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A Financial Analysis of Five Different Firms

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The coronavirus has certainly made its impact around the world. This paper will dive deeper into the significant changes it has had on a variety of industries as well as the protocols of these companies within these industries in specific countries. This research will measure potential bankruptcy, severe liability delinquency (the ability to pay back according to terms), profitability, liquidity as well as stock position.

We as humans have experienced many tragedies. Many of them are natural. Weather conditions or diseases such as the measles outbreak and smallpox. However, in 2020, another outbreak has begun, and is still making its impact around the world as of April, 2021. The coronavirus started in China and spread throughout the world in only a few months. Globalization has allowed for the intertwining of many countries. But with easy sea and air travel, this allowed for it to spread swiftly around the globe. Several movies have depicted what this would look like, but of course for entertainment purposes, on a more extreme scale.

The COVID-19 pandemic began in Wuhan, China during a new year's event. It was a concern by the World Health Organization (WHO) at the end of January, and only two months later on March 11th, 2020, it became known as a global pandemic. Since then, it has spread to over 200 countries and caused over 200,000 deaths. These deaths as well as the most cases have taken place in the United States. The United States has 33 million cases and has 1% of the total cases with over 1.6 million. While Russia in second with 6.27% of the total cases.

There was some shock that it was able to make such an impact, however, there were warning signs such as SARS in 2003 as well as H1N1 in the year 2009. And most recently, MERS coronavirus. However, compared to the coronavirus the number of cases was much lower. SARS-CoV began spreading with healthcare workers. Also, it had over 8,000 cases and a fatality rate of 9% (Hewings, 2020). While MERS-COV had over 2,000 cases and a fatality rate of 34%. But, the coronavirus has a much lower fatality rate of 1-3% (Hewings, 2020).

Now with COVID-19 taking center stage, it's still making waves within some countries such as India. India's cases are still skyrocketing and are experiencing a shortage in vaccines. Thankfully for many other countries, they invested in research early on. The vaccine research is critical in stopping a vaccine, the businesses that help keep our economies running is vital to lending out money, depositing funds, air travel, commodity transportation, pharmacies and construction of new structures. This paper will focus on Walgreens, Eiffage, Canadian National Railway, Commonwealth Bank, and ANA Holdings Inc. Each of these firms can be looked at differently due to their unique industries. Each company's background was heavily looked at as well as a financial analysis was conducted on each firm to see their performance in the future using historical results.

Most of the past research on financial analysis during the coronavirus, has focused on entire industries or the macroeconomic factors of entire countries or the globe. There has been a lot of research done on overall globalization. For instance, earths economy and various ecosystems that discuss different strategies for how money circulates between them (Ibn-Mohammed, 2021). Looking at the impacts from the coronavirus policies as well as exports and imports is also common among the research. Something else a lot of papers discussed were the impacts on individual countries or industries. For example, the healthcare sector or the United States (Economic Impact of COVID-19 Pandemic on Healthcare Facilities and Systems: International Perspectives, 2020). Healthcare systems are especially understandable since this industry is directly impacted by the coronavirus due to patients being admitted that are impacted as well as vaccine research. Also, countries like the United States and China had research done on them due to them being heavily intertwined with international trade and impact on globalization. While this research has clearly made macroeconomics a focus point, this paper will be focusing on microeconomics with five particular companies' financials. And therefore, will be looking at the microeconomic impacts of each firm with macroeconomics being the supporting role. Diving deeper into different firms within unique parts of the world will allow this paper to give a diverse understanding of how each of them were affected and will be impacted in the long-term.

Walgreens is a pharmaceutical company which has countless locations around the country and currently employs over 450,000 people around the globe. This firm is one of the largest retail pharmacy companies on earth. The company boasts over $100 billion dollars in sales annually and has 21,000 stores within eleven different countries (Walgreeens 2020). While today they are an international brand, they began in Illinois as Walgreens Co. in 1909. And only made the switch in 2014 to Walgreens Boot Alliance in Delaware. This was most likely due to their laws, as a lot of corporations choose to incorporate in this state. Actually, over 60% of corporations choose to incorporate in a state with under 1 million people (Ting, 2011). While they do have some of the lowest tax rates for corporations, they have laws that are written out really well in regards to corporate actions as well as have courts that are advantageous towards corporations. For instance, the Court of Chancery exists to "rule on corporate law disputes without juries" (Ting, 2011). Since this court is only for corporations, they can conclude issues efficiently. Clearly, in that year the firm made an intelligent move. However, in recent history they have been dealing with other external issues. Walgreens, like many other companies, has seen an impact whether it be short or long-term, from the coronavirus.

Due to the first stages of the stay-at-home order, Walgreens got hit with a loss of over $700 million dollars. United States markets and overseas revenue saw a decline during that time period. This in-turn should cause the overall profit margin of the firm to shrink when compared to years prior to the coronavirus. However, the sheer magnitude in revenue that Walgreens generates, combined with Walgreens being one of the main destinations for pharmacy products in the United States, still was not enough to make a full recovery. The table below shows the profit margin dwindling over the last three years, with the lowest being .33% in 2020.

Profit Margin (millions)						
		2020		2019		2018
Net Income	$	456	$	3,982	$	5,024
Revenue	$	139,537	$	139,866	$	131,537
Profit Margin		0.33%		2.85%		3.82%

Looking at this data, 2020 net income was $456 million. That account shrunk by 89% when compared to 2019. While the revenue had remained stagnant at $139 billion in the last two years. With this information, it proves that an increase in expenses was the main driver for the decrease in net income and not a decline in revenue. The cost of goods in 2019 were $107 billion while in 2020 they were $111.52 billion. While they were able to maintain stable revenue, the cause of this increase may have been do to offering discounts during the pandemic, possible spoilage of retail goods due to less customers coming into the store or turnover of less inventory which would drive up the cost.

The liquidity tells a similar story. Walgreens current ratio has been decreasing year over year even without the coronavirus. In 2017 it was at its highest in the last four years at 1.07. This was the only year when the current ratio had been over 1. A working capital that is positive is an indication that Walgreens had the ability to pay off its short-term obligations with current assets.

However, Walgreens had a ratio under 1 for the last three years, which means that they would be unable to meet these short-term obligations if they were to liquidate their current assets. As the table below shows, in 2018 the current ratio was .81 and in 2020 it went down to .67. While in both of these years they would not have enough current assets to liquidate for short-term payments, the amount of liquid assets in proportion to current liabilities is smallest in 2020.

Current Ratio (millions)						
		2020		2019		2018
Current Assets	$	18,073	$	18,700	$	17,486
Current Liabilities	$	27,070	$	25,769	$	21,667
Current Ratio		0.67		0.73		0.81
Working Capital	$	(8,997)	$	(7,069)	$	(4,181)

Overall, the liquidity risk for Walgreens has seen growth over the last three years. Working capital was -$4 billion in 2018 and the risk has increased by 115% or to -$9 billion dollars. Since the liquidity position is shrinking, this translates that Walgreens is unable to pay its short-term obligations with current assets in the event that suppliers need to be paid

To further look into liquidity risk, cash conversion cycle can be utilized due to inventory, accounts payable and accounts receivable either being current assets or current liabilities. Unlike the other four firms, a large part of Walgreens business is physical goods. While the other four companies rely on services or fixed and tangible assets. The calculation for the conversion cycle is: AR Turnover + Inventory Turnover – AP Turnover. Diving deeper into accounts payable, the AP turnover can be used for supplier analysis. This formula is COGS/Accounts Payable. The reason why revenue is not used instead of COGS is because revenue represents a markup in sales price while the cost of goods sold represents a more true price. While the accounts payable account is typically represented as the ability to pay back suppliers. Walgreens classifies this account as Trades Accounts Payable which is for their pharmaceutical products that they receive from AmerisourceBergens (Walgreens, 2020). This is the distributor that they use to distribute goods into their stores.

