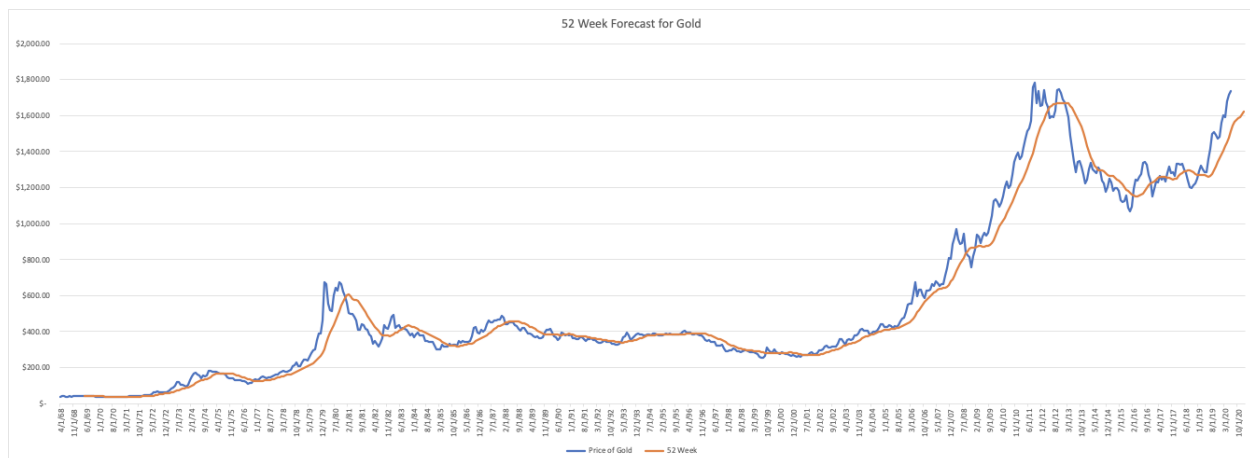
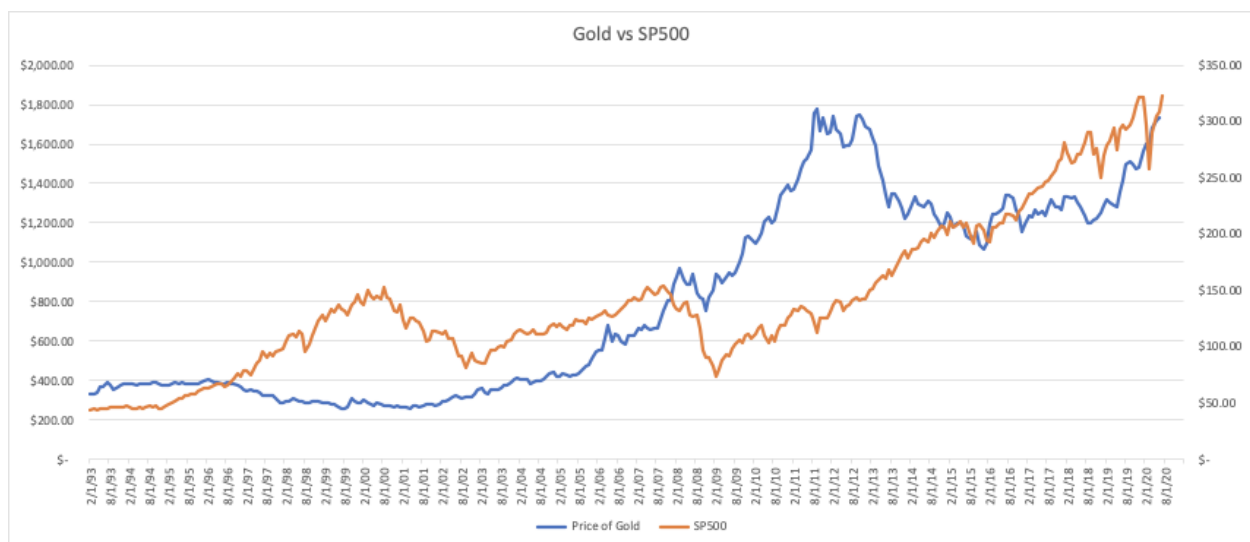
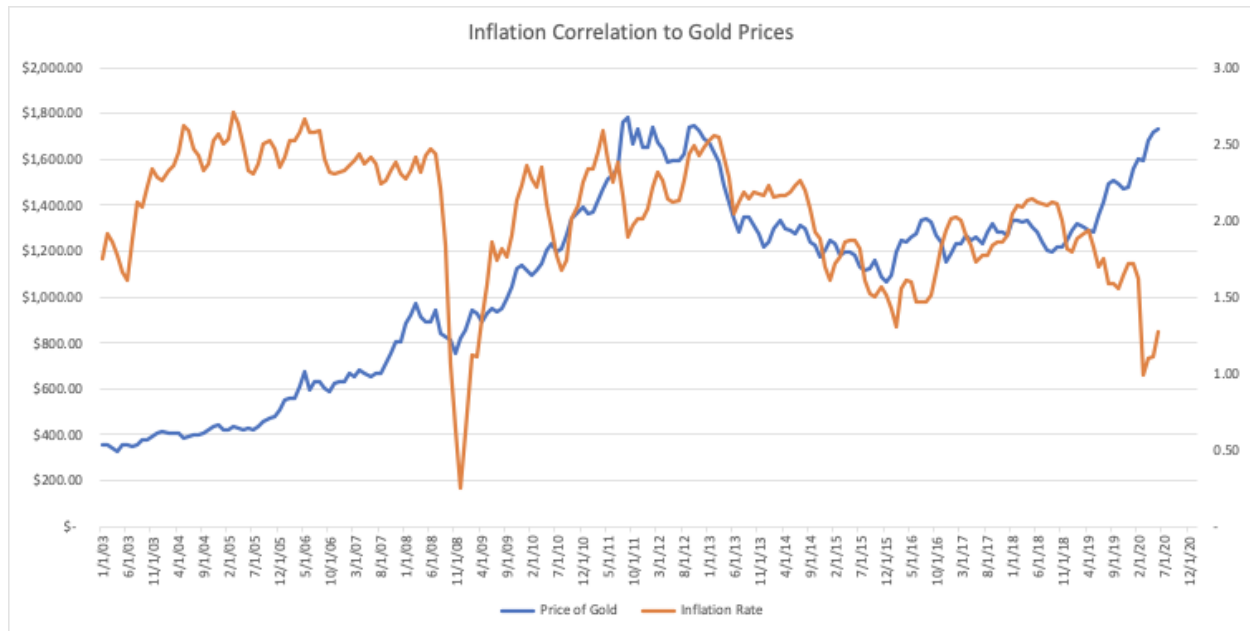


## Quant Analysis



This model depicts a 52 week moving average alongside the price movement of the SP500. After giving this model a forecast error it shows an 8% error through the mean absolute percent error. When using mean absolute deviation to predict error it shows that the mean deviates by \$15.84. The mean squared error shows an error range \$42.37. This model forecasts the movement of the SP500 to remain stagnant over the next 6 months. It predicts that for the average price of the stock for July will be \$301 and will move to \$302 during August. SPY will then sit on \$303 from September until the end of November. After this it shows a decline to \$299 by January 1st.



