June 2022

From the front page of Friday's WSJ:

Markets Post Worst First Half Of Year In Decades

BY AKANE OTANI

Global markets closed out their most bruising first half of a year in decades, leaving investors bracing for the prospect of further losses.

Index performance, year to date

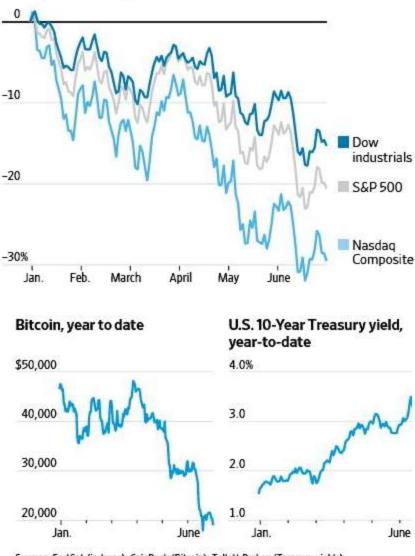
Accelerating inflation and rising interest rates fueled a monthslong rout that left few markets unscathed. The S&P 500 fell 21% through Thursday, suffering its worst first half of a year since 1970, according to Dow Jones Market Data. The blue-chip Dow Jones Industrial Average lost 15%.

Investment-grade bonds, as measured by the iShares Core U.S. Aggregate Bond exchange-traded fund, lost 11%—posting their worst start to a year in history.

Stocks and bonds in emerging markets declined, hurt by slowing growth. And cryptocurrencies came crashing down, saddling individual investors and hedge funds alike with steep losses.

About the only thing that rose in the first half was commodities prices. Oil prices surged above \$100 a barrel, and U.S. gas prices hit records after the Russia-Ukraine war upended imports from Russia, the world's third-largest oil producer.

Now, investors seem to be in agreement about only one thing: More volatility is ahead. That is because central banks from the U.S. to India and New Zealand plan to keep raising interest



Sources: FactSet (indexes); CoinDesk (Bitcoin); Tullett Prebon (Treasury yields)

rates to try to rein in inflation. The moves will likely slow down growth, potentially tipping economies into recession and generating further tumult across markets. ...

The good news for investors is that markets haven't always done poorly after suffering big losses in the first half of the year. In fact, history shows they have often done the opposite.

When the S&P 500 has fallen at least 15% the first six months of the year, as it did in 1932, 1939, 1940, 1962 and 1970, it has risen an average of 24% in the second half, according to Dow Jones Market Data.

... Fund managers currently have larger-than-average cash positions, smaller-than average equities positions and a markedly high degree of pessimism about the economy, Bank of America found in its June survey of investors. Those factors, among others, make markets look "painfully oversold"— and thus potentially ripe for a rally, the bank's strategists said in a separate report. ...

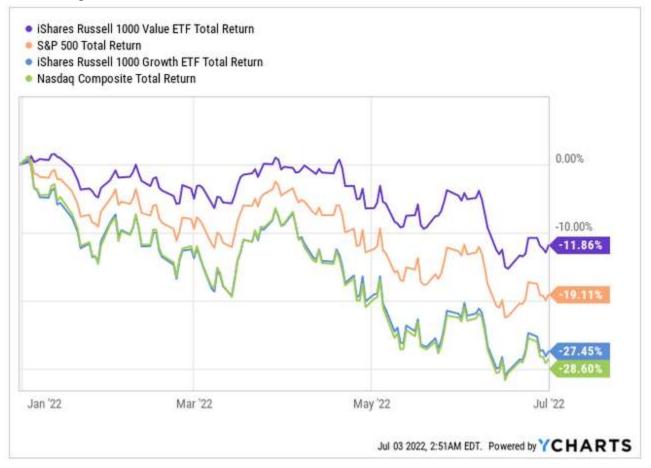
Economists surveyed by The Wall Street Journal in June said they saw a 44% probability of a recession in the U.S. in the next 12 months, compared with 18% in January.

History has shown the Fed has seldom been able to pull off a "soft landing," a scenario in which it slows the economy enough to rein in inflation but avoids tightening monetary policy to the point of causing a recession. The U.S. went into recession four of the last six times the Fed began raising interest rates, according to research from the Federal Reserve Bank of St. Louis that looked at monetary-policy-tightening cycles since the 1980s.

From today's High Dividend Opportunities: Market Outlook:

The markets were unable to maintain momentum, and the major indexes ended down last week. As a result, they had their worst first half since 1970. This means that most investors have had their worst first half of the year ever.

The bear market is on, but the pain is not equally felt. Investors with portfolios focused on Growth are feeling much more pain than investors who focus on Value stocks



Third Quarter 2022 Strategy Outlook: Soft or Hard Landing?

I. Macroeconomic Outlook

A Bad Call

The Global Investment Strategy service tactically downgraded equities in February as the war in Ukraine was beginning and inflation was galloping higher. That was a good call. However, we then proceeded to upgrade stocks in May as the S&P 500 fell below the 4,000 mark, thinking that a bottom was at hand. That was a bad call. While stocks did initially rise after our upgrade, they then began to swoon. After another failed attempt at a rally last week, the S&P 500 is 4.7% below where we upgraded it.

The May CPI report clearly shocked the Federal Reserve. Rather than dragging its feet in raising rates, as we had erroneously anticipated, the Fed was forced into action, delivering a supersized 75 bps rate hike at its June meeting.

The FOMC now expects to lift rates to as high as 3.8% in 2023, up from its projection of 2.8% in March and

1.6% last December. This is smack in the middle of our estimate of 3.5%-to-4% for the US neutral rate of interest. For the first time in many years, US monetary policy will no longer be unambiguously accommodative.

Not surprisingly, the Fed's hawkish pivot has led to a sharp tightening in financial conditions. While the absolute level of Goldman's FCI is still broadly neutral, the pace of tightening has been so rapid that it points to a sub-50 ISM manufacturing reading later this year (**Chart 2**).

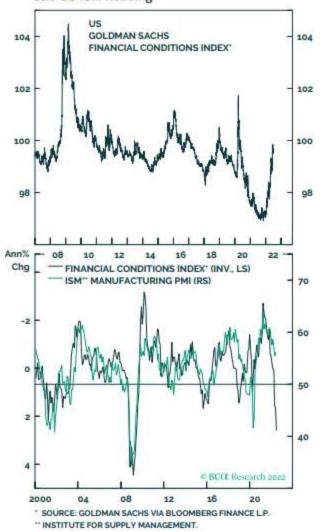
Recessionary Feedback Loops

Naturally, the Federal Reserve does not want a recession. Its forecast sees the unemployment rate rising only modestly from 3.6% at present to 3.9% in 2023 and 4.1% in 2024, bringing it close to the Fed's full employment estimate of 4%.