Accounts payable continued to increase despite COVID-19. Since they primarily sell pharmaceutical goods, a decrease in sales would be unlikely to occur since many of their products are a necessity versus a want. This account ended with a 2020 balance of $14.46 billion while in 2019 it had a balance of $14.34 billion. Furthermore, the accounts payable turnover was 7.45 in 2019 and increased to 7.71 in 2020. This increase shows minimal concern for a rise in accounts payable as it continued to grow despite stagnant revenue. Comparing the differences in inventory to the differences in accounts payable in 2019 and 2020, it does have similar results. Inventory turnover was 11.80 in 2020 while in the previous year it was 11.44. This formula is represented as, COGS divided by Inventory. Since inventory turnover and accounts payable turnover were highest in 2020, it translates that this was the year that Walgreens got products off the shelves the quickest as well as able to pay back suppliers the fastest. A theory in mind of why this occurred, is due to the amount of hording some people participated in during the beginning of the coronavirus. However, later on, governments were enforcing stores to shut down and enacting stay at home policies. This is why there is not a steep incline in revenue. Another possibility is due to shortages in manufacturing resources.

Looking more into inventory turnover, the COGS account in 2018 was $100.75 billion while in 2020 it increased to $111.52 billion or by 107%. Comparing that to the inventory turnover, it has been increasing as well. Since the highest inventory turnover is 11.80 in 2020, it would mean that sales would naturally increase due to turning over the inventory and therefore getting products off the shelves more quickly.

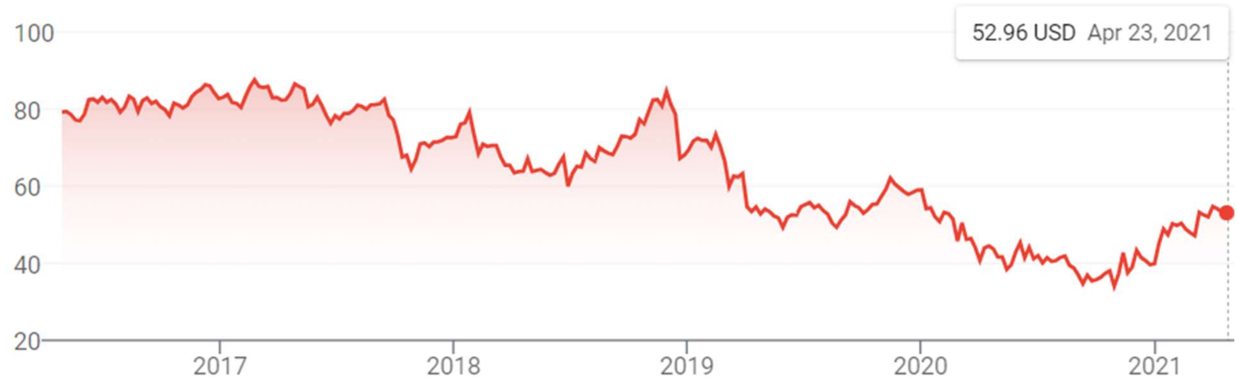
The last part of the cash conversion cycle discussed is accounts receivable compared to revenue. The AR turnover displays how quickly customers pay back Walgreens. After the events of the coronavirus, this ratio had no negative impact as it rose when compared to 2019. AR turnover in 2020 is 19.56 while in 2019 it was 18.94. Since it is higher in 2020, this means that customers are paying Walgreens back more quickly. This would also indicate a more true value in sales. Both of these indicators clearly show that both accounts performed well in 2020 when compared to prior years. Accounts receivable amounted to $7.22 billion and $7.13 billion in 2019 and 2020. While sales revenue in 2019 was $136 billion and increased to $139 billion in 2020.

Cash Conversion Cycle			
	2020	2019	2018
Accounts Receivable Turnover	19.56	18.94	20.01
Inventory Turnover	11.80	11.44	10.53
Accounts Payable Turnover	7.71	7.45	7.43
Cash Conversion Cycle	23.65	22.94	23.12

Overall, the cash conversion cycle showed that Walgreens is managing their business very well. Typically, a supplier’s terms are 30 days. Therefore, a cash conversion cycle of 23.65 in 2020 is ideal. The previous two years also had great results. This is due to a great AR and Inventory Turnover and a low accounts payable turnover. Combining customers paying back Walgreens fast, inventory flying off the shelves more quickly, and paying back suppliers on-time, is a great combination for the firm. While the cash conversion cycle has shown great results, the stock price of the company has been mixed.

During 2020, COVID-19 caused Walgreens to have a strong decline in October. Naturally, the recession phase in a business cycle, would cause a vast majority of stocks to fall due to a decrease in income and employment ("How Do Recessions Impact Investors?", 2021). Many stores and places of gathering, had to shut down their doors due to the lockdown. During the main months of the pandemic, between 12,000-15,000 outlets were impacted by the procedures.

The stock started decreasing in the February of 2020 despite being a defensible stock, as Walgreens is primarily classified as a pharmacy company. Typically, the pharmacy industry is seen as defensible due to medical products being a necessary part of having healthy periods of longevity. On November 30th, 2018, the stock peaked at $84.67 per a share. While the price of this stock saw its lowest price at $34.04 on October 30th of 2020. Investor belief clearly has not picked up momentum since then, because the stock in April, 2021 was $54.18 and has not surpassed $60 after COVID-19. A full recovery does not seem possible in the near future for this stock but it is increasing month over month. January 22, 2021 had a stock price of $47.45 while February had $50.38 per share. The stock price of Walgreens below in the last five years does show that momentum could potentially pick back up for the firm. While the leverage has started to pick up, the leverage of the firm has worsened in recent history.



Walgreens Boot Alliance Stock Price, 2021

The equity multiplier of Walgreens in 2018 was 2.55 while 2020 it was 4.12. This formula can be represented as total assets/total equity. Since their leverage position is highest in 2020, this means that they have a higher chance of defaulting on payments due to their increase in debt. Another way to look at it is by switching the formula around and saying that equity makes up 24% of total assets in 2020. While total liabilities are 76%. Both the equity multiplier and the common-sized analysis clearly indicate that the firm is highly leveraged as only $.24 is going into every dollar of total assets. Higher leverage has the potential to deter investor confidence.

While leverage can indicate a higher chance of bankruptcy, another way to analyze a firm is through Altman's Z-Score which measures a firm's likelihood of bankruptcy. More specifically, it measures the liquidity position, funding, profitability, operating cash flow, market value risk, and asset efficiency. This calculation is on a 0 to 4 scale. A safe score is between 3 to 4. While the highest risk of bankruptcy is under 1 ("Altman Z-Score", 2021). The formula can be represented as: 1.2A + 1.4B + 3.3C + 0.6D + 1.0E = Z-Score

A: Working Capital/Total Assets B:Retained Earnings/Total Assets C:EBIT/Total Assets D: Market Value of Equity/Total Liabilities E: Total Sales/Total Assets

The Z-Score for Walgreens is 2.39 in 2020 while in 2019 and 2018 it is 3.62 and 3.81. Since the Z-Score is lowest in 2020, this indicates that there is the highest chance of bankruptcy risk in this year. However, since the final calculation is not close to one, the odds of a bankruptcy are still miniscule since it is in the grey zone. The two primary areas that Walgreens should work on are Part's B and C of the formula. These are Retained Earnings/Total Assets and EBIT/Total Assets. The Part B calculation showcases how much money is being put back into the firm and therefore back into assets. While Part C showcases how much operating income the company is generating as it does not account for interest or taxes. The massive increase in Total Assets was the primary cause for both of these ratios to go down. Since there was a decrease in Part B, that indicates the amount of money that total assets was generating is less than years prior. The lower amounts in EBIT relative to Total Assets naturally trickles down to Retained Earnings since these amounts can both be calculated on the Income Statement. To represent that, here is a sample multiple step income statement.

