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Cadence clips

FOCUSED ON WHAT MATTERS MOST.

How Should I Know If My Diversified Portfolio Returns Are Good Enough?

It's not easy for a diversified investor to know what their investments should be returning over most time frames. Just because the S&P 500 is up 15% this year, should you be too? The S&P 500 plus dividends was up 40% over the past twelve months, but since you have a diversified portfolio, what is a normal return for you over the same period? For any short-term period, like a year, how do we know if we're still on track, or if our returns show something has gone wrong?

Given the amount of media coverage large cap US stocks receive with ubiquitous reporting on the Dow and S&P 500 throughout the day right up to the nightly news, most diversified investors resort to comparing their own returns to one or both of those indexes, despite their portfolios possibly containing only 20% or less in large cap US stocks. That is kind of like wondering why your mixed breed dog with 20% greyhound ancestry can't keep up with an actual greyhound at times. Sure, your dog can't run as fast, but it's still pretty quick and it also avoids the negative greyhound characteristics you wanted to avoid which is why you got a mixed breed dog instead of a greyhound in the first place.

Hearing how just one asset class is doing makes it very difficult to know what your diversified portfolio should be doing. One place that may have performance information for more than just large cap US stocks is your 401(k) or 403(b) plan. You can usually find performance information for all the funds available for the plan either on a statement or via an employer-provided website, but having that kind of information at hand can cause another type of problem: "Return Envy". You see the returns for the aggressive investments during the good times and they can look extremely tempting. Even though you probably do already have exposure to some of those high-octane funds it is very easy to think if you just had more of them then you'll really be off to the races. Millions of Americans see those high returns during bull markets and start shifting their allocations to be more and more aggressive, and it works until the next bear market comes and then it suddenly doesn't.

With either incomplete information or a lot of different pieces of information with no real explanation on how to actually use them, how are you to know if what your investments are returning is what they SHOULD be returning?

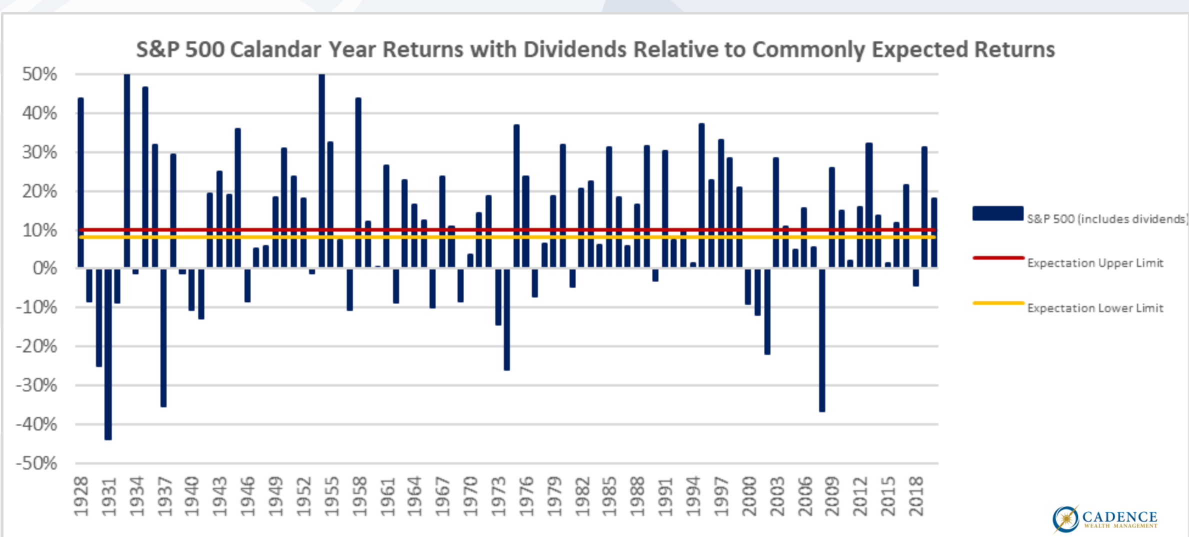
WHAT ARE "NORMAL" DIVERSIFIED INVESTMENT RETURNS?

You get a pass right now if you've never taken a statistics course, but if you who have, it's time to dust off some of those things you swore you'd never, ever use in real life, or possibly hoped you wouldn't have to. One of the reasons clients work with Cadence advisors is we have the knowledge required to verify if a mix of many different investments is behaving as we would expect it to over time. We wear many hats as advisors, and one of our roles involves educating our clients so they have a comfortable understanding of financial planning and investing concepts. Sometimes the knowledge we are passing is easy, and sometimes it's, well, challenging. Learning how to calculate if your investments are performing as intended may be more the latter than the former, because it all comes down to those darn statistics.

