

December 2022

The WSJ's banner headline to mark the end of a disastrous year for most investors:

Stocks Log Worst Year Since 2008

Tech sector took the brunt, bonds suffered historic selloff, as Fed raised rates sharply

BY AKANE OTANI

This year was a bust for markets.

Stocks tumbled. Bonds were hit by their worst selloff ever. And cryptocurrencies were eviscerated, leading to the collapse of industry giants including FTX.

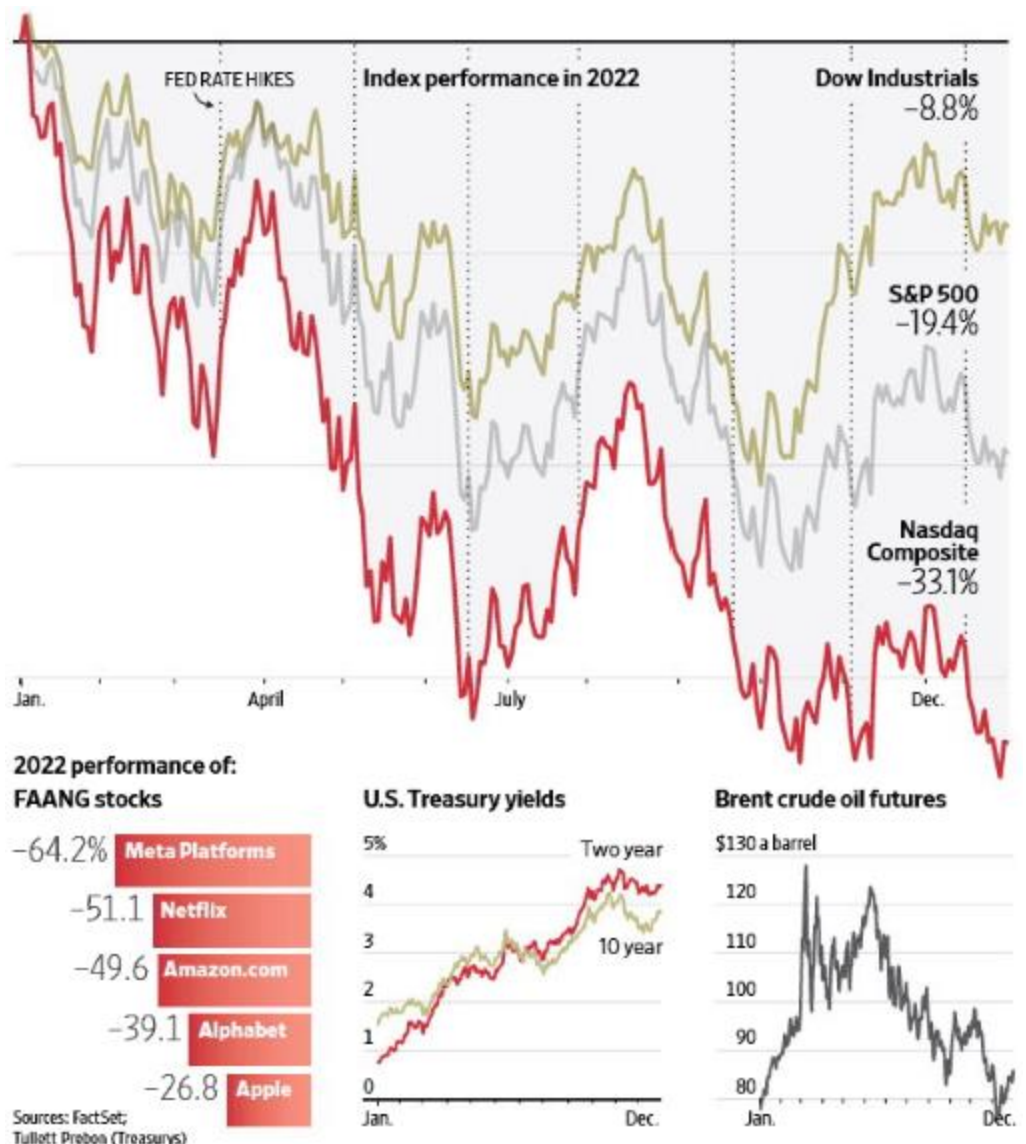
The tumult across global markets had a chilling effect on Wall Street and beyond. Companies that hoped to go public scrapped their plans. Banks that typically cash in on fees for advising on deals and initial public offerings are slashing bonuses because of the drought. And retirees saw their savings shrink.

