Benchmark Returns as of September 30, 2020

| INDEX | $\mathbf{3}$ Mo. | $\mathbf{6}$ Mo. | $\mathbf{1 2}$ Mo. |
| :--- | ---: | ---: | ---: |
| US STOCKS |  |  |  |
| S\&P 500 Index (large-cap stocks) | 8.93 | 31.31 | 15.15 |
| Russell 2000 Index (small-cap stocks) | 4.93 | 31.60 | 0.39 |
| FOREIGN STOCKS |  |  |  |
| MSCI EAFE Net Total Return Index (US\$) | 4.80 | 20.39 | 0.49 |
| S\&P Europe 350 Index Net TR Index (US\$) | 4.22 | 19.68 | $(0.75)$ |
| MSCI Japan Net Total Return Index (US\$) | 6.94 | 19.36 | 6.91 |
| MSCI Emerging Markets Net TR Index (US\$) | 9.56 | 29.37 | 10.54 |
| COMMODITIES \& CURRRENCIES |  |  |  |
| US Dollar | $(3.60)$ | $(5.21)$ | $(5.53)$ |
| Euro | 4.34 | 6.26 | 7.54 |
| Gold | 5.89 | 19.57 | 28.07 |
| Oii (West Texas Intermediate) | 2.42 | 96.39 | $(25.61)$ |
| BONDS |  |  |  |
| BBgBarc US Aggregate Bond (inv. grade) | 0.62 | 3.53 | 6.98 |
| BBgBarc US Treasary 20+ Year | 0.14 | 0.25 | 16.62 |
| BBgBarc US Treas. Infataion Protected Secs. | 3.03 | 7.40 | 10.08 |
| BbgBarc Municipal Bond | 1.23 | 3.99 | 4.09 |
| BBgBarc US Credit TR (corporate bonds) | 1.50 | 9.84 | 7.50 |
| BBgBarc US Corp. High Yield Bond | 4.60 | 15.24 | 3.25 |
| S\&P International Sov Ex-US Bond US\$ | 4.53 | 8.32 | 6.11 |

Source: Bloomberg and Morningstar
Risk assets rallied during the third quarter with US large cap stocks as measured by the S\&P 500 Index (SPX) continuing to outpace most broad stock market indices. As shown in the table above, large cap stocks outperformed small caps by almost double ( $+4 \%$ ) during the third quarter and nearly $15 \%$ over the last twelve months. The story is similar for the SPX relative to foreign stocks which have massively underperformed the US market since 2008 (Chart 1).


Source: Access Financial Services using Bloomberg Software \& Data
High quality bonds were mostly flat with the exception of treasury inflation protected securities which rallied as the Fed confirmed it will allow inflation to accelerate
before it lifts short term interest rates. Foreign bonds also posted strong returns as the US dollar declined.

The first two months of the third quarter saw a continuation of this year's outsized gains by the five largest stocks by market capitalization: Apple, Microsoft, Amazon.com, Facebook \& Alphabet (parent of Google.com). This group accounted for $34 \%$ of the SPX's 8.74\% gain between July 1 and September 2 (the SPX's most recent all time high). The SPX then corrected by $-9.7 \%$ between September 2 and September 23 (Chart 2). While selloffs prior to September 2 were broad based, this one was more concentrated in the high profile technology related stocks (Apple and Microsoft are technology stocks, Amazon.com is the largest member of the consumer discretionary sector and Facebook and Alphabet are classified as communication services).


This is illustrated in Chart 3, which compares the evolution of the five largest US stocks to the remainder of the US equity space. Notice that virtually all the September correction stemmed from a $16 \%$ drop in the five largest US stocks. In fact, excluding these leading technology related names, the evolution of large cap stocks has mirrored that of mid and small companies, which typically exhibit a stronger link with the real economy.

The SPX's correction in September was minimal in the face of Washington's inability to reach a fiscal compromise which has become the stock market's primary policy driver recently. The resilience of the financial markets reflects that economies in the G-10 and China have pleasantly surprised (Chart 4) investors
despite rolling second and third waves of infections around the world, fiscal policy paralysis and generalized unease. In the meantime, global central banks are promising to keep accommodative monetary conditions in place indefinitely which has allowed valuations to balloon.