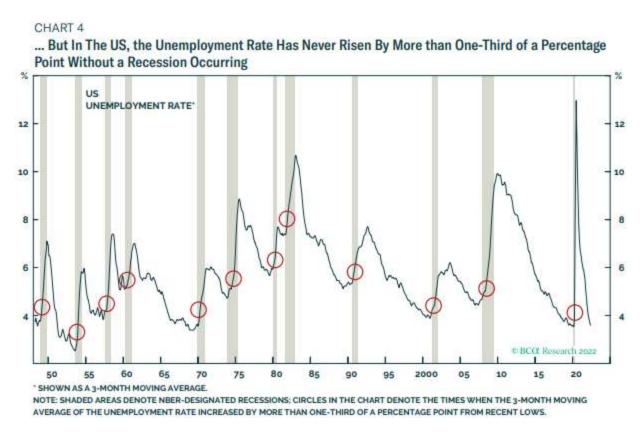
The danger is that the unemployment rate increases by more than half a percentage point.

Rising unemployment tends to feed on itself. Households react to a weaker labor market by paring back consumption. Businesses react by cutting investment. The resulting decline in aggregate demand leads to higher unemployment and even less spending. While some smaller advanced economies have been able to achieve soft landings in the past, the US has never averted a recession when the unemployment rate has

CHART 2 Tighter Financial Conditions Point To A Sub-50 ISM Reading



risen by more than one-third of a percentage point over the preceding three months (Chart 4).



Recession Risks Have Risen, But Soft Landing Remains the Base Case

Despite these inauspicious developments, I think that the odds of a soft landing in the US are much higher than in the past. As a result, I assign 60% odds to a no-recession (i.e., soft landing) scenario over the next 12 months. If a recession were to occur, I think it would be a very mild one. I assign 30% odds to a mild recession and only 10% odds to a deep recession.

Most of my colleagues at BCA think the odds of a recession are much higher than I do. Judging from conversations with clients, most investors share this bearish view. Thus, I stand on the bullish side of the debate.

The Case for a Soft Landing: A Summary of Our Argument

As we argue below, today's situation is unique in that the labor force participation rate has scope to recover and job openings are exceptionally high. This means that labor market slack may end up increasing in a fairly pain-free way.

Moreover, to the extent that some pain in the form of lower employment may be necessary, ... well-anchored long-term inflation expectations imply that only a small decline in employment may be necessary to knock down inflation. This is especially the case if the various pandemic and war-related dislocations that have pushed up inflation fade.

Lastly, the sort of financial imbalances that have exacerbated recessions in the past are generally absent in the US today. This implies that if a recession does occur, it will be a fairly mild one, perhaps so mild that the whole distinction between recession and soft landing will become superfluous.

A Rebound in Labor Force Participation Could Increase Labor Market Slack Without the Need to Fire Workers

In contrast to the unemployment rate, which is near a multidecade low, the employment-to-population ratio is still 1.1 percentage points below its pre-pandemic level, and 4.6 percentage points below where it was in April 2000. A similar, though less pronounced, pattern holds if one focuses only on the 25-to-54 age cohort (**Chart 5**).

Labor participation has increased over the past two years. Nevertheless, the number of people not working either because they are worried about the pandemic, or because they are still burning through their stimulus savings, remains elevated according to the Census Bureau's Household Pulse Survey.

Low-skilled workers comprise a disproportionately large share of missing workers (**Chart 7**). Until last autumn, many of these workers received more in unemployment benefits than they did from working.

According to the Fed, bank deposits held by these relatively poor workers are shrinking (**Chart 8**). Along with dwindling pandemic savings, faster wage growth at the bottom of the income distribution should incentivize more workers to seek employment (**Chart 9**).

High Job Openings Provide a Wide Moat Around the Labor Market

The section above argued that labor market slack would increase if the participation rate rose. Labor market slack would also decrease if the job openings rate declines.

... In April, there were 1.9 job openings for every unemployed worker, up from 1.2 at the start of the pandemic.

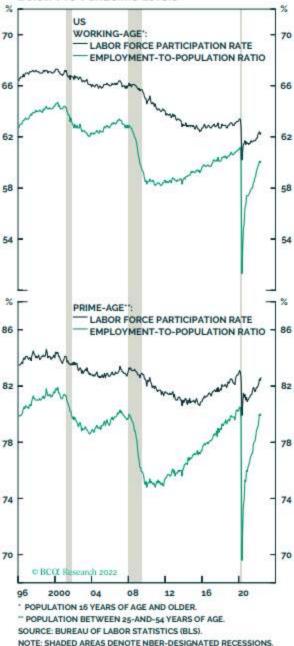
A high job openings rate provides the labor market with a wide moat against an increase in firings. As Fed governor Christopher Waller has emphasized, the main effect of the Federal Reserve's efforts to cool labor demand could be to push down vacancies. This could lower wage growth without the need for substantially higher unemployment.

Notably, the job openings rate ticked down from 7.3% in March to 7.0% in April with no corresponding increase in the unemployment rate. The share of small businesses planning to raise compensation over the next three months has dropped.

The growth in average hourly earnings has also slowed since the second half of last year (**Chart 12**). Private-sector earnings rose at an annualized rate of 3.8% in both April and May. Assuming 1.5%-to-2% productivity

CHART 5

The Employment-To-Population Ratio Remains Below Pre-Pandemic Levels



growth, this is consistent with unit labor cost growth of 2%-to-2.5% – broadly in line with the Fed's inflation target. ...

The discussion so far suggests that at least some of the gap between labor demand and labor supply can be closed by boosting labor force participation and lowering job openings.

Realistically, however, some decline in output and employment may be necessary to rebalance the economy. But how much?

In a report published in May of 2021, we argued that ... a decline in unemployment from high to moderate levels may do little to spur inflation, but once the unemployment rate falls below its full employment level, inflation could take off. Our report concluded: "when inflation eventually does begin to rise, it could happen faster and more forcefully than expected."

... If a small decrease in unemployment can trigger a large increase in inflation, does that mean that a small increase in unemployment can trigger a large decrease in inflation?

The answer hinges on what happens to inflation expectations during the period when realized inflation is elevated. If long-term inflation expectations rise a lot, then it could take a deep recession to bring them back down. If they do not, then the so-called "sacrifice ratio" — the amount of output that has to be sacrificed to

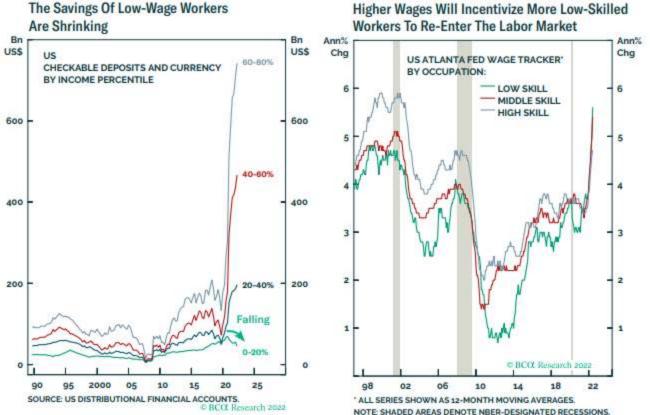


CHART 8

EMPLOYMENT BY WAGE COHORT 100 100 LOW MIDDLE HIGH 90 90 80 80 70 70 © BCCf Research 2023 16 18 10 12 14 20 22 NOTE: ALL SERIES REBASED TO JANUARY 2020 = 100%. LOW-WAGE, MIDDLE-WAGE, AND HIGH-WAGE COHORTS REFER TO EMPLOYMENT IN INDUSTRIES WHERE THE AVERAGE HOURLY EARNINGS STOOD AT LESS THAN \$20/H. BETWEEN \$20-30/H, AND MORE THAN \$30/H.

