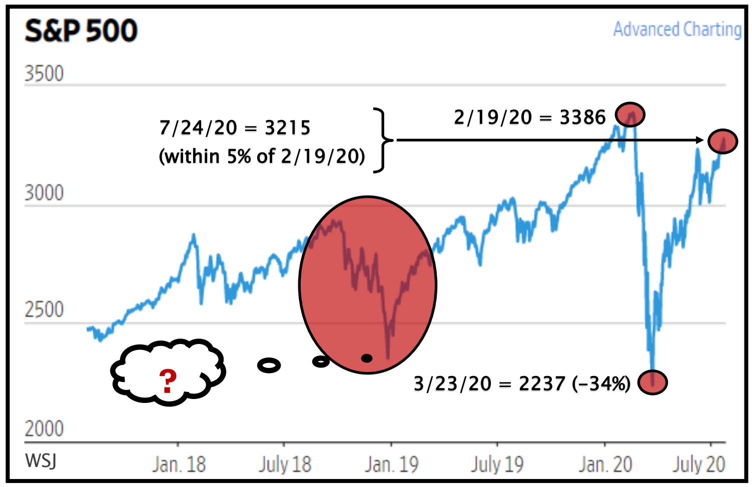
INVESTORS WONDER

WHY HAVE EQUITY VALUES REBOUNDED SO HEARTILY?

On February 19th, the S&P 500 stood at an all-time high. As it became apparent a new iteration of the Coronavirus was becoming a pandemic, investors assessed the impact and marked capital asset values down, accordingly. By March 23rd, the S&P 500 had shed a third of its value. Four months later this index was within 5% of its March high. In this view of the S&P 500, I've captured three years' worth of data as a reminder that although the path of equity valuations can look a bit like a moth trying to find a porch light, equity valuations have tended to drift higher over time. In general, I expect that trend to continue.



I've yet to hear anyone question that initial, 34% plunge, but I've heard from quite a few folks who are understandably mystified by the subsequent rebound. This most recent plunge-rebound episode is precisely the type of event that causes most market timers and other fancy steppers to lose ground to investors who remain planted. Over the years, I've harped aplenty about the virtues of adhering to one's asset allocation targets and ranges and to not fret too much over the risk du jour, so for fun see if you can remember the circumstances that threw investors into a tizzy during the last quarter of 2018. If you can't quite recall, ↻180° for a refresher:

Concerns du 4Q-2018: ◆President Trump's trade war with China and the imposition of tariffs ◆The Federal Reserve possibly triggering a recession as it sought to normalize (raise) interest rates ◆Reports that President Trump was considering firing Fed Chairman Jerome Powell ◆Congressional focus on companies like Google, Twitter and Facebook for not combatting foreign election interference more proactively ◆The possibility of the stock market being in a bubble, partly as a result of corporate tax cuts

Gilda Radner's Roseanne Roseannadanna may have, unwittingly, best captured the nature of uncertainty as she would remind us on her *Saturday Night Live* newscast, "It's like my father always said to me, he said to me, he said, 'Roseanne Roseannadanna, it's always something. If it isn't one thing, it's another. It's always something.'"

VACCINE-RELATED OPTIMISM INCREASES

I have no idea whether the worst of the pandemic's economic impact is behind us and I'd be leery of any pundit who claims clarity on the issue. However, I do think it's safe to assert there are a large number of variables at play, many of which are difficult to quantify and even harder to forecast. For example, much remains unknown about the spread of the virus, and every expert I've seen who has been asked to handicap the race to vaccine readiness has done so only in a context that's rich with hedges, disclaimers and qualifiers. From what I can tell, economists are operating in a fog that's at least as dense but, according to Zacks Research, 160 separate vaccines are under development and optimism is clearly building around some of them.

