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The Market At Work

By: Patrick Flynn

My project is looking at how to make a stock portfolio. I am trying to find the best way to invest my money when I graduate from college. There are some basic tips that I have learned throughout discussion with people as well as in class. For example, I know not to invest all in one stock or in one market/industry, but the research I am doing is trying to make sense of this strategy. My research will find which markets to diversify in and see if there is any correlation between different industries or not. There is a chance that some industries that have little in common to the public, but move in similar directions in the market. In my research, I am going to try to see if there are certain events that help predict multiple markets. There are obvious events in the world that impact companies and markets. For example, if there is new technology helping water be saved or spread out to people, then water companies will most likely see an increase in their stock price. However, I also want to find out how that could have an impact on different industries. This will take a lot of research, but it's an interesting subject that could help me after college. If I am able to figure out how to invest in the stock market with a higher success than the common investor is, then it will help me make more money while working.

What I Have Done

Throughout this semester, I have had several meetings with my advisor to go over the work that I had been doing. I came into his office with a plan of researching four main companies as well as doing some research on their competitors. My goal was to take four familiar companies and do research on whether I should invest in these companies or not. I would go into his office almost weekly to decide what information I should be looking into. In the spreadsheet below, I added on several categories after our meetings, and looked at

significant decisions and news articles about the companies. These meetings made me stay on top of the project, but also helped me consistently follow the companies throughout the entire semester. I gained a lot of knowledge from these meetings going back and forth on different reasons to invest in a company and looking at companies and markets in a different way. One important lesson I took away was not to just look at the price of the stock. The price just shows how much it costs to buy the shares and how many shares you can buy, but it does not tell you if the company is a good investment or not. While I already knew this, what it made me think of was a company like Apple. They have a very expensive stock price, which is something that turns me away from the company. I like being able to own more than a few shares in a company. In addition, with being on a college budget it makes it difficult for me to own several shares of a stock that is that expensive. However, after discussion, if I believe that the company is going to do well and the stock price is not be priced correctly, then I should invest either way, even if it is just a few shares. When comparing the companies, stock price is not what is important to be researched; instead, it would be smarter to look at the different ratios. While this may seem like a basic fact, it is something that is very important and I will carry that information with me throughout my investing career.

Spreadsheet

For my spreadsheet, shown below in the appendix, I picked four main companies and looked at three or four competitors of these companies. I used the competitors to compare the ratios because if I only used the four companies I researched, then it would not have told me very much. Comparing Apple and Ford is difficult because each industry is different, so the ratios and expectations are different depending on the market. However, since I was comparing

companies in the same industry, it would make it useful to see how each company matched up to their competition.

One ratio that I looked at was earnings per share (EPS). Earnings per share tell you how much one share of stock is earning in profits. One would want the EPS to be higher because that is showing investors they are earning more per share of stock. If a stock has a higher EPS, then they have the ability to give out more money in dividends. I looked at the amount of dividends a company gives out as well, as shown in the spreadsheet. Dividends are important because it gives investors some of their money back while being able to hold the stocks. This cash flow can give the investors the ability to either reinvest their money or use it in their daily lives. I am a big fan of dividends because it can help pay off my investment on a continuous basis while still holding onto the stock. If the company's EPS is higher than their competitors, it could show that the stock price may go up or that the company is going to offer a higher dividend for the quarter or the year, which is the case for one of the companies I researched.

After talking with my advisor, he told me I should look at the PEG ratio. I did not know too much about the PEG ratio prior to the meeting, so I did some research about it. The PEG ratio is looking at the company's stock value while looking at the growth as well. This ratio is supposed to give a better understanding of the company's value than the P/E ratio. In my future research, I will make sure to focus on the P/E ratio as well as the PEG ratio. Both ratios are important for comparisons because it can tell me about the growth of a company. If there is a big difference between competitors P/E and PEG ratios, it should give me insight to the potential future growth of the company.