Employment In Low-Wage Sectors

Is Still Below Pre-Pandemic Levels

%

CHART 7

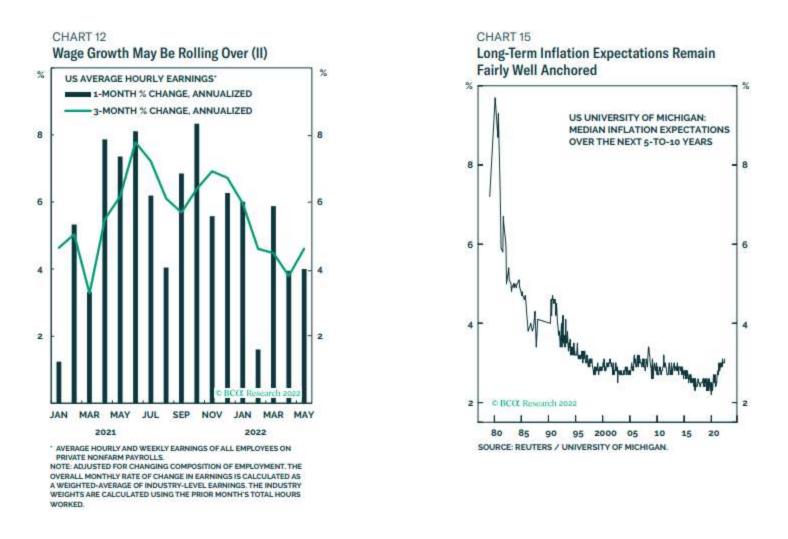
US

%

RESPECTIVELY, IN JANUARY 2020

CHART 9

ALL SERIES SHOWN AS 12-MONTH MOVING AVERAGES. NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS. SOURCE: FEDERAL RESERVE BANK OF ATLANTA, WAGE GROWTH TRACKER.



reduce inflation — may turn out to be quite low.

Short-term inflation expectations have moved up a lot, with expected 12-month inflation in the University of Michigan survey reaching 5.3% in June. However ... short-term inflation expectations tend to track gasoline prices. The gasoline futures market is pricing in a 22% decline in wholesale gasoline prices over the next 12 months. If gasoline prices were to fall that much, short-term inflation expectations could drop appreciably.

In contrast to short-term inflation expectations, long-term inflation expectations have not increased in a major way. After a preliminary reading of 3.3% for May – which Chair Powell described as "eye-catching" – expected inflation in 5-to-10 years in the University of Michigan survey was revised down to 3.1%. While this is still up from about 2.5% in the period preceding the pandemic, it is broadly in line with where long-term inflation expectations were between 1995 and 2014, and a far cry from their peak of 9.7% reached in February 1980 (**Chart 15**). ...

A recent San Francisco Fed study documented that about half of the year-over-year increase in PCE inflation in May was the result of supply-side factors. About a third was due to demand-side factors, with the rest classified as "ambiguous".

It is difficult to know how fast the supply-side drivers of inflation will dissipate given the ongoing threat of further Covid lockdowns in China and the continued disruptions caused by Russia's invasion of Ukraine. Nevertheless, progress is being made. Shipping rates are trending lower. The supplier deliveries components in

the regional Fed surveys have dropped sharply. Retail inventories have moved above their pre-pandemic trend, which should provide a buffer against future shocks.

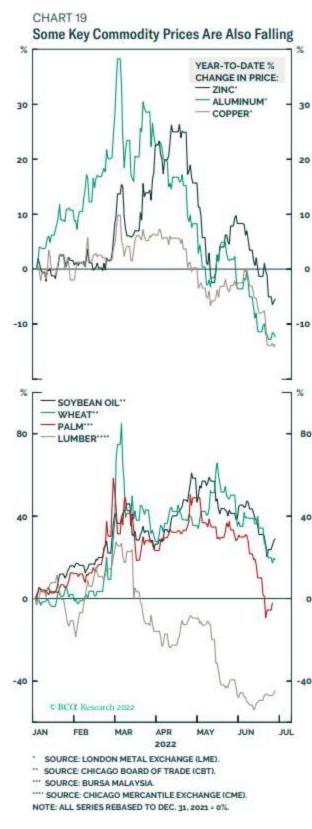
Many commodity prices have also retreated (**Chart 19**). Copper prices have dropped to a 16-month low. Wheat prices are down 36% from their high. The price of lumber has fallen 45% since the start of the year.

We would add that some of the inflation that most people associate with demand-driven factors has also been strongly influenced by pandemic-related dislocations. For instance, the composition of spending shifted from goods to services during the pandemic. One might think that the composition of spending should be irrelevant for inflation, as only the aggregate level of spending should matter. In practice, however, that is not the case. ...

As spending continues to shift back towards services, goods inflation could decline much more than services inflation rises. This could push down overall inflation, even if one adjusts for the higher weight of services in price indices.

Rent inflation is another category within the CPI that was distorted by the pandemic. Aided by lower mortgage rates and ample fiscal stimulus, the proliferation of work-from-home practices led to a sharp increase in the demand for bigger and better housing. Home price appreciation has historically been an important driver of rent inflation (**Chart 22**). As the housing market cools, rent inflation will recede.

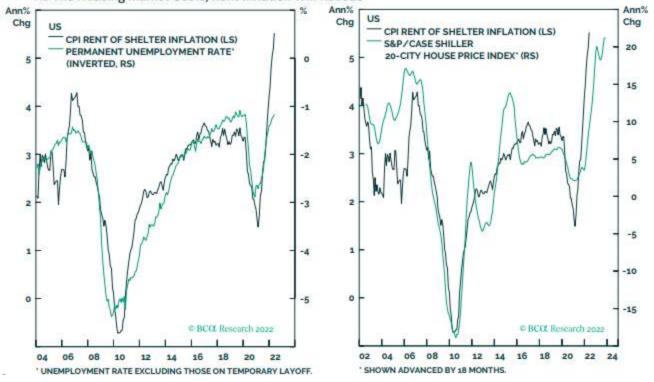
Granted, there is a risk that the housing market will cool to such an extent that it drags the entire economy down with it. While such an outcome is possible, we would bet against it. The quality of mortgage lending has been very strong over the past 15 years. Moreover, unlike in 2007, when there was a large glut of homes, the homeowner vacancy rate today is at a record low. Tepid homebuilding has pushed the average age of the US residential capital stock to 31 years, the highest since 1948 (**Chart 24**).



The Lack of Major Private-Sector Imbalances Argue for a Soft Landing

The feedback loops that kick in during economic downturns tend to be more pronounced when an economy is suffering from pre-existing imbalances. If households and firms have to dramatically cut spending in response to economic shocks, what began as a modest slowdown could easily morph into a full-blown recession.

CHART 22 As The Housing Market Cools, Rent Inflation Will Recede



While the US private-sector financial balance – the difference between private-sector income and spending – dipped into deficit in the first quarter, this follows a long string of financial balance surpluses.

