Southwest Airlines Co. (NYSE: LUV)
Price: \$29.23
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Investment Thesis

- 1. The COVID-19 pandemic has drastically reduced revenues across the airline industry in the United States, but the industry will recover within a few years. Once the crisis is over, people will still be flying. The market is currently overestimating the long-term impact of the crisis.
- 2. Southwest Airlines Co is uniquely positioned to survive the crisis and recover compared to other airlines in the United States. There are many contributing reasons for its advantage.
 - a. Southwest has the strongest balance sheet in the industry, with a comparatively large amount of cash and far less debt than its competitors.
 - b. Southwest is the largest low-cost carrier in the United States by a massive margin. Its low-cost approach makes it much more recession proof than American Airlines, Delta Airlines, and United Airlines, its three competitors of comparable size. Its size gives it a distinct advantage over smaller low-cost carriers who cannot compete on the scale of Southwest.
 - c. Southwest has very little reliance on business travelers and international travel for revenue, both of which will likely suffer in the coming years as the United States recovers from COVID-19.
 - d. Southwest has strong government support, even among airlines. It is one of the four airlines widely considered "too big to fail," and its long history of responsible financial decisions make it more worthy of a bailout. The bailout that has already occurred indicates that the government is going to support the industry if necessary.

Business Overview

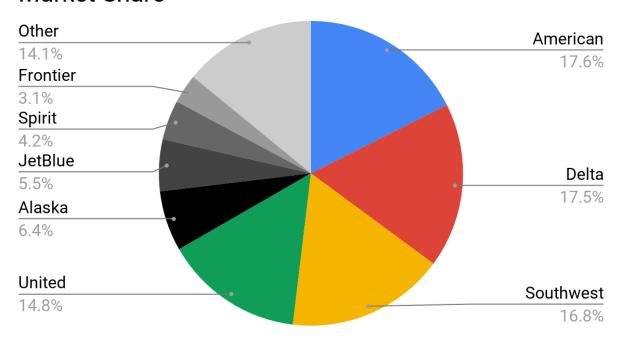
Southwest was founded in 1967 in Dallas, TX, and has grown into the fourth largest U.S. airline by revenue. Southwest has a long history of success and has been profitable for the last 47 years prior to 2020, although it will almost certainly not be profitable this year. It currently has more than 60,000 employees and serves 101 destinations in the United States and ten other countries. Its revenue is almost entirely derived from domestic travel, however.

Southwest is the world's largest low-cost carrier. It does not have first or business class on its flights, and passengers can check their first two pieces of luggage for free. Its fares are consistently lower than its competitors of similar size.

Industry Overview

The airline industry in the United States can be characterized as an oligopoly, with four clear market leaders accounting for 66.7% of total market share. American Airlines Group Inc. leads with 17.6%, followed by Delta Air Lines Inc. with 17.5%, Southwest with 16.8%, and United Airlines Holdings Inc. with 14.8%. In 2019, these carriers had revenues of \$45.8 billion, \$47.0 billion, \$22.4 billion, and \$43.3 billion, respectively. American, Delta, and United are considered "legacy carriers," and their business models are extremely similar. They have the traditional structure with business class, first class, and other premium options, as well as charges for baggage and a lesser focus on low fares. Southwest is the clear outlier of the big four, with its low-fare business model. There are other low-fare competitors, including JetBlue Airways Co. and Spirit Airlines Inc., but none have a market share above 5.5%.

Market Share



There are many strong industry-wide competitive advantages that make it virtually impossible for new entrants to challenge the existing market leaders.