Revenue – Cost of Goods Sold = Gross Profit

Gross Profit – Operating Expenses = **EBIT** (Earnings Before Interest and Taxes)

EBIT - Interest Expense = EBT – Tax Expense = Net Income

Net Income – Dividends = **Retained Earnings**

Total Assets in 2019 were $67.60 billion while in 2020 they were $87.17 billion. While the substantial increase in assets caused the ratio to decrease, it was also partly because of a decrease in EBIT. The EBIT in 2019 was $5.23 billion, while in the following year it decreased by 74%. The increase in assets and decrease in EBIT, played a major factor in the overall decrease in the Z-Score. Since EBIT/Total Assets is lower in 2020 when compared to the previous year, this means that normal operations are generating less income in 2020. Also, this part of the formula has the second highest weight at 1.4x which also played a role.

Meanwhile, the Retained Earnings/Total Assets calculation has the highest weight in the formula at 3.3. In the other formula EBIT had a visible difference between recent years, however the Retained Earnings differences is minimal when compared to the differences in total assets. The 2019 Retained Earnings was $34 billion in 2020 while in the year prior it was $35.81 billion. The change in retained earnings between these two years was -4.48%. While for total assets it was 29%.

Z-Score (millions)						
		2020		2019		2018
Total Assets	$	87,174	$	67,598	$	68,124
Net Working Capital	$	(8,997)	$	(7,069)	$	(3,821)
Retained Earnings	$	34,210	$	35,815	$	33,551
EBIT	$	1,382	$	5,231	$	6,591
Market Value of Equity	$	34,450	$	52,230	$	64,460
Total Liabilities	$	66,038	$	43,447	$	41,435
Revenue	$	139,537	$	136,866	$	131,537

Z-Score			
	2020	2019	2018
WC/TA	-0.1238	-0.1255	-0.0673
RE/TA	0.5494	0.7418	0.6895
EBIT/TA	0.0523	0.2554	0.3193
MVE/TL	0.3130	0.7213	0.9334
Sales/Total Assets	1.6007	2.0247	1.9308
Z-Score	2.39	3.62	3.81

In summary, during the coronavirus pandemic thus far they have experienced a dwindling profit margin. This was primarily due to a decrease in sales. Moving onto liquidity, they have been seeing gains on this end which means that they are more able to pay off short term debt with current assets than previous years. While their leverage position has increased, however it was not higher than 2018's. Lastly, the stock price had seen the effects of the coronavirus during its prime months, however the stock has been able to return to where it was at before COVID-19. Overall, this company seems that it will return back to 100% of where it was. The European French construction firm, Eiffage, shows more mixed results.

Eiffage is known as a civil engineering construction company in France. The third largest company in its industry within its headquartered country, and is ranked #5 in Europe (Eiffage, 2020). This firm is headquartered in Asnières-sur-Seine and was founded in 1992 (Eiffage, 2020). They have completed over 100,000 projects and employ over 70,000 people. Despite their size, they have certainly seen the impact of the coronavirus. This is partly because the construction industry is known for being cyclical. During expansions in the economy, construction companies like Eiffage, thrive. While naturally, during a recession Eiffage would also be contracting. It would be normal that not many construction projects would be occurring when people have less money to invest.

Eiffage also experienced profitability issues. In particular, Eiffage has been experiencing declining earnings year after year. Due to COVID-19, the profit margin was 5.71% and it went up to 5.96% in the years 2018 and 2019. When the France lockdown started during the first quarter for the French based construction company, revenue had declined by 13% (Staff, 2020). For the year, when converted to USD, US$614 million was reported while in the year prior it was US$1.11 billion. That is a difference of -44.83% between 2020 and 2019. This drop in revenue caused 2020 to have a lower profit margin. Since this year's margin was the lowest, this year's net income reflects that the least amount of money was made when compared to the previous two fiscal years. The table below reflects this analysis.

Profit Margin (millions)						
		2020		2019		2018
Net Income	€	614	€	1,113	€	965
Revenue	€	16,659	€	18,690	€	16,890
Exchange Rate		1.22		1.12		1.14
Net Income	$	752	$	1,246	$	1,104
Revenue	$	20,399	$	20,930	$	19,319
Profit Margin		3.69%		5.96%		5.71%

However, the difference became more noticeable in 2020 when the profit margin became 3.69%. It was hard to notice this change as revenue has been relatively stable year after year as the difference between 2018 and 2020 revenue was -1.37%. The 2020 revenue was €16.66 billion or $19 billion. Therefore, the lower profit margin became more understandable when looking at the net income. The difference between 2020 and 2019 net income was -43.75%. In 2019 the net income was $1.25 billion while in 2020 it was $701 million. This lower net income and lower profit margin in 2020 when compared to the previous two years is an indication that the business is making less money and therefore would have less money to either invest back in the business or do a distribution to investors.

While the profitability margins have not been performing as well, the current ratio has actually been increasing year after year due a fall in current liabilities. The current ratio in 2019 was .94 while in 2020 it was 1.04. The positive current ratio translates that this firm can pay off its short-term liabilities with current assets through liquidation. However, in years prior, this was not the case. This is due to being able to pay off long-term debt within 2020. The part of non-current borrowings due within one year or current portion of long-term debt account was $1.46 billion in 2019 and decreased to $274 million in 2020. That is a difference of 433%. The current liabilities account in 2019 was $15.81 billion while in 2020 it was $14.28 billion.

Current Ratio						
		2020		2019		2018
Current Assets	€	12,993	€	12,707	€	965
Current Liabilities	€	12,508	€	13,557	€	16,890
Exchange Rate		1.22		1.12		1.14
Current Assets	$	12,993	$	12,707	$	11,550
Current Liabilities	$	12,508	$	13,557	$	11,648
Current Ratio		1.04		0.94		0.06
Net Working Capital	$	485	$	(850)	$	(15,925)

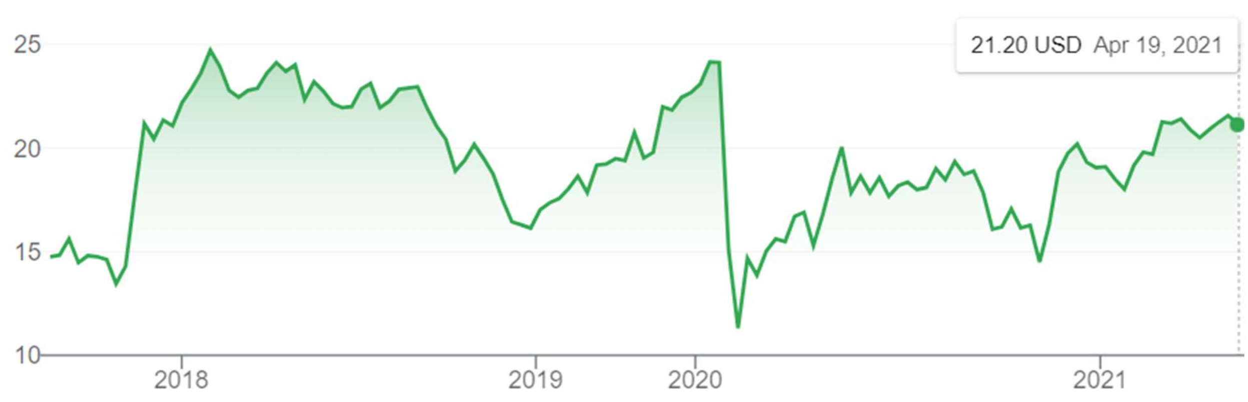
Moving over to fixed assets, there is more of a focus on fixed assets versus inventory (current asset), as a construction company. Since Eiffage company's balance sheet does not have inventory, the primary driver of revenue are fixed assets instead of current. While a company like Walgreens had a mix of both. The primary tangible fixed asset for the firm is PPE or Property, Plant and Equipment. This asset turnover ratio can be calculated as (Revenue/(PPE-Depreciation). This formula can tell a potential investor how efficiently a company's fixed assets are generating revenue.