Finally, I looked at the change in cash flows. Cash flows can tell a lot about a company. Something that I have learned in my time at BGSU is that cash is king. The amount of cash a company has can tell you what their future plans might be. In addition, the change in cash flows can show how good of a year the company is having. Even if they have a negative change in cash flows, it may not be a bad thing. The company could have made several investments in other companies and equipment for future benefits that are not showing cash benefits yet. There is a benefit of looking at previous years to compare what is going on in the past to what just happened this year. If you look back at the previous three to five years and there is a significant change, then you will have to do some further research to see what is going on. Cash is very important as well as tell you a lot about a company and is something that I will need to look into for each company that I would potentially want to invest in.

Ford Analysis

The first of the four companies I am going to talk about is Ford Motors. Ford is a automobile company based out of Michigan and has been around in the market for an extremely long time. I chose to look at Ford because I wanted to choose a market I was familiar with and could understand. The motor industry is one that numerous people know about, and I thought it would be good to investigate the industry. In addition, I am intrigued with the idea of self-driving cars. The idea of being able to sit in the car and have a computer control it is fascinating to me. I also think this could change the auto industry. If car companies are able to complete this project successfully, then auto companies could see a big increase in sales, leading to higher stock prices. I chose Ford specifically because I have followed them from time to time as a potential investment for the past couple of years. I thought it would be good to

look more in depth at the company to decide if purchase this stock would be a smart one or not.

Over the past couple of months, Ford has had a lot of great potential future news, while their immediate news has not been the best. For some of their potential as a company, Ford is partnering with Lyft to deploy self-driving cars by 2021. This could turn out to be extremely beneficial for the company for several reasons. First off, Lyft has had continued growth as of late with their emergence as a top competitor of Uber. Partnering with them at an early stage could be a terrific decision. Being able to use an app to order a ride has been something countless people have benefited from and enjoyed, and most see this trend continuing. In addition, the ability to have self-driving cars in 2021 could be outstanding for the company. It seems to be a race in the auto industry to come out with self-driving cars that will be safe and can function on the road. While Ford may not be the first company to have self-driving cars, coming in second may actually be used to their advantage. There have been some self-driving cars used for test runs, and even though most reports have been successful, there have been accidents reported that have really hurt the image in the public eye. Ford can learn from the mistakes other companies are making. They will be able to make adjustments and learn from their test runs. I learned about this in my marketing class of being second to the market.

Everyone thinks it is best to be first to the market, and while there are various benefits of being first to the market, there are some costs. Being first to the market requires you to do the extra research and incur expenditures from failing the first time. The self-driving cars have been a project that has now gone on over a decade, so there have been some sunk costs that have already happened. Ford can have the ability to sit back a little bit, as they have over the past

few years, and learn from what their competition is doing. Now they are in the position to accelerate their push for the self-driving cars after having the opportunity to learn from their competition. This situation needs to be followed because if they can successfully pull this project off, the company may see a large increase in sales.

On the other hand, Ford has had some issues over the past few months. They had to recall around 1.3 million trucks in the middle of October because of problems with their side door latches. Overall, this recall is going to cost them around \$267 million. This is obviously bad news for the company, but it is even worse that they had to recall over 5 million cars since 2016 for different latch issues. Even though the new problem is latch related, it is not the same problem as the other recalls, which could be good news meaning they hopefully solved the other issue. Ford's stock took a hit of .7% on the morning of the news. Trucks have been very important to their sales over the past year, so the recalls on trucks is probably the worst automobile to have an issue with. This type of news happens for companies in the auto industry, but for Ford, it seems to be happening too often. They need to find a way to stop having these issues happen and need to put a stop to them.

In November, Ford reported their October sales. Their sales numbers have dropped a little bit since last year at this time. While this is bad, it is even worse when you consider one of their competitors, General Motors, saw their sales go up 26.5% in the same time. For Ford's sales, they have seen their trucks selling at a much higher rate than their other offerings. More people are buying trucks, and this has led to an increase in their sales in that section. This is something the company has been focusing on and needs to continue to focus on because the trend of people and customers seem to be heading this way. This is why the news mentioned

above is worse than just a normal recall because it was related to their trucks. If people doubt their trucks, or if there is another recall related to their trucks, it could really damage their overall sales.

