November 2021

“Expansions don’t die of old age, they are murdered by the Fed”. - Rudy Dornbusch

From the front page of this weekend's WSJ:

Markets’ Fall Caps Volatile Week

BY GUNJAN BANERJI

Markets ended a tumultuous week on an ominous note, with a broad technology-sector selloff sending major U.S. stock indexes sharply lower and Treasury yields falling at a pace not seen since some of the worst days of the pandemic last year.

After a relatively placid stretch across financial markets, investors have been confronted with several fresh worries that have triggered volatility in markets around the globe. (Stocks turned negative for the month on Black Friday, with last weekend's WSJ lead titled **Dow Suffers Worst Day of 2021.**)

Many investors expect the Federal Reserve to raise interest rates next year after a prolonged period of keeping them near zero, a policy that has propelled the market to record after record over the past year. Federal Reserve Chairman Jerome Powell said this week that the central bank was prepared to pare its easy-money policies at a quicker pace, opening the door to raising interest rates in the first half of 2022. ...

And the new Omicron variant of Covid-19 has emerged, injecting further volatility into the stock market as investors were already weighing rising inflation and the path of the economic recovery. The variant has triggered fresh restrictions around the world, throwing up new obstacles to the economy just as travel was starting to bounce back after last year’s Covid-19 measures. Scientists are trying to gauge how effective current vaccines will be against the variant. ...

The Nasdaq ended the week with a 2.6% weekly loss, lagging behind its peers, and concluded its biggest two-week percentage decline since March. The S& P 500 fell 1.2%. The Dow Jones Industrial Average fell 0.9%, notching a fourth consecutive week of losses. ...

Though losses in the stock market have been broad-based (The Russell 2000 is now in correction territory, down 11.7% from its November 8th all-time high.), many highflying tech and growth stocks have badly underperformed after a November in which traders poured gobs of money into hot tech stocks ....

Shares of Meta Platforms, formerly Facebook, and Netflix tumbled 7.9% and around 9.5%, respectively, this week. The ARK Innovation ETF (see the Analysis from Morningstar below) ... fell 13% for the week. ...

In bond markets, the yield on the benchmark 10-year Treasury note fell to 1.342%, recording the biggest one-week yield decline since June 2020. Yields have now fallen for three consecutive weeks. ...

From Friday's Global Investment Strategy:

Strategy Outlook 2022 Key Views: The Beginning Of The End

I. Macroeconomic Outlook

Running out of Greek Letters

Just as the world was looking forward to “life as normal”, a new variant of the virus has surfaced. While little is known about the Omicron variant, preliminary indications suggest that it is more transmissible than Delta.

The emergence of the Omicron variant is coming in the midst of yet another Covid wave. The number of new cases has skyrocketed across parts of northern and central Europe, prompting governments to re-introduce stricter social distancing measures. New cases have also been trending higher in many parts of the US and Canada since the start of November.

Despite the risks posed by Omicron, there are reasons for hope. BioNTech has said that its vaccine, jointly developed with Pfizer, will provide at least partial immunity against the new strain. At present, 55% of the world’s population has had at least one vaccine shot; 44% is fully vaccinated. ...

In a worst-case scenario, BioNTech has said that it could produce a new version of its vaccine within six weeks, with initial shipments beginning in about three months.

New antiviral medications are also set to hit the market. Pfizer claims its newly developed pill cuts the risk of hospitalization by nearly 90% if taken within three days from the onset of symptoms. The drug-maker has announced its intention to produce enough of the medication to treat 50 million people in 2022. In addition, it is allowing generic versions to be manufactured in developing countries. The company has indicated that its antiviral pills will be effective in treating the new strain.

Global Growth: Slowing but from a High Level

Assuming the vaccines and antiviral drugs are able to keep the new strain at bay, global growth should remain solidly above trend in 2022. **Table 1** shows consensus GDP growth projections for the major economies. G7

TABLE 1

Growth Is Slowing, But From Very High Levels

	BLOOMBERG SURVEY OF ECONOMISTS GDP GROWTH EXPECTATIONS											
	2021*				2022*				2023*	2021**	2022**	2023**
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1			
US	6.3%	6.7%	2.1%	4.9%	4.5%	4.0%	3.2%	2.6%	2.4%	5.5%	3.9%	2.5%
EURO AREA	-1.2%	8.7%	9.1%	2.8%	3.2%	3.2%	2.8%	2.4%	2.0%	5.1%	4.2%	2.3%
UK	-5.5%	23.9%	5.3%	4.5%	4.1%	3.2%	2.4%	2.4%	2.0%	7.0%	5.0%	2.1%
JAPAN	-4.1%	1.5%	-3.0%	5.3%	4.5%	3.1%	2.0%	1.3%	1.2%	2.0%	2.6%	1.3%
CANADA	4.9%	-3.2%	5.5%	4.7%	5.0%	4.5%	3.8%	2.8%	2.7%	5.0%	4.1%	2.6%
AUSTRALIA	7.4%	2.8%	-7.4%	7.4%	8.0%	5.7%	4.1%	3.2%	2.8%	3.9%	3.8%	3.0%
BRAZIL	4.9%	-0.4%	0.9%	1.9%	0.6%	0.3%	0.5%	1.2%	1.5%	5.0%	1.3%	2.2%
CHINA	0.8%	4.9%	0.8%	4.9%	5.7%	6.1%	5.7%	5.3%	4.7%	8.0%	5.3%	5.3%
INDIA***	---	---	---	---	---	---	---	---	---	9.2%	7.5%	---
RUSSIA	---	---	---	---	---	---	---	---	---	4.2%	2.5%	2.1%
G7****	1.8%	7.2%	3.6%	4.5%	4.1%	3.6%	2.9%	2.3%	2.1%	5.0%	3.9%	2.2%
G7**** EX. US	-2.9%	7.6%	5.3%	4.1%	3.8%	3.3%	2.6%	2.1%	1.8%	4.4%	3.9%	1.9%

* QUARTERLY RATE OF CHANGE, ANNUALIZED.
** ANNUAL RATE OF CHANGE.
*** THE 2021 FORECAST FOR INDIA REFERS TO THE APRIL 2021-MARCH 2022 PERIOD, WHILE THE 2022 FORECAST REFERS TO APRIL 2022-MARCH 2023.
**** INCLUDES US, CANADA, JAPAN, GERMANY, FRANCE, ITALY, AND THE UK.
SOURCE: BLOOMBERG FINANCE L.P.
NOTE: ACTUAL VALUES FOR Q1 AND Q2 OF 2021 ARE USED FOR ALL COUNTRIES. FOR G7 COUNTRIES, THE EURO AREA, AUSTRALIA, AND CHINA, ACTUAL VALUES ARE USED FOR Q3 AS WELL.

growth is expected to tick up from 3.6% in 2021Q3 to 4.5% in 2021Q4. Growth is set to cool to 4.1% in 2022Q1, 3.6% in 2022Q2, 2.9% in 2022Q3, 2.3% in 2022Q4, and 2.1% in 2023Q1.

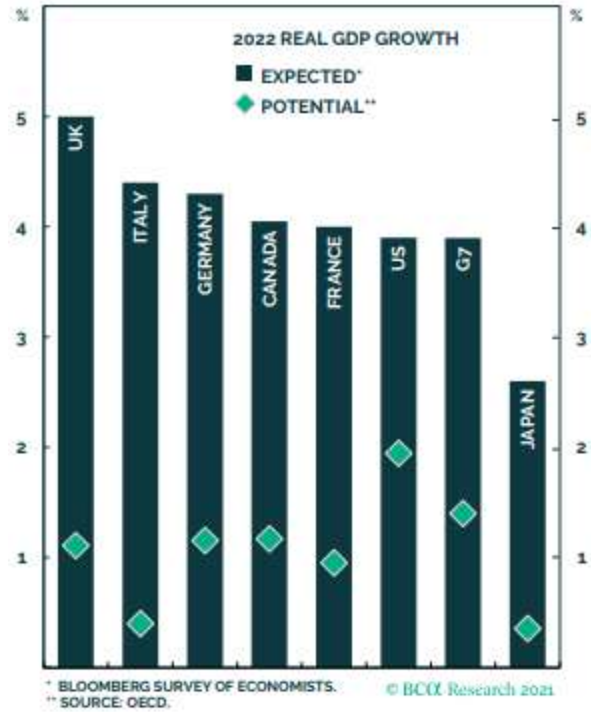
According to the OECD, potential real GDP growth in the G7 is about 1.4% (**Chart 3**). Thus, while growth in developed economies will slow next year, it is unlikely to return to trend until the second half of 2023.

Emerging markets face a more daunting outlook. The Chinese property market is weakening, and the recent collapse of the Turkish lira highlights the structural problems that some EMs face. Nevertheless, the combination of elevated commodity prices, forthcoming Chinese stimulus, and the resumption of the US dollar bear market starting next year should support EM growth.

Relative to consensus, we think the risks to growth in both developed and emerging markets are tilted to the upside in 2022. Growth will likely start surprising to the downside in late 2023, however.

CHART 3

Growth Next Year Will Remain Firmly Above Trend



The United States: No Shortage of Demand

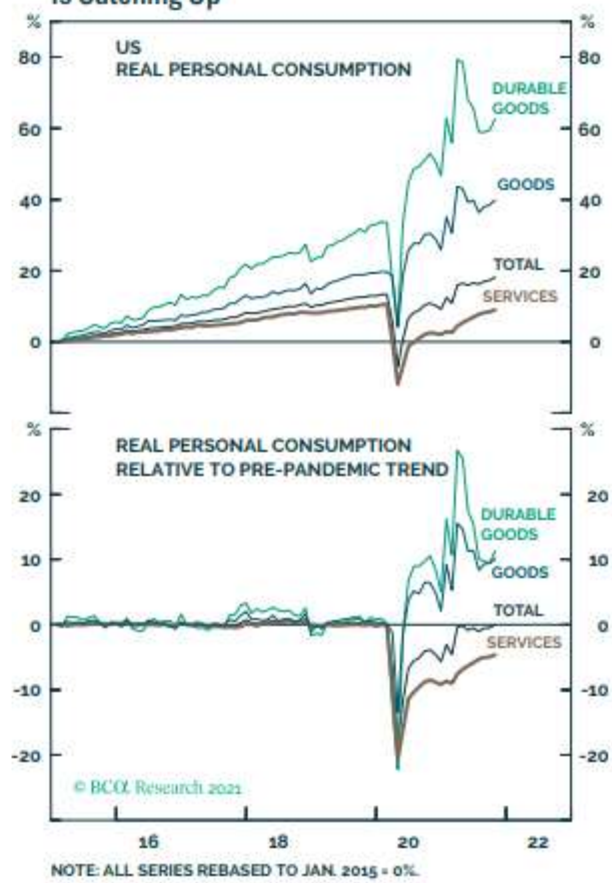
US growth slowed to only 2.1% in the third quarter, reflecting the impact of the Delta variant wave and supply-chain bottlenecks. The semiconductor shortage hit the auto sector especially hard. The decline in vehicle spending alone shaved 2.2 percentage points off Q3 GDP growth.

The fourth quarter is shaping up to be much stronger. The Bloomberg consensus estimate is for real GDP to expand by 4.9%. The Atlanta Fed's GDP Now model is even more optimistic. It sees growth hitting 9.7%.

The demand for goods will moderate in 2022. As of October, real goods spending was still 10% above its pre-pandemic trendline (**Chart 4**). In contrast, the demand for services will continue to rebound. While restaurant sales have recovered all their lost ground, spending on movie theaters, amusement parks, and live entertainment in October was still down 46% on a seasonally-adjusted basis compared to January 2020. Hotel spending was down 23%. Spending on public transport was down 25%. ...

CHART 4

Durable Goods Spending Is Still Above Pre-Pandemic Trend, While Services Spending Is Catching Up



US households have accumulated $2.3 trillion in excess savings over the course of the pandemic. Some of this money will be spent over the course of 2022 (**Chart 6**).

Increased borrowing should also help. After initially plunging during the pandemic, credit card balances are rising again. Banks are eager to make consumer loans.

Household net worth has risen by over 100% of GDP since the start of the pandemic (**Chart 9**). In an earlier report, we estimated that the wealth effect alone could boost annual consumer spending by up to 4% of GDP.

Business investment will rebound in 2022, as firms seek to build out capacity, rebuild inventories, and automate more production in the face of growing labor shortages. After moving sideways for the better part of two decades, core capital goods orders have broken out to the upside. Surveys of capex intentions have improved sharply. Nonresidential investment was 6% below trend in Q3 – an even bigger gap than for consumer services spending – so there is plenty of scope for capex to increase.

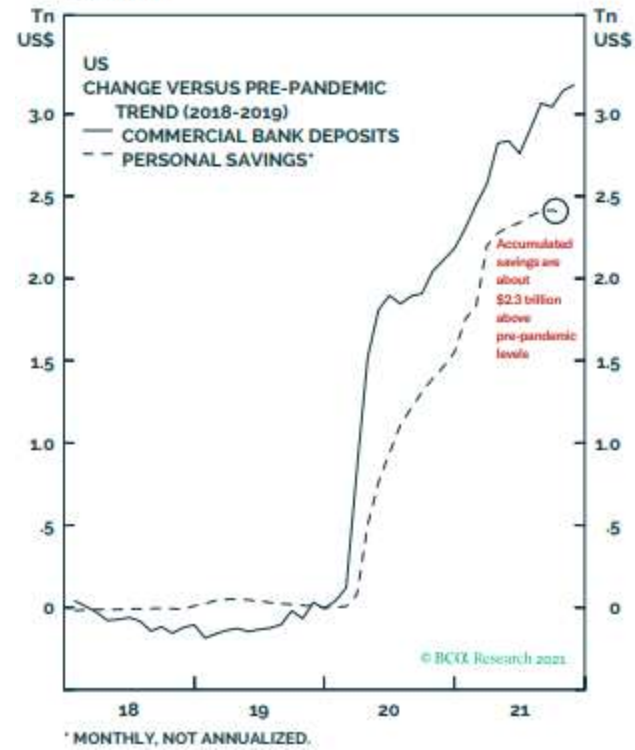
Residential investment should also remain strong in 2022 (**Chart 11**). The homeowner vacancy rate has dropped to a record low, as have inventories of new and existing homes for sale. Homebuilder sentiment rose to a 6-month high in November. Building permits are 7% above pre-pandemic levels.

US Monetary and Fiscal Policy: Baby Steps Towards Tightening

Policy is unlikely to curb US aggregate demand by very much next year. While the Federal Reserve will expedite the tapering of asset purchases and begin raising rates next summer, the Fed is unlikely to raise rates significantly until inflation gets out of hand.

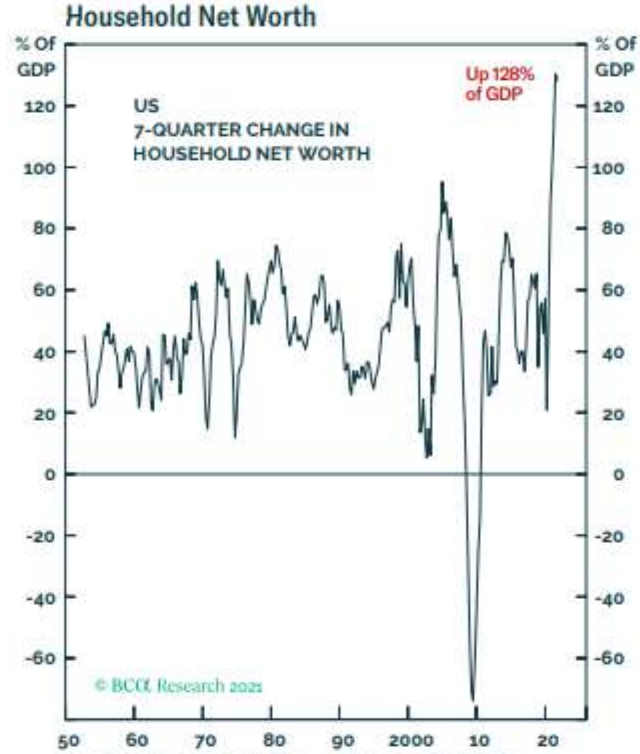
As we discuss in the Feature section later in this report, the next leg in inflation will be to the downside, even if the long-term trend for inflation is to the upside. The respite from inflation next year will give the Fed some breathing space. A major tightening campaign is unlikely until mid-2023.

CHART 6
Plenty Of Pent-Up Demand



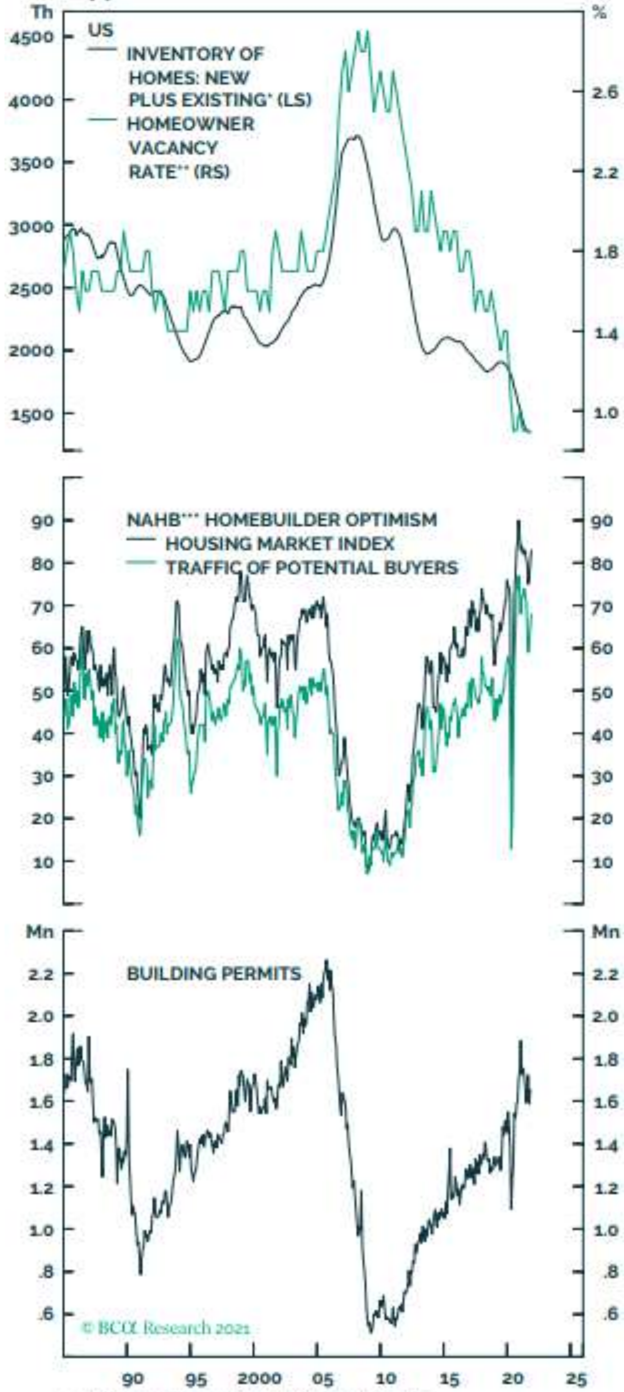
* MONTHLY, NOT ANNUALIZED.

CHART 9
A Record Rise In Household Net Worth



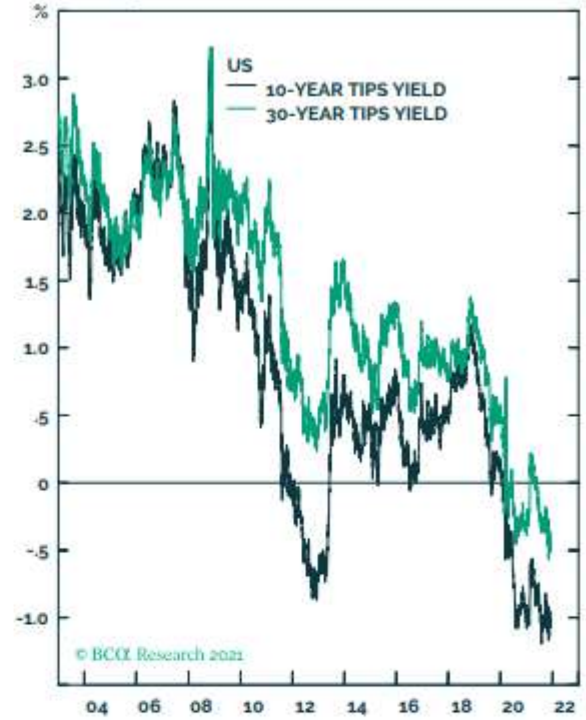
NOTE: LATEST DATA POINT (Q3 2021) IS A BCA ESTIMATE.