The PPE turnover before and after the coronavirus showed intriguing results as it shows that assets became more efficient during the pandemic than years prior. While revenue did see a drop when comparing 2020 to 2019, the PPE remained stable. Therefore, the primary cause of the increase in the formula was depreciation. In 2018 the depreciation account was $988 million while in 2020 it increased to $1.47 billion. This increase in depreciation allowed the net PPE to be much smaller than the gross amount and allowed the PPE Turnover to significantly increase when compared to 2018. In 2018 and 2020 they were 17.08 and 26.91.

PPE Turnover						
		2020		2019		2018
Revenue	€	16,659	€	18,690	€	16,890
PPE	€	1,814	€	1,817	€	1,853
Depreciation	€	(1,195)	€	(1,041)	€	(864)
Revenue	$	20,461	$	20,930	$	19,319
PPE	$	2,228	$	2,035	$	2,119
Depreciation	$	(1,468)	$	(1,166)	$	(988)
PPE Turnover		26.91		24.09		17.08

While the PPE turnover is still performing well, cyclical in nature, the French civil engineering construction company saw the stock drop when the coronavirus cases started to spread throughout the world. Before 2020, the stock price peaked at $24.73 in the first quarter of

2018. Its second highest peak was at $24.16 in February of 2020. This peak occurred right before the largest drop in the stock price when the coronavirus started to gain its momentum. The stock dropped to $11.30 and has been rising since then with a few notable expansions and recessions within the individual stock price. In the first quarter of 2021 it was sitting at $19.10 on January 13th, 2021. As of April 1st, 2020, it is at $20.89. And going back and looking at it on April 21st, it has increased to $21.13. That is an increase of $9.83 or 86% when compared to Eiffage's lowest trough in the last 5 years. And in recent history that would be a $3.27 difference when compared to the firm's highest peak. This means that investor belief for the stock is increasing. And these two comparisons are an indication that this company will be able to make a full recovery from the coronavirus and not have any long-term negative impacts. These troughs and expansions of the stock price in the last five years is shown below.



Eiffage SA Stock Price, 2021

While Walgreens clearly showed that the Altman's Z-Score is accurate, the Eiffage company is a bit more questionable. This could be possibly due to a difference in industry as the construction firm heavily relies on non-current assets. The Eiffage company has a Z score of 1.19 in 2018 while in 2020 it went down to .96. Since they are near or under 1, this means that there is a high chance of the firm to have financial stress. In this final calculation, there are many different parts of the formula that made it very low. The main one was Part A of the calculation which is Working Capital/Total Assets. This formula compares net liquid assets to the total assets of the firm. In 2019 this calculation had a negative ratio of -.0310 while in 2020 it was .0173. This part of the formula is naturally low due to the firm being a company in the construction industry and being more reliant on intangible as well as fixed assets. Compared to Walgreens, this firm also has a much lower total asset turnover. In 2020 Walgreens had a total asset turnover of 1.6 which was a major factor in pushing the firm into the grey zone. While the total asset turnover was .494 in 2020 for the construction company. In this year, revenue amounted to $20.46 billion and total assets were $41.42 billion. Altman's Z-Score does show the firm overall as high risk.

Z-Score (millions)			
	2020	2019	2018
Total Assets	$ 41,417	$ 36,818	$ 34,735
Net Working Capital	$ 596	$ (952)	$ (112)
Retained Earnings	$ 4,295	$ 3,706	$ 3,445
EBIT	$ 1,213	$ 1,937	$ 1,806
Market Value of Equity	$ 9,140	$ 11,770	$ 8,320
Total Liabilities	$ 26,055	$ 21,636	$ 15,416
Revenue	$ 20,461	$ 20,930	$ 19,319

Z-Score			
	2020	2019	2018
WC/TA	0.0173	-0.0310	-0.0039
RE/TA	0.1452	0.1409	0.1389
EBIT/TA	0.0966	0.1736	0.1716
MVE/TL	0.2105	0.3264	0.3238
Sales/Total Assets	0.4940	0.5685	0.5562
Z-Score	0.96	1.18	1.19

Safe Zone: >2.99 Grey Zone: 1.88-2.99 High Risk: <1.88

The ANA Airports company or All Nippon Airways is a Japanese airline company. They are headquartered in Tokyo, Japan and were founded on December 27th, 1952 (ANA Airlines, 2020). And the company has over 45,000 employees according to 2019 data. Being an airport company, even with COVID-19, they have had relatively stable sales. This could have been partially due to their less strict policies back in April and May of last year. The Narita Airport only had people go through a thermal camera that scanned people for temperatures, wearing masks, maintain social distancing as well as a few other policies (Ripley, 2020). Also, an employee at the airport or "quarantine officer" gave a person a paper, told them to not use public transportation and to check temperature on a daily basis (Ripley, 2020). These weaker policies when compared to other countries, was a potential cause for the airline to remain thriving.

Despite their policies, net income has been decreasing while revenue has remained stable. This means that there has been a lower profit margin when comparing 2020 to 2018. The profit margin in 2018 was 7.39% while in 2020 the net income was $238 million and it became 1.31%.. The lower profit margin in 2020 translates that they are making less money, despite generating similar revenue over these last few years.

Profit Margin (millions)			
	2020	2019	2018
Revenue	¥1,974,216	¥2,058,312	¥1,971,799
Net Income	¥25,919	¥111,837	¥145,638
Exchange Rate	0.0097	0.0092	0.0091
Revenue	$ 19,110	$ 18,875	$ 17,864
Net Income	$ 251	$ 1,026	$ 1,319
Profit Margin	1.31%	5.43%	7.39%

The revenue in 2018 and 2019 were $18.54 and $18.55 billion. While in 2020 it decreased by 2.18% when compared to the previous year. This translates the decline in net income was due to an increase in expenses. The decline in margin has been due to a decrease in gross margin as the biggest difference in percentage year after year is with this margin instead of the operating margin. The gross margin compares the total cost of a product and the revenue or markup in sales price. This indicates either that the airport was offering discounted prices or they had lower revenue.

Since the gross profit margin is on the decline, this indicates that cost of goods sold is growing more than revenue when comparing 2020 to 2019. 24% being the higher percentage means that they were generating higher gains than 2020 when looking at the cost of manufacturing and distributing their services. Besides cost of goods sold, the other main expense is selling, general and administrative expenses. The SGA expense account was $3 billion in all three years with no notable trends. While cost of goods sold has been increasing year after year. The cost of goods sold account in 2019 was $13.95 billion while the account became $14.5 billion in the following. That is a difference of 3.55 percentage points. This was significant enough to bring net income down to $238 million or -76.37%. 2020 Revenue had the opposite trend as it decreased by 2.18% when compared to 2019 and became $18.1 billion. This indicates that the selling price of airline tickets decreased due to a decrease in markup when compared to cost of goods sold. This is why cost of goods sold increased while revenue decreased.

