July 2020

From the lead story in Friday's WSJ:

U.S. Economy Sees Record Downturn

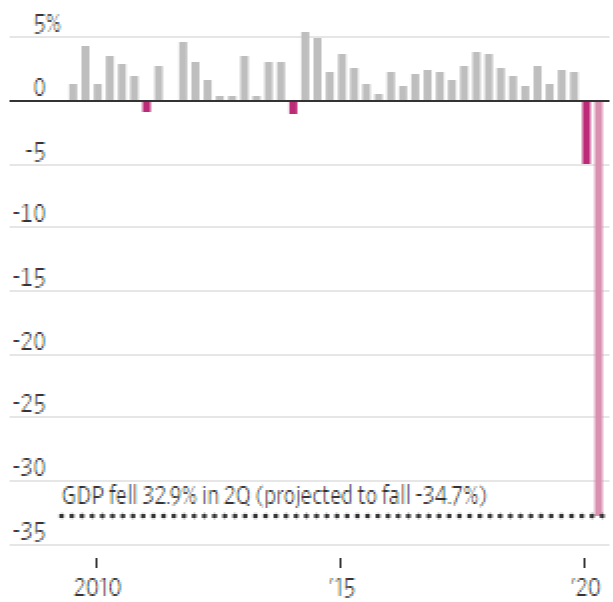
GDP drop, weekly jobless claims suggest pace of recovery is slowing

By Harriet Torry

The economy contracted at a record rate last quarter and July setbacks for the jobs market added to signs of a slowing recovery as the country faces a summer surge in coronavirus infections.

The Commerce Department said U.S. gross domestic product—the value of all goods and services produced across the economy—fell at a seasonally and inflation adjusted 32.9% annual rate in the second quarter, or a 9.5% drop compared with the prior quarter. The figures were the steepest declines in more than 70 years of record-keeping.

Change in GDP from previous quarter



Note: Seasonally adjusted at an annual rate
Source: Commerce Department, WSJ Survey of Economists

Meanwhile, the Labor Department's latest figures on unemployment benefits suggested the jobs market was faltering. The number of workers applying for initial unemployment benefits rose for the second straight week—by a seasonally adjusted 12,000 to 1.43 million in the week ended July 25—after nearly four months of decreases following a late-March peak. The number of people receiving unemployment benefits increased by 867,000 to 17 million in the week ended July 18, ending a downward trend that started in mid-May.

"We're expecting a longer and slower climb from the bottom unfortunately, and here the virus will dictate the terms," Beth Ann Bovino, U.S. chief economist at S&P Global Ratings, said. ...

The second-quarter economic contraction came as states imposed lockdowns in March and April to contain the coronavirus pandemic—triggering a steep drop in output—and then lifted restrictions in May and June—allowing growth to resume.

Gains later in the second quarter weren't enough to offset April's steep drop, however. Economists expect the third quarter, which began on July 1, to show growth, though the summer rise in infections is likely to temper gains. ...

Private high-frequency data show "that the pace of the recovery looks like it has slowed since the cases began that spike in June," Federal Reserve Chairman Jerome Powell said Wednesday, noting declining measures of debit- and credit-card spending, flattening hotel occupancy rates and fewer restaurant and salon visits. ...

From Friday's Global Investment Strategy Weekly Report:

US Virus Wave Cresting, But Fiscal Risks Intensifying

Last week, we argued that the two biggest near-term threats to stocks and other risky assets were the rising number of coronavirus cases in parts of the US and the looming fiscal cliff.

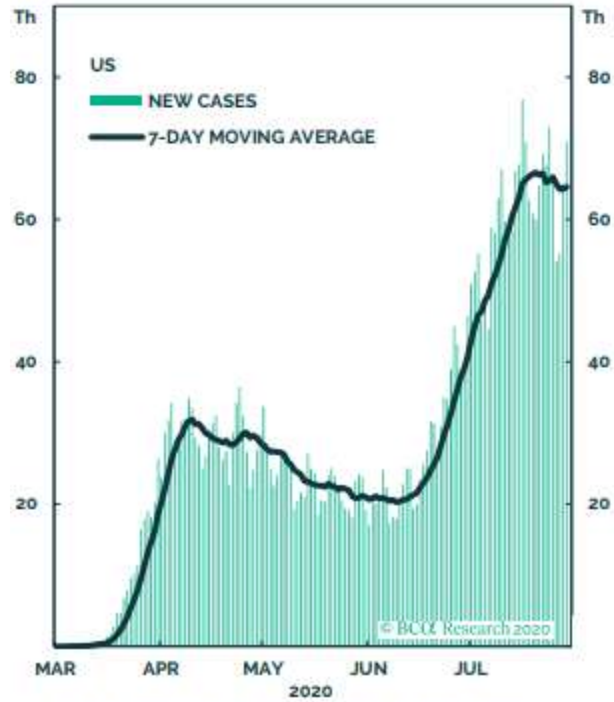
Since then, the news on the virus has been broadly positive, while developments on the fiscal front have been mixed.

Chart 1 shows that the number of new cases seems to have peaked in the US. In Texas, Florida, California, and Arizona, the share of doctor visits linked to suspected Covid infections is trending lower. This metric leads diagnoses by about one-to-two weeks (**Chart 2**).

Over half the US population lives in states that have either suspended or reversed reopening plans (**Chart 3**). Assuming the number of infections keeps falling and fiscal policy is not unduly tightened, household spending and employment growth – which appear to have stalled out in the second half of July – should begin to pick up.

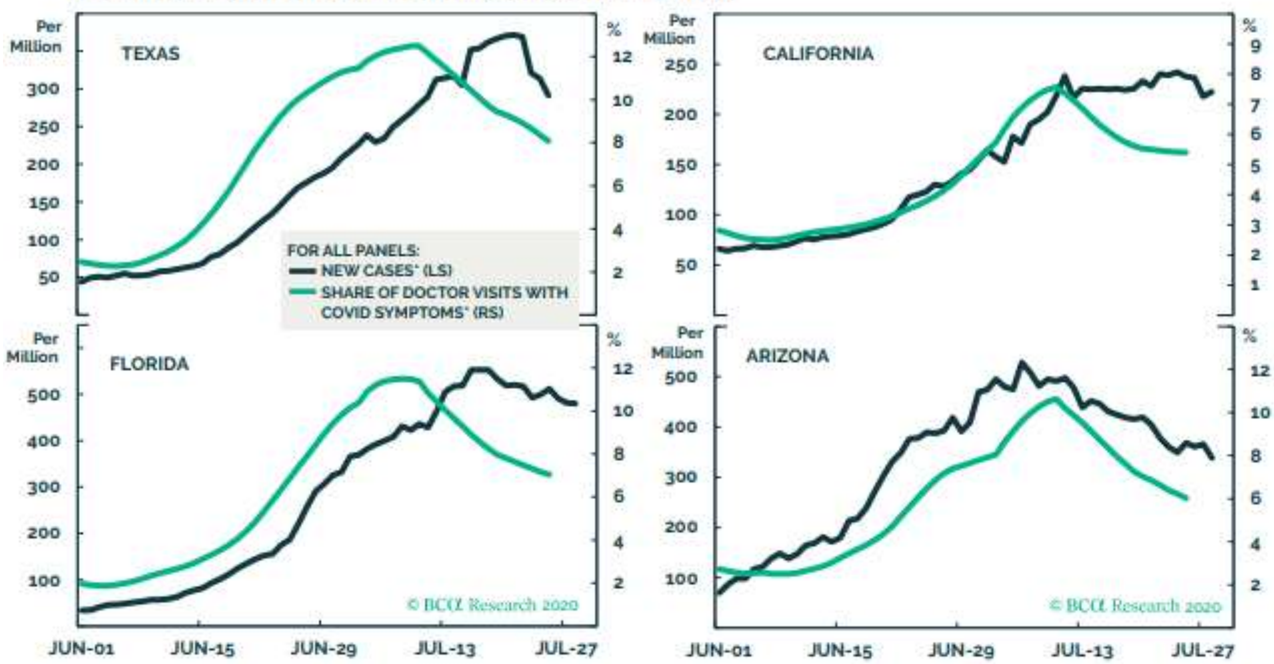
Unfortunately, the assumption that fiscal policy will remain stimulative looks somewhat shaky. Expanded unemployment benefits for 30 million Americans, consisting mainly of an additional $600 per week for unemployed workers, ~~are set to~~ expired at the end of July.