Monetary stimulus reached an all-time high during the summer months (Chart 5). This constituted the greatest ever global monetary stimulus, surpassing even the stimulus that followed the 2008 financial crisis. Now, however, the Fed has paused telling the world that politicians need to do more to support the economy.

For now, our outlook is that global equities have entered a period of heightened volatility and downside risk through year end. The SPX has overshot its fundamentals, and the momentum of the economic
surprise index is deteriorating and central banks have deployed their full arsenal. Investors are concerned by a lack of fiscal support and rising policy uncertainty created by the approaching US election in November. This nervousness is likely to result in meaningful fluctuations in stock prices.


As we enter the third quarter, the presidential election and its significant implications are at the forefront of everyone's mind. More than at any time in recent US history, voters believe that the 2020 election is definitive in charting two distinct courses for the country (Chart 6).


Source: BCA Research
Unfortunately, election year stock market history isn't much of a guide other than since 1972 election year returns have generally been positive (Chart 7) and that going back to 1936, the stock market has - on average performed much better when the incumbent party wins than when it loses - especially during September and October (Chart 8).

An added dimension going into this year's election is the apprehension that the US presidential election will fail to produce a legitimate result (an election that is not
decided by the popular vote or Electoral College but requires the intervention of Congress or Supreme Court to determine the final outcome), leading to an escalation in political instability and uncertainty. While this is not a likely scenario, we believe it is important to be prepared for volatility related to this issue in the months ahead.


Chart 8: S\&P 500 Average Performance During Presidential Election Years \& Incumbent Party Outcome, 1936-2016


As it stands today, election polls, betting markets and many election models strongly favor a Biden victory (Chart 9). Very recently, the bond market has also been trading like a blue sweep is in the cards with long term treasury bonds selling off as long term interest rates have risen.

However, a quantitative model from BCA Research that predicts electoral votes and which correctly forecasted Trump's 2016 victory based on state-by-state economic indexes, a "time for change" variable that rewards the incumbent party after a four-year term but penalizes it after an eight-year term in the White House, the president's margins of victory in the previous election, and the range of Trump's approval rating (rather than the level to avoid concerns about polling understating Trump's support) has Trump's probability of winning the election at $49 \%$ based on winning 259 of the 270
required electoral votes. One additional state plus one of the stray electoral votes from either Nebraska or Maine would deliver him the Oval Office again.


Should the stock market rally to new highs between now and the election, a model from LPL Financial would signal a Trump victory. The model measures the stock market's performance in the three months leading up to election day. Currently, the S\&P is up $4.2 \%$. If a new high is reached, that would be an $8.7 \%$ gain off of the early August levels. According to LPL, when stocks gained during the three months before the election, the incumbent party tended to win. The opposite is true when stocks were lower. This three month pre-election performance indicator has a strong track record. It has worked in every presidential election since 1984. Going back to 1928, it worked 20 out of 23 times. If the election is mainly about the economy, then such a stock market move could put Trump back in the race, which raises the prospect of a lot more twists and turns in the days leading up to the election.

Subjectively, the models keeping Trump in the race seem a bit optimistic. Pandemic, recession, and social unrest have taken a toll on voters and unemployment is more than double what it was when Trump's approval rating peaked in March ( $7.9 \%$ vs. $3.5 \%$ ). Voters tend to take their cue from the jobs market more than the stock market, although the stock rally is certainly helpful for the incumbent.

At this point, it looks almost certain that Trump will lose the popular vote. He won $46 \%$ of the popular vote in 2016, trailing Hillary Clinton by 2.9 million votes. Since 2017, Trump's national approval rating has never risen above $50 \%$ in the average of polls. Thus, if Trump wins the election it will be through his Electoral College strategy, as in 2016, or through a contested election.

The US has split the popular and Electoral College vote on five occasions, yielding a historical probability of $9 \%$. The fifth time was President Trump's victory in 2016. He would be the first president to do so twice. This should not be ruled out because the regional and demographic factors behind Trump's win four years ago are still largely intact.

Very broadly, the election can be viewed from the perspective of whether global policy uncertainty will continue its ascent in recent years. Increases in uncertainty have strengthened the dollar bull market and US stock market outperformance, as the US is an insulated market and the dollar is a safe haven currency (Chart 10).