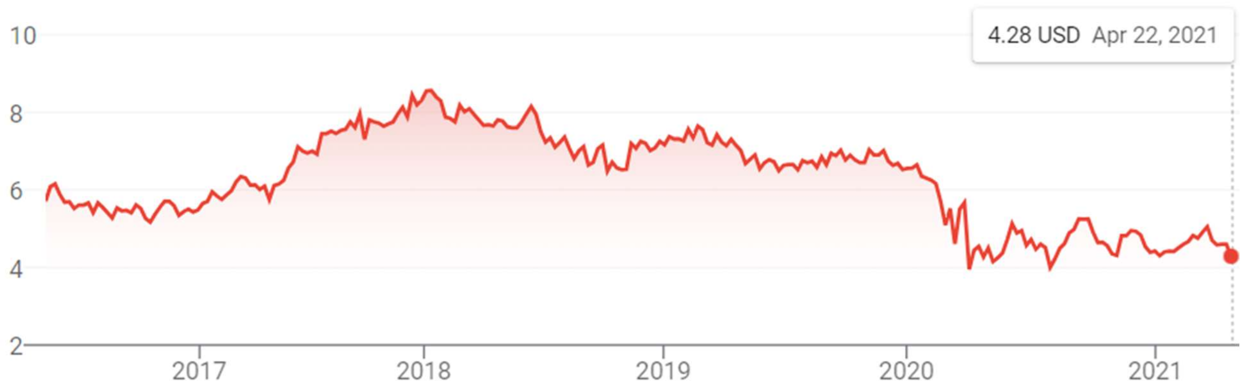
Partial Income Statement (millions)						
		2020		2019		2018
Revenue	¥	1,974,216	¥	2,058,312	¥	1,971,799
Cost of goods	¥	1,583,434	¥	1,559,876	¥	1,481,881
Gross Profit	¥	390,782	¥	498,436	¥	489,918
SGA	¥	329,976	¥	333,417	¥	325,402
Operating Income	¥	60,806	¥	165,019	¥	164,516
Net Income	¥	25,919	¥	111,837	¥	145,638
Revenue	$	18,140	$	18,545	$	18,560
Cost of goods	$	14,549	$	14,054	$	13,948
Gross Profit	$	3,591	$	4,491	$	4,612
SGA	$	3,032	$	3,004	$	3,063
Operating Income	$	559	$	1,487	$	1,549
Net Income	$	238	$	1,007	$	1,371

A decreasing net income could draw some concern for the near future. However, over time the account will be able to rise again once more time has passed and when countries begin to open up their borders. While the income statement for the firm has been showing unsatisfactory results, the balance sheet is displaying a more promising snapshot in 2020 than the previous years. The airline is one of the few companies discussed in this report to have increased working capital at the end of 2020. In that year, having more assets to potentially liquidate when compared to total current liabilities, allowed for the firm to raise their current ratio to 1.64 and working capital to $3.30 billion. For NWC, that is a 2415% increase when compared to the previous year. This increase was primarily due to the incline in the Cash and Deposits account. More cash that is idle, allows the company to pay off current liabilities if need be in-case the coronavirus impact ended up having significant effects. This account went up to $1.06 billion which was a 69% increase when compared to the prior year. By offsetting liability risk with an increase in current assets, they are able to combat any liquidity issues that come up in the future.

Moving onto the leverage of the firm, there are no notable decreases. In 2018 the equity multiplier was 2.56 while it decreased to 2.40 in 2020. Since it is lower in 2020, this means that a higher percentage of equity makes up total assets. And therefore, has a lower proportion of liabilities. However, in 2020 69% of their liabilities help fund assets which could be a potential red flag. However, the norm of their firm seems to be highly leveraged. Furthermore, the company has revenue of $19.11 billion in 2020 and total assets of $24.78 billion. That is a .77 total asset turnover and means that assets are being underutilized. However, the airline has steeper increases in revenue year after year when compared to the growth in total assets. This allows them to manage to pay off their obligations every year. But with a lower net income in 2020, they had to set more cash aside which is why there was a significant increase in net working capital. The leverage position of the firm has the potential to lower investor confidence, but the airline is taking the right steps to ensure they do not default on their obligations.

Leverage (millions)						
		2020		2019		2018
Total Assets		¥2,560,153		¥2,687,122		¥2,562,462
Total Equity		¥1,068,870		¥1,109,313		¥1,000,552
Total Assets	$	24,782	$	24,641	$	23,216
Total Equity	$	10,347	$	10,172	$	9,065
Leverage		2.40		2.42		2.56

While the leverage for ANA is performing better, the stock price for the firm peaked at $8.56 on January 12th, 2018. Even before the coronavirus started to spread, this firm had a slightly decreasing stock price year after year. At the beginning of January in 2019, the stock was sitting at $7.16 per share. While the beginning of 2020 they had a stock price of $6.55. This decrease in stock price translates that investors have been cautious to putting money in it or have decided to sell their shares as the stock has been under $10 for at least the last five years. ANA Holdings Inc is not attractive to investors with a high growth strategy.



ANA Holdings Inc Stock Price, 2021

To further prove this, at the stock's worst trough, the price was at $3.95 on April 3rd, 2020. Ever since that point, ANA has been unable to make a full recovery. Many people today are still hesitant to ride airlines which is a potential impact. Since then, the stock has peaked at $5.24 and has fluctuated between 4 and 5 dollars per share with no trend of it rising. Since the company has a declining stock price, this also indicates a lower market value of equity than years prior. Therefore, it will impact Altman's Z-Score and give the firm a higher chance of financial distress. The airline had a market value of equity divided total liabilities ratio of 45.99% in 2019 and it went down to 39.69% in the following year. In other words, the account was $11.09 billion and decreased to $9.55 billion. This translates that investor confidence is lowering and they potentially feel that the airline would not be able to meet their financial obligations.

Z-Score (millions)						
		2020		2019		2018
Total Assets	$	24,782	$	24,641	$	23,216
Net Working Capital	$	3,297	$	131	$	683
Retained Earnings	$	5,332	$	5,029	$	4,147
EBIT	$	589	$	1,513	$	1,491
Market Value of Equity	$	9,550	$	11,090	$	12,000
Total Liabilities	$	14,436	$	14,469	$	14,151
Revenue	$	19,110	$	18,875	$	17,864

Z-Score			
	2020	2019	2018
WC/TA	0.1597	0.0064	0.0353
RE/TA	0.3012	0.2857	0.2501
EBIT/TA	0.0784	0.2027	0.2119
MVE/TL	0.3969	0.4599	0.5088
Sales/Total Assets	0.7711	0.7660	0.7695
Z-Score	1.71	1.72	1.78

Safe Zone: >2.99 Grey Zone: 1.88-2.99 High Risk: <1.88

While the rising working capital benefits the overall Z-Score, the EBIT divided by total assets has been on the decline. 2019 EBIT was $1.51 billion and shrunk by 157% in the next year. A lower EBIT indicates that total assets are generating less income from everyday operations, which is discussed in the profit margin section. Despite an increase in working capital, a lower market value of equity and EBIT caused the overall Z-Score to be on the decline for the last two years. 2020 Z-Score was only .1 lower than the prior year which was 1.71.

