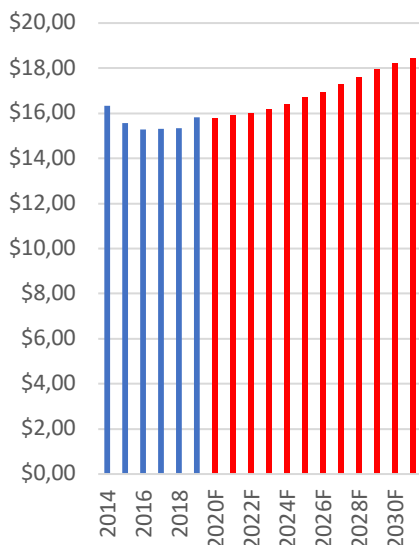
RPM is understood as a paying passenger who flew a mile. Also called "traffic", which is a measure of demand by period. This metric is calculated by multiplying the number of paying passengers by the distance traveled in miles. The RPM had a CAGR of 4% between 2014 and 2019, that is, going from 108 billion to 133.3 billion. As in ASM, RPM decreased in 2019 when compared to 2018, because some aircraft were not operating. For future projections, it was considered the COVID-19 scenario for 2020, resulting in a reduction of 4%, with a drop in demand for flights. For the following years, the economy is expected to recover, causing more flights, which would result in an increase in RPM over time.

- Passenger Revenue Yield per RPM

Passenger Revenue Yield represents the average cost paid by a passenger to fly a mile. The result of the calculation of passenger revenue divided by RPM expressed in cents per mile becomes a measure of production revenues and tariffs. The evolution of prices paid overtime is observed by the result of this calculation.

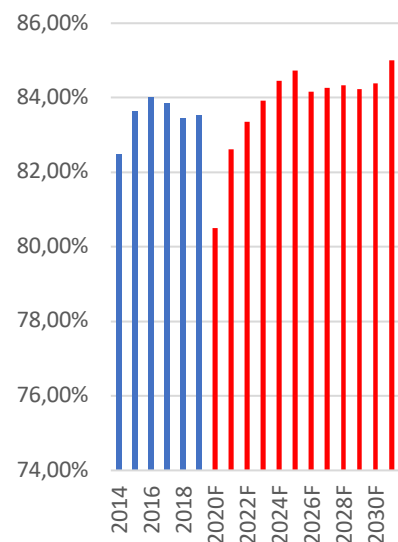
From 2014 to 2018, due to high competition in the sector, a "price war" was allowed, motivated by the fall in fuel prices, causing a significant drop in the average tariff price. In 2019, there was an increase in Passenger Revenue Yield when compared to previous years, as the average fare price increased (Figure 20). Due to the effects caused by COVID-19, a reduction in the average cost paid by the passenger for 2020 was projected to help passengers who need to return to their homes during the confinement period. For the years 2021 to 2023, an

Figure 20. Revenue Passengers Yield (In cents)



Source: Southwest Annual Reports and own creation

Figure 21. Load Factor



Source: Southwest Annual Reports and own creation

increase in passenger income between 0.4% and 0.8% was projected, aiming at a small improvement in the world economy. Finally, for the following years, an increase in income of between 1.5% and 2% was projected, due to the expected increase in GDP per capita, which will increase the purchasing power of the entire sector, which may result in an average highest tariff for consumers.

▪ Load Factor

Load Factor is a metric used by airlines to measure the occupancy rate of a flight, that is, it indicates whether the seats are being occupied by passengers. This metric is calculated by dividing the RPM by the ASM. Airlines not only try to maximize their load factor, but also make decisions about prices, capacity, and frequency of flights based on this indicator. Thus, this indicator provides the responsible departments of the company an indication that its efficiency in transport is improving or deteriorating.