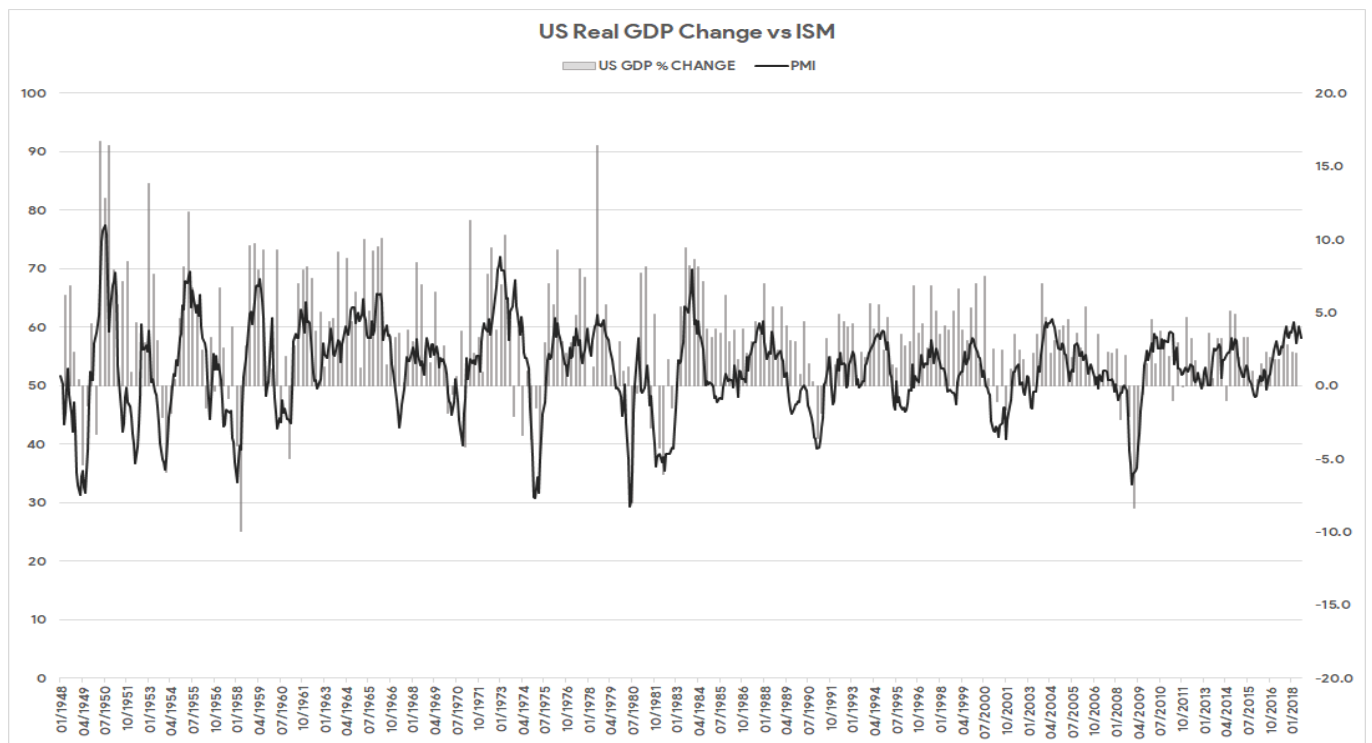


The price of gold is currently sitting at \$1734.03. This is nearly close to the all time high of \$1780 during September 2011. Notice that for this high to occur there was a dip in inflation. When inflation is relatively high the price of gold is very low and when inflation is low the price of gold soars. The 52 week forecast model shows that gold prices will continue to increase. This model has a 10% error. However, if inflation continues to grow over the next few weeks there will be a reversal and gold prices will decline. Gold has a 66 percent correlation to the SP500 and this chart shows selected moments where the price of gold can dictate movement in the SP500.

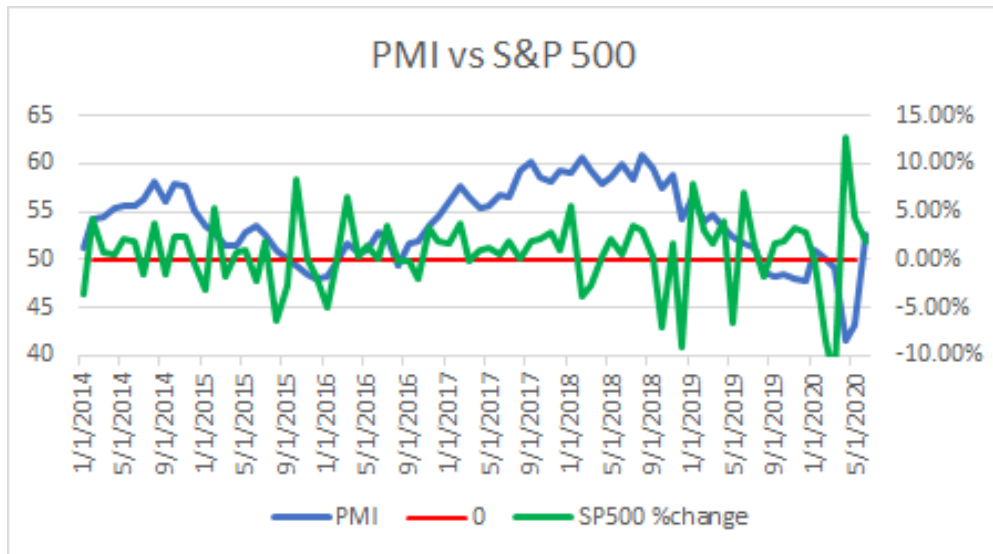
### ISM Manufacturing Report on Business

One important indicator of the US economy is the ISM index that interviews 300 purchasing managers across the country to get a better picture of the economy, its health and direction:

When analyzing this metric, it is important to use trends as an indicator of where the economy is going. Values above 50 indicate economic expansion and values below 50 represent contraction. This measure is reflective of overall US GDP performance, as seen in the below chart:



It is clear in this chart that PMI values under 50 are highly correlated with recessionary periods. More importantly are the trends in PMI that might be indicative of future economic performance.



The relationship between PMI and the actual stock market appears to be less clear, although there are various trends that can be observed.

Positive, increasing PMI values generally reflect positive performance in the stock market.

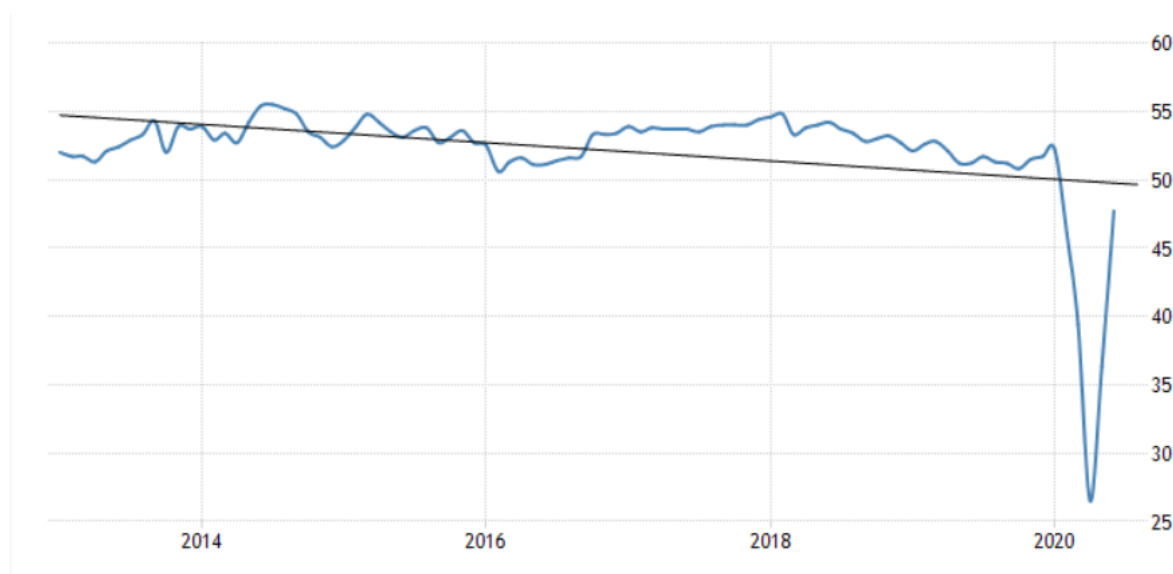
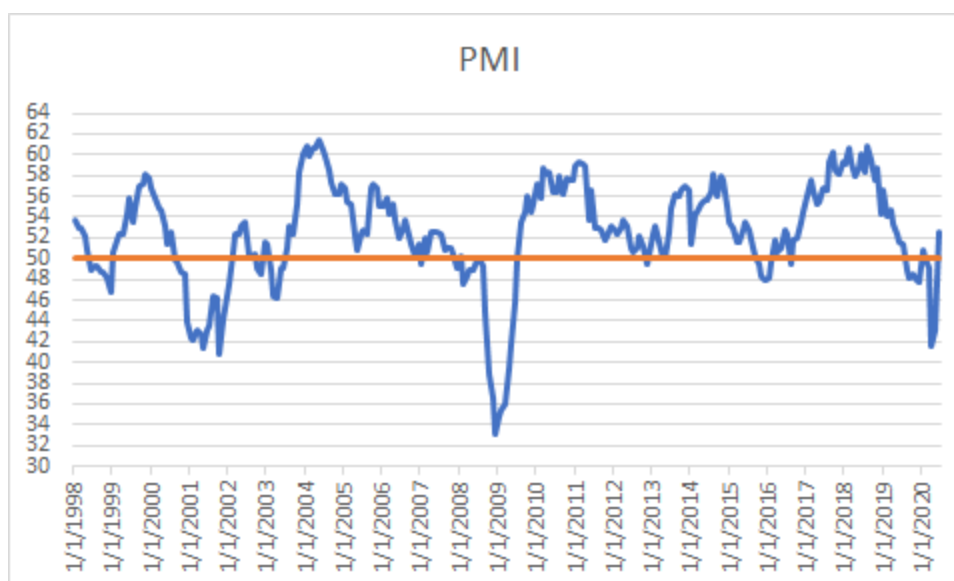
A trend of decreasing PMI values indicate more volatility in the market, including more negative periods. (negative outlook)

If PMI values are in a decline, a slowing of its rate of change is generally indicative of upcoming positive market performance.