If Trump is elected, uncertainty will remain high because of his erratic conduct related to foreign and trade policy, particularly the likelihood of a "Phase Two" trade war with China and potentially even a global trade war. If not, US trade and foreign policy will moderate. It will not return to the status quo pre2016, but it will be more predictable, more responsive to the input of presidential advisors and less erratic. This is more or less the case if Democratic Party candidate Joe Biden wins.

The US election is also about political polarization within the United States. Growing polarization has contaminated US fiscal policy as well as foreign policy for years. Trump has done nothing to reverse this longspiraling trend. He is not nationally popular but instead depends on regional appeal, so his presidency splits the
popular vote from the Electoral College vote. He is also controversial when it comes to voters' deepest held values.

The common thread in both party platforms is fiscal largesse at a time of monetary dovishness. Both Trump and Biden promise to build infrastructure, energize domestic manufacturing, and lower pharmaceutical prices. The two candidates are competing adamantly over who will bring more American manufacturing jobs home. President Trump won the Republican nomination in 2016 partly because he stole the Democrats' thunder on "fair trade" over "free trade." Biden's agenda is responsive on these Trump themes as his party sees a significant risk in the Rust Belt if it cannot steal that thunder back.

The manufacturing agenda centers on China-bashing. China runs the largest trade surplus with the US, it has a negative image in the public eye, and it has alarmed the military-industrial complex by rising to the status of a peer strategic competitor over the technologies of the future. Where Trump once spoke of a "border adjustment tax," or a Reciprocal Trade Act, Biden speaks openly of a carbon border tax: "the Biden Administration will impose carbon adjustment fees or quotas on carbon-intensive goods from countries that are failing to meet their climate and environmental obligations." China's coal intensive economy would obviously be the prime target.

It is true that Biden will seek to engage China and reset the relationship. He will probably maintain Trump's tariff levels or even add a token new one, but he will then settle down for a two track policy of dialogue with China and coalition building with other democracies. The result may be an easing in strategic tensions for a period of time, but Biden will maintain the Obama administration's "Pivot to Asia," which was about countering China.

The race is still close in some of the states most needed to win the presidency. The unprecedented number of mail-in ballots being cast this year because of the pandemic means it likely won't be possible in some battleground states to declare an unofficial winner on election night. Election officials say it could take days or even weeks in some cases to get a complete count. A final determination could also be delayed by postelection lawsuits challenging the results.

As has been the case for much of the year, both the virus and the policy response to the pandemic will also continue to be key drivers of market returns.

On the virus front, the global number of daily new cases continues to trend higher, with the seven day average
reaching a record high of 317,000 this week (Chart 11). The number of daily new cases in the EU has risen above its April peak. Spain and France have been particularly hard hit. Canada is also seeing a pronounced rise in new cases. In the US, the number of new cases peaked in July. However, the seven day average has been creeping up since early September, raising the risk of a third wave.


Even if a vaccine becomes available early next year, there is a danger that the global economy will have suffered enough damage over the intervening months to slow the recovery currently underway. When an economy suffers an adverse shock, a feedback loop can develop where rising joblessness leads to less spending, leading to even more joblessness. Fiscal stimulus can short-circuit this cycle by providing households with the income to maintain spending.

Fiscal policy in the major economies turned expansionary within weeks of the onset of the pandemic. In the US, real personal income growth actually accelerated in the spring because transfers from the government more than offset the loss in wage and salary compensation. However, starting in August, US fiscal policy turned less accommodative. Regular weekly unemployment payments have fallen from around $\$ 25$ billion to $\$ 8$ billion since the end of July. At an annualized rate, this amounts to over $4 \%$ of GDP in fiscal tightening. While President Trump signed an executive order redirecting some of the money that had
been earmarked for the Federal Emergency Management Agency (FEMA) to be given to unemployed workers, the available funding will run out within the next month or so. On top of that, the funds in the small business Paycheck Protection Program have been used up, and many state and local governments face a severe cash crunch.

US households saved a lot going into the autumn so a sudden stop in spending is unlikely. Nevertheless, cracks in the economy are widening. Core retail sales contracted in August for the first time since April and consumer expectations of future income growth remain weak. Permanent job losses are rising faster than they did during the Great Recession. Both corporate bankruptcy and mortgage delinquency rates are moving up, while bank lending standards have tightened significantly.

