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Aircraft Funding Legal & Financial Analysis

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Airline Credit Analysis Case Study

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OVERVIEW

In layman terms, Credit analysis is more about identification of risks in situations where a potential for lending is observed. Both quantitative and qualitative assessment forms a part of overall appraisal of the clients (company/individual). This in general, helps to determine the entity's debt servicing capacity, or its ability to repay.

The chosen airline is Spirit Airlines, Inc. This case study's analytic framework is divided into two major segments. The first part is fundamental business risk analysis. This step forms the basis and provides the industry and business contexts for the second segment of the analysis, a financial risk analysis of the company. The case study will discuss about

- Market position: its route network, the revenue potential of the markets it serves, and the strength of the airline's competitive position in those markets
- Revenue generation, which includes capacity utilization and pricing
- Operating cost structure relative to competition and the company's revenue model
- Diversity of revenues, based on geography, types of passengers, and contribution from non-passenger services
- Age, technology, and suitability of aircraft fleet to airline's operating requirements
- Service standards and reputation

Keywords

Market – Revenue Potential – Macroeconomics – Competitors – Revenue – Service –Fuel Price – Industry Policy

1. Macroeconomic Environment

Country risk plays a critical role in determining all ratings on companies in a given country. Country-related risk factors can have a substantial effect on company creditworthiness, both directly and indirectly. Such risks pertain to the effect of government policies and other country risk factors, such as safety and environmental regulation, the air traffic control system, airport infrastructure, and labor law, although there may be various strategies an airline can pursue to try to insulate itself from certain of these risks. Large, developed countries or regions, such as the U.S. and the EU, are wealthy enough to support substantial travel demand, but tend also to have many airline industry participants and often, intense competition. Conversely, in less developed countries, economies tend to be more volatile, but also may offer stronger growth prospects for travel demand.

1.1 U.S.A. Economy

The airline industry today operates the safest mode of transportation with 2.4 MILLION passengers transported every day. Commercial air travel is the safest form of intercity transportation in the United States. Every day U.S. airlines transport more than 2.4 million passengers and more than 58,000 tons of cargo. Safety is our number one priority. A4A[1] and our member airlines work together with the Department of Transportation, Federal Aviation Administration, National Transportation Safety Board, Department of Homeland Security, Transportation Security Administration, Customs and Border Protection, aircraft manufacturers, labor and others to provide a safe and efficient travel experience. As a result, the U.S. airline industry is experiencing the safest period in aviation history.

[1] Airlines for America (A4A), formerly known as Air Transport Association of America (ATA), is an American trade association and lobbying group based in Washington, D.C. that represents the largest airlines.

Per the National Safety Council® (NSC) in its INJURY FACTS® 2017 EDITION, "Overall, passenger transportation incidents account for about 1 out of 6 unintentional injury-related deaths. But the risk of death for the passenger, expressed on a per-mile basis, varies greatly by transportation mode. Highway travel by personal vehicle presents the greatest risk; air, rail, and bus travel have much lower death rates." The table below shows the most recent available comparative information on U.S. passenger transportation fatality rates.

Years	U.S. PASSENGER FATALITIES PER 100 MILLION PASSENGER MILES			
	Light Duty Vehicles	**Intercity Buses**	**Railroad Passenger Trains**	**Airlines**
2012-2014	0.46	0.04	0.02	0.00

Table 1. Safety Record of U.S. Air Carriers. Source: National Safety Council® (NSC) INJURY FACTS® 2017 EDITION

Commercial aviation helps drive more than 10 million American jobs and 5 cents of every dollar of U.S. GDP. The member airlines contribute at the local, state, national and global levels, transporting people and goods around the world safely, efficiently and economically. The industry supports and creates new markets at home and abroad, as communities across the world rely on access to air transportation for economic growth and stability.

Between 1978 and 2017, U.S. airlines improved fuel efficiency by over 125%, which has resulted in more than 4.6 billion metric tons of carbon dioxide savings. The member airlines have a strong record of environmental responsibility. Today, the U.S. airplanes are quieter, cleaner and use less fuel than ever, and we fly them smarter. Carriers continue to invest in new aircraft and engines, winglets, alternative fuels and operational procedures – both in-flight and on the ground – among many other initiatives to create cleaner, greener skies for us all.

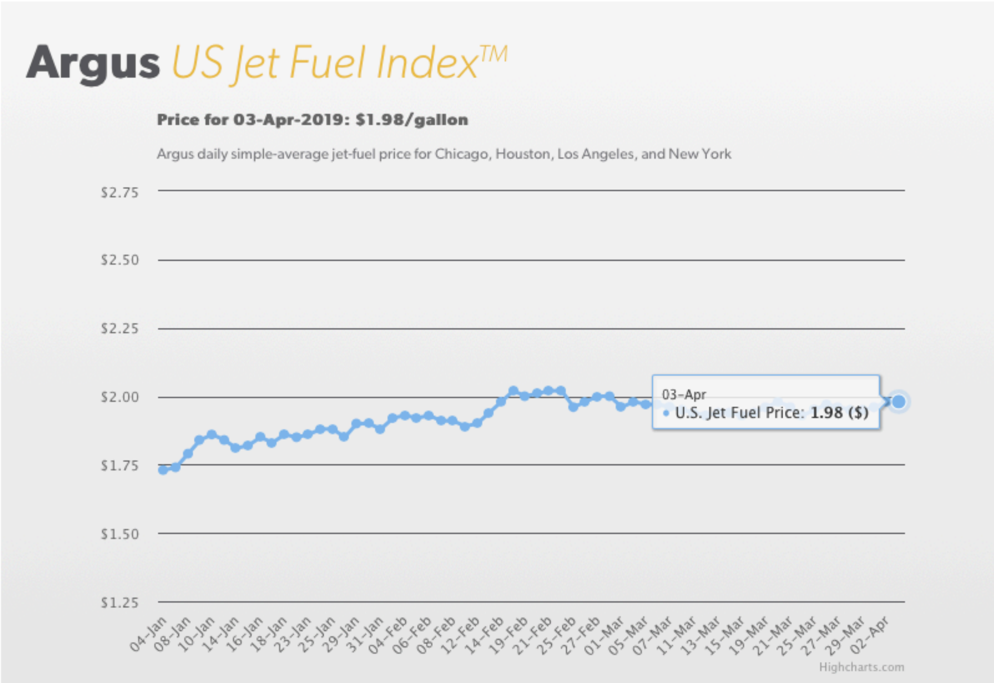


Figure 1 "Argus US Jet Fuel Index." Copyright © 2019 Argus Media Limited.

A change in the price of any good or service over time has little value in isolation. Therefore, it is common practice to adjust the values in a time series for inflation. The adjusted (restated) values are then presented in "real" (rather than "nominal") terms. In the example below, however, rather than restating the various items in real (inflation-adjusted) terms, they are shown in their original values, facilitating comparisons with each other and with movements in the U.S. Consumer Price Index (CPI), a federal metric designed to capture the price of a representative basket of U.S. goods and services. *Congress enacted legislation deregulating domestic airline passenger service in October 1978.