There is a way to measure whether or not your investment returns are "normal", and this is by using the concepts of "mean" and "standard deviation" in conjunction with each other. "Mean" is pretty much a fancy way of saying "average", whereas "standard deviation" is a fancy way of expressing how volatile an investment is. The two of them work in conjunction because the standard deviation tells you just how high or low returns are likely to go, and the mean is what all those different returns average out to over time. Think of it this way: the day to day, month to month, and year to year returns for your investments are a product of their standard deviations, and the long-term average from all those different returns is the mean. We set a target return (mean) and then we manage the volatility over time (standard deviation).

The higher the standard deviation for an investment or for an entire portfolio, the more it will fluctuate up and down over time above and below its mean. Even though you may expect to earn a certain return from your investments, the vast majority of the time you will earn something else, either more or less, and that is completely normal. Keep in mind, you will have below average returns 50% of the time *by definition*.

An example of how the shorter-term returns can differ profoundly from a long-term average is when you ask someone how much they expect the stock market, specifically the S&P 500, to earn over time and they tell you the common answer of "8 to 10%". That's actually pretty accurate for the long-term return, but the yearly returns can deviate from that, and they frequently do by quite a bit. The average annual return of the S&P 500 plus dividends between 1928 and 2020 according to data provided by the Stearn School of Business is 9.8%, but look at just how many times the annual returns on the road to get that 9.8% fell between 8-10%:

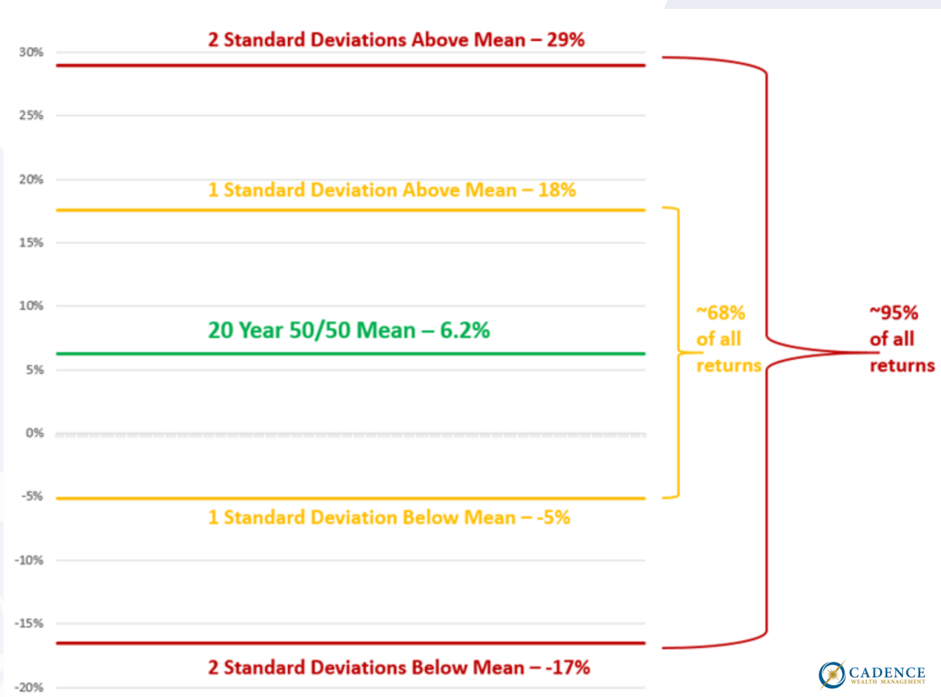


The blue lines show the calendar year returns and the red and yellow lines create the 8-10% range. It's hard to see here because there are 93 different blue lines crammed into a small space, but care to guess just how many times the S&P 500's calendar year total return actually fell between 8 and 10%? ONCE. Yes, just once in 1993 when it was 9.97%. And if it had only earned 0.04% more that year it would have been zero times in 93 years! The index has earned 9.8% per calendar year starting in 1928, and it only actually returned what many people would expect it to 1.1% of the time. The takeaway on this one is that you're very, very rarely going to earn what you think you should in the short term on your way to your long-term return.

So, what is "normal" then?