The Southwest's load factor was reduced between 2015 and 2018, due to the replacement of older aircraft with more modern and more seating capacity, thereby increasing the ASM; and expanding its network to new destinations. The projection of this factor took into account the forecasts provided by the FAA for the domestic industry. According to the published report, "the load factor is expected to increase and reach a peak of around 86.6% in the future (2036) due to the logistical difficulties inherent in the perfect combination of supply and demand". In the future, with the increase in demand for new destinations, an increase in RPM is expected at a higher speed than ASM, thus increasing the load factor.

▪ Revenue

As previously mentioned, the composition of Southwest Airlines' revenue consists of three segments: passengers, freight, and other revenues. Each of the revenue was provided separately. To forecast passenger revenue, which has the largest revenue stream in the company (with an average of 99.11% of total revenue), the performance forecasts mentioned above (ASM, Load Factor, and Yield) were used. Due to the grounding of the Boeing 737 MAX and the limited data previously provided in the air transport sector on the impact of COVID-19, the projection was for a 3.7% reduction in 2020. However, from 2020 to 2031, it is expected considerable improvement, with a 3% CAGR increase.

The freight revenues (reflecting approximately 0.8% of the Southwest total revenue) was taken into account the expected growth for the sector, according to the FAA report, which was 4.4% per year and adjusted according to the past performance. Therefore, it projected growth of 2% per year.

Finally, the forecast for Other Revenues, which comes from marketing royalties from Southwest's partnership with Chase, was considered the average growth rate of the past, projecting at a rate of 3.5% per year, since data were not provided.

▪ Costs

The costs are separated into six captions, but the most important to be considered are the costs of salaries, wages and benefits, and the costs of fuel and oil, landing fees and other rentals, maintenance materials and repairs, and depreciation and amortization. These captions together represent approximately 88% of the total costs of the company.

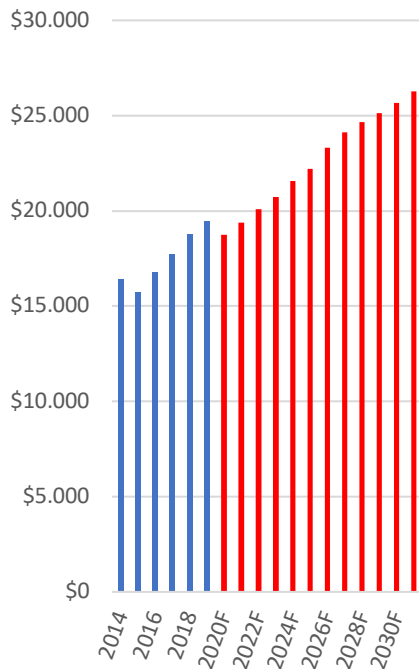
To predict salaries, wages and benefits were considered for the increase in the number of aircraft in the company fleet. So, with more aircraft, the company should increase its operational staff over the years. The cost per employee of the company was estimated taking into account the inflation in the USA. Thus, this caption will represent about 38% of the total Southwest revenue in the projected years.

The second caption, with the largest share of Southwest's total cost, Fuel and Oil, was projected based on the FAA report¹⁸, with fuel prices expected to increase by 1.7% per year until 2023 and thereafter an increase of between 2% and 2.5% in 2030. However, in 2020, due to COVID-19, the demand for oil in the world decreased. As a result, there was a 13% reduction in oil prices in the year. During the forecast period, this item represented an average of 20% of the company's total revenue.

The landing fee and other rental charges account for 7% of the total cost of the Southwest. The projection of this legend was based on the average prices charged for a landed aircraft. In the projection, this item remained at 5% of the company's total revenue.

For the projection of spending on maintenance materials and repairs, which account for 6% of the total cost of the Southwest, the average cost of maintenance per aircraft was calculated, considering that the company is acquiring more modern aircraft. Thus, maintenance costs increase over time, but on a smaller scale, because these new aircraft would take longer to malfunction.

Figure 22. Total Costs Expense (in millions)



Source: Southwest Annual Reports and own creation

¹⁸ Source: FAA report, "FAA AEROSPACE FORECAST, fiscal years 2020-2040".

Finally, with a 6% share of the company's total costs, depreciation and amortization expenses, it was projected considering the historical average of 4.33% for fixed assets. The increase over the years occurs because the company is implementing new technology assets.