Relative to Most Consumer Goods and Services, Air Travel Is a Bargain
This Century, U.S. Inflation and U.S. Personal Incomes Have Outpaced Domestic Airfare

	Product (Unit)	2000	2016	% Δ
Outpaced Inflation	Public College Tuition & Fees (4-Year, In-State, Net)	$1,234	$3,770	205.5
	Walt Disney World® (One-Day Pass, Adult, Regular Season)	$46	$110	139.1
	National Football League Game (Nonpremium Ticket)	$43.70	$92.98	112.8
	Major League Baseball Game (Nonpremium Ticket)	$16.22	$31.00	91.1
	Jet Fuel (Gallon, Price Paid by U.S. Airlines)	$0.807	$1.447	79.3
	Prescription Drugs (BLS Index)	285.425	502.549	76.1
	Disposable Personal Income per Capita (Annual)	**$26,206**	**$43,194**	**64.8**
	Gasoline (Gallon, Unleaded Regular, Retail Including Taxes)	$1.510	$2.142	62.1
	Movie Ticket (One Adult)	$5.39	$8.65	60.5
	Single-Family Home (Existing)	$147,300	$235,500	59.9
	Food (BLS Index)	167.817	247.928	47.7
	U.S. Consumer Price Index (CPI-U)[1]	**172.200**	**240.007**	**39.4**
Lagged Inflation	Vehicle (New, Retail)	$24,900	$34,449	38.3
	Public Transit	209.492	265.389	26.7
	Air Travel (R/T Domestic Fare + Ancillary)[2]	**$317.13**	**$366.92**	**15.7**
	Air Travel (R/T Domestic Fare Only)[2]	**$314.64**	**$344.22**	**9.4**
	Apparel: Clothing/Shoes/Jewelry (BLS Index)	129.583	126.045	(2.7)
	Television (BLS Index)	49.925	2.727	(94.5)

Figure 2 Price of U.S. goods & services

[1] Bureau of Labor Statistics "measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods & services."
[2] Airlines for America analysis of data collected by BTS – excludes taxes, "ancillary" includes revenue from reservation changes/cancellations and baggage.

2. Spirit Airlines, Inc.

2.1 Overview

Spirit Airlines, Inc. provides low-fare airline services and travel to price-conscious customers. The company operates approximately 600 daily flights to 72 destinations in the United States, the Caribbean, and Latin America. As of December 31, 2018, the company had a fleet of 128 Airbus single-aisle aircraft comprising 31 A319s, 61 A320ceos, 11 A320neos, and 30 A321ceos. It offers tickets through its call centers and airport ticket counters, as well as online through spirit.com; and through various third parties, including online, traditional travel agents, and electronic global distribution systems. The company was formerly known as Clippert Trucking Company and changed its name to Spirit Airlines, Inc. in 1992. Spirit Airlines, Inc. was founded in 1964 and is headquartered in Miramar, Florida.

2.2 History & High-Rolling Origins

Travel Agent magazine calls Spirit Airlines, Inc. 'the most successful small carrier you've never heard of.' The carrier's raison d'etre is ferrying northerners to hot vacation spots for less. It attracts travelers with low, low fares and is known for filling planes better than anyone else: load factors typically average more than 80 percent. In 1998, more than two and a half million people flew Spirit, one of the few budget start-ups to see a second decade.

Spirit's background as tour operator gave it a predisposition to filling as many seats as possible. In 1990 it employed 120 and carried 150,000 passengers. By 1993, annual revenues were almost $21 million. The carrier flew more than 275,000 people that year. Phenomenal growth continued the next year; sales were $56 million with 683,000 passengers.

The early 1990s were a period of consolidation among airlines. A global recession and the repercussions of the Persian Gulf War made it nearly impossible for even established carriers to post a profit. Making things easier for the new start-ups were readily available aircraft and personnel that had been employed by Pan Am, Eastern, or Midway before their demise. Spirit also was able to obtain cheaper, nonunion labor.

Major airlines could still make it very difficult for low-cost airlines to get a toehold in their hubs. In 1994, Spirit attempted to buy two gates at Detroit Metropolitan Wayne County Airport from US Airways for $950,000. But they were sold to Northwest Airlines, which resold them to Trans World Airlines, according to the Wall Street Journal. Spirit was able to buy a hangar at Detroit Metropolitan Wayne County Airport from Delta Airlines in 1995, which it used to perform its own maintenance. Northwest Airlines also had been eyeing the hangar.

Spirit's low-cost strategy axed some traditional amenities, such as frequent flyer miles and in-flight meals. Tickets were also nonrefundable. Spirit introduced 'Freedom Fare' service from Detroit to New England beginning in December 1995. The first once-daily flights, to Philadelphia, featured fares as low as $49 one way. The next February, Boston was added, beginning at $69 one way. A month later, Spirit announced service to Myrtle Beach, South Carolina, which boasted plenty of golf courses--one of Spirit's prerequisites for leisure destinations. (Source: Spirit Airlines, Inc. - Company Profile, Information, Business Description, History, Background Information on Spirit Airlines, Inc.)

2.3 SWOT Analysis & Competitors

In the first few years after its 2011 IPO, Spirit Airlines seemed practically invincible. The carrier used its rock-bottom cost structure to undercut traditional airlines' fares, enabling it to quickly gain market share while producing industry-leading margins. That changed quickly beginning in 2015. The legacy carriers, led by American Airlines, began matching Spirit's fares, driving sharp unit revenue declines. Spirit Airlines eventually responded by shifting most of its growth into small and midsize cities, as well as big leisure markets like Florida, rather than fighting for market share in the biggest hubs. However, Spirit Airlines recently started targeting legacy carriers' biggest hubs for growth once again.

When Spirit Airlines was just a tiny upstart, larger rivals most ignored it. That encouraged Spirit to grow rapidly in big markets such as Dallas and Chicago, both of which are major hubs for American Airlines. Most of Spirit Airlines' leisure market routes from Austin, Indianapolis, Raleigh-Durham, and Charlotte should thrive. On the other hand, it's not clear how Spirit will do on the routes it is adding to other airlines' hubs. A lot depends on how aggressively the legacy carriers respond.

However, cities such as Atlanta, Chicago, Denver, and Detroit are big markets, and Spirit Airlines has already had some success there. It can't avoid growing in these places forever. The carrier's 2019 plan entails relatively modest growth at these legacy carrier hubs, and Spirit can wait to see how the new routes perform before deciding on its next move.

It's possible that Spirit Airlines will face another wave of aggressive price-matching behavior, in which case it may choose to cut some of these routes and redeploy the capacity elsewhere. But it's equally possible that the incumbents will be more careful about protecting their own margins this time around, since fuel prices have risen since the 2015-2016 period. If that's the case, 2019 is likely to be an incredible year for Spirit Airlines.