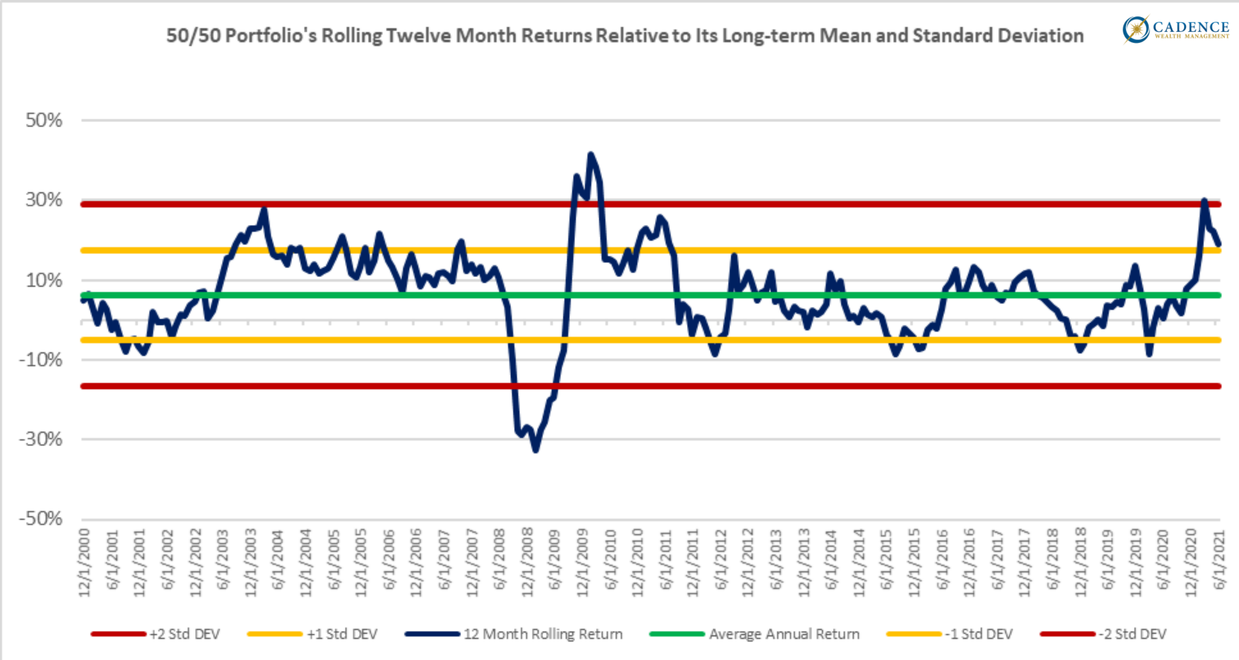
The math behind this is pretty simple provided you have the right information. You take the mean of the investment, or the investment portfolio, and you add and subtract one standard deviation. That gives you a range above and below the mean. Approximately 68% of the periodic returns should fall inside that range. Adding and subtracting one more standard deviation on each side gives you a range within which approximately 95% of all periodic returns should fall. This does mean that it would still be considered normal for a small number of returns to fall outside that wide range. So even when the portfolio has an unbelievably good year or a disappointingly poor one, it is actually to be expected and would be considered normal. Just look back at the last chart to see how common it is for the S&P 500's return to be well above or well below 9.8% for a calendar year.

For a 50% stock, 50% bond portfolio with a current 20 year mean of 6.2% and standard deviation of 11.4%, doing that math looks like this:



This is the statistical model for all 247 twelve-month periods between December 31, 2000 and June 30, 2021. The majority of the time, this portfolio should have returns between 18% and -5%, which still leaves 30% of all twelve-month returns to be better than 18% or worse than -5%. **Consider that: just about one third of the time, this portfolio's returns are going to look way better or way worse than 6.2%, and that is normal.**

Let's just go ahead and satisfy our curiosity on this one. Just how WOULD this 50/50 portfolio's returns have done relative to these statistics?



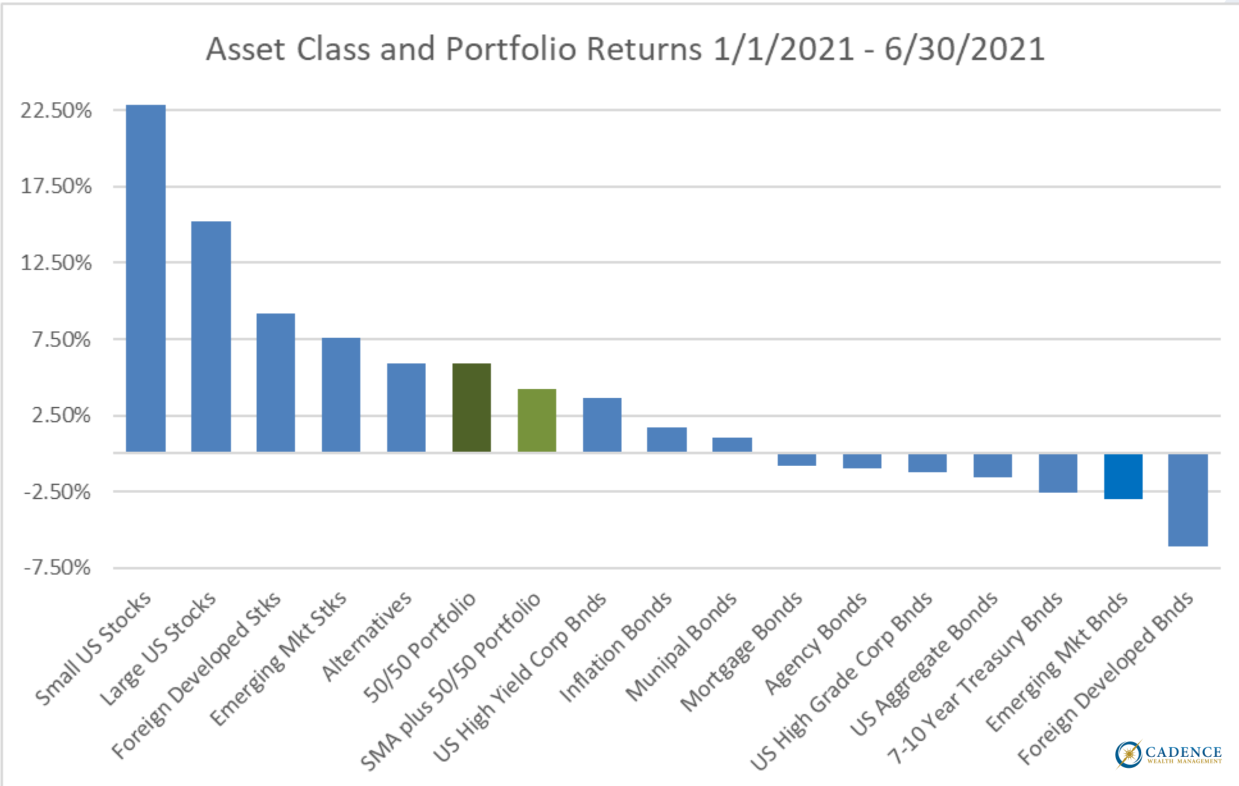
Now that you have completed, or revisited, statistics 101, you can see this distribution appears to be behaving mostly as expected. The majority of the returns look to be between the yellow lines, and occasionally the blue line is between a yellow and a red line. It's rare, but there are 16 twelve-month returns that are better or worse than two standard deviations above or below the mean. Most of them are during or right after the financial crash of 2007-2009.