The S& P 500 fell 19% for the year, while the Dow Jones Industrial Average dropped 8.8%. The Nasdaq Composite declined 33%, hurt by a steep slide in technology shares. All three indexes logged their biggest declines since 2008, the year Lehman Brothers collapsed and the financial crisis began. ...

Bonds had an even more bruising year. The yield on the 10-year U.S. Treasury note—which influences everything from mortgage rates to student debt—climbed to 3.826%, from 1.496% at the end of 2021. ...

How did things go so badly? In short, investors and policy makers were burned by bets that 2021's inflation surge would prove to be transitory.

Instead, price pressures were exacerbated by Russia's



invasion of Ukraine, which sent oil and gas prices soaring in February and March. And then, even as energy prices moderated, inflation stayed stubbornly high. In a bid to bring inflation back down, the Federal Reserve executed its most-aggressive interest-rate increases since the 1980s.

Tighter monetary policy led investors to flee the most popular bets across markets from previous years. When interest rates were ultralow, as they were for more than a decade after the 2008 financial crisis, it cost investors less to bet on shares of often-unprofitable companies promising to deliver big growth years down the line. ...

That explains why so many technology-driven companies were hit so hard this year. The NYSE FANG+ Index, which tracks Meta Platforms, Amazon.com, Apple, Netflix and Alphabet, among other stocks, was down 40% year to date.

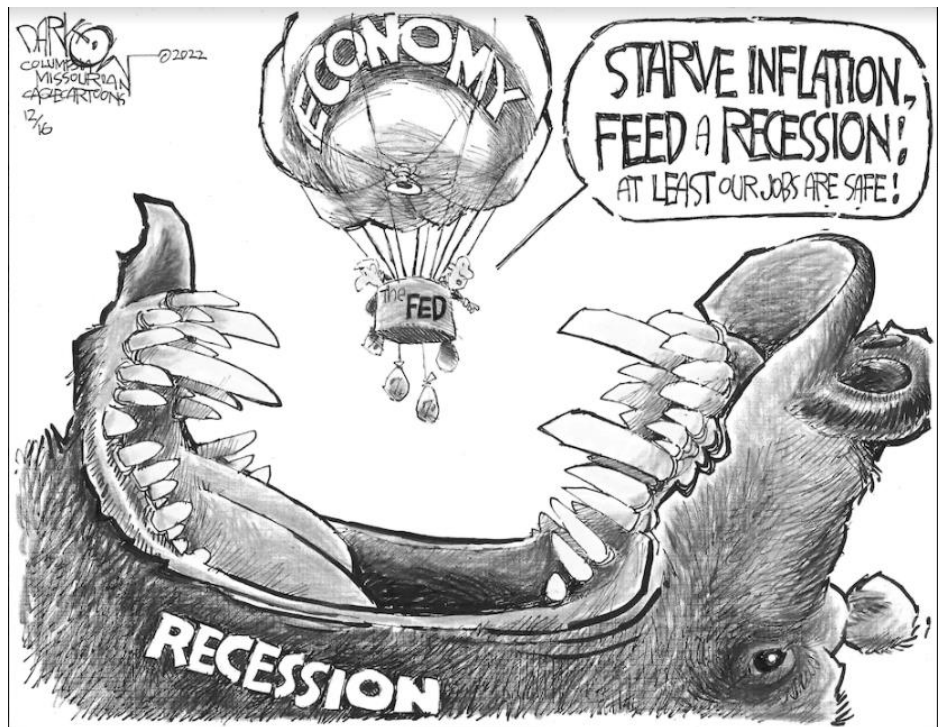
Tesla shares suffered their worst year ever as Chief Executive Elon Musk was embroiled in more controversies at Twitter, for which he took ownership in October. ...

Bitcoin slumped more than 60%, a sharp reversal after it flew to records in 2021. TerraUSD, a cryptocurrency that had been marketed as a safe harbor from volatility, crashed. Customers and clients of such firms as Celsius Network LLC and Three Arrows Capital were left scrambling to get their money back after a wave of bankruptcies. ...

U.S. crude oil prices topped \$130 a barrel in March, reaching a 13-year high, after intensifying Russian attacks in Ukraine prompted lawmakers in the U.S. and Europe to discuss banning imports of Russian oil and energy products. Although oil prices failed to maintain their momentum in the second half of the year, they still posted modest gains for 2022—making for one of the few bright spots in an otherwise glum year for markets. ...

Many economists see the U.S. slipping into recession next year. But the unemployment rate has remained at a historically low level.