Strengths	Below is the Strengths, Weaknesses, Opportunities & Threats (SWOT) Analysis of Spirit Airlines: 1. Affordable pricing gives it a cost advantage 2. Well-known brand in the region 3. Offers loyalty program for customer retention 4. More seat-size as compared to other low-cost carriers 5. Apart from US it operates in Mexico, Latin America and Caribbean

Weaknesses	1. No in-flight entertainment and catering services 2. Operational across limited destinations 3. Extra fees for baggage (no baggage allowance)
Opportunities	1. Positive outlook of US economy 2. Technological advancements can help provide in-flight entertainment cheaply and improve the overall experience 3. Growing popularity of low fare airline travel
Threats	1. Fuel price increase a threat to low-cost operations 2. Outdated technology compared to big players 3. Service quality leading to loss of customers

Table 2 Spirit Airlines, Inc. SWOT Analysis

For this case study, we will compare Spirit Airline, Inc. with JetBlue Airways and Allegiant Travel with reasons being similar fleet size, comparative net income, and other similar factors as follows:

	spirit	jetBlue	allegiant
	Spirit Airlines Spirit Airlines is an ultra low-cost and low-fare airline.	**JetBlue Airways** JetBlue Airways Corporation is a passenger airline company that operates primarily on point-to-point routes.	**Allegiant Travel** Allegiant Travel is a leisure travel company.
Type	Public	Public	Public
Employees	7,110 (17% increase)	22,000 (29% increase)	3643 (3% increase)
Revenue (FY, 2018)	\$3.3b	N/A	\$1.7b
Net Income (FY, 2018)	\$155.7m	\$188m	\$161.8m
Fleet (Q2, 2017)	104	233	88
ASM (Q2, 2017)	7.3 b	14.2 b	3.6 b

CASM (Q2, 2017)	$0.1	$0.1	$0.1
PAX Load Factor (Q2, 2017)	0.9	0.9	0.8

Table 3 Spirit Airlines, Inc. vs. JetBlue Airways vs. Allegiant Travel

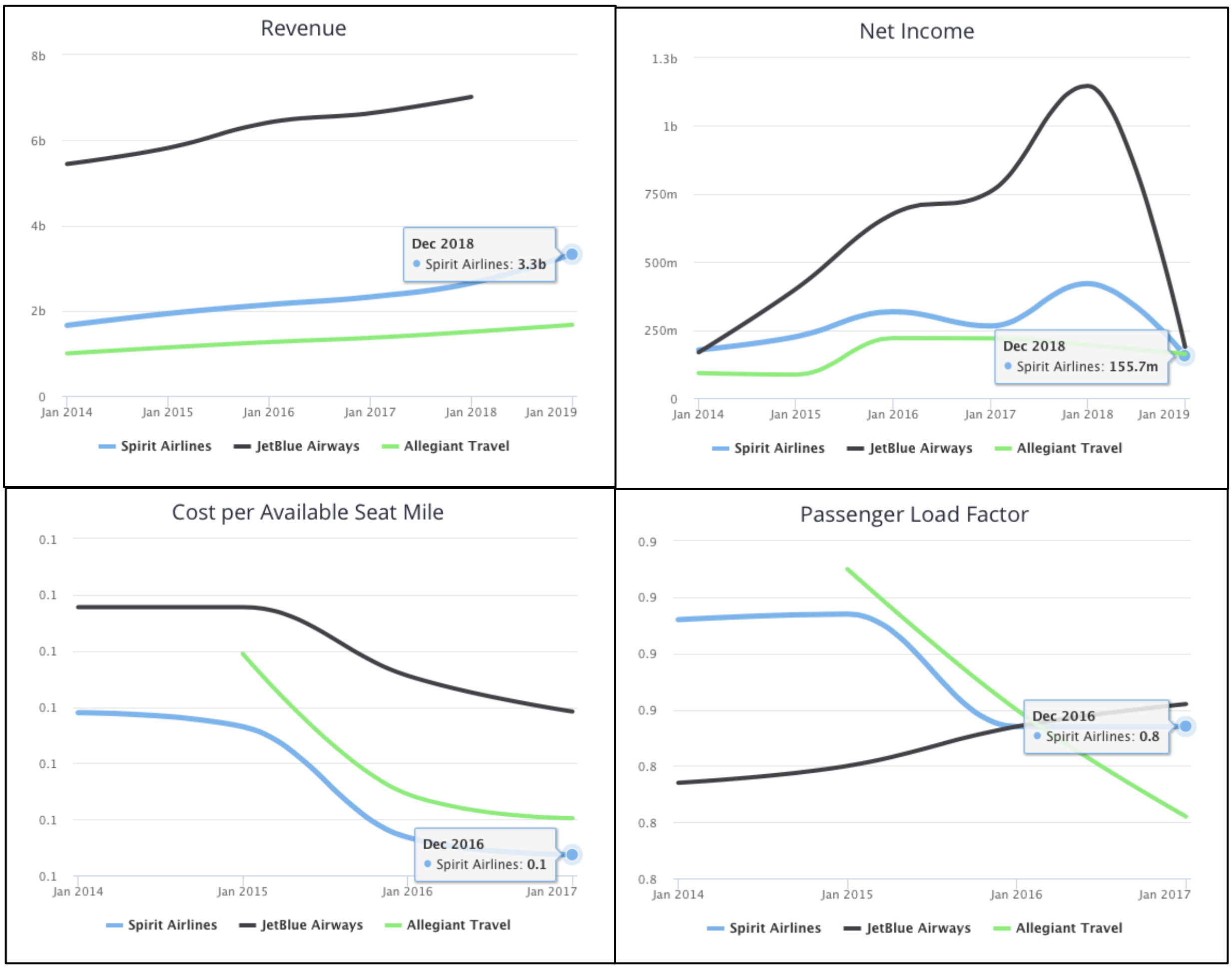


Figure 3 Spirit Airlines, Inc. vs. JetBlue Airways vs. Allegiant Travel

3. Industry Policy

3.1 Taxes

Over the years, the government has imposed an increasing number of taxes and fees on airlines, travelers and shippers, undermining the positive economic impact of aviation. Air travel is taxed at much higher rates than other modes of transportation. In fact, aviation's federal tax rate is higher than that on alcohol or tobacco – products taxed to discourage their use. Taxes on passengers and airlines have skyrocketed by 400 percent over the past two decades. Since 1990, the number of U.S. federal aviation taxes has increased from six to 17 and the amount of taxes paid went from $3.7 billion in 1990 to over $23 billion in 2016.

Reducing the tax burden would help keep airfares affordable, allowing the traveling public to fly more often, encouraging economic growth. Congress should repeal the commercial jet fuel tax, which costs 4.4 cents per gallon, prevent any increase to the passenger facility charge and reject proposals to a value-added tax approach to airlines' optional services.

3.2 Regulatory Burden

Even though the U.S. airline industry was deregulated in 1978, it is still one of the most regulated industries in the country and government regulations have grown rapidly over the past two decades.

Certain regulations are critical to enhancing airline operations and providing the safest mode of transportation. However, many regulations are unnecessary and costly, negatively impacting the industry's ability to create jobs and facilitate economic growth. There are several pending and proposed regulations that will not improve safety, security or the passenger experience.

More thoughtful, consistent and streamlined U.S. airline regulations would save billions of dollars, spurring more investment in newer planes, expanding routes and preserving air service in smaller markets. The government needs to adopt regulations that are based on science and facts, can be justified on a cost-benefit basis and eliminate inefficient rules.

3.3 Energy & Environment

With fuel being one of the highest and most volatile cost centers for airlines, the U.S. airlines' environmental and economic interests and saving fuel and reducing associated emissions align. Between 2000 and 2018, the average price paid by U.S. airlines for jet fuel rose 167 percent.

The US airliners are committed to development and deployment of alternative fuels and have already invested billions of dollars in new aircraft and technologies that decrease emissions.

Stabilizing the cost of jet fuel and avoiding increases in jet-fuel taxes would help keep airfares affordable, preserve air service, and encourage investment in alternative fuels, advanced aircraft technologies and more environmentally friendly jet fuel supplies.