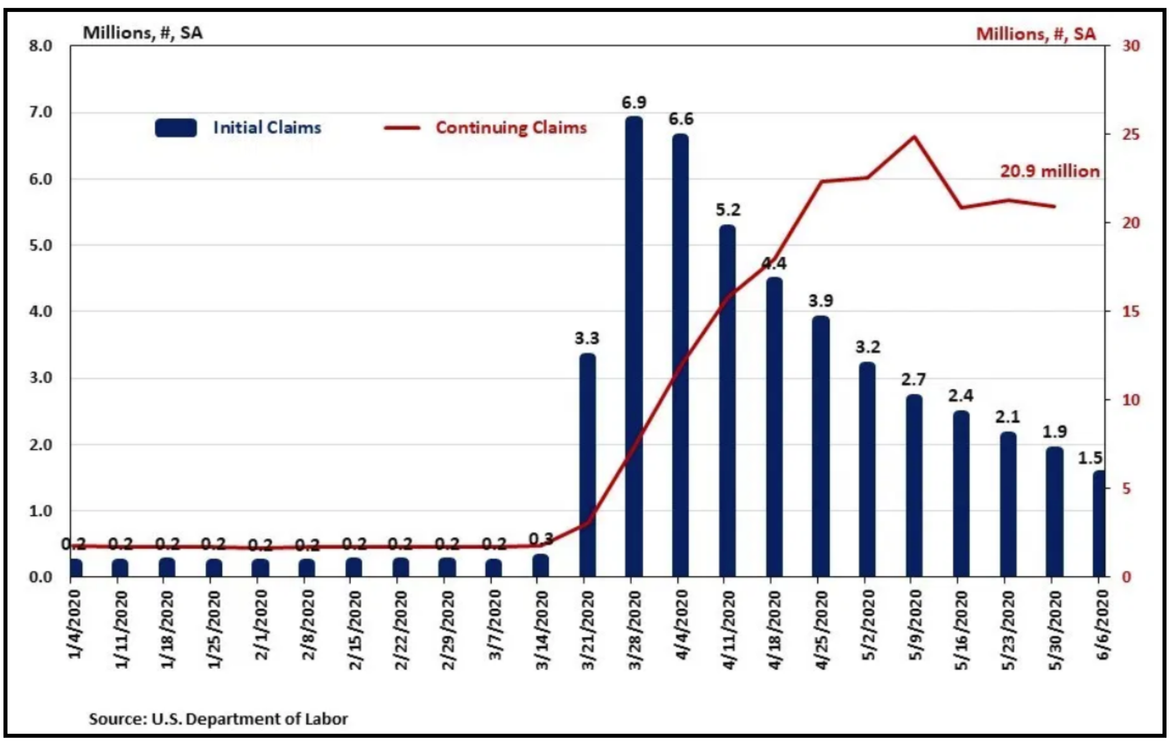
THE FEDERAL RESERVE AS FIRST RESPONDER

Although there is little clarity about the current economic environment, the Federal Reserve has, in my view, come to our rescue in many impactful ways. I spent most of my previous letter explaining how the Fed's response would provide much needed liquidity to the capital markets and economy. When I wrote that letter, however, I had little expectation the Fed's actions would have preserved economic normalcy to the degree it apparently has. But since many folks believe the sharp rebound we've so far experienced is at odds with a virus that is increasingly infecting our population, I'd like to summarize some of the many actions the Fed has taken on our behalf over the past several months … and continues to take today, as a means of explaining how it is that capital asset valuations could have recovered most of their lost value in the midst of a worsening pandemic. The Fed has:

- **Reduced short-term interest rates** to stimulate borrowing and economic activity.
- **Issued guidance that we should expect rates to remain low until the Fed is confident the economy has weathered the economic impact of the pandemic.** Forward-looking guidance is salve to the markets.
- **Purchased massive amounts of interest-bearing securities** to help ensure markets continue to function and that credit continues to flow to entities that need it.
- **Lent directly to large financial institutions** to help credit markets continue to function at a time when people and firms may be inclined to hoard cash rather than to conduct business as usual.
- **Backstopped money market mutual funds** to ensure they can honor any redemption request they receive.
- **Lowered the rates on loans it makes directly to banks** to incentivize banks to continue to lend to the public at attractive rates. This also bolsters banks' ability to satisfy withdrawal requests.

- **Temporarily reduced banks' capital** requirements which allows banks to increase lending activity.
- **Lent directly to major corporate employers** on deferred-payment terms to help these entities maintain business operations and retain employees.
- **Extended deferred-repayment loans to hospitals, schools and other such entities** to support the non-profit segment of the U.S. economy as well as the employees who work there.
- **Lent directly to state and municipal governments** to support a wide variety of governmental functions as well as the employees who administer them.
- **Funded international swap lines to make U.S. Dollars available to central banks in other countries** which then allows foreigners to express demand for U.S. goods and services in U.S. Dollars.

As the Fed continues to administer economic fluids to the U.S. economy, Congress has undertaken its own relief efforts, and more appears to be on the way. As a whole, I think it would be fair to say that the economic reports we've received over the last couple of months have been quite a bit better than what most people, myself included, had been expecting. As an example, here's a look at some pre- and post-shutdown, jobless-claims data.