Fed Chairman Jerome Powell has signaled that he doesn't view the fight against inflation as anywhere near done (image to the right added). Markets are pricing in something entirely different. Bond traders are betting on the Fed pivoting from raising rates to cutting them as early as next year, according to FactSet data on the interest-rate derivatives market. ...



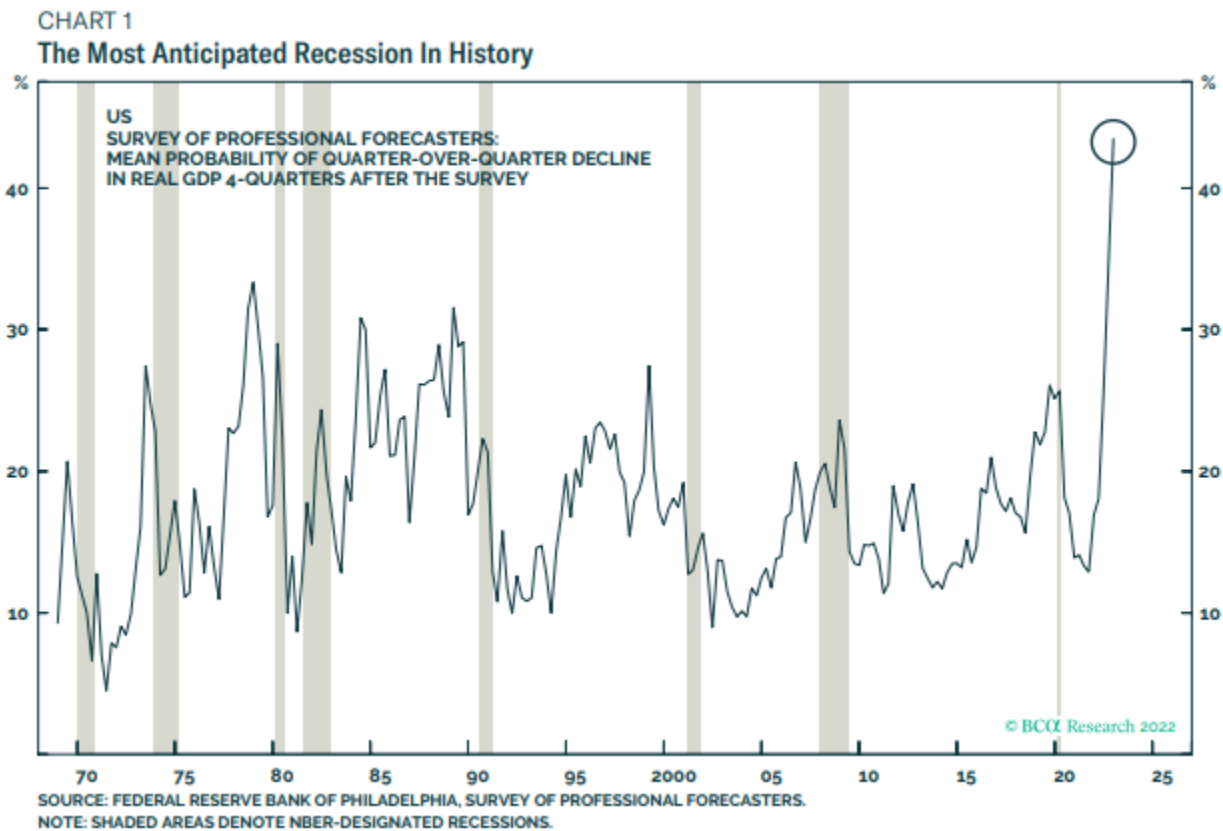
From December 8th's Global Investment Strategy:

Strategy Outlook – 2023 Key Views ...

I. Macroeconomic Outlook

Introduction

Most clients we speak with are highly skeptical that the rebound in stocks from their October lows can be sustained. The consensus view seems to be that stocks will fall over the next six months as a US recession becomes a fait accompli (**Chart 1**). In the minds of most investors, this will set up a good buying opportunity at some point in 2023.



When asked what level of the S&P 500 would present an attractive entry point, eerily, the same number is often heard: 3,200. Why 3,200? Who knows. But the constant invocation of this number raises an intriguing question: If stock market bears succeed in buying back their positions at 3,200, who is going to sell them the shares?

At 3,200, the S&P 500 would be down about a third from its highs in nominal terms and by around 40% in real terms. That is quite a lot. Presumably, the only investors willing to sell their shares at those levels would be those who expected a very deep recession.

We would not rule out a US recession over the next 24 months. However, if a recession does occur, it will probably not start until 2024. More importantly, any US recession is likely to be a mild one – so mild, in fact, that it may end up being almost indistinguishable from a soft landing.