Overall, the Japanese airline has been making many of the correct decisions for their firm. While the profit margin was decreasing, they offset this by increasing working capital. Throughout 2020, they also managed to increase the amount of equity and lower their debt in proportion to total assets. However, they continue to maintain a low stock price and Z-Score.

While there are signs of financial distress, they have decreasing debt and an increase in working capital.

Unlike the other firms discussed in this paper, the Commonwealth Bank is government owned and is the largest lender in Australia (Commonwealth Bank, 2021). Headquartered in Sydney, Australia, this bank does business through New Zealand, United States, Australia, as well as other countries. As of 2020, the company has over 40,000 employees. During the coronavirus, the bank took many measures to help their customers. For instance, they approved over half a billion dollars for a loan program (Staff, 2021). Furthermore, they took precautions by launching Covid-19 apps that gave customers updated information on their policies as well as to keep customers safe (Staff, 2021). They also allowed for customers to change certain loans as well as remove fees.

Using all of these measures has possibly helped the bank still see great returns during 2020. The profit margin in the last three years is decreasing which could leave some investors with some concern. However, with a profit margin being 35.95% in 2018 and decreasing to 31.18%, the negative impact is small. Since the profit margin is lowest in 2018 this does indicate that they made the least money when compared to revenue. The reason for this lower profit margin is not due to expenses as they have remained stable but definitely due to revenue being heavily tied to performance of net income. Both of these accounts have remained stable as they have been averaging net income of over US$5 billion and sales over US$16 billion.

Profit Margin (millions)						
		2020		2019		2018
Net Income		AUD 7,459		AUD 8,101		AUD 8,742
Revenue		AUD 23,925		AUD 23,505		AUD 24,319
Exchange Rate		0.69		0.70		0.74
Net Income	$	5,122	$	5,682	$	6,456
Revenue	$	16,430	$	16,485	$	17,960
Profit Margin		31.18%		34.47%		35.95%

While there certainly were some influences from the coronavirus that were not ideal, the pandemic allowed for Commonwealth to rely more on the digital realm and therefore helped create stable revenue. The CEO Matt Comym said to shareholders, “Technology and specifically digital banking, has played an enormous role in the way we’ve served our customers, particularly over the last six months (Barbaschow, 2020). By focusing on the digital end, they were able to access a lot more customers at a much faster pace. While the total income of the company has been decreasing, the liquidity position of the firm has been showing a similar trend.

Measuring the exact liquidity of the bank was difficult as they do not categorize their assets or liabilities into fixed assets, current assets, current liabilities and long-term liabilities. But the largest amounts by far were loans for current assets and deposits for current liabilities. In 2020, the deposit account was $433 billion and loans were $465 billion or 91% and 77% of total current assets and current liabilities. While the current ratio has been remaining strong as shown by the size of loans when compared to deposits, it has been decreasing. 2018 current ratio was 1.34 while in 2020 it was 1.28. But, all three years are over 1 which translates that the bank is able to pay off current liabilities with current assets. A lower current ratio means that the company has less money to liquidate when compared to the previous year. In this case, there are not any notable differences between the three years. An investor's confidence would increase for the bank as they have a strong liquidity. However, while there haven't been many liquidity issues during the coronavirus pandemic, some credit rating agencies were uncomfortable with the firm's long-term debt position.

Current Ratio						
		2020		2019		2018
Current Assets		AUD 878,985		AUD 832,754		AUD 837,218
Current Liabilities		AUD 686,787		AUD 631,084		AUD 626,191
Current Assets	$	603,643	$	584,060	$	618,302
Current Liabilities	$	471,651	$	442,617	$	462,455
Current Ratio		1.28		1.32		1.34
Net Working Capital	$	131,992	$	141,443	$	155,848

Fitch, one of the largest credit agencies that assigns credit ratings had given Commonwealth Bank an outlook of negative due to the uncertainty of the coronavirus. And an A+ rating which means that they are at low risk of default but also translates that external factors such as the coronavirus are at play. (Fitch Affirms Commonwealth Bank of Australia at 'A+', Outlook Negative, 2020). However, looking at leverage for most banks they naturally have higher leverage positions in order to be able to easily lend out money whenever a customer needs it. This is because when a customer deposits money, a bank is able to lend out those same dollars.

For instance, Commonwealth Bank has an equity multiplier of 15.18 in 2018 while in 2020 it was 14.16. Therefore, it is decreasing and indicates that debt is becoming less of a burden overall and translates that they owe less money to customers. This is further shown by comparing total assets versus total equity. The total assets in 2020 and 2018 were $662 billion and $717 billion. That is a difference of -8%. While total equity only saw a -1% change and amounted to $47 billion in 2020. Overall, the leverage position of the bank is not worrisome.

Moving into the stock price, it is showing similar results as the Canadian National Railway company discussed in the following section. Both firms saw all time high stock prices at the end of 2020 and still are in 2021. Before the pandemic, the bank was averaging prices in the $50 range. During it, investor confidence was lowest when the price was $35.79 in March, 2020 as the long-term impact of the coronavirus was unknown. However, as 2020 began to close the stock rose to over $60 for the first time since 2018 and peaked at $79.65 in 2021. This stock has remained above that $70 mark since June, 2021. Similar to the railway firm, it seems that it will remain steady and have consistent increases. But it is possible that the stock will eventually stabilize as the stock was sitting in the $50-60 dollar range for four years in a row with minimal recessions and expansions. Overall, the new standard of the stock price has been rising, however, the overall leverage of the firm when compared to the market cap makes it at high risk of bankruptcy when looking at the Z-Score.

Commonwealth Bank Stock Price, 2021

The Z-score shows odd results as each year is under .50. Naturally, that means the firm is at high risk of bankruptcy. However, being a government owned bank has allowed them to be a reserve bank. This means that they are more prone to helping circulate currency and support other banks.

One of the most impactful parts of the score being low is comparing the market cap of the firm to total liabilities. The market value of equity in 2020 for instance was $73.95 billion. While the 2020 total liabilities were $472 billion. By dividing market value of equity by total liabilities the total came to be .0941 with an overall Z-Score of .44 in 2020. This could mean that investors are passing on the stock due to their high leverage position.

Z-Score (millions)						
		2020		2019		2018
Total Assets	$	661,853	$	678,321	$	716,772
Net Working Capital	$	131,992	$	141,443	$	155,848
Retained Earnings	$	18,852	$	16,201	$	17,591
EBIT	$	8,742	$	7,299	$	8,943
Market Value of Equity	$	73,949	$	73,299	$	69,871
Total Liabilities	$	471,651	$	442,617	$	462,455
Revenue	$	16,430	$	16,485	$	17,960

Z-Score			
	2020	2019	2018
WC/TA	0.2393	0.2502	0.2609
RE/TA	0.0399	0.0334	0.0344
EBIT/TA	0.0436	0.0355	0.0412
MVE/TL	0.0941	0.0994	0.0907
Sales/Total Assets	0.0248	0.0243	0.0251
Z-Score	0.44	0.44	0.45

Safe Zone: >2.99 Grey Zone: 1.88-2.99 High Risk: <1.88

Another part of the formula that is heavily affecting this result is sales/total assets. This calculation generated the lowest result with .0248 in 2020 and .0243 in the year prior. A way to look at this formula is total asset turnover which indicates how efficiently assets are being used to generate revenue. Since the total asset turnover is significantly lower than 1, assets are underutilized. Besides the Z-score being an indication of financial distress, despite lower profits, the firm issued a dividend in 2021 (Frost, 2021). The firm believes that economic growth will continue due to the pandemic. Overall however, since all three years are below 1, this indicates that there is a high chance of the firm experiencing financial distress.

