FINANCIAL SYNERGIES®
WEALTH ADVISORS

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Quarterly Newsletter

INSIDE THIS ISSUE

Market Predictions and the Madness of Crowds

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Much like the weather, markets have a way of being unpredictable: "There's a 50% chance of rain today." Wouldn't it be helpful to get a bit more detail, such as how heavy might this rain be? When exactly might I expect it to start raining? Market gurus lack the same detail and accuracy in their predictions.

Naissance Partners, a financial services consulting firm, analyzed 345 predictions for 2020 from 22 asset managers, and they found that 80% of the predictions were similar, vague, and offered little direction. So, if you hear it once, you are likely to hear it many times from all the same "market experts."

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Naissance also noted there's considerable "herding" around ideas and predictions. Herding is the term used by behavioral scientists and is the idea that we feel most comfortable when we follow the crowd. We feel safe in the crowd, and often we will base our decisions on what we see others are doing – we follow trends.

So how in the world are these similar, trendy, yet vague market predictions going to help us investors make the right decisions?

They won't.

There are some guiding principles, however, that will genuinely impact your financial future:

- **Predictions are worse than useless:** It has been said that the most dangerous market prognosticator is the one who does not know what he/she does not know. Market predictions are problematic, but the larger problem is that people still act on them, even though they are consistently incorrect! Let's stop listening to them. An investment game plan is what matters, not vague predictions.

- **Play the long game:** The only way to achieve your financial goals is to invest with a long-term perspective. Knee jerk reactions to events (like the market swoon in early 2020) typically result in setbacks to a well-thought-out investment strategy. Set your investment plan, update it when needed, and avoid the urge to cash out. Short-term reactions, no matter how good they feel at the time, can wreck your long-term plan.

- **Tune out the noise:** By noise, I mean the 24/7 nonstop market advice we are bombarded with, mostly from the financial media. The noise can make investors buy at market peaks and sell when the market tanks. Tune out the noise. The noise hasn't a clue.

We investors must travel through difficult, emotionally charged periods. Last year was no exception. You have a thoughtful investment strategy, a path to financial success and security. Never let the noise or anybody else coax you off your path. Stay on the path with us. We will do great things together.

There is Still Time to Save

MARIE VILLARD | CCO, DIRECTOR OF OPERATIONS

Even though 2020 has come to an end, there is still time to save for retirement. Both traditional IRA and Roth IRA contributions for tax year 2020 can be made until the personal filing deadline of April 15th and could be beneficial to you depending on your tax situation and retirement savings goals.

The total amount you can contribute to either a traditional IRA or a Roth IRA for tax year 2020 is $6,000 as long as you or your spouse have earned income. For those age 50 and older, there is an additional $1,000 catch-up provision allowing for a total contribution of up to $7,000.

Traditional IRA contributions are considered pre-tax dollars, which means that you could qualify to deduct all or part of the contribution from your federal income taxes. There are some limitations with tax-deductibility, however, depending on a variety of factors, including your income, your tax-filing status, and whether you or your spouse is covered by a workplace retirement plan.

The earnings in a traditional IRA grow tax-deferred until you begin taking distributions (after age 59 ½ without penalty). Roth IRAs work a bit differently. The contributions made are considered after-tax dollars and are not tax-deductible. However, the funds in these accounts grow tax-free, and the withdrawals made after age 59 ½ are also tax-free if the distribution is qualified. There are income limits set out to qualify for contributing to a Roth which depend on your income, tax-filing status, and whether you are single or married.

There are many considerations when making contributions to an IRA or Roth IRA, so if you have any questions please give us a call. We will be happy to help.

The Future is Here

BRYAN ZSCHIESCHE, CFP® , MS, MBA | SHAREHOLDER, FINANCIAL ADVISOR

Though my last science course was a biology class taken in 11th grade - whose tests are still the source of my most vivid nightmares - I am in awe of the technological breakthroughs in so many areas of our world. While we still don't have flying cars (yet), advancements in genomics, artificial intelligence, automation and communication continue to boggle my mind. Below are two that I find particularly fascinating.