4. Financial Risk Analysis

4.1 Financial Overview

This financial risk analysis is based on the annual report provided by Spirit Airlines for the fiscal year ended December 31, 2018. As of the end of 2018, the total assets of Spirit Airlines were $5165.46 million and the total shareholders' equity were $1928.50 million. The company achieved $3323.03 million of operating revenues and $155.75 million of net income in year 2018. The total assets of company were continuously growing from year 2016 to 2018 and the compound annual growth rate was 21.29%.

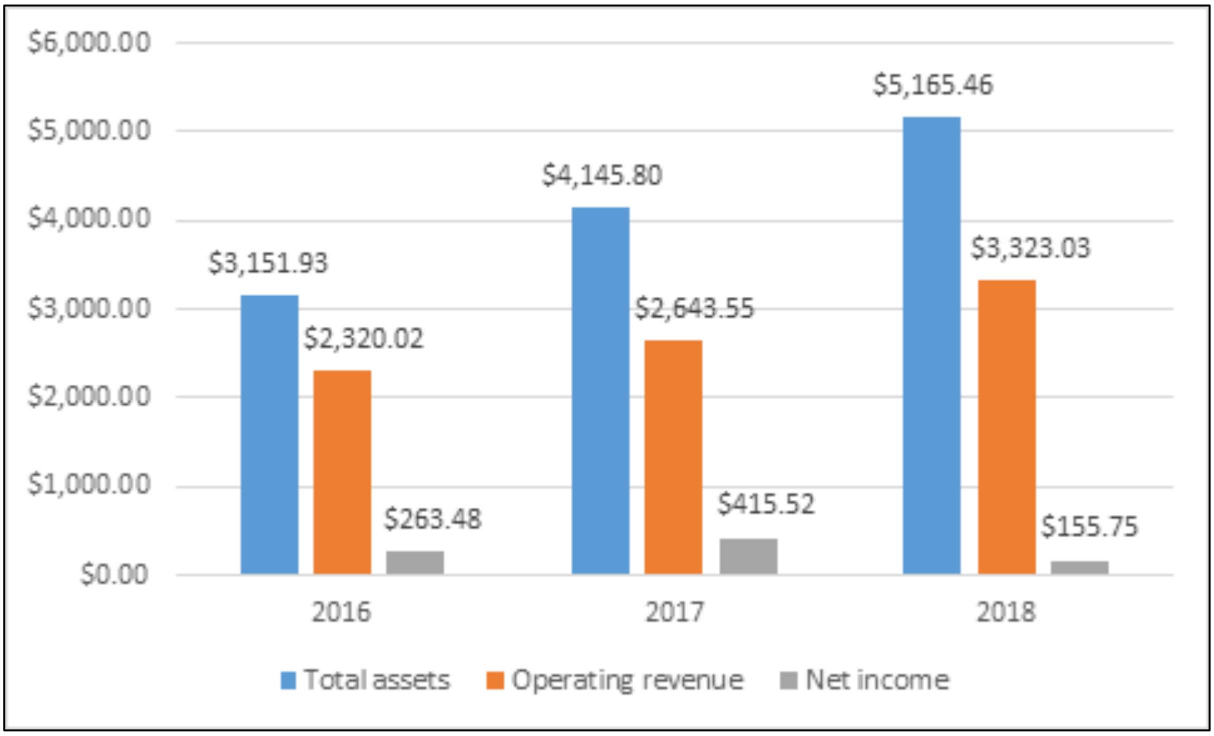


Figure 4 Three financial indicators from 2016 to 2018 (Million)

The methodology we used for financial risk analysis was KBRA, and there are four financial risk metrics typically considered by it. We will do the trend analysis based on the years from 2016 to 2018 and also the competition analysis with JetBlue and Allegiant

4.2 Profitability and Cash Flow

From year 2016 to 2018, the compound annual growth rate (CAGR) of company's total operating revenues was 14.41%. Due to the increase of fleet size, the expenses of aircraft fuel, salaries of crew and depreciation was increasing which resulted in 19.51% CAGR of company's total operating expenses. Increase rate of operating expenses was higher than operating revenues, which leaded to the decrease in profitability.

Earning before interests and taxes (EBIT) Margin is a measure of a company's profitability on sales over a specific time period. From year 2016 to 2018, EBIT of the company was continuously reducing due to the high increase in operating expenses especially the aircraft fuel and Salaries. The company's scale is growing rapidly, but the profitability did not catch up with it.

*EBIT Margin = (EBIT / Net Revenue) * 100%*

With the increase in net revenue, the decrease in EBIT will result in a larger reduction in EBIT Margin.

Year	2016	2017	2018
EBIT	$441.46	$384.83	$350.91
Revenue	$2,320.02	$2,643.55	$3,323.03
EBIT Margin	19.03%	14.56%	10.56%

Table 4 EBIT Margin of Spirit Airlines (Million)

The major reason of the reduction in EBIT was the increasing jet fuel price, as a result of which, the CAGR of Spirit Airlines' operating expenses was 19.40%. It was almost 5% higher than the CAGR of revenue. As for JetBlue, the EBIT of year 2018 was just 29% of that in 2017, owing to the big increasement on operating expenses too. But the impact of fuel expense increase of JetBlue was less than Spirit in 2018. There was a special item recorded $362 million in operating expenses which made the EBIT margin worse. *The special item was the Embraer E190 fleet transition costs which was triggered by JetBlue's decision to exit the Embraer E190 fleet.* But even without the transition costs, the EBIT margin of JetBlue was still not so good. Things are different in Allegiant. Allegiant was the only one of these three airlines achieved the increased EBIT with the expansion of business. Although the revenue of Allegiant was just half of the Spirit, the EBIT was $243.46 million which was approximately 70% of Spirit.

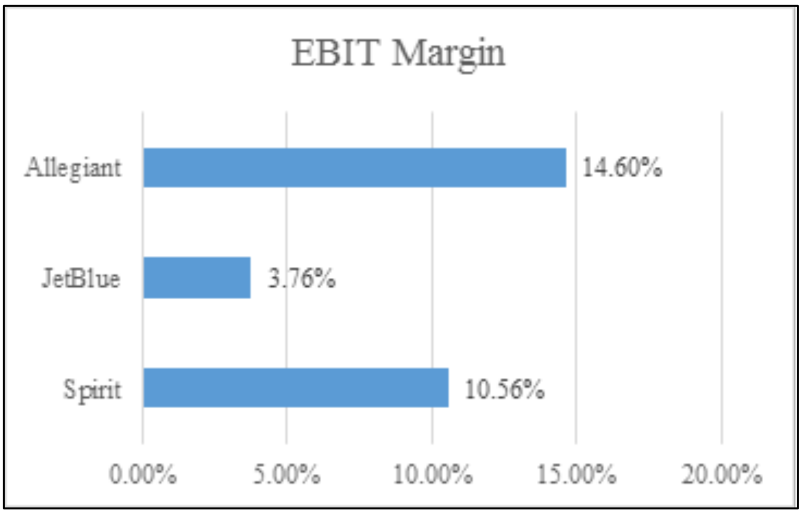


Figure 5 EBIT Margins for three airlines in 2018

Earnings before interest, taxes, depreciation/amortization, and rent (EBITDAR) margin. EBITDAR is a metric especially for airlines industry which removes the influence of aircraft-financing decisions.