CHART 1
US: Number Of New Cases Seems To Be Peaking



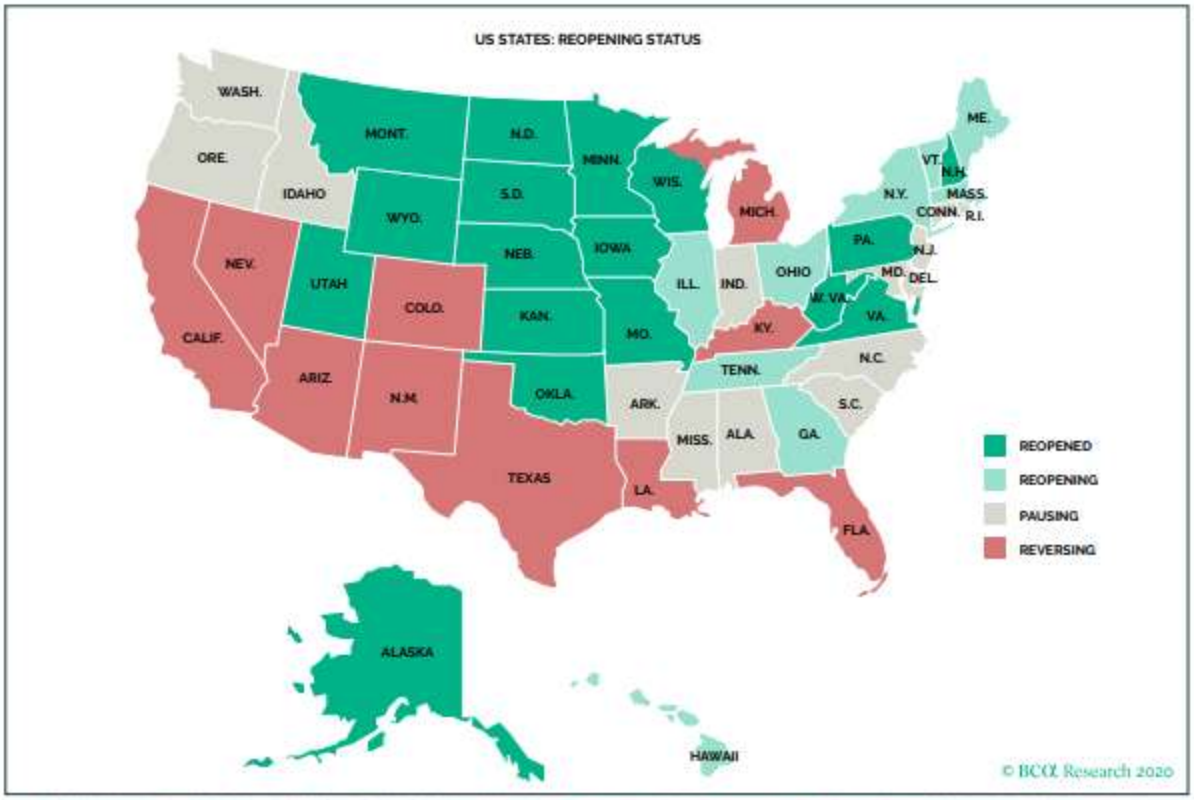
SOURCE: THE CENTER FOR SYSTEMS SCIENCE AND ENGINEERING (CSSE) AT JOHN HOPKINS UNIVERSITY.

CHART 2
Doctor Visits, Which Lead Diagnoses, Are Trending Lower



* SHOWN AS A 7-DAY MOVING AVERAGE. SOURCE: CARNEGIE MELLON UNIVERSITY COVIDCAST AND THE CENTER FOR SYSTEMS SCIENCE AND ENGINEERING (CSSE) AT JOHN HOPKINS UNIVERSITY.
NOTE: DATA FOR DOCTOR VISITS FOR ALL STATES AND DATA FOR CONFIRMED CASES IN TEXAS ARE AVAILABLE ONLY UNTIL JULY 25, 2020.

CHART 3
Not So Fast



JASMINE C. LEE, SARAH MERVOSH, YURIRIA AVILA, BARBARA HARVEY, AND ALEX LEEDS MATTHEWS, "SEE HOW ALL 50 STATES ARE REOPENING (AND CLOSING AGAIN)," *THE NEW YORK TIMES*, UPDATED JULY 30, 2020.

Congressional Republicans have suggested trimming benefits to $200 per week. However, even that would represent a fiscal tightening of nearly 3% of GDP. ...

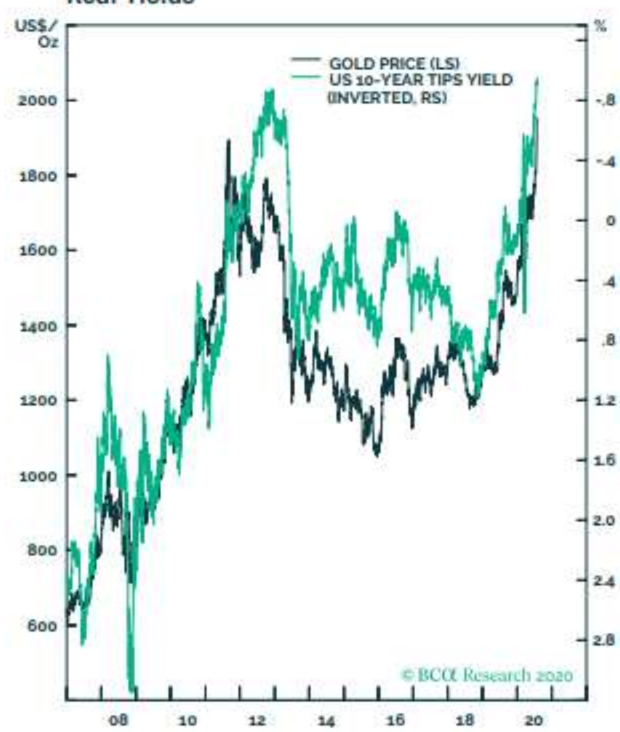
Debt, Gold, And The Dollar

Does the inevitable increase in government debt due to ongoing fiscal stimulus portend disaster down the road? According to many commentators, the recent drop in the dollar and the surge in gold prices is surely telling us that it does.

While it is a compelling story, it is mainly false. The yield on the 30-year Treasury bond currently stands at 1.20%, down from 1.5% in mid-June and 2.33% at the start of the year. Bondholders may be many things, but masochistic is not one of them. If they really thought a fiscal crisis was around the corner, yields would be a lot higher.

So why is the dollar falling and gold rallying? The answer is inflation expectations have risen off very low levels, which has pushed down real yields. Gold prices are almost perfectly correlated with real interest rates (**Chart 4**).

CHART 4
Gold Prices Have Risen On The Back Of Falling Real Yields



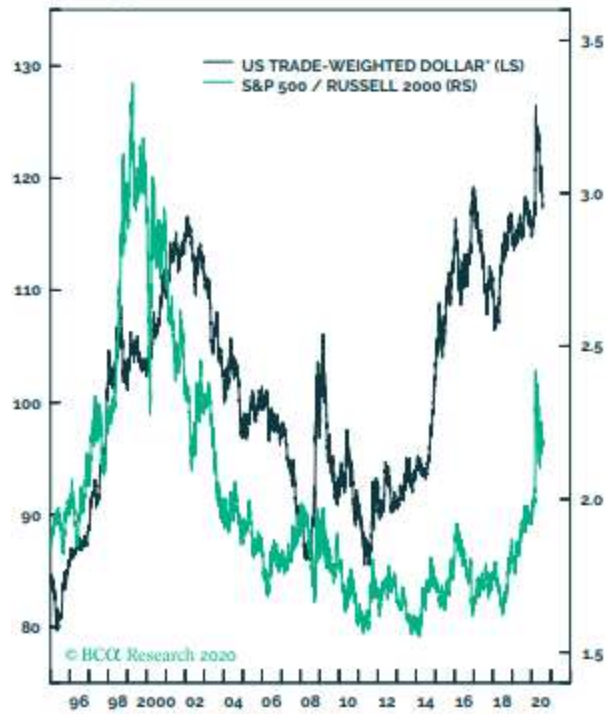
The Real Reason The Dollar Has Fallen

Going into this year, US real yields had a lot more room to decline than rates abroad. For example, at the start of 2019, US real 2-year yields were 221 bps above comparable euro area yields. Today, US real rates are 35 bps lower – a swing of 256 bps. Yield differentials have narrowed against other economies as well, which has pushed down the value of the dollar.

In addition, relative growth dynamics have hurt the greenback. The US economy tends to be less cyclical than most of its trading partners. While the US benefits from faster global growth, the rest of the world benefits even more. This causes capital to flow from the US to other countries, leading to a weaker dollar.

CHART 19

Small Caps Tend To Outperform Large Caps During Weak Dollar Environments...



* BROAD, NOMINAL. SOURCE: FEDERAL RESERVE.

BCA Research's Foreign Exchange Strategist ... has stressed that the dollar typically fares worst in the initial stages of business cycle recoveries. That is the stage we are in today. Indeed, the gap in growth between the US and the rest of the world is likely to be larger than usual over the next few quarters because the pandemic has hit the US harder than most other developed economies.

Momentum is also working against the dollar. Being a contrarian is usually a smart investment strategy. That is not the case when it comes to trading the dollar. With the dollar, you want to follow the herd. This is because the dollar is a high momentum currency. ... Likewise, the dollar performs best prospectively when sentiment is bullish and improving. Currently, the dollar is trading below its various moving averages. Sentiment is also poor and deteriorating.

If the dollar were cheap, all the factors discussed above could be overlooked. But the dollar is not cheap. It is still pricey based on purchasing power parity measures which compare the common-currency cost of identical consumption bundles from one country to the next.

CHART 20

...The Same Goes For Value Stocks

* IN US DOLLARS. SOURCE: MSCI INC. (SEE COPYRIGHT DECLARATION).
** BROAD, NOMINAL. SOURCE: FEDERAL RESERVE.

A Weaker Dollar is Bullish For Stocks, Especially Non-US Stocks

Global equities in general, and non-US stocks in particular, tend to perform well when the dollar is weakening.

Cyclical sectors such as industrials, energy, and materials normally outperform defensives in a weak dollar environment. Relative profit growth in these sectors tends to rise when the dollar depreciates.

To the extent that cyclicals are overrepresented in stock market indices outside the US, this gives non-US equities a leg up. ...