Being a firm that is owned by the government allows for Commonwealth Bank to have a more lenient balance sheet and income statement than private institutions. Despite having an extremely high leverage position and a very low Altman's Z-Score, they are able to stay afloat as they are the federal reserve bank of Australia. The bank continues to maintain a strong liquidity position and a great profit margin in 2020 when compared to the previous two years. Lastly, the stock price increasing due to government support and a strong recovery. Commonwealth Bank will be able to return to its original state in the short-term.

The final firm discussed in this paper is Canadian National Railway which is headquartered in Montreal, Canada (Canadian National Railway, 2021). This company is known for being the largest railway in North America and transports goods throughout the United States and Canada. Because of this, they have been able to have over 20,000 employees. Recently, the firm bought out Kansas City Southern for $33 billion. This is going to allow them to extend their business to Mexico. Also, the firm is known for having Bill Gates as their largest individual shareholder. While they have made many great decisions that have helped them grow, they also have had to put their foot on the break during the coronavirus. For instance, when the border closed for a period of time between Canada and the United States, that would naturally hurt revenue (*COVID-19 | Cn.Ca*, 2021). However, it did not impact rail shipments between the two countries. Furthermore, while the temporary shutdown did occur, they are working with government regulators to ensure that goods can still be transported across the border.

Despite being able to still transport goods, the correlation between the coronavirus pandemic and decrease in sales still existed. Revenue in 2019 was $11.41 billion and it decreased by 5.30% when comparing it to 2020. However, 2018 sales were 9% lower than 2019. Going back a year further into 2017 shows revenue as $10.40 billion. This proves that revenue was impacted due to a lack of manufacturing from within Canada as well as internationally. A majority of the firm's revenue is freight. This makes up 80% of gross revenue in 2020 without accounting for estimated debt losses. Since this firm uses accrual accounting, they have a method to estimate how many customers will default. It is subtracted from accounts receivable in order to calculate a net's receivable. This formula can be represented as: Gross Accounts Receivable - Estimated Credit Losses = Net Accounts Receivable.

However, the profit margin year after year has minimal differences, but there is a pattern. Before the coronavirus pandemic there were already decreases in the profit margin. The margin in 2018 was 30% while in 2020 it was 26%. Since it is lower in the most recent year, this means that they earned less money when compared to revenue. While the profit margin and revenue has declined, it is manageable for them to return to normal business increases in the near future.

Profit Margin (millions)						
		2020		2019		2018
Revenue	CAD	13,819	CAD	14,917	CAD	14,321
Net Income	CAD	3,562	CAD	4,216	CAD	4,328
Exchange Rate		0.78		0.77		0.73
Revenue	$	10,810	$	11,415	$	10,497
Net income	$	2,786	$	3,226	$	3,172
Profit Margin		26%		28%		30%

Despite the coronavirus pandemic, the current ratio has shown increases which means that the railway firm has more cash that is idle to pay off current liabilities. In other words, the ability to sell off more assets than years prior to pay off current liabilities such as suppliers (accounts payable). However, in all three years they still do not have the ability to fully pay off liabilities. In 2020 and 2019 they were .95 and .66. One of the reasons for this increase, was the cash and cash equivalents account amounted to $49 million in 2019 while in the next 12 months it ended as $445 million. This showed to be a factor as total current assets in 2020 were $2.43 billion while in the past year it was $2.17 billion.

Current Ratio						
		2020		2019		2018
Current Assets	CAD	3,102	CAD	2,830	CAD	2,728
Current Liabilities	CAD	3,274	CAD	4,287	CAD	3,500
Current Assets	$	2,427	$	2,166	$	2,000
Current Liabilities	$	2,561	$	3,281	$	2,565
Current Ratio		0.95		0.66		0.78
Net Working Capital	$	(135)	$	(1,115)	$	(566)

Secondly, the accounts receivable displayed that nearly all of their revenue is tied to credit customers which means that decline in production also impacted the current ratio. The AR account is the largest current asset account being the only one with a balance that is at least over $800 million in the last three years. This current asset does show a similar trend as 2019 receivables were $928 million. While in 2020 it shrunk by 11% while revenue in this time frame declined by 5%. However, even though the receivables declined, the increase of cash was large enough to offset this decrease in sales. The cash account in-between the years 2019 and 2020 increased by 789%.

Leverage however showcases a potential issue with their debt position. Over the last three years the equity multiplier has been over 2 which means that around 40% of their funding is through equity while the other 60% is with leverage. From a high level, a firm that is primarily funded with money from creditors and lenders, means a higher risk of bankruptcy if they are unable to meet the payments. A lower equity multiplier would indicate that less money would need to be paid back to another party.

Leverage						
		2020		2019		2018
Total Assets	CAD	44,804	CAD	43,784	CAD	41,214
Total Equity	CAD	19,651	CAD	18,041	CAD	17,641
Total Assets	$	35,049	$	33,505	$	30,209
Total Equity	$	15,373	$	13,806	$	12,930
Leverage		2.28		2.43		2.34

Many investors were worried about their recent acquisition due to increases in debt. At the end of 2021, they should see a rise in debt due to their purchase of Kansas City Southern in May, 2021. Included in the agreement was to pay US$3.8 billion in debt. The total purchase price however was US$33.6 billion (3 Reasons to Buy Canadian National Railway Stock Now, 2021). Besides this news, there is not much information on why their debt position could be considered high. This increase in leverage has drawn some concern to investors in regards to the stock price.

The stock price for the firm had reached $67.75 in March of 2020, which was an all-time low when compared to the previous two years. The stock price has not been that small since mid-2017. However, despite this decline, the railway company has had significant growth in the stock. Investor belief increased after 2020 which caused the price to rise above $100 for the first time towards the end of 2021. In 2020, the price remained in the range of $80 to $90. One possible reason for the continuous rise in price is because of the belief Bill Gates has in it. Being the largest stockholder in CN, he has the potential to influence it.

Canadian National Railway Stock Price, 2021

The rise in stock is also partly because of their recent acquisition. The company purchased Kansas City Southern which would potentially hinder investor belief and cause the stock price to lower. This caused the stock price to rise again as it would be undervalued with the buyout. Secondly, it is the only railway that connects to ports on three different coasts. The firm connects the "Atlantic and Pacific in Canada to the Gulf of Mexico in the United States" (The Motley Fool Canada, 2021). By adding on this purchase, they would be able to further their business to Mexico. Lastly, the stock on its own has acted like an index fund. An index fund is known for consistently rising over the long-term due to diversifying risk among many of the largest companies in the world. This individual stock has also seen itself consistently rising. The stock price ties in nicely to the Z-score as the market value of equity is a factor in Altman's Z-Score.

The Z-score in 2020 was 3.11 while in the two years prior it was 2.78 and 2.70. Looking at these results, the only year that had a low risk of bankruptcy was 2020 since it was over 2.99.