We can see that prior to COVID-19, PMI values were already in a decline, corresponding to volatile swings in the market itself. By the end of 2019 and into 2020, however, this trend appeared to slow. PMI actually rose above 50 in January both January and February, perhaps indicating a reversal in the PMI declines, and in the economy itself. Whatever manufacturing recovery that was occurring was quickly wiped out by the pandemic, plunging the PMI to a low of 41.5. The most recent measure, at 54.6, is a good sign regarding the recovery of the economy. It indicates an increase of orders, production, inventory, and consumption related to economic reopening throughout the US.

However, the trend of the index prior to COVID-19 is worrying. From the declining PMI values, especially those that decline past 50, we see that recessions have often been the result. In our current case, we have seen a sharp increase in PMI, reflective of not underlying economic well being, but rather supported by an economic recovery from a pandemic. In general, the stock market recovery from the COVID-19 crash has been relatively quick. As a leading indicator,

markets have appeared to price in what investors hope will be a 'V' shaped recovery, with unemployment and income loss being temporary. However this recovery, back to pre-corona levels, doesn't ultimately address the economic weaknesses and overvaluation of the market that we saw prior to the crash, as the S&P500 and Dow have both recovered much of their 2020 loss.



Here is a similar measure, **JPMorgan's Global Manufacturing PMI**, which tells a similar story to ISM's PMI, that is a declining trend as well as a sharp decline in April of 2020 before recovering slightly (although still below 50). This is an indication of a generally negative outlook with a potentially quick recovery.

## Report on the Actions of the Fed (Adapted from Addison's work and the Debt Cycle Project)

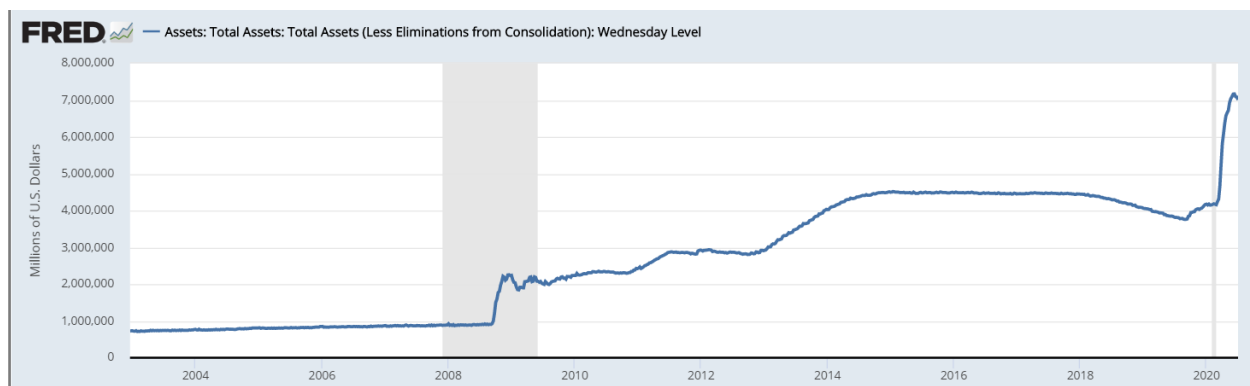
- Analysis of the Fed's balance sheet
- How has the Fed increased liquidity
- What has the Fed indicated about future events

It is in my opinion (Eric) that the most important influence on the market will be the actions of the Fed (and the government, to a perhaps lesser extent). Much of the market recovery has been driven by increased liquidity from the Fed and government incentives including expanded unemployment and stimulus checks.

*The Fed's actions to increase liquidity and credit in the economy:*

- Increased the purchases of debt (bonds), both government and corporate
- The Fed relaunched MMLF (Money Market Mutual Fund Liquidity Facility)
- Increased overnight repo operations, increasing short-term liquidity
- Loans to companies, banks, and small-businesses (buying bonds, etc)

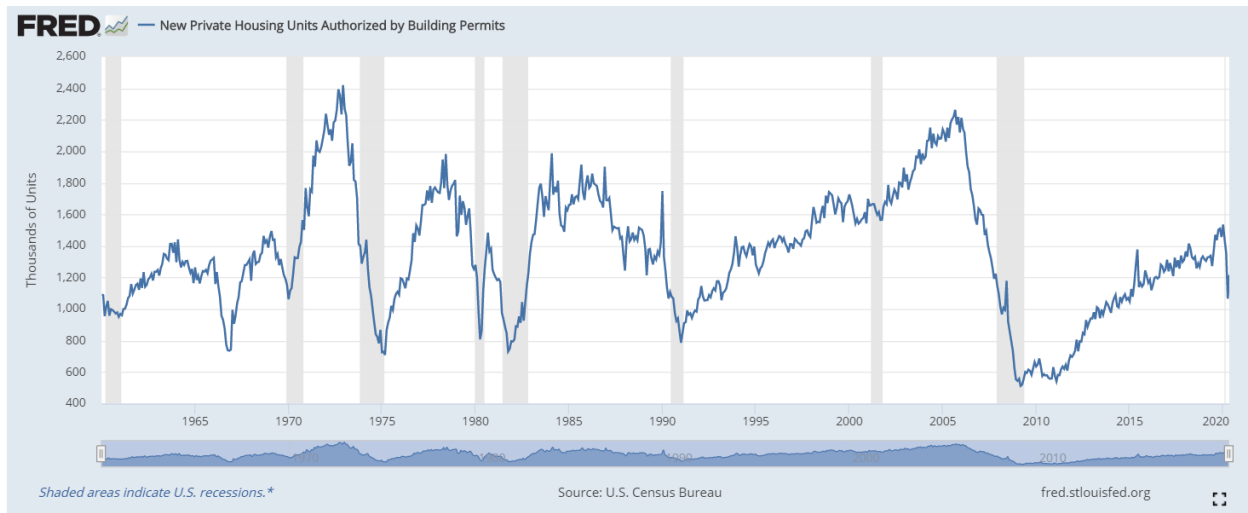
The continuation of this liquidity and security for investors and corporations will be important to the performance of the market moving forward. Powell said *"We are deploying these lending powers to an unprecedented extent [and] ... will continue to use these powers forcefully, proactively, and aggressively until we are confident that we are solidly on the road to recovery,"* regarding the actions that the Fed has taken. In June, they announced they would begin to increase Treasury purchases to \$80 billion a month following a decline in purchases in the months of April and June. The Fed's balance sheet has exploded over the past three months, as we can see in the chart below:



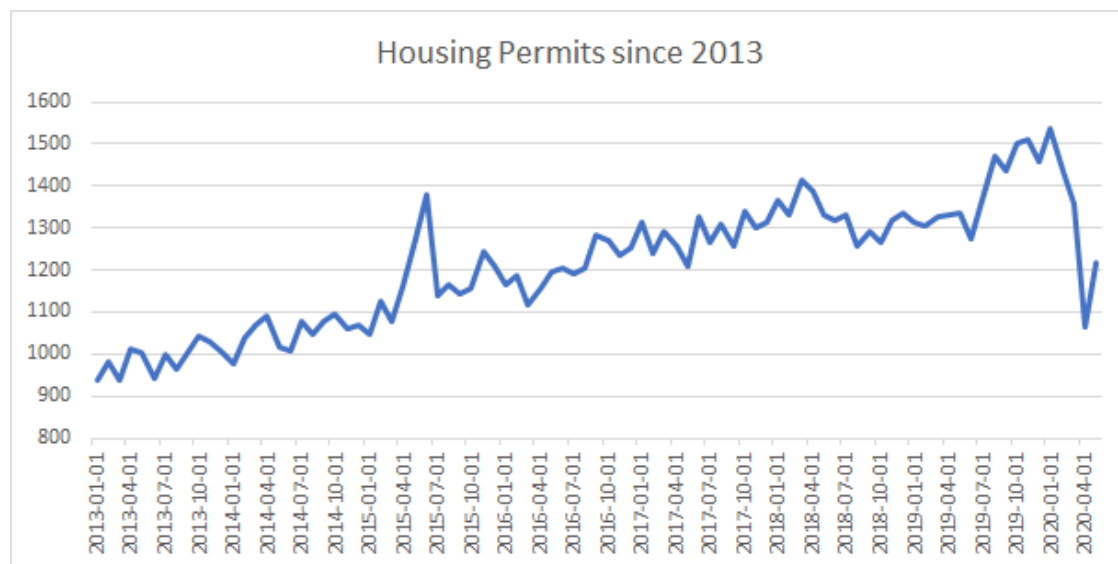
This graph reflects the policy of quantitative easing that the Fed first implemented in response to the Great Recession, and one that they have again turned to in response to COVID-19, wherein the balance sheet of the Fed increases exponentially during recession. Because of how intertwined the market is in relation to the Fed, changes in policy can have rippling effects across the stock market. Quantitative easing, and the Fed's willingness to turn to it, has made investors begin to factor in expectations of high amounts of liquidity from the Fed. For example in 2018, Powell's comments that he expects the Fed to reduce its balance sheet (by letting more bonds to mature than the amount being bought) led to market turmoil and Powell walked back those statements soon after, relieving market concerns and reversing market losses. In the long-run, quantitative easing may have negative effects on the economy, but I do not believe that the markets in the next 3 to 6 months will be affected by the underlying concerns of QE.