Next to the words “transitory inflation,” no other two words generate more smirks and eye rolls among investors than the words “soft landing.” Yet, as we discuss below, our framework for thinking about growth and inflation suggests that the odds of a soft landing are higher than widely believed. ...

For example, core inflation was remarkably stable at around 1.5% during the first half of the 1960s, even as unemployment steadily declined. ... It was only when the unemployment rate fell to 3.8% in 1966 – two percentage points below NAIRU at the time – that inflation erupted, doubling to more than 3% within the span of 10 months (**Chart 3**).

Although it took more than 50 years ... At its peak in March 2022, labor demand exceeded labor supply by 3.6 percentage points – the largest “jobs-workers gap” in history (**Chart 4**).

This Ain’t 1982

The conventional wisdom is that it will require a lot of economic pain to bring down inflation. ...

Many commentators have argued that the Volcker disinflation provides ample evidence that a deep recession will be necessary to drive down inflation. However, the 1982 recession is a bad analogy for today’s situation.

In the early 1980s, the jobs-workers gap was barely positive. High inflation back then was less the result of an overheated economy and more the consequence of sky-high embedded inflation expectations.

As **Chart 6** illustrates, most people in the early 1980s expected inflation to average nearly 10% over the remainder of the decade. Paul Volcker had no choice but to engineer a deep recession in order to bring down inflation expectations.

Jay Powell does not need to engineer a deep recession because long-term inflation expectations remain well anchored. The TIPS market suggests that inflation will fall close to 2% by the end of 2023 and then stay near 2% for at least the next three decades (**Chart 7**). Median inflation expectations 5-to-10 years out in the University of Michigan survey clocked in at 3% in November, roughly in line with where they have been since the mid-1990s.

Also, keep in mind that Paul Volcker inherited high inflation. In contrast, Jay Powell was the Fed chair when inflation surged. The only way that Powell can rehabilitate his tattered image is by engineering a soft landing. As he acknowledged last week, it would be preferable to “go slower and feel your way a little bit” than “crash the economy and clean up afterwards.”

CHART 3
Inflation Started Accelerating Quickly Only When Unemployment Reached Very Low Levels In The 1960s