In Southwest's total cost forecast, there was a 2.5% CAGR increase between 2019 and 2031.

▪ Property and Equipment

Regarding the company's balance sheet, it is worth mentioning that the most significant part of the fixed assets corresponds to Flight Equipment, as well as Ground Property and Equipment; Deposits on Flight Equipment Purchase Contracts; and Assets Constructed for Others (this being considered non-operational). From 2014 to 2019, Southwest's property and equipment caption had a 4.3% CAGR, from \$ 22.5 billion to \$ 27.7 billion. This appreciation was mainly due to the replacement of Boeing 737-300 aircraft with more modern aircraft, such as the Boeing 737-800 and 737 MAX 8.

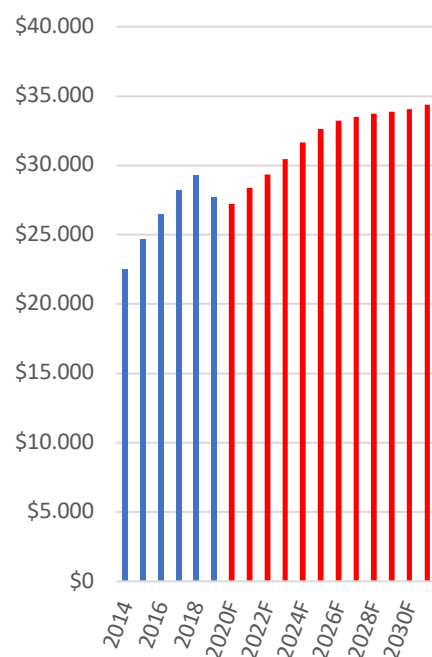
To forecast the fixed assets corresponding to the Flight Equipment, the average cost of the equipment leased and owned by the company's aircraft was considered. Thus, between the years 2020 and 2031, it calculated a CAGR of 2.1%. As for Ground Property and Equipment, the average cost per aircraft was calculated, with a CAGR of 2.6% in the same period. The Deposits on Flight Equipment Purchase Contracts were calculated using the average deposits on flight equipment purchase costs in the percentage of flight equipment, with a CAGR of 0.3%. Finally, to calculate the Assets Constructed for Others was used the average of the years preceding the projection period.

For the projection of the legends of the property and equipment for the future, it was considered the number of requests for new aircraft that the company already has until 2026 and, in the following years, an average renewal of 19 aircraft per year. This renewal of aircraft is advantageous for the company because the models of the Boeing 737 MAX are more efficient in terms of fuel consumption and have a greater number of seats, which will cause the ASM to increase.

Weighted Average Cost of Capital (WACC)

To calculate Southwest Airlines' cost of capital, the Weighted Average Cost of Capital (WACC) was used, thus being able to discount the company's free cash flow. In the composition of the WACC, it has the cost of equity and the cost of debt, which were projected as follows.

Figure 23. Total PP&E (in millions)



Source: Southwest Annual Reports and own creation

Figure 24. Southwest WACC

Cost of Equity - CAPM	
Risk Free Rate	0,64%
Beta Unlevered	1,208
Beta levered	1,365
Market Risk Premium	6,00%
Cost of Equity	8,83%

Cost of Debt	
YTM	1,12%
Default Probability	0,256%
Cost of Debt	1,38%

WACC	
Total Equity (MV)	\$ 16.219
Total Debt	\$ 2.665
Tax	21%
Weight of Equity	85,9%
Weight of Debt	14,1%
WACC	7,73%

Source: Duff & Phelps and Own estimation

The cost of equity was calculated using the CAPM¹⁹ model, where the risk-free rate used was the 10-year US government bond since the probability of the US government to not pay its debts is almost null. The market risk premium used for analysis was based on the report presented by Duff and Phelps²⁰, in the amount of 6%. For the beta calculation, data from Southwest competitors operating in the same sector (Alaska Airlines, American Airlines, Delta Airlines, JetBlue, and United Airlines) were used, in which the closing prices used were the monthly closings of the last six years, calculating the returns for each period. Thus, the 95% confidence intervals for the beta of each company were calculated, unlevering them later according to its capital structure and calculating the average of the betas of the sector. Finally, with the average unlevered beta of the sector, the beta of the Southwest was relevered, reaching a value of 1,365. Thus, the cost of equity of Southwest Airlines can be calculated, reaching a value of 8.83%.