Powell has shown a willingness to stretch the powers of the Fed to keep markets afloat in times of turmoil. Based on prior actions, it is clear that he understands the importance of the Fed's role in providing liquidity to the market and the Fed's actions in response to COVID have proven that they are willing to take quick, decisive measures to stem economic turmoil and keep the markets afloat. With increasing cases and the lack of a vaccine, a full economic recovery appears far-off and I believe that the Fed will continue to keep interest rates low and provide liquidity to the market through the next 3-6 months, especially knowing the fragility of the market and uncertainty of the economy. This will provide key support for an economic and market recovery, especially as government benefits begin to expire.

## **Building Permits**

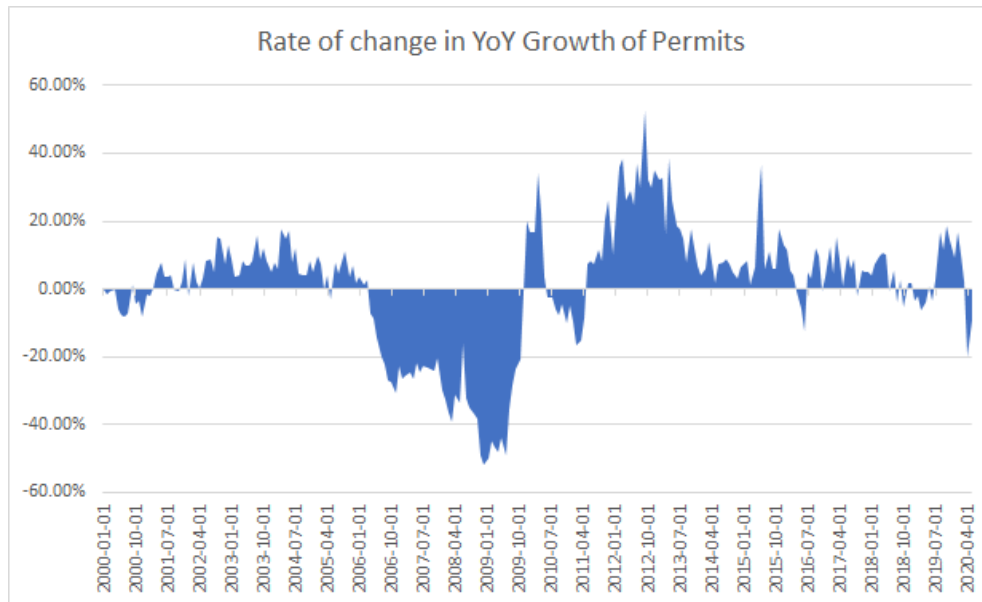


From the above graph, we can see how a decline in building permits have often preceded a recession (gray areas) so let's take a look at analyzing building permit trends prior to the coronavirus outbreak.

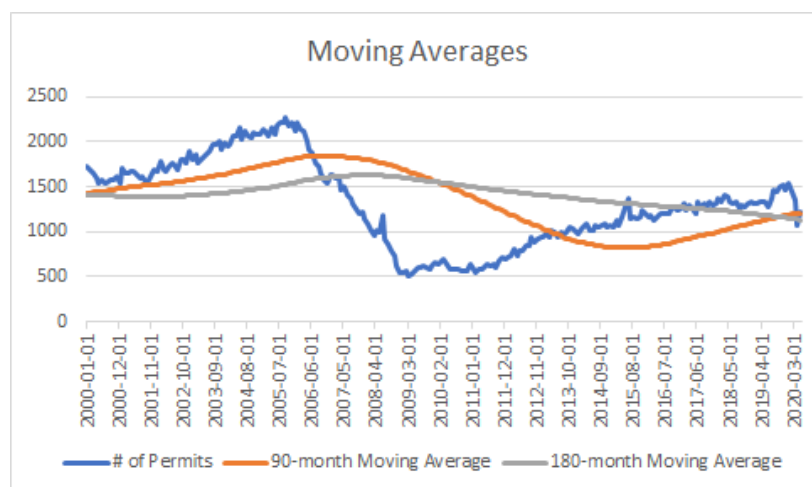


Looking at the past 7 years, we can see that following the Great Recession, the number of housing permits issued has been on an upward trend, at least prior to COVID. Since building permits cost money, and since people are more likely to build houses when they are doing well financially, looking at the trend in housing permits can be very informative as to how well individuals are doing economically. It is also reflective of banks' ability to give out loans and of available credit in the market. Prior to COVID, housing permits have trended upwards, indicating a bullish sign for the economy and by extension, the stock market.

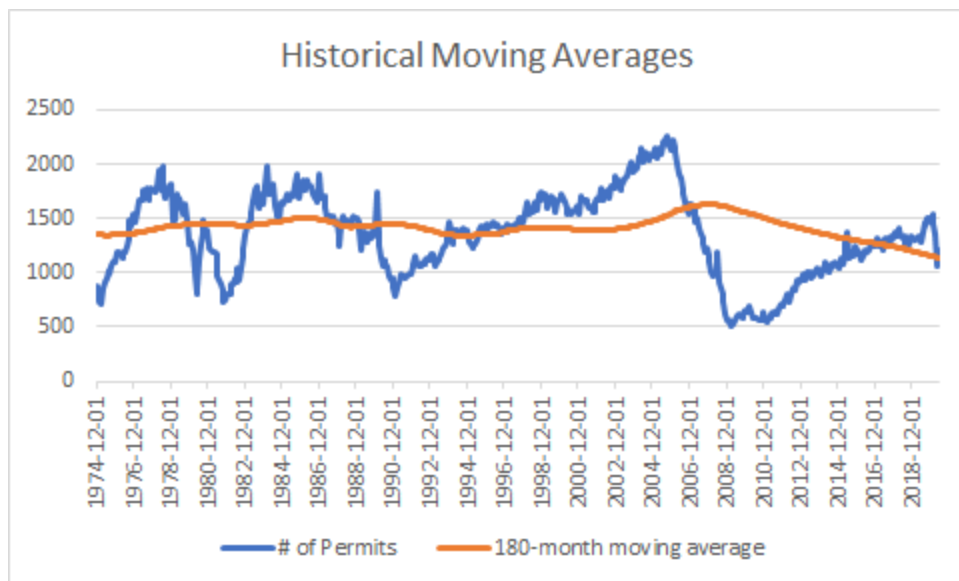




Above is a graph illustrating the YoY change in the growth of building permits being issued. 2019 appeared to be a strong comeback year, following a slow down in growth in 2018 and this is a good sign, albeit the slow downward trend of growth over the past 8 years may be a little concerning. Growth, however, was still positive prior to COVID. With flush credit and cheap interest rates, I expect the amount of building permits to return to pre-COVID levels by the end of the year, at the very latest. Overall, the analysis of building permits and its trends indicates that prior to COVID, the US economy was performing fairly well, seeing strong increases in building permits in 2019. Generally, despite a weak 2018, housing permits have increased at a steady rate, at an average rate of 0.41% since 2014, eclipsing the historical average growth of 0.20%.



The # of permits issued prior to COVID had crossed above the 180-month Moving Average line and may see a correction in the near future. Compared to historical averages, however, I don't think it would've caused the imminent crash in the number of building permits issued. Using historical data, it may be possible to determine the extent to which Americans can continue to build new units, without stretching their finances and the financial credit system too thin. I don't think we are quite there yet.