*EBITDAR Margin = (EBITDAR / Revenue) * 100%*

Year	2016	2017	2018
EBITDAR	$744.28	$730.83	$705.28
Revenue	$2,320.02	$2,643.55	$3,323.03
EBITDAR Margin	32.08%	27.65%	21.22%

Table 5 EBITDAR Margin of Spirit Airlines (Million)

EBITDAR margin is more helpful to gauge the effectiveness of airlines' cost-cutting efforts than EBIT margin by removing the impact of rent, depreciation and amortization. The reason why EBITDAR margin looks good than EBIT margin in 2017 was the high aircraft rent expense. As for year 2018, the rent went down, so the EBITDAR margin and EBIT margin were in the same rating category. Comparing to JetBlue and Allegiant, the rank of the three airlines did not change, but there were still some differences. JetBlue achieved a higher rating level of this indicators because of the high proportion of depreciation, amortization and rent in operating expenses. And the converse situation of Allegiant did not lead to the EBITDAR margin as good as EBIT margin.

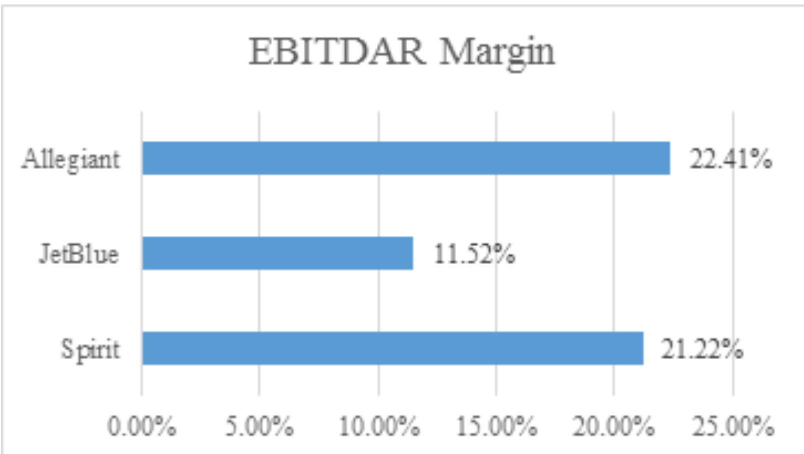


Figure 6 EBITDAR Margins for three airlines in 2018

According to the rating category of KBRA, although these two indicators substantially decreased in the last three years, we can still say the profitability of Spirit Airlines was good among this industry.

From the aspect of operating activities, net cash provided by operating activities was fluctuating from year 2016 to 2018 which was $471.77 million, $425.24 million and $506.46 million. Particularly, the company recorded $90.4 million, special charges (non-operating), in the statement of operations. *It was due to the purchase agreement for the purchase of 14 A319 aircraft previously operated under operating leases by the company.* In addition, during the years ended 2018, 2017 and 2016, the Company deferred $190.5 million, $78.2 million and $35.4 million, respectively, of costs for heavy maintenance. As for investing activities, the proceeds from available-for-sale investment securities was increasing stably. And net cash used in investing activities which was composed mostly of the purchase of property and equipment was -$824.36 million, -$792.00 million and -$783.71 million respectively for year 2016 to 2018. Refer to the financing activities, there was a big increasement on net cash provided by financing activities from $249.86 million to $481.13 million for these three years. The main source of cash provided by financing activities was the issuance of long-term debt, and in year 2018 it was $832.10 million, twice of that in year 2016. Also, the company paid capital lease obligations with $205.72 million in 2018.

Funds from operations (FFO) / debt ratio is an indicator that measures the ability to generate cash-flow relating to the company's total debt.

$$FFO = Revenue - operating\ expenses - interest\ expense - taxes$$

In this equation, depreciation and amortization are excluded from operating expenses. Also, the debt does not consist the lease obligations. FFO compensates for cost-accounting methods which may leads to unreal performance of a company. The FFO to total debt ratio also indicates the ability of a company to pay off its debt using net operating income. So, a ratio lower than 1 means the company should pay the debt from the other source not only the funds from operation.

Year	2016	2017	2018
FFO	$347.18	$533.51	$388.63
total debt	$971.33	$1,485.94	$2,173.18
FFO / debt	35.74%	35.90%	17.88%

Table 6 FFO / debt ratios of Spirit Airlines (Million)

As we can see, the ability of Spirit Airlines to pay off its total debt was not bad in year 2016 and 2017. But in 2018, it dropped a lot, *this was mainly because of the negative income tax expense in 2017 due from tax authorities for recovery of income taxes paid in prior years.* And when it came to be normal in 2018, the FFO decreased with impact of fuel expense. Also, there was a big increase in long-term debt with $832.10 million issued in year 2018.

For this indicator, JetBlue performed much better than Allegiant and Spirit because the debt of JetBlue was much less than Spirit and in the meanwhile the FFO of JetBlue was much more than Allegiant and Spirit due to the huge amount of depreciation and amortization.

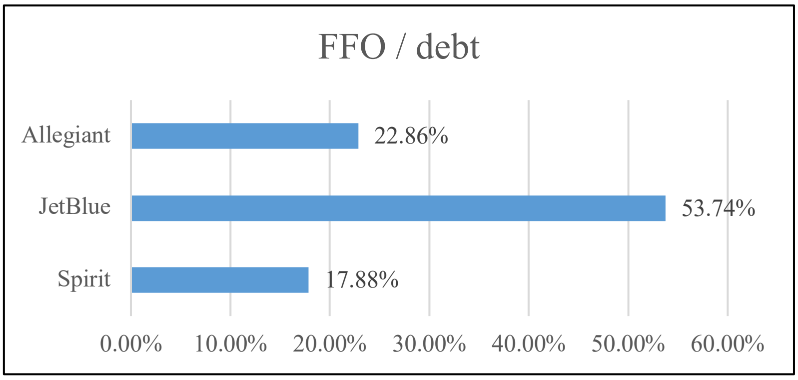


Figure 7 FFO / debt ratios for three airlines in 2018

4.3 Leverage

The lower the FFO to total debt ratio, the more leveraged the company is, but the ratio alone does not provide enough information to decide about a company's financial standing. Adjusted debt to EBITDAR ratio is a debt-to-cash flow leverage ratio which tells investors how many years it would take the company to pay off its debts. The aircraft and facility lease obligations for year 2016 to 2018 were $10.28 million, $16.99 million and $15.15 million which were added back to the debts to get the adjusted debts.

Year	2016	2017	2018
EBITDAR	$744.28	$730.83	$705.28
Adjusted debt	$981.71	$1,502.93	$2,188.33
Adjusted debt / EBITDAR	1.32	2.06	3.10

Table 7 Table 4 Adjusted debt / EBITDAR ratios of Spirit Airlines (Million)

Similar to FFO / debt ratio, the EBITDAR did not catch up with the increase of debt. This could be fine because the debt has not been transferred to the capacity to generate more revenue. But the cost control is still the first consideration to ensure the increase of profitability in order to pay off the debt with expansion of fleet.