Z-Score (millions)			
	2020	2019	2018
Total Assets	$ 35,049	$ 33,505	$ 30,209
Net Working Capital	$ (135)	$ (1,115)	$ (566)
Retained Earnings	$ 14,989	$ 13,494	$ 12,184
EBIT	$ 3,737	$ 4,280	$ 4,026
Market Value of Equity	$ 60,963	$ 49,136	$ 39,566
Total Liabilities	$ 19,677	$ 19,700	$ 17,278
Revenue	$ 10,810	$ 11,415	$ 10,497

Z-Score			
	2020	2019	2018
WC/TA	-0.0046	-0.0399	-0.0225
RE/TA	0.5987	0.5638	0.5647
EBIT/TA	0.3518	0.4215	0.4398
MVE/TL	1.8589	1.4966	1.3739
Sales/Total Assets	0.3084	0.3407	0.3475
Z-Score	3.11	2.78	2.70

Safe Zone: >2.99 Grey Zone: 1.88-2.99 High Risk: <1.88

Investor optimism for the company has seen growth through the stock prices. Since the price is a part of the market value of equity, it would in turn impact the overall Z-Score. The market value of equity was US$60.96 billion in 2020 while in the year prior it was US$49.14 billion. That is a difference of 24% and is a clear indication of belief from stockholders due to the sheer magnitude in the market cap. As stated in the stock price section, economic growth and the Kansas City Southern purchase have both been major factors in this steep expansion of price. The second highest percentage in the Z-Score is from Retained Earnings/Total Assets. Since this percentage rose to 59.87%, this indicates that a higher proportion of retained earnings are going back into assets than years prior. And therefore, translates that more money is being funded through equity and not liabilities as retained earnings is a part of equity on the balance sheet. This is because retained earnings is self-generated earnings and not money owed to an outside party.

Overall the performance of the railway firm is positive. They have a great Z-Score in 2020 as well as a rising stock price. Furthermore, making a purchase that will expand business to Mexico has the potential to significantly increase revenue. However, the leverage in the acquisition with their current state of debt can draw some concern. Lastly, they are still unable to meet their current obligations. But with a great Z-Score and a rising stock price, it outweighs those other factors and has allowed the firm to stay stable during the pandemic and will allow them to thrive afterwards.

Conducting a microeconomic financial analysis on five of the largest companies in their industry has given a better understanding of how particular sectors are impacted within their countries. The stock prices showed varying results as companies like the railway firm were able to increase their stock towards the end of 2020, while firms like the Japanese airline could not stabilize at their previous prices. As for the Z-Score, it also showed mix results. Altman's Z-Score was able to precisely measure and produce good results for Walgreens and the Canadian railway firm. However, for Commonwealth Bank, ANA Airlines, and Eiffage, it produced unsatisfactory results. But the bank is certainly an outlier as it is government owned. When looking at the other ratios as well, they definitely all produced varying results as well when it came to leverage, profitability, turnovers and liquidity. More research can certainly be done on this topic in a variety of ways. A deeper financial analysis is possible to conduct on these firms, or within different companies in unique industries.

Bibliography

Altman's Z-Score. (n.d.). Investopedia. https://www.investopedia.com/terms/a/altman.asp

ANA Airlines. (n.d.). ANA Airlines. https://www.ana.co.jp/group/en/investors/irdata/annual/pdf/20/20_E_00.pdf

ANA Holdings Inc Stock Price, 2021. (n.d.). [Graph]. Yahoo Finance. https://finance.yahoo.com/quote/alnpy/

Barbaschow, A. (2020, August 12). *Commonwealth Bank sees boost during COVID-19 with annual profit hitting AU$9.6b*. ZDNet. https://www.zdnet.com/article/commonwealth-bank-sees-boost-during-covid-19-with-annual-profit-hitting-au9-6b/

Canadian National Railway Results. (n.d.). Canadian National Railway. https://www.cn.ca/en/investors/financial-results/

Canadian National Railway Stock. (n.d.). [Graph]. https://finance.yahoo.com/quote/CNI/

Commonwealth Bank Annual Report. (n.d.). Commonwealth Bank Website. https://www.commbank.com.au/content/dam/commbank/about-us/shareholders/pdfs/results/fy20/cba-2020-annual-report.pdf

Commonwealth Bank Stock Price. (n.d.). [Graph]. Google Finance. https://www.google.com/finance/quote/CMWAY:OTCMKTS?sa=X&ved=2ahUKEwitieS466TyAhX4QzABHU7cB6UQ3ecFMAJ6BAggEBI

COVID-19 | cn.ca. (n.d.). Canadian National Railway. Retrieved August 9, 2021, from https://www.cn.ca/en/stories/20200320-covid-19-update/

Economic impact of COVID-19 pandemic on healthcare facilities and systems: International perspectives. (2020, November 12). PubMed Central (PMC). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7670225/

Eiffage Company. (2020). Eiffage. https://www.eiffage.com/files/live/sites/eiffage-v2/files/Finance/Rapport%20annuel/2018/Eiffage_RA2020_EN_Planches.pdf

Eiffage Stock Price, 2021. (n.d.). [Graph]. Yahoo Finance. https://finance.yahoo.com/quote/fgr.pa?ltr=1

Fitch Affirms Commonwealth Bank of Australia at 'A+' Outlook Negative, 2020. (n.d.). Fitch Ratings. https://www.fitchratings.com/research/structured-finance/covered-bonds/fitch-affirms-commonwealth-bank-of-australia-at-a-outlook-negative-21-09-2020#:~:text=Fitch%20Ratings%20%2D%20Sydney%20%2D%2021%20Sep,of%20Australia's%20four%20largest%20banks.

Frost, J. J. E. (2021, February 10). *CBA half year result sees surprise dividend*. Australian Financial Review. https://www.afr.com/companies/financial-services/virus-crisis-weighs-on-cba-result-20210209-p570xz

Hewings, Y. H. (2020, April 10). *How do SARS and MERS compare with COVID-19?* Medical News Today. https://www.medicalnewstoday.com/articles/how-do-sars-and-mers-compare-with-covid-19

How Do Recessions Impact Investors? (n.d.). Investopedia. Retrieved August 9, 2021, from https://www.investopedia.com/insights/recession-what-does-it-mean-investors/#:%7E:text=During%20a%20recession%2C%20stock%20prices,of%20the%20stock%20market%20entirely.

Ibn-Mohammed, T. I. (2021, January 1). *A critical analysis of the impacts of COVID-19 on the global economy and ecosystems and opportunities for circular economy strategies*. ScienceDirect. https://www.sciencedirect.com/science/article/pii/S0921344920304869#!

Ripley, W. C. (2020, March 19). *Hong Kong and Tokyo airports are handling coronavirus very differently. Which one has it right?* CNN. https://edition.cnn.com/2020/03/18/asia/japan-coronavirus-intl-hnk/index.html

Staff, R. (2021, June 25). *Australia's Commonwealth Bank to offer relief measures after Sydney lockdown*. U.S. https://www.reuters.com/article/health-coronavirus-australia-cba/australias-commonwealth-bank-to-offer-relief-measures-after-sydney-lockdown-idUSL3N2O726Q

Staff, R. (2020, May 12). *Eiffage construction revenue tumbles as lockdowns hit activity*. U.S. https://www.reuters.com/article/us-eiffage-results/eiffage-construction-revenue-tumbles-as-lockdowns-hit-activity-idUSKBN22O2K7

The Motley Fool Canada. (2021, June 15). *3 Reasons to Buy Canadian National Railway Stock Now*. https://www.fool.ca/2021/06/16/3-reasons-to-buy-canadian-national-railway-stock-now/

Ting, J. (2011, April 27). *Why do so many corporations choose to incorporate in Delaware?* WHYY. https://whyy.org/articles/why-do-so-many-corporations-choose-to-incorporate-in-delaware/

Walgreens 2020 10-K. (n.d.). Walgreens. Retrieved January 3, 2021, from https://s1.q4cdn.com/343380161/files/doc_financials/2020/q4/9a63d04f-e4a3-4950-8c7a-0dec02c91c16.pdf

Walgreens Boot Alliance Stock Price. (n.d.). [Graph]. Yahoo Finance. https://finance.yahoo.com/quote/WBA/