CHART 11
Residential Construction Will Be Well Supported



* SHOWN AS A 12-MONTH MOVING AVERAGE.
** SOURCE: US DEPARTMENT OF COMMERCE.
*** NATIONAL ASSOCIATION OF HOME BUILDERS.

CHART 12
US Real Bond Yields Hitting Record Lows



Reflecting the Fed's dovish posture, longterm real bond yields hit record low levels in November (**Chart 12**). Despite giving up some of its gains in recent days, Goldman's US Financial Conditions Index stands near its easiest level in history.

US fiscal policy will get tighter next year, but not by very much. In November, President Biden signed a $1.2 trillion infrastructure bill into law, containing $550 billion in new spending. BCA's geopolitical strategists expect Congress to pass a $1.5-to-$2 trillion social spending bill using the reconciliation process. The emergence of the Omicron strain will facilitate passage of the bill because it will allow the Democrats to add some "indispensable" pandemic relief to the package.

All in all, the IMF foresees the US cyclically-adjusted primary budget deficit averaging 4.9% of GDP between 2022 and 2026, compared to 2.0% of GDP between 2014 and 2019.

It should also be noted that government spending on goods and services has been quite weak over the past two years (**Chart 15**). The budget deficit surged because transfer payments exploded. Unlike direct government spending, which is set to accelerate over the next few years, households saved a large share of transfer payments. Thus, the fiscal multiplier will increase next year, even as the budget deficit shrinks.

Europe: Room to Grow

The European economy faces near-term growth pressures. In addition to Covid-related lockdowns, high energy costs will take a bite out of growth. After having dipped in October, natural gas prices have jumped again due to delays in the opening of the Nord Stream 2 pipeline, strong Chinese gas demand, and rising risks of a colder winter due to La Niña.

The majority of Germans are in favor of opening the pipeline, suggesting that it will ultimately be approved. This should help reduce gas prices. Meanwhile, the winter will pass and Chinese demand for gas should abate as domestic coal production increases.

The combination of increased energy supplies, easing supply-chain bottlenecks, and hopefully some relief on the pandemic front, should all pave the way for betterthan-expected growth across the euro area next year.

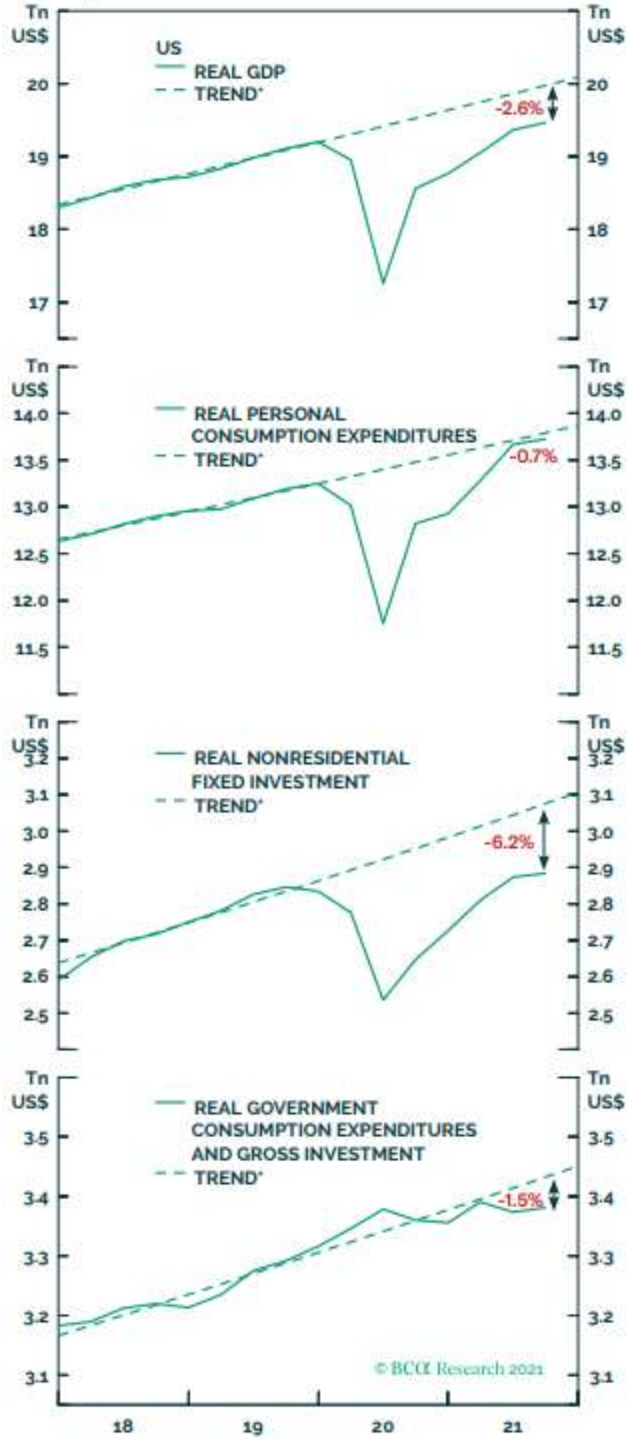
After a decade of housecleaning, European banks are in much better shape. Capex intentions have risen. Consumer confidence is even stronger in the euro area than in the US.

Euro area fiscal policy should remain supportive. Infrastructure spending is set to increase as the Next Generation EU fund begins operations. Germany's "Traffic Light" coalition will pursue a more expansionary fiscal stance. The IMF expects the euro area to run a cyclically-adjusted primary deficit of 1.2% of GDP between 2022 and 2026, compared to a surplus of 1.2% of GDP between 2014 and 2019.

For its part, the ECB will maintain a highly accommodative monetary policy. While net asset purchases under the PEPP will end next March, the ECB is unlikely to raise rates until 2023 at the earliest. In contrast to the US, trimmed-mean inflation has barely risen in the euro area (**Chart 19**). Moreover, unlike their US counterparts, European firms are reporting few difficulties in finding qualified workers. In fact, euro area wage growth slowed to an all-time low of 1.35% in Q3.

CHART 15

While Overall Consumption Has Recovered, Business Spending And Direct Government Expenditures Remain Below Trend



* PRE-PANDEMIC (2018-2019) TREND.

The UK finds itself somewhere between the US and the euro area. Trimmed-mean inflation is running above euro area levels, but below that of the US. UK labor market data remains very strong, as evidenced by robust employment gains, firm wage growth, and a record number of job vacancies. The PMIs stand at elevated levels, with the new orders component of November's manufacturing PMI rising to the highest level since June. While worries about the impact of the Omicron variant will likely cause the Bank of England to postpone December's rate hike, we expect the BoE to begin raising rates in February.

Japan: Short-Term Stimulus Boost

A major Covid wave during the summer curbed Japanese growth. Consumer spending rebounded after the government removed the state of emergency on October 1 but could falter again if the Omicron variant spreads. The government has already told airlines to halt reservations for all incoming international flights for at least one month.

On the positive side, the economy will benefit from new fiscal measures. Following the election on October 31, the new government led by Prime Minister Fumio Kishida announced a stimulus package worth 5.6% of GDP.

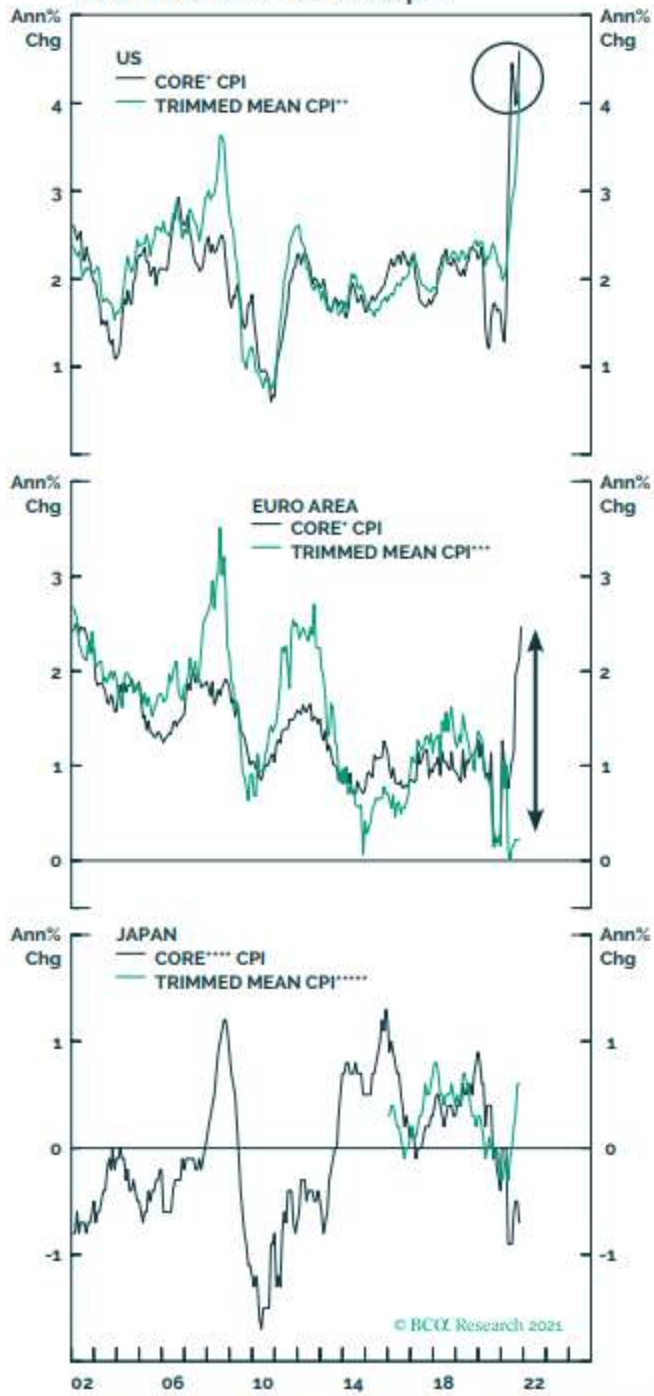
As with most Japanese stimulus packages, the true magnitude of fiscal support will be much lower than the headline figure. Nevertheless, the combination of increased cash payments to households, support for small businesses, and subsidies for domestic travel should spur consumption in 2022.

The capex recovery in Japan has lagged other major economies. This is partly due to the outsized role of the auto sector in Japan's industrial base. Motor vehicle shipments fell 37% year-over-year in October, dragging down export growth with it. As automotive chip supplies increase, Japan's manufacturing sector should gain some momentum.

Despite the prospect of stronger growth next year, the Bank of Japan will stand pat. Core inflation remains close to zero, while long-term inflation expectations remain far below the BOJ's 2% target. We do not expect the BOJ to raise rates until 2024 at the earliest.

CHART 19

Trimmed-Mean Inflation: Higher In The US Than In The Euro Area And Japan



* EXCLUDING FOOD AND ENERGY. US IS BUREAU OF LABOR STATISTICS DATA, EURO AREA IS ECB DATA.
** SOURCE: FEDERAL RESERVE BANK OF CLEVELAND.
*** BASED ON BCA CALCULATIONS.
**** EXCLUDING FRESH FOOD AND ENERGY, AND CONSUMPTION TAX EFFECT.
***** SOURCE: BANK OF JAPAN.

China: Crosswinds

The Chinese economy faces crosswinds going into 2022. On the one hand, the energy crisis should abate, helping to boost growth. China has reopened 170 coal mines and will probably begin re-importing Australian coal. Chinese coal prices have fallen drastically over the past 6 weeks. Coal accounts for about two-thirds of Chinese electricity generation.

The US may also trim tariffs on Chinese goods, as Treasury Secretary Yellen hinted this week. This will help Chinese manufacturers.

On the other hand, the property market remains under stress. Housing starts, sales, and land purchases were down 34%, 21%, and 24%, respectively, in October relative to the same period last year. The proportion of households planning to buy a home has plummeted.

Loan growth to real estate developers has decelerated to the lowest level on record. Nearly half of their offshore bonds are trading at less than 70 cents on the dollar.

The authorities have taken steps to stabilize the property market. They have relaxed restrictions on mortgage lending and land sales, cut mortgage rates in some cities, and have allowed some developers to issue asset backed securities to repay outstanding debt.

Most Chinese property is bought “off-plan”. The government does not want angry buyers to be deprived of their property. Thus, the existing stock of planned projects will be built. ... in past years, developers have started more than twice as many projects as they have completed.

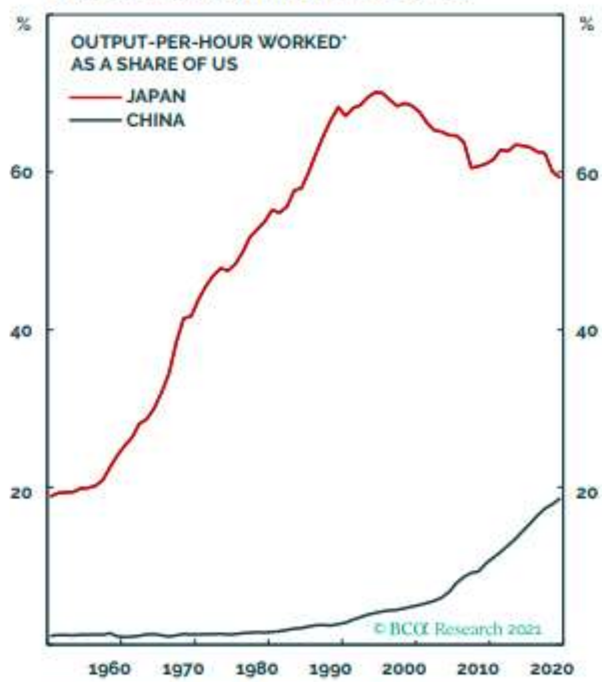
The longer-term problem is that China builds too many homes. Like Japan in the early 1990s, China’s working-age population has peaked. According to the UN, it will decline by over 400 million by the end of the century. China simply does not need to construct as many new homes as it once did.

Japan was unable to fill the gap that a shrinking property sector left in aggregate demand in the early 1990s. As a result, the economy fell into a deflationary trap.

China is likely to have more success. Unlike Japan, which waited too long to pursue large-scale fiscal stimulus, China will be more aggressive. The authorities will raise infrastructure spending next year with a focus on clean energy. They will also boost social spending. A frayed social safety net has forced Chinese households to save more than they would otherwise for precautionary reasons. This has weighed on consumption.

The fact that China is a middle-income country helps. In 1990, Japan’s output-per-worker was nearly 70% of US levels; China’s output-per-worker is still 20% of US levels (**Chart 26**). If Chinese incomes continue to grow at a reasonably brisk pace, this will make it easier to improve home affordability. It will also allow China to stabilize its debt-to-GDP ratio without a painful deleveraging campaign.

CHART 26
A Lot Of Potential For China To Grow



* LABOR PRODUCTIVITY PER HOUR WORKED IN 2020 INTERNATIONAL DOLLARS, CONVERTED USING PURCHASING POWER PARITIES.
SOURCE: THE CONFERENCE BOARD.

II. Feature: The Long Term Inflation Outlook

Two Steps Up, One Step Down

We expect inflation in the US, and to a lesser degree abroad, to follow a “two steps up, one step down” trajectory of higher highs and higher lows.

The US is currently near the top of those two steps. Inflation should dip (the amount will matter) over the next 6-to-9 months as the demand for goods moderates and supply-chain disruptions abate. ... container shipping costs have started to come down. The number of ships anchored off the ports of Los Angeles and Long Beach is falling.

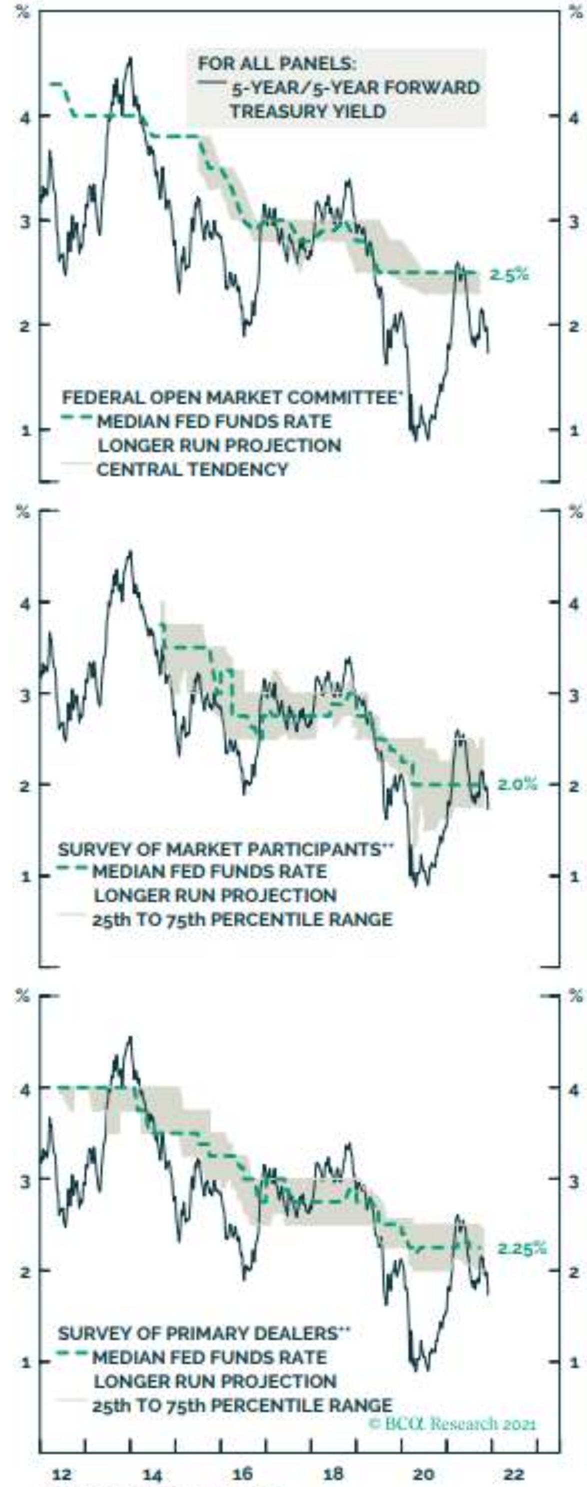
US semiconductor firms are working overtime. Chip production in Japan and Korea is rising swiftly. DRAM chip prices have already started to decline.

Reflecting the easing of supply-chain bottlenecks, both the "prices paid" and "supplier delivery" components of the manufacturing ISM declined in November.

The respite from inflation will not last long, however. The US labor market is heating up. So far, most of the wage growth has been at the bottom end of the income distribution. Wage growth will broaden out over the course of 2022, pushing up service price inflation in the process.

Rent inflation will also rise, as the unemployment rate falls further. The Zillow rent index has spiked 14%. Rents account for 8% of the US CPI basket and 4% of the PCE basket.

CHART 32
Both The Fed And Investors Have Lowered Their Estimate Of The Neutral Rate



* SOURCE: FEDERAL RESERVE.
** SOURCE: FEDERAL RESERVE BANK OF NEW YORK.
NOTE: 5-YEAR/5-YEAR FORWARD TREASURY YIELD SHOWN SMOOTHED EXCEPT FOR LATEST DATA POINT.

Biased About Neutral?

Investors are assuming that the Fed will step in to extinguish any inflationary fires before they get out of hand. The widely-followed 5-year/5-year forward TIPS breakeven inflation rate has fallen back below the Fed's comfort zone.