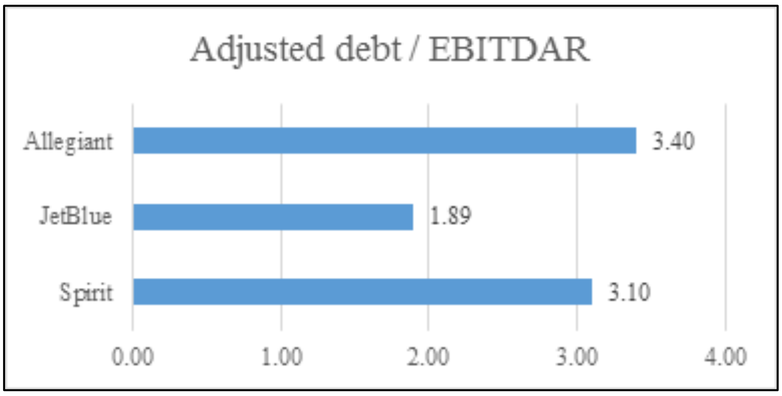


Figure 8 Adjusted debt / EBITDAR ratios for three airlines in 2018

Comparing to the FFO / debt ratios, the rank of adjusted debt / EBITDAR ratios for these three airlines did not change because of the impact of depreciation and amortization, the EBITDAR of JetBlue was the highest. And finally it came to the debt influence again.

4.4 Liquidity

Cash to revenue ratio is the metric that reflect the liquidity of the company. This ratio of Spirit airlines was stable for these three years. As we known, the leverage of Spirit Airlines was really high due to the expansion rate. The profit of operation can not pay off the debt well.

Year	2016	2017	2018
Cash and cash equivalents	$700.90	$800.85	$1,004.73
Revenue	$2,320.02	$2,643.55	$3,323.03
Cash / Revenue	30.21%	30.29%	30.24%

Table 8 Cash / Revenue ratios of Spirit Airlines (Million)

So, this huge amount of cash and cash equivalents ensured the safety of cash flow. Although debt was high, the company has strong ability to pay its short-term liabilities.

The ratio was reasonable for airlines because they need the cash buffer without leaving too much money in the low-return environment.

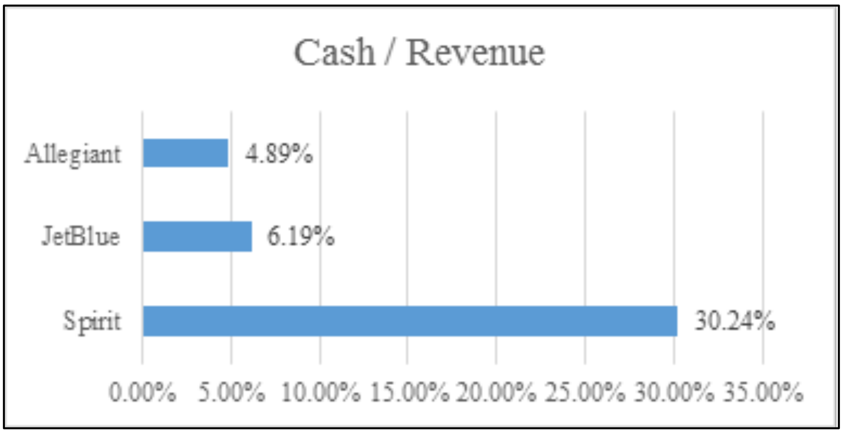


Figure 9 Cash / Revenue ratios for three airlines in 2018

Current assets of Spirit Airlines were majorly concentrated on cash and cash equivalents. But it was different of JetBlue and Allegiant. The total current assets of Allegiant were $495.25 million and $314.46 million was used on short-term investments. And the current assets of JetBlue were evenly divided which were $1474 million. The current ratio of Allegiant was 0.96 which was not bad. And JetBlue's current ratio was only 0.61. So, comparing to JetBlue and Allegiant, Spirit Airlines was more liquid and could respond to the downturns or demand shocks more quickly and safely.

4.5 Fixed Charge Coverage

This fixed charge is defined as interest expense plus rental expense which reflect the financing and lease obligation. And fixed charge coverage is the EBITDAR divided by the fixed charge which is used to assess a company's financial durability by examining whether it at least has the profitability to pay off its interest expense and rental expense. So, a ratio just over 1 is not enough at all. Interest expense was increasing continuously from year 2016 to 2018. And the rental expense dropped about

$28 million in 2018. This ratio also indicated the insufficient profitability of Spirit Airlines from operating activities which essentially due to the high operating expenses and debt.

year	2016	2017	2018
EBITDAR	$744.28	$730.83	$705.28
Interest + Rent	$243.32	$263.15	$261.42
EBITDAR / (Interest + Rent)	3.06	2.78	2.70

Table 9 EBITDAR / (Interest + Rent) ratios of Spirit Airlines (Million)

The coverage ratio of Allegiant was good but it was irregular of JetBlue. This is because the negative interest expense offset the rental expense.

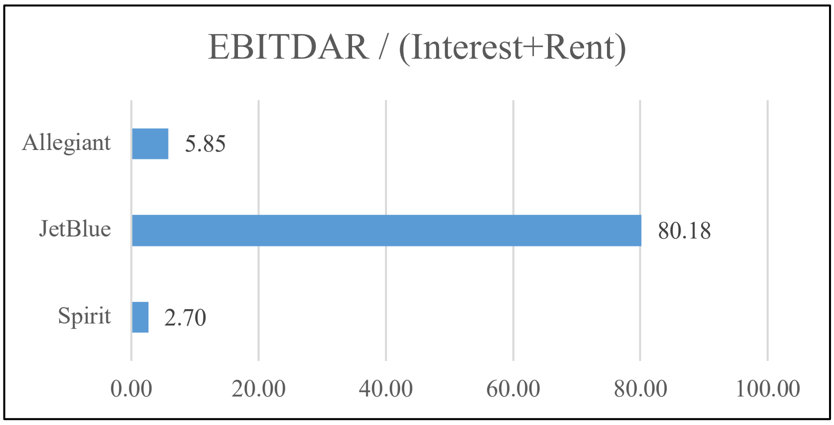


Figure 10 EBITDAR / (Interest + Rent) ratios for three airlines in 2018

After calculating all the indicators discussed above, we can use the rating category of KBRA to identify the level of each indicators.

Quantitative Rating Determinant 1: Profitability & Cash Flow					
Ratio	***A***	***BBB***	***BB***	***B***	***CCC***
EBIT Margin	>15%	10-15%	5-10%	0-5%	<0%
EBITDAR Margin	>25%	20-25%	10-20%	0-10%	<0%
FFO/Debt	>60%	30-60%	10-30%	0-10%	<0%

Quantitative Rating Determinant 2: Leverage					
Ratio	***A***	***BBB***	***BB***	***B***	***CCC***
Adjusted Debt/EBITDAR	<1x	1-3x	3-6x	6-10x	>10x

Quantitative Rating Determinant 3: Liquidity					
Ratio	***A***	***BBB***	***BB***	***B***	***CCC***
Cash/LTM Revenues	>30%	20-30%	10-20%	5-10%	<5%