We ultimately expect US fiscal policy to turn accommodative again. There is no appetite for fiscal austerity. Both political parties are moving in a more populist direction, which usually signals larger budget deficits. Even among Republicans, more registered voters support extending emergency federal unemployment insurance payments than oppose it.

As long as interest rates stay low, there will be little market pressure to trim budget deficits. US real (inflation adjusted) interest rates remain in negative territory. Despite a rising debt stock, the Congressional Budget Office expects net interest payments to decline towards $1 \%$ of GDP over the span of the next couple of years (Chart 12).

Chart 12: Low Interest Payments Amid Skyrocketing Debt
Total Public Debt as Percent of GDP Quarterly


Federal Interest as a Percent of GDP Annual (12/31/19 to 12/31/30 are CBO Estimates)


[^0]For some time, the widely held view has been that a Trump victory would be good for the stock market and a Biden victory would be bad. This view is increasingly being challenged as evidenced by the stock market's resilience in the face of Biden's rising odds of a victory.

Looking out into next year and beyond, our outlook for the US stock market is relatively bullish. Our rationale is two-fold. It is based on:

1) Stimulus
a. The Fed's explicit stance that it is ready to incur inflation risk which will cement short term interest rates near the zero lower bound for a long time
b. Washington will eventually pass additional fiscal stimulus to support the economic recovery
2) A stronger corporate earnings growth outlook now that earnings have taken a significant hit which will make future earnings growth easier to achieve

In the last cycle, it took the Fed seven years to lift short term interest rates from zero, a move that ended being judged as premature and forced the Yellen-led Fed to pause for another year. As such, there is a good chance the Fed will again stay put for a number of years.

While easy monetary policy and loose fiscal policy create a supportive environment for risk assets, ultimately earnings have to deliver in order to justify rising stock prices.

Looking at corporate earnings growth for the SPX going back to the 1920s, earnings per share (EPS) have grown at a rate of $7.5 \%$ per year, effectively doubling every decade. More recently, using I/B/E/S data, there have been four distinct EPS growth periods over the past four decades with different durations. From trough-to-peak, EPS have enjoyed an average compound annual growth rate of over $10 \%$ (Chart 13). With actual EPS having declined from $\$ 153$ in January to $\$ 128$ in July, and forward earnings having bottomed in June, the earnings low point for this cycle has likely been made and we expect them to look much better going forward.

A supportive fiscal and monetary policy, and strong earnings growth should be a very bullish setup for stocks. The problem is that the SPX's advance since March in the face of declining corporate earnings has driven valuations back to levels last seen just prior to the bear market following the dotcom bubble that began in March 2000 (Chart 14). This valuation extreme is not sustainable.

The price of the SPX is 3419 . Table 1 illustrates its current and ten year average valuations using four
measures. Based on these measures, the SPX is trading at a premium of between $29.4 \%$ and $46.6 \%$ and the price of the Index would fall to between 2348 and 2639 $(-22.8 \%$ to $-31.3 \%)$ in order to bring valuations back to their ten year averages. Using the average values for the last two years - a period of elevated valuations - the valuation premium drops to between $6.8 \%$ and $30.5 \%$ and Index levels of between 2607 and $3196(-6.5 \%$ and $-23.7 \%$ ). Even if the price/earnings ratio dropped to its high of 22.1 on February 14 prior to the selloff, it would put the Index at 2850 , a decline of $-16.6 \%$.



Table 1: S\&P 500 Index (current level: 3419)

| Valuation Measure | 10 Year |  |  | SPX |  | Change <br> From <br> Current |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Value | Average Value | Difference | Percent Diff. | Level at 10 Yr. Avg |  |
| Price/Earnings Ratio | 26.5 | 18.2 | 8.3 | 45.6\% | 2348 | -31.3\% |
| Price/Book Value Ratio | 3.8 | 2.8 | 1.0 | 35.7\% | 2483 | -27.4\% |
| Price/Cash Flow Ratio | 14.1 | 10.9 | 3.2 | 29.4\% | 2639 | -22.8\% |
| Price/Sales Ratio | 2.5 | 1.8 | 0.7 | 38.9\% | 2448 | -28.4\% |

Source: Access Financial Services using Bloomberg Data
Fair value for the SPX using a dividend discount model, equity risk premium analysis and valuation sensitivity
all put its fair value at around 3000 - a decline from the current level of $-10.8 \%$

Given today's rich valuations, deteriorating momentum in both economic surprise indices and the rate of change in monetary policy, the shorter-term risk/reward tradeoff is tilted to the downside, especially in the technology related stock universe, at least until the election uncertainty lifts late in the year.