Finally, Ford has seen their sales in China suffering as of late. Ford has two joint ventures in China and they have not been having the best of sales. Sales have dropped 14% with the cars made in China, so this has to be a focus for the company. While the sales from the joint ventures have been bad, not all sales in China have been down. Ford produces cars in other countries as well, and they have been shipping their high performance cars to China. These sales have seen an increase in 38% for the year. This is terrific news if they can continue to see this growth for their high-performance cars, but their joint ventures need to be addressed. Overall, Ford has seen a decrease in sales in China of 5%. Their competition on the other hand has seen their sales increase. General Motors have seen their sales go up 2%, Toyota has seen their sales increase by 8.5%, and Honda has increased sales 17% in China over the same period. Ford is going to have to change what they are doing in China if they want to stay up with their competitors.

Company	Price	Dividend	Div Yield	P/E	EPS	PEG Ratio
Ford	11.84	0.6	5.07%	12.46	0.95	0.58
Toyota	120.63	3.93	3.26%	10.6	11.38	1.67
Hyundai	41.5	1.78	4.29%	6.62	6.26	1.96
Nissan	20.65	0.85	4.12%	6.73	3.07	1.82
VW	34.57	0.42	1.21%	9.07	3.81	0.64

When looking at the spreadsheet for Ford, there are a few things that stand out to me. First off, they are paying a dividend that is lower than their competition. The dividend isn't

close to Toyota, while it is in the same ballpark as Nissan and Volkswagen. When looking deeper into the dividend though, their dividend yield is actually great in comparison to their competition. If you were to take their dividend amount and divide it by their stock price, it is a higher percentage than all of their competition in the spreadsheet. This is important because it isn't completely fair to just say that a company like Toyota is paying a higher dividend than Ford so they are better in that category. In order to acquire the shares from Toyota, you would have to pay a lot more money in comparison for the same shares as Ford. So if the stock price were to equal, then Ford would be paying a better dividend if the percentages were to stay the same.

On the negative side, Ford has a bad EPS with respect to the rest of the market. They are significantly lower than each company and this is not a good sign for investors. They are not earning nearly enough money per each share that is outstanding. This is a red flag for me that the EPS is so much lower than the rest of the industry. Obviously one ratio can't make the decision on my investment, but I definitely have to take this into strong consideration when I will be making my final decision for this stock.

After doing my research and looking at the ratios, I would hold on Ford right now. I think the auto industry has some great potential in the near future with self-driving cars, but as of right now the auto industry isn't the best investment in my opinion. Companies have been decreasing how many cars and trucks they are selling because the demand is not there right now, but that should change soon. Looking at Ford specifically, they have not been posting the best numbers in comparison to their competition. They consistently were struggling with their numbers and news all over the world, which makes it difficult to feel confident with investing in them. In the future though, they have some room to grow with their partnership. I am

definitely going to continue to follow Ford because I think they are a stable company that has some growth potential in the next few years. If I were to buy this company soon, it would probably have to drop to a price of around \$11.75. The company has been stable over the past month around \$12, but I would not feel comfortable buying at that price now. Obviously, there is news that can come out that could make me change my price and opinion, but as of right now, that is where I would feel comfortable buying.

American Water Works Analysis

A second company I looked at was American Water Works. I have been following this company since my sophomore year of high school. My brother actually purchased this company around eight years ago on my request and sold his shares and made almost 100% return on the stock. The stock has gone from around \$20 when I first started looking at it to around \$90 on the given day. I believe the water industry is one that is going to continue to grow and the demand for water is going to increase greatly over the upcoming years. The population of the world continues to grow, and while there is a lot of water in the world, I think that people are going to realize it is limited. This is going to put a lot of pressure on the companies in the water industry to find a way to transform salt water to drinkable water effectively and efficiently, or focus on reusing wastewater and finding ways to clean it quickly and effectively. American Water Works is the biggest water company in the industry and that is why I wanted to do research on them to see if it would be a good investment. I already have purchased shares in another water company, but wanted to follow American Water Works closely for these few months to see what they are doing.