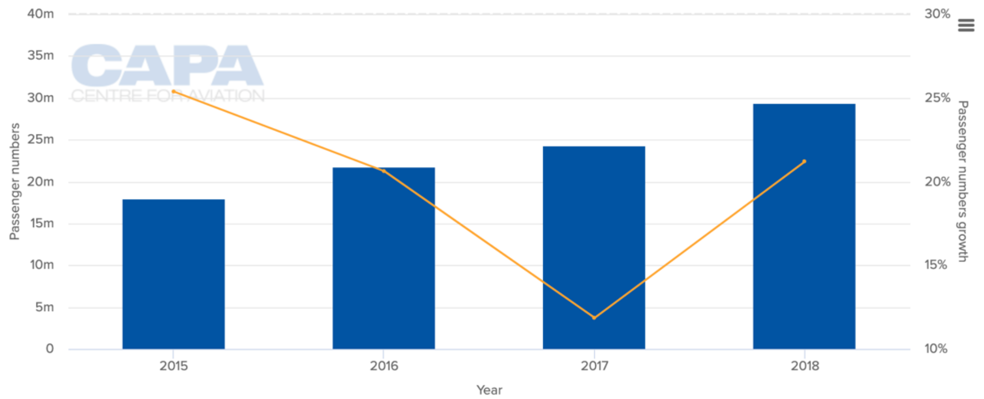
Quantitative Rating Determinant 4: Fixed Charge Coverage					
Ratio	***A***	***BBB***	***BB***	***B***	***CCC***
EBITDAR/(Interest+Rent)	>6x	4-6x	2-4x	1-2x	<1x

Figure 11 Financial Ratios by Rating Category

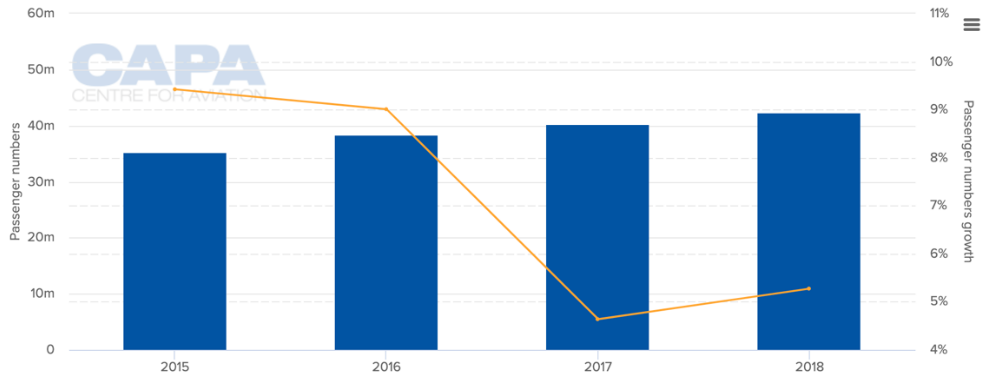
5. Business Risk Analysis

Demand and trends/traffic growth

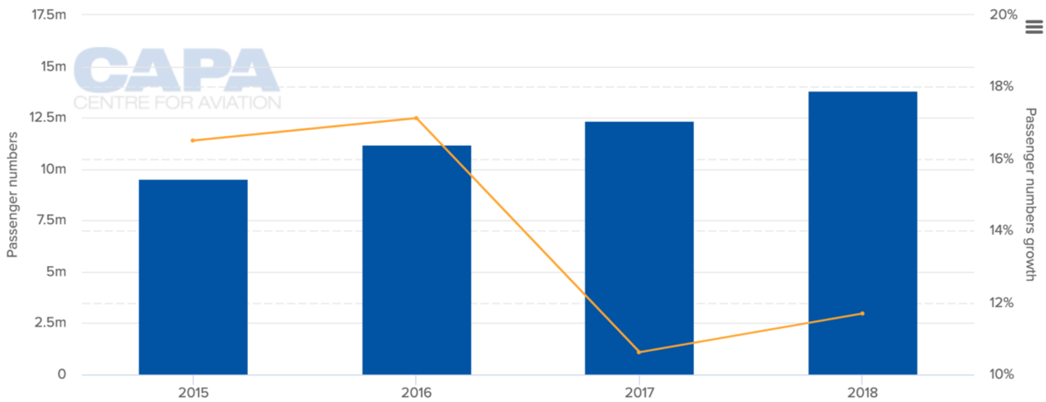
Spirit Airlines



JetBlue Airways



Allegiant Air



Spirit Airlines		
Year	Total Passenger	Growth Rate
2015	17921419	25.4%
2016	21618039	20.6%
2017	24183070	11.9%
2018	29312000	21.2%

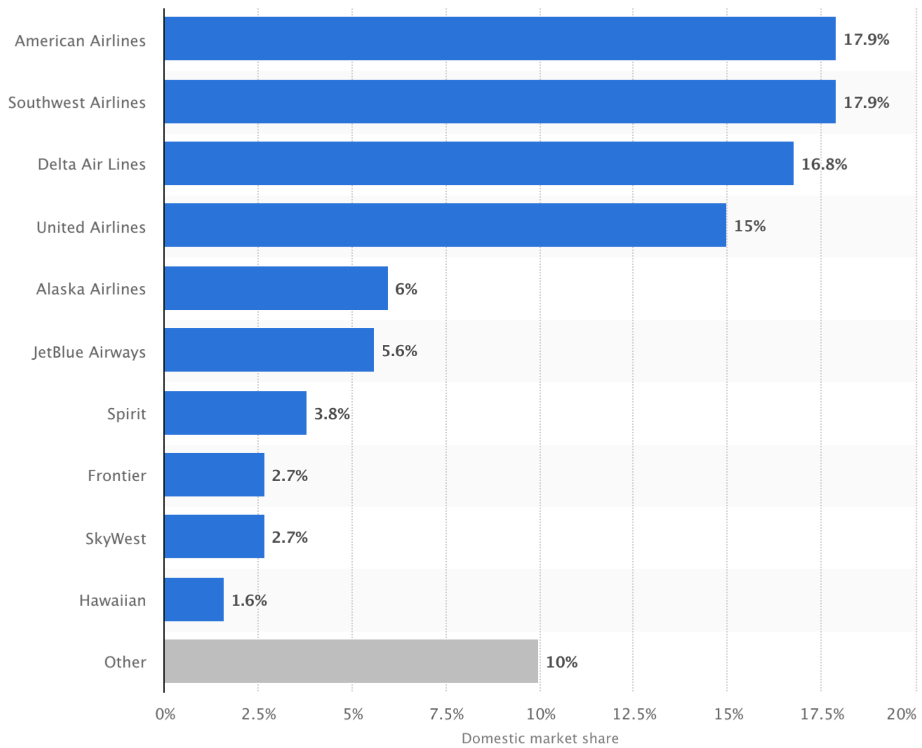
JetBlue Airways		
Year	Total Passenger	Growth Rate
2015	35100986	9.4%
2016	38263104	9.0%
2017	40038090	4.6%
2018	42149989	5.3%

Allegiant Air		
Year	Total Passenger	Growth Rate
2015	9500611	16.5%
2016	11128191	17.1%
2017	12310122	10.6%
2018	13750199	11.7%

Comparing to its competitors, Spirit Airlines' growth rate is the most competitive. Therefore, rating of this segment should be higher than the two competitors compared in this analysis, A.

Market Share

Domestic market share of leading U.S. airlines from DEC 2017 – NOV 2018



With respect to U.S. market share, Spirit reached 3.8% which was smaller than that of the JetBlue Airways (5.6%). We can assume that the Allegiant Air was included in the "Other" and thus, its market share was smaller than Spirit. However, among ultra low cost carriers, Spirit Airlines' had the second largest market share, next to JetBlue Airways. Therefore, Spirit Airlines' raking in this segment should be higher than the majority but somewhat lower than the JetBlue Airways, BBB.