Elements of froth reminiscent of the dotcom bubble are growing as technology related stocks and other "work from home" / "pandemic plays" have rallied sharply while most other stocks have not followed suit. Chart 15 below shows the year to date change in total market value for the top five S\&P 500 stocks versus the remaining 495 stocks.


Source: Access Financial Services using Bloomberg Software \& Data
Going forward, we believe technology related stocks will underperform the broad market for five main reasons:

## 1) The dismantling of pandemic lockdown measures should shift some spending from the online realm back to brick-and-mortar stores

The pandemic has led to a major reallocation of spending from brick-and-mortar stores to online retailers. Sales at US online stores increased by $25 \%$ year-over-year in July versus - $1 \%$ at physical stores. According to Bank of America, after rising steadily from about $5 \%$ in 2009 to $16 \%$ in 2019, the US e-commerce penetration rate has jumped to $33 \%$, representing more than ten years of growth in only a few months.

There is little doubt that we are still in the midst of a secular transition towards e-commerce. However, it is likely that the dismantling of lockdown measures hopefully facilitated by the release of a vaccine later this year - will bring back some spending to brick-and-
mortar stores. This could produce a temporary air pocket in sales for online sellers, a risk that does not seem to be discounted in earnings expectations.

Similarly, other technology related companies that have benefited from the pandemic could face headwinds. Netflix saw its global subscriber count jump 27\% in the second quarter relative to a year earlier. If someone did not bother to purchase a Netflix subscription in March or April, how likely is it that they will subscribe for the first time in September?

Along the same lines, global PC and server shipments surged to multi-year highs earlier this year as millions of people were forced to work from home. This likely brought demand for computers and peripheral equipment forward, which could produce a spending vacuum over the next few quarters.

## 2) Interest rates are unlikely to fall much further, which will remove one of the tailwinds that has propelled technology related stock outperformance

Technology related companies trade on very long-term growth expectations which means changes in interest rates have a greater impact on the discounted present value of their future cash flows than for slower growing companies. As a result, technology related stocks tend to outperform in environments where inflation and interest rates are falling.

We do not expect inflation to surge over the next few years. Nevertheless, the deflationary impulse from the pandemic is likely to abate as spare capacity is absorbed and overall demand recovers. Likewise, longer term bond yields/interest rates are likely to rise during the year ahead.

## 3) As noted above, technology related stocks sport among the highest valuations among all sectors

See Appendix A for valuations of the top five SPX stocks along with what appear to be very optimistic earnings growth projections.

## 4) Many marquee technology related companies have become so large that further gains in market share may be difficult to achieve

The rapid growth in earnings could decelerate as many of today's marquee technology related companies struggle to expand market share. Close to three-quarters of US households already have an Amazon Prime account. Slightly over half have a Netflix account. Nearly 70\% have a Facebook account. Google commands $92 \%$ of the internet search market. Together,
sites owned by Google and Facebook generate about $60 \%$ of all online advertising revenue.

## 5) Regulatory and tax policy changes could negatively impact a number of prominent technology related comanies

Historically, the US government has taken a laissezfaire approach towards this sector. As a pro-business party, the Republicans were happy to promote deregulation and low corporate taxes, while praising Silicon Valley's vitality and global dominance. The Democrats also have a cozy relationship with the technology sector. As Chart 16 shows, political donations from technology related company employees are heavily skewed towards Democratic candidates.