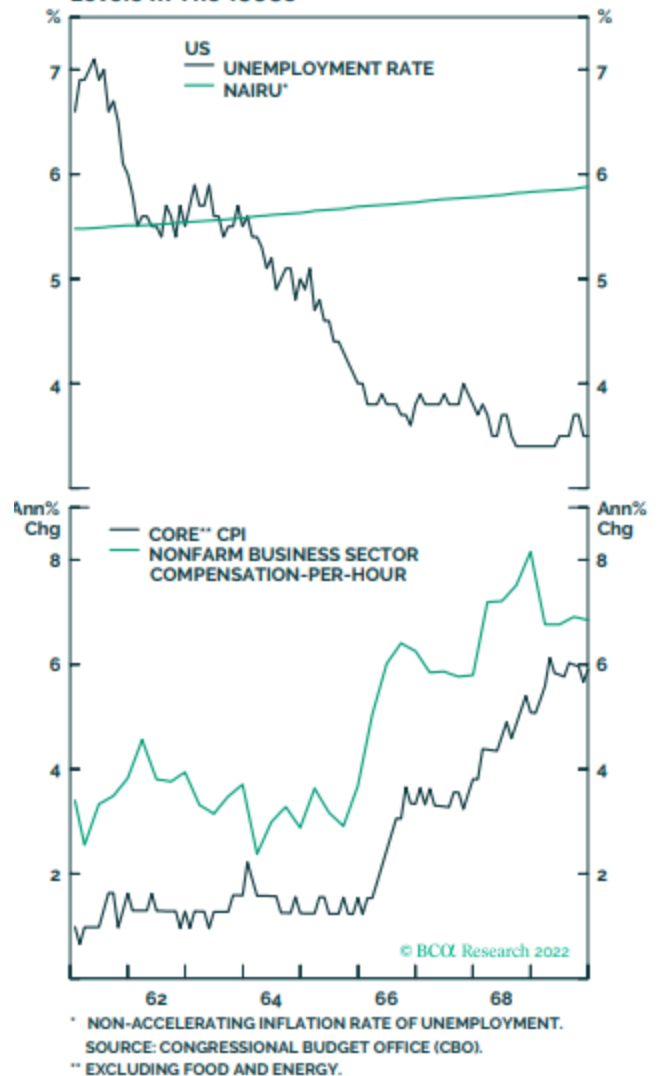
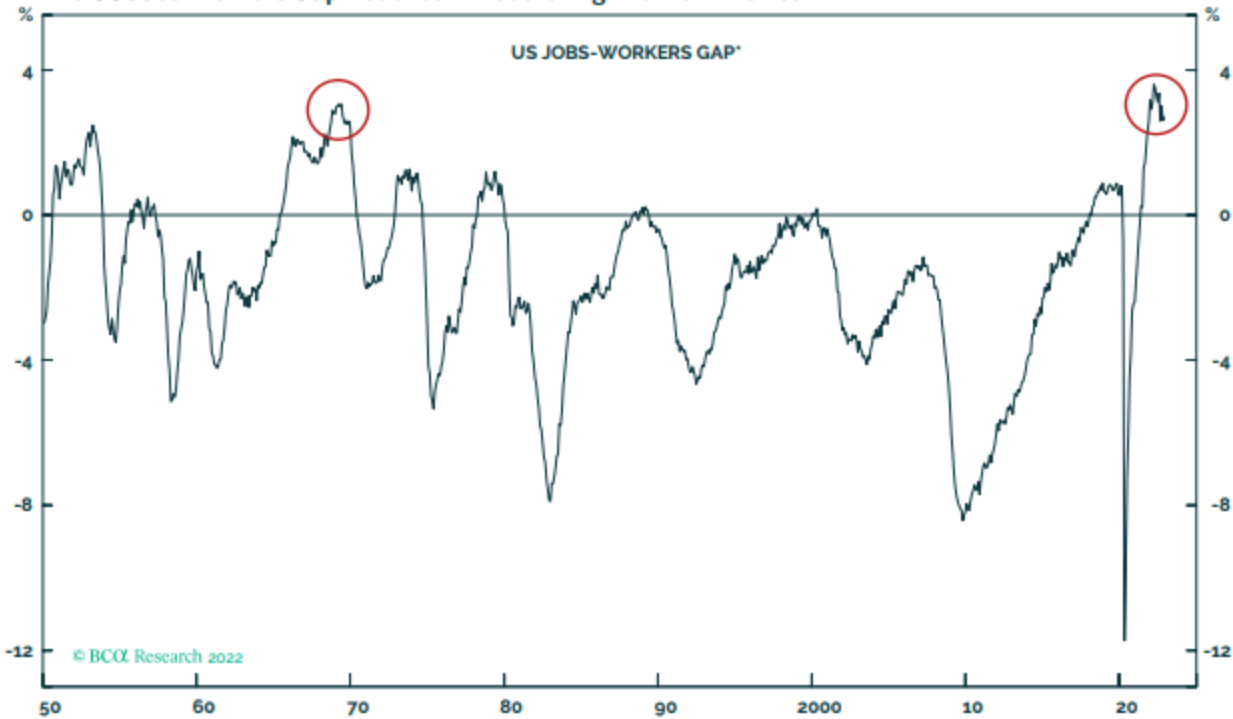


CHART 4

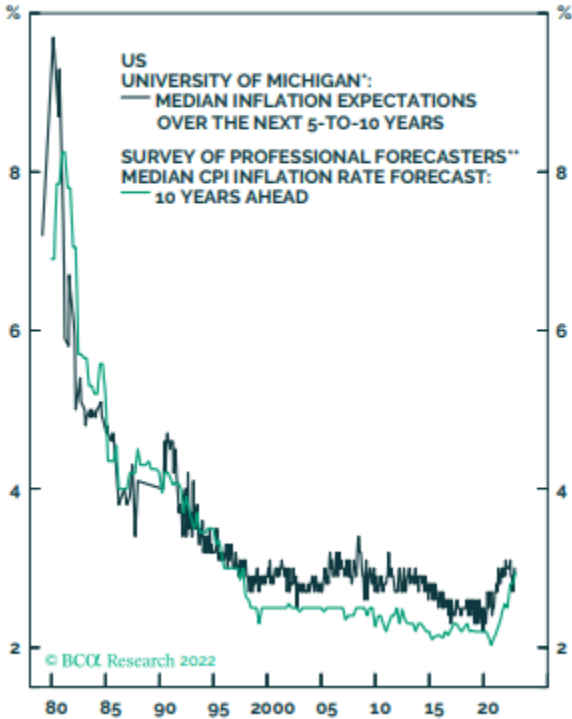
The US Jobs-Workers Gap Reached A Record High Earlier This Year



* JOBS-WORKERS GAP IS THE DIFFERENCE BETWEEN LABOR DEMAND (SUM OF JOB OPENINGS AND CIVILIAN EMPLOYMENT) AND LABOR SUPPLY (CIVILIAN LABOR FORCE) AS A PERCENT OF THE LABOR SUPPLY. HISTORICAL JOB OPENINGS DATA IS EXTENDED USING THE CONFERENCE BOARD'S HELP WANTED INDEX AND NOVEMBER JOB OPENINGS DATA IS ESTIMATED USING INDEED JOB POSTINGS DATA.