Small Caps And Value Stocks Tend To Outperform When The Dollar Weakens

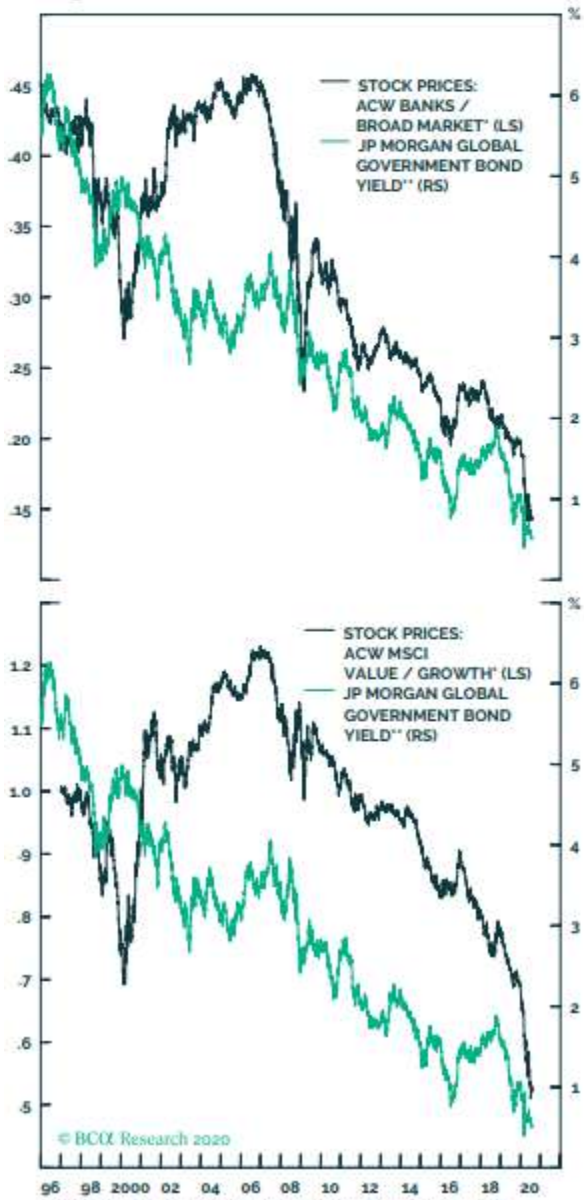
Even though companies in the small cap Russell 2000 index generate less of their sales from abroad than those in the S&P 500, small caps still tend to outperform large caps in weak dollar environments (**Chart 19**). This is partly because smaller companies are more cyclical in nature. It is also because the US dollar performs best in a risk-off setting when investors are pouring money into the safe-haven Treasury markets. In contrast, small caps excel in a risk-on environment.

Value stocks tend to outperform growth stocks in a weaker dollar environment (**Chart 20**). Like small caps, cyclical equity sectors are overrepresented in value indices. Financials also tend to punch above their weight in value indices.

Small caps and value stocks outperformed between 2000 and 2008, a time when the US dollar was generally weakening. That period saw both a commodity boom and a wave of debt-fueled housing booms. The former lifted commodity prices, while the latter buoyed financials.

Commodity prices should rise over the next 12 months thanks to a rebound in global growth and copious Chinese stimulus. ... Chinese credit impulse is on track to reach the highest levels since the Global Financial Crisis, while the fiscal deficit will probably hit a record 8% of GDP.

CHART 22
The Structural Decline In Bond Yields Has Been Negative For Bank And Value Stocks



* IN US DOLLARS. SOURCE: MSCI INC. (SEE COPYRIGHT DECLARATION).
** SOURCE: J.P. MORGAN CHASE & CO.

The Outlook For Financial Stocks

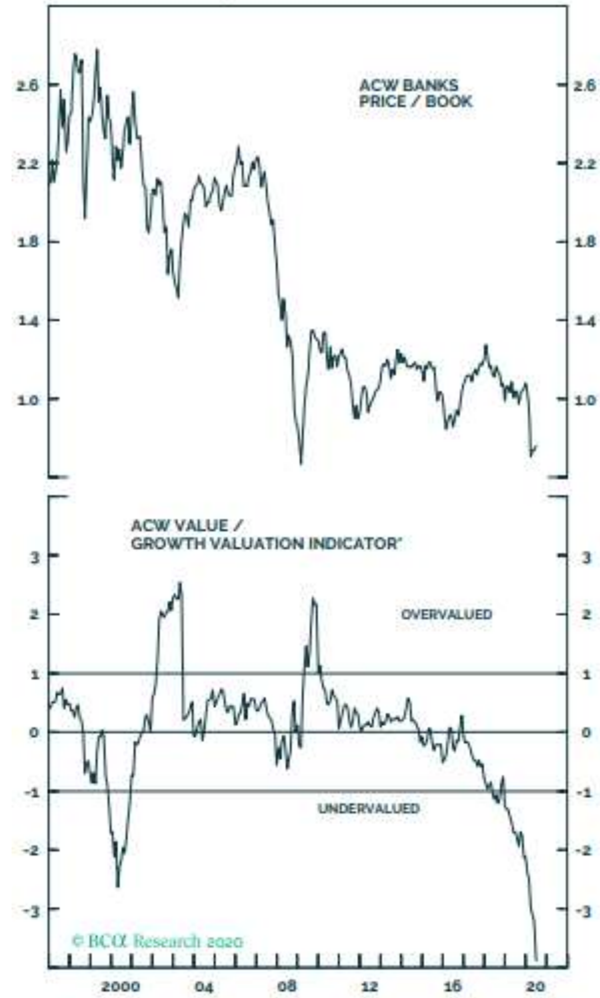
Gauging the outlook for financials is trickier. Credit growth has slowed sharply since the Global Financial Crisis, which has weighed on bank profits. The structural decline in bond yields has also been toxic for bank shares (**Chart 22**). Lower bond yields tend to translate into flatter yield curves, which can depress net interest margins.

A falling dollar has historically been associated with higher bond yields. As global growth recovers over the next 12 months, bond yields will edge higher. That said, central bank bond purchases, coupled with aggressive forward guidance, will keep bond yields from rising as much as they normally would. And even if nominal yields do rise, inflation expectations will rise even more, implying that real yields will fall further. Falling real yields tend to benefit growth stocks more than they benefit value stocks.

Still, even a modest steepening of the yield curve will be good for bank earnings. A recovery in economic activity should also dampen concerns about a spike in bad loans. Credit spreads normally fall when economic growth is improving and the dollar is weakening. Banks have significantly increased provisions since the start of the year, which has depressed reported earnings. If some of those provisions are reversed, profits will jump.

Moreover, bank stocks in particular, and value stocks in general, are extremely cheap by historic standards (**Chart 25**). Thus, while the case for favoring value over growth is not as clear-cut as it could be, it is strong enough that long term-oriented investors should consider moving capital from high-flying tech stocks to unloved value stocks.

CHART 25
Bank And Value Stocks Are Quite Cheap



* BASED ON RELATIVE PRICE/BOOK, PRICE/EARNINGS, AND DIVIDEND YIELDS.
SOURCE: IBES / THOMSON REUTERS AND MSCI INC. (SEE COPYRIGHT DECLARATION).

From Grandeur Peak's Quarterly Letter:

July 15, 2020

Market Commentary

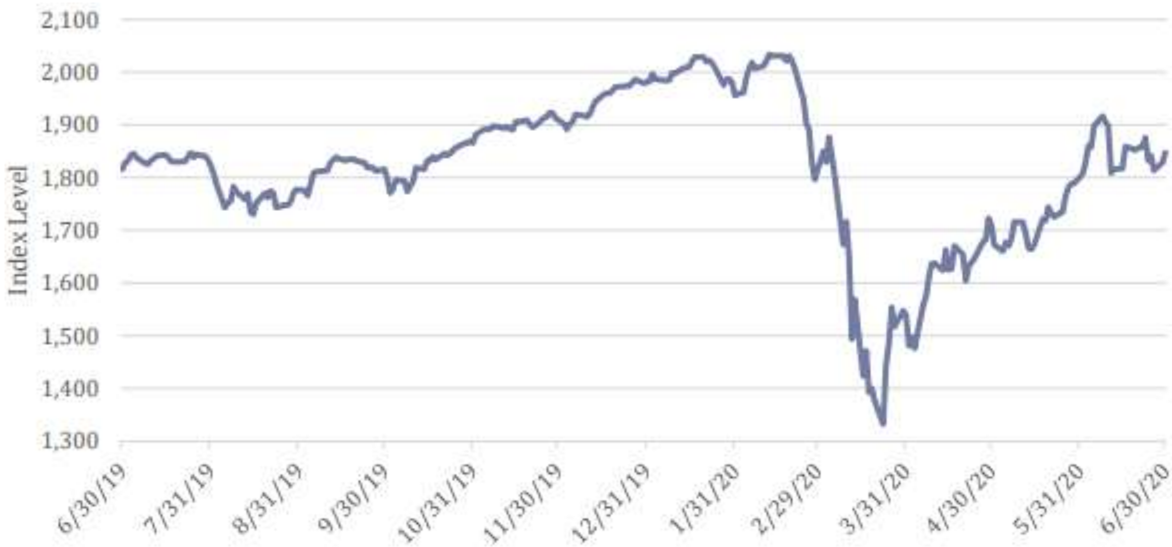
The tremendous roller coaster ride the global stock markets have been on has been, to put it lightly, quite astonishing. Exhibit 1 shows the daily index levels of the MSCI All-Country World Investible Index (ACWI IMI) over the past year from June 28, 2019 through June 30, 2020.

This kind of market action can wreak havoc with any investor's emotions. So, we thought it might be a good time to revisit the behavioral biases of investors. We are sure you are aware of this important field of study and the various biases from which investors suffer, but to summarize, here are five of the most common investor biases:

1. Overconfidence: the unwarranted faith in one's intuitive reasoning, judgments, and cognitive abilities.
2. Confirmation Bias: the selective perception that emphasizes ideas that confirm one's beliefs, while deemphasizing or devaluing information that contradicts one's beliefs.
3. Availability Bias: the tendency to overestimate the probability of an outcome based on how prevalent or familiar that outcome appears in one's life.
4. Hindsight Bias: the tendency to convince oneself after an event that one would have been able to accurately predict it before it happened.
5. Outcome Bias: the error made in evaluating the quality of a decision when the outcome of that decision is already known.

Hindsight Bias might be the most irritating bias our team faces. Think about what you might be thinking after the roller-coaster ride we've been on over the past year. After the global markets (as measured by the ACWI IMI) fell -34.5% from its 12-month high on February 12, 2020 to its low on March 23, 2020, we may have all been thinking something like: "I knew the market was too frothy. I knew I should have gotten out of equities."

Exhibit 1: MSCI ACWI IMI Daily Index Levels



Source: MSCI (data from 6/28/2019 – 6/30/2020)

Maybe at some point between February 12th and March 23rd you did sell some equities, only to see the market rebound. From the low on March 23, 2020 the market went on a tear, rising 43.8% to June 8, 2020. Now you may be thinking, “I knew that sell off was too sharp, too deep. I knew I should have bought into that dip.” This kind of Hindsight Bias thinking can drive you nuts. Worse still, Hindsight Bias can lead to Outcome Bias. How many times have we judged a past decision by its ultimate outcome instead of based on the quality of the decision at the time we made it?