- 1. Firstly, it is an extremely capital-intensive business. The largest cost is the fleet of airplanes itself. For example, a single Boeing-737 costs \$90 million, and Southwest currently has 742 planes in its fleet. Additionally, fuel costs are significant, costing Southwest approximately \$4.35 billion in 2019. Acquiring and paying pilots presents another significant expense.
- 2. Secondly, obtaining rights to airports is a tremendously difficult process. The way the system is set up is that airlines own gates within airports, and only that airline can dock its planes at that gate. At airports in major cities, almost all gates are already owned by the largest airlines, and if they refuse to sell the rights, there is no way for new entrants to move into those airports. For example, it took Virgin America Inc. (which has since

- merged with Alaska Air Group) three years to get gate rights at Chicago O'Hare airport, and it has to date failed to obtain rights at Newark airport because no other airline will sell them.
- 3. Thirdly, there are extensive governmental regulations governing the industry, with both the U.S. Department of Transportation and Federal Aviation Administration providing oversight. The bureaucracy this creates means that it takes time for new entrants to obtain required approvals.

Covid-19 and Industry Outlook

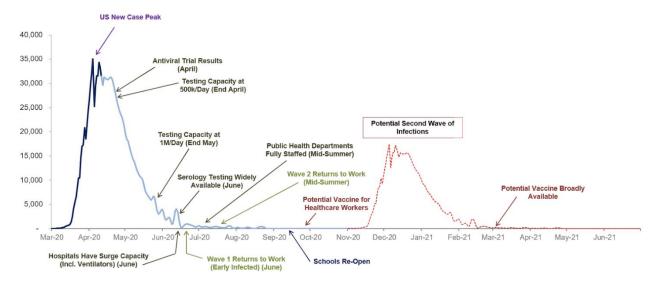
The COVID-19 pandemic has virtually shut down the entire air travel industry in the United States. Quarantine and social distancing around the country have pressured people to stay home and refrain from any travel that is not absolutely necessary. April 2020 ticket sales were down more than 90% compared to April 2019. Since January, airlines have cut flight capacity by about 70%. The flights that do fly are mostly unoccupied, with many planes flying completely empty to comply with government regulations that airlines serve certain cities despite nonexistent demand. Passengers that do fly are required to wear masks. As a result of this crisis, 2020 revenues are projected to be down 55% from 2019 levels across the industry.

Predictably, these developments have caused airline stocks to fall catastrophically. The Arca Airline Index that tracks the sector is down 59% since February 12th. American Airlines' stock price is down 65%, United's is down 67%, Delta's is down 59%, and Southwest's is down 50% in that same period. These numbers provide significant upside for the airlines that do recover from the crisis. Given that they cannot all fail, it would be wise for an investor to identify which airlines are in the best position to successfully navigate through this crisis and be primed to do well once it ends. Since the impact of the pandemic on ticket demand will almost certainly not be permanent, these massive price drops present an opportunity to buy at a price that does not reflect what the value will likely be within a few years.

Recovery Timeline and Outlook

Predictions about the duration of the pandemic vary greatly, but some prominent projections indicate that air travel will begin its recovery within months. Although a full recovery is likely years away, the industry will probably begin to pickup in the near future. For example, a predicted recovery timeline from Morgan Stanley expects a return to a relatively normal life by the end of summer, with most people returning to work by early August and schools reopening before the start of the 2020-2021 schoolyear. It also predicts that a vaccine could be available by late March. Even if this timeline is slightly optimistic, and quarantines remain into the fall, air travel will still begin its recovery within six months. However, airlines will need to survive until this time, making current cash and debt levels exceedingly important in determining which airlines are best positioned.

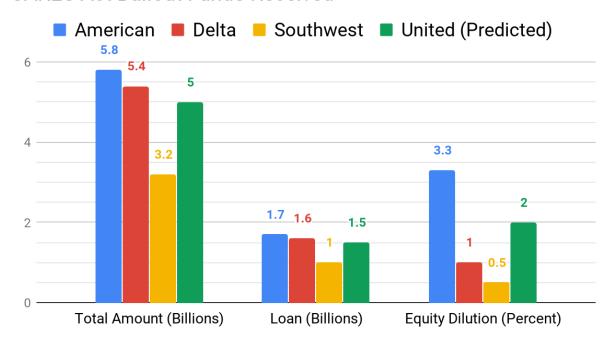
By 2021, travel levels are predicted to be around 80% of what they were in 2019. Although this is not a complete recovery, this is significantly better than the 10% of 2019 levels they are currently at and will put airlines in a position where they are not just burning through cash. A full recovery to 2019 levels is expected in 2022.