This may be wishful thinking. Back in 2012, when the Fed began publishing its "dots", it thought the neutral rate of interest was 4.25%. Today, it considers it to be around 2.5% (**Chart 32**). Market participants broadly agree. Both investors and policymakers have bought into the secular stagnation thesis hook, line, and sinker.

If the neutral rate turns out to be higher than widely believed, the Fed could find itself woefully behind the curve. Given the "long and variable" lags between changes in monetary policy and the resulting impact on the economy, inflation is liable to greatly overshoot the Fed's target.

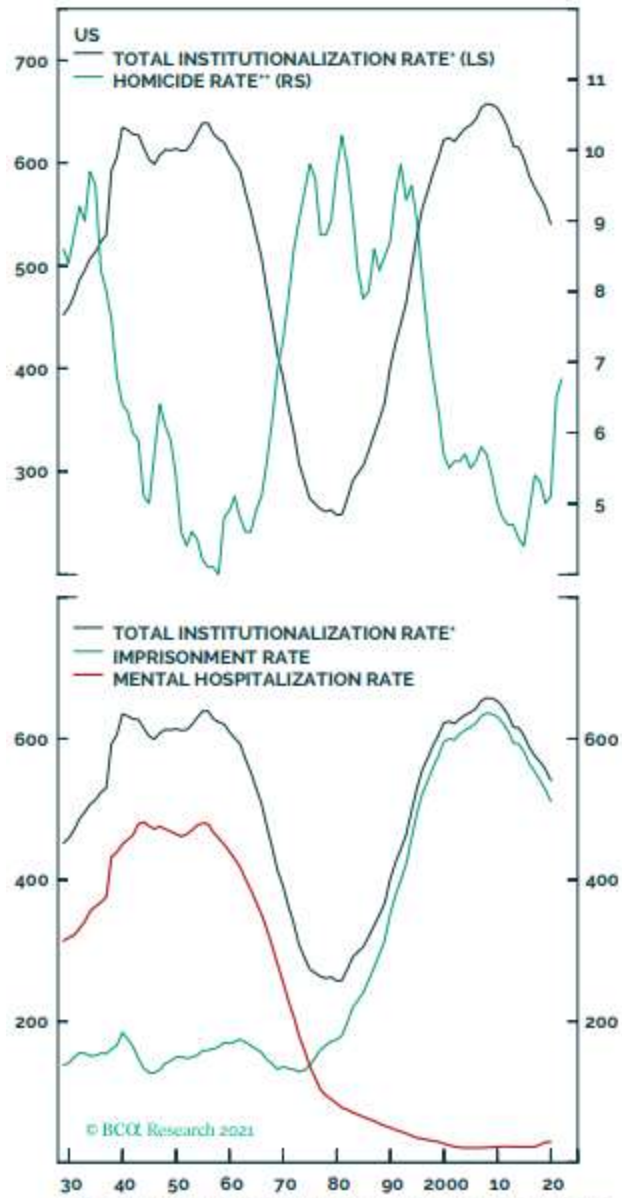
Structural Forces Turning More Inflationary

Meanwhile, the forces that have underpinned low inflation over the past few decades are starting to fray:

- Globalization is in retreat: The ratio of global trade-to-manufacturing output has been flat for over a decade. Looking out, the ratio could decline as geopolitical tensions between China and the rest of the world continue to simmer, and more companies shift production back home in order to gain greater control over the supply chains of essential goods.

- Baby boomers are leaving the labor force en masse: As a group, baby boomers hold more than half of US household wealth. They will continue to run down their wealth once they retire. However, since they will no longer be working, they will no longer contribute to national output. Spending that is not matched by output tends to drive up inflation.
- Social stability is in peril: The US homicide rate increased by 27% in 2020, the biggest one-year jump on record. All indications suggest that crime has continued to rise in 2021, coinciding with the ongoing decline in the incarceration rate (**Chart 35**). Amazingly, the murder rate and inflation are highly correlated (**Chart 36**). If the government cannot credibly commit to keeping people safe, how can it credibly commit to keeping inflation low? Without trust in government, inflation expectations could quickly become unmoored.
- The temptation to monetize debt will rise: Public-sector debt levels have soared to levels last seen during World War II. If bond yields rise as the Congressional Budget Office expects, debt-servicing costs will triple by the end of the decade (Chart 37). Faced with the prospect of having to divert funds from social programs to pay off bondholders, the government may apply political pressure on the Fed to keep rates low.

CHART 35
The Homicide Rate Has Tended To Rise When The Institutionalization Rate Has Declined



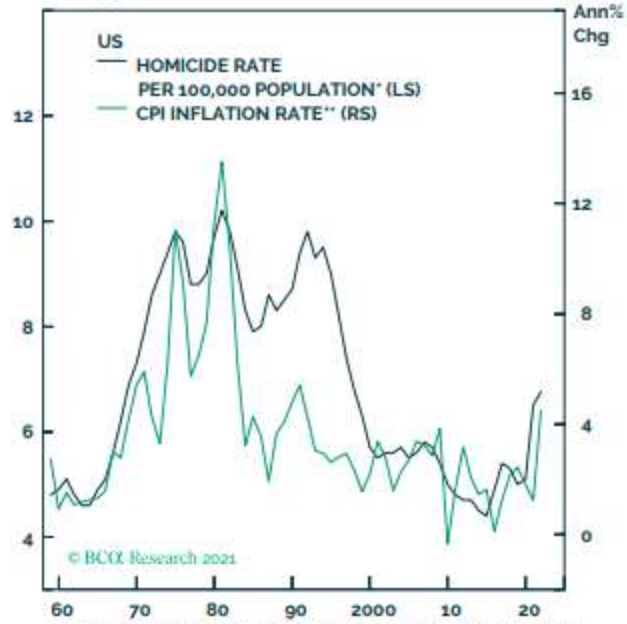
* INCLUDES POPULATION WHO SERVE THEIR PRISON SENTENCE AND PATIENTS CONFINED IN MENTAL HOSPITALS. SOURCE: BERNARD E. HARCOURT, BUREAU OF JUSTICE STATISTICS, SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION AND BCA RESEARCH.
** INCLUDES MURDER AND NONNEGLIGENT MANSLAUGHTER ONLY. SOURCE: US BUREAU OF JUSTICE STATISTICS, FBI UNIFORM CRIME REPORTING. 2021 IS BASED ON ESTIMATES FROM THE COUNCIL ON CRIMINAL JUSTICE.
NOTE: HARCOURT'S DATA IS USED FOR 1928-2000. BCA RESEARCH ESTIMATES USING BUREAU OF JUSTICE STATISTICS DATA ON PRISONER STATISTICS ARE APPLIED FROM 2001 WHILE DATA ON MENTAL HOSPITAL RATE FROM 2001 IS BASED ON NATIONAL MENTAL HEALTH SERVICES SURVEYS AND DATA PUBLISHED IN THE MENTAL HEALTH UNITED STATES 2010 REPORT. ALL RATES SHOWN PER 100,000 POPULATION.

A Post-Pandemic Productivity Boom?

Might faster productivity growth bail out the economy just like it did following the Second World War? Don't bet on it. US labor productivity did increase sharply during the initial stages of the pandemic. However, that appears to have been largely driven by composition effects that saw many low-skilled, poorly-paid service workers lose their jobs. As these low-skilled workers have returned to the labor force, productivity growth has dropped. The absolute level of productivity declined by 5.0% at an annualized rate in the third quarter, leading to an 8.3% increase in labor costs.

Productivity growth has been extremely weak outside the US (Chart 38). This gives weight to the view that the pandemic-induced changes in business practices have not contributed to higher productivity, at least so far. It is worth noting that a recent study of 10,000 skilled professionals at a major IT company revealed that work-from home policies decreased productivity by 8%-to-19%, mainly because people ended up working longer.

CHART 36
Bouts Of Inflation Tend To Coincide With Rising Crime



* INCLUDES MURDER AND NONNEGLIGENT MANSLAUGHTER ONLY.
SOURCE: US BUREAU OF JUSTICE STATISTICS, FBI UNIFORM CRIME REPORTING. 2021 IS BASED ON ESTIMATES FROM THE COUNCIL ON CRIMINAL JUSTICE.
** 2021 IS BASED ON BLOOMBERG CONSENSUS ESTIMATES.

Increased investment spending should eventually boost productivity. However, the near-term impact of higher capex will be to boost aggregate demand, stoking inflation in the process.

III. Financial Markets

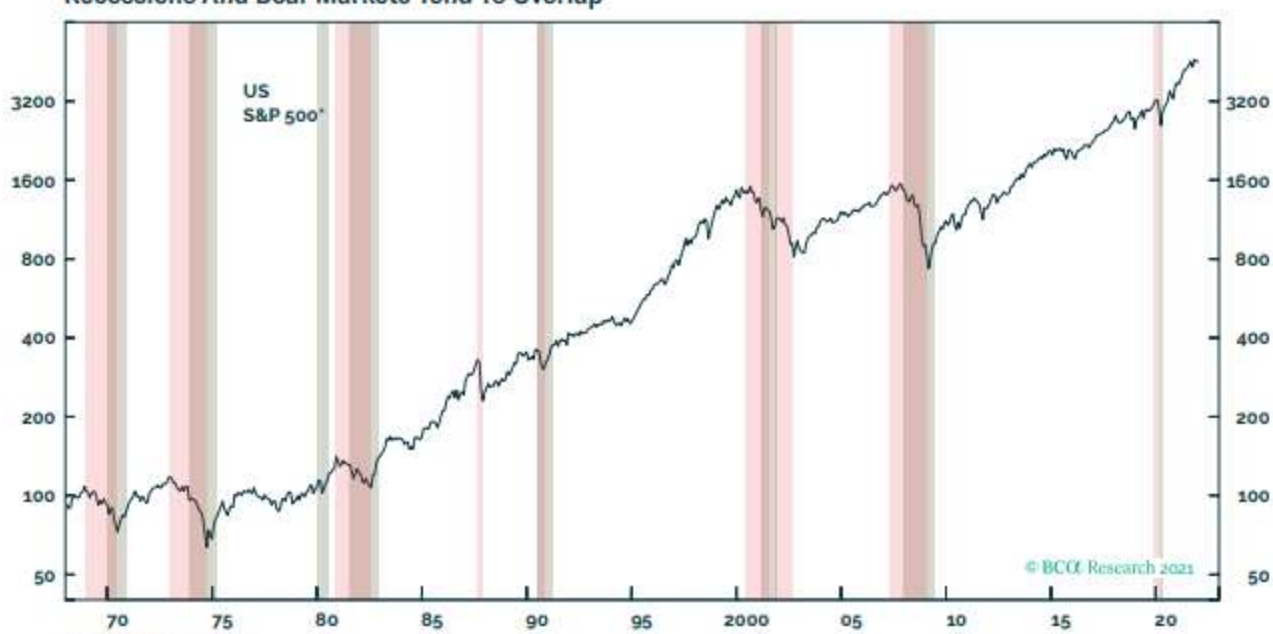
A. Portfolio Strategy

Above-Trend Global Growth Will Support Equities

Our golden rule of investing is about as simple as they come: Don't bet against stocks unless you think that there is a recession around the corner. As **Chart 39** shows, recessions and equity bear markets almost always overlap.

Equity corrections can occur outside of recessionary periods. In fact, we are experiencing such a correction right now. Yet, with the percentage of bearish investors reaching the highest level in over 12 months in this week's AAII survey, chances are that the correction will not last much longer. A sustained decline in stock prices requires a sustained decline in corporate earnings; the latter normally only happens during economic downturns.

CHART 39
Recessions And Bear Markets Tend To Overlap



* SHOWN IN LOG SCALE.
NOTE: LIGHT RED SHADING INDICATES BEAR MARKETS; GREY SHADING INDICATES NBER-DESIGNATED RECESSIONS.

Admittedly, it is impossible to know for sure if a recession is lurking around the corner. If the Omicron variant is able to completely evade the vaccines, growth will slow considerably over the coming months. Yet, even in that case, the global economy is unlikely to experience a sudden-stop of the sort that occurred last March. As noted at the outset of this report, pharma companies have the tools to tweak the vaccines, and most experts believe that the soon-to-be-released antivirals will be effective against the new strain.

If economic growth remains above trend, earnings will rise. S&P 500 companies generated $53.82 per share in profits in Q3. The bottom-up consensus is for these companies to generate an average of $54.01 in quarterly profits between 2021Q4 and 2022Q3, implying almost no growth from 2021Q3 levels. This is a very low bar to clear. We expect global equities to produce high single-digit returns next year.

The Beginning of the End

Our guess is that 2022 will be the last year of the secular equity bull market that began in 2009. In mid-2023 or so, the Fed will come around to the view that the neutral rate is higher than it once thought. Unfortunately, by then, it will be too late; a wage-price spiral will have already emerged. A nasty bear flattening of the yield curve will ensue: Long-term bond yields will rise but short-term rate expectations will increase even more. A recession will follow in 2024 or 2025.

The most important real-time indicator we are focusing on to gauge when to turn more bearish on stocks is the 5y/5y forward TIPS breakeven rate. As noted earlier, it is still at the bottom end of the Fed's comfort zone. If it were to rise above 3%, all hell could break loose, especially if this happened without a corresponding increase in crude oil prices. The Fed takes great pride in the success it has had in anchoring long-term expectations. Any evidence that expectations are becoming unmoored would cause the FOMC to panic.

B. Equity Sectors, Regions, And Styles

Favor Value, Small Caps, and Non-US Markets in 2022

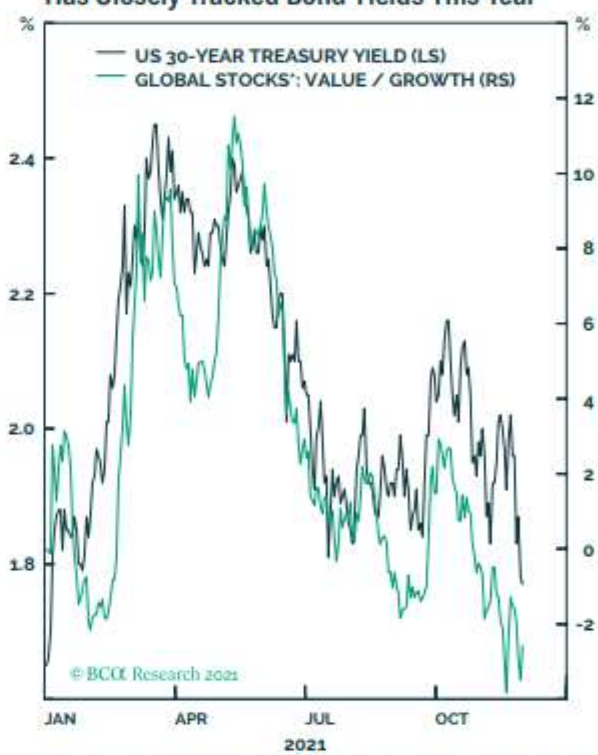
Until the Fed takes away the punch bowl, a modestly procyclical stance towards equity sectors, styles, and regional equity allocation is warranted.

The relative performance of value versus growth stocks has broadly followed the trajectory of the 30-year Treasury yield this year (**Chart 42**). Rising yields should buoy value stocks, with banks being the biggest beneficiaries. In contrast, rising yields will weigh on tech stocks.

If we receive some good news on the pandemic front, this should disproportionately help value. ... the relative performance of value versus growth stocks has tracked the number of new Covid cases globally. The correlation between new cases and the relative performance of IT and energy has been particularly strong.

Rising capex spending will buoy industrial stocks. Industrials are overrepresented in value indices both in the US and abroad. Along with financials, industrials are also overrepresented in

CHART 42
The Relative Performance Of Value Stocks Has Closely Tracked Bond Yields This Year



* IN US DOLLARS. REBASED TO JAN 1, 2021 = 0%. SOURCE: MSCI INC. (SEE COPYRIGHT DECLARATION).

small cap indices. US small caps trade at 15-times forward earnings compared to 21-times for the S&P 500.

Time to Look Abroad?

Given our preference for cyclicals and value in 2022, it stands to reason that we should also favor non-US markets. ... non-US stock markets have more exposure to cyclical and value sectors.

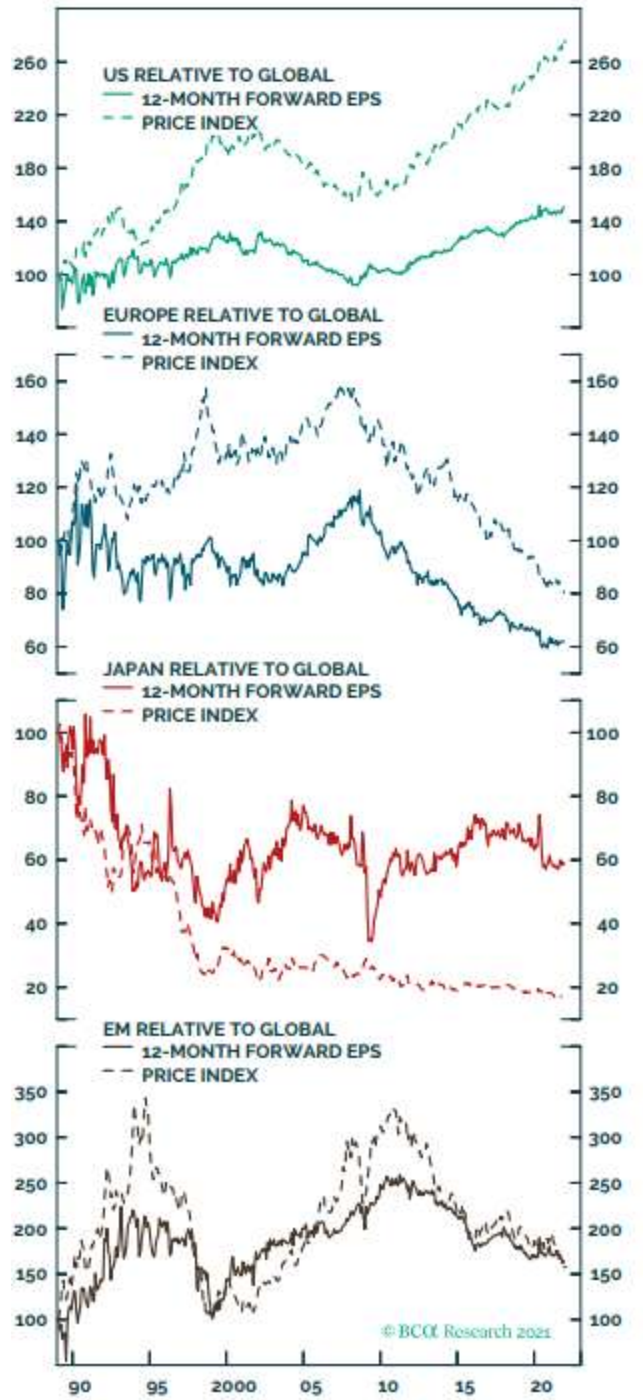
Admittedly, favoring non-US stock markets has been a losing proposition for the past 12 years. US earnings have grown much faster than earnings abroad over this period (**Chart 45**). US stock returns have also benefited from rising relative valuations.

At this point, however, US stocks are trading at a significant premium to their overseas peers, whether measured by the P/E ratio, price-to-book, or price-to-sales. US profit margins are also more stretched than elsewhere.

The US dollar may be the ultimate arbiter of whether the US or international stock markets outperform in 2022. Historically, there has been a close correlation between the trade-weighted dollar and the relative performance of US versus non-US equities. In general, non-US stocks do best when the dollar is weakening.

The usual relationship between the dollar and the relative performance of US and non-US stocks broke down in 2020 when the dollar weakened but the tech-heavy US stock market nonetheless outperformed. However, if "reopening plays" gain the upper hand over "pandemic plays" in 2022, the historic relationship between the dollar and US/non-US returns will reassert itself.