Inspired by Howard Marks’ memo, “You Bet!” published January 13, 2020, I recently read *Thinking in Bets: Making Smarter Decisions When You Don’t Have All The Facts* by Annie Duke. In this book, Duke, a retired professional poker player, explains various strategies to help us overcome behavioral biases and become better decision makers when faced with uncertainty, which of course is a daily occurrence for investors.

A lot of us were taught in college finance class that the only right answer to any Finance question is: “It depends.” And over many years of experience in the markets, we’ve all learned that the best answer to any Investment-related question is: “I’m not sure.” Duke explains that though we regard those expressions as vague, unhelpful, or even evasive, getting comfortable with “I’m not sure,” is a vital step to being a better decision-maker. We have to make peace with not knowing. We do not believe that there was any way of knowing that a global pandemic was going to tank markets over a four-week period in Q1-2020. Nor that investors were ultimately going to shrug off the economic ramifications of the pandemic, and that markets were going to rally right back in Q2. Because one can never really know what the overall market is going to do, fretting over past market vicissitudes is just giving into the behavioral biases that we believe ultimately lead to poor decisions. ...

From July 6th's WSJ:

Are Stock Investors **'Irrationally Exuberant'** *Again?*

One of the current narratives about the market is that it's being boosted by foolishly optimistic investors. The numbers don't support that.

BY MARK HULBERT

There's a lot of talk these days about the return of "irrational exuberance"— the frothy stock market seen in the internet-stock bubble of the late 1990s. But a close look at the data suggests things are nowhere near that heated.

That doesn't mean the stock market won't fall in coming months, of course. But if it does, it will be for reasons other than speculative excesses rivaling those of two decades ago.

The term "irrational exuberance" traces to a now-famous speech in December 1996 by Alan Greenspan, then chairman of the Federal Reserve. Persuaded by comments by Yale University professor Robert Shiller, Mr. Greenspan wondered, "How do we know when irrational exuberance has unduly escalated asset values?" The comment caused a sensation among investors, and for years, the term and the date Mr. Greenspan uttered it was referenced whenever the press published stock charts on milestones in the markets.

Though the warnings from Mr. Greenspan and Prof. Shiller were sounded early, they were remarkably prescient. In the 2½ years following the bursting of the internet-stock bubble, from March 2000 to October 2002, the Nasdaq Composite Index fell 78%. Years later, Prof. Shiller would be awarded the Nobel Prize in economics in part for the research that became the basis of his book "Irrational Exuberance."

There of course is plenty of anecdotal evidence that individual investors today are rushing into the market in a way reminiscent of the late 1990s.

Commission-free brokerage platforms have experienced a surge in new customers, for example. And we're seeing huge swings in individual stocks—sometimes, for little to no reason at all. Consider:

• **In the two weeks** after Hertz declared bankruptcy, the company's stock doubled, and investors appeared eager to participate in a secondary offering. The company subsequently withdrew its offering after security regulators vowed to review it.

• **Though fracking** company Chesapeake Energy indicated in May that it likely would have to declare bankruptcy, in just one session in early June its stock jumped more than 180%. The company in late June did formally file for chapter 11 protection.

• **On another day** in June, stock in Chinese real-estate company Fangdd Network Group Ltd. jumped nearly 400%—on no news. Many suspect that day traders erroneously believed investments in the company were bets on the performance of the highflying FAANG stocks— Facebook , Amazon , Apple, Netflix and Google (owned by Alphabet)— and that once the Chinese company's stock started rising, algorithmic trading took over.

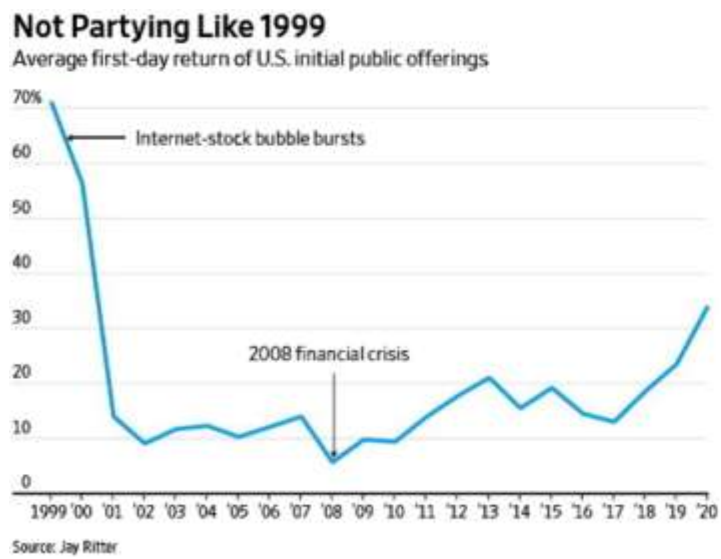
Given these examples, it is hard to argue that there aren't pockets of irrational exuberance in the market. But that is far different than concluding that the market as a whole is as frothy as it was in the late '90s. Our memories are notoriously unreliable when trying to make such comparisons, which is why it is important to rely on objective data.

Perhaps the most systematic effort to quantify investor exuberance was conducted 20 years ago by Malcolm Baker, a finance professor at Harvard Business School, and Jeffrey Wurgler, a finance professor at New York University.

In research done in the wake of the bursting of the internet bubble, they identified five variables for comparing investor sentiment at different points in time and showing how that relates to stock performance. A composite of those indicators shows that the current market is far less exuberant than in the late 1990s.

It isn't even close, in fact. Consider what each of these five indicators currently is saying about the prevailing market mood:

• **Two measures relate to** the new-issue market—the number of initial public offerings and their average first-day return. In calendar 1999, according to data from University of Florida finance Jay Ritter, there were 476 IPOs, versus a much leaner 44 so far this year. The 1999 IPOs' average first-day return was 71%, more than double this year's 34%, indicating a much cooler market today. Although, as you can see from the accompanying chart, this year's average return is the highest since 2000.



• **The third variable** tracks how public companies raised their capital: equity vs. debt. The theory goes that during periods of irrational exuberance, companies increasingly turn to the eq- uity market to raise capital. In calendar 1999, the last full year before the top of the internet bubble, the equity proportion stood at 18%. So far in 2020, in contrast, it is less than half that, at 7.5%.

• **Another variable** is the relative valuations of dividend-paying and non-dividend-paying companies. Profs. Baker and Wurgler think this is a proxy for investor exuberance, because dividend payers tend to be older, more-established companies; during periods of speculative excess, however, investors usually turn toward highflying growth stocks that don't pay dividends.

The professors report that, at the top of the internet-stock bubble, the price-to-book ratio of the average nonpayer was more than double that of the average dividend- paying company. Today, according to FactSet data, it is nearly the reverse: Dividend payers sport an average price-to-book ratio that is 44% higher than for the typical nonpayer.

• **The final indicator** is the average closed-end-fund discount, which is the amount by which the average fund's price is below its per-share net asset value. At the market's bottom in March, this discount widened to one of the largest in history, suggesting extreme investor pessimism, according to Ryan Paylor, a portfolio manager with Thomas J. Herzfeld Advisors. Though this average discount has narrowed since March, Mr. Paylor says that the discount remains deep by historical standards, indicating that closed-end fund investors "are leaning more towards fear than greed."

Given these stark differences between the market environments of the late 1990s and today, one may wonder why so many observers are quick to point to irrational exuberance. Is it more than just faulty memories at work?

One factor could be a predisposition among many bearish commentators to judge those who throw caution to the winds as having defects of character. Will Goetzmann, a finance professor at Yale University, says that this tendency appears especially strong right now among those who wish to rationalize why they missed the stock market's 40%-plus rally from its March low. "People seem to be quick to judge those who participated in the rally as being stupid," Prof. Goetzmann says.

It's not just that they believe the market will soon fall; they are prejudging those who will lose when the bubble bursts as getting what they deserve.

We'll leave the inscrutable question of what investors deserve to others—forecasting the stock market's direction is difficult enough. At a minimum, we can confidently say that the current market environment isn't nearly as exuberant as it was at the top of the internet-stock bubble.

While Gold closed at an all time high on Friday, more than a word of caution from Morningstar:

Beware the Hype on Gold

It looks good this year, but its longer-term track record is mixed.

Amy C. Arnott, CFA

Jul 27, 2020

Gold has been one of the hottest performers so far in 2020. With the price of gold rising nearly 17% for the first six months of the year, precious metals and commodities funds focusing on gold and other metals have been among the best performers in 2020's turbulent market. In response, money has flooded into gold funds. SPDR Gold Shares (GLD), an exchange-traded fund that ranks as by far the largest precious metals fund, has scooped up $20.4 billion in estimated net inflows over the past 12 months, increasing its asset base by roughly 30%.

In this article, I'll take a look at the role gold can play in a portfolio and explain why it deserves a more skeptical look than the current hype might suggest.

Background
Gold has a long history as a safe haven. Its price is largely independent of other asset classes, and it has also traditionally been used as a refuge against weakness in the dollar. It can also serve as a hedge against inflation and market volatility.

There are two primary ways to invest in gold: buying the commodity directly (gold bullion) and buying shares in companies that mine and sell gold (gold equity). Because gold stocks have both financial and operating leverage, their results tend to magnify the impact of changes in the price of gold. They're also significantly more volatile than bullion, which only depends on the underlying commodity price.

Both gold stocks and gold bullion have soared recently as the yellow metal (priced at about $1,901 per ounce as of this writing) has hit its highest level since 2011.

Performance in Market Drawdowns

Over longer periods, gold has excelled during bear markets and periods of unusually high market volatility. Exhibit 1 illustrates that gold has posted significantly better returns during previous market drawdowns and has generally even notched positive total returns during periods of deep losses in the equity market.