The $540,000 Camera in Your Pocket

Every couple of years, Bret Swanson of Entropy Economics updates his blog to tell us what an iPhone would have cost in 1991. He looks at measurable components such as data storage, processing speeds, and communications bandwidth. This time, Swanson included the camera as part of his analysis in a blog titled, "***The $540,000 Camera in Your Pocket.***" I hope you're sitting down.

The iPhone 12 has three (count them...three!) 12-megapixel cameras. For reference, that's "36 times the number of pixels of the original DCS 100," the first digital single-lens reflex (DSLR) camera, which was created by Kodak in 1991. The DCS 100 was marketed to professional photographers and sold for $20,000. "At $15,000 per megapixel, circa 1991, that's $540,000 worth of photographic power in every smartphone."

As if this weren't incredible enough, looking at the three other factors of data storage, processing speeds, and communications bandwidth, the iPhone 12 would have cost **$51,000,000** to build in 1991! Don't believe me? Here's the math:

How much would it have cost to build an iPhone in 1991?-1

	cost in 1991	iPhone 5s (2013)	iPhone 7 (2016)	iPhone Xs (2018)	iPhone 12 (2020)
Data storage (nonvol. memory)		32 GB	128 GB	256 GB	256 GB
	$45,000 per GB	$1.44 million	$5.76 million	$11.52 million	$11.52 million
Computation (main processor)*		A7: **2,144*** (20 nm, 1.2 B transistors)	A10: **5,726*** (16 nm, 3.3 B trans.)	A12: **11,219*** (7 nm, 6.9 B trans.)	A14: **16,014*** (5 nm, 11.8 B trans.)
	Geekbench score (11/16/20)	259	729	1,109	1,583
	$30 per MIPS	$.620 million	$3.6 million	$7.1 million	$10.1 million
Bandwidth		LTE, 15 Mbps, 1 Mbps upstream	LTE, 33 Mbps, 3 Mbps upstream	Gigabit LTE (U-LAA), ~100 Mbps, 12 Mbps upstream	5G New Radio (WiFi 6), ~300 Mbps, 50 Mbps upstream, 1/10 latency
	$100 per Kbps	$1.5 million	$3.3 million	$10 million	$30 million
Total		**$3.56 million**	**$12.66 million**	**$28.62 million**	**$51.62 million**

3D Printing and Augmented Reality

I first geeked out on 3D printing in my 2014 blog, "Disruptive Innovation & 3D Printing." Since then, the applications for this incredible technology have ballooned.

For example, The Jerusalem Post recently published an article about Isreal's first-ever augmented reality, 3D eye socket surgery. Doctors used 3D printing to produce a titanium plate that was then inserted under the patient's eye to repair the fractured socket.

To position the plate accurately, doctors used Microsoft's HoloLens glasses connected to a computer containing a model of the patient's skull. "The model was virtually and accurately placed over the patient's head through the glasses, which enabled the surgeon to place the plate correctly in real time."

Are you ready for the best part? The surgery took only an hour-and-a-half and the patient was released after a recovery of just a few days! Mind. Blown.

The future is officially here.

Reflecting on an Unprecedented Year

MIKE MINTER, CFP®, CFS® | SHAREHOLDER, PORTFOLIO MANAGER

The year 2020 proved to be one of the most tumultuous in modern history, marked by countless developments that were historically unprecedented. But the year also demonstrated the resilience of people, institutions, and financial markets.

The coronavirus was already in the news early in the year, and concerns grew as more countries began reporting their first cases of COVID-19. Infections multiplied around the world through February, and by early March, when the outbreak was labeled a pandemic, it was clear that the crisis would affect nearly every area of our lives. *(Side note: I was in Disney World with my family in late February / early March. In the first half of the trip there wasn't much mention of coronavirus. By the end of the trip COVID-19 had gripped the entire country and they were planning on shutting down the park the following week. We were even worried about our flight home being canceled. Surreal experience.)*

The spring would see a spike in cases and a global economic contraction as people stayed closer to home, and another surge of infections would come during the summer. Governments and central banks worked to cushion the blow, providing financial support for individuals and businesses and adjusting lending rates.