The cost of debt was calculated using corporate bonds issued by Southwest. For this calculation, the formula $K_d = YTM + \text{default probability}$ was used. In which the YTM was calculated from the weighted average of each bond issued, being equal to 1.12%, and the probability of default equal to 0.256%. Thus, the cost of debt was 1.38%.

After calculating all the necessary elements, the company WACC was estimated at 7.73%.

Discounted Cash Flow

Southwest Airlines ROIC between the projection years (2020 and 2031) is on average equal to 21.9%. After analyzing the company's cash flows, it can be seen that Southwest Airlines has a lower cost of raising the capital required for investment than the returns generated from the investments made, thus, the company is obtaining excess returns. Considering that if a company expects to continue generating positive returns on new investments in the future their value will increase as growth increases.

Southwest Airlines will achieve a growth rate of 1.01% by 2031, this rate will be used to calculate the value of the terminal. By discounting the terminal value to the present value and adding the present value of the discounted cash flows from 2020 to 2031 with Noncore Invested capital, it obtains a corporate value of US \$ 19,889 million. After that, added the cash and the cash equivalent value and subtracting the market value of the net debt and the net transactions with the

¹⁹ Capital Asset Pricing Model (CAPM) – Formula: $E = \text{risk free rate} + \text{beta} * \text{market risk premium}$

²⁰ Duff & Phelps recommended US Equity Risk Premium, <https://www.duffandphelps.com/insights/publications/cost-of-capital/us-equity-risk-premium-increased-march-25-2020>

shareholders, the market value of the equity is found, in which it is divided by the number of outstanding shares of the Southwest (about 519 million), finding the share price at \$ 36.73. This estimate would bring a buy recommendation for the asset, since the price compared to April 30, 2020, was being quoted at \$ 31.25, an increase of 17.5%.

Sensitivity and Scenario Analysis

In this report, some forecasts used are based on assumptions and others based on solid evidence. They can be influenced by many external variables, making future predictions difficult. Therefore, in this sensitivity and scenario analysis, the focus is on analyzing what would happen to the valuation if some of the assumptions occur differently than expected so far and what are their impacts on Southwest Airlines.

Sensitivity analysis helps companies understand how their value changes if one of their main independent variables changes, keeping all other factors constant. The main variables for the revenue stream and the cost structure of the aviation sector are the load factor and the cost of fuel. Thus, the analysis was based on these two factors.

As seen previously, the load factor represents the percentage of available capacity of seats filled with passengers during the flight. To perform the sensitivity analysis, the two lowest levels of the load factor and the two highest in recent years in the industry were used to make the comparison. Keeping all other factors constant, if the industry load factor were used when the average reached 73.6%, Southwest's price would be \$ 34.83; however, if using the highest level of the load factor, 84.5%, Southwest's price would be \$ 38.08, as shown in Table 01 in the appendix.

Since jet fuel is derived from petroleum, which is very exposed to different events that occur in the world, making it very volatile and difficult to predict correctly. In this analysis, it was decided to compare the two highest aviation fuel prices and the two highest fall prices between 2018 and 2019. Thus, if the aviation fuel price was \$ 2.25 per gallon, the price of Southwest shares would be \$ 15.92. On the other hand, if the price of a gallon of fuel came to \$ 1.51, the price of Southwest's stock would be \$ 63.70, as shown in Table 02 in the appendix.