Source: "The most liberal and conservative tech companies, ranked by employees' political donations" CNBC.com July 2, 2000

Things may not be as easy for the sector going forward, however. Conservatives have accused social media companies of stifling their voices. According to a recent Pew Research study, 53\% of conservative Republicans favor increasing government regulation of big technology related companies, up from $42 \%$ in 2018. For their part, Democrats have expressed concerns about the growing monopoly power of technology related companies and their perceived relaxed attitude towards consumer privacy. Biden has said that breaking up big tech companies is "something we should take a really hard look at. ${ }^{11}$ He has also argued that online platforms should not be granted legal immunity for user-generated content.

On the tax side, Biden has vowed to reverse half of Trump's corporate tax cuts, while introducing a minimum $15 \%$ corporate tax. The latter could disproportionately affect a number of prominent technology related companies that have taken full
advantage of the current tax code to minimize their tax liabilities.

Our sense is that there will be a rotation out of mostly high-flying technology titans and select health care Covid beneficiaries and into other areas of the market that will benefit from the reopening of the global economy. While the transition to these stocks will be anything but smooth, it will be necessary for the continuation of the rally late in the year post the election and into 2021.

The "Covid winners" have stolen demand from the future. Now that the working-from-home setup is nearly complete for most workers, the pendulum is likely to swing in the opposite direction. In other words, at the margin, employees will slowly start to return to work, travel and leisure activities will grow and demand from the "real economy" will expand which should serve as a catalyst for this rotation. A definitive vaccine breakthrough will accelerate this process. We remain hopeful that such positive news will emerge soon.

Excluding technology related stocks/the pandemic winners, stock valuations are more reasonable as are their earnings growth estimates and technical profiles. Further, earnings growth estimates for this group stand a good chance of being upgraded versus the high-fliers which face greater odds of downgrades as the economy recovers and life returns to normal. One example is dividend paying stocks. Below, Tables 2 and 3, and Chart 17 are similar to those above for the Dow Jones US Dividend 100 Index and the Dow Jones Select Dividend Index illustrating their more favorable valuations.

Table 2: DJ US Dividend 100 Index (current level: 4080)

| Valuation Measure | 10 Year |  |  | Today's |  | Change <br> From Current |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current Value | Average Value | Difference | Percent Diff. | Level at 10 Yr. Avg |  |
| Price/Earnings Ratio | 15.7 | 16.4 | (0.7) | -4.3\% | 4248 | 4.1\% |
| Price/Book Value Ratio | 2.5 | 3.8 | (1.3) | -34.2\% | 6215 | 52.3\% |
| Price/Cash Flow Ratio | 8.3 | 10.7 | (2.4) | -22.4\% | 5242 | 28.5\% |
| Price/Sales Ratio | 1.6 | 1.6 | - | 0.0\% | 4100 | 0.5\% |

Table 3: DJ Select Dividend Index (current level: 613)

| Valuation Measure | 10 Year |  |  | Percent | Today's | Change <br> From <br> Current |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current <br> Value | Average Value | Difference |  | Level at 10 Yr. Avg |  |
| Price/Earnings Ratio | 12.9 | 15.9 | (3.0) | -18.9\% | 754 | 23.0\% |
| Price/Book Value Ratio | 1.5 | 2.2 | (0.7) | -31.8\% | 917 | 49.6\% |
| Price/Cash Flow Ratio | 6.2 | 8.1 | (1.9) | -23.5\% | 802 | 30.8\% |
| Price/Sales Ratio | 1.2 | 1.3 | (0.1) | -7.7\% | 706 | 15.2\% |

[^1]

Source: Access Financial Services using Bloomberg Software \& Data

Another interesting aspect of this group of stocks is their performance versus the SPX and the technology sector during the bear market following the dotcom bubble between 2000 and 2002 (Chart 18). Similar to today, the period of time leading up to this reset also brought significant underperformance of the broad market relative to the technology sector (red box on Chart 19).


DJovy Index (Dow Jones Select Dividend Index) TR: Nox Bubble \& val 5 Daily $27 \mathrm{MA} \quad$ Copyrightis 2020 Bloomberg Finance L.p. $\quad$ 07-0ct-2020 17:28:40
Source: Access Financial Services using Bloomberg Software \& Data

Relative to "the market" (the SPX), we have been underweight the stocks that have performed best this year. We have also been underweight stocks generally since the market bottomed on March 23. Our rationale for this strategy has been driven by our view that, while the US stock market has returned to its prior highs which were achieved during a very strong economic and corporate earnings environment, the advance since late March is supported neither by economic fundamentals nor reasonable valuations.