When I first started researching American Water Works for this project, they invested \$1.5 million for installation of 2,200 feet of new water main. They were using this investment to replace their old water main that had been in use for over 80 years. This news was good because this showed they were trying to get higher quality and service for their customers. That same day though, they came out with their dividend and the dividend price was not the best. It was a price that was lower than their competitors in comparison by percentage. Not only is a lower percentage negative news, their dividends got a score of 25 out of 100, which is said to be unsustainable. This could lead to an issue in the future if they are going to have to decrease the amount of dividends once or twice to lead to a more sustainable percentage. Dividends are cash flows that investors like seeing and a decrease in the amount they get may cause people to sell, which could drop the stock price. With the water industry growing, companies shouldn't be giving out many dividends and instead they should be investing that money back in their company.

In October, American Water Works received two awards for their innovation and service to their customers and communities. They have been working hard to find ways to use renewable energy to lower their energy costs. This is one way that AWK has changed how they are doing business. They are working hard to become more efficient and lower costs. One week later, Illinois Water invested \$12 million at East St. Louis water treatment plant. This plant is right next to the Mississippi River, which is obviously a huge source of water. The river does present some problems though for water companies. The water contains grit and sand, which makes it more difficult for the water to be used. The investment made by American Water Works is their way to try to find a solution to remove the grit and sand quickly. They are trying

to work ahead of the competition to find different sources of water that were not used as much in the past. People have used the Mississippi River before for water, but if they can use parts of the river and transform it to clean water quickly, they will see many benefits from it. This news of the investment, as a potential investor, is very important. It goes along with the awards that they got for trying to lower energy costs; just here, they are trying to work on their efficiency in a different way.

Finally, AWK reported their earnings per share for the quarter and they were \$1.08 per share, which was consistent with the estimate. Their earnings increased 2.9% so this was good news. When companies see their estimates come out, they obviously want to beat them. The overall goal though is to match the estimates at a minimum. The company also decreased their expenditures for the year in comparison to last year, dropping them by 17.2%. They were able to lower their operation and maintenance expenses. This shows that their goals are working of lowering the operation expenditures, and I expect this trend to continue of the company trying to find ways to decrease their operating expenses. This company didn't have as much news over the past few months, but they have focused greatly on their perception in the community. They really focus on giving back to the community and trying to look good in the public eye. This is very important for a company because people enjoy companies that are trying to do good overall.

Company	Price	P/E	EPS	Beta	1-Year Target	PEG Ratio
AWK	82.03	30.97	2.65	0.09	86.91	3.6
Suez	15.27	33.21	0.46	0.68	17.38	2.5
United utilities	860.5	13.55	63.5	0.3	949.79	17.19
Aqua America	33.75	25.76	1.31	0.29	35.33	3.92

After comparing the four companies, the one category that stands out is beta. Beta is looking at the volatility of the stock in comparison to the market. American Water Works has a very low beta, which shows they don't have much volatility in relation to the market. A beta of one shows that the company should move up and down on average with the market. If a company were to have a beta of negative one though, it would, on average, move in the exact opposite direction as the market. The beta for AWK is showing that they shouldn't move very much and could show some stability for the company. It is a positive outlook for the company and would be good to invest in.

When looking at this industry as a whole, I think there is a lot of room for growth. I have been a big fan of the water industry in my whole investing career, ever since I have started doing research. After seeing the one year target for the industry, it seems like the projections agree with me. Each company is supposed to see an increase in their price by a few dollars with the exception of United Utilities, which is supposed to increase by even more. This leads me to believe that there are a lot of investment opportunities in this industry in the future.

As of right now, I do not have a ton of intention to buy this company. I already have invested in the water industry and I would rather focus on diversifying first. This company has continued to do some great things over the past years I have followed them. I would not be scared to invest in this company if I were to sell my other investment, which may happen within the next few months. The only thing holding me back with investing in American Water Works is the diversification of a portfolio, but I may have to reevaluate that decision if I continue to believe in the water industry as a whole. There is not a specific price I would be willing to purchase this stock at. I think that if I were to sell my other stock I would like to see a stock

price closer to \$87. This stock has continued to grow and is at a high right now. I am not sure if their stock will decrease in price or just continue to grow through their highest marks, but in my opinion, I would feel more comfortable investing at \$87. If I were to invest in this company, it would be a long-term investment. American Water Works has shown continued growth over the past several years and have been making decisions that should help them maintain their status at the top water company.