Exhibit 1: Performance in Market Drawdowns

	Jan 1973–Dec 1974	Sep 1987–Nov 1987	Jul 1990–Oct 1990	2008	Mar 2000–Oct 2002	Q4 2018	Feb 19, 2020–Mar 23, 2020
LBMA Gold Price PM USD	69.58	8.62	7.75	4.32	7.92	7.73	-4.05
S&P GSCI Gold TR	n/a	8.75	6.16	3.91	8.67	7.24	-2.02
S&P GSCI Precious Metal TR	47.74	3.82	1.33	0.48	10.52	7.05	-4.31
US Fund Equity Precious Metals	31.89	-12.56	-9.45	-19.54	45.44	4.68	-30.73
S&P 500 TR USD	-20.81	-29.58	-14.11	-37.00	-32.82	-13.52	-33.47

Source: Morningstar Direct. Data as of June 30, 2020.

The novel coronavirus crisis in 2020 was a partial exception. While gold fared much better than large-cap stocks, it still posted a small loss. Market observers have attributed this somewhat out-of-character showing to a variety of factors, including liquidity-driven selling and the expectation that interest-rate cuts would help support the dollar. Mine closures and production shutdowns early in the pandemic wreaked havoc on equity precious metals producers. Toward the end of March, though, gold reversed course and gained about 9.9% in the second quarter alone.

Exhibit 2: Mixed Record as an Inflation Hedge

	Annualized Returns (%)		
	1973–79	1980–84	1988–91
LBMA Gold Price PM USD	31.77	-10.06	-7.58
S&P GSCI Gold TR	n/a	-11.45	-7.12
S&P GSCI Precious Metal TR	28.59	-15.50	-7.60
US Fund Equity Precious Metals	25.79	7.79	-5.32
US BLS CPI All Urban NSA 1982–84	9.26	6.54	4.55

Source: Morningstar Direct. Data as of June 30, 2020.

Gold as an Inflation Hedge

Gold is often touted as a hedge against inflation, but its record there is more mixed. Gold did excel during the high inflationary period of the 1970s, when surging oil prices and a rapidly expanding monetary supply pushed inflation to historically high levels in the United States. During the more muted inflationary environments of the early 1980s and 1988-91, it actually posted negative total returns, on average, and lagged large-cap stocks by a wide margin.

Overall, the evidence for gold as an inflation hedge is relatively weak. Over the past 15 years, gold has had a very low correlation with inflation, with a correlation coefficient of just 0.07. The correlation has been even lower over the trailing three-year period, dropping to negative 0.26. Part of that may reflect the fact that inflation has been such a nonissue over the past 30 years or so that it's difficult to pick up correlations with other asset classes. But even back in the high-inflation period of 1973-79, the correlation coefficient was only 0.15. The upshot: Gold's role as an inflation hedge is probably overhyped, or at least not guaranteed to deliver if inflation becomes more of an issue.

Gold's Role in Improving Risk-Adjusted Returns

Looking at risk and return trends over the past 15 years, the argument for adding gold to a portfolio looks pretty convincing. (In fact, many asset management firms and gold advocates have trotted out studies showing the merits of adding gold to improve risk-adjusted returns, focusing heavily on performance over the past 15 years.) I tested a basic balanced portfolio (60% stocks and 40% bonds) and then added various gold allocations as part of the equity weighting; as shown in Exhibit 3, the portfolios with heavier gold weightings had lower volatility and higher Sharpe ratios.

Exhibit 3: Impact of Adding Gold to a Portfolio

	Total Returns (%)					15 yr	
Gold Weighting (%)	YTD	3 yr	5 yr	10 yr	15 yr	Std Dev	Sharpe Ratio
0	1.02	8.91	8.26	9.84	7.46	8.18	0.76
2%	1.42	8.95	8.23	9.66	7.50	7.93	0.79
5%	2.01	9.00	8.17	9.38	7.55	7.60	0.83
10%	3.00	9.09	8.07	8.90	7.63	7.17	0.88
15%	3.99	9.17	7.97	8.42	7.70	6.90	0.93
20%	4.98	9.25	7.87	7.92	7.75	6.81	0.95

Source: Morningstar Direct. Data as of June 30, 2020.

While adding more gold would have reduced returns over the trailing five- and 10-year periods, it also significantly reduced risk. On a risk-adjusted basis, the portfolios with heavier gold weightings had higher Sharpe ratios.

Exhibit 4: Impact of Adding Gold to a Portfolio (Decade by Decade)

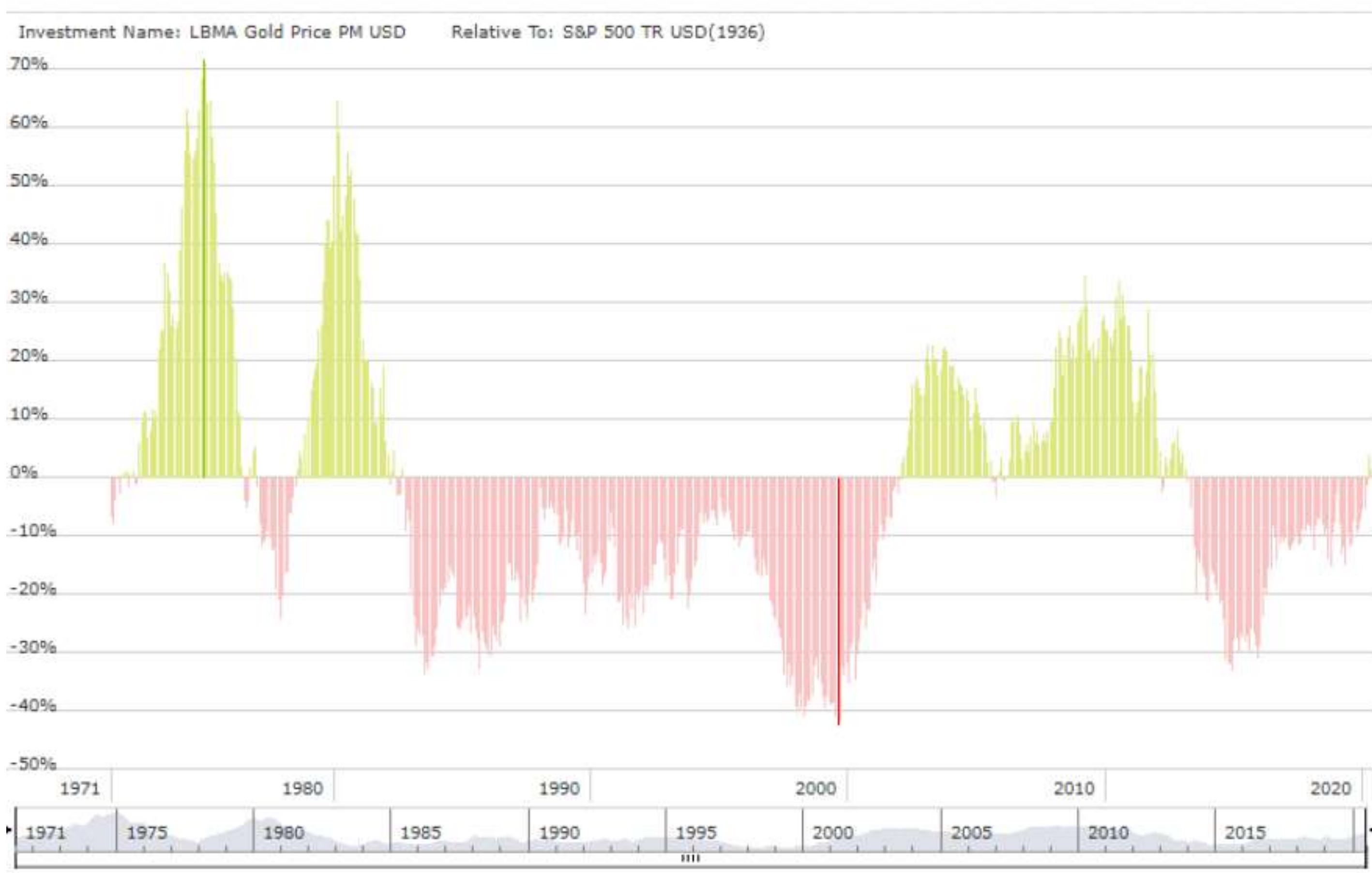
	1970–79			1980–89			1990–99			2000–09			2010–19		
	Tot Ret (%)	Std Dev	Sharpe Ratio	Tot Ret (%)	Std Dev	Sharpe Ratio	Tot Ret (%)	Std Dev	Sharpe Ratio	Tot Ret (%)	Std Dev	Sharpe Ratio	Tot Ret (%)	Std Dev	Sharpe Ratio
Balanced portfolio (no gold)	6.68	11.17	0.06	15.44	11.60	0.51	13.96	8.92	0.96	2.72	8.75	0.03	9.54	7.14	1.23
15% gold	11.50	9.52	0.51	12.58	10.06	0.32	10.86	7.04	0.80	4.95	7.11	0.31	8.14	6.12	1.22

Source: Morningstar Direct. Data as of June 30, 2020. Balanced portfolio includes 60% stocks and 40% bonds; 15% gold portfolio substitutes gold for part of the equity weighting. Both portfolios assume annual rebalancing. All total returns are annualized. Yellow highlights indicate periods with better results.

But the picture looks far different with a different choice of starting date. If we assume the portfolios started on Jan. 1, 1980, adding gold would have reduced returns over the following 10-year period. It still would have reduced portfolio volatility, but not enough to improve risk-adjusted returns.

To see how consistently gold can perform, I compared the basic balanced portfolio with a portfolio that included 15% in gold as part of the equity weighting. I looked at five different 10-year periods starting in 1970, 1980, 1990, 2000, and 2010. Overall, adding gold improved returns in only two of the five periods. It reduced

Exhibit 5: Rolling 36-Month Returns Relative to S&P 500



Source: Morningstar Direct. Data as of June 30, 2020.

risk in every period but improved the Sharpe ratio only in the two periods where returns also improved.