CHART 45
The US Has Been The Earnings Leader In Recent Years



SOURCE: REFINITIV / IBES, AND MSCI INC. (SEE COPYRIGHT DECLARATION).
NOTE: ALL SERIES SHOWN IN US DOLLARS, REBASED TO BEGINNING OF 1989 = 100.

... while near-term momentum favors the dollar, the greenback is likely to weaken over a 12-month horizon. This suggests that investors should look to increase exposure to non-US stocks in a month or two. Around that time, the energy shortage gripping Europe will begin to abate, China will be undertaking more stimulus, and investors will start to focus more on the prospect of higher US corporate taxes.

From November 15th's WP:

Opinion: On inflation, it's past time for team 'transitory' to stand down

By Lawrence H. Summers

There is a wise apocryphal saying often attributed to John Maynard Keynes: "When the facts change, I change my mind. What do you do?" After years of advocating more expansionary fiscal and monetary policy, I altered my view this past winter, and I believe the Biden administration and the Federal Reserve need to further adjust their thinking on inflation today.

Fed Chair Jerome H. Powell's Jackson Hole speech in late August provided a clear, comprehensive and authoritative statement, enumerated in five pillars, of the widespread team "transitory" view of inflation that prevailed at that time and shaped policy thinking at the central bank and in the administration.

Today, all five pillars are wobbly at best.

First, there was a claim that price increases were confined to a few sectors. No longer. In October, prices for commodity goods outside of food and energy rose at more than a 12 percent annual rate. Various Federal Reserve system indexes that exclude sectors with extreme price movements are now at record highs.

Second, Powell suggested that high inflation in key sectors, such as used cars and durable goods more broadly, was coming under control and would start falling again. In October, used-car prices accelerated to more than a 30 percent annual inflation rate, new cars to a 17 percent rate and household furnishings by an annualized rate of just above 10 percent.

Third, the speech pointed out that there was "little evidence of wage increases that might threaten excessive inflation." This claim is untenable today with vacancy and quit rates at record highs, workers who switch jobs in sectors ranging from fast food to investment banking getting double-digit pay increases, and ominous Employment Cost Index increases.

Fourth, the speech argued that inflation expectations remained anchored. When Powell spoke, market inflation expectations for the term of the next Federal Reserve chair were around 2.5 percent. Now they are about 3.1 percent, up half a percentage point in the past month alone. And consumer sentiment is at a 10-year low due to inflation fears.

Fifth, Powell emphasized global deflationary trends. In the same week the United States learned of the fastest annual inflation rate in 30 years, Japan, China and Germany all reported their highest inflation in more than a decade. And the price of oil, the most important global determinant of inflation, is very high and not expected by forward markets to decline rapidly.

Further considerations reinforce concerns about inflation. Meme stocks, retail option buying, crypto market developments, credit spreads and some start-up valuations suggest significant froth in some markets. Housing prices and rents are both up 15 to 20 percent in the past year. These movements are far from fully reflected in the shelter component of the consumer price index, which represents one-third of the CPI, implying substantial pressures to come. ...

Excessive inflation and a sense that it was not being controlled helped elect Richard Nixon and Ronald Reagan, and risks bringing Donald Trump back to power. While an overheating economy is a relatively good problem to have compared to a pandemic or a financial crisis, it will metastasize and threaten prosperity and public trust unless clearly acknowledged and addressed.

Lawrence Summers is a professor at and past president of Harvard University. He was treasury secretary from 1999 to 2001 and an economic adviser to President Barack Obama from 2009 through 2010.

From November 10th's WSJ:

STREETWISE | By James Mackintosh

Own Tesla Stock? Do Like Musk

Did Elon Musk outsource the decision of whether to sell his Tesla stock to his Twitter followers because he's a wacky billionaire who is angry about Democratic tax plans? Or is it because he knows Tesla's true value and thinks now's the time to get out?

Either way, it's a good time to sell as the three trends that helped Tesla soar are fickle and might reverse at any time.

Usually when executives announce they are selling stock after a run-up in the price, it is obvious to everyone that they think the share price is too high. Mr. Musk seems to have dreamed up a plan to try to get round this problem. Instead of announcing he was selling stock, he noted the plan by Sen. Ron Wyden to tax unrealized capital gains, and held a Twitter poll on whether he should sell 10% of his Tesla holding. When the Twitterati voted for him to dump shares, that confused the question of whether this is an insider signal about the share price.

Perhaps Mr. Musk thinks it's insane that Tesla added $440 billion to its value in the past month alone, a rise equivalent to the combined market capitalization of Ford, General Motors and Toyota.

Shares in Tesla began to reflect the risks this week, plunging 12% on Tuesday after a 5% drop on Monday. Perhaps people have realized that at 155 times estimated earnings over the next 12 months, the shares are wildly expensive. After all, they jumped 75% with little justification in just the past three months before this week's drop.

I have no idea what Mr. Musk is thinking. He is a billionaire who doesn't take kindly to the suits in authority trying to hold him to earth-year bound standards (or taxes). On the other hand, he ought to sell shares, because they're beyond bonkers.

Tesla sits at the intersection of three strong trends, and a change in one could lead to a rapid fall in the stock.

The first are meme stocks. Tesla is the original meme stock, supported by individuals who've done very well by following Mr. Musk, and who don't take kindly to anyone who disagrees. No matter the reality of sales, competition, margins, subsidies or anything else, Mr. Musk has attracted supporters who not only buy, but actively promote Tesla shares.

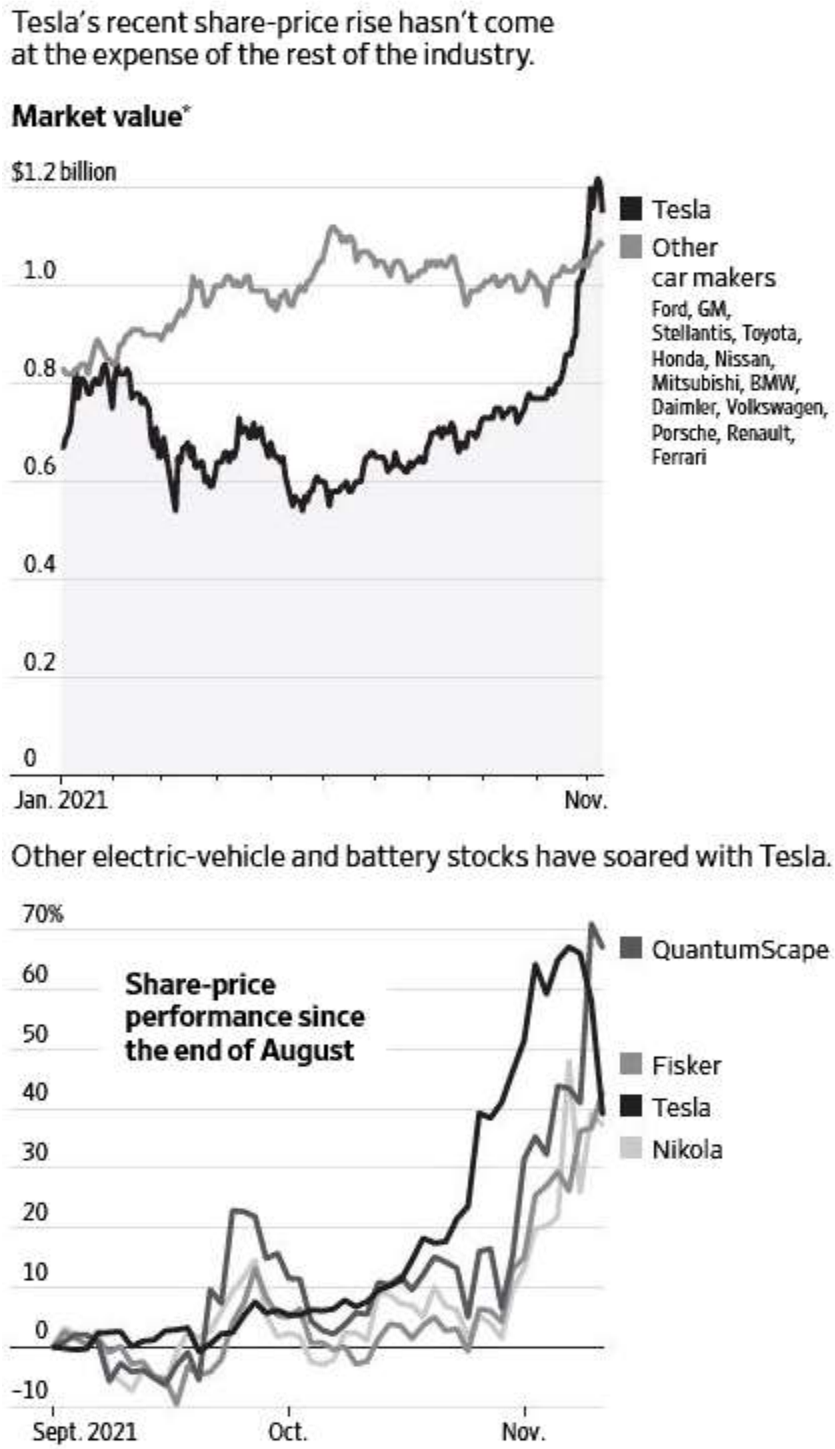
The second is the willingness of investors to bet on the future. Tesla doesn't make very much money, or indeed very many cars, at the moment. It is valued at $1.3 million for each of the 900,000 or so cars it is forecast to deliver this year because of the potential for growth. The value of the company doesn't lie in this or next year's sales, but on hopes for sales and profits far in the future.

The hard-to-predict nature of the far-off future is what allows the speculation that meme traders love. It makes Tesla a huge beneficiary of low long-term interest rates. Whatever one's guess at future earnings, they are worth more today if rates are lower.

When long-dated bond yields fall, as they have massively in the past two years, growth stocks tend to beat cheap value stocks. That isn't surprising since growth stocks have earnings far in the future, and value stocks will make their earnings soon. Tesla is the growthiest of all the big growth stocks.

The third trend is the desire for green technology. It's great to be an electric-car maker at the moment. Governments are pushing electric cars and the rest of the industry is stuck with the wrong sort of factories, has the wrong sort of expertise and hasn't yet built charging networks.

Yet, if the share price change was about Tesla beating the gasoline-fueled competition, the shares of traditional rivals should be suffering.



Sources: Refinitiv (market value); FactSet (share-price performance) *As of Monday

Instead, the value of the other car makers has been rising too. It would be great if the stock was doing well because investors rationally worked out that electric cars will take market share. Instead, there has been an unthinking rush to buy stock in electric-vehicle makers, with many of the speculative pure-electric vehicle stocks that fell hard from a peak early this year leaping in the past month (and Ford, with a electric F-150 on the way, soaring).

Cashing in your Tesla shares now locks in the gains, even if it does ensure they are taxable.

How Crazy is the Current Market? Not that Crazy.

By [Wesley Gray, PhD](#) | November 10th, 2021

Eric Balchunas had a recent tweet that I found fascinating.

Eric's tweet merely captures the tip of the iceberg with respect to the current market environment, which certainly feels "bubbly." [1]

The gist of the tweet is that $META, which is an ETF from our friends over at Roundhill Investments, has gained a substantial level of new assets because investors are confusing the ETF with the name change recently announced by Facebook (they are changing their name to 'Meta' apparently).

Two hypotheses as to what is going on:

1. META is raising a ton of capital via organic efforts that are independent of the Facebook name change. (congrats to the team, if so!)
2. META is raising a ton of capital because investors are being silly.

We will probably never know which hypothesis is causal/correct, however, **one cannot eliminate #2 as a valid hypothesis**. While it might appear insane that investors would do really stupid things — like buying a ticker because it is randomly associated with a FB name change — we've seen this sort of silly behavior before from investors…over 20 years ago!

Enter the Internet Bubble. When I got really started in investing…

"A Rose.com by Any Other Name" is a fascinating paper that documents how firms would add a ".com" to the end of their name and see an immediate increase in their firm value, despite the fact, there were no fundamental changes to their business.

The abstract discusses in more detail:

> *We document a striking positive stock price reaction to the announcement of corporate name changes to Internet related dotcom names. This "dotcom" effect produces cumulative abnormal returns on the order of 74% for the ten days surrounding the announcement day. The effect does not appear to be transitory; there is no evidence of a post announcement negative drift. The announcement day effect is also similar across all firms, regardless of the firm?s level of involvement with the Internet. A mere association with the Internet seems enough to provide a firm with a large and permanent value increase.*

Just how wild was the effect? On average, the abnormal returns around the announcement period were 74%!

... the bottom line:

Degenerate gamblers are common in the stock market and become more common in sentiment-driven markets with plenty of liquidity and strong animal spirits.

Funny enough, here is a quote from the paper, quoting an investor from a yahoo message board:

Just bought 50,000 shares, took 3 transactions to get it done, there r no shares out there, going to run big.

The quote above is a carbon copy of what you see on twitter, reddit, tiktok, and so forth in the current environment.

Same game. Different tools.

I can't help but think about the research papers that will be written on the current marketplace. There will certainly be differences, at the margin, but it is truly the case that when it comes to human behavior, history repeats itself. Over. And over. Again. ...

Notes:

But who knows. If my allocations were based on my assessment of market 'bubbality' I would have been in cash since 2014, probably…

The 1st of 5 from Morningstar:

The FAANG Market Is Fading

The impact of the largest stocks on the market has lessened and that could be good news for investors.

Lauren Solberg, **Tom Lauricella**
Dec 1, 2021

Heading into the final weeks of 2021, an important trend has emerged in the stock market: The hyper-concentration of returns that saw a handful of stocks responsible for much of the gains last year has faded.

Some of the largest stocks in the market still dominate returns to a degree that's greater than in previous years. Case in point is Tesla (TSLA), whose wild swings can shave returns off funds that track broad market indexes, thanks to its current status as the fourth-largest stock.

During 2020, the concentration of stock market returns reached a peak amid the pandemic-induced volatility. But the trend in 2021 has shifted toward a lesser degree of concentration of returns. For investors, this is a potentially healthier dynamic, with less risk for index-tracking funds and more opportunities for stock-pickers.

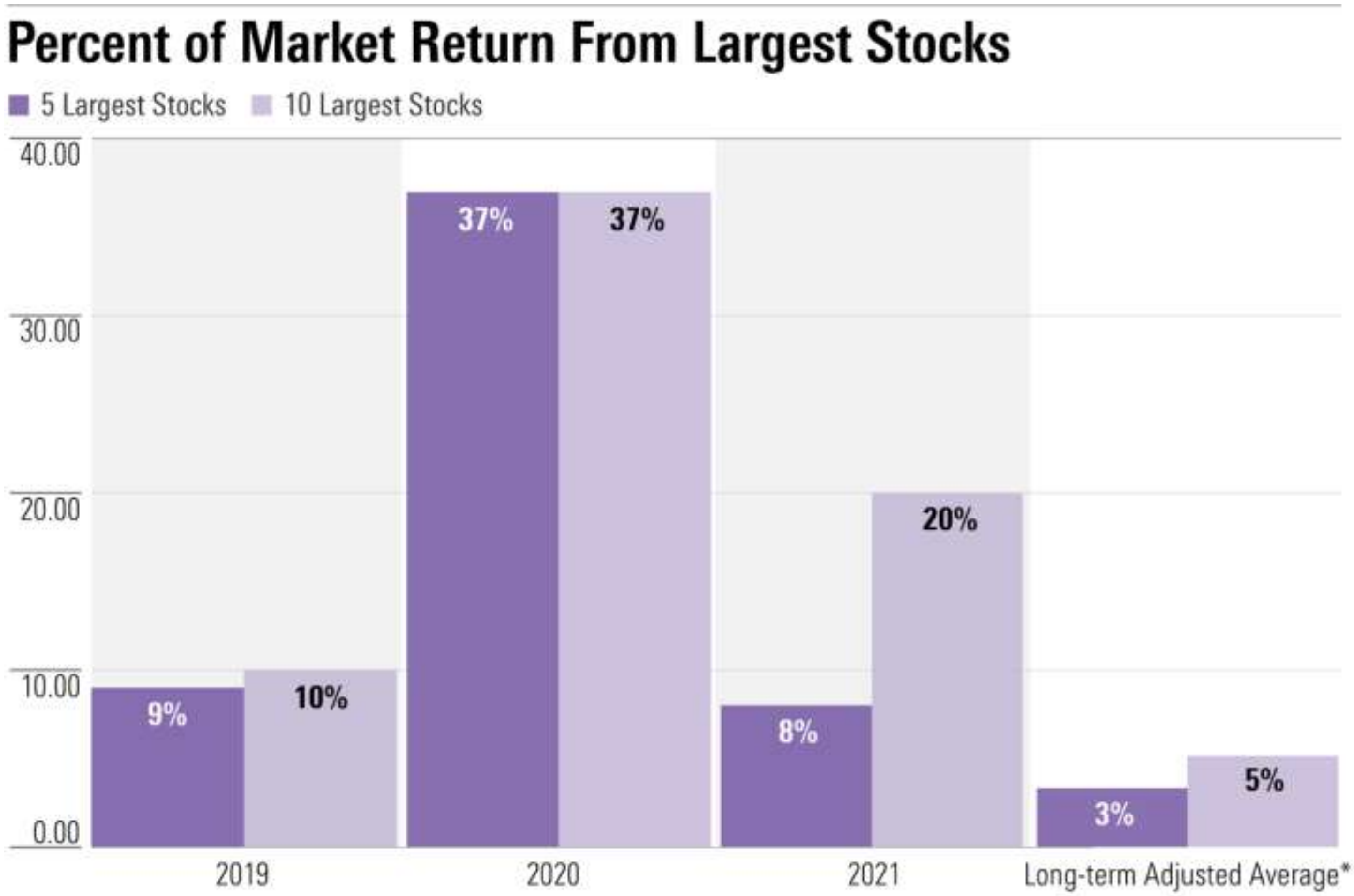
Last year, the five largest stocks--Apple (AAPL), Microsoft (MSFT), Amazon.com (AMZN), Meta Platforms (FB), and Tesla--contributed a massive 37% of the market's returns. In contrast, this year through late November, the five largest stocks--the same group with the exception of Alphabet (GOOG) taking the place of Meta--contributed just 8% of market returns. That compares with an average of 3% from 2009 through 2019.

The actual FAANG stocks--Facebook (now Meta), Apple, Amazon, Netflix (NFLX), and Google (now Alphabet)--have contributed 2.7% of returns in 2021, down from 24% in 2020.

"The unwinding of concentration is good for investors and the health of the market," says Dan Kemp, global chief investment officer at Morningstar Investment Management. "Concentrated portfolios tend to be less robust to a change in the economic environment and have further to fall in the event of unexpected headwinds due their lofty valuations."

It's natural for there to be clusters of outperformance or underperformance in the markets. And when one of those clusters involves the largest stocks, that can have a significant impact because the largest companies make up the largest weights of the benchmarks that are most widely tracked by index funds.

To measure just how concentrated stock returns have been, we calculated the impact that the 10 largest stocks have had on the Morningstar US Large-Mid Index, which essentially tracks 90% of the stock market. We took the 10 largest stocks at the end of each year going back to 2009, and using Morningstar Direct's equity



Source: Morningstar Direct. Data is based on the Morningstar US Large-Mid TR USD Index. Data as of November 19, 2021.
**Adjusted average excludes 2011, 2015 and 2018 to remove distortions caused by those years' market returns.*

attribution tool, excluded their returns from the index's performance and compared that number with each year's total return.