US households are still sitting on \$2.2 trillion (9% of GDP) in excess savings that they accumulated during the pandemic (**Chart 26**). Admittedly, most of those savings belong to relatively well-off households. However ... even rich people spend well over half of their income.

The ratio of household debt-to-disposable income in the US is down by a third since its peak in 2008 (**Chart 28**). Despite falling equity prices, the ratio of household net worth-to-disposable income is still up nearly 50 percentage points since the end of 2019. All this provides households with the wherewithal to keep spending even in the face of rising interest rates and slower employment growth.

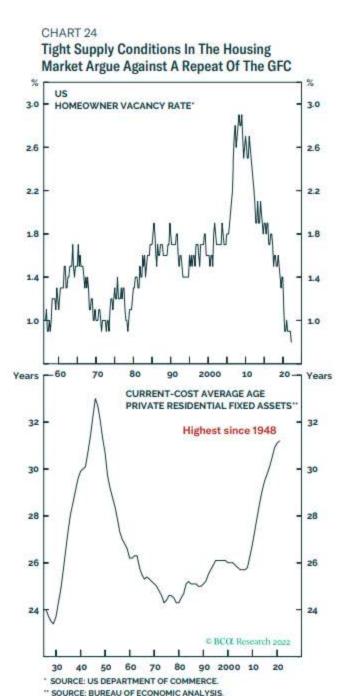
The picture is not as positive on the corporate side, as debt levels have risen over the past decade. That said, corporate assets have also risen, so that the ratio of corporate debt-to-assets today is lower than it was during the 1990s. Moreover, thanks to stronger profitability, the interest coverage ratio is near an all-time high.

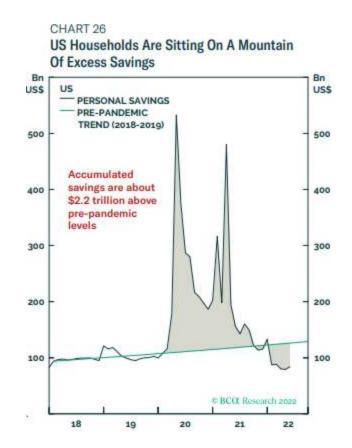
The Impact of Tighter US Fiscal Policy

After opening the fiscal spigots, the US budget deficit is set to decline over the next few years. The Hutchins Center at Brookings estimates that tighter fiscal policy shaved 3.5 percentage points off of US real GDP growth in the first quarter of 2022. While the fiscal drag will abate over the remainder of the year and into 2023, it will continue to weigh on aggregate demand.

For investors, modestly tighter fiscal policy could be a blessing, as it would take some pressure off the Fed to aggressively raise rates.

The worry is that fiscal policy tightens too much just when the rest of the economy is weakening. While this is a risk that cannot be ignored, it is a fairly modest one. Much of the projected tightening in fiscal policy simply





reflects the unwinding of pandemic-related stimulus measures. As a share of GDP, the CBO still expects the ratio of government debt-to-GDP to rise to 105% of GDP in 2030, up from 100% in 2021 (**Chart 31**).

Energy Crunch Casts a Pall Over Europe

The economic outlook remains more challenging outside the US. The euro area flash PMI for June came in well below expectations, with the manufacturing new orders component falling into contractionary territory for the first time since the start of the pandemic.

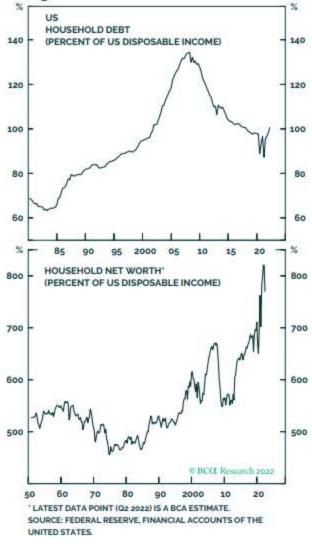
Energy shortages will continue to hamper European manufacturing. In retaliation against western sanctions, Russia has begun to throttle natural gas exports to Europe. This has caused the price of the December 2022 euro area natural gas contract to rise by 53% over the past two weeks.

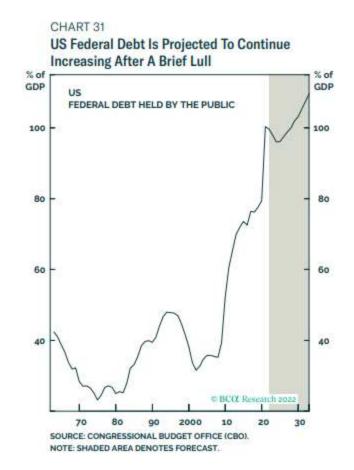
Last Thursday, Germany activated the second phase of its three-stage emergency energy program, bringing it one step closer to gas rationing. The government has made it clear that it will prioritize "protected customers" such as households and hospitals over industrial users.

Europe has committed to investing 210 billion euros over the next five years to achieve energy independence from Russia. Combined with increased defense expenditures, the IMF expects the structural primary budget balance to swing from a surplus of 1.2% of GDP in 2014-19 to a deficit of 1.2% of GDP in 2022-27.

CHART 28

The US Household Debt Burden Has Come Down Significantly Since 2008, While Net Worth Is Still Higher Than Before The Pandemic





Looser fiscal policy will support the euro area economy. However, this will come at the cost of higher government debt levels. For countries such as Germany, this not a problem, but for others such as Italy, it is a bittersweet outcome. ...

China's Trifecta of Economic Risks

The Chinese economy continues to suffer from the "triple

threat" of renewed Covid lockdowns, a shift of global demand away from manufactured goods towards services, and a floundering property market.

Of the three, a downturn in the property sector represents the gravest long-term threat. Chinese real estate prices are amongst the highest anywhere. The five biggest cities in the world with the lowest rental yields are all in China.

We expect the Chinese property market to ultimately succumb to the same fate that befell Japan 30 years ago. As was the case in Japan starting in the 1990s, China's working-age population is now shrinking, which will erode the demand for housing over the coming years.

At a time of high global inflation, a slowing in China's property market might not be such a bad thing for international investors, as it will cool the demand for commodities.

The risk is that the property market decelerates too fast, triggering financial distress across the Chinese economy. This is a legitimate concern. Corporate bonds of property developers are trading at less than 50 cents

to the dollar. Household debt has risen from almost nothing in 2007 to 62% of GDP today, mainly on account of rising mortgage debt.

Still, we are inclined to think that a hard landing for China's property market is unlikely. The Chinese government continues to retain considerable control over the domestic banking system. A broad-based credit squeeze is not in the cards. Nor is a significant decline in residential investment. If anything, the authorities want to expand the supply of housing to make it more accessible and affordable to poorer households.

Then there is the possibility of stimulus. With the Twentieth Party Congress slated for later this year and the population jaded by lockdowns, the political incentive to shower the economy with cash and loosen the reins on regulation will intensify. As we discuss later on, this could generate some upside for Chinese stocks. (Our view, as previously shared, is that the geopolitical risk in China outweighs relative valuation considerations.)

Japan: Benefiting from Reopening

Japan was slower to reopen its economy than most other developed economies. Thus, the service sector is only now recovering, which is helping to flatter growth. Retail sales rose 3.8% year-over-year in May, up from 3.3% in April. Department store sales rose a whopping 58%.