CHART 6

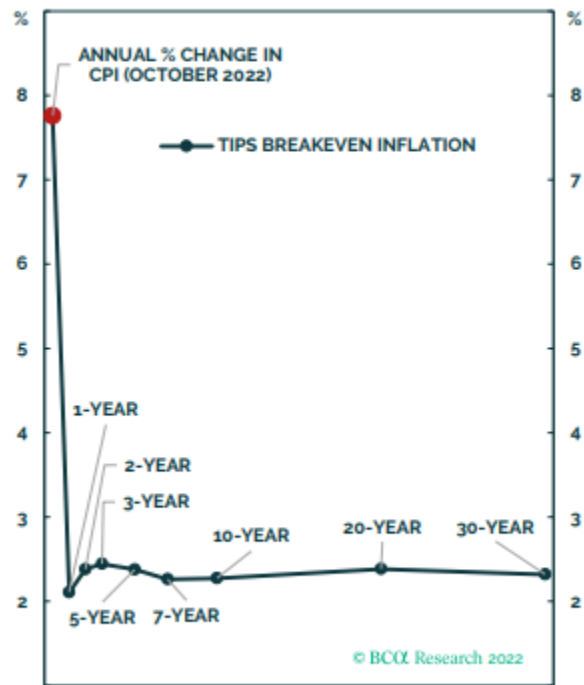
Long-Term Inflation Expectations Remain Well Anchored (I)



* SOURCE: UNIVERSITY OF MICHIGAN, SURVEY OF CONSUMERS.
** SOURCE: FEDERAL RESERVE BANK OF PHILADELPHIA.

CHART 7

Long-Term Inflation Expectations Remain Well Anchored (II)



© BCO Research 2022

Supply Shocks and Spending Shifts

The combination of looser fiscal and monetary policies caused aggregate demand to swell during the pandemic. This pushed up inflation. Two other shocks compounded the inflationary consequences.

First, generous unemployment benefits and stimulus checks, along with the general reluctance that many people had towards working outside the home, curbed labor supply. The hit to aggregate supply was exacerbated by lockdowns and other supply-chain dislocations.

Second, the pandemic led to a shift in the mix of spending – from services to goods. ...

Both of these shocks have unwound, at least to some extent. On the supply side, while the labor force participation rate for older workers is still depressed, the participation rate for prime-age (25-to-54) workers is close to where it was, on average, in 2019.

The New York Fed's Global Supply Chain Pressure Index is approaching pre-pandemic levels. This is reflected in falling supplier delivery times, lower shipping costs, and decreased memory chip prices. Inventory levels are also returning to normal.

Gasoline and agriculture prices have dropped, with the futures suggesting further disinflation ahead.

A leveling-off in goods spending is helping to relieve supply-chain bottlenecks. In real terms, spending on goods has declined by 3.3% from its peak in March 2021. Goods spending is still 6.4% above its pre-pandemic trend line, but this is down from a peak of 16.4% in March 2021. Goods prices fell in October, and we expect them to keep falling well into next year.

Services Inflation Should Moderate

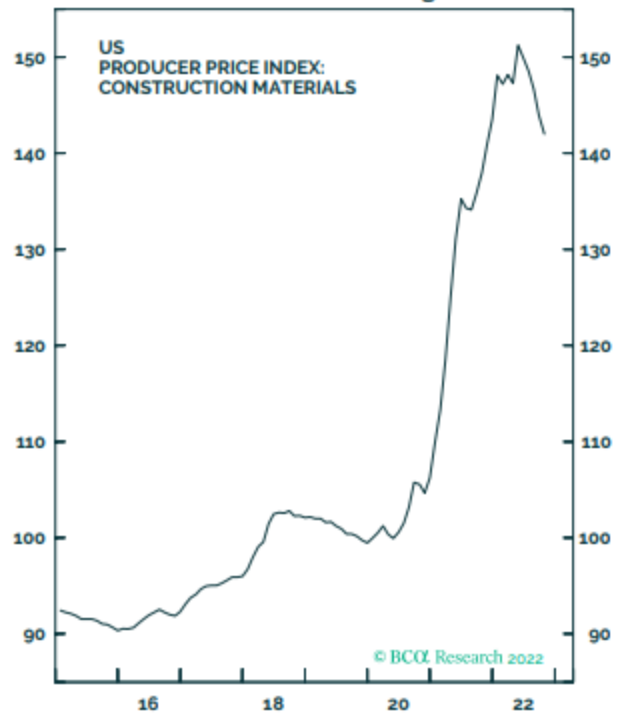
In contrast to goods inflation, services inflation remains elevated. The two most important drivers of services inflation are wages and shelter costs.