There has been one major industry bailout so far, through the CARES Act. The Act provides \$50 billion of total aid in a mixture of grants and loans. It provides \$25 billion that is specifically earmarked for payroll expenses. Seventy percent of this is in the form of grants that airlines will not need to pay back, and 30% is in the form of low interest 10-year loans. The Act provides an additional \$25 billion in loans that may be used for any purpose. However, there are conditions attached to the aid. Firstly, airlines accepting funds are required to maintain service to all cities deemed "necessary" by the U.S. Department of Transportation until October. This only applies to cities they were already serving as of March 1st. Secondly, the Treasury will receive a relatively small amount of stock warrants from any airlines receiving funds. Thirdly, the airlines must keep all current employees on the payroll through September.

The amount of funds received from the Act and resulting equity dilution varies among the four largest airlines. American Airlines led in all categories, with \$5.8 billion in total funds, including \$1.7 billion in loans, and a resulting equity dilution of 3.3%. Southwest, on the other hand, was last in all categories, with \$3.2 billion in total funds received, \$1 billion in loans, and a resulting equity dilution of only 0.5%. This not only indicates that Southwest is in a strong financial position, but also its low level of equity dilution bodes well for any potential inventors expecting subsequent bailouts, because it is unlikely that Southwest will significantly dilute its shares in the coming months.

CARES Act Bailout Funds Received

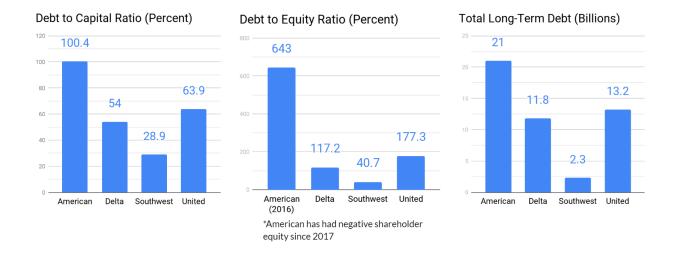


Financial Position

Southwest has a substantial advantage over its three major competitors because of its rock-solid balance sheet. Revenues are currently near-zero across the industry and surviving until they improve is largely a function of cash reserves and debt. Based on cash reserves and burn rate as of March 31st, Southwest led the big four in projected time until insolvency, with the numbers indicating that it could last 9.4 months. This was followed by 6.2 months for Delta, 5.7 months for United, and 4.8 months for American. Since this calculation was done on March 31st, it did not account for any funds from the CARES Act bailout or those raised through debt and equity since then. On March 31st, Southwest had \$5.5 billion in cash, and it has since received \$3.2 billion from the bailout and raised \$2.6 billion in debt and equity. This means it likely has around \$11 billion in cash, which would be enough for 19 months, assuming burn rate remains unchanged from March 31st levels. However, this will almost certainly not be the case. As restrictions and quarantines lift within the coming months and recovery begins, burn rate will decrease dramatically. Assuming that 2021 travel does return to 80% of levels seen in 2019, and factoring in the savings when payroll cuts are allowed to occur, these numbers indicate that Southwest will surely survive the duration of the crisis. It will also likely have more cash on hand and less debt than the other major airlines, putting it in a strong position to take market share away from American, Delta, and United, who will likely be in worse positions when the recovery begins.