## Technical Analysis

While a technical analysis may not be most conducive to a long term market outlook, I think it is important to take a look at regardless.

### S&P500

I had Sahib do some additional analysis, which can be found [here](#).

Chart:



Over the past 10 years, the S&P 500 has been on a clear upward trend and a 'V'-shaped recovery has continued this trend. We see a long term resistance level at the 200-day moving average, which is currently at \$270. In comparison to this long term-outlook, the next 3-6 months will not be greatly affected by these long term trends.



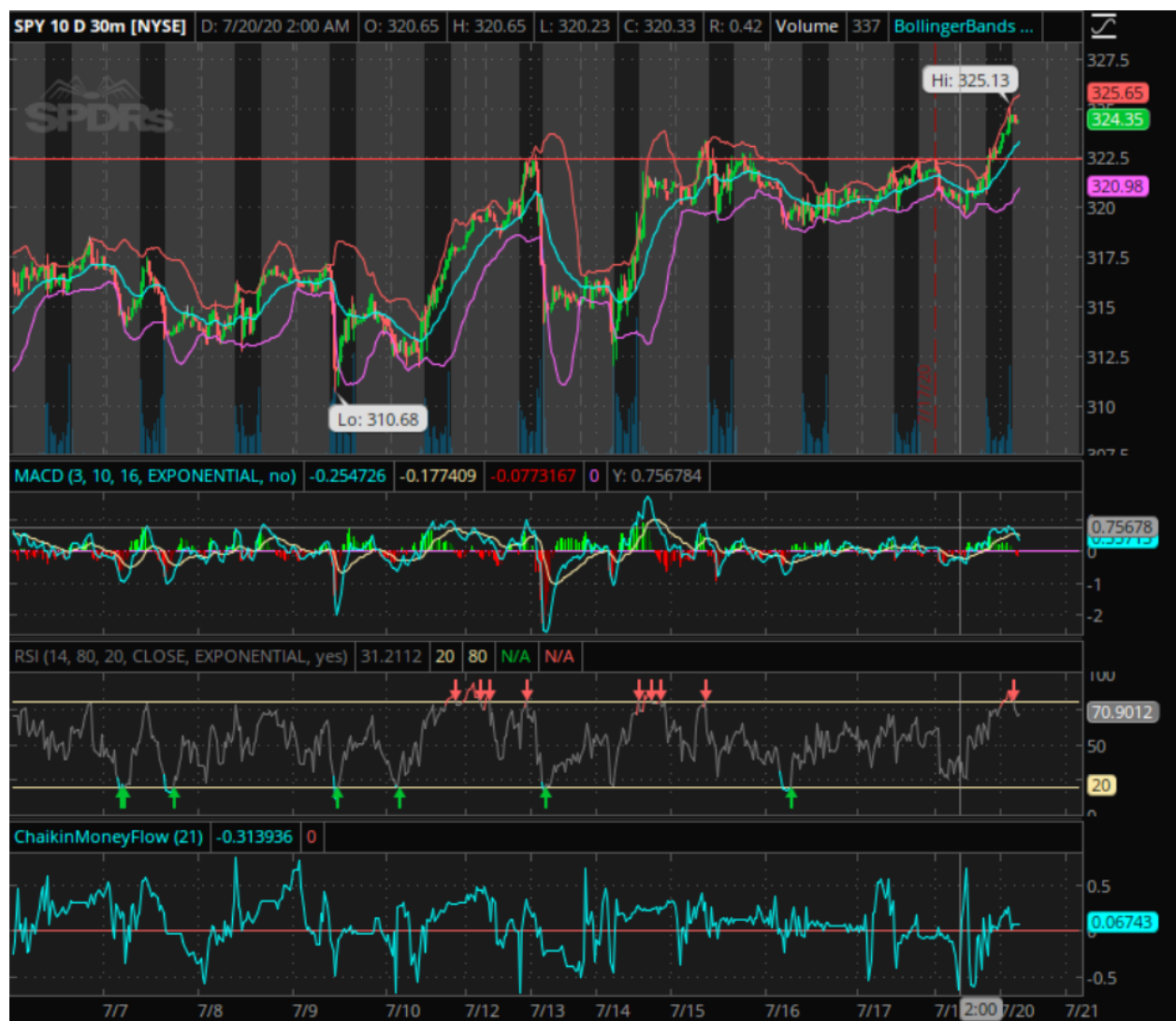
Zooming in, we see that the sharp recovery following the COVID crash is beginning to slow, as it is growing at a pace closer to the 200-day SMA. I have identified three resistance levels that

may be relevant to a medium-term analysis. It appears that one resistance level is at about \$322, while the lower support level is at about \$292. An established break past either one of these levels would project a bullish/bearish signal for the coming months. Currently, the market is leaning bullish but less so than the immediate months following the crash. The future of the market will be heavily influenced by macroeconomic indicators and expectations for economic recovery, but we can use technicals to support macro observations.



On the SPY 4-hour chart, we see strong resistance levels at \$322.25, tested early June and over the past week. If we see a break past this level, it may be a bullish sign towards the pre-corona high of \$339, where I expect another resistance level. The market as a whole has been driven by strong performance in the tech sector, which appears to be in a particularly severe bubble, however. The non-financial NASDAQ has outpaced both the larger S&P500 and

the DJIX over the past 3 months. Since March 23, the NASDAQ has returned 53.09% compared to 44.35% for the S&P500 and 43.49% for the Dow. The previous resistance level for the S&P 500 was tested twice before a breakout (and retested afterwards, as a support level). Whether or not a breakout is poised to happen will depend on upcoming earnings, particularly in tech. If companies report poorer earnings than expected, we can see a drop from the current resistance level down towards support at \$299. Until then, flat trading should be expected, especially taking into account economic uncertainty due to COVID. On this chart, the MACD indicates flat trading with no buy/sell signal. The RSI at 59 indicates markets being slightly overbought, but no strong signal there, either. The Chaikin money flow also shows flat trading and no signals either which way.



Just today, the SPY broke its resistance level on a strong rally by the tech sector. This is a bullish sign heading into earnings season and I think the market will rally the next week or so. This may be aided by Congressional passage of another stimulus package, including more relief for individuals or businesses. The Fed has continued to make liquidity and credit easily accessible, which has propped up the market thus far.

## Economic Outlook

As we learned in our debt cycle project, the most important part of the debt cycle and our economy is spending. If people don't spend then, this will cause a rippling effect that causes further economic contraction. In order to forecast how the market will perform in the next three months, it is important to see how spending has recovered and on what people tend to spend.

### Unemployment

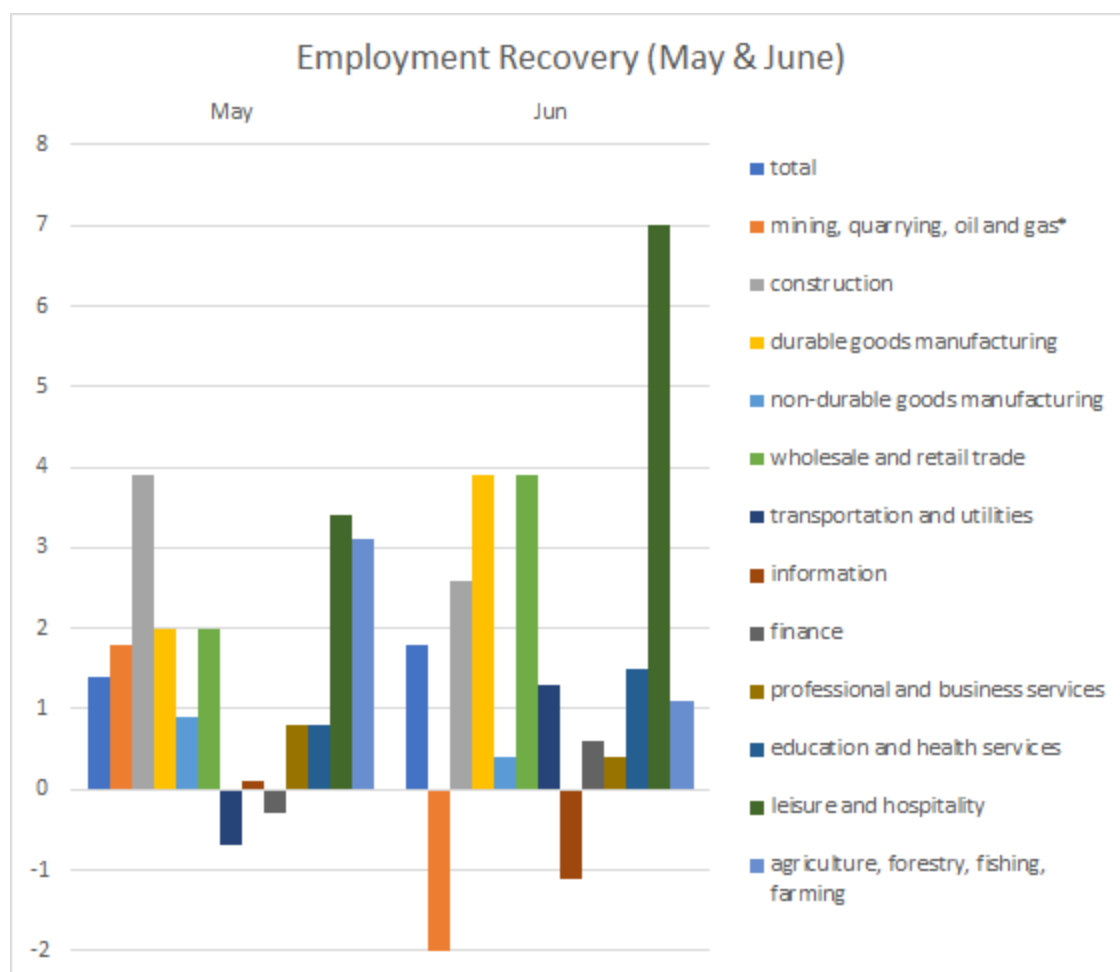
	unemployment rate	change %
2020-02-01	3.5	
2020-03-01	4.4	25.7%
2020-04-01	14.7	234.1%
2020-05-01	13.3	-9.5%
2020-06-01	11.1	-16.5%