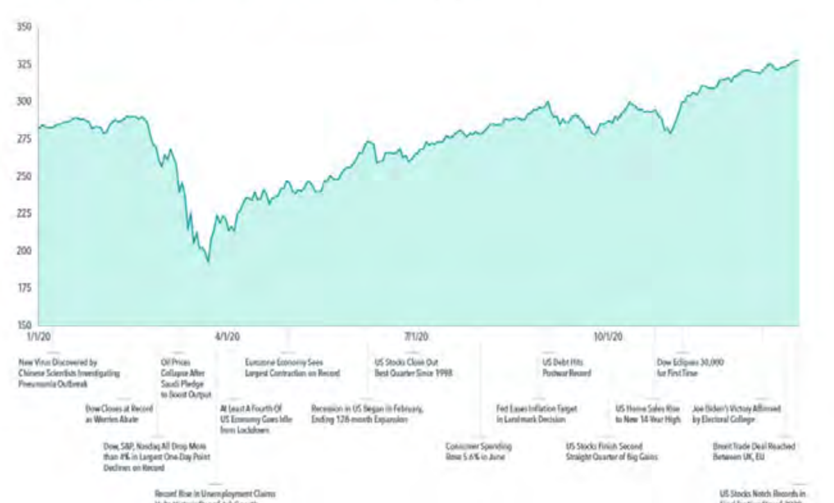
On top of the health crisis, there was widespread civil unrest over the summer in the US tied to policing and social justice. In August, Americans increasingly focused on the US presidential race in this unusual year. Politicians, supporters, and voting officials wrestled with the challenges of a campaign that at times was conducted virtually, and with an election in the fall that would include a heightened level of mail-in and early voting. In the end, the results of the election would be disputed well into December. As autumn turned to winter, 2020 would end with both troubling and hopeful news: yet another spike in COVID-19 cases, along with the first deliveries of vaccines in the US and elsewhere.

For investors, the year was characterized by sharp swings for stocks. March saw a 33.79% drop in the S&P 500 Index as the pandemic worsened. This was followed by a rally in April, and stocks reached their previous highs by August. Ultimately, despite a sequence of epic events and continued concerns over the pandemic, global stock market returns in 2020 were above their historical norm. The US market finished the year in record territory and with an 18.40% annual return for the S&P 500 Index. Non-US developed markets, as measured by the MSCI World ex USA Index, returned 7.59%. Emerging markets, as measured by the MSCI Emerging Markets Index, returned 18.31% for the year.

EXHIBIT 1

Highs and Lows

MSCI All Country World Index with selected headlines from 2020



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Fixed income markets mirrored the volatility of equity behavior, with nearly unprecedented dispersion in returns during the first half of 2020. For example, in the first quarter, US corporate bonds underperformed US Treasuries by more than 11%, the most negative quarterly return difference in data going back a half century. But they soon swapped places: the second quarter was the second-most positive one on record for corporates over Treasuries, with a 7.74% advantage. Large return deviations were also observed between US and non-US fixed income as well as between inflation-protected and nominal bonds.

Global yield curves finished the year generally lower than at the start. US Treasury yields, for example, fell across the board, with drops of more than 1% on the short and intermediate portions of the curve. The US Treasury curve ended relatively flat in the short-term segment but upwardly sloped from the intermediate – to long-term segment. For 2020, the Bloomberg Barclays Global Aggregate Bond Index returned 5.58%.

EXHIBIT 2

Sharp Shifts

US Credit minus US Treasury: Quarterly Returns, March 1973–December 2020

Uncertainty remains about the pandemic and the broad impact of the new vaccines, continued lockdowns, and social distancing. But the events of 2020 provided us with many lessons, affirming that following a disciplined and broadly diversified investment approach is a reliable way to pursue long-term investment goals.