Southwest is the only airline of the big four to have an investment grade credit rating from all three ratings agencies, and this makes sense when examining its debt levels, especially compared to its competitors. Its 2019 debt to capital ratio was only 28.9%, compared to 100.4% for American, 63.9% for United, and 54% for Delta. Its 2019 debt to equity ratio was only 40.7%, compared to 643% for American (in 2016), 177.3% for United, and 117.2% for Delta. American

has actually had negative shareholder equity since 2017, so it is not even meaningful to calculate its current debt to equity ratio. In terms of total long-term debt, Southwest again leads the pack, with only \$2.3 billion, compared with \$21 billion, \$13.2 billion, and \$11.8 billion for American, United, and Delta, respectively. Southwest's comparatively low debt levels bode well for its ability to survive the crisis despite practically nonexistent revenue, as well as its ability to recover faster than the big three legacy carriers.



Post-Recovery Industy Outlook

It is likely that there will be some long-term changes to the airline industry caused by the pandemic, even once demand recovers. In the event that a serious economic recession occurs, Americans will have lower disposable income, especially if the unemployment rate stays around the 16.1% it is currently at. This would likely create a greater focus on low-fare travel in an attempt to save money. It would also lead to less international travel, since it is typically more expensive than domestic travel. There is also the possibility that business travel could decline if businesses that operated remotely during the quarantine choose to make a permanent shift. All of these changes put Southwest in the best position of the major airlines for a strong recovery.

Low-Cost Approach

Southwest's low-cost approach makes it the most recession resistant of the big four airlines. If a recession occurs, travellers will look for the lowest fares available and flock to budget airlines. As the only major low-fare airline, Southwest will almost always have cheaper ticket prices than American, Delta, and United, as well as lower additional costs given that the first two checked bags are free. This will cause Southwest's demand to recover faster and more completely than the other three large carriers. Another advantage of Southwest's no-frills model is that it has no first class or business class, so it has virtually no reliance on premium customers, a segment that would suffer in a recession. The most premium option Southwest offers is "business select," which is basically a normal ticket except that it comes with priority boarding. It only costs \$30-50 more than a standard ticket, meaning it provides a negligible portion of total revenue. This is

far different from the legacy carriers. For example, in 2019 Q3, 39% of Delta's ticket revenue came from premium seats, including business class, first class, upgrades, and extra legroom seats. In a recession, all of these more expensive options will see decreased demand, and Southwest is the only major carrier that will be largely unaffected.

In order to test how prices would vary, I checked the price of one round trip ticket on each major airline from PHL to LAX departing on May 17th and returning on May 19th. Delta's lowest option was \$628, followed by American at \$557, then United at \$538, and finally Southwest at only \$280. For consumers whose main consideration is price, this is a clear choice, and there will be a drastic increase in cost-focused consumers following the pandemic.

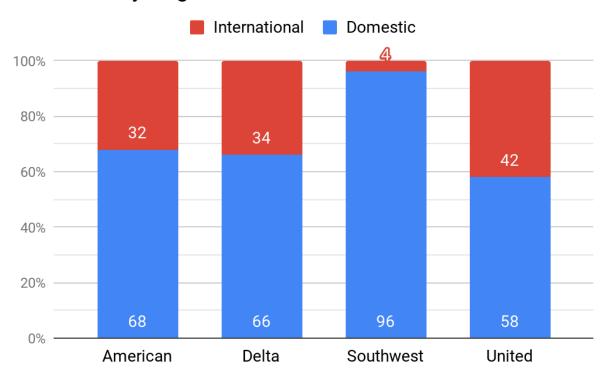
Business Travel

The COVID-19 related social distancing requirements have forced many business to operate virually, whereas they would typically fly employees onsite instead. It is possible that this will lead many businesses to decide to switch over permanently if they have found the current situation to be an acceptable way of operating. Additionally, in a recession, they may choose to cut costs by decreasing the number of employees flown onsite or by choosing to make employees fly economy rather than business class. Currently, business travel accounts for around 12% of passengers industry-wide, but these passengers make up far greater than 12% of profit. They can be anywhere from two to five times as profitable as economy passengers, because the price difference between business class tickets and economy tickets is so great. Southwest has no business class, so it will be far less impacted than the three legacy carriers by a decline in business travel, since it already had fewer business travelers and the ones it had were not any more profitable than other passengers.