Passenger and Revenue Profile

Spirit Airlines		
Year	Op. Rev. Fare (in 1,000)	Op. Rev. Non-fare (in 1,000)
2015	1169338	972125
2016	1200621	1121335
2017	1363395	1209492
2018	1704107	1555908

JetBlue Airways		
Year	Op. Rev. Fare (in 1,000)	Op. Rev. Non-fare (in 1,000)
2015	5893000	523000
2016	6013000	619000
2017	6288000	727000
2018	7381000	277000

Allegiant Air		
Year	Op. Rev. Fare (in 1,000)	Op. Rev. Non-fare (in 1,000)
2015	735563	494241
2016	768721	532309
2017	821621	596568
2018	898653	672225

Spirit Airlines		
Year	Op.Rev. Fare/Total	Op.Rev. Non-fare/Total
2015	**54.60%**	**45.40%**
2016	**51.71%**	**48.29%**
2017	**52.99%**	**47.01%**
2018	**52.27%**	**47.73%**

JetBlue Airways		
Year	Op.Rev. Fare/Total	Op.Rev. Non-fare/Total
2015	**91.85%**	**8.15%**
2016	**90.67%**	**9.33%**
2017	**89.64%**	**10.36%**
2018	**96.38%**	**3.62%**

Allegiant Air		
Year	Op. Rev. Fare (in 1,000)	Op. Rev. Non-fare (in 1,000)
2015	**59.81%**	**40.19%**
2016	**59.09%**	**40.91%**
2017	**57.93%**	**42.07%**
2018	**57.21%**	**42.79%**

Assessing the revenue mix between 2015-2018 from the three ultra low cost carriers revealed an interesting result. JetBlue's revenue structure is extremely biased; 90% or higher was generated by fare only. In 2018, surprisingly 96.38% of the total revenue was generated by fare only. This is an example of high risk. Although both Spirit Airlines' and Allegiant Air's fare/non-fare revenue ration stayed within 40-50% range, Spirit Airline's mix is more balanced than Allegiant Air's. Therefore, Spirit Airline should receive the highest rating, A.

Business Model

Spirit Airlines has not partnered with any airlines, so has the Allegiant Air. JetBlue Airways have several domestic and overseas partners including but not limited to Aer Lingus, Cape Air, Emirates, Hawaiian, and Silver Airways. Though, their alliance or codesharing is not as prevalent as that of, for instance, Delta or American Airlines. In this segment Spirit Airlines receives the lowest rating on the chart, CCC.

Competition

Although the number of competitors is rather small, the nature of the ultra low cost carrier business makes the competition fierce. Thus, Spirit Airlines receive B rating in this segment.

Unionization

	Allegiant Air	**Spirit Airlines**	**JetBlue Airways**
Representatives	2	5	2
% of employee	57%	80%	44%

It is evident from the table that Spirit Airline's unionization is significantly more extensive than the two competitors. Consequently, Spirit Airlines receive B rating in this segment.

Fleet Dynamics

	Allegiant Air	**Spirit Airlines**	**JetBlue Airways**
Fleet in-service/storage/order	83/30/0	133/0/44	253/0/145
Avg. Age	13.1	5.7	10.2
Median Age	12.5	4.5	13.6

Spirit Airlines' fleet is the by far the newest of the three. By the end of 2019, Spirit is adding 10 new aircrafts into the fleet which will make the average age 5.3 years. Whereas JetBlue Airways' average fleet age after the 13 new aircrafts that will be delivered in 2019, the average age of their fleet will be 9.7 years. Allegiant has no new aircraft being delivered in 2019, thus, the average age will not change. We can assume that the fuel efficiency of aircrafts is higher for newer ones. Spirit Airlines received BBB, if not A, in this segment.

Unencumbered Aircrafts

	Allegiant Air	**Spirit Airlines**	**JetBlue Airways**
Unencumbered Aircrafts	27	22	107
Unencumbered/Total	32.53%	16.54%	42.29%

Spirit Airlines has the lowest percentage of unencumbered aircrafts, thus, receives BB rating in this segment.

Fleet Capital Expenditure

	Allegiant Air	**Spirit Airlines**	**JetBlue Airways**
2018	N/A	652 million	1018 million
Fleet Capex/Total Op.Revenue	N/A	19.62%	13.30%

From the comparison above, it appeared that Spirit Airlines made relatively significant amount of capital expenditure. Spirit Airlines receives B rating in this segment.

Fuel Hedging

"As of December 31, 2018, we had no outstanding jet fuel derivatives and we have not engaged in fuel derivative activity since 2015. There can be no assurance that we will be able to enter into fuel derivative contracts in the future if we are required or choose to do so. In the past, we have not had and in the future, we may not have sufficient creditworthiness or liquidity to post the collateral necessary to hedge our fuel requirements." (Spirit Airlines, 2018). It was clearly stated in the annual report that the organization was not eligible for fuel hedging. Therefore, rating of CCC is appropriate.

Frequent Flyer Program (rating)

	Allegiant Air	Spirit Airlines	JetBlue Airways
Member	N/A	3.08	4.09
Web flyer	N/A	5.64	6.93

The above was the result of FFP comparison, according to Web Flyer (Web Flyer, 2019). However, the rating for Free Spirit and True Blue were generated in 2013 which was out of date. It is safe to assume that both carriers made changes in their programs. However, due to lack of up-to-date information regarding the airlines' FFP customer rating, the date retrieved from Web Flyer was considered valid for this analysis. Therefore, Spirit Airlines FFP, Free Spirit, was given BB rating.

Pension Obligation

It appeared that Spirit Airlines does not provide Pension Plan or similar. Therefore, it was determined that Spirit Airlines did not have any pension obligation as of this date. Hence, the rating of A considered appropriate.

Open Skies

Spirit Airlines held a DOT certificate of public convenience and necessity (Spirit Airlines, 2018). Hence, it was assumed that Spirit Airlines received some support from the Dept. of Transportation. This assumption led to the rating of BB in this segment.

Political Stability

Spirit Airlines is based in the U.S. Thus, the highest degree of political stability was assumed; A.

Safety Record

Airline Rating rated Spirit Airlines as 4 out of 7 stars whereas JetBlue received perfect 7 stars. Allegiant received 4 which was equivalent to Spirit Airlines. Therefore, BB was deemed appropriate for this rating segment.

Sreholder

	Allegiant Air	**Spirit Airlines**	**JetBlue Airways**
Number of shares	16,281,038	68,328,977	306,533,167

This analysis suggested that Spirit Airlines market cap is small in the entire industry but probably median with respect to ultra low cost carrier sector. Hence, BB was considered appropriate.

BRA summary

Factor	Rating	Weight	Weighted Score
Strategy & Competitive Risk	2.64	20%	0.528
Financial Flexibility	3.2	20%	0.64
Ownership/Sovereign	2.5	10%	0.25
Total	8.34		1.418

6. Conclusion

Figure 9 Spirit Airlines Scorecard

The company's assets were mainly composed of non-current assets, and the quality was good. However, the debt ratio was high as a result of the long-term debt issuance for expansion. Operating revenue was increasing these years but the profitability was decreasing influenced by the operating expense especially the fuel expense. The liquidity of company was good which indicated a strong ability to pay off the short-term debt. In general, Spirit Airlines' credit was good.

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