Analyzing portfolio returns using mean and standard deviations does have its limitations. Those statistical measures are dependent on the time period being measured, and the shorter the time period measured, the greater the likelihood the data may deviate from the expected outcome. The 50/50 portfolio we used would have a different mean and standard deviation if we used thirty years, or ten years, or a different twenty years than we did. The twenty plus years we used were good periods to measure, considering both the tech bubble as well as the financial crisis of 2007-2009 were included in that measurement period, which gives a very good indication of just how bad or good returns can get. Despite that, the 2.5% chance that a portfolio's return gets worse than two standard deviations below the mean is guaranteed to happen from time to time. Though there are times where the outcomes deviate from the model, especially during extreme events like two standard deviation plus market crashes that can happen more often than the model seems to suggest, it is still a good way to estimate when a diversified investment portfolio is behaving as expected to a meaningful degree.

What Does That Mean for 2021 So Far?

If you are wondering how this applies to your returns so far this year, it's not all that accurate to compare half-year numbers to statistics generated from full-year returns. However, we can look at how the various asset classes have performed so far this year and compare our own diversified portfolio's return to it and at the very least get a general sense for how we are doing. Looking at both the aforementioned 50/50 portfolio as well as a portfolio that has 30%

of its assets in Cadence separately managed accounts and the remaining 70% split 50/50 like the first portfolio, it looks like they are performing as well as we'd expect at this point in the year when compared to a variety of asset classes:



With small and large US stocks having a good year to this point, but with everything else returning quite a bit less, and in some cases being negative, the mid-year returns on the two diversified portfolios appear not to be doing better or worse than we'd expect. They are being pulled up by their stock allocations, especially US stocks, but being held down by pretty much everything else. Looking at the twelve-month returns for both portfolios, they both fall within their normal ranges. The 50/50 portfolio is a bit higher than one standard deviation above its 20 year mean of 6.2% over the past twelve months, and the 50/50 portfolio that also has Cadence separately managed account exposure has returned just a shade under its 8.8% 20-year estimated return over the same timeframe.

We can use history as a guide to help us find that mix of assets that we think should get us that proverbial 6-8%, and now we know just how common it is for the periodic returns to differ up and down from that target. That is a reasonable way to view a diversified portfolio's construction, but as we have reported many times, including already twice this year with our March newsletter piece entitled "Narratives Aside", and just last month with the piece "Change Happens", the price you pay for an asset determines what you will get in the short and long term. Both newsletter pieces discuss the relatively high price of US stocks right now, such that it is reasonable to expect little to no growth, and possibly even negative growth, from large cap US stocks over the next ten to twelve years. This is why you have a diversified portfolio in the first place: if US stocks do not perform well in the coming years, you should have other investments that perform better. Depending on how many US stocks you have in your portfolio, you may experience more returns that fall within the standard deviations below the mean over the coming years than over past time periods.

Party Tricks That Matter

We should have paid more attention in those statistics classes, but if there's one thing all those people who have loaded up on the aggressive asset classes since the financial crash should familiarize themselves with is just how low two standard deviations below their portfolio's average returns actually is. Statistically speaking, you can't avoid a two or more standard deviation loss forever. Whether it's one or two standard deviations above, or one or two standard deviations below, your monthly or yearly investment returns are going to differ quite a bit from their long-term averages very frequently. THAT, for lack of a better word, is NORMAL. So the next time you hear someone discuss disappointing investment returns, go ahead and ask them what the standard deviation is. To a Cadence financial advisor, that is considered being the life of the party.