International Travel

Even after the pandemic is under control domestically, it is possible that international travel restrictions will remain in place for an extended period of time. Additionally, when restrictions are eventually lifted, people may be hesitant to travel internationally for fear of obtaining the virus while travelling. If a recession occurs, international flights will also see lower demand because international travel is more expensive than domestic travel, and consumers will want to avoid the additional cost. Of the big four airlines, Southwest is the only one with minimal revenue from international flights. While United, Delta, and American obtain 42%, 34%, and 32% of revenue from international travel, respectively, Southwest only gets 4% of its revenues from this segment. This means that the expected slowdown in international flight demand will hit the legacy carriers hard while leaving Southwest virtually unscathed.

Revenues by Region



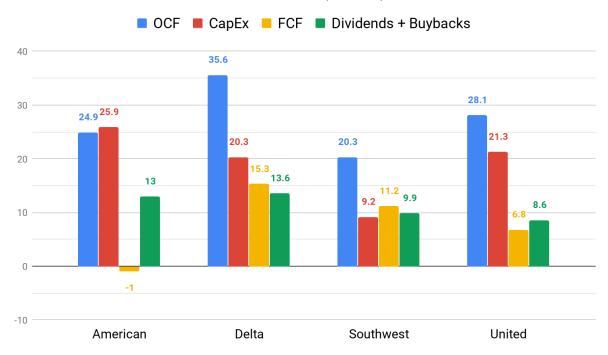
Government Support

The four largest U.S. arlines are widely considered "too big to fail," and it is probable that the government would provide additional bailouts should they become necessary. However, if the govnerment were to allow a major airline to fail, it would almost certainly be American Airlines. The company has extremely high leverage and has been financially irresponsible in recent years. In contrast, Southwest has been the most responsible of all four, with an investment grade balance sheet as previously mentioned. Additionally, while all three legacy carriers have gone bankrupt at some point since 2000, Southwest has been profitable for 47 consecutive years through 2019.

Bailouts of private companies during recessions have proven to be very unpopular, especially when those companies are seen as being rescued from their own poor decisions. This was the case in 2008 regarding large banks. At that time, the government allowed Bear Stearns and Lehman Brothers to fail. If it were to take a similar approach to airlines in 2020 and allow one to fail to appear as though it was teaching a lesson about corporate responsibility, American is by far the most likely scapegoat. Over the period from 2015-2019, American had negative \$1 billion in free cash flow, but spent \$13 billion on share buybacks and dividends. If the government wanted to avoid outrage at the bailouts, letting American fail is a possible course of action. Delta and United have both been less reckless than American, but Southwest has been the most careful of all as evidenced by its strong balance sheet and reasonable amount of share buybacks and dividends. The government could not afford to allow all four airlines to fail, and most likely can

only allow one to fail, if any at all. Southwest is the least likely to cause outrage if bailed out, so it should have strong support in the event that future bailouts are necessary.





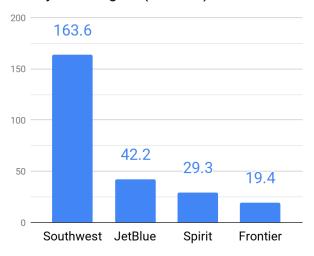
Other Low-Fare Airlines

The COVID-19 recovery will give Southwest a strong advantage over the legacy carriers largely because of its low-cost business model. However, it will also have advantages over other low-

fare airlines as well, primarily because of its vastly greater size. With a yearly passenger count nearly four times its nearest low-fare competitor, Southwest dwarfs all other airlines with similar models. Since these other airlines serve fewer locations and have fewer available flight times, they simply do not compete on the same scale. As a result, Southwest is in a much better position to take market share from American, Delta, and United during the pandemic recovery.