We continue to expect the fundamentals to be borne out by lower stock prices over the shorter term and that our allocations will serve us well in the process. We do anticipate increasing our clients' allocations to stocks during the market setbacks we expect by allocating to stocks and asset classes that should benefit from the reopening of the economy.


We are looking forward to next spring. Hopefully the political mess will be behind us and there will be light at the end of the Covid tunnel.

We thank you for your continuing confidence in these difficult times. Please do not hesitate to contact me if you would like to discuss our investment strategy as it relates to your individual portfolio.

Brant Kairies
952-885-2732

## Appendix A

| Apple, Inc. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S\&P 500 Weight: 6.5\% Current Level: 115.08 |  |  |  |  |  |  |
| Valuation Measure | Current Value | 10 Year <br> Average <br> Value | Difference | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change |
| Price/Earnings Ratio | 35.0 | 16.0 | 19.0 | 118.8\% | 53.1 | -53.9\% |
| Price/Book Value Ratio | 27.3 | 6.8 | 20.5 | 301.5\% | 28.5 | -75.2\% |
| Price/Cash Flow Ratio | 25.3 | 11.7 | 13.6 | 116.2\% | 53.0 | -53.9\% |
| Price/Sales Ratio | 7.4 | 3.6 | 3.8 | 105.6\% | 55.4 | -51.9\% |
| Valuation Measure | Current Value | 2 Year Average Value | Difference | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change From Current |
| Price/Earnings Ratio | 35.0 | 21.0 | 14.0 | 66.7\% | 69.2 | -39.9\% |
| Price/Book Value Ratio | 27.3 | 12.9 | 14.4 | 111.6\% | 54.6 | -52.6\% |
| Price/Cash Flow Ratio | 25.3 | 16.1 | 9.2 | 57.1\% | 73.2 | -36.4\% |
| Price/Sales Ratio | 7.4 | 4.5 | 2.9 | 64.4\% | 70.3 | -38.9\% |



| Microsoft Corp. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPX Weight: 5.6\% <br> Current Level: 209.83 |  |  |  |  |  |  |
| Valuation Measure | Current <br> Value | 10 Year <br> Average <br> Value | Difference | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change <br> From <br> Current |
| Price/Earnings Ratio | 36.1 | 19.9 | 16.2 | 81.4\% | 115.5 | -44.9\% |
| Price/Book Value Ratio | 13.4 | 6.3 | 7.1 | 112.7\% | 98.9 | -52.9\% |
| Price/Cash Flow Ratio | 26.3 | 13.6 | 12.7 | 93.4\% | 108.8 | -48.2\% |
| Price/Sales Ratio | 11.2 | 5.3 | 5.9 | 111.3\% | 99.3 | -52.7\% |
| Valuation Measure | Current <br> Value | 2 Year Average Value | Difference | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change From Current |
| Price/Earnings Ratio | 36.1 | 30.3 | 5.8 | 19.1\% | 176.1 | -16.1\% |
| Price/Book Value Ratio | 13.4 | 11.0 | 2.4 | 21.8\% | 171.6 | -18.2\% |
| Price/Cash Flow Ratio | 26.3 | 21.6 | 4.7 | 21.8\% | 171.9 | -18.1\% |
| Price/Sales Ratio | 11.2 | 8.8 | 2.4 | 27.3\% | 164.5 | -21.6\% |



Amazon.com, Inc
SPX Weight: 4.7\%
Current Level: 3,195.69

| Valuation Measure | Current Value | 10 Year <br> Average <br> Value | Difference | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change <br> From <br> Current |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Price/Earnings Ratio | 122.9 | 345.7 | (222.8) | -64.4\% | 8,991.6 | 181.4\% |
| Price/Book Value Ratio | 21.7 | 18.1 | 3.6 | 19.9\% | 2,661.1 | -16.7\% |
| Price/Cash Flow Ratio | 31.0 | 28.6 | 2.4 | 8.4\% | 2,945.0 | -7.8\% |
| Price/Sales Ratio | 4.9 | 2.8 | 2.1 | 75.0\% | 1,786.0 | -44.1\% |
| Valuation Measure | Current Value | 2 Year <br> Average Value | Difference | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change <br> From <br> Current |
| Price/Earnings Ratio | 122.9 | 93.7 | 29.2 | 31.2\% | 2,436.0 | -23.8\% |
| Price/Book Value Ratio | 21.7 | 19.2 | 2.5 | 13.0\% | 2,821.7 | -11.7\% |
| Price/Cash Flow Ratio | 31.0 | 27.4 | 3.6 | 13.1\% | 2,821.4 | -11.7\% |
| Price/Sales Ratio | 4.9 | 3.8 | 1.1 | 28.9\% | 2,445.1 | -23.5\% |