Despite the upside surprise to average hourly earnings in November, wage growth is showing some signs of moderation. Both the 6-month and 12-month change in average hourly earnings remain well below their peak. Wage growth in the highly cyclical leisure and hospitality sector has swooned, a sure sign that hiring constraints for low-skilled workers are easing.

Forward-looking indicators for wage growth such as job openings, the quits rate, business surveys, and the perceived easiness of finding work are all pointing lower.

Shelter accounts for 42% of the core CPI basket and 57% of the core services CPI basket. Outside of shelter, core CPI declined in October, taking the 3-month annualized change from 8.4% in June to only 3.5% in October.

CHART 16
Supply-Side Constraints Limited Home Building During The Pandemic, Helping To Push Up Home Prices And Rents On New Listings



SOURCE: BUREAU OF LABOR STATISTICS (BLS).
NOTE: SHOWN REBASED TO JANUARY 2020 = 100.

The pandemic led to a surge in the demand for housing, amplified in part by the proliferation of work-from-home practices. Due to a kinked supply curve for new housing construction, builders were unable to secure enough materials and workers to meet rising demand for homes (Chart 16). As a result, both home prices and rents on newly listed properties surged.

The latest data suggest that rents on new listings are barely rising and, by some measures, may even be falling. Empirically, rental growth for new properties coming onto the market leads the official measure of shelter inflation by about 12 months. As Jay Powell highlighted in last week's speech, this is something that the Fed is well aware of.

... despite the fact that housing starts have been trending lower since April, construction employment remains at multiyear highs, reflecting the need for homebuilders to finish previously committed projects.

Home prices are still near record levels and will decline over the next few years, certainly in real terms and probably in nominal terms as well (Chart 19). Falling home prices will curb aggregate demand. That said, compared to other asset prices, home prices tend to move fairly slowly.

It took six years for home prices to bottom after the GFC housing bust, and that occurred against a backdrop of