If continuing jobless claims continue to decline as one or more vaccines become viable, I would argue that investors have a reasonable chance of avoiding a second pandemic-related drubbing.

FED AGAIN SHOWS WHY IT SHOULD REMAIN INDEPENDENT

When the Fed injects money into the various corners of the economy as it is now doing, it does so as an independent entity without having to endure any political wrangling. Incidentally, this political independence is what allowed the Fed to swiftly respond to the impact of this virus in the first place. As was the case with the onset of the meltdown of 2008/9, the Fed's quick and multifaceted response to mitigate the economic wreckage triggered by the pandemic is a primary argument for the Fed to remain independent. Just as no one would want his or her local fire department to have to receive permission from the city council prior to dispatching a fire truck, no one should want the Fed to be at the mercy of political interference as it tries to respond to a given emergency.

When the Fed provides relief to the U.S. economy, it then decides how and when to reverse course and, again, it does so without political interference. In contrast, when Congress borrows funds to provide relief, the process is not only political, the funds it borrows add to our country's national debt which is, ostensibly, to be repaid.

ADDITIONAL FISCAL RELIEF LIKELY

As of late July, there appears to be bi-partisan support for additional fiscal relief and the Senate seems set to unveil a plan, soon (after President Trump and his administration review some details).

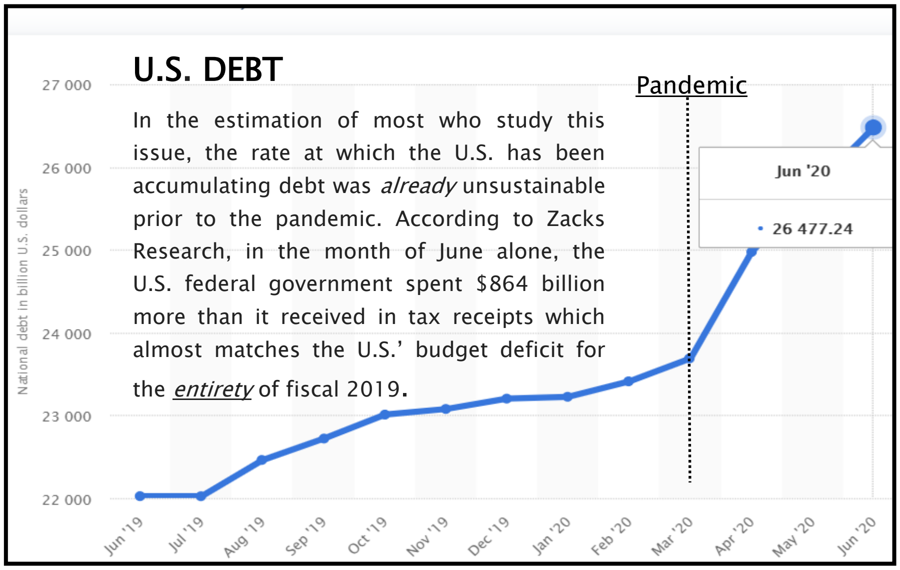
The plan will include a second round of direct payments, but we do not yet know who would get checks or how large they would be. Additional funds would also be allocated to another round of Paycheck Protection Program loans for certain small businesses. When that additional support arrives, it is likely to be something of a double-edged sword inasmuch as it will certainly ameliorate some of the acute financial insecurity that now seems so widespread. But it will also put our country on pace to post its largest deficit as a percent of GDP since World War II, and it will also exacerbate this country's already-large national debt. Therefore, I think this topic is worth exploring.