Series I Savings Bonds: What You Need To Know

With the Federal Reserve keeping interest rates at zero and Fed Chairman Powell saying last month that the Fed "is not even thinking about thinking about raising rates", interest on your cash reserves is very hard to come by. Also, as we've talked about in prior Cadence Clips pieces, inflation has been gaining steam, which further erodes the purchasing power of your cash.

So, what is one solution if you want to keep a cash reserve but also earn some interest without any downside risk to your principal? CDs used to be an answer, but as of the writing of this article, a quick search finds the best rate available for a 2-year CD to be .75%, and going all the way out to a 5-year CD, the best rate available is 1.1%. Not very appealing. A possible solution that may work for you are Series I Savings Bonds, or I bonds for short.

Series I Savings Bonds are issued by the US Treasury and can be purchased online by setting up a TreasuryDirect account at www.treasurydirect.gov. Electronic I bonds can be purchased to the penny in any amount for $25 or more, up to $10,000 a year. Paper I bonds can also be purchased using your tax refund, but they are only available in denominations of $50, $100, $500, and $1,000 with a $5,000 annual limit.

I bonds earn interest two ways: A fixed rate (currently at 0%), and a rate that is set twice a year based on inflation. The inflation rate is based on the non-seasonally adjusted Consumer Price Index for all Urban Consumers (CPI-U) for all items, including food and energy, and is set every six months on the first business day of May and November. The current rate of an I bond issued from May 2021 through October 2021 is 3.54%. Not too shabby!

What are the drawbacks?

- I bonds must be held for 12 months before they can be sold. After 12 months and up to 5 years, I bonds can be sold, but you'll lose the last 3 months of interest. With the top one-year CD rate of .7%, you'll definitely earn more interest with an I bond.

- You are limited to purchases of $10,000 annually per person.

What are the advantages?

- I bonds are issued by the US Treasury and backed by the full faith and credit of the Federal government, so they are very safe.
- I bonds can help your cash reserves keep place with rising costs because the inflation component is adjusted twice per year to the CPI-U.
- The current interest rate of 3.54% is 2.44% better than the current best 5-year CD interest rate.
- After 5 years, there is no interest penalty to sell an I bond, and they can earn interest for 30 years.
- No state tax is owed when you sell your I bond.
- Federal tax is only owed after the I bond is sold, not as it grows.

In summary, if you have funds that you want to keep as cash for at least a year, but you also want to earn some interest that can keep pace with inflation, consider purchasing Series I Savings Bonds from the US Treasury. And as always, please reach out to your Cadence advisor with additional questions you may have regarding I bonds or to determine if they may be an appropriate tool for your portfolio.

Market Update

Change is underway as we head into August. When it comes to markets, what we spend most of our time analyzing and attempting to understand are those changes taking place under the surface. We make a concerted effort to remain unbiased, objective, and to keep our eyes on the data as they present themselves to us. We try to remain flexible in our thinking so that we can change our minds as circumstances change. As important as this is in investing, it's still incredibly hard to do. Before digging into some market data that is currently informing our investment process and allocation, please bear with us as we say a few words about how this relates to our current health struggle – Covid-19.

As important as it is to stay unbiased, objective, and data-focused, most people have a very hard time executing on that – professionals and experts included. Why is this the case? In some cases it's financial incentive, in others it's political orientation or bias. Throw tribalism and group think into the mix and we have a complete and total divide on how to move forward with respect to a pandemic. We've taken an interest in truly understanding Covid because we value health, but also because there are economic and market consequences from the disease itself as well as our public policy response to it. Covid can affect our clients' health. Lockdowns can affect our clients' livelihoods. The promotion of novel, expensive, patented drugs as the only way forward can have tremendously negative consequences as it relates to our already quite broken and unaffordable-to-most health care system. And all of these things, all of them, come together down the road to create either a better life for our children or a more challenging one. We are very much in our lane in caring about this, and so we are very interested in making sure that we think about it without bias, objectively, and with a keen focus on the data, even if that points us in an unpopular direction.