| Alphabet, Inc. (Google Parent) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SPX Weight: 3.1\% <br> Current Level: 1,459.14 (GOOGL) |  |  |  |  |  |  |
| Valuation Measure | Current Value | 10 Year <br> Average <br> Value | Difference | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change From Current |
| Price/Earnings Ratio | 32.3 | 27.0 | 5.3 | 19.6\% | 1,221.6 | -16.3\% |
| Price/Book Value Ratio | 4.8 | 4.2 | 0.6 | 14.3\% | 1,267.7 | -13.1\% |
| Price/Cash Flow Ratio | 18.1 | 17.1 | 1.0 | 5.8\% | 1,372.7 | -5.9\% |
| Price/Sales Ratio | 6.0 | 6.0 | - | 0.0\% | 1,452.9 | -0.4\% |
| Valuation Measure | Current Value | 2 Year <br> Average Value | Differ- <br> ence | Percent Diff. | Today's <br> Level at 10 Yr. Avg | Change <br> From <br> Current |
| Price/Earnings Ratio | 32.3 | 27.5 | 4.8 | 17.5\% | 1,244.9 | -14.7\% |
| Price/Book Value Ratio | 4.8 | 4.6 | 0.2 | 4.3\% | 1,414.3 | -3.1\% |
| Price/Cash Flow Ratio | 18.1 | 17.0 | 1.1 | 6.5\% | 1,370.3 | -6.1\% |
| Price/Sales Ratio | 6.0 | 5.8 | 0.2 | 3.4\% | 1,395.7 | -4.3\% |

Alphabet Earnings Per Share History with Consensus Earnings Projections (dashed line) and Forward Price/Earnings Ratios


| Facebook, Inc. <br> SPX Weight: 2.2\% <br> Current Level: 258.12 |  |  |  |  |  | Change <br> From Current |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Valuation Measure | Current <br> Value |  |  | 5 Year Average Value | Differ- <br> ence |  | Percent Diff. | Today's <br> Level at 10 Yr. Avg |
| Price/Earnings Ratio | 31.5 | 38.9 | (7.4) | -19.0\% | 318.2 | 23.3\% |
| Price/Book Value Ratio | 6.7 | 6.6 | 0.1 | 1.5\% | 255.5 | -1.0\% |
| Price/Cash Flow Ratio | 22.1 | 22.4 | (0.3) | -1.3\% | 216.2 | -16.2\% |
| Price/Sales Ratio | 9.8 | 12.0 | (2.2) | -18.3\% | 317.3 | 22.9\% |
| Valuation Measure | Current <br> Value | 2 Year Average Value | Differ- <br> ence | Percent <br> Diff. | Today's <br> Level at 10 Yr. Avg | Change <br> From <br> Current |
| Price/Earnings Ratio | 31.5 | 24.4 | 7.1 | 29.1\% | 199.9 | -22.6\% |
| Price/Book Value Ratio | 6.7 | 6.0 | 0.7 | 11.7\% | 231.7 | -10.2\% |
| Price/Cash Flow Ratio | 22.1 | 16.6 | 5.5 | 33.1\% | 194.9 | -24.5\% |
| Price/Sales Ratio | 9.8 | 8.5 | 1.3 | 15.3\% | 224.7 | -13.0\% |

Facebook Earnings Per Share History with Consensus Earnings Projections (dashed line) and Forward Price/Earnings Ratios



[^0]:    Source: Access Financial Services using Bloomberg Data

[^1]:    ${ }^{1}$ Hunter Woodall, "2020 hopeful Biden says he's open to breaking up Facebook," The Associated Press, May 13, 2019.