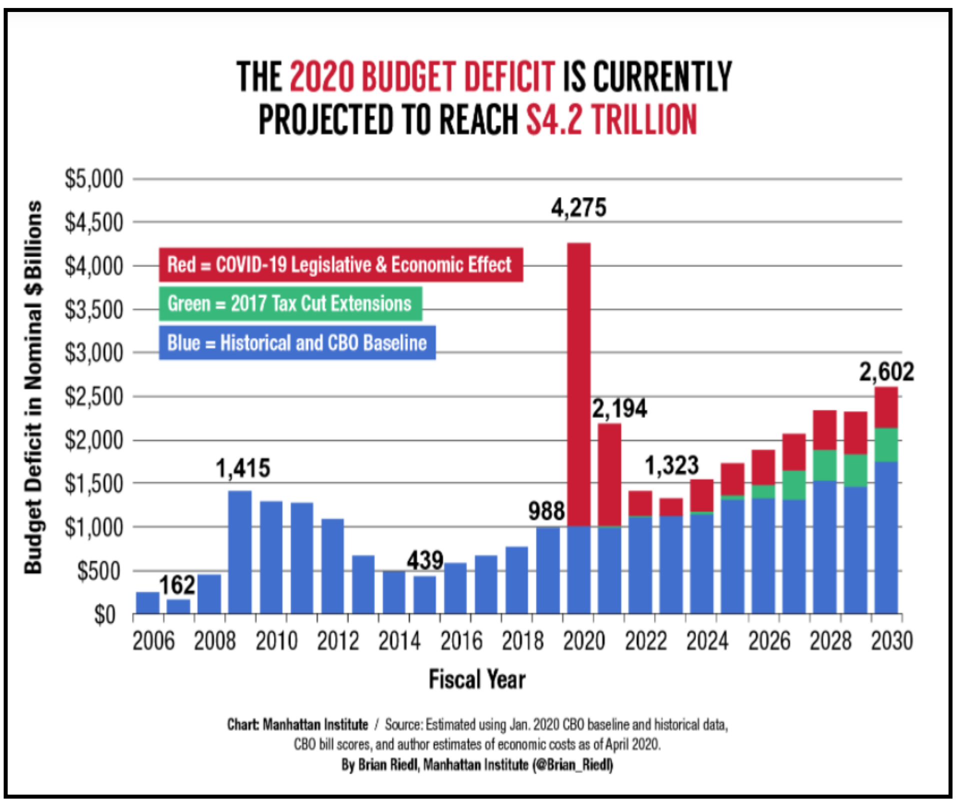
INVESTORS TURN BLIND EYE TO CORONA DEBT

Since the 1980s, federal spending within the U.S. has outstripped income-tax receipts by a large margin. Accordingly, these persistent budget deficits have accumulated to result in a national debt that, as of June 30th, amounts to almost $26.5 *trillion*, … or to add a bit of numerical perspective to that figure, $26.5 *thousand-billion*, … or $26.5 *million-million*, … or even $26.5 *thousand-thousand-thousand-thousand*.

However you prefer to think of that figure, it's now about 16% ($2.7 trillion) higher than it was at the end of 2019 which is an astounding rate of increase over such a short time. The nation's debt has soared since the pandemic's onset and that's likely to continue.

You may recall the political haggling over the extent to which the federal income-tax cuts that were enacted in 2017 would further exacerbate our nation's indebtedness. That argument commanded a lot of attention at the time, but note in the image, below, how the estimated impact of those cuts is dwarfed by the estimated impact of the Coronavirus.

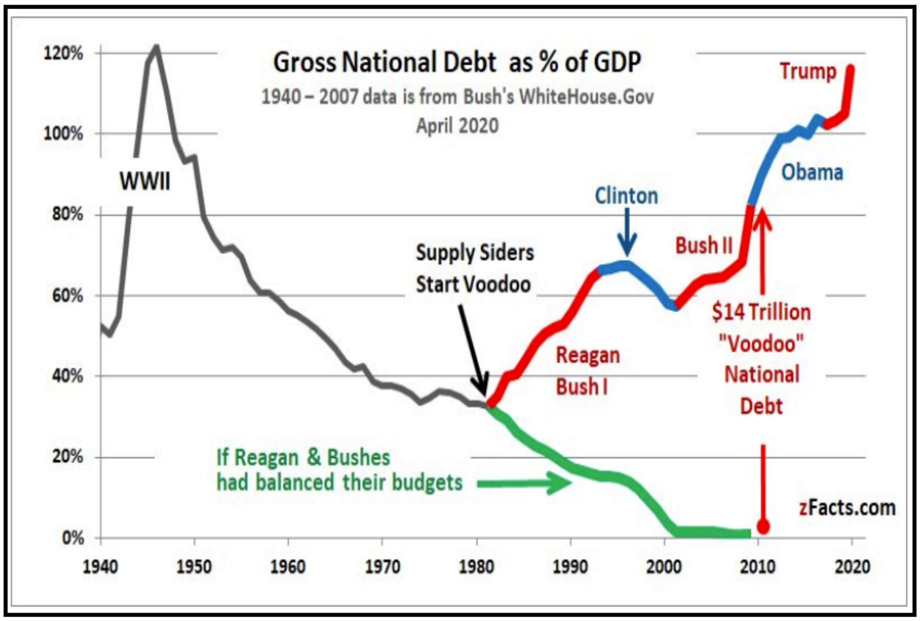




Although the surge in post-pandemic debt shown above is already dramatic, one can imagine the rate at which that blue line would zoom off the page as the post-2020 budget deficits pictured to the left begin to materialize.