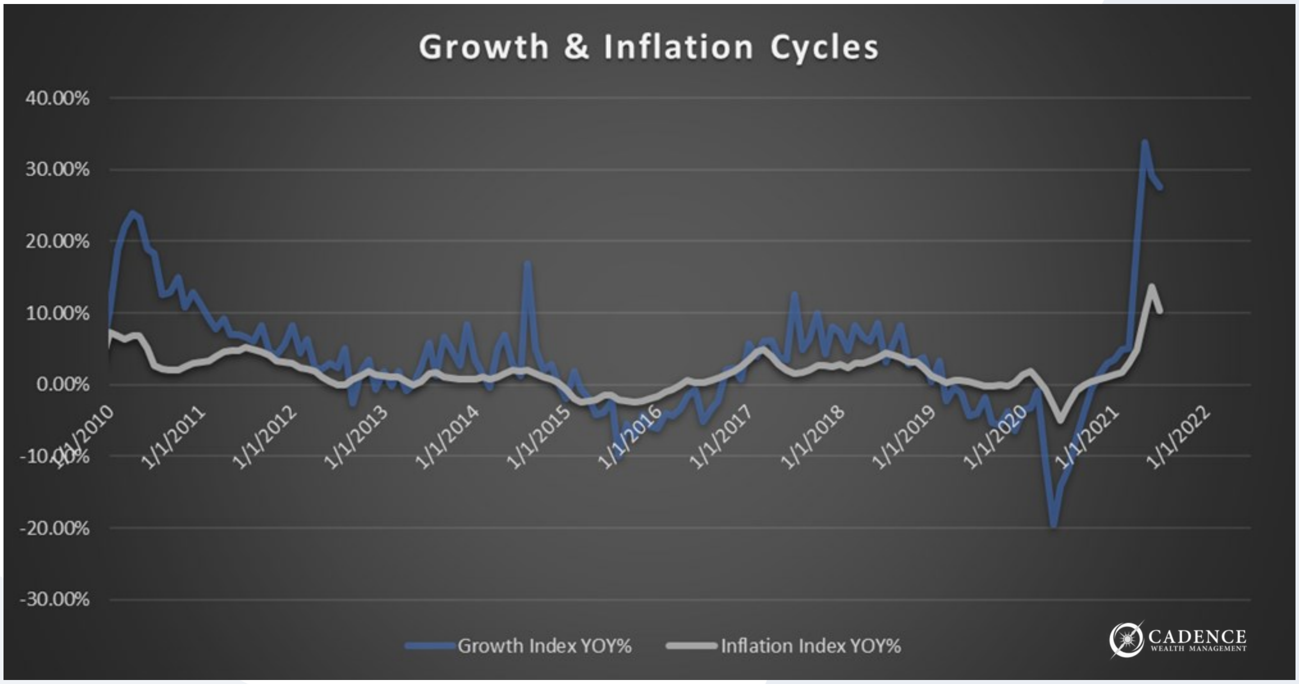
And so, with respect to Covid-19 we'll say this. There is plenty of data that's been accumulated over the last 16 months that suggest there are highly effective ways to treat Covid-19. We would urge everyone to seek out that information and to be intellectually curious about it. Most of these treatments are cheap, off-patent, and have been around for decades. This may give you some indication as to why there hasn't been much "officially sanctioned" discussion around them. Please don't take this as conjecture; it's just how the world works. What also appears to be happening is that the Covid vaccines are beginning to lose efficacy. We've seen more breakthrough cases in Israel and the U.K. that are a much higher proportion of the overall population than we were told possible. More recently, ABC News reported that a Fourth of July outbreak in Provincetown, MA has now led to 882 infections, 74% of which within vaccinated individuals. This has contributed to the CDC reimposing a masking recommendation for all people when indoors. What's worth pointing out here is that there were a handful of prominent experts pointing out this possibility months ago, some of whom were discounted, discredited, or outright censored. Their arguments were logical and plausible, yet they weren't heard. It's helpful in hindsight for all of us to think about why there was no debate on this front. There are also experts with concerns about vaccine safety who haven't been brought into the discussion. Meanwhile, while the vaccine is being advertised and promoted as safe, the number of adverse events accumulating in the CDC's voluntary VAERS database (Vaccine Adverse Events Reporting System) are well beyond what we've seen in the last handful of years combined. Again, if we're being objective, we'd think this information would be crucial in weighing the risks and benefits of our individual health decisions as well as larger public policy decisions as we move forward. The good news is that although cases are jumping here at home as well as in most parts of the world, the Delta variant appears much less virulent. Serious illnesses and deaths simply aren't anywhere near prior peaks in most places. This is very encouraging.

So, our takeaway is this: The official response and narrative around Covid is very confusing and inconsistent. From what we can tell, the path forward in dealing with Covid was decided very early on and that path hasn't been interrupted or altered despite changing data that's rolled in along the way. That path up to this point has been mass vaccination. It's not surprising to us because it's something we're very familiar with in the financial services community. When the business of Wall Street is selling financial products, every market forecast is an optimistic one. Being honest about market risks and potential bear markets simply isn't good for business. Incentives drive behavior and whether it's a mutual fund or a new vaccine, one's ability to rationalize questionable actions when the gravitational pull of profit is imparting its forces is very high. In terms of sorting out the truth from the narrative, it would probably serve one well not to get too political, tribal, or pre-ordained in his or her opinion around the best path forward with Covid. We've found there are good arguments both for and against the vaccine depending on one's circumstances just as there are very compelling arguments as to why we should spend more time focusing on treating this disease rather than attempting to eradicate it. Just like with financial planning, there is not, nor should there be one single solution. We should all be open to discussing the pros and cons of each not only from an individual health standpoint, but from a more global policy perspective.

We've spent a good amount of time over the years talking about the growing wealth disparity between the haves and have-nots in this country. This has set the stage for people to feel increasingly frustrated and distrustful of those at the top. What's extremely unfortunate, but incredibly important to understand, is that Covid and our public health response to it has only served to increase that social fracturing. Every single one of us has the ability to keep that from happening by keeping an open mind and remaining unbiased, objective, and intellectually curious around all possible solutions for keeping people healthy and our overall society safe, solvent, and harmonious moving forward. How good a job we do with this will have significant market and economic implications. If you're finding yourself believing too strongly in any one solution, it might be worth a re-think. In investing, we call that overconfidence.