The CARES Act bailout terms also hurt smaller airlines in a way that will likely inhibit their recovery ability, specifically with its requirement that airlines continue service to all "necessary" locations that they

Yearly Passengers (Millions)



served as of March 1st. This requirement states that they must have at least three flights per week to each location. The big four might have many flights per day to each location, allowing them to cut 90% of flights and still fulfill the requirements. The smaller low-fare airlines, like JetBlue and Spirit, might only have a few flights a week already, so they have to run much closer to a full schedule to meet the bailout requirements, even though most of their planes are practically empty. This prevents the smaller airlines from the same level of savings the four largest airlines can obtain by cutting flight schedules. Spirit, for example, requested to stop flying to 26 locations, including Sioux Falls, ND, and Wichita, KS, but it was only approved for one of those requests.

Why the Market's View is Irrational

Currently, the market is punishing the entire airline industry as a whole. For example, Warren Buffett recently announced that Berkshire Hathaway sold its entire positions in American, Delta, United, and Southwest. The market is acting as though all the airlines are equally poorly positioned, or at least in similar positions, given that American's stock has dropped 65% since February 12th while Southwest has dropped 50%. While it is true that Southwest is not being punished quite as much as the legacy carriers, this difference is not nearly as great as I believe it should be. Given its financial position and the trends that COVID-19 will cause regarding business travel, international travel, and focus on low fares, I would argue that Southwest should have dropped no where near as far as American, but in reality it dropped only slightly less. In his explanation for why he sold his positions, Buffett repeatedly referred to "the airlines" as a unit rather than discussing individual companies. I believe that the market in general is doing this to a significant extent as well. This provides an opportunity to take advantage of the market's improper grouping of all the airlines into a monolith. While I agree that the airline industry as a whole is in a difficult position, Southwest is positioned much better than the rest of the industy. I believe it is in a much better position than its recent price action would suggest, and thus I believe that it is currently trading at an attractive price.

Risks

It is possible that the COVID-19 pandemic could last longer than currently expected, keeping revenues at near-zero for an extended time and exhausting cash reserves, making the eventual recovery more difficult once travel finally resumes. It is also possible that even once the outbreak itself is over, the lack of a vaccine could lead to an enduring fear of air travel and keep demand down for years.

I do not believe that the first scenario is particularly likely given the attitude of the current administration toward the quarantines and the fact that some states are already beginning to reopen. It seems improbable that the country will remain in this locked down state for longer than several months. The second scenario is also unlikely given that a vaccine is predicted to be available within a year, but I also believe that most Americans would travel even without the availability of a vaccine. Addionally, both of these scenarios would impact the entire industry, so when the recovery eventually did occur, Southwest would still be in the best position of any airline.

It is also possible that future bailouts, if necessary, could have unfavorable terms such as a large equity stake or payroll requirements.

Again, this scenario would either impact the entire industry, or Southwest would receive the best terms given that it needs the bailout least and has been financially responsible for decades, unlike its competitors.

The most dangerous risk is that the airline industry as a whole could perform so poorly that even if Southwest is the best performing airline, it could still perform worse than is currently priced into its stock price.

However, since its stock price is already down 50% since February 12th, it would have to perform very poorly for this to occur.

Conclusion

It may take years, but the airline industry will recover to 2019 levels. Southwest's low fares, negligible reliance on business and international travel, and comparatively strong financial position put it in the best position of any airline to survive the COVID-19 crisis and increase market share once it passes, however long that takes.

Revenue will be down significantly in 2020, but the 50% drop in share price likely already reflects this.

While the industry as a whole is in a difficult position, Southwest is the most likely candidate to be an outlier. The market is not distinguishing between airlines enough, punishing all of them severely. I believe this makes for a compelling opportunity to buy Southwest stock at an unusually low price.