Conclusion: Handle With Care
That means that gold is far from guaranteed to improve risk, return, or risk-adjusted returns in any given period. Instead, its track record is decidedly mixed. As Exhibit 5 shows, gold has gone through long periods of underperformance.

On balance, gold has a pretty reliable record as a safe haven in times of market turmoil. However, it's better viewed as an insurance policy than as a core holding. Investors who decide to add gold to their portfolios should be wary of the current hype surrounding precious metals and be prepared for periodic dry spells.

Follow-ups

From Verdad on Jul. 27th:

By Brian Chingono

Think back to the summer of 2010. The global economy was emerging from a crisis that was triggered by overpriced real estate. Imagine you had received a call at that time from a fund manager, pitching a new investment strategy. "Never mind the fact that speculative purchases of expensive assets caused the last market crash," explains the caller. "We have a great new strategy for the next decade: buy the most expensive stocks with the lowest profitability."

How would this speculative strategy have performed over the next ten years? Turns out, this approach of buying expensive, unprofitable companies would have tripled an investor's money over the subsequent decade, with a $100 investment in July 2010 growing to $321 in June 2020.

Meanwhile, a rational strategy of buying highly profitable companies at cheap valuations would have been left behind, with the same $100 investment in July 2010 being worth $167 in June 2020, as illustrated in the chart below.

Figure 1: Growth of $100 in Global Developed Markets (2010–2020)

Source: Ken French data library (June 2020).

But what if the fateful call in 2010 had come two decades earlier? Would expensive, unprofitable companies have outpaced cheap, profitable firms over a longer horizon?

In 1992, Nobel Prize-winner Gene Fama and his colleague Ken French published their famous "Three Factor Model," which demonstrated that value is an important factor that explains equity returns. Although investors have known about value since at least the days of Ben Graham, 1992 was the first time this factor was popularized in quantitative investment models.

So we looked at the performance of value since 1993, in combination with profitability. The table below shows the annualized returns of global stock portfolios that were sorted according to firms' valuation characteristics (cheap to expensive) and their profitability characteristics (low to high). Returns of the cheapest, most profitable companies are shown in the bottom left cell. And returns of the most expensive, least profitable firms are shown in the top right cell.

Over the past three decades, companies that exhibit both cheap valuations and high profitability have delivered the highest annualized returns in the market, compounding at 12% per year.

On the other hand, the most expensive, least profitable companies have delivered a paltry 2% annualized return over the past three decades.

Figure 2: Annualized Returns in Global Developed Markets (1993–2020)

		VALUATION			
		1: Deep Value	2	3	4: Expensive
PROFITS	1: Low	6.3%	6.0%	2.3%	2.2%
	2	9.7%	8.6%	7.0%	3.8%
	3	11.0%	10.4%	8.7%	7.4%
	4: High	11.7%	11.6%	10.6%	9.2%

Most Expensive, Least Profitable

Cheapest, Most Profitable

Source: Ken French data library (June 2020).

If an investor had followed the speculative approach and held expensive, unprofitable companies since 1993, then a $100 investment would have been worth $184 in June 2020, after a long 27-year wait.

Conversely, if the same $100 were invested in a strategy that holds the cheapest, most profitable companies since 1993, that investment would be worth $2,116 in June 2020!

How should investors today weigh the historical evidence? Over the past decade, the speculative approach of holding expensive, unprofitable companies has created 3x more wealth than the rational strategy of buying cheap, profitable firms. Yet the opposite is true over a longer horizon. Over the past three decades, the rational strategy has generated over 11x more wealth than the speculative approach.

The 18th-century statistician and Presbyterian minister, Thomas Bayes, also grappled with the question of how to evaluate conflicting evidence. The answer he proposed—now formalized as Bayes Theorem—is to start with a prior belief (e.g., "cheap, profitable stocks are likely to outperform expensive, unprofitable stocks") then update that belief based on the strength of new evidence. For example, if the stock market's strange behavior over the past ten years leads one to question the efficacy of buying profitable companies at low valuations, then those doubts should be laid to rest by the counterevidence from the past three decades. In fact, the three decades of evidence in favor of value investing carries much more weight because of its longer horizon. Therefore, investors should be more convinced about the efficacy of value investing after evaluating the longer horizon of evidence.

Indeed, when we extend the time horizon as far back as reliable records allow, we find even stronger evidence in favor of buying profitable companies at low valuations. The United States has reliable financial statement data for public companies starting in 1963. Over the six decades between 1963 and 2020, stocks that are cheap and profitable have compounded at 13% per year. And over the same period, expensive and unprofitable stocks have lagged far behind, compounding at only 4% per year. The difference in wealth creation between these two approaches over a six-decade horizon is staggering: $100 invested in 1963 would be worth $131,130 under the rational strategy and $993 under the speculative approach.

Figure 3: Long-Horizon Outcomes in the United States (1963–2020)

Source: Ken French data library (June 2020).

Over the past six decades, the rational strategy has created 132x more wealth than the speculative approach. So following Bayes Theorem, our prior belief that “cheap, profitable stocks are likely to outperform expensive, unprofitable stocks” should be significantly bolstered after seeing six decades of supporting evidence.

Under this Bayesian framework, we can better evaluate the unusual outcome of the most recent ten years. Compared against six decades of evidence in favor of buying profitable companies at low valuations, the unlucky experience of the past ten years should not even make a dent in our conviction that value investing works over the long run.

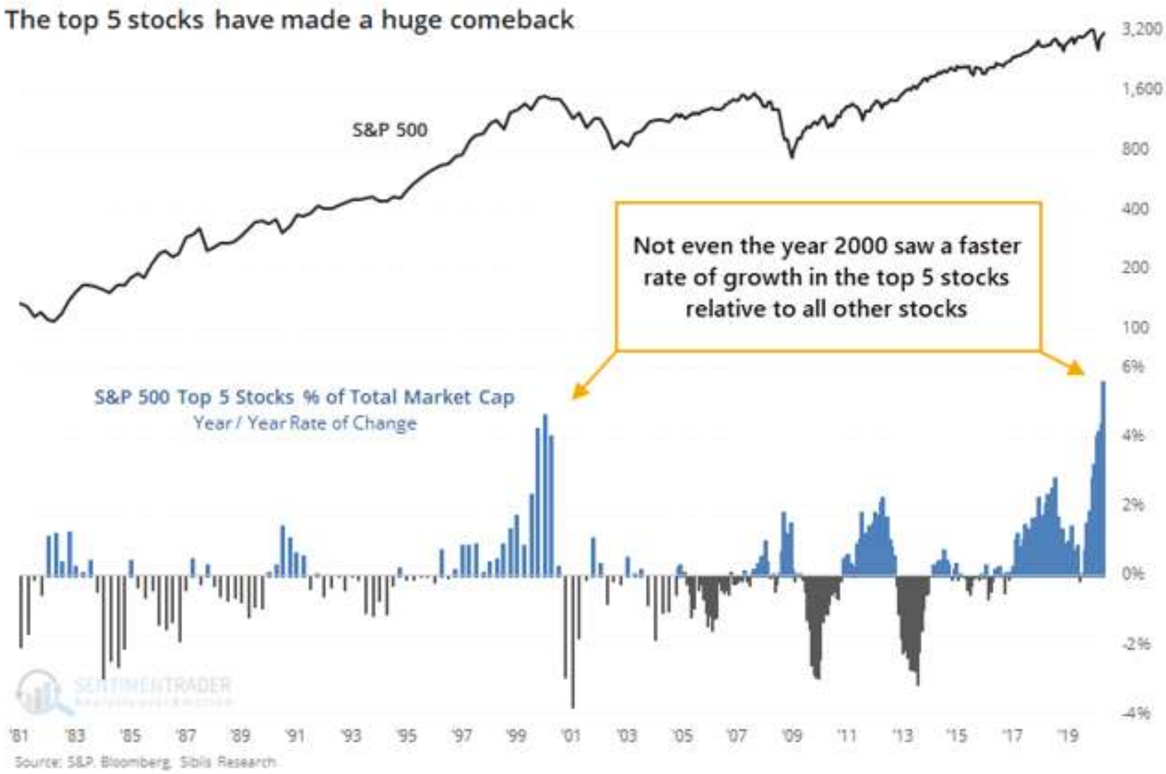
Ultimately, the rational investment logic of “buy low, sell high” is well supported by six decades of evidence. Whereas, like a game of musical chairs, the speculative logic of “buy high, sell higher” seems fun until the music stops.

The stock market is noisy, and strange things can happen over three, five, even ten years. But over the long haul, investors eventually get what they pay for. Those who buy expensive equities at low yields usually realize low returns over the long run. And investors who buy cheap stocks at high yields can realize high returns—provided they stick with the strategy over the long haul.

From High Dividend Opportunities on Jul. 26:

Party like it is 1999?

By some measures Technology is even outpacing the 2000 peak. The top 5 stocks gained in relation to the broader market faster than what we saw right at the Nasdaq peak.



If you add a few companies that trade outside the technology sector today (namely in the communication sector), the technology weight as a percentage of S&P 500 exceeds that seen in the year 2000.

The question you have been waiting to ask

Can the smaller cap names that have been killed go up or at least hold their own if the broader indices move lower? **Yes they can.** Above we can see the Small-Cap Index holding its own as the S&P 500 and Nasdaq crashed lower (chart between January 2000 and June 2002).

From Morningstar:

The S&P 500 Grows Ever More Concentrated

Does this bode well for small-value stocks?