Apple Analysis

The third company that I investigated was Apple. This is a company that everyone knows about and a company that I felt comfortable with. Apple is a very large company that has had tons of success over the past decade. I chose this company because of all of their success and, in my opinion, the continued success they are going to have. I believe that they will continue to come out with new products and continue to work on new elements of the iPhone to keep customers happy. In a world that keeps trying to work with technology to help their lifestyle, Apple will continue to be one of the first companies that come to mind.

While the Apple makes a lot of their money off the iPhone, they have many different products as well. In my opinion, they are going to have to pursue other avenues of revenue because there will become a day where they can't make any more significant updates to the iPhone to get people to buy it right away. Because of this, they have come out with a new smart speaker called the Apple HomePod. This product has been out for a little bit, but the bigger news is that Google is trying to work on a smart speaker as well. The competition should lead to Apple possibly responding with a new product or updating theirs. The speaker market is not

nearly as big as the phone market, but the extra competition is probably going to lead to a little loss of revenue for the company and it is worth monitoring if Apple responds with anything regarding the speakers. If Google is investing money in this industry, there is a chance they see a potential for growth. This is a minor market to monitor to see if anything significant happens in the future.

Another market that Apple is pursuing is the augmented reality glasses. Apple already came out and said they are not going to be the first to come to market. I already talked about some advantages of coming second to the market above, but CEO Tim Cook has said they want the product to have Apple quality when they come out with it. This market is very intriguing because people are saying this market has the chance to explode a little bit. Amazon has already come out and said they are trying to produce a similar product. It would not be surprising if Amazon was first to market of the major suppliers with Apple following in after them. Amazon is a company that has continued to spend and is trying to get into more markets so they may turn out to be tough competition for Apple. Technology is continuing to grow, and if the next new part of technology is in glasses, then this might be a great time to jump in on Apple when the stock is trading for “cheaper” than it may be in the next few months or years.

Finally, the big news for Apple in the past few months is them coming out with their iPhoneX. This phone has taken the phone industry by storm and is selling for an extreme price of \$999. The preorders came out and within 15 minutes people were informed their orders would be backordered by a few weeks. There is so much demand for the phone there is no way Apple can keep up with it and supply it for everyone all at once. This is perfect for them though because they can keep an extremely high price, which they have done, and make a lot of profit

for each phone they sell. A few people were able to have the phone at the time of the preorders, and all reviews have been great so far. Even though the phone is so expensive, people are saying that it is worth the price. Their new big feature is the face identifier that allows you to unlock your phone with your face. It will be interesting to see if people have problems opening their phone at all or if the face recognition is not good enough. Almost all people have sensitive and protective information in their phone, so if people are able to break in using the face identifier that will be a major issue. The holidays are right around the corner and I think there will be a lot of kids and parents hoping to find an iPhoneX under the tree. Apple is expecting sales to increase in these last few months of the year for with the release of the new phone.

The final article I read was talking about the cost to make the iPhoneX. The materials are the most expensive compared to all the other phones they have made. The bill of materials is \$370.25, which is \$115 more expensive than the iPhone8 and \$132 more expensive than the iPhone7. They have made some significant changes to the iPhone so this increase in price is not surprising. The one part that can be a little surprising though is the significance in increase. The iPhone8 and iPhone7 only had a \$17 difference, while the jump in price is \$115 for the iPhoneX. The screen is \$70 more for the iPhoneX. This is going to lead to very expensive repairs for people. To repair the screen it would cost you \$279 out of warranty, where it used to cost \$169 for the previous iPhones. They have said the products are made to be used and not to be serviced. This is showing that once the phone breaks, there are going to be some significant expenses to repair it. This is going to be interesting to follow and see if people start to reconsider buying the product due to the initial cost and the future repair costs if anything were

to happen to the phone. Apple could have the ability to sell more cases as a protective measure with the costs of breaking or damaging the phone. This is something to follow to see if there are more cases sold compared to previous phones due to the significant future expenses that would have to be incurred.