Cumulative Market Impact of the Largest U.S. Stocks

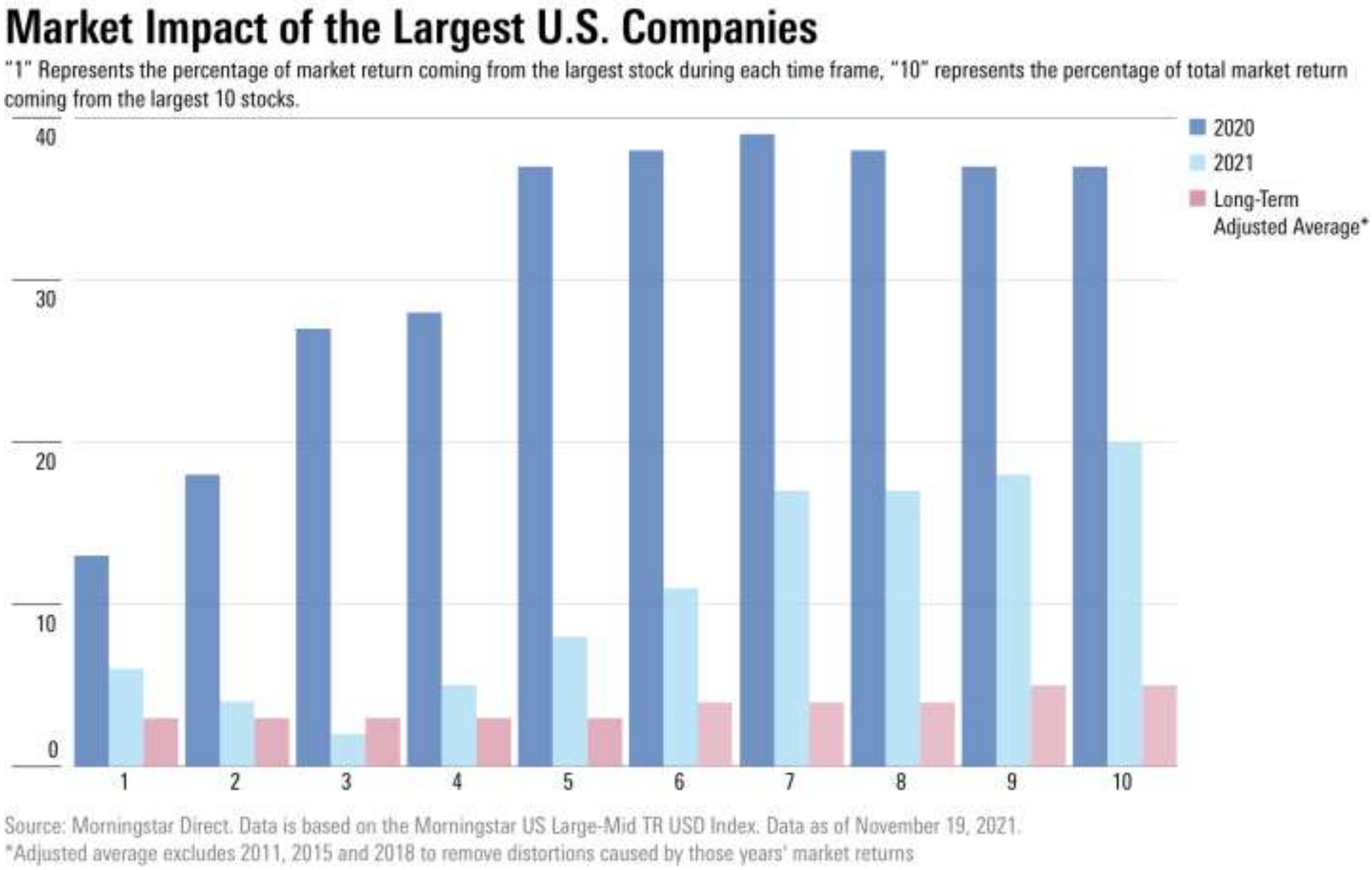
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Largest Stock	-5%	-1%	20%	3%	0%	6%	-28%	-1%	2%	775%	3%	13%	6%
2 Largest Stocks	-3%	3%	47%	1%	-2%	-3%	17%	-1%	4%	728%	9%	18%	4%
3 Largest Stocks	1%	0%	69%	2%	-1%	-1%	-14%	0%	7%	425%	8%	27%	2%
4 Largest Stocks	0%	1%	86%	0%	0%	2%	25%	1%	9%	392%	10%	28%	5%
5 Largest Stocks	-3%	1%	81%	-1%	0%	3%	26%	2%	9%	390%	9%	37%	8%
6 Largest Stocks	-1%	1%	81%	-2%	0%	4%	110%	5%	10%	390%	9%	38%	11%
7 Largest Stocks	-3%	0%	88%	-2%	0%	1%	113%	5%	10%	377%	9%	39%	17%
8 Largest Stocks	-3%	0%	95%	-2%	-1%	4%	92%	4%	8%	467%	9%	38%	17%
9 Largest Stocks	-5%	-2%	103%	-3%	-1%	3%	104%	4%	10%	496%	9%	37%	18%
10 Largest Stocks	-7%	-4%	124%	-4%	-1%	2%	141%	6%	11%	410%	10%	37%	20%

Source: Morningstar Direct. Data as of November 19, 2021.
Based on the Morningstar US Large-Mid TR USD Index.

In the above table, the concentration of returns can be seen across the readings for the largest stocks. For example, the three largest stocks accounted for less than 10% of returns in most years since 2009, and often just in the very low single digits. But in 2020, the three largest stocks were responsible for 27% of the market's returns. That figure dropped to 2% this year.

One quirk is that when the market has only a small move, such as 2015's 0.92% change, or is basically flat as it was in 2011, the results can be distorted. It's a similar story for the math in 2018, when the market was down but each of the 10 largest stocks rose. So, to create a more useful comparison point, we're excluding those three years from our long-term average.

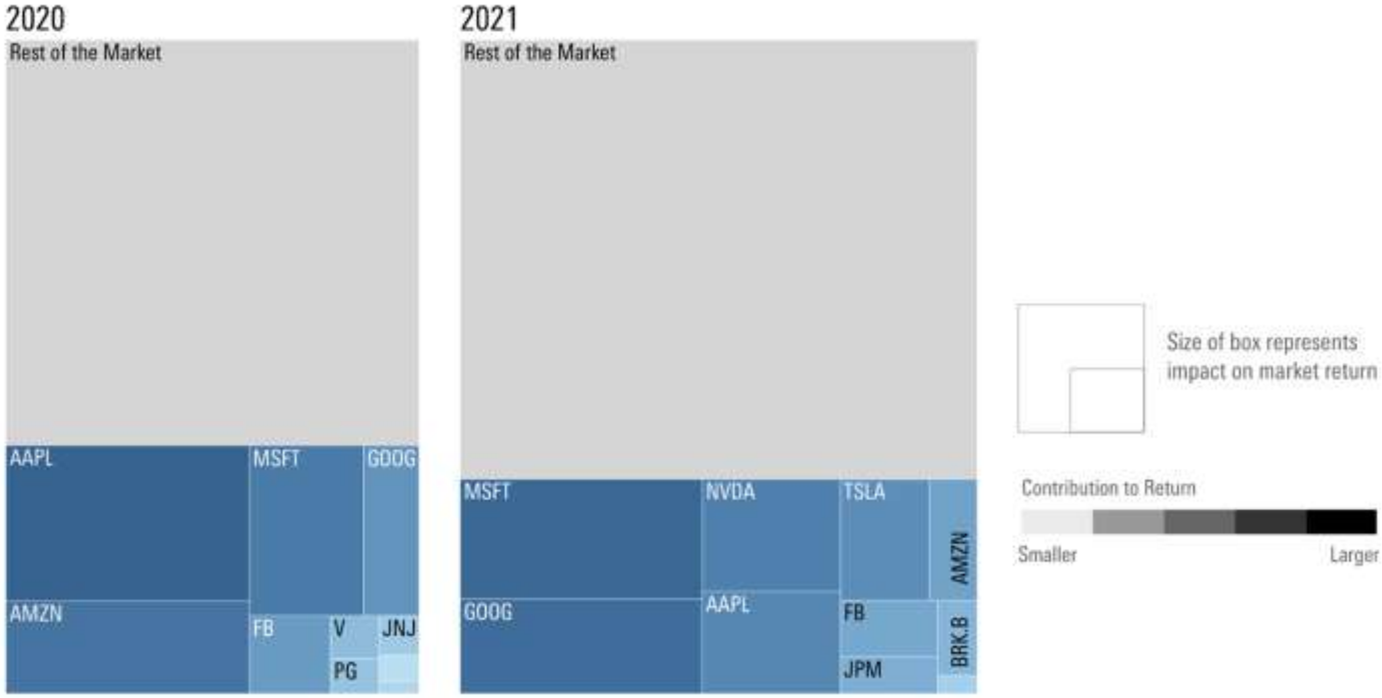
Overall, the picture for 2021 marks a meaningful change from 2020's dynamic and is closer to the long-term picture.



Drilling down into the underlying stocks shows the roots of the change. In 2020, Apple, with the top weighting in the index at 6.12%, rose 81.84%. At such a high weighing in the index, that meant Apple alone--out of 699 stocks in the Morningstar US Large-Mid Index--contributed 13% of the year's 20.9% gain. Add in Microsoft and Amazon, and more than one fourth of the year's return was accounted for by just those three stocks.

This year, the concentration is less pronounced, even though the top five stocks are still providing above-average contributions to market returns. Microsoft, 2021's largest company with a market weighting of 5.75%, by itself contributed 9% of the market's 25.5% return as of Nov. 19. Apple, the next-largest stock in the index, returned 21.7%--a 4% contribution to the market's total. The third-largest stock, Amazon, returned 12.9%--contributing just 2% of the total.

U.S. Market Return Composition



Source: Morningstar Direct. Data is based on the Morningstar US Large-Mid TR USD Index.
Data as of November 19, 2021.

"This year has been a mild-mannered correction to the extremes of 2020," says Russ Kinnel, director of manager research at Morningstar. "With a recovery and surprising economic growth and low unemployment,

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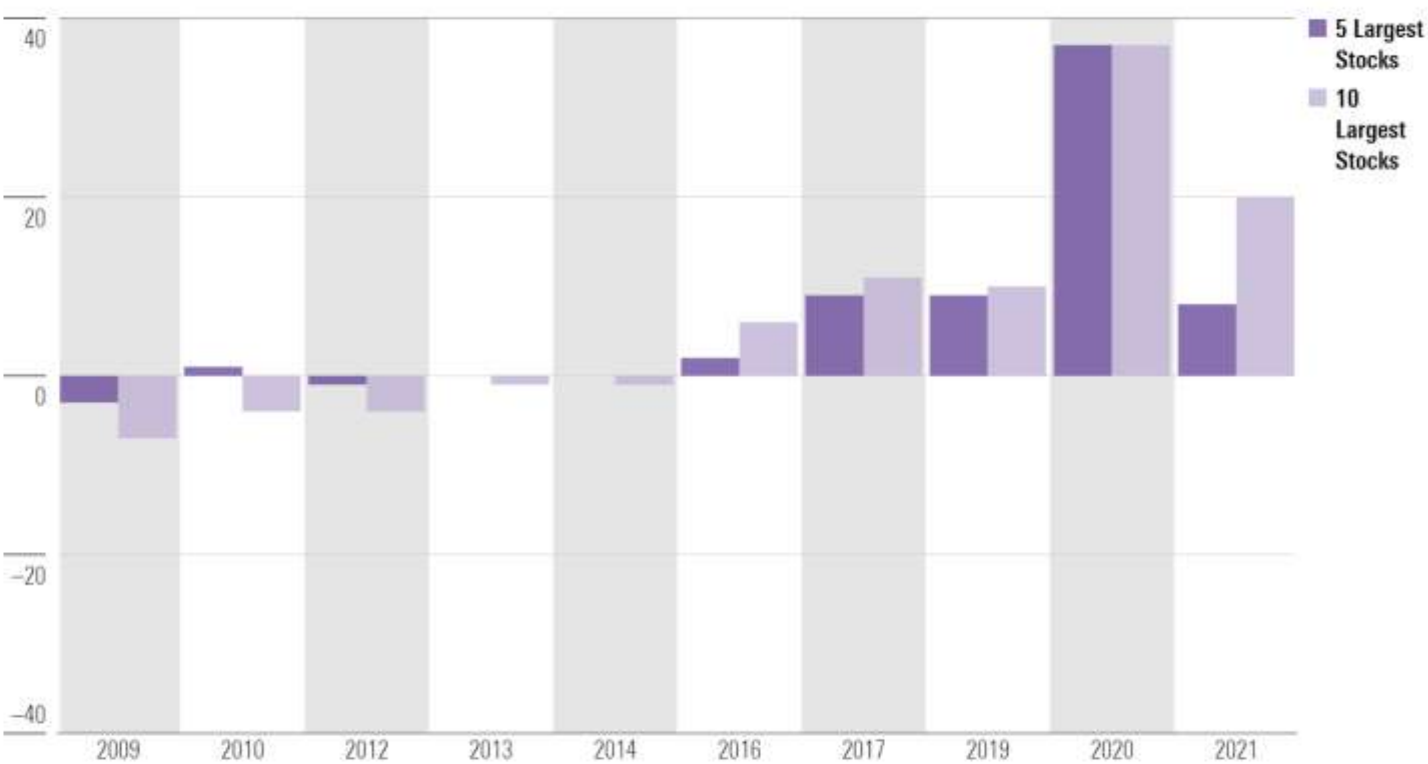
Percent of Market Return from Largest Stocks



Source: Morningstar Direct. Data is based on Morningstar US Large-Mid TR USD Index. Data as of November 19, 2021.

2021 has been a great environment for value and everything that was dumped due to COVID."

On the flip side, Kinnel says, these trends took some oxygen away from the FAANGs and other work-from-home stocks, but it was largely a correction via underperformance.

Over most of the past decade, the proportion of market returns coming from the largest companies has steadily increased. In 2017, the largest five stocks contributed 9% of market's total returns, up from just 6% in 2016. And in 2019, the top 10 holdings contributed 10% of the market's annual return of 31%.

Market concentration came to a peak in 2020 when the top five holdings alone contributed nearly 40% of the market's return for the year. This year, the largest five stocks have been responsible for 8% of market return, while the largest 10 stocks contributed a total of 20%.

Kinnel says that it's premature to call the FAANG market dead, but the year's relative cooldown of the largest stocks does show the market is behaving in a fairly rational way, "even though meme stocks and crypto tell us there's still a lot of irrational behavior going on."

The Hidden Costs of Free Investment Services

Looking gift horses in their mouths.

John Rekenthaler
Nov 15, 2021

A Little Knowledge

Most people recognize that free offers aren't. If you receive 60,000 airline miles for obtaining a credit card, the award doesn't come from the goodness of the company's heart. An auto dealer's finance department doesn't offer zero-interest loans without getting something in return. And Publishers Clearing House … Well, I haven't yet figured out how that firm makes money. But apparently it does.

The same principle applies to investment bait. Even before the news about payment for order flows broke, Robinhood's (HOOD) should have clients realized that somehow, somewhere, the company generated revenue. Otherwise, the organization wouldn't remain in business. Long before that, no-load fund investors understood that while their admission was complimentary, their stay was not.

Frequently, though, such knowledge is superficial. Customers recognize that their gifts are subsidized, but they don't know how. Consequently, they assume that somebody else is footing the bill. Or, as with mutual fund expenses, they grasp that they themselves are liable, but they underestimate their full costs. For example, fund expenses are reported as percentages rather than dollars, and are quietly removed from assets, rather than explicitly charged to shareholders.

Besotted With Cash

Such, apparently, was the situation for Lauren Barbiero, Kimberly Lopez, and William Lopez, who have sued Charles Schwab (SCHW) for providing them with biased advice. In 2019 and 2020, the trio joined Schwab's digital-advice program, Intelligent Portfolios, which invests for free in exchange-traded funds. The three now claim that their performance has been subpar, because Intelligent Portfolios served two masters.

Besides benefiting Schwab's clients, the lawsuit alleges, the program was written to boost the company's revenue.

The salient issue is Intelligent Portfolio's cash recommendations. Per Schwab's website, the program recommends cash stakes ranging from 6% for its aggressive allocation to 23% for its conservative mix. Those amounts are unquestionably high. For example, the median cash position for target-date 2060 funds, which correspond to Intelligent Portfolio's aggressive allocation, is 2%. (Amusingly, that median position is held by … Schwab's own fund, Schwab Target 2060 (SWPRX). You can't make this stuff up.) Meanwhile, the median cash stake held by target-date retirement funds, which are roughly akin to its conservative strategy, is 7%.

Asking Why

Thus, Schwab's Intelligent Portfolios contain three times as much cash as one would reasonably have expected. Schwab's explanation sheds little light. Its website contents itself with the general statement that "We believe cash is a key component of an investment portfolio." Not very informative, that.

The company's Disclosure Brochure isn't much better. Per the lawsuit, the document reads, "Schwab Bank earns income on the Sweep Allocation [that is, the cash position] for each investment strategy. The higher the Sweep Allocation and the lower the interest rate paid the more Schwab Bank earns, thereby creating a potential conflict of interest. The cash allocation can affect both the risk profile and the performance of a portfolio."

Those words initially seem helpful, but they bypass the central point, which is whether the Intelligent Portfolios service advocates unusually high cash positions because Schwab's investment team is unusually fond of that asset, or because Schwab earns a higher profit from the program's cash positions than it does from its ETF selections. Who knows? Almost certainly, though, Schwab earns a higher return from its cash than it does from its ETFs, which carry a median expense ratio of 0.05%.

The Plaintiffs Speak

The plaintiffs, of course, are confident that they know the answer. In support of their claim that the Intelligent Portfolios program lined Schwab's pockets, they cite a 2015 Raymond James stock report, which states, "Schwab stands ready to generate substantial revenue from the product despite not charging any advisory fees. From the client's perspective, however, the potential performance drag from such a high cash allocation may easily exceed the management fee savings relative to competitors."

They go further. Because Schwab wished to create a "bumper crop of cash sweeps income for itself," declare the plaintiffs, the company placed their investments in too much cash, thereby causing them to lag. Ironically, they argue, all parties would have been better off had Schwab levied an advisory fee, as do its rivals. Schwab would have received more revenue than it did through its cash-sweep trickery, and its customers' accounts would have enjoyed better profits.

The latter claim is correct, although it's worth pointing out that it is very much a bull-market argument. Had stock and bond prices declined when the plaintiffs were invested in Intelligent Portfolios, then they would have enjoyed the twin benefits of 1) better bear-market protection from their cash, and 2) lower advisory fees. Under such circumstances, Intelligent Portfolios would likely have led the field. This lawsuit was conceived while watching a rear-view mirror.

The problem for Schwab comes not only from disgruntled clients, but also from the SEC. This summer, in response to the SEC's attentions, Schwab took a $200 million write-down, establishing a reserve against potential future liabilities from its Intelligent Portfolios service. For Schwab as well as for its customers, free advice seems to have extracted a price.

Seeking Better Disclosure

Many years back, a portfolio manager served as a subadvisor for two bond funds. One fund, sold by Vanguard, was very cheap. The other carried a steep expense ratio. The manager ran the two funds very differently. Vanguard's fund held relatively low-yielding bonds that performed well during bull markets. The other fund held higher-paying bonds that did not. The reason for the difference was that, after paying its expenses, the second fund could not post a competitive yield. Its additional costs forced its manager to change his investment approach.

This example featured no free service, but the principle was the same. The portfolio manager took the product's cost structure into consideration when devising his investment strategy, just as Schwab allegedly did with its Intelligent Portfolios program. I do not think that such situations should be prohibited. Attempting to do so would be impractical at best, and unreasonable at worst.

However, investors should understand the terms of such arrangements. If the business decisions for Schwab's Intelligent Portfolios service were completely divorced from its business model, Schwab owed no additional disclosure. If there were any overlap whatsoever, though, the company should have informed its clients that the service would hold consistently above-average cash positions, along with a frank discussion of that practice's investment implications.

If such a practice were ever to become standard, investors would be well positioned to evaluate free offers. They would have the information required to make an informed decision. In the absence of such disclosures, however, abstinence is the soundest policy. Accept the freebie if you fully understand why and how the company expects to profit from the offer. If not, walk away.

John Rekenthaler (john.rekenthaler@morningstar.com) 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.

We have consistently warned against IPOs:

What's Next for Rivian After a Supercharged IPO?

Even with a sound business strategy, hot new stocks often run out of steam.

Margaret Giles, **Tom Lauricella**
Nov 11, 2021

Rivian Automotive (RIVN) has had a supercharged debut as a stock, racing more than 50% above its initial public offering price in its first two days, including a nearly 30% pop on day one.