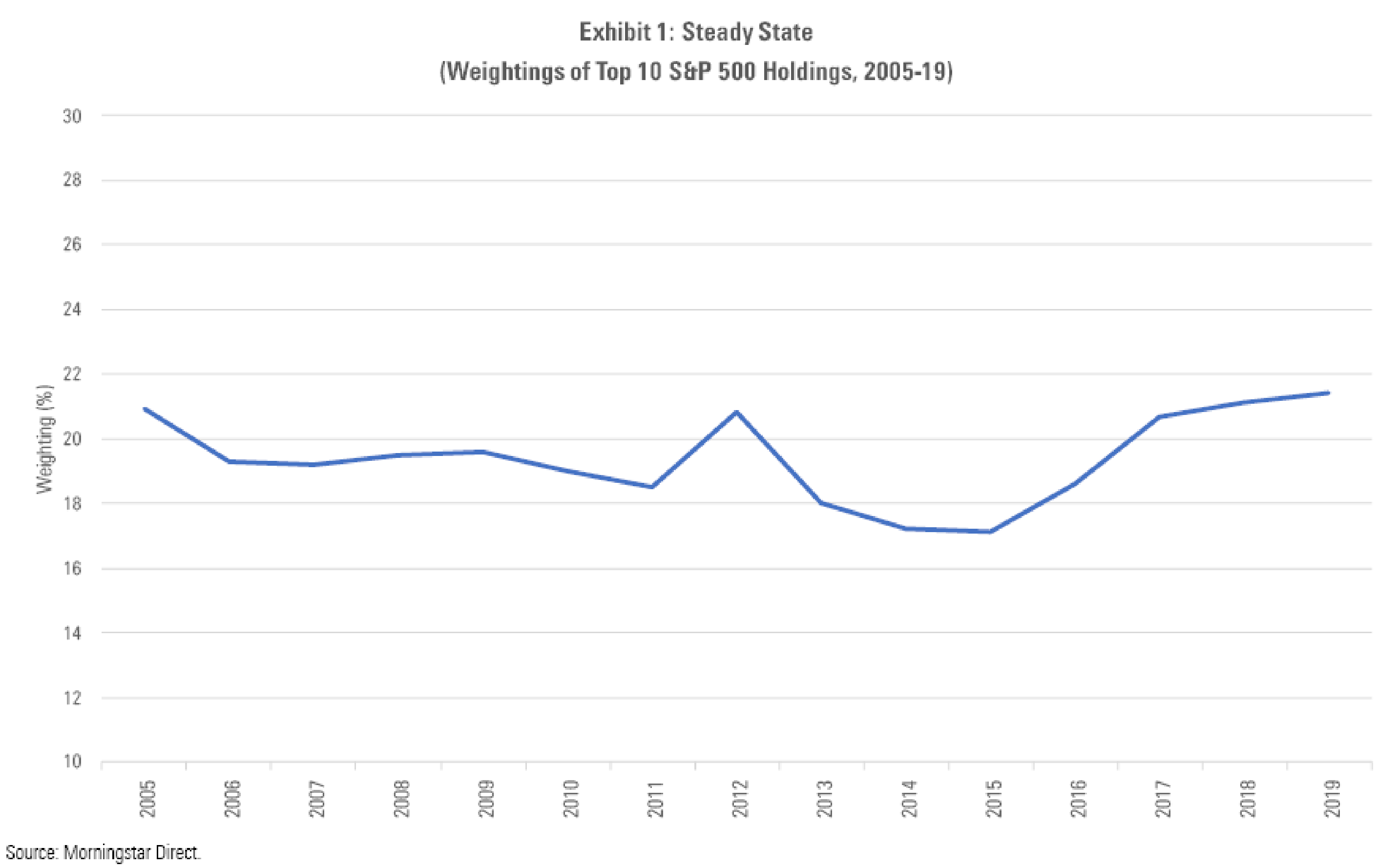
John Rekenthaler

Jul 20, 2020

Ahead of Their Time

Entering this year, observers had long complained that the S&P 500 was overly concentrated, thereby relying too heavily on the performance of its largest positions. Such was the lament in 2016, and in 2017, and again in early 2019.

However, as measured by the size of the index's 10 largest positions, the charge didn't stick. The graph below depicts the cumulative weighting of Vanguard 500 Index's (VFINX) Top 10 holdings, using each year's June portfolio, from 2005 through 2019. The recent results were unremarkable, landing only slightly above the 15-

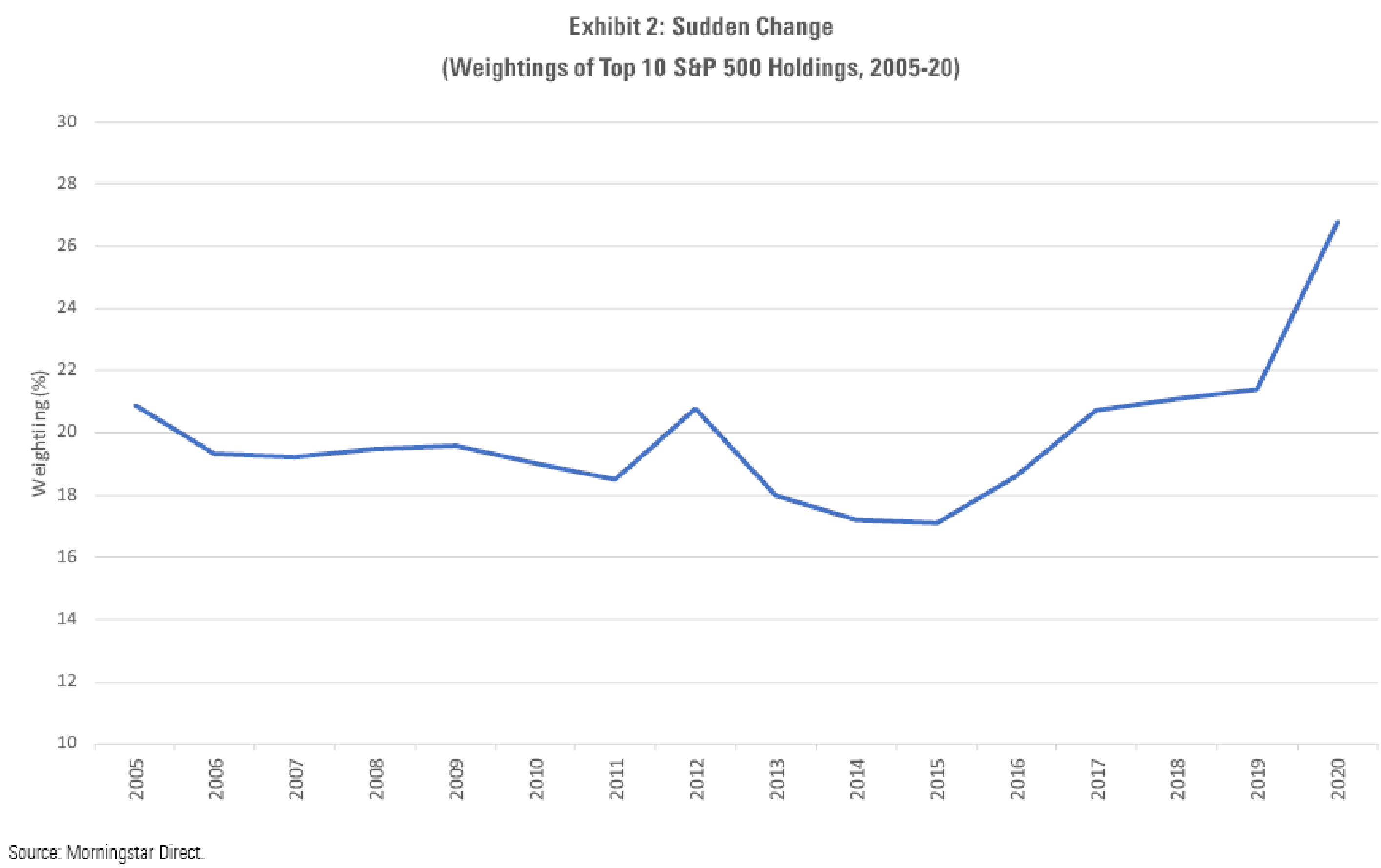


year norm, and matched by two previous showings.

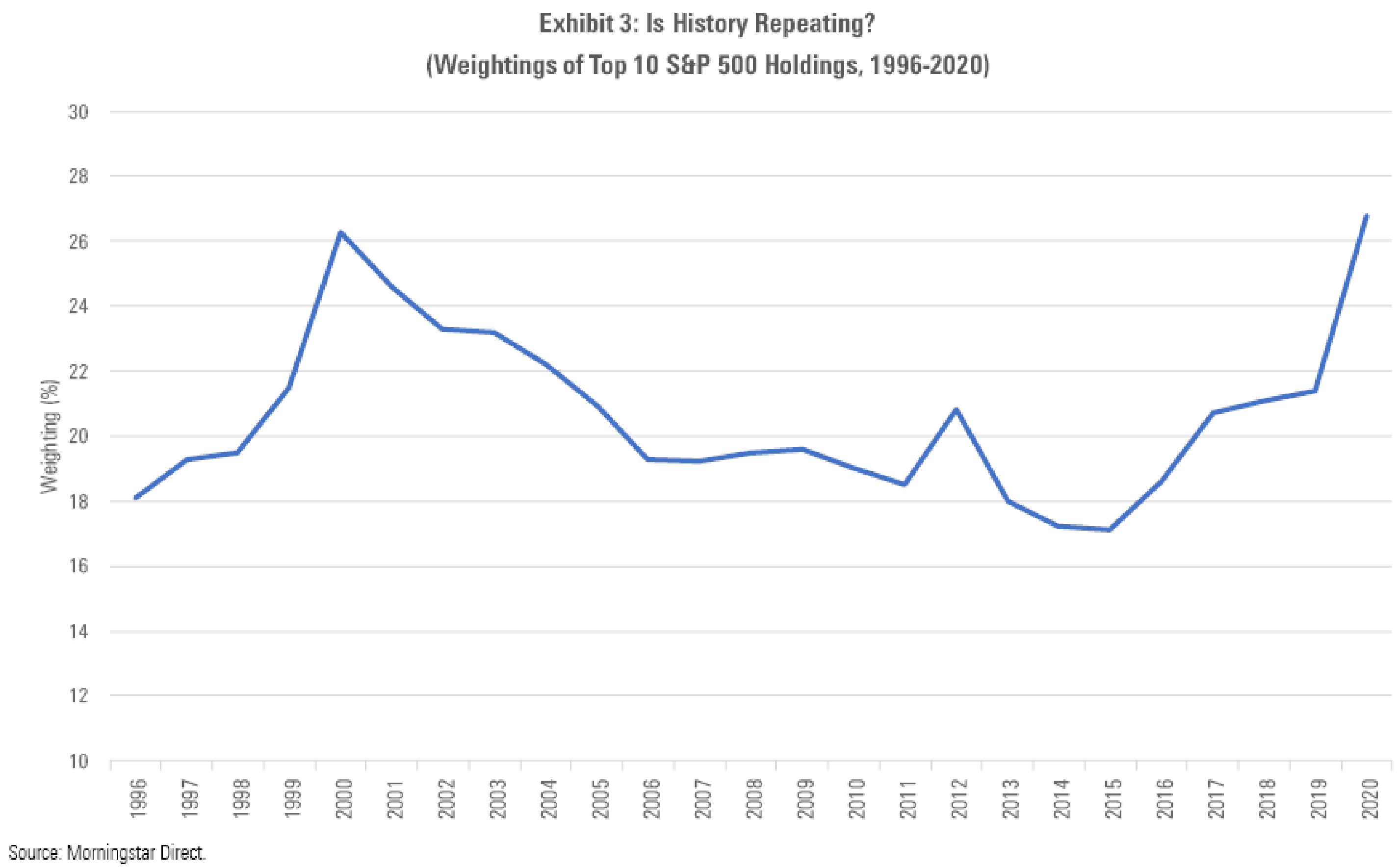
Of course, one can assess portfolio concentration in various ways, including by industry exposure and investment style. The amount invested in a portfolio's largest holdings provides but one perspective. Nevertheless, it's difficult to embrace a thesis that can't withstand an initial, simple test. Through 2019, the S&P 500's leading stocks weren't commanding significantly more assets than in the recent past.