Company	Price	P/E	EPS	Beta	PEG Ratio
Apple	151.89	17.24	8.81	1.43	1.44
Samsung	2100	11.2	185.38	0.69	1.2
Google	928.53	33.65	27.59	0.98	1.7
Sony	37.5	39.72	0.94	2.01	2.99

As talked about with American Water Works, Apple has a beta that is worth looking at. In comparison to American Water Works, Apple's beta is almost the opposite as it is more volatile than the market. Within the industry, Apple has a beta that is average. The industry as a whole though, is more volatile than the market, which comes as no surprise to me. Being in the technology market, it makes sense that the companies are a little more sensitive. When there is good news coming out or an invention, it is the expectation that the price will go up at a faster rate than the market or other companies. It isn't as stable of a market and the industry hasn't been around as long, so this is something that has to be looked at when thinking of investing in one of these companies.

As of right now, I think I missed my chance to buy Apple because the iPhoneX has already came out. I think I could have been able to purchase in October then I could have had the opportunity to see some profit from the iPhone sales. The only issue is the price of Apple, which limits how many shares I can buy. Obviously, I will be on a budget with how much I can invest and I do not really want to buy only ten shares. I may have to reconsider if some of their

additional products continue to surface and the iPhoneX sales are great. Apple has been close to their highest stock price in the past year, so I may want to wait a little bit to make a purchase. I think waiting six months and seeing if the stock falls closer to \$155 or \$160 would be the best option for me.

Citigroup Analysis

The last company I looked at was Citigroup. Citigroup is a multinational banking firm. My family has invested in this company at multiple prices and has done extremely well with their returns. I wanted to look more into this company because the banking industry could be seeing an increase in their prices in the near future. The outlook so far about the industry is positive with the new president in office. Over the past few months, Citigroup has seen their name in a lot of public news articles about how they would be a great stock to purchase. This company is very intriguing to me and I hope it is not too late for me to make a purchase on their stock.

To begin with, Citigroup has been the hot topic on many stock talk shows. One of the shows I watch is Fast Money, and they were quoted saying that Citigroup is going to see their stock price jump to \$100 in the next year or two. At the time of the article, that would be a jump of \$27, and right now it would still be a price jump of around \$24. Obviously this is great news that they are confident in the stock, but the reporting could also encourage more purchases. Some people make their investment decisions based on these experts telling them what to purchase. So if they keep talking about how Citigroup is going to keep seeing an increase in price, then the demand should in fact increase. This is not always the case, but their name has been mentioned by almost every investment website and show that I have seen over

the past few months as a company to invest in. This may be the next company I look to add to my portfolio, especially if the shows continue to talk up the company and their financials are still strong.

Later on, Citigroup announce a dividend of \$0.32 per share that was paid out in the beginning of November. This is great news to help shareholders get some of their investment back and get some cash flow. Additionally, Citigroup reported their earnings late last week, and while the report was good their stock price fell. The earnings were still a good report, so the stock price may have fell due to other news either in the company, industry, or world in general. Not every article that comes out will directly impact the stock price of the firm. Each article though talks about how experts love the financial companies and think they are undervalued. The banking industry is one that is projected to see some growth over the next year and all of the experts are trying to get people to buy in before the large price increase. With the decrease in stock price last week, now may be a great time to potentially buy some shares.

In November, Citigroup came out with an article talking about some revenue they are going to receive. Citigroup is expecting to receive pretax \$150 million for the sale of Hilton Cards portfolio. The partnership is going to be done with at the end of the year, but that is not before Citigroup is going to make some money. It will be interesting to see what Citigroup is going to do with this large amount of money they are going to get from this partnership. One thought is that they are going to try and invest more in their overseas operation. They are currently trying to make a big impact in Australia by hiring 100 wealth advisors over the next three years. Their goal is to triple the number of wealthy customers in the country. I don't think

it will cost them \$150 million to invest in 100 wealth advisors, so it will be worth following to see what the company decides to do with the rest of the money.