These levels have not been seen since the Great Depression, but may in fact be understated, as it doesn't account for a decline in labor force participation numbers and the numbers in April and May may not have reflected accurate numbers because of mistakes with counting those who were temporarily unemployed due to COVID. The decline in unemployment comes as states and businesses reopen, but this number represents a snapshot of the situation in June, and does not reflect the recent spike in cases that we've seen throughout the country.

- Despite the quick recovery thus far, the 11.1% unemployment rate is still higher than any point in modern American history, eclipsing the highest rate achieved during the great recession, which was 10%.
- permanent unemployment numbers are increasing in proportion to total unemployment, increasing the likelihood of a deepening recession

*Sector Breakdown (unemployment rates, in percent)*

	Jan	Feb	Mar	Apr	May	Jun
Total	4	3.8	4.5	14.4	13	11.2
mining, quarrying, oil and gas	1.9	5.4	6.2	10.2	8.4	17.8
construction	5.4	5.5	6.9	16.6	12.7	10.1
durable goods manufacturing	3.2	3.6	3.5	15.1	13.1	9.2
non-durable goods manufacturing	3.7	4.3	5.3	10.2	9.3	8.9
wholesale and retail trade	4.7	4.2	4.9	17.1	15.1	11.2
transportation and utilities	3	3.4	5	13.5	14.2	12.9
information	2.3	2.6	1.8	11	10.9	12
finance	2.5	1.6	2.2	5.4	5.7	5.1
professional and business services	4.1	4.4	4.8	9.8	9	8.6
education and health services	2.4	2.4	3.2	10.9	10.1	8.6
leisure and hospitality	5.9	5.7	8.1	39.3	35.9	28.9
agriculture, forestry, fishing, farming	12.5	11	8.3	9.6	6.5	5.4



\*mining saw unemployment rates increase by 9.4 percentage points

Recovery appears to be greatest amongst the leisure and hospitality (service) industry, but this industry still represents the sector with highest unemployment, at 28.9%. The industry also appears to be facing additional headwinds with states realizing they may have reopened too quickly. Unemployment has also appeared to impact low-paying jobs the most (and by extension, immigrants and minorities have been disproportionately affected in comparison to whites), as evidenced by the low unemployment rates of white collar jobs in the business and finance industries. Jobs where remote work is feasible tend to be limited to ones that require a college degree, rather than for our most vulnerable. We can take a look at the past two recessions to see how different groups of people might be affected by a different kind of recession. The dot-com bubble crash was one that impacted mostly those who had a stake in the stock market, particularly with internet companies and because this mostly affected the more wealthy, who had more disposable income and would be less proportionately affected, spending didn't decline following this crash. The 2008 recession affected home values, which for the



majority of Americans affected their wealth on a more disproportionate scale, causing a decline in spending and plunging the economy into a deeper recession. In today's economy, we see a scary combination of the two factors. Asset prices, having largely rebounded, remain inflated especially given the lack of economic output over the past several months. Unemployment seems to have affected vulnerable workers the most, which will likely cause a decrease in spending if:

- We see further permanent job losses
- Stimulus checks and unemployment benefits stop/ are reduced
- Economic recovery slows

### Personal Spending

	PCE (personal consumption expenditure)	% change
2019-06-01	14565.0	0.34%
2019-07-01	14644.4	0.55%
2019-08-01	14682.4	0.26%
2019-09-01	14707.8	0.17%
2019-10-01	14745.4	0.26%
2019-11-01	14792.5	0.32%
2019-12-01	14847.1	0.37%
2020-01-01	14909.9	0.42%
2020-02-01	14914.3	0.03%
2020-03-01	13925.8	-6.63%
2020-04-01	12168.2	-12.62%
2020-05-01	13162.6	8.17%

Spending numbers indicate a sharp drop in March, and April as a result of shutdowns across the nation. This is likely to have a strong impact on Q2 earnings reports especially for companies that rely on physical purchases, as opposed to online shopping, which is likely to see increased traffic throughout the pandemic. We already see this in effect, as tech stocks have done incredibly well throughout the past several weeks. Regardless, it appears that spending is already beginning to recover, but it is uncertain if spending will bounce-back as the market has done.

The sharp drop in spending is unprecedented; during the 2008-09 crisis, the decline in spending was much more gradual and smaller in scale, with a decline of 3.7% between June 2008 and the trough in March 2009. During this period, the spending declined in 8 out of the 9 months, mirroring the drop in the S&P 500, which experienced a decline from a high of 1282 in August 2008 to a low of 735.09 in February 2009. This prolonged economic downturn is more aligned with a typical recession, unlike the sharp drop and recovery that we saw recently. The governmental measures taken during the COVID pandemic is on a vastly larger scale than the one that took place in 2008 -- the 2008 paycheck protection program, for example, handed out only \$30 billion compared to the \$600+ billion this time around. Government stimulus has heavily softened the economic blow, at least in the short term.

Regression Statistics -- Spending vs. S&P 500	
Multiple R	0.951363959
R Square	0.905093382
Adjusted R Square	0.904932796
Standard Error	1285.533414
Observations	593

Regression statistics indicate a strong correlation between spending and the S&P 500. Upcoming spending numbers will undoubtedly have an effect on the market short term. Based on unemployment recovery numbers for June, it should be a strong assumption that spending would have increased as well, with more people going outside and more people going back to work. Employment rose by 2.2 points in June, so I would expect spending to rise more, as it generally has a higher standard deviation compared to unemployment numbers. However, the

PCE (personal consumption expenditure) value for May was still 11.7% below that of February, signalling a long way to get back to pre corona levels, especially with the sudden spike in COVID cases.

### Personal Income & Savings

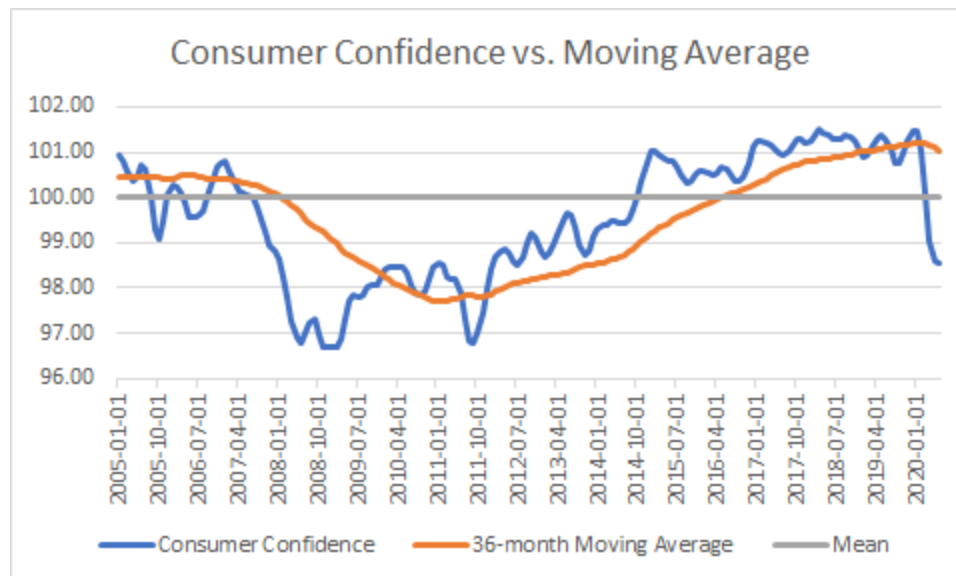
	Jan	Feb	Mar	Apr	May
<b>Personal Income</b>	19014.3	19117.5	18694.6	20713.5	19839.3
<b>Personal Saving</b>	1330.2	1418.4	2077.7	6022.4	4121.4
<b>Unemployment Insurance</b>	26.5	26.2	69.6	452.6	1277.9
<b>Pandemic Unemployment Compensation</b>				179.4	980
<b>-&gt; as a percentage of total unemployment insurance</b>				39.64%	76.69%
<b>Economic Impact Payments</b>				2588.4	605.8
<b>total pandemic assistance as a % of income</b>				13.36%	7.99%
<b>without pandemic assistance income</b>				17945.7	18253.5
<b>-&gt; decline from February</b>				-6.13%	-4.52%