Japan's export sector has performed well over the past year. Looking out, the shift in global spending from goods to services will weigh on exports. That said, a weaker yen will help matters, suggesting that Japanese exporters could fare better than some of their overseas peers.

The Upper House elections are set for July 10. The Kishida administration has pledged to introduce some fiscal measures to help ease the pain of higher energy prices. This should help support aggregate demand at the margin.

II. Financial Markets

A. Portfolio Strategy

Retain Modest Overweight to Global Equities

The odds of a recession have increased, but equities now adequately discount that risk. The S&P 500 is currently down 21.1% in nominal terms and 24.4% in real terms from its peak in early January. Overseas bourses have fallen by a similar amount.

As mentioned earlier, we assign 60% odds to a "no-recession" (i.e., soft landing) scenario for the US over the next 12 months, 30% odds to a mild recession, and only 10% odds to a deep recession.

... We assume that the S&P 500 will fall a further 10% in real terms over the next 12 months in a mild recession scenario and by 25% in a deep recession scenario. Conversely, we assume that the S&P 500 will be 20% higher in 12 months' time in a no-recession scenario. Note that even in a no-recession scenario, the real value of the S&P 500 would still be down 10% in June 2023 from its high earlier this year.

On a probability-weighted basis, the expected 12-month real return for the S&P 500 across all three scenarios works out to 6.5%, or 8% with dividends. As we discuss below, returns are likely to be somewhat higher outside the US. Globally, the expected real total return is about 9%-to10%. This is enough to justify a modest overweight to global stocks, but not a strong overweight.

In summary, our recommended 12-month asset allocation is a slight overweight on global equities, a neutral position on bonds, and an underweight on cash.

B. Equities

A Divergence Between EPS Trends and Equity Prices

If one had been told at the start of the year that the MSCI All-Country World Index would be down 21.1%, one probably would have concluded that earnings estimates had fallen substantially. In fact, for the most part, they have not. While 2022 EPS estimates for emerging markets are down slightly, they are up for the US and Europe.

If the global economy succumbs to recession, forward earnings estimates would surely decline. In contrast, if a recession is avoided, earnings estimates are likely to remain flat, and could even rise a tad if supply-side cost pressures abate. A weighted-average of the possible scenarios implies a modest decline in earnings

Our conversations with clients indicate that most believe that current EPS estimates are wildly optimistic and will be revised considerably lower. Thus, a modest decline in earnings would probably imply a positive surprise, although not one that would propel stocks to new highs.

Have US Profit Margins Peaked?

The consensus view among investors is that US profit margins are extraordinarily high and that they will eventually come down to earth. Directionally, we agree that profit margins will fall over time. However, we suspect that this may take a lot longer to happen than many investors anticipate.

Chart 40 breaks down S&P profit margins into I.T. and non-I.T. The chart reveals that most of the secular increase in profit margins has occurred due to rising margins within the tech sector and the accompanying

increase in the market cap weight of tech within the S&P 500. If one were to adjust for the growing list of quasi-tech companies found outside of the formal IT sector, the upward trend in profit margins outside of the tech sector would look even less impressive.

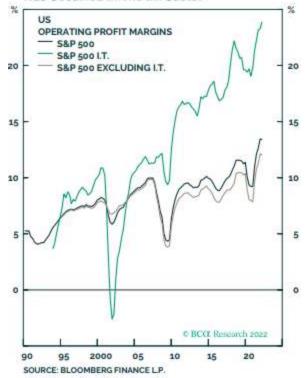
What is going on? The answer is that the competitive landscape has changed. The tech sector is now dominated by natural monopolies – companies which benefit from network effects and strong economies of scale. While increased regulation will erode their market power over time, it is likely to be a slow process.

We flagged the risks to tech stocks in our August 2021 report, These Three High-Flying Equity Sectors Could Come Crashing Back Down To Earth. In May 2022, however, following the

NASDAQ's plunge, we upgraded tech to neutral within an equity portfolio.

Slight Preference for non-US Stocks

CHART 40 S&P 500: Much Of The Increase In Margins Has Occurred In The I.T. Sector



To the extent that tech stocks are overrepresented in US indices, our tech upgrade blunts the case for favoring non-US stock markets. Nevertheless, we are inclined to recommend a slight overweight to non-US bourses over the next 12 months.

For one thing, as **Chart 41** shows, non-US stocks still trade at a steep discount to their US peers (16.4-times forward earnings in the US compared to 12.0-times abroad).

Non-US stocks also tend to outperform when the dollar is weakening (**Chart 42**). As we discuss below, the greenback is likely to retrace some of its gains over the next 12 months.

E. Commodities Oil: Tight Supply Continues to Buoy Prices

As the old saying goes, "the cure for high oil prices is high oil prices." High oil prices will catalyze more investment in the energy sector. They will also suppress oil demand, both in the near term, as people drive less, as well as in the long run, as more people elect to purchase an electric vehicle. **Chart 57** shows that 40% of US households expect to buy an EV over the

next five years, up from 15% in 2018. The transport sector currently accounts for about 60% of global oil demand.

The problem is that the long run is still a ways away. Capital spending in the oil sector is still a fraction of what it was in 2014 (**Chart 58**). Energy companies do not want to spend huge sums on capex given the uncertainty about the future path of oil prices. While the spot price of Brent is \$115/bbl, the futures contract for December 2024 trades at only \$83/bbl (**Chart 59**).

Still, the possibility exists that oil prices will fall over the next 12 months, even in the absence of a global recession. President Biden is set to visit the Middle East in a few weeks. The conventional wisdom is that he will come away emptyhanded. That may be too pessimistic. The Saudis do not want the US to lift the embargo on Iranian crude, but if Biden

threatens to do so, they may offer to raise production instead. From the Saudis' point of view, it is preferable that they be the ones to pump more oil rather than have their archenemies, the Iranians, do it.

The Outlook for Gold



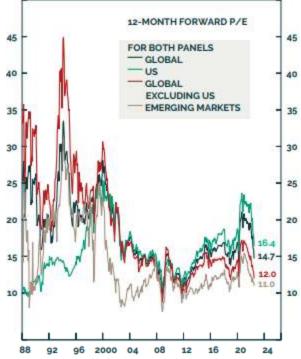
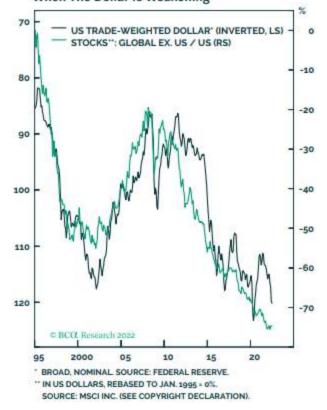
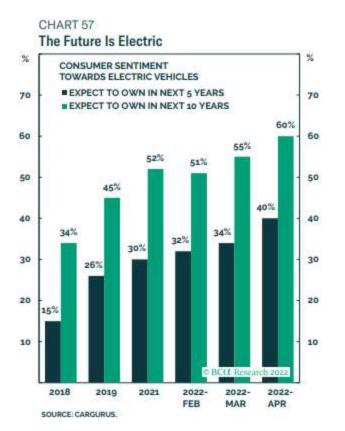


CHART 42 Non-US Stocks Tend To Outperform When The Dollar Is Weakening





The Fed's hawkish pivot has significantly reduced the odds of a sustained inflation overshoot. This reduces the attractiveness of owning gold. That said, a weaker dollar has historically been good news for gold prices. A shift in investor demand from cryptos – which many investors bought for their alleged "anti-fiat" qualities – could also benefit gold. For now, we recommend a neutral allocation to gold.