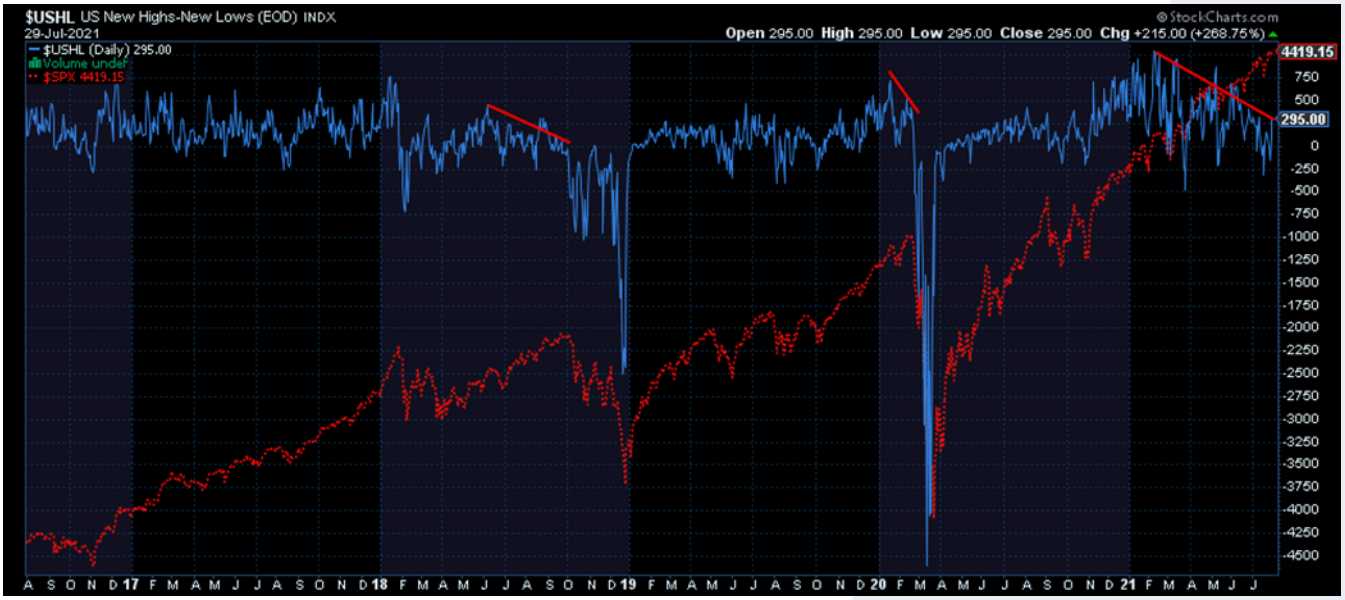
And Finally… the Market Update

As we discussed earlier this year and suspected would occur, the growth and inflation cycles have both peaked and edged lower (chart below). From a big picture viewpoint, this tends to make it harder for risk asset like stocks to perform well and increases the probability of them experiencing large, lasting losses. This has us on the lookout for market signals that may be confirming that this peak in the growth and inflation cycles is more than just a blip. Although we are in fact seeing some pretty clear signals under the surface of markets suggesting the slowdown in growth may be real and lasting, we're not yet convinced that the slowdown in inflation will be as notable. More on that later.