- Personal incomes actually rose in April and May (in comparison to Feb.), primarily caused by federal pandemic aid (including unemployment compensation and stimulus checks)
- Higher savings in April and May will enable people to spend more in the month of June
- Unemployment insurance doesn't actually make up a significant portion of PI, and pandemic assistance is declining as a percentage of total income
- 48 million people have applied for unemployment assistance over the past 16 weeks and may remain reliant on government assistance, as COVID spikes

- Mitch McConnell said that he expects one more rescue package to be passed, which may give another round of stimulus payments, while will continue to boost incomes
- Federal Unemployment assistance will end in July, which will deal a major blow to those reliant on it and may contribute to slower economic growth in the coming months
- Incomes, without taking into account federal aid, have fallen 4.5% since February, and is likely to decline further without federal aid.

While the future regarding federal assistance (including PPE which we will get to later) is uncertain, the assistance already provided is likely enough to have boosted spending in June and July. This will contribute to a positive forecast for companies reporting Q2 earnings, but many companies are likely to have troubled Q2 earnings reports simply because of widespread shutdowns that took place in the quarter.

## Consumer Confidence



In June 2020, the composite consumer confidence was at 98.55, the lowest value since 2012. CCI has been increasing since 2011, corresponding with the overall bull market that we have experienced, but we can see with the 36MA that growth appeared to slow down over the past 3 years, and on two instances the index dipped below the moving average. This was the first time this happened since 2011, and back in 2005 dips under the Moving Average precipitated a market crash. As long as COVID remains a threat, I don't expect consumer confidence to recover to pre-corona levels, which were already showing signs of weakness. In July, the University of Michigan's CCI level fell after two periods of growth in May and June. This reflects an increasingly darkening consumer mood as a result of a spike in COVID cases. The quick recovery that we had seen through May and June is likely to slow, as consumers begin to recognize that the virus is still very much a threat.

## **Paycheck Protection Program**

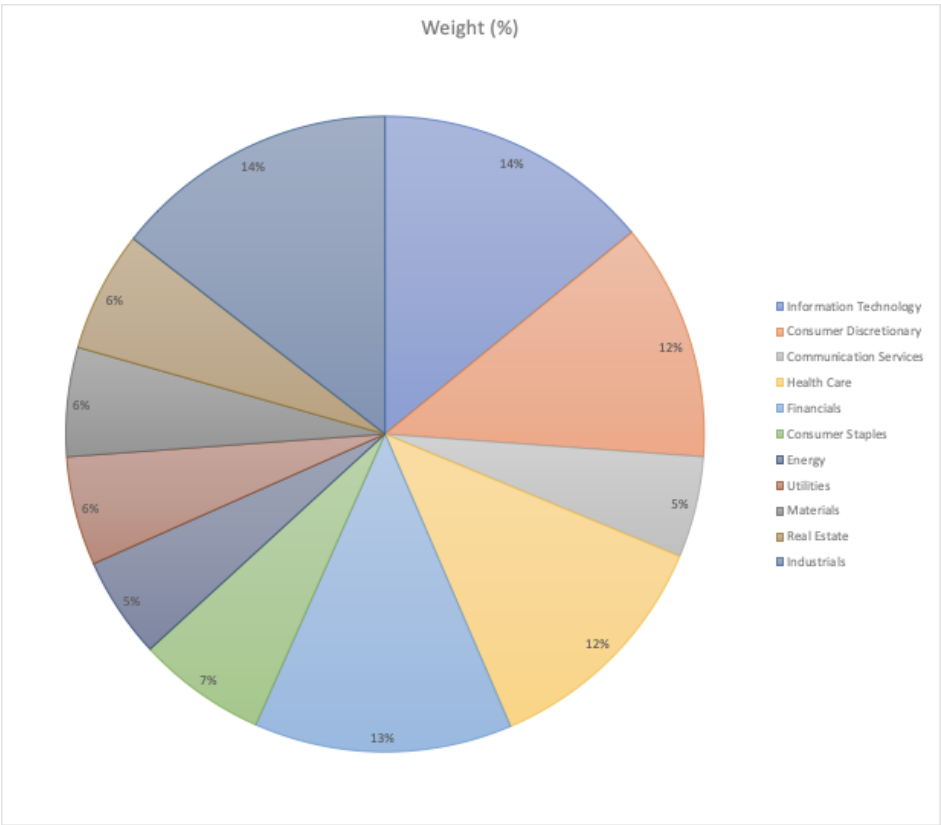
According to the Small Business Administration, PP has supported 51 million jobs, and has likely helped depress the unemployment rate that would have been without the program. The program has been extended because there is still over a 100 billion dollars left in the program. PPP is designed to give small businesses money to fund 8 weeks of payroll and as long as most of the money is used to fund payroll (60%) the loan will be fully forgiven. The money can either be used to retain employees or to rehire them within 24 weeks. There is currently a proposed bill that would make it easier for smaller loans (<150K) to be forgiven. This program, combined with unemployment insurance and stimulus checks, kept money in Americans' pockets and has contributed to incomes and savings that have increased since February. However, this money is beginning to dissipate. The 8 weeks of payroll help will begin to run out, Federal Unemployment Assistance is ending on July 24, and another stimulus check is not certain. We thus enter into a new phase of economic recovery, in which the economy is half-open and continues to be threatened by a resurgent COVID-19.

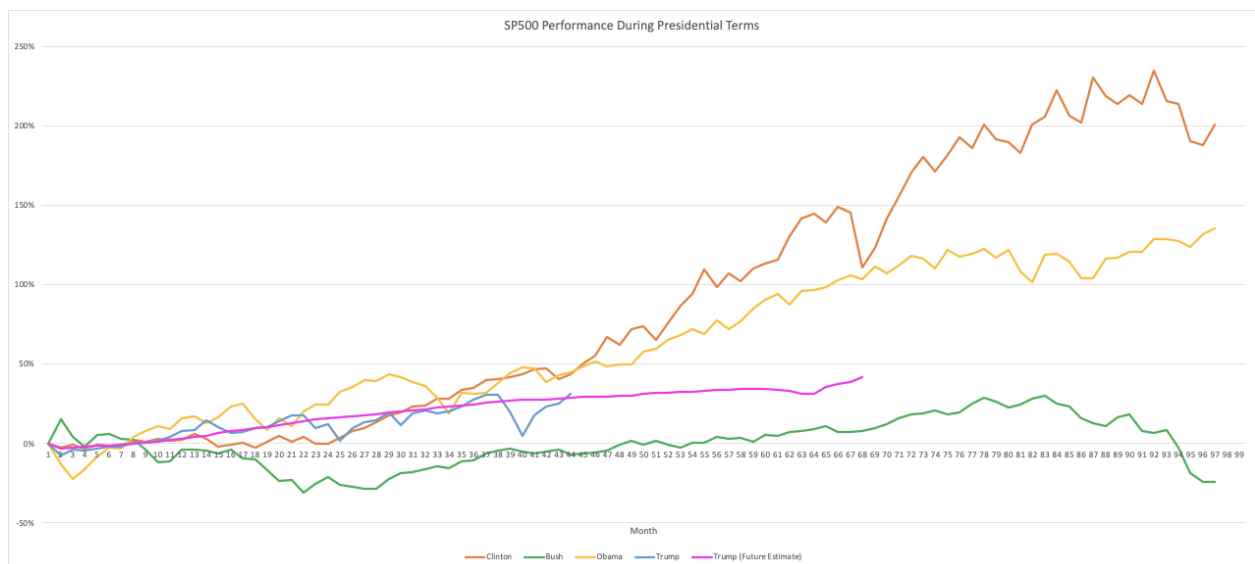
The majority of these loans appear to have been given out in amounts lower than 150K, accounting for 85% of borrowers, or 4.2 million businesses. These likely represent the smallest, most vulnerable businesses, often with less than 10 employees. While spending is still recovering, consumer confidence appears to be declining and peoples' incomes and savings are beginning to fall. It is clear that the economy will not be able to reopen as quickly as some may have hoped and that many jobs may be lost as PPP funds run out and if the government doesn't provide additional economic assistance. For those most vulnerable, more government aid is likely needed in order to maintain economic stability and solvency, but this aid will not be infinite and its impact depend on the scale of the next stimulus package, as well as how quickly the economy can reopen given COVID fears.