Finally, another interesting sensitivity analysis would be the WACC compared to the growth rate in its terminal value. As previously mentioned, the calculated WACC was 7.73% and the growth rate in the terminal was 1.01%. For this analysis, a variation of 1 percentage point was used for the WACC rate and 0.3% for the growth rate. In the worst-case scenario, that is, the growth rate falling to

0.41% and the WACC rising to 9.73%, Southwest's share price would reach \$ 26.97, with a 13.7% reduction (Table 03 in the appendix).

The scenario analysis, on the other hand, allows companies to understand how the value of the equity changes in the case of optimistic and pessimistic scenarios by changing more than one variable at a time. Unlike the sensitivity analysis, the scenario analysis has the advantage of estimating the asset's value in case of recession (pessimistic scenario) and the case of economic expansion (optimistic scenario).

Southwest's pessimistic scenario analysis conducted in this report was based on an increase in the price of aviation fuels to \$ 2.25 and a reduction in the load factor to 73.6%. This scenario is quite plausible in a recession since travel flows decrease as a result of the reduction in disposable income of economic agents and the price of fuel is expected to increase due to rising oil prices. Thus, Southwest's stock price would reach a value of \$ 13.86. On the other hand, in an optimistic scenario, assuming a reduction in fuel by \$ 1.51 and an increase in the load factor to 84.5%, resulting in an increase in Southwest's share price by \$ 64.89, as shown in Table 04 in the appendix.

Multiples

Figure 25. Multiples

	Min	Max
EV/EBITDA	\$19,25	\$31,96
EV/SALES	\$27,28	\$43,30
P/E	\$17,75	\$50,80
P/Sales	\$6,97	\$45,77
P/Book	\$17,17	\$48,22
P/Cash Flow	\$20,22	\$61,26

Source: Own estimation

In addition to the DCF method, the multiples valuation was used to calculate the southwest value. The analysis was based on Equity Multiples and Enterprise Multiples. When companies are comparable in terms of structure and face the same perspective, they must be traded at similar prices. The comparable companies for this analysis were: Alaska Airlines, American Airlines, Delta Airlines, JetBlue, and Delta Airlines. This analysis was presented through the football field in the appendix (Figure 26), where the stock price is between \$ 27 and \$ 43.

Therefore, considering the scenarios presented and the multiples analysis, it is possible to follow the recommendation to buy Southwest Airlines shares.