Appendix Comparable Companies Analysis

Company	Market Cap (B)	TEV (B)	Revenue (B)	Profit Margin (%)	Return on Capital (%)	EV/EBITDA	Total Debt/EBITDA	
American	4.50	35.00	43.79	24.5	7.2	3.9	3.8	
Delta	15.32	33.42	45.13	25.8	12.9	3.2	2.3	
United	7.63	25.83	41.65	32.0	9.2	2.9	2.6	
JetBlue	2.43	4.26	8.09	33.8	6.7	2.3	1.7	
Spirit	0.90	3.38	3.83	34.6	6.5	3.3	3.5	
Southwest	17.2	18.10	21.51	29.6	13.6	3.4	1.3	
Average	8.00	20.00	27.33	30.1	9.4	3.2	2.5	
Median	6.07	21.97	31.58	30.8	8.2	3.3	2.5	

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DCF

	2016	2017	2018	2019	2020	2021	2022	2023	2024
Revenue	20,289	21164	21965	22428	11214	18723	21771	24887	27650
% Revenue Growth		4.30%	3.80%	2.10%	-50.00%	66.96%	16.28%	14.31%	11.10%
cogs	12917	13830	14720	15408	11214	12544.41	14586.57	16674.29	18525.5
% of revenue	63.40%	65.30%	67.00%	67.70%	100.00%	67.00%	67.00%	67.00%	67.00%
Gross Profit	7372	7316	7245	7020	0	6178.59	7184.43	8212.71	9124.5
Gross Profit Margins	36.30%	34.60%	33.00%	31.30%	0.00%	33.00%	33.00%	33.00%	33.00%
Selling General & Admin	244	238	227	225	121.1112	202.2084	235.1268	268.7796	298.62
% of revenue	1.20%	1.10%	1.00%	1.00%	1.08%	1.08%	1.08%	1.08%	1.08%
Depreciation/Amort	1098	1197	1201	1219	619.0128	1033.51	1201.759	1373.762	1526.28
% of revenue	5.41%	5.67%	5.55%	5.43%	5.52%	5.52%	5.52%	5.52%	5.52%
Other Operating Expenses	2199	2527	2662	2628	1306.431	2181.23	2536.322	2899.336	3221.225
% of revenue	10.83%	11.94%	12.11%	11.72%	11.65%	11.65%	11.65%	11.65%	11.65%
EBIT	3831	3354	3155	2948	-2046.56	2761.643	3211.223	3670.833	4078.375
% EBIT Growth		-12.50%	-5.90%	-6.60%	25.10%	34.00%	34.00%	34.00%	34.00%
Less Taxes	1267	-92	699	657	-383.32	517.2556	601.462	687.5469	763.8796
Tax Rate	33.10%	-2.70%	22.20%	22.30%	18.73%	18.73%	18.73%	18.73%	18.73%
Less CapEx	2147	2249	1976	1027	1849.75	1849.75	1849.75	1849.75	1849.75
Plus Depreciation	1098	1197	1201	1219	619.0128	1033.51	1201.759	1373.762	1526.28
Less Change Net Working Capital	1036	-62	-469	-101	-210.667	-210.667	-210.667	-210.667	-210.667
Free Cash Flow	667.4	968.3	2228.9	2004.5	-2683.31	1638.813	2172.437	2717.965	3201.692

Equity	9075		
Debt	6420		
Percent Equity	0.5856728		
Percent Debt	0.4143272		
Tax Rate	22.20%		
Beta	1.63		
Risk Free Rate	0.64%		
Market Risk Premium	7.20%		
Cost of Equity	12.37600%		
Cost of Debt	9.8800000%		
WACC	11.34%		
NPV of Future Cash Flows	4125.78777		
Terminal EBITDA	5604.655		
Exit Multiple	5		
Discounted Terminal Value	28023.275		
Enterprise Value	32149.0628		
Less Debt	6420		
Equity Value	25729.0628		
Shares Outstanding	589.1		
Implied Price	43.6752042		