With this surge in its stock, the EV manufacturer joins the ranks of IPOs that have seen big rallies out of the chute. Having raised nearly $12 billion through the stock offering, the market is attaching a value to the company roughly equal to that of Ford (F) and General Motors (GM)--even though it has just begun producing vehicles for sale.

So for investors wondering whether to chase the rally, the history of IPOs such as Rivian's is important to consider.

Hot IPOs often cool off significantly after the first few days of trading, leaving investors who jumped in after the stock went public sitting on losses. Plus, Rivian also joins the ranks of money-losing companies going public. While that doesn't necessarily mean the stock will be a bad investment, it's an important factor for investors to consider.

Morningstar's Seth Goldstein, who covers the EV industry, says that Rivian is entering into an intensely competitive space. "The difficulty for new companies, including Rivian, won't be designing a new EV. Instead, the challenge will be to profitably be able to mass-produce an EV at a low-enough cost to become profitable." That's in part why Goldstein believes investors will find better opportunities to play the shift toward EVs within the supply chain, such as raw materials, specialty chemicals, and parts suppliers.

However, Goldstein believes that Rivian could benefit from its focus on consumer trucks and commercial delivery vehicles. "The focus on commercial delivery vehicles is a good idea as EVs save companies expenses on a total cost of ownership basis. This creates the business case for delivery companies to use EVs for shorter fixed routes in cities. All in all, if Rivian is able to successfully scale its manufacturing and reduce unit costs, the company's strong demand end markets should allow it to reach profitability."

In the meantime, what's next for Rivian? Will its share price momentum continue or will it run out of charge?

IPO Spikes Are Often Short-Lived

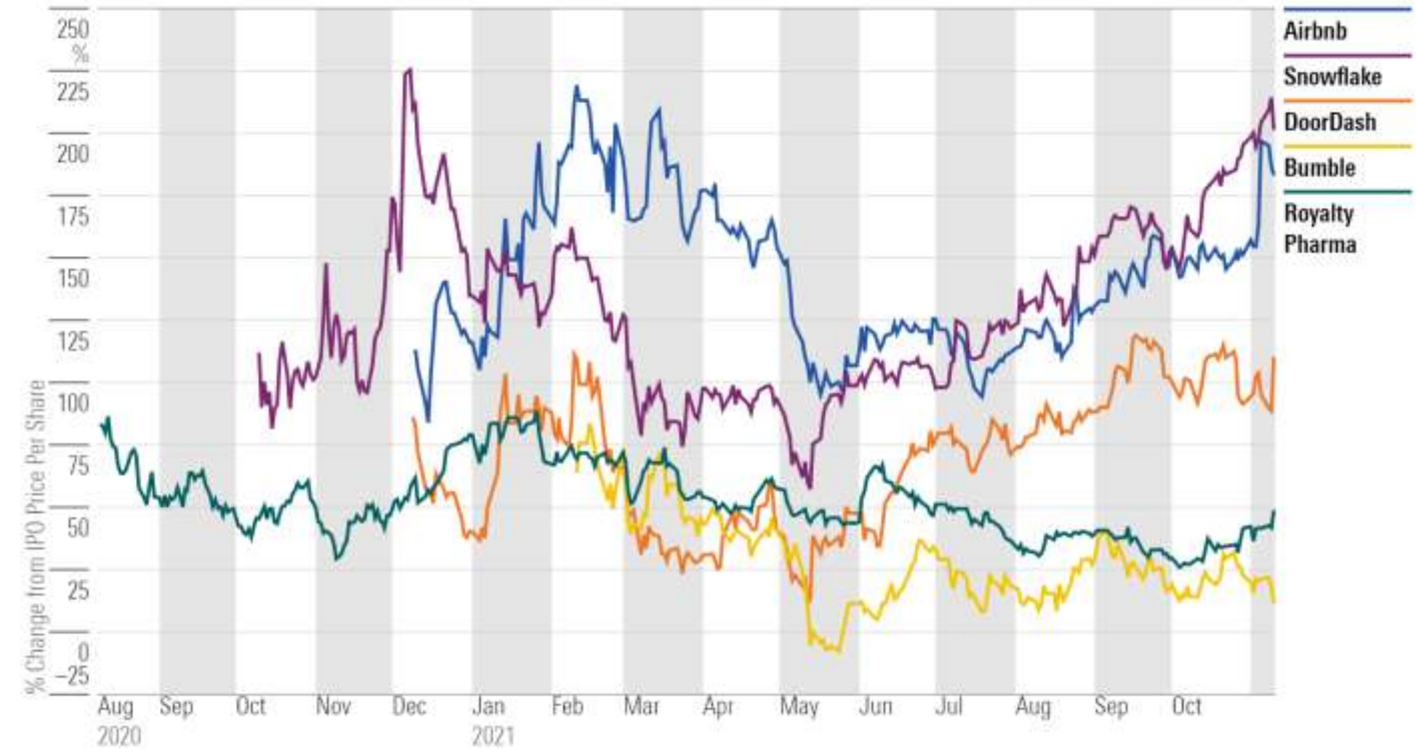
Among the largest IPOs of the last three years, a handful of companies saw similar investor enthusiasm to Rivian on their first day of trading. Airbnb (ABNB) and database software company Snowflake (SNOW) both

The Largest Public Offerings Since 2019

Company	Funds Raised in IPO or SPAC Deal ($Mil)	IPO Valuation ($Bil)	First Day of Trading	% Share Price Change on First Day	Cumulative % Change as of Nov. 10	Price/Fair Value
Airbnb (ABNB)	3,490	40.63	6/16/2020	112.81	182.68	1.88
Snowflake (SNOW)	3,360	33.20	9/30/2020	111.61	200.90	1.22
DoorDash (DASH)	3,366	32.40	6/20/2019	85.79	110.04	1.34
Bumble (BMBL)	2,150	7.94	5/17/2019	63.51	11.05	
Royalty Pharma (RPRX)	2,180	9.92	5/20/2021	58.93	48.50	
Slack Technologies	4,574	19.47	12/9/2020	48.54	N/A	
Palantir Technologies (PLTR)	2,443	21.00	2/6/2020	31.03	210.62	0.73
Rivian Automotive (RIVN)	11,900	77.00	12/10/2020	29.14	29.14	
SoFi Technologies (SOFI)	2,400	8.65	7/26/2021	12.41	1.34	1.00
Lucid Motors (LCID)	2,100	11.75	5/10/2019	10.64	68.04	
Lyft (LYFT)	2,340	24.00	3/29/2019	8.74	(24.17)	0.83
Blue Owl Capital (OWL)	3,900	3.76	2/11/2021	4.10	60.80	
Avantor (AVTR)	2,898	7.48	6/1/2021	3.57	173.71	
Uber Technologies (UBER)	8,100	75.71	9/16/2020	(7.62)	(3.6)	0.63
Robinhood Markets (HOOD)	2,090	32.01	7/29/2021	(8.37)	(9.24)	

Source: PitchBook, Morningstar Direct. Includes companies that went public on or after Jan. 1, 2019 with a deal size of at least $2 billion. Data as of Nov. 10, 2021.

Post-IPO Stock Performance

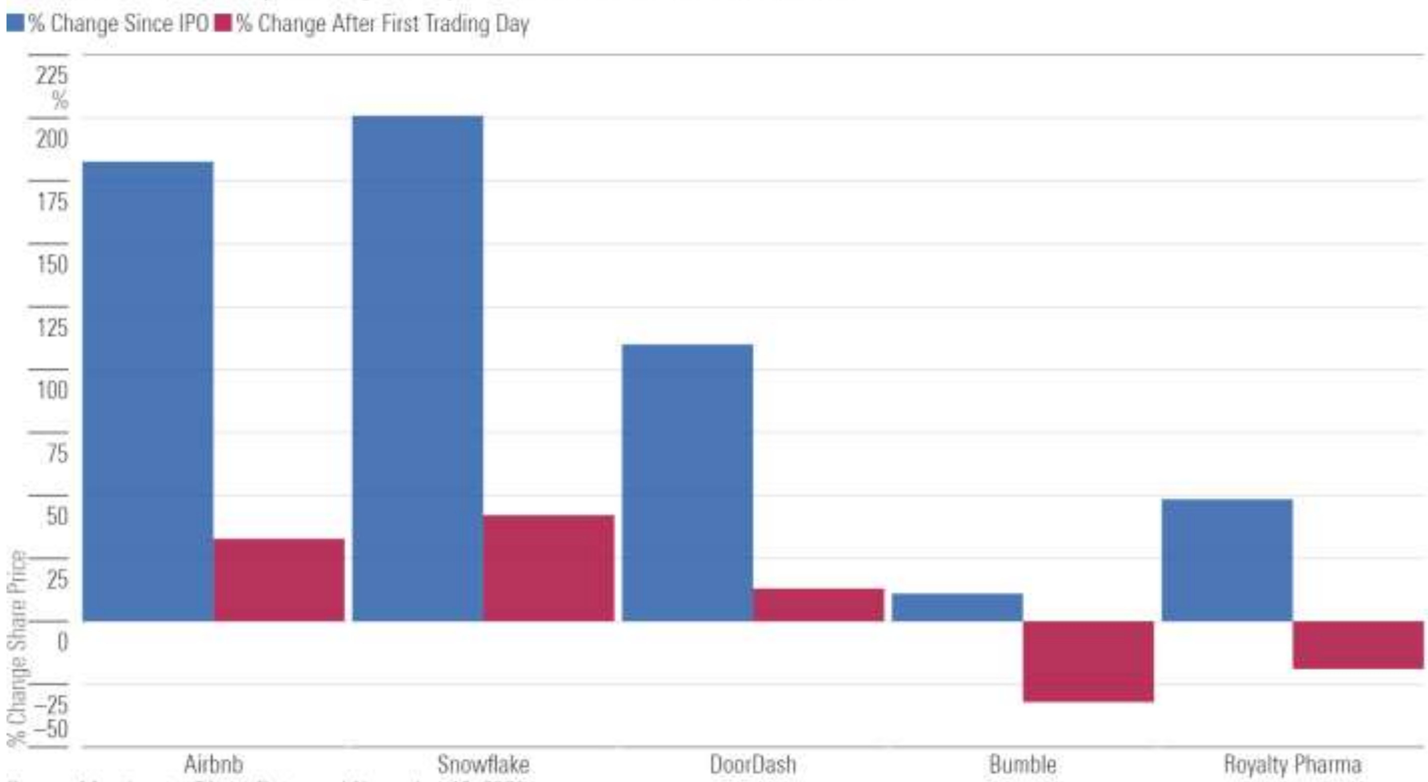


Source: Morningstar Direct. Includes companies with IPOs of at least $2 billion and first-day price spikes of at least 50%. Data as of November 10, 2021.

ended their first day of trading at over double their IPO price.

It’s common for investor enthusiasm to wane after an IPO is no longer fresh and new, especially if the first trading day saw a major price spike. The companies with the largest first-day spikes rarely maintain that momentum.

After an Exuberant First Day of Trading, Subsequent Performance Is Often More Subdued

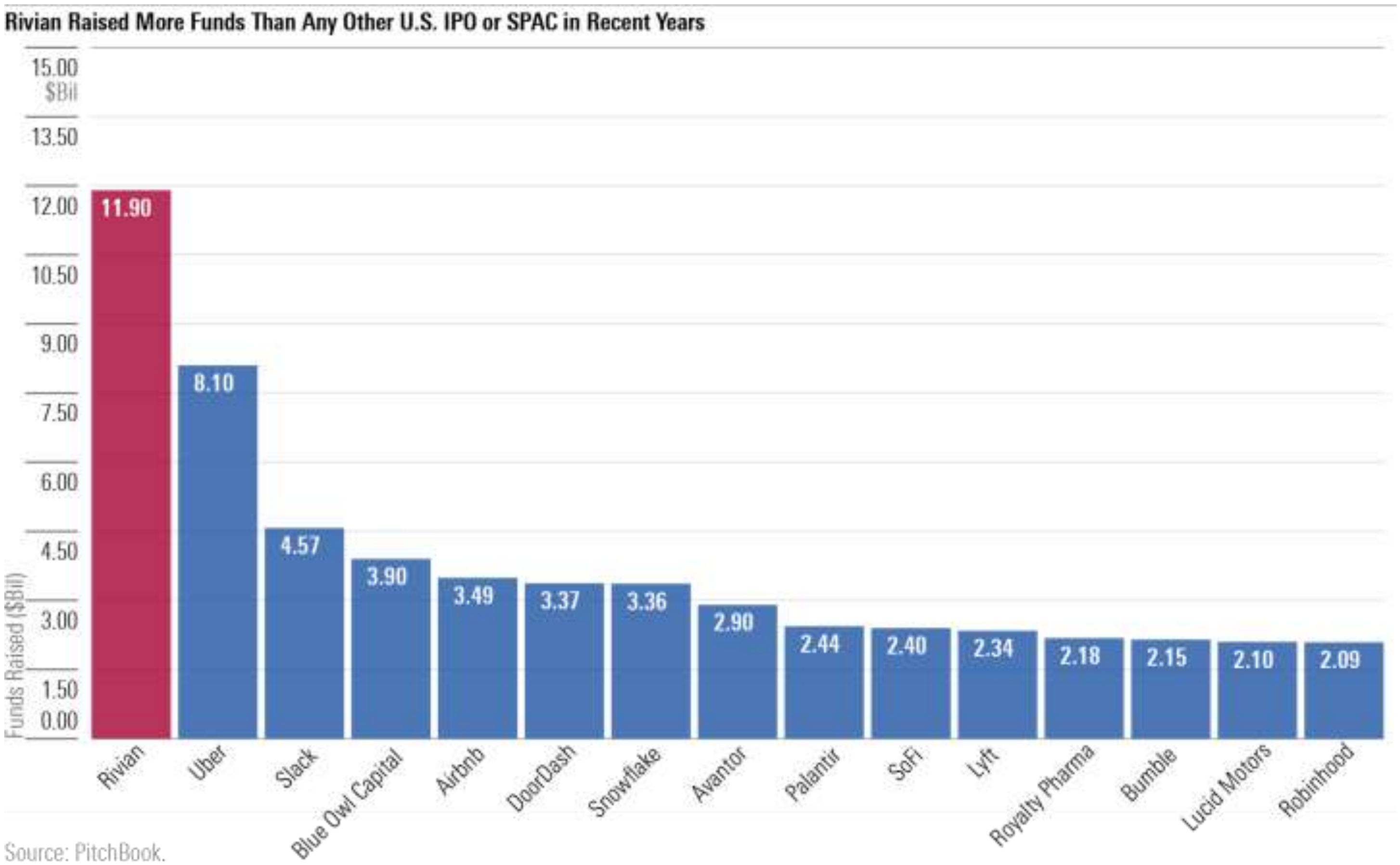


Source: Morningstar Direct. Data as of November 10, 2021.

The chart above shows the cumulative returns of companies that had the biggest IPO pops with and without the first day of trading. Excluding the first day of trading paints a very different picture of the stock performance. Since few individual investors are able to buy in at the IPO price, the return since the first trading day's close may better represent an individual investor's experience.

Rivian's Record IPO

Rivian's IPO earned the company a whopping $11.9 billion, the largest public offering that the U.S. has seen in over five years. The automaker surpassed Uber (UBER) to take the top spot.



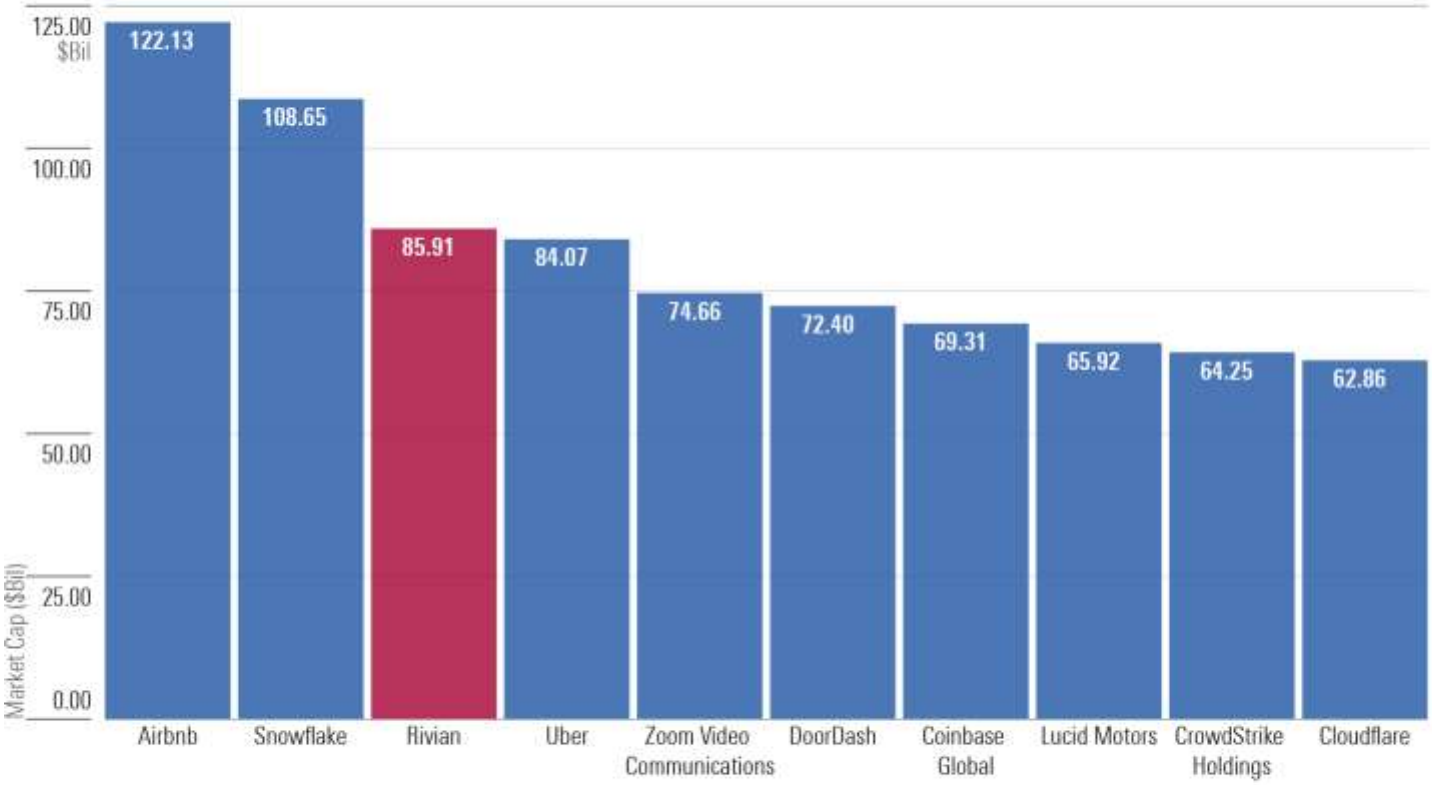
At the end of its first trading day, Rivian was valued at $86 billion, making it the third largest newly public company in the U.S. Fellow EV manufacturer Lucid Motors (LCID), which went public in July, also makes the list that mostly consists of tech names.

Make Way, Tesla?

Ultimately, what matters most for Rivian's outlook is how the company will fare in an increasingly crowded market for EV producers.

Despite only recently delivering its first vehicles, Rivian has a larger market cap than Ford, one of its largest investors. In 2020, Ford sold nearly 4 million vehicles in the U.S. alone; Rivian's working plant is equipped to produce 150,000 vehicles a year. While the valuation may not touch that of Tesla (TSLA), which passed $1 trillion, $86 billion is an impressive feat for a company that is still years away from potentially becoming profitable.