Appendix

Income Statements

Forecast Statement of Income <i>(in millions, except per share amounts)</i>	Year ended December 31,						2020E	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
	2014	2015	2016	2017	2018	2019												
OPERATING REVENUES:																		
Passenger	17658	18299	19068	19763	20455	20779	20018	20916	21592	22496	23515	24457	24899	25559	26179	26680	27278	27919
Freight	175	179	171	173	175	172	175	179	183	186	190	194	198	202	206	210	214	218
Special Revenue Adjustment	0	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	772	1170	1050	1210	1335	1480	1362	1382	1410	1452	1510	1570	1633	1699	1767	1837	1911	1987
Total Operating Revenue	18605	19820	20289	21146	21965	22431	21555	22477	23184	24135	25215	26221	26730	27459	28151	28727	29403	30124
OPERATING EXPENSES:																		
Salaries, wages, and benefits	5434	6383	6786	7305	7649	8293	8136	8459	8782	9056	9384	9659	10317	10783	11078	11371	11679	12002
Fuel and oil	5293	3616	3801	4076	4616	4347	3993	4196	4386	4612	4880	5123	5308	5483	5652	5815	5993	6198
Maintenance materials and repairs	978	1005	1045	1001	1107	1223	1287	1147	1183	1244	1297	1314	1337	1351	1362	1365	1370	1384
Aircraft rentals	295	238	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landing fees and other rentals	1111	1166	1211	1292	1334	1363	1313	1363	1412	1463	1517	1553	1581	1595	1604	1609	1618	1633
Depreciation and amortization	938	1015	1221	1218	1201	1219	1186	1236	1263	1311	1376	1414	1439	1449	1460	1467	1475	1489
Acquisition and integration	126	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other operating expenses	2205	2242	2703	2847	2852	3026	2847	2979	3053	3055	3103	3158	3327	3472	3490	3505	3525	3556
Total operating expenses	16380	15704	16767	17739	18759	19471	18762	19380	20078	20742	21557	22222	23308	24133	24644	25133	25660	26262
OPERATING INCOME	2225	4116	3522	3407	3206	2960	2793	3097	3107	3393	3658	3999	3422	3327	3506	3594	3743	3862
OTHER EXPENSES (INCOME):																		
Interest expense	130	121	122	114	131	118	142	125	75	75	102	102	102	102	102	102	102	102
Capitalized interest	-23	-31	-47	-49	-38	-36	0	0	0	0	0	0	0	0	0	0	0	0
Interest income	-7	-9	-24	-35	-69	-90	0	0	0	0	0	0	0	0	0	0	0	0
Other (gains) losses, net	309	556	21	112	18	8	18	18	18	18	18	18	18	18	18	18	18	18
Total other expenses	409	637	72	142	42	0	160	143	93	93	120	120	120	120	120	120	120	120
INCOME BEFORE INCOME TAXES	1816	3479	3450	3265	3164	2960	2633	2954	3014	3300	3538	3879	3302	3207	3386	3474	3623	3742
PROVISION FOR INCOME TAXES	680	1298	1267	-92	699	657	484	558	488	687	751	804	589	538	590	590	610	625
NET INCOME	1136	2181	2183	3357	2465	2303	2149	2396	2525	2613	2787	3075	2712	2669	2797	2884	3012	3117
NET INCOME PER SHARE, BASIC	1,65	3,3	3,58	5,58	4,3	4,28	4,14	4,62	4,87	5,03	5,37	5,93	5,23	5,14	5,39	5,56	5,80	6,01
NET INCOME	1136	2181	2183	3357	2465	2303	2149	2396	2525	2613	2787	3075	2712	2669	2797	2884	3012	3117

Free Cash Flow Map

Forecast FCF <i>(in millions, except per share amounts)</i>	Year ended December 31,						2020E	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
	2014	2015	2016	2017	2018	2019												
Core Business																		
Operation Cash Flow	1385	2722	3503	4048	2619	2300	2340	2608	2703	2805	3019	3298	2910	2826	2910	2948	3027	3085
Net Capex	0	-2994	-2657	-2647	-1990	-1176	-811	-2362	-2238	-2437	-2611	-2402	-2033	-1741	-1674	-1595	-1686	-1827
Invested in NW and Others	0	1346	678	-327	1239	813	-1371	419	592	753	760	315	400	314	231	144	169	267
Invested in CF	0	-1648	-1979	-2974	-751	-363	-2183	-1943	-1646	-1684	-1851	-2087	-1633	-1427	-1443	-1451	-1517	-1560
FCF Core	1385	1073	1524	1074	1867	1936	157	665	1057	1121	1168	1211	1277	1399	1467	1498	1510	1525
NonCore Business																		
Operation Cash Flow	208	366	670	906	1141	1231	1090	1106	1128	1161	1207	1255	1304	1356	1410	1466	1524	1584
Net Capex	0	-294	-305	-323	-225	1604	0	0	0	0	0	0	0	0	0	0	0	0
Invested in NW and Others	0	890	-47	451	231	-1031	-26	-2	45	-4	-6	6	27	17	0	0	3	3
Invested in CF	0	596	-352	128	6	573	-26	-2	45	-4	-6	6	27	17	0	0	3	3
FCF NonCore	208	962	318	1034	1147	1804	1064	1104	1173	1157	1201	1261	1332	1373	1409	1466	1526	1587
Financial																		
Financial Result	-253	-204	-42	-44	-67	-90	-111	-97	-56	-55	-76	-75	-74	-73	-72	-71	-70	-69
Invested in Net Financial Asset	0	-545,7	27,38	428,14	-667,62	-1408	511	361	-73	-140	-223	-313	-443	-616	-715	-793	-858	-926
Change in Equity	0	583	1083	1200	212	-21	146	353	410	511	694	950	609	575	696	775	893	992
Net Transactions	-401	-1285	-1828	-2492	-2279	-2243	-1622	-2033	-2100	-2084	-2070	-2084	-2092	-2084	-2091	-2100	-2108	-2117
FCF Financial	-654	-2035	-1842	-2108	-3014	-3740	-1222	-1769	-2229	-2279	-2369	-2472	-2609	-2772	-2877	-2964	-3036	-3112