Now and Then

That has since changed, in a big way. Thanks in part to gains from Microsoft (MSFT), Apple (AAPL), and Amazon.com (AMZN), which have each appreciated by at least 48% over the trailing 12 months, the percentage of assets held by the S&P 500's 10 largest positions leapfrogged to 26%. Adding one year to the previous graph sharply alters the narrative.



I then wondered how the picture would have looked during the New Era, when so many stock-valuation charts behaved anomalously. During that infamously speculative period, had the same pattern appeared? Indeed, it had. In June 2000, the percentage of assets held by the S&P 500's 10 largest holdings temporarily spiked above 25%, then subsided over the next few years.



Setting a New Record

As with the current leaders, the New Era's biggest firms were almost all growth stocks. One might think that usually occurs because growth companies typically command steep price/earnings multiples, which translates to higher stock-market capitalizations. But that is not necessarily so. In 2006, Exxon Mobil (XOM), Citigroup (C), and Bank of America (BAC) were three of the index's five largest positions. Half a decade later, ExxonMobil remained atop the chart, joined by such veterans as Chevron (CVX), General Electric (GE), and AT&T (T). Exciting new businesses they were not.

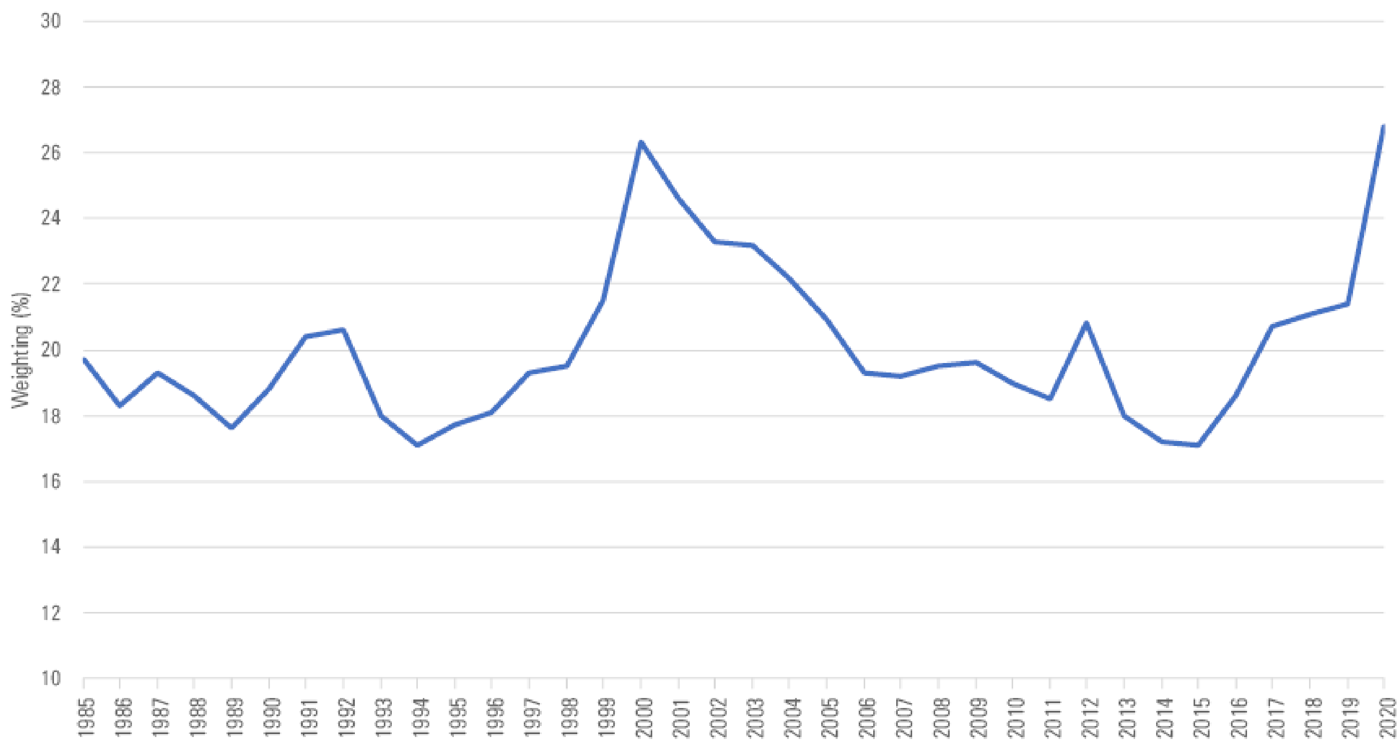
Today's list, though, is more top-heavy than that of the New Era, as well as more dependent on technology. In June 2000, no single company exceeded 4.2% of the S&P 500's portfolio. Twenty years later, Microsoft, Apple, and Amazon each eclipse that mark. In addition, whereas tech stocks accounted for three of June 2000's six largest positions, they currently occupy all six slots. (The seventh is Johnson & Johnson (JNJ), at 1.4% of the index's assets.)

Never, to paraphrase Winston Churchill, have so many stocks owed so much to so few. To be sure, the U.S. stock market remains the world's deepest. Elsewhere, having 10 stocks account for one fourth of an index's portfolio would rate as well-diversified. For example, the 10 largest holdings of the United Kingdom's FTSE 100 Index take up 37% of its portfolio. The figures are higher yet for smaller bourses.

That said, summer 2020 has established a new American record, at least during recent memory. The top positions of the S&P 500 are at their most concentrated.

As a final test, I extended the analysis another 10 years, beginning with 1985. (I would have preferred to start with Vanguard 500 Index's 1976 inception, but that predates Morningstar's existence. Morningstar calculates total returns for funds that were launched before its 1984 debut but does not possess portfolio data.) The additional results strengthen the narrative. The only period that resembles today is summer 2000.

Exhibit 4: The Longer View
(Weightings of Top 10 S&P 500 Holdings, 1985-2020)



Source: Morningstar Direct.

Drawing Conclusions

At first glance, that final chart suggests that U.S. stocks are in big trouble. Only once before during the past 35 years has the top 10 percentage behaved comparably, and that occurred as the market was about to suffer its longest downturn over the entire time period, a shellacking that persisted (with the occasional respite) for the next two years. History does not appear to be friendly.

There are other similarities. On both occasions, tech stocks enjoyed record popularity, thanks in part to aggressive participation from retail investors. Twenty years ago, everyday investors discovered day trading, through online brokerage platforms. If recent media reports are to believed, they have now reclaimed the pleasure, spurred by the current brokerage innovation: free transactions.

Each period also follows a long string of outperformance by large-growth stocks, accompanied by poor returns from small-value companies. Over the past half-century, the two weakest showings by small-value stocks occurred during the late 1990s, and then again over the past half-decade. For many value investors, the lesson is obvious: Expect a prolonged small-value rally, at least in relative terms.

As I have written, that remains a distinct possibility. After all, the current situation not only resembles that of summer 2000, but in certain aspects exceeds it. One might reasonably expect the glamorous tech stocks to at last give way, just as they did two decades ago. On the other hand, investment history typically offers a general guideline rather than a precise blueprint. It repeats, but only vaguely.

Also, the parallels are incomplete. While S&P 500 concentration is higher today, other signs of speculation were greater in the past. The gap in valuations between the glamor stocks and small-value securities was much larger 20 years ago than it is today. Also higher was retail investors' fervor. At the peak of the New Era, several readers sent death threats to pessimistic Morningstar researchers. This year, thankfully, has not resuscitated that trend.

My take: This column's findings add another tally to small-value stocks' ledger. They appear to be the soundest bet among U.S. stocks over the next three to five years. However, the evidence is not yet overwhelming.

John Rekenthaler has been researching the fund industry since 1988. He is now a columnist for Morningstar.com and a member of Morningstar's investment research department. John is quick to point out that while Morningstar typically agrees with the views of the Rekenthaler Report, his views are his own.

Positions

HEAR - Fortunately for 4 of our clients for whom we invest in individual stocks, HEAR's gaming headsets have been in high demand as a result of Covid-19. An IVE System pick, it's valuation decile had climbed from the cheapest to the 8th highest over the year held. We sold all positions on 7/13 @ 17.97.