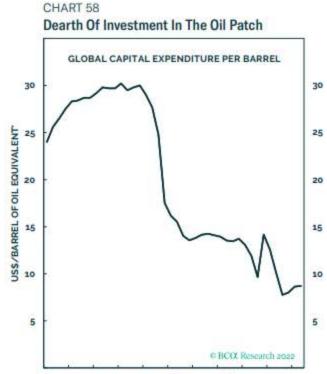
All of our clients investing in individual stocks have 1 or 2 BDCs. They must meet our insider buying criteria, and be recommended by our BDC analyst. From Verdad on June 21:

High Yield, High Volatility

Business development corporations are hyper-cyclical investments

By: Greg Obenshain & Ethan Weinstein

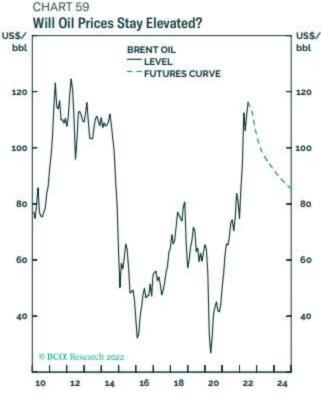
Every cycle we receive breathless warnings of the imminent implosion of the high-yield market, and with good reason. The junkiest bonds tend to sell off much more dramatically than investment-grade debt and often prove to be the canary in the coal mine for the broader economy. This has been true since the earliest days of the high-yield market. The buyout boom of the 1980s led to the high-yield bust of the early 1990s, when the average



2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

IN 2015 US DOLLARS. SOURCE: US EIA

NOTE: BASED ON PUBLIC FINANCIAL STATEMENTS FROM GLOBAL OIL AND NATURAL GAS COMPANIES. THE VALUE FOR Q4 2015 HAS BEEN INTERPOLATED.



price of bonds dropped to 70 cents on the dollar and the yield reached 21%. That performance was repeated in the great financial crisis and has been repeated to a lesser extent in every other crisis.

But this time is different. Not because high-yield spreads aren't vulnerable, but because the greatest risks in credit markets now reside in loans, not bonds. Whereas the early leveraged buyouts were financed by high yield, most buyouts are now financed by loans. As the buyout business has boomed over the last decade, so has the loan market. As we argued in "The Loan Engine," much of the lending in the loan market is risker than in the high-yield market.

For the most part, none of this affects public investors. Most loans are made through private credit funds or through hedge funds. But there is a notable exception: Business Development Corporations (BDCs).

Created in 1980 through the Small Business Investment Incentive Act, BDCs are companies specifically set up to make loans to US small businesses. So long as they distribute 90% of their taxable income as dividends to shareholders, they pay no corporate taxes. And for retail investors looking for yield, BDCs often offer yields in the high single digits and sometimes over 10%.

Public BDCs raise about half their investment funds from public shareholders and the rest through borrowing. Most assets in BDCs are loans to small businesses. In some cases, these are directly originated by the BDC, but, increasingly, these loans are financing the booming buyout market and are loans funding private equity deals. This makes BDCs one of the few ways that retail investors can get access to private equity debt. And because BDCs use leverage, the performance of these vehicles is highly sensitive to the loan sector.

Below we show the average asset composition of 10 large public BDCs.

| Figure 1: Asset | Composition | of Select BDCs |
|-----------------|-------------|----------------|
|-----------------|-------------|----------------|

| Security | % of Assets |
|-----------------------|-------------|
| 1st Lien | 67% |
| 2nd Lien | 16% |
| Unsecured & Preferred | 4% |
| Equity & Other | 13% |

Source: Company filings, Verdad Analysis. BDCs: ARCC, AINV, HTGC, ORCC, FSK, CION, CGBD, PFLT, PSEC, MAIN

The composition is relatively conservative, with over 70% of assets in secured debt, which is typical of BDCs. But while it is secured, almost all of it is below investment grade (high yield), as would be expected of loans to small companies.

BDCs earn income and gains on their investments, and 2021 was a very good year for BDCs. Below we break down the 2021 investment returns for the 10 large BDCs from Figure 1.

Figure 2: Average Return on Investment for 10 BDCs

| | | With Normalized |
|----------------------------|-------------|--------------------|
| | 2021 Actual | Gains |
| Interest & Dividends | 7.7% | 7.7% |
| Fees | 0.9% | 0.9% |
| Gains (book basis) | 4.2% | 1.0% |
| Gross Return on Investment | 12.8% | 9.6% |
| Expenses & Fees | -2.9% | -2.2% |
| Net Return on Investment | 9.9% | 7.4% |

Source: Company filings, Verdad Analysis.

BDCs: ARCC, AINV, HTGC, ORCC, FSK, CION, CGBD, PFLT, PSEC, MAIN

The BDCs in our sample earned 7.7% interest on their investments. This is relatively high, considering that the single-B high-yield index averaged a 4.5% yield during 2021. BDCs are earning premium yields for both risk and illiquidity. They earned another 1% yield from fees on transactions and a huge 4.2% on price gains from investments. Of these, interest, dividends and fees are relatively stable, but gains are not. That same number was -4.8% in 2020, so we also show a more normalized gain of 1%. In both cases, BDCs earn a relatively high return of 7-9% on their investments.

But the dividend yield to the retail investors is even higher because of leverage. Below we show how a BDC's return on investment flows through to the equity.

Figure 3: 2021 Return on Equity for BDCs

| | | With | |
|--------------------------------------|-------------|------------|--|
| | | Normalized | |
| | 2021 Actual | Gains | |
| Return on Investment | 9.9% | 7.4% | |
| Interest on Leverage | -2.0% | -2.0% | |
| Return after Interest | 7.9% | 5.3% | |
| Leverage (Investments / Book Equity) | 2.0x | 2.0x | |
| Return on Book Equity (NAV) | 15.7% | 10.7% | |

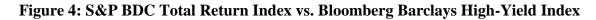
Source: Company filings, Verdad Analysis.

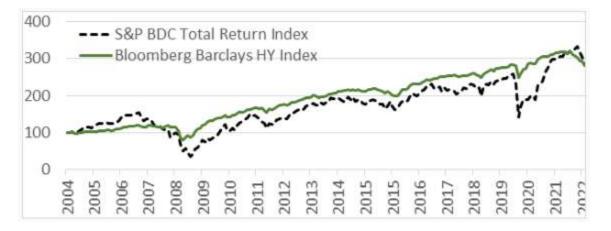
BDCs: ARCC, AINV, HTGC, ORCC, FSK, CION, CGBD, PFLT, PSEC, MAIN

Even if you normalize gains, BDCs return over 10% to the equity. And indeed, the average dividend yield for these BDCs is around 10%, with many paying special dividends this year due to the high gains from 2021.