Mounting debt impairs the financial flexibility of our nation the same way consumer debt impairs households who rely upon it too heavily. For the moment, however, the markets are awash in liquidity and, for now, investors are bathing in it.

As anyone who's tried to borrow money knows, one's borrowing capacity is largely determined by the level of one's income and existing debt load. The same metric applies to countries. However instead of calculating a debt service-to-income ratio as a bank would when considering a personal loan request, economists compare the total debt of a country to its annual productive output (Gross Domestic Product). Here's a view of this metric applied to the U.S. since 1940.

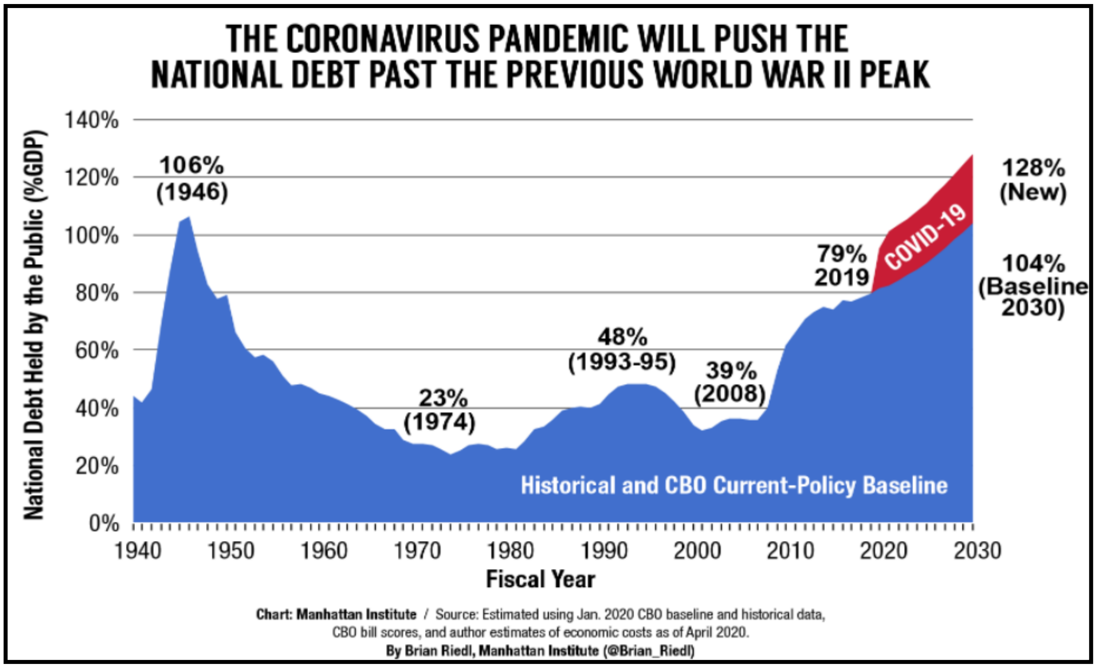


As you can see here, the U.S. borrowed heavily to meet the demands of World War II. At its peak, the amount of debt accumulated during that period peaked at about 120% of GDP. Thereafter, the debt profile of this country improved markedly as a portion of that debt was repaid and as the productive capacity of the U.S. economy grew.

Because I can't always find the exact chart I want and because I don't have time to create my own, I sometimes settle for charts that make points that don't exactly coincide with the one I'm trying to make. In this case, the "Voodoo" reference refers to the "Voodoo Economics" label then presidential candidate George H. Bush hung on then presidential candidate Ronald Regan's notion that a reduction in income-tax rates would result in stable or even *increasing* tax revenues.

Regan won that election and named George H. Bush as his vice-president who then fell in political line with his boss. But the fork in this image suggests H. Bush was correct. The reduction in tax rates that took place during the Regan administration resulted in tax revenue declines, not increases. This tidbit of history aside, I included this image to show that the "Trump" portion of this image includes only fiscal Coronavirus relief that had already come into existence by April. Future costs are sure to materialize and they will certainly drive that red line higher.