Finally, the last article I read about was talking about President Trump. The article started off by talking about the potential growth of banks again, something that has been very constant and consistent over the past few months. The reason President Trump was mentioned was because of his new tax plan that he is trying to put in. The tax code is supposed to drop corporate tax greatly, which would help banks keep more of their gross profits. The banks have seen their stock price go down recently though because of the uncertainty of the plan.

Whenever there is uncertainty in the market or industry, people tend to stop investing. They don't like investing in companies when they don't know what is going to happen. In this case, the tax plan could completely change how much the banks are keeping after they pay taxes.

Because of this, it could be a great time to potentially buy if I believe the tax plan is going to go through. We saw President Trump struggle with the health care plan and how complex it truly is, so right now there is some uncertainty. I think there will have to be some adjustments made in the plan in order for it to be pushed through the house and the senate, but I am hoping they can figure it out. I think this could be the time to buy in hopes the plan goes through and banks see the large increase in their profit holdings.

Company	Price	Dividend	Div Yield	P/E	EPS	Beta	1-Year Target	PEG Ratio
Citigroup	71.4	0.8	1.12%	14.29	4.99	1.63	73.16	1.5
JPMorgan	94.83	2	2.11%	13.99	6.78	1.24	95.12	1.88
Wells Fargo	54.25	1.56	2.88%	13.36	4.06	1	57.83	1.24
Bank of Am.	25.02	0.48	1.92%	14.9	1.68	1.61	26.98	1.82

When looking at the ratios, Citigroup is pretty consistent and comparable to the rest of the industry. The whole industry is very similar in a lot of the different ratios I looked at. When looking at the one year target, I was not surprised to see that each stock was expected to increase. Given all of the readings I have done this semester, each article talks about the banking industry having a good next year or two, especially with President Trump trying to change the tax plan. I was a little surprised at how little Citigroup was projected to increase though in their price. A lot of articles and news shows talked about seeing Citigroup close to \$100 per share in the next year. But this stock preview showed only a few dollar increases in the stock. I believe that the price will continue to rise and probably will beat the expected one year target.

Because each ratio was very similar within the industry, I don't think I can look at one ratio just for Citigroup and point it out. I think the industry is strong and will continue to do well. I don't think there are any red flags within the ratios that will cause me to be scared to invest or for me to jump in right away because I think there is a mispricing. I am thinking that I would like to purchase this company by the end of the year potentially. This company looks good and their ratios are strong. All of the news coming out about the company is showing that the stock should increase in price. Take that news and combine it with the dividend the company issues and I think this would be a great addition for me in my portfolio.

Conclusion

I have learned a lot about the stock market from this project. It has given me the opportunity to follow specific companies and learn about what decisions they are making. The

project also gave me the opportunity to set up a spreadsheet with important ratios that I will be able to use in the future. One key lesson that I have learned is that even though I research a company for a while, it does not mean it is the correct company to invest in. I need to be patient with my money and my decisions and make sure to invest in smart companies. Just because I have invested a lot of time looking into one company, does not guarantee there is a price that I would like to pay to own part of the company. In my project, you can look at Ford for example. This company has been around for a very long time and I have followed for a few months with high intensity and have monitored for a few years. Just because I have put in this much work to learn about the company does not mean that I should be putting money toward them. This is a lesson that should save me money down the road so that I am not pressured to invest my money given that I have put in a lot of time and effort to learn about the company.

Another thing I learned was to understand what makes the company money and the power of cash. Many of the big companies have different products that earn them money. If we look at Apple, they have several products that they make money from. Not only do they have the iPhones and iPads, they also make money off the accessories of these products. However, when doing more research, I learned that Apple makes a lot of their money off the iPhones. So while the other products they work with can make them money and are very important, it is even more critical to research how their main product is doing. With the release of the iPhoneX, the revenue generated from that will be crucial to the company. They are relying on those sales to carry this company. If the iPhoneX does poorly but their other products do well, Apple is still going to struggle overall and probably miss their numbers for the quarter or year. In addition, it is important to look at how much cash a company has and how they spend their cash. If a

company were holding onto lots of cash, more than normal, than one would have to think a large investment is happening. They could be investing in a new product that will cost them a lot of money with research and space and capital. Alternatively, they could possibly be trying to buy another company. This type of information would be important to know because it could have a huge impact on a company. If the company you are investing in is going to buy another company, it is probably a major event. This will affect the stock price, either good or bad. Obviously, you would like this to help the company, but people have seen that not all mergers go as planned and not all buyouts are the best decision. There can be some hints of these decisions before they are public news, and one main area to research this is in the cash department.