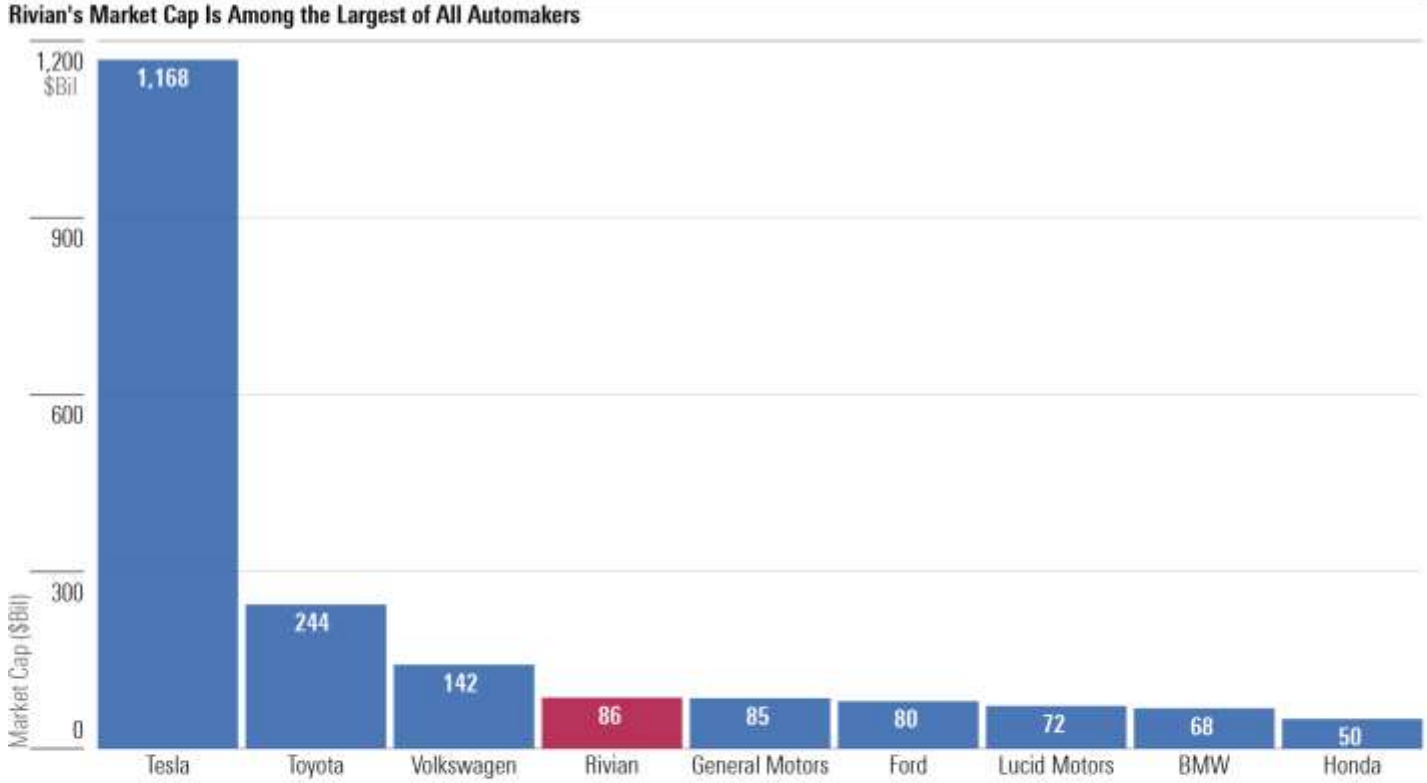
Rivian Is the Third Largest U.S. Company to Go Public in the Last Three Years



Source: Morningstar Direct. Market Caps as of November 10, 2021.

In addition, when it comes to valuations among auto manufacturers, traditional automakers--most of which are also competing in the EV market--trade at or below Morningstar analysts' estimates of the companies' worth. Tesla, meanwhile, trades at extremely lofty levels to both its Morningstar fair value estimate and when

Rivian's Market Cap Is Among the Largest of All Automakers



Source: Morningstar Direct, author calculations. Data as of November 10, 2021.

compared with earnings. Of course, boosters of EV-focused companies such as [ARK Investment's Cathie Wood] contends that demand and production of EVs will rise faster and sooner than is currently expected, making high valuations warranted.

Morningstar's analysts do not currently cover other EV producers, and those companies--like Rivian--have reported losses, leading them to have negative price/earnings ratios. (Rivian does not yet have a consensus earnings estimate for 2021, so we're not showing its P/E ratio.)

Automaker Price Ratios

Company	Price/Fair Value	P/E Ratio
Tesla (TSLA)	1.57	346.74
Toyota (TM)	0.99	11.69
Volkswagen (VWAGY)	0.81	7.90
General Motors (GM)	0.87	7.92
Ford (F)	0.97	27.66
BMW (BMWYY)	0.67	5.07
Honda (HMC)	0.80	6.33
Lucid Group (LCID)		-30.82
Arrival (ARVL)		-92.62
Canoo (GOEV)		-5.46
Lordstown Motors (RIDE)		-2.20
Nikola (NKLA)		-15.61

Source: Morningstar Direct, FactSet. Data as of November 10, 2021.

So far, Rivian has fared far better in its public debut than many EV startups, largely because the company has demonstrated that it can, in fact, produce a product and successfully bring it to market. Other EV startups that chose to go public via SPAC rather than an IPO went public before bringing a product to market, and investor sentiment cooled quickly in the face of uncertain production. Lucid Motors has just started to attract investor attention thanks to the delivery of its Air sedan.

Many EV SPACs Have Struggled in the Public Market

Source: Morningstar Direct. Data as of November 10, 2021.

When choosing a Fund, Performance matters, if it is the result of a systematic Process with strong academic support. Focusing on Performance alone leads to chasing:

ARK Innovation Has Likely Been a Disappointment for Most Investors

Following a frenzy of inflows, investors are fleeing for the exits amid the fund's underperformance this year.

Katherine Lynch
Nov 8, 2021

ARK Innovation ETF (ARKK) gained 152.5% in 2020 and ranked as the best fund in the mid-cap growth Morningstar Category.

The eye-popping return caused investors to flood into the exchange-traded fund. At one point, ARKK was collecting $1 billion a week.

But now, these investors may feel like they had the rug pulled out from under them. While the Morningstar US Market Index was up 22% this year through Oct. 31, 2021, ARK Innovation was down 2.6%, while the average mid-cap growth fund gained 17%. ARKK now ranks as the worst-performing fund in the category.

Morningstar U.S. Market Index Outperforms ARK Innovation ETF

Source: Morningstar Direct. Data as of October 31, 2021.

The experience of the average investor in ARKK has likely been disappointment. Relatively few reaped the full benefit of its 2020 rapid rise. Only $3.2 billion was in the fund at the start of 2020. By the end of the year, it had more than 10 times that amount: $34.4 billion.

Most of the inflows into the fund came in late 2020 and early 2021, right when the fund's performance was peaking. Investors poured in more than $2 billion a month during December, January, and February, and the fund's assets hit a high of $51.35 billion at the end of February.

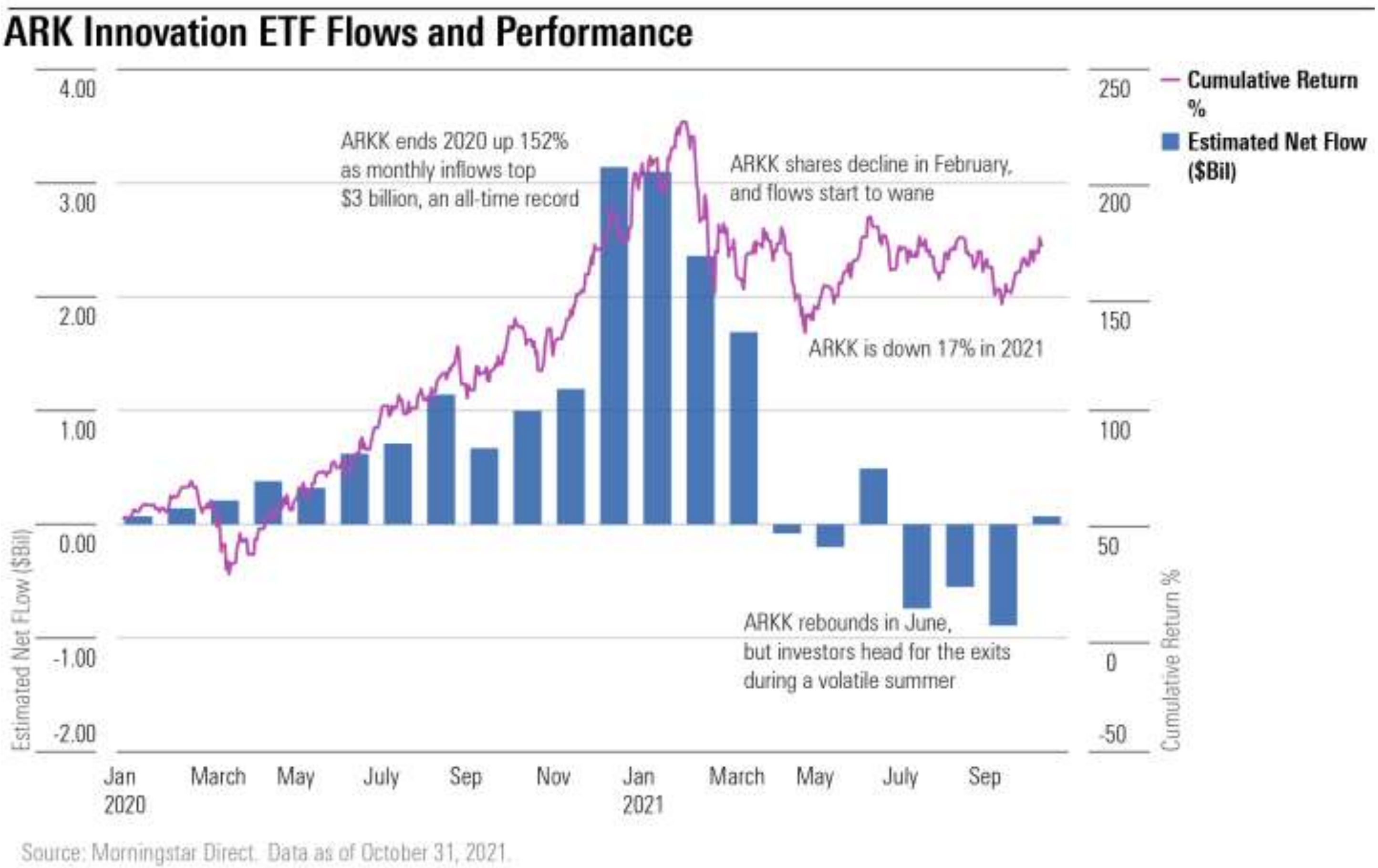
But then the tide turned for ARKK. The fund crashed in February when rising bond yields spurred a sell-off in technology shares. In May, it fell sharply again when technology companies declined.

Technology and communication-services companies account for more than half of the portfolio, and the sell-offs hit ARKK's concentrated portfolio particularly hard. The fund fell 34% from its February high and has yet to fully recover.

Flows into the fund cooled but stayed positive until April, the first time the fund recorded a monthly net outflow since October 2019. Outflows picked up in the third quarter. If these sellers bought the fund at the start of the year, they saw a dismal return.

ARKK's past 10 months are not an uncommon story. Fear of missing out following a stellar year for a fund can drive rapid inflows, and when the fund is unable to repeat history, investors start to lose interest. Investors who lack patience often suffer the most by buying at a high and selling after a decline.

Morningstar analysts Ben Johnson and Bobby Blue [wrote about the difficulties ahead for ARKK]() in March: "After a period of stellar returns and a flood of inflows, capacity concerns loom large." The fund's rapid growth

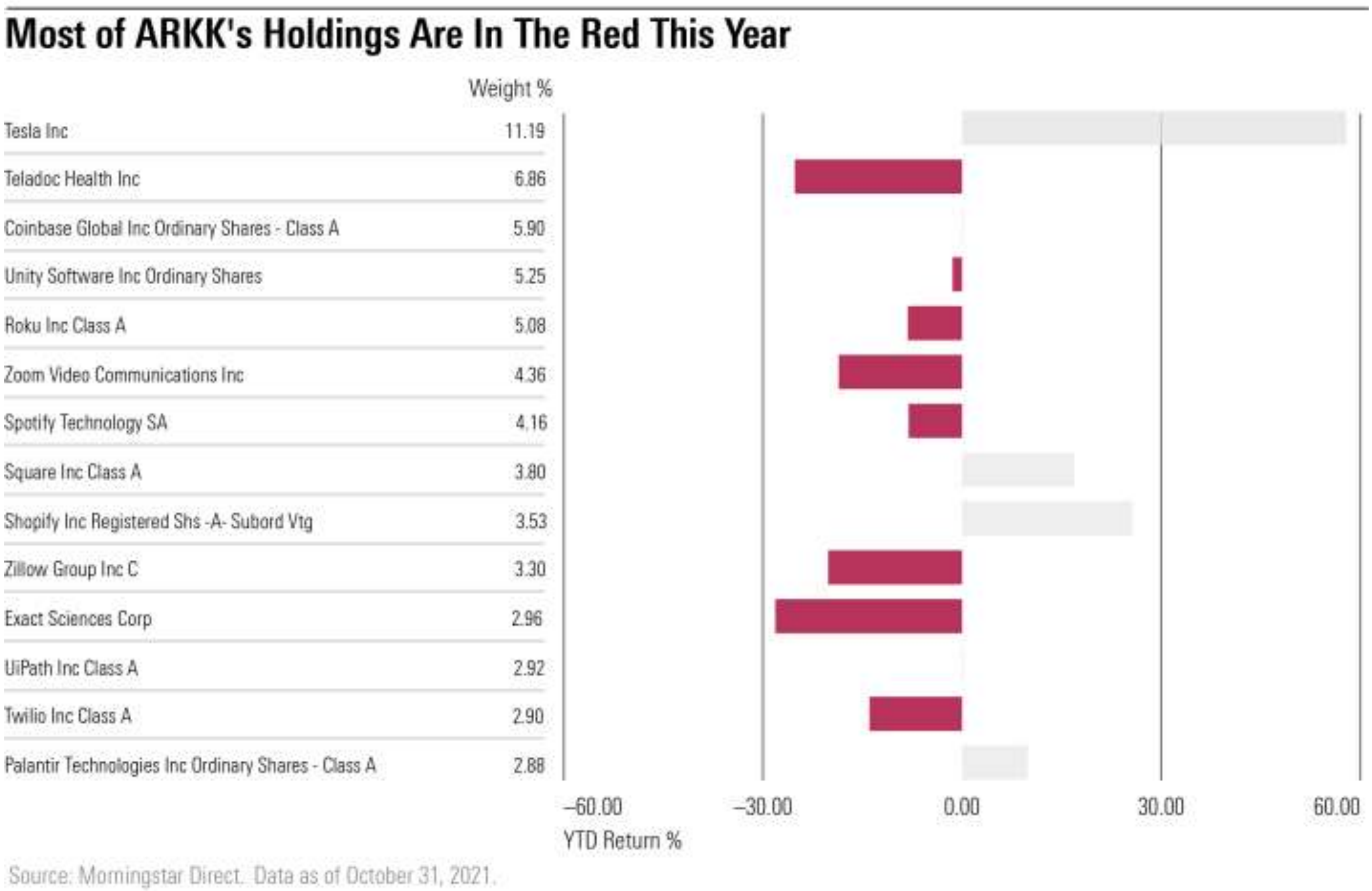


caused it to dip into large-cap stocks and keep outsize stakes in its smaller holdings. ARKK owned at least 10% in 10 out of the 55 companies in its portfolio as of February.

Most of its holdings have lost money for the year to date. As of Oct. 31, 24 out of 38 publicly traded holdings were in the red. (The fund holds 44 publicly traded stocks, but six just recently went public and don't have year-to-date returns.) Teladoc Health (TDOC) dragged on returns, losing 25%. Mirroring the trajectory of the overall fund, Zoom (ZM), which gained 395% in 2020, had fallen 19%. Poor performance from Zillow (ZG) (down 20%) and Exact Sciences (EXAS) (down 28%) also hurt the fund.

Tesla (TSLA) continues to perform strongly, bolstering the fund, but any sudden turn with the company would be a severe detriment for ARK Innovation. Tesla accounts for 11.19% of the fund's assets and is one of the few holdings with positive returns so far this year.

ARKK's story isn't unique. Of the 18 funds that rose more than 100% in 2020, half rank in the bottom half of their category this year. As Morningstar's Jeff Ptak wrote in January, "What to expect from funds after they gain 100% or more in a year? Trouble, mostly."



The Loser’s Curse

Buying the fund industry's winners sure beats the alternative.

John Rekenthaler
Nov 1, 2021

The Claim

Over the past decade, many have contended that mutual funds suffer from “The Winner’s Curse.” Champion funds struggle to remain successful because they become too large, their investment styles lose favor, and/or their portfolio managers become distracted by their marketing obligations. The explanations vary, but the articles keep coming. And coming.

The argument is misleading. To be sure, several celebrity funds have crashed. Legg Mason Opportunity Fund beat the S&P 500 for 15 straight years, from 1991 through 2005, before reversing course. (The fund has since changed its name to ClearBridge Value (LMNVX).) Another value-fund darling, Fairholme (FAIRX), imploded even more spectacularly, as did veteran Sequoia Fund (SEQUX). In recent years, perhaps the most highly touted bond fund, DoubleLine Total Return Bond (DBLTX), has lagged most of its rivals.

But these are anecdotes, not data. For every large, well-known fund that makes headlines by disappointing shareholders, dozens go undiscussed. What of their fates? Could the winner’s curse be a mirage? Because index investing has been so unquestionably successful, might onlookers be leery of actively managed funds and therefore be readily convinced of their failures by a few lurid tales?

The Reality

They could be, they might be, and they are. My October 2014 column, "The Fund Winner Curse is an Optical Illusion," demonstrated that. As a group, the best-performing funds of the previous decade, per the Morningstar star rating (technically, I am supposed to call it the *Morningstar Rating for funds*), fared well over the succeeding 10 years. Funds that held the top Morningstar Rating of 5 stars in 2004 were much likelier to carry that same rating one decade later than they were to possess the bottom rating of 1 star.

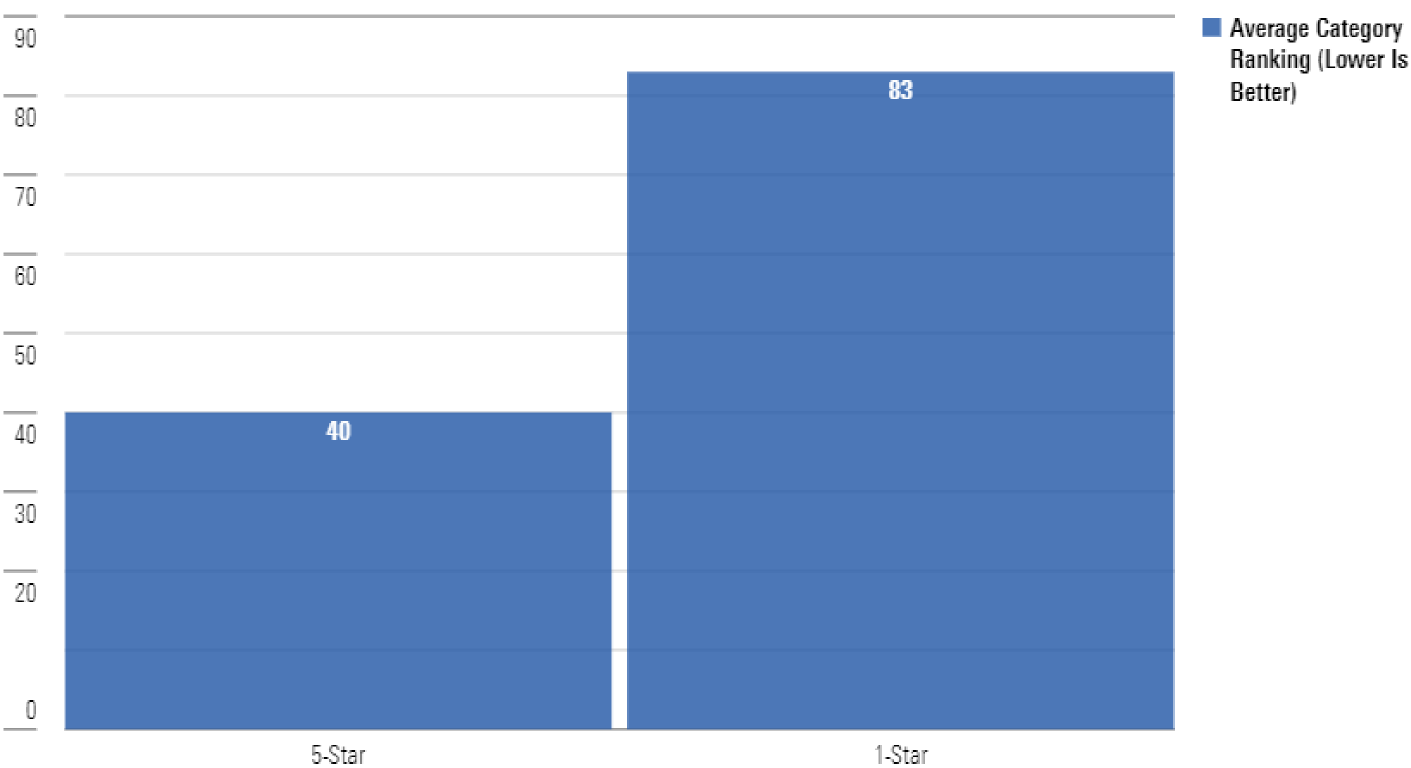
This finding was meaningful for two reasons. One, our star rating doesn't do anything special. It is a risk/return calculation that is highly correlated with a Sharpe ratio. Thus, my column's conclusion could be generalized. By any measure, there was no fund winner's curse. Second, the maximum period over which the star rating is calculated is 10 years. The results were therefore fully independent. None of the performances that earned the funds their 5-star ratings were used for assessing the ratings' results.