As with the image on page 6 that relates U.S. debt to productive capacity, this image also captures the estimated, incremental impact of Coronavirus-related debt. As you can see, national debt as a percent of productive capacity is estimated to eclipse the relative level of indebtedness the U.S. shouldered as a result of World War II.



OR, MAYBE OUR LEVEL OF DEBT IS NOT YET EXCESSIVE

Obviously, high-income countries can carry more debt than can lower-income ones. The question then becomes, "How much is too much?" I don't know, but here are some figures for other countries.

Eurostat　Gross debt as percentage of GDP

Entity	2007	2010	2011	2017/2018
United States	62%	92%	102%	108%
European Union	59%	80%	83%	82%
Austria	62%	78%	72%	78%
France	64%	82%	86%	97%
Germany	65%	82%	81%	64%
Sweden	40%	39%	38%	41%
Finland	35%	48%	49%	61%
Greece	104%	123%	165%	179%
Romania	13%	31%	33%	35%
Bulgaria	17%	16%	16%	25%
Czech Republic	28%	38%	41%	35%
Italy	112%	119%	120%	132%
Netherlands	52%	77%	65%	57%
Poland	51%	55%	56%	51%
Spain	42%	68%	68%	98%
United Kingdom	47%	80%	86%	88%
Japan	167%	197%	204%	236%
Russia	9%	12%	10%	19%
Asia [1] (2017+)[2]	37%	40%	41%	80%

The relative debt burdens of Japan, Greece and Italy are significantly higher than they are within the U.S. but compared to other developed countries, the relative debt burden within the U.S. still seems high. I'm not able to draw any firm conclusions about this issue, but again, I think this topic deserves attention. I would think the issue of debt would be a presidential campaign issue, but I suppose people are relatively more concerned at the moment with controlling the pandemic.

EVENT-DRIVEN DOWNDRAFTS HAVE TENDED TO BE LESS SEVERE

Severe market downdrafts are either structural, cyclical, or event-driven, in nature. Trouble caused by financial bubbles and inadequate regulation tend to have structural roots whereas changes in interest rates and inflation tend to have cyclical components. Downturns triggered by war, weather, pandemic or other acts of God are said to be event-driven, in nature. While event-driven downdrafts tend to be difficult to avoid, they have also tended to be less severe (in economic terms).

The table to the right captures the 13 "bear" markets (declines of at least 20%) since 1929. There were five structural declines, four cyclical declines and four event-driven declines, excluding the one we're now experiencing. Using history as a guide, if one were to have an opportunity to select the type of market decline one had to experience, one might reasonably opt for an event-driven episode since previous ones have tended to be both shorter in length (time in this image is measured in months), and somewhat less severe in magnitude. But every situation is admittedly unique, so don't draw too much solace from these figures.

S&P 500 - Bear Market					Time to recover back to previous level	
Type	Start	End	Length (m)	Decline (%)	Nominal (m)	Real (m)
S	Sep-1929	Jun-1932	33	-85	266	284
S	Mar-1937	Apr-1942	62	-59	49	151
C	May-1946	Mar-1948	21	-28	27	73
E	Aug-1956	Oct-1957	15	-22	11	13
E	Dec-1961	Jun-1962	6	-28	14	18
E	Feb-1966	Oct-1966	8	-22	7	24
C	Nov-1968	May-1970	18	-36	21	270
S	Jan-1973	Oct-1974	21	-48	69	154
C	Nov-1980	Aug-1982	20	-27	3	8
E	Aug-1987	Dec-1987	3.3	-34	20	49
C	Jul-1990	Oct-1990	3	-20	4	6
S	Mar-2000	Oct-2002	30	-49	56	148
S	Oct-2007	Mar-2009	17	-57	49	55
Average			**28**	**-38**	**60**	**90**
Median			**18**	**-32**	**39**	**49**
Average Structural			**42**	**-57**	**111**	**134**
Average Cyclical			**27**	**-31**	**50**	**73**
Average Event Driven			**9**	**-29**	**15**	**71**

LOOKING FORWARD

Investing with a mentality of trying to sidestep market downdrafts is a fool's game. As a result of efforts that are already underway to mitigate the economic damage of the pandemic, interest rates may remain low for quite some time, but at least some degree of inflation is likely to persist. Uncertainty is always frightening but, as always, I hope you'll remain committed to real estate, equities and other types of assets whose values are not determined by contractual reference to some depreciating currency.

— Glenn Wessel