Balance Sheet

Forecast Balance Sheet

(in millions, except per share amounts)

	Year ended December 31,						2020E	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028F	2029F	2030F	2031F
	2014	2015	2016	2017	2018	2019												
ASSETS																		
Current Assets:																		
Cash and Cash equivalents	1282	1583	1680	1495	1854	2548	1277	450	464	483	504	524	535	966	1696	2502	3373	4313
Short-term investments	1706	1468	1625	1778	1835	1524	1525	1526	1527	1528	1529	1530	1531	1532	1533	1534	1535	1536
Accounts and other receivables	365	474	546	662	568	1086	673	735	787	833	915	886	915	947	973	993	1006	1033
Inventories of parts and supplies, at cost	342	311	337	420	461	529	434	460	491	511	531	536	567	589	602	613	624	640
Prepaid expenses and other current assets	232	188	310	460	310	287	250	271	276	264	264	268	272	272	271	272	274	275
Total Current assets	3927	4024	4498	4815	5028	5974	4159	3442	3545	3619	3743	3744	3819	4307	5075	5914	6813	7798
Property and equipment, at cost:																		
Flight equipment	18473	19462	20275	21368	21753	21629	21641	22458	23204	24074	25082	25920	26373	26599	26770	26879	27053	27319
Ground property and equipment	2853	3219	3779	4399	4960	5672	4529	4877	5174	5438	5641	5633	5787	5865	5904	5910	5926	5994
Deposits on flight equipment purchase contracts	566	1089	1190	919	775	248	886	852	784	769	783	912	897	884	887	897	914	915
Assets constructed for others	621	915	1220	1543	1768	164	164	164	164	164	164	164	164	164	164	164	164	164
Total	22513	24685	26464	28229	29256	27713	27220	28352	29326	30446	31670	32628	33221	33512	33724	33850	34057	34392
Less Allowance for depreciation and Amortization	8221	9084	9420	9690	9731	10688	9720	10063	10402	10869	11461	11652	11864	11983	12078	12131	12181	12305
Goodwill	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970	970
Other Assets	534	717	774	786	720	577	759	748	742	743	751	791	790	789	791	794	799	802
TOTAL ASSETS	19723	21312	23286	25110	26243	25895	23388	23449	24181	24909	25673	26480	26935	27595	28482	29396	30458	31657
LIABILITIES AND STOCKHOLDERS' EQUITY																		
Current Liabilities:																		
Accounts Payable	1203	1188	1178	1320	1416	1574	1418	1460	1533	1591	1659	1693	1778	1846	1886	1923	1960	2008
Accrued liabilities	1565	2591	1985	1700	1749	1749	1738	1745	1762	1776	1793	1807	1866	1898	1906	1912	1919	1927
Air traffic liability	2897	2990	3115	3495	4134	4457	3684	3936	4170	4418	4591	4681	4802	4954	5077	5161	5267	5400
Current maturities of long-term debt	258	637	566	348	606	819	595	587	591	640	646	0	0	0	0	0	0	0
Total Current Liabilities	5923	7406	6844	6863	7905	8952	7436	7727	8055	8425	8690	8181	8447	8698	8869	8996	9147	9335
Long-term debt less current maturities	2434	2541	2821	3320	2771	1846	1251	664	73	0	0	0	0	0	0	0	0	0
Air traffic liability noncurrent	0	0	0	1070	936	1053	1005	1055	1086	1133	1184	1232	1254	1287	1318	1343	1374	1406
Deferred income taxes	2782	2490	3374	2119	2427	2364	2824	2664	2693	2680	2655	2637	2614	2598	2582	2566	2551	2536
Construction obligation	554	757	1078	1390	1701	164	164	164	164	164	164	164	164	164	164	164	164	164
Other noncurrent liabilities	1255	760	728	707	650	706	729	709	711	712	729	735	755	768	771	775	777	780
Total Liabilities	12948	13954	14845	15469	16390	16063	13409	12983	12782	13114	13421	12949	13233	13515	13705	13845	14013	14220
STOCKHOLDERS' EQUITY:																		
Common Stock	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808
Capital in excess of par value	1315	1374	1410	1451	1510	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581	1581
Retained earnings	7416	9409	11418	13832	15967	17945	19908	22099	24433	26803	29357	32177	34664	37112	39678	42326	45093	47956
Accumulated other comprehensive income	-738	-1051	-323	12	20	-61	-61	-61	-61	-61	-61	-61	-61	-61	-61	-61	-61	-61
Treasury stock	-2026	-3182	-4872	-6462	-8452	-10441	-12258	-14096	-15997	-17879	-19738	-21609	-23487	-25360	-27230	-29102	-30976	-32848
Total Stockholders equity	6775	7358	8441	9641	9853	9832	9978	10332	10764	11252	11946	12896	13505	14080	14777	15551	16445	17436
TOTAL LIABILITIES + STOCKHOLDERS' EQUITY	19723	21312	23286	25110	26243	25895	23388	23315	23546	24366	25368	25845	26738	27595	28482	29396	30458	31657