So far, BDCs seem like a very attractive investment. But high yields very rarely come without risk. As we wrote in "Fool's Yield," high yields often come with higher losses. And indeed, the higher yields on BDCs do not necessarily lead to higher returns. S&P has tracked a market cap-weighted BDC total return index since

December 2004. Over the life of the index, the annualized total return has been 6.2% while the high yield index has returned 6.1%.





Source: Bloomberg. Last data point is June 15, 2022.

The BDC index has barely beaten high yield, despite dividend yields higher than the yield on the high-yield index. The chart above hints at the problem. BDCs are plagued by higher losses because they make riskier investments, and they have leverage that magnifies those losses. When the market gets nervous and high yield sells off, BDCs sell off a lot more. The higher-yielding, less-liquid investments become much scarier in bad times.

Below is the history of the price-to-book value of the S&P BDC Index since data became available in 2014. Despite high dividend yield, currently 9.8% on the index, BDCs tend to trade below the book value of their assets, a convincing sign that the market is pricing the risk of loss.

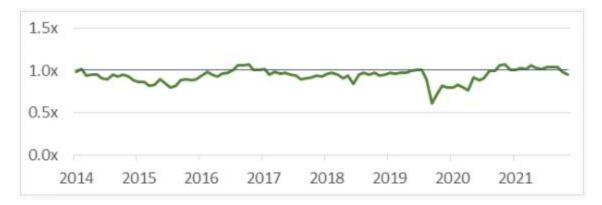


Figure 5: S&P BDC Index Price to Book

Source: Bloomberg

So how should an investor think about BDCs? As a buy-and-hold investment, they have delivered returns comparable to the high-yield index with far more volatility. And there is good reason to believe that this volatility will continue. BDCs are in the middle of the private credit lending boom and the private equity lending boom. Lending booms are not great places to invest, as that is where mistakes are often made. If we have a credit sell-off, BDCs may suffer more than high yield. But the silver lining is that, in the depths of a

crisis, BDCs have proven to be terrific investments. While they may suffer outsize losses, when you buy an investment portfolio of mostly secured loans at 60-70 cents on the dollar, you have a good chance to win.

Using our definition of the business cycle stages, which we derive from the high-yield spread, we can see that, since its inception at the end of 2004, the S&P BDC index has delivered much higher average forward returns starting in recoveries and much lower return across the rest of the cycle.

| | Avg 3mo Forward | |
|----------------------|-----------------|--|
| Business Cycle Stage | Return | |
| Recovery | 14.8% | |
| Growth | 0.6% | |
| Overheating | 1.0% | |
| Recession | -1.2% | |

Figure 6: BDCs Deliver Most of Their Returns in Market Recoveries

Source: Bloomberg, Verdad analysis

The high yields on BDCs come with a cost: huge drawdowns into recessions. But when their blood is in the streets, they can be terrific cyclical investments.

From Morningstar:

Chasing Thematic ETFs' Returns Has Set Investors Up to Fail

By the time you find out about a trend, it's often too late.

Bryan Armour

Jun 7, 2022

Thematic funds have exploded in popularity in recent years. Their allure for investors is plain. They simplify investing in the trends that dominate today's headlines and may shape the future. Thematic funds provide a targeted way for investors to make predictions and put their money where their mouths are.

Thematic funds aggregate stocks by a particular theme, giving investors a tool to buy into a trend without having to deeply analyze individual companies. In many cases it is fund investors, not the funds' portfolio managers, who are expected to identify market-beating themes and try to time their bets right.

The problem is that investors are not particularly good at this—and they're not alone. Professional active managers struggle to beat passive benchmarks, and they have greater resources, training, and experience, and they don't have another day job competing for their time. Some combination of hope, compelling narratives, and a fear of missing out can lead investors to chase thematic funds' returns. In 2020, the market for thematic funds

took off as retail investors entered the market in droves. This, unsurprisingly, coincided with impressive returns for many of these funds.

The bull market that spawned from the coronavirus-driven selloff was the dawn of a new golden age for thematic funds and the predecessor of the meme-stock boom (which led to meme-stock thematic funds, of course). Investors took to social media to bet on companies like Peloton (PTON) and Zoom (ZM) that benefited from the world being stuck in their homes. Asset managers launched three different work-from-home themed exchange-traded funds. WallStreetBets began to enter investors' vernacular, and a cult following for Tesla (TSLA), Cathie Wood, and ARK Invest pushed all three onto the center stage.

The returns were tempting. Among the 111 U.S. thematic ETFs listed prior to May 2019 that were still around as of April 2022, 50 gained more than 50% in 2020. Another 17 had annual returns in excess of 100%—five of which came from Wood's ARK Invest.

It's easy to see the appeal of thematic funds. Several funds' 2020 returns were potentially life-changing for investors, and their investment theses are easily digestible. But as many of these funds climbed ever higher, valuations stretched to the end of their elasticity. In 2022, many have broken.

Now That's a Gap!

Funds' time-weighted total returns can be misleading. While they accurately portray how a fund has performed, they fail to capture the experience of a typical investor. Dollar-weighted returns (aka investor returns) give us a better sense of how investors have fared in a fund by accounting for the timing of their purchases and sales. Generally speaking, there tends to be a gap between fund performance (time-weighted returns) and investor performance (dollar-weighted returns).

That's been the case for thematic funds over the past three years. Red-hot performance has often been the prelude to massive inflows. As money has poured in, returns have sputtered, stalled, and eventually reversed course. Looking back, many investors bought many of these funds near the top and set themselves up for disappointment in the process.

To get a better idea of investors' experience with these funds, I calculated the dollar-weighted investor returns for each of the 111 U.S. thematic ETFs that launched prior to May 2019 and survived through April 2022. Exhibit 1 measures the gap between the three-year total return of the 111 funds in my sample and their investor

| 21 C | | | |
|----------------|---------------------|----------------------|--------|
| Theme | 3-Year Total Return | 3-Yr Investor Return | Gap |
| Technology | 6.6% | -5.1% | -11.7% |
| Physical World | 17.6% | 4.3% | -13.3% |
| Social | 1.7% | -4.8% | -6.6% |
| Overall | 8.6% | -2.8% | -11.4% |
| VTI | 13.0% | 10.2% | -2.8% |

Exhibit 1 Mind the Gap: Thematic Edition

Source: Morningstar Direct, author's calculations. Data from May 2019 through April 2022.

returns. I've grouped the summary statistics according to the broad themes each ETF belongs to within Morningstar's thematic funds taxonomy.