Market Prices Quickly Reflect New Information about the Future

The fluctuating markets in the spring and summer were also a lesson in how markets incorporate new information and changes in expectations. From its peak on February 19, 2020, the S&P 500 Index fell 33.79% in less than five weeks as the news headlines suggested more extreme outcomes from the pandemic. But the recovery would be swift as well. Market participants were watching for news that would provide insights into the pandemic and the economy, such as daily infection and mortality rates, effective therapeutic treatments, and the potential for vaccine development. As more information became available, the S&P 500 Index jumped 17.57% from its March 23 low in just three trading sessions, one of the fastest snapbacks on record. This period highlighted the vital role of data in setting market expectations and underscored how quickly prices adjust to new information.

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Owning the Winners and Losers

The 2020 economy and market also underscored the importance of staying broadly diversified across companies and industries. The downturn in stocks impacted some segments of the market more than others in ways that were consistent with the impact of the COVID-19 pandemic on certain types of businesses or industries. For example, airline, hospitality, and retail industries tended to suffer disproportionately with people around the world staying at home, whereas companies in communications, online shopping, and technology emerged as relative winners during the crisis. However, predicting at the beginning of 2020 exactly how this might play out would likely have proved challenging.

In the end, the economic turmoil inflicted great hardship on some firms while creating economic and social conditions that provided growth opportunities for other companies. In any market, there will be winners and losers – and investors have historically been well served by owning a broad range of companies rather than trying to pick winners and losers.

For more flavor on this topic see my previous **article on the winners and losers of 2020**.

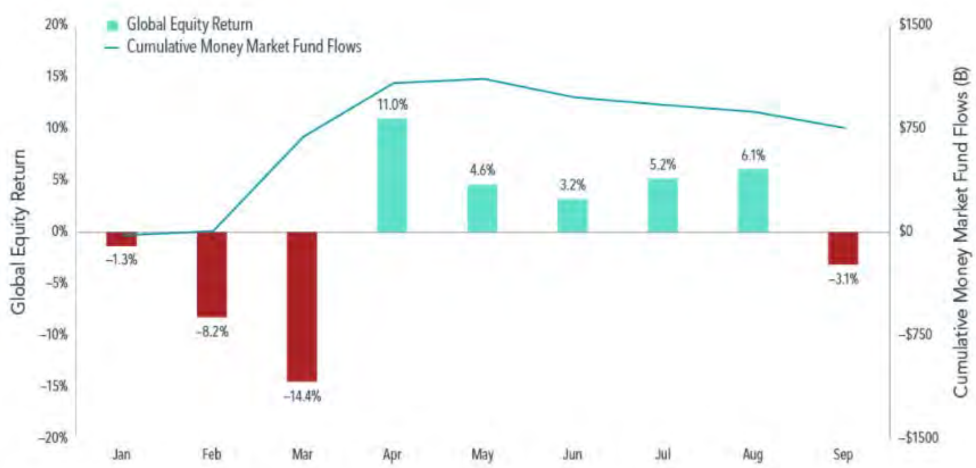
Sticking with Your Plan

Many news reports rightly emphasized the unprecedented nature of the health crisis, the emergency financial actions, and other extraordinary events during 2020. The year saw many "firsts" – and subsequent years will doubtless usher in many more. Yet 2020's outcomes remind us that a consistent investment approach is a reliable path regardless of the market events we encounter.

Investors who made moves by reacting to the moment may have missed opportunities. In March, spooked investors fled the stock and bond markets, as money-market funds experienced net flows for the month totaling $684 billion. Then, over the six-month period from April 1 to September 30, global equities and fixed income returned 29.54% and 3.16%, respectively. A move to cash in March was a costly decision.

EXHIBIT 3

Cash Concerns in 2020



It was important for investors to avoid reacting to the dispersion in performance between asset classes, too, lest they miss out on turnarounds from early in the year to later. The stark difference in performance between the first and second quarters across bond classes drives home this point.

A Welcome Turn of the Calendar

Moving into 2021, many questions remain about the pandemic, new vaccines, business activity, changes in how people work and socialize, and the direction of global markets. Yet 2020's economic and market tumult demonstrated that markets continue to function and that people can adapt to difficult circumstances. The year's positive equity and fixed income returns remind us that, with a solid investment approach and a commitment to staying the course, we can focus on building long-term wealth, even in challenging times.

Source: Dimensional Fund Advisors