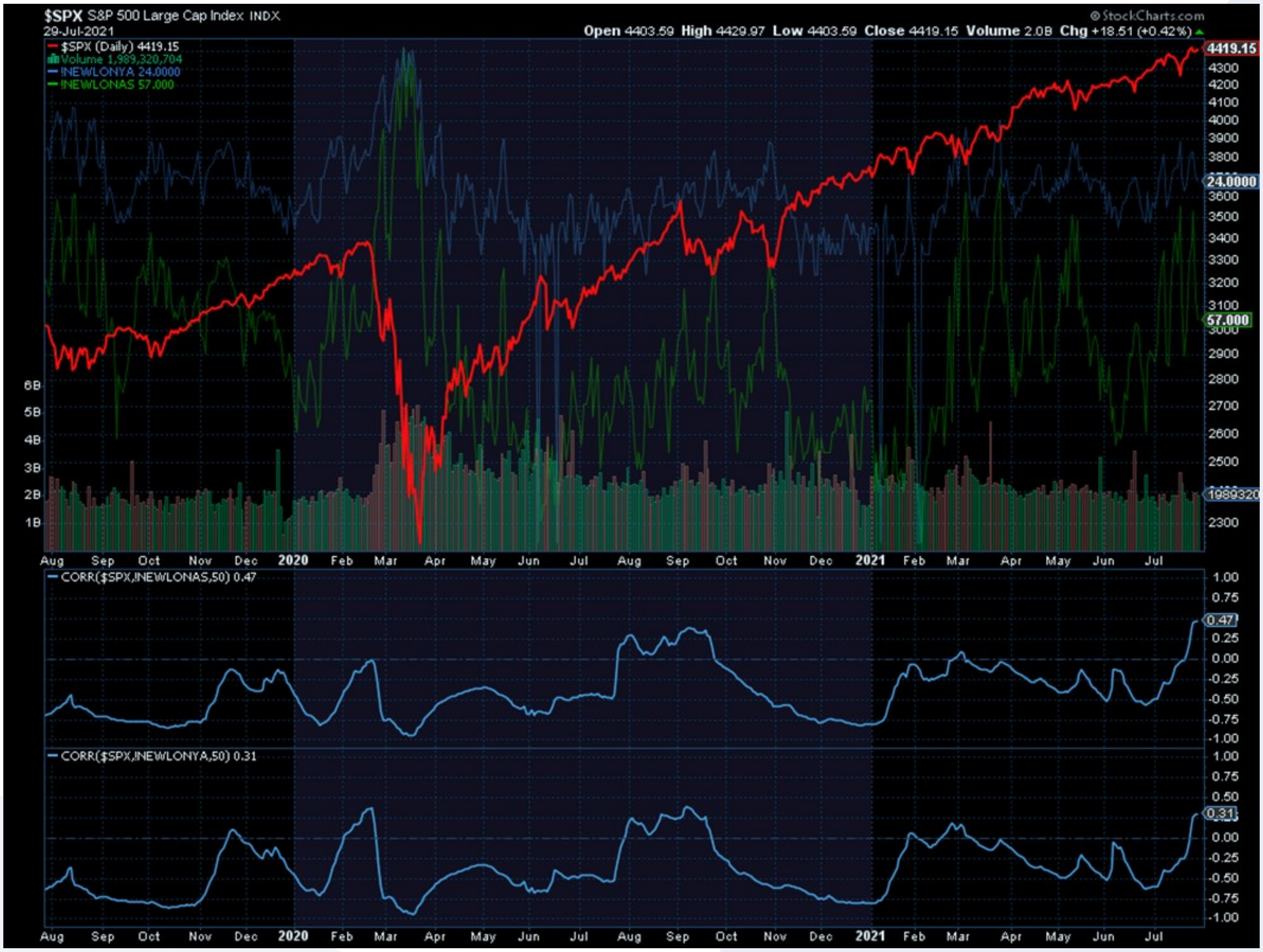
In the chart below, we can see the ratio of consumer discretionary stocks relative to consumer staples is trending lower even though the S&P 500 continues to be near all-time highs. This indicates that investors are favoring stocks of companies that tend to experience less disruption in revenues and profits when the economy begins to weaken. The idea is that when people are strapped financially, they cut their discretionary purchases before their necessary ones. Therefore, a downward sloping line here suggests the safer companies have recently begun performing better.

What few investors know is that most market indexes such as the S&P 500 are most heavily influenced by the largest companies in them rather than by all of the companies equally. So often times a rising index can hide what's happening with the majority of other companies in an index. Below, we can see in the blue line in the chart that the number of companies making new price highs minus the number of companies making new price lows is falling. This means fewer highs and more lows at least on a relative basis, which tends to indicate a shift in the "rest" of the index that one wouldn't see by just looking at the index itself; in this case the S&P 500.



We're also seeing weakness in the transportation sector of the market relative to the rest of the market. This weakness tends to foreshadow economic slowdowns and market weakness.

If we just look at the number of stocks on the Nasdaq and New York Stock Exchange making new price lows, we can see both have been rising (green and blue in the following chart). What's more important to note is that both have been rising along with the market, which is unusual. Again, the theme here is that although the indexes are moving higher, not all companies in those indexes are sharing in the success.



Below we can see the performance of semiconductor stocks (blue) and small cap stocks (orange) relative to the broad market (S&P 500). What both downward trending lines suggest is relative weakness in those areas which tends not to reflect a robust, healthy stock market. Again, not all areas are acting "healthy".

So, against the backdrop of a slowdown in growth, we are in fact seeing market signals that suggest we should be very cautious here. Does this mean there's a market crash right around the corner? No. It does however raise the probability of one happening, or a more difficult time for risk assets at a minimum. These signals would have us less willing to hold expensive, speculative assets in favor of those that do better in tough times or offer much better medium to long-term value. With the jury still out on whether or not the current high rate of inflation will remain, we'd favor less economically sensitive commodity positions at this point rather than all commodities indiscriminately across the board. Should the evidence start to suggest that the inflation cycle isn't slowing very fast, and market signals point in that same direction, we'd feel better about a more broad commodity exposure in the short term. The long-term appeal of commodities hasn't changed.

So, until next month, stay prudent in markets, expect some volatility, and keep an open mind and a focus on facts and data. A tree is designed to bend and sway with the wind in all directions. If it's too rigid, it will snap. This is just as important in any investment management process as it is in day-to-day life. Stay healthy.

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