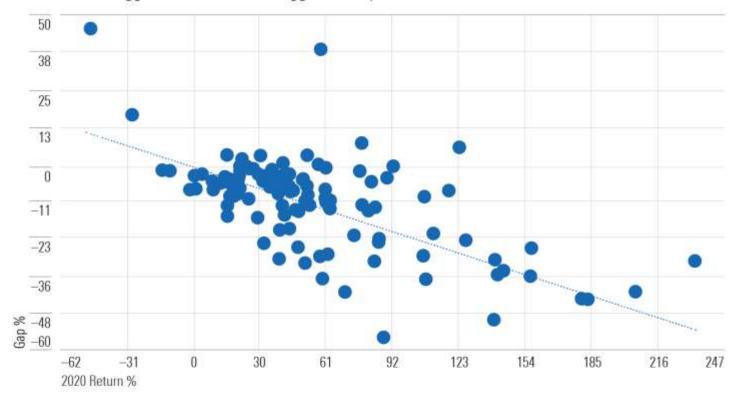
These funds have generally failed on two accounts. First, 71% of the funds in the sample failed to beat the market, as represented by Vanguard Total Stock Market Index ETF (<u>VTI</u>). Said differently, their time-weighted returns were disappointing. Second, and even worse, is that their investor returns were 11.4 percentage points less than their total return, on average. This gap is symptomatic of investors chasing returns and piling in as enthusiasm, valuations, and assets peaked, just as the music was about to stop.

Don't Fly Too Close to the Sun

Exhibit 2 highlights the relationship between each sampled fund's gap in investor and total returns and its 2020 return during the runup to peak inflows. It paints a clear picture of the potential pitfalls of chasing performance. From May 2019 through April 2022, investors in 2020's top-performing thematic funds experienced the largest (negative) gap between the returns they realized and the returns delivered by the funds they owned. Indeed, several of 2020's top-performing thematic ETFs experienced three-year investor returns that were more than 40 percentage points below their three-year total returns.

Among the 10 best-performing thematic ETFs of 2020, all but one had a negative investor return from May 2019 through April 2022. The smallest gap between time-weighted and dollar-weighted returns among these 10 ETFs was 26.6 percentage points.

Unsurprisingly, three of the ETFs in this group hail from ARK Invest. The remaining seven ETFs are all pinned to clean energy themes and gained anywhere from 140% to 233% in 2020. Unlike the ARK Invest funds, these **Exhibit 2** The Bigger the Returns, The Bigger the Gap



Source: Morningstar Direct, author's calculations. Runup return period from May 2019 through February 2021. Data from May 2019 through April 2022.

funds have held on to a decent portion of their gains. Each of these seven clean energy ETFs logged an annualized total return of at least 20% between May 2019 and April 2022, roughly double VTI's return over the same period. Yet the average dollar-weighted return among these top-performing clean energy ETFs was negative 9.8%, translating to an average gap of 37.9% between these funds' total returns and investor returns.

On the flip side, the 10 worst-performing thematic ETFs of 2020 saw a positive gap between their total returns and investor returns. This positive investor experience was driven entirely by the two worst-performing thematic ETFs of 2020: Breakwave Dry Bulk Shipping ETF (<u>BDRY</u>) and U.S. Global Jets ETF (<u>JETS</u>). BDRY dropped by more than 48% in 2020, and JETS lost 29%, as the pandemic brought the global economy to a halt.

But contrarian investors bought the dip, betting on a reversion to the mean for these funds and a reversal of the restrictions imposed by the global pandemic. Between the end of 2019 and June 2021, BDRY's net assets grew 48-fold and JETS' multiplied by a factor of 69. Investors timed their investments in BDRY and JETS well. From April 2020 through March 2021, BDRY gained 159% and JETS 83%. The result was a positive gap of 45.5% between BDRY's time- and dollar-weighted returns and 17.2% for JETS. Investors clearly had more success buying this pair of beaten-down thematic ETFs at depressed prices than those with sky-high valuations.

Chasing Returns Comes With a High Cost

A look at the performance of thematic funds over the past three years is a damning indictment of investors' tendency to chase performance. It's easy to be swept up in narratives and envious of others' success, but investors must consider what is currently priced into the theme they are buying. Buying opportunities are often long gone once investors recognize the trend—and even further gone by the time there are thematic ETFs looking to capitalize on it. This rings especially true for the top-performing thematic funds.

In my analysis, top performers tended to be used worst by investors. This cautionary tale is a good reminder that low-cost, diversified portfolios are tough to beat in the long run.

Follow-ups

We have repeatedly railed about the overvaluations of the FANG stocks, so couldn't resist sharing that 2 of the 4 have dropped enough to now be considered value stocks in the Russell indexes. From the WSJ:

Facebook, Netflix and PayPal Are Value Stocks Now

FTSE Russell is due to rebalance indexes, adding and deleting companies from benchmarks

By <u>Gunjan Banerji</u> Updated June 23, 2022

Investors are positioning for a big reshuffling in the stock market Friday.

Index provider FTSE Russell is due to rebalance its stock benchmarks at the close of trading, adding and deleting companies from indexes tied to trillions of dollars of investments.

Among the stocks on the move are former darlings Meta Platforms, the parent of Facebook, Netflix, and PayPal. All three will jump into the Russell 1000 Value Index, and their weights in the Russell 1000 Growth

Index will dwindle. GameStop, another favorite among individual investors, will make the same trip, though it will lose its place in the growth index.

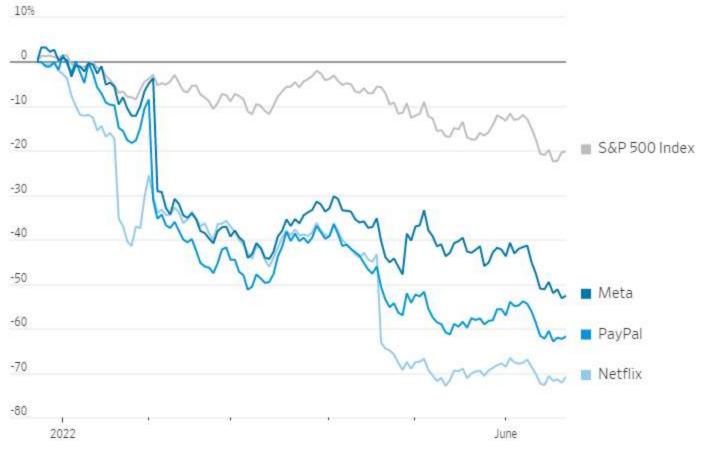
Among the other big changes in store? Tesla will replace Meta as the fifth-largest U.S. company in Russell indexes. And many energy stocks, star performers this year, are being promoted to the Russell 1000 index from the Russell 2000 index of small companies.

FTSE Russell says the value benchmark is populated with companies that exhibit lower price-to-book ratios which reflect the famed investor Benjamin Graham's traditional approach to discovering undervalued companies—and lower expected growth values. The growth benchmark, on the other hand, is supposed to feature companies promising faster growth.

The index producer says it uses a number of different metrics, including growth forecasts and historical sales, to determine whether stocks fall into growth or value buckets, or both. The Russell 1000 Growth Index is down 28% this year and is headed for its worst performance relative to the value gauge in the first half of any year since 2002, around the time the dot-com bubble burst.

The revamp underscores the recent regime change in the stock market. For much of the past decade, shares of technology companies such as Meta and Netflix kept soaring, helping push major indexes to fresh highs. Investors, hungry for shares of companies promising high growth in the future, paid up to hold those stocks.

Meanwhile, value investors, who typically hunt for bargains, often eschewed the flashy social-media giants and software companies and sought other corners of the market. Now, shares of the tech companies have fallen so



Share-price performance

Source: FactSet

fast and hard that they look like bargains, by FTSE Russell's criteria at least. Meta has declined 53% this year, Netflix has tumbled 70% and PayPal has fallen 61%. ...