As of today, I have already invested in two companies. One of the companies I looked at as a straight dividend play that I will be holding onto for a while and the other is a combination of a growth stock as well as dividend play. I value the power of dividends because of the constant revenue that the stock can generate. It is very conservative for the beginning of my portfolio, but I believe that it is a smart strategy for me at the start. I do not have a ton of investing money as of right now without working too much, so I do not want to invest in extremely risky stocks at the start. I think as time goes on, I will look to build a portfolio with a few more risky stocks that have potential for more growth. That is one aspect of the concept of diversification of having a portfolio with a wide range of risk. In addition, I am going to have to look into a few different markets as I have done in the project. I am a big fan of the water market and think that the market will continue to grow. Even though I am confident in that theory and industry, I cannot invest all of my money in water stocks. If the water market for

some reason were to struggle or take a hit, then I would be losing many of my investments, something I would not enjoy doing. I need to carry with me some of these different learning and ideas that I have been able to discover over the past few months. I need to be able to think long-term with my money, something that I have not needed to do for a while. I have always been very good at saving money, but with a lot more expenditures coming my way with graduating college and moving on to the real world, I am going to need to be able to invest in companies that may not pay off for a few years. I am going to be living at home for the first few years after college, so the major expenditures are going to be hitting me then. I am expecting that I will have to cash out some of my investments at that time, so that needs to be going through my head. I think this project has allowed me to learn many potential mistakes I could make in the market and that is something that I was hoping it would do. I have learned different items to look at for a company and what news is interpreted with high importance and what news is not nearly as impactful. This project has potentially and hopefully saved me lots of money from many potentially bad mistakes. I have learned a lot of information I plan to carry with me the rest of my life and hope to put to good use.

Appendix

	Price	Dividend	Div Yield	P/E	EPS	Beta	1y Target	NI	PEG Ratio
Apple	151.89	2.52	1.66%	17.24	8.81	1.43	172.69	46,651	1.44
Samsung	2100	25.45	1.21%	11.2	185.38	0.69	N/A	29,614,445	1.2
Google	928.53	N/A	N/A	33.65	27.59	0.98	1053	19,334	1.7
Sony	37.5	0.18	0.48%	39.72	0.94	2.01	46.97	132,994	2.99
Citigroup	71.4	0.8	1.12%	14.29	4.99	1.63	73.16	15,375	1.5
JPMorgan	94.83	2	2.11%	13.99	6.78	1.24	95.12	26,490	1.88
Wells Fargo	54.25	1.56	2.88%	13.36	4.06	1	57.83	22,185	1.24
Bank of Am.	25.02	0.48	1.92%	14.9	1.68	1.61	26.98	19,776	1.82
AWK	82.03	1.66	2.02%	30.97	2.65	0.09	86.91	14,581	3.6
Suez	15.27	0.72	4.72%	33.21	0.46	0.68	17.38	10,977	2.5
United utilities Aqua America	860.5	0.5	0.06%	13.55	63.5	0.3	949.79	7,937	17.19
	33.75	0.82	2.43%	25.76	1.31	0.29	35.33	5,949	3.92
Ford	11.84	0.6	5.07%	12.46	0.95	1.37	11.91	3,803	0.58
Toyota	120.63	3.93	3.26%	10.6	11.38	0.73	110.53	1,891,700	1.67
Hyundai	41.5	1.78	4.29%	6.62	6.26	0.93	N/A	4,208,889	1.96
Nissan	20.65	0.85	4.12%	6.73	3.07	1.08	21.79	662,038	1.82
VW	34.57	0.42	1.21%	9.07	3.81	1.58	27.02	8,386	0.64

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