CHART 19
Real House Prices Are Still Near Their 2006 Peak

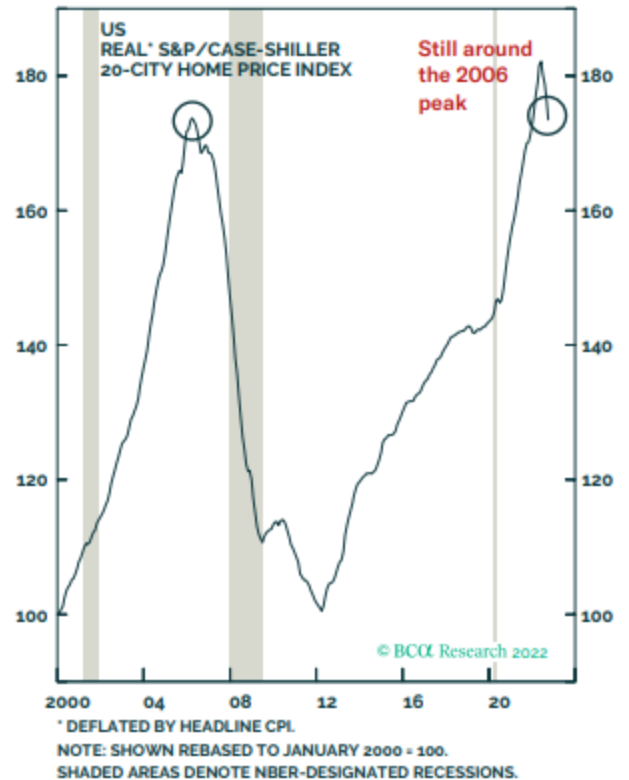


CHART 21
... And Banks Are Much Better Capitalized

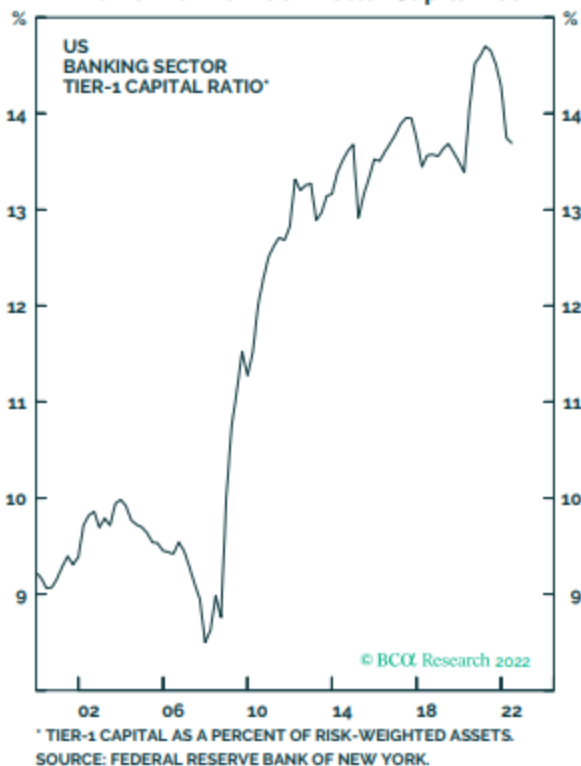
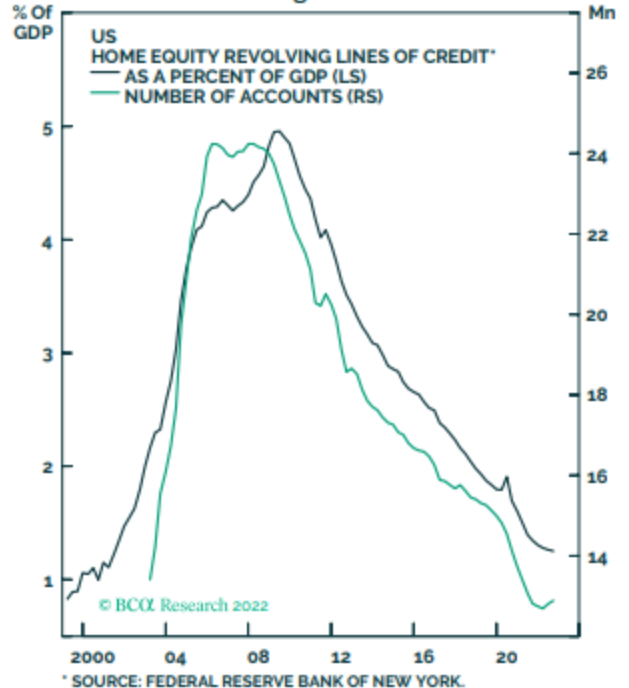


CHART 22
After The Housing Bust, Households Cooled On The Idea Of Using Their Homes As ATMs



rising foreclosures and fire sales, as well as a general glut of newly built homes.

The quality of mortgage lending has been strong since the GFC, as evidenced by higher FICO scores on new loan originations and the fact that mortgage debt declined as a share of GDP even as home prices rebounded. Bank balance sheets are also in relatively good shape (**Chart 21**).

Unlike during the housing bubble, homeowners have not been extracting equity from their homes to finance consumption. Outstanding balances under home equity lines of credit have declined from a peak of 5% of GDP to only 1.3% of GDP today (**Chart 22**). The diminished use of home equity lines of credit implies that the link between consumption and home prices is not as strong as it once was.

Higher mortgage rates will curb discretionary spending, but again, this will only occur with a fairly long lag. Less than 10% of US homes turn over every year (**Chart 23**). Considering that 96% of mortgages are of the fixed-rate variety, this means that it will take some time for more homeowners to feel the pinch from higher rates.

The lags between changes in the value of the US dollar and the trade balance are especially long – close to two years based on a simple comparison of the two series. While the real broad trade-weighted dollar has eased off its highs, it is still 10% stronger than it was in early 2020.

Insulation

Beyond the normal lags in monetary policy, four additional factors should delay the onset of a US recession until 2024.

First, job openings remain elevated. In October, there were 1.7 job openings per unemployed worker, nearly 50% higher than in December 2019. Job openings were plentiful across all industry groups. For the foreseeable future, most workers who lose their jobs will have little difficulty in finding new ones. This will prevent the unemployment rate from rising sharply.

Second, after contracting for five straight quarters, aggregate real disposable personal income rebounded in the third quarter – a trend that should continue into 2023 (**Chart 26**). It is highly unusual for real wages to decline when unemployment is this low. As inflation continues to fall, real wage growth will turn positive, even if nominal wage growth does decelerate.