Sensitivity Analysis & Scenario Analysis

Table 01. Sensitivity analysis of Load factor

Load Factor			
	Value	Equity Value	Price per Share
Pessimistic	73,6%	\$ 18.075	\$ 34,83
	75,9%	\$ 18.431	\$ 35,51
Realistic		\$ 19.061	\$ 36,73
Optimistic	83,8%	\$ 19.654	\$ 37,87
	84,5%	\$ 19.763	\$ 38,08

Source: Own estimation

Table 02. Sensitivity analysis of Jet fuel

Jet Fuel			
	Price	Equity Value	Price per Share
Pessimistic	\$ 2,25	\$ 8.261	\$ 15,92
	\$ 2,15	\$ 11.386	\$ 21,94
Realistic		\$ 19.061	\$ 36,73
Optimistic	\$ 1,70	\$ 26.449	\$ 50,96
	\$ 1,51	\$ 33.058	\$ 63,70

Source: Own estimation

Table 03. Sensitivity analysis of WACC and growth rate.

		WACC					
		\$ 36,73	5,73%	6,73%	7,73%	8,73%	9,73%
Growth	0,41%	\$ 49,26	\$ 41,01	\$ 35,03	\$ 30,51	\$ 26,97	
	0,71%	\$ 51,15	\$ 42,21	\$ 35,84	\$ 31,08	\$ 27,38	
	1,01%	\$ 53,27	\$ 43,54	\$ 36,73	\$ 31,69	\$ 27,83	
	1,31%	\$ 55,68	\$ 45,02	\$ 37,69	\$ 32,36	\$ 28,30	
	1,61%	\$ 58,44	\$ 46,67	\$ 38,76	\$ 33,08	\$ 28,81	

Source: Own estimation

Table 04. Scenario analysis summary

Scenario Summary			
	Pessimistic	Realistic	Optimistic
Jet Fuel Price	\$ 2,25		\$ 1,51
Load Factor	73,6%		84,5%
Equity Value	\$ 7.192	\$ 19.061	\$ 33.677
Price per Share	\$ 13,86	\$ 36,73	\$ 64,89

Source: Own estimation

Multiples

Figure 26. Football Field Multiples



Source: Own estimation

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Report Recommendations

Buy	Expected total return (including expected capital gains and expected dividend yield) of more than 10% over a 12-month period.
Hold	Expected total return (including expected capital gains and expected dividend yield) between 0% and 10% over a 12-month period.
Sell	Expected negative total return (including expected capital gains and expected dividend yield) over a 12-month period.

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