Another Study

This article updates its predecessor. Because only seven years have passed since the original study, I cannot evaluate funds' 10-year totals. Instead, I have measured five-year results. The tests begin on Sept. 30, 2016. All data that are used for sorting funds into initial groups--star ratings, asset size, and category return rankings--arise from that date. I then measured fund performances over the succeeding five years, from Oct. 1, 2016 through Sept. 30, 2021.

The outcome was remarkable. Never mind the winner's curse. The real story is directly the opposite: the persistence of mutual fund returns. Prospectuses state that past performance is no guarantee of future results.

Exhibit 1 Future Return Rankings, Largest 5- and 1-Star Funds



Source: Morningstar Direct.

Well, of course they are not. There are no investment guarantees, save from insurers or the government, and even those promises are sometimes broken. But past performance has been a surprisingly useful indicator.

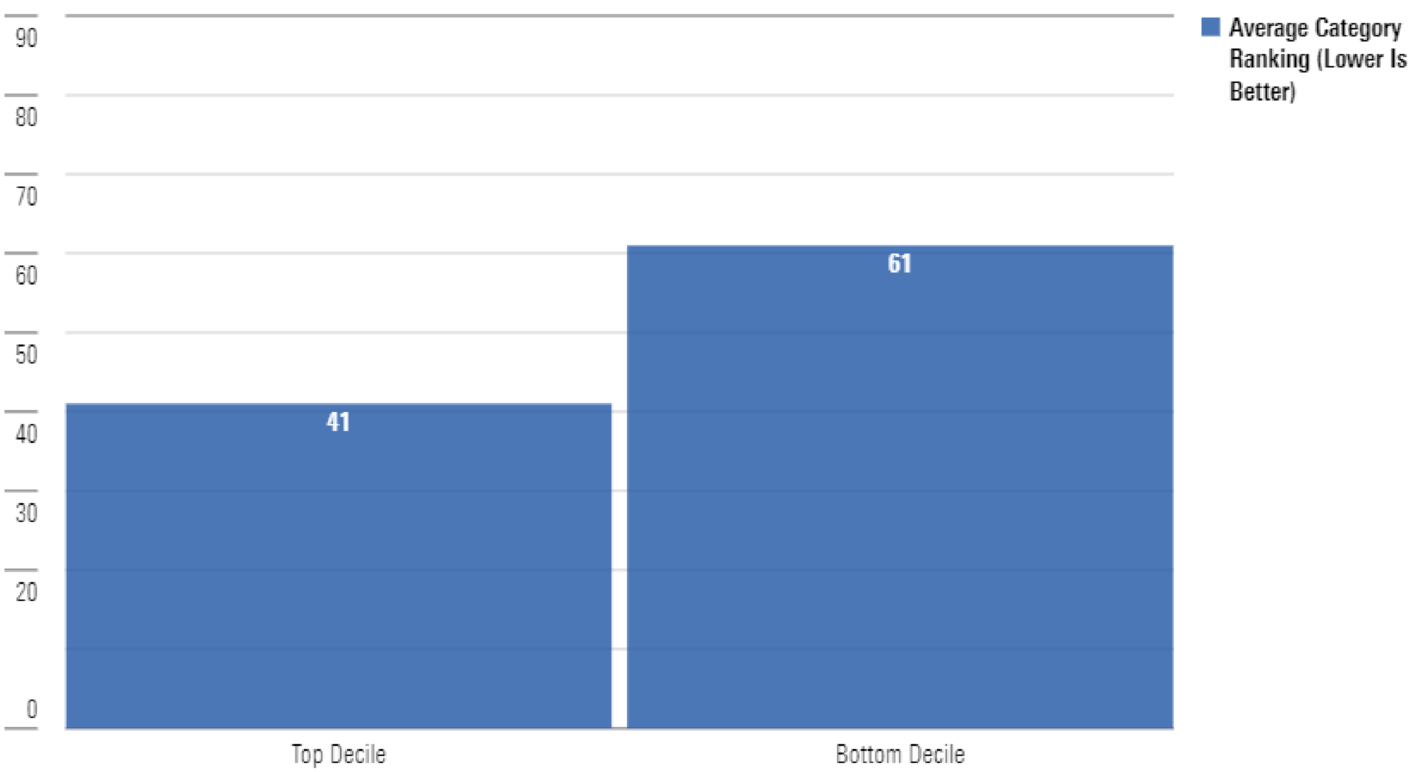
The first chart depicts the average five-year return ranking, by investment category, for the 10 largest 5-star funds. (Once again, the funds were identified in September 2016, while their performances were assessed thereafter.) Also shown--because this time, in addition to evaluating the industry's winners, I opted also to examine its losers--are the 10 largest 1-star funds.

Quite a difference! The 5-star funds avoided the winner's curse. Of the 10 funds, only DoubleLine Total Return Bond disappointed. The remaining nine funds ranged from average to good. But those 1-star funds ... wow. Because the results were so dramatic, I tripled-checked the computations. No mistake. Not a single 1-star fund placed in the top half of its group. Six landed in their category's bottom decile.

A Broader View

Now that's what I call a loser's curse. Of course, the sample size is modest. The conclusion could therefore be a fluke (although probably not, because the general data rule is that if smoke is ever that thick, even over a small amount of ground, a fire exists). Consequently, I greatly enhanced the study to include all mutual funds, not just the giants. This time, rather than sort funds by their 2016 star ratings, I did so by their previous 10 years' returns. I compared the top-decile performers, as measured by their 2016 10-year category rankings, to the bottom-decile funds.

Exhibit 2 Future Return Rankings, All Top- and Bottom-Decile Performers

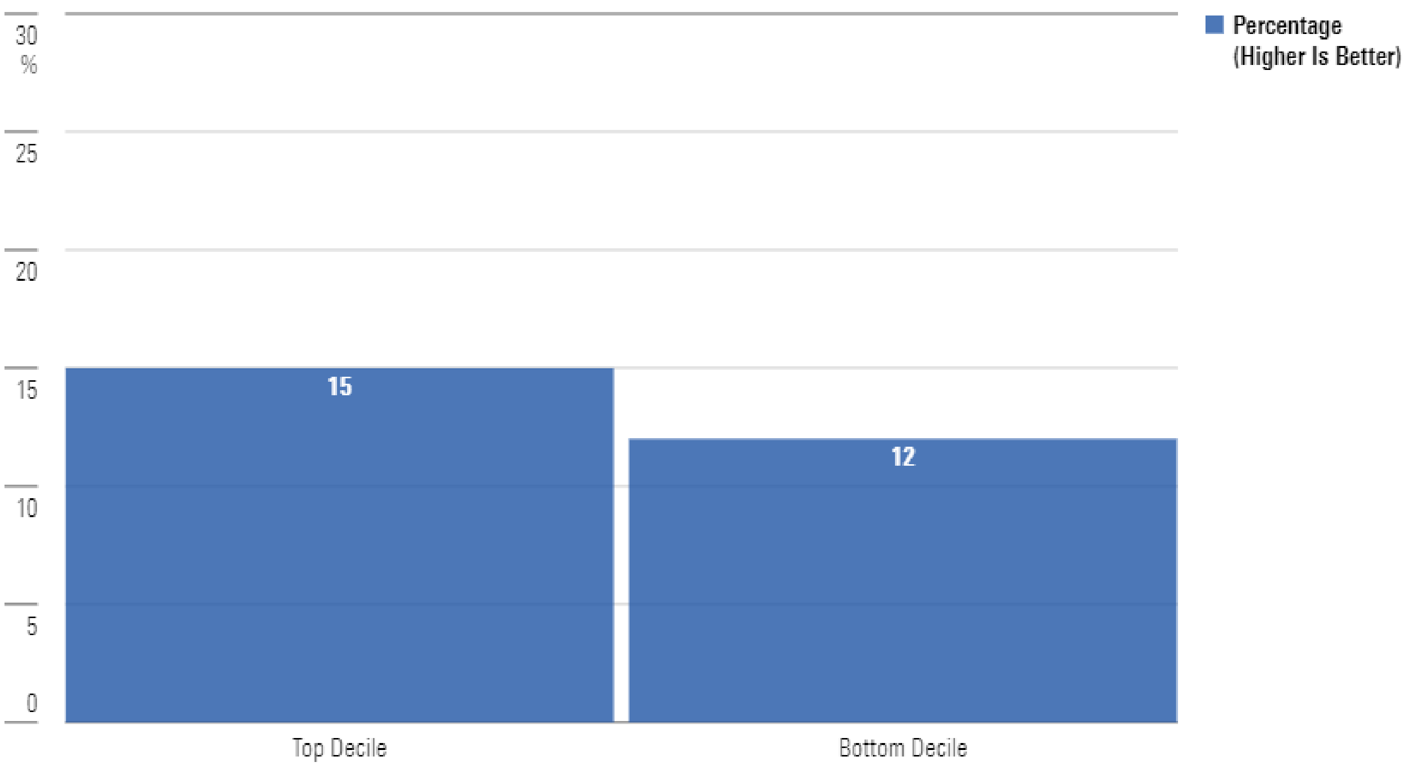


Source: Morningstar Direct.

The discrepancy between the top- and bottom-ranking funds' results shrunk, which is to be expected when expanding from 20 funds to several hundred. However, the gap was still substantial. The funds that had posted relatively strong returns from October 2006 through September 2016 performed, on average, a full quintile better than those that had posted relatively weak returns. The curse afflicted the mutual fund losers, not the winners.

Two additional charts provide further details. The first shows the percentage of top- and bottom-decile performers, from October 2006 through September 2106, that subsequently placed in their category's top decile.

Exhibit 3 Future Top-Decile Results, All Top- and Bottom-Decile Performers



Source: Morningstar Direct.

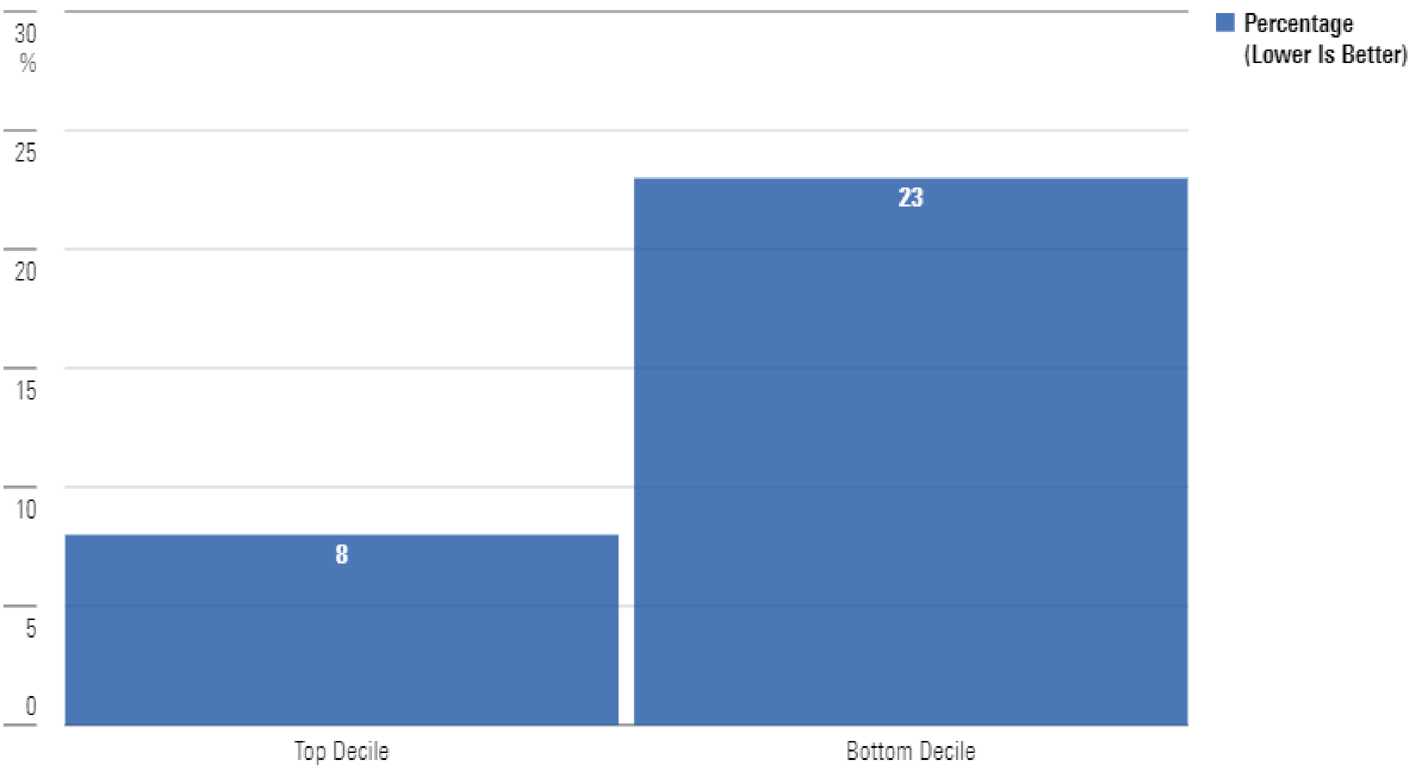
Those figures didn't differ greatly among the two groups. The winners edged the losers, but their victory margin was slight, as some losers did indeed recover sharply. However, reversing the test, to see how many funds landed in the bottom quintile, reconfirmed the initial observations. The losers persisted. They were more than twice as likely to remain in the bottom quintile as would be dictated by chance, and 3 times as likely to land there as were the winners.

Wrapping Up

To some extent, these findings owe to the prolonged bull market. Since 2009, investment conditions have been unusually consistent. Stocks have performed well; interest rates have declined; growth companies have generally outgained value stocks; and the U.S. stock market has been steadily among the world's best. Under such conditions, relative performance is likelier to persist.

Nonetheless, the evidence does not support the existence of a "winner's curse." Quite the contrary.

Exhibit 4 Future Bottom-Decile Results, All Top- and Bottom-Decile Performers



Source: Morningstar Direct.

Positions

BRSP - This cmREIT had been on our very small Buy/Watch list since August. On 12/1 we added 2% positions for 6 clients @ 9.39:

Insider Buying:

Trade Date↑	No. Part	Participants	Net Sell (Shares)	Net Buy (Shares)
10/13/2021	1	Diamond Kim		5,690
08/18/2021	1	Witt Andrew		10,000
08/17/2021	1	Mazzei Michael		25,000
08/16/2021	3	Mazzei Michael, Palame Da...		95,000

From High Dividend Opportunities on Nov. 29th:

For our "Picks of the Year", we are looking at picks that have a high yield today, and significant upward price potential that is likely to be realized within the next year. ...

Today, we want to preview our second pick: **BrightSpire Capital** (BRSP). BRSP is a commercial mortgage REIT that was formerly named **"Colony Credit"**. The events since COVID have been transformative for the company in the best possible way. Let's take a look at the material changes since COVID:

- **Management replaced**: For mortgage REITs, management ultimately plays a very big role in success or failure. The types of mortgages the company pursues, how much leverage is used, and how it underwrites risk are all management decisions that have meaningful long-term impacts on the company. Michael Mazzei, is an old hand in the mortgage markets, having traded commercial mortgages professionally since 1984.

- **Strategy Adjustment:** BRSP was already in the process of simplifying its portfolio before COVID hit. As a result, it had a fair amount of cash on hand from legacy sales. It continued to liquidate its legacy portfolio and coming into 2021, cash made up over 30% of its assets. This provided the new management team with a blank slate, keeping only the best of what Colony Credit had and redeploying the cash into holdings with a new strategy. Specifically, BRSP is having a focus on senior first-lien mortgages. "Mezzanine" level mortgages have higher yields but are junior to the first mortgage, the legacy portfolio saw the costs of reaching for yield. Going forward, BRSP will only invest in mezzanine debt with existing borrowers and when BRSP has the ability to hold the first mortgage as well, providing them much more control in the event of a default. BRSP today has a much more conservative portfolio than CLNC had pre-COVID.

- **Internalized Management:** Previously, BRSP was externally managed by Colony Capital (DBRG). In 2021, it struck an agreement to end the management contract and internalize management. DBRG had a diverse array of investments and never put in the time necessary to properly care for BRSP. DBRG's lack of focus came across in BRSP's lack of focus. There was a one-time cost associated with ending the contract, but now BRSP has higher cash flow and dedicated management that is focused on BRSP alone.

- **Dividend Growth:** BRSP reinstated its dividend in Q1 2021, starting at $0.10/quarter, and raised it 3 times this year to $0.18/quarter. Distributable EPS was $0.26 in Q3, providing dividend coverage of over 140%. In 2022, we expect dividend growth to continue another 30-40%, which would put the forward yield on purchases today at 10-11%. Even with that level of dividend growth, BRSP would still be paying a less aggressive dividend than peers as a percentage of book value.

- **Price Upside:** BRSP is trading at a 20%+ discount to book value in a sector where most peers are trading at 10-20%+ premiums to book value. This discount is no doubt caused by the overhang of the mistakes of prior management, and the low dividend payout ratio relative to peers. As discussed above, we expect the dividend will rise throughout 2022 as BRSP's distributable earnings continue to grow. Looking beyond the mistakes of prior management and developing trust in the current management is simply a matter of time and continued strong performance. Through 2022, we can expect the discount to book to diminish. Over the course of the year, we believe it is reasonable to expect BRSP to trade at a modest premium to book of 5-10%. That suggests upside potential of 30-40%!

- **Inflation Protection:** Commercial mortgage REITs directly benefit from inflation in two ways. First, real estate prices frequently lead inflation as investors turn to physical assets. Rising real estate prices reduce the loan to value for existing loans making them less risky and reducing mortgage defaults. Second, the majority of these loans are floating-rate, providing a hedge against the risk of the Federal Reserve raising rates.

The bottom line is that BRSP is a company reborn. It has very little resemblance to the Colony Credit that existed prior to COVID. The market has been slow to recognize these changes and continues to value BRSP at a substantial discount to fair value. BRSP pays a 7.7% yield today, and that is likely to grow at a 30-40% rate over the next year. BRSP's share price also has a lot of upside, even with a 40% gain, it would still be inexpensive compared to peers. ...