Sector Analysis

	SP500 (SPY)	CONSUMER DISCRETIONARY (RXI)	CONSUMER SERVICES (IYC)	HEALTH CARE (IXJ)	FINANCIALS (IXG)	CONSUMER STAPLES (KXI)	ENERGY (IXC)	UTILITIES (JXI)	MATERIALS (MXI)	REAL ESTATE (IYR)	INDUSTRIALS (EXI)
CONSUMER DISCRETIONARY (RXI)	93%										
CONSUMER SERVICES (IYC)	92%	95%									
HEALTH CARE (IXJ)	78%	74%	71%								
FINANCIALS (IXG)	88%	88%	80%	69%							
CONSUMER STAPLES (KXI)	79%	74%	73%	77%	72%						
ENERGY (IXC)	71%	69%	57%	49%	64%	60%					
UTILITIES (JXI)	68%	60%	58%	62%	64%	77%	59%				
MATERIALS (MXI)	83%	80%	73%	64%	79%	65%	82%	62%			
REAL ESTATE (IYR)	66%	76%	65%	57%	72%	67%	46%	66%	59%		
INDUSTRIALS (EXI)	94%	92%	87%	74%	90%	76%	78%	68%	87%	73%	
INFORMATION TECHNOLOGY (IXN)	89%	89%	82%	62%	76%	70%	55%	62%	80%	56%	87%

SP500 Correlation Chart (2019-2020)											
	SP500	CONSUMER DISCRETIONARY (RXI)	CONSUMER SERVICES (IYC)	HEALTH CARE (IXJ)	FINANCIALS (IXG)	CONSUMER STAPLES (KXI)	ENERGY (IXC)	UTILITIES (JXI)	MATERIALS (MXI)	REAL ESTATE (IYR)	INDUSTRIALS (EXI)
SP500											
CONSUMER DISCRETIONARY (RXI)	97%										
CONSUMER SERVICES (IYC)	98%	98%									
HEALTH CARE (IXJ)	81%	75%	78%								
FINANCIALS (IXG)	91%	92%	87%	60%							
CONSUMER STAPLES (KXI)	87%	84%	87%	74%	73%						
ENERGY (IXC)	94%	94%	91%	76%	92%	79%					
UTILITIES (JXI)	71%	72%	71%	51%	72%	76%	72%				
MATERIALS (MXI)	95%	96%	93%	81%	88%	93%	93%	63%			
REAL ESTATE (IYR)	83%	83%	83%	58%	80%	77%	87%	84%	74%		
INDUSTRIALS (EXI)	96%	94%	92%	72%	95%	82%	93%	77%	92%	83%	
INFORMATION TECHNOLOGY (IXN)	96%	93%	92%	75%	86%	84%	86%	64%	94%	71%	92%





The Presidential Elections are an influential catalyst to the market. This model shows that out of the last 6 elections, 5 out of 6 times the market declines. This means that heading towards an election year more than often, the market will have dull returns. This downward trend isn't biased toward one part or the other. These percent changes can be quantified and based on percent change, the year leading up to the election shows a -0.17% decline. Whereas, during any other year after the election, there is an average upside of 0.94%. After an election the market gains are muted though not as bad as the year leading upto the market. Despite popular belief, when parties change there is nearly a 5% increase to the market. Right now President Trump was near the same slope as former presidents Obama and Clinton but the pandemic has definitely caused an abrupt decline. This decline, however, has corrected itself.



After extrapolating the data to find how President Trump's term would play out if he was elected, the results showed stagnant movement. Looking at data from previous presidents also point to the fact that Presidents with a second term have a better performance for the SP500. This could mean that the forecast could be off because more than often the SP500 does much better during a president's second term than their first term. This also tells us that if Trump does get a second term we could see a bullish market for the next 4 years.

## **Conclusion**

### **(Ahamed)**

The SP500's movement will be heavily based on the government more than ever before. The federal bank and the government are in control of how to deal with decline in inflation. Currently, the demand in the market is still up as evident in the sales of Amazon and retail. The Presidential election will play a big hand in market movement. Biden and Trump will deal with economic disturbances differently. Trump will focus on bringing back Americans to work in order to deal with unemployment which would be good for the economy. Biden on the other hand will probably allow for more leniency in unemployment, perhaps granting more allocation for unemployment. Trump might advocate for more tax cuts which would lead to higher investments into the markets. Trump's focus is on the economy while Biden will be focused on dealing with COVID. Polls show that Trump is more energetic and courageous but Biden is better tempered. If Trump does win, we may see further growth in the SP500 since previous second term president's performances have been good. If Biden wins, since there is a change in a political party, there may be a 5% growth in the SP500. Inflation also plays a big role as it is a way to see how the price of gold moves. Gold can be used as an indicator to see how the market will move. If inflation decreases the price of gold will increase. This increase in price can mean that the SP500 will either decline or become stagnant. Therefore, I believe that in the coming months the SP500 will be bullish if the government is able to deal with the issues at hand. If they fail to do so and inflation declines, the markets may see a downward trend.

### **(Eric)**

The next 8 to 12 weeks will be primarily shaped by further government response to the pandemic, with particular focus on the Fed and on economic stimulus. While slowing down, the economy did not appear to be on the verge of collapse prior to COVID, and the underlying fundamentals of the economy remain in place in terms of consumer spending and wealth, but this continuation has largely been supported by actions of the government in terms of stimulus.

For those that are most vulnerable, often working jobs that have been the most heavily impacted by COVID (leisure, hospitality, entertainment), further aid is essential, because we know that the virus is not going away any time soon and these businesses will continue to be impacted. If the government approves another, substantial, round of stimulus(which they are likely to do) and the Fed continues to support liquidity in the markets, I don't see the markets crashing over the next couple of months. While trading in the past two weeks have been shaky, likely impacted by a rise in COVID cases, the economic shutdowns that we saw at the onset of the pandemic are unlikely to be reinstated. Regardless of the increase in cases, the market has shown us that it doesn't really care about corona specific trends. As long as businesses continue to reopen/don't shut down further, the market seems to maintain an optimistic outlook.

While tech has performed extraordinarily well during the pandemic, asset prices are undoubtedly inflated, especially given the economic contraction that has occurred. Investors are pricing in the future, but it may be too much too soon. The asset bubble isn't limited to just tech, although it is most prominent in that sector. While trading derivatives in the tech sector is a good idea in the short run, I would oppose long-term entries into overvalued equities. While I agree with Ahamed that we will see a bullish market over the next few weeks and (likely) months, I am also of the opinion that once the effects of COVID become clearer (government stimulus subsides, permanent unemployment rises, decreased spending and savings, debt defaults) by the end of the year, I think the market will see a correction towards the 6 month mark. The economy, although still strong prior to COVID, was beginning to see shaky ground, and this pandemic likely worsened the underlying state of the economy, especially if payrolls will be cut and people begin spending less/taking out less loans.

The sudden crash and just as sudden recovery of the economy is an unprecedented event that we may not see again in a very long time. Coming from a bullish market, I think investors remain cautiously optimistic about the economy, but I don't think they've fully realized the economic impact of the nationwide shutdowns as of yet. The massive spending that the government has undertaken to support its citizens will weaken the dollar and ultimately have long-term, debilitating effects on the economy.

In the next 3-6 months, I believe that government stimulus will continue, to an extent, helping to prop up the economy until these funds run out. The market will lean bullish during this period, albeit not as strong as it was over the past several months. Depending on the state of economic reopenings (doesn't look too good now) and on recovery indicators, however, I think

that by election time the markets could begin to realize the true impacts of the virus on the economy and begin to price that in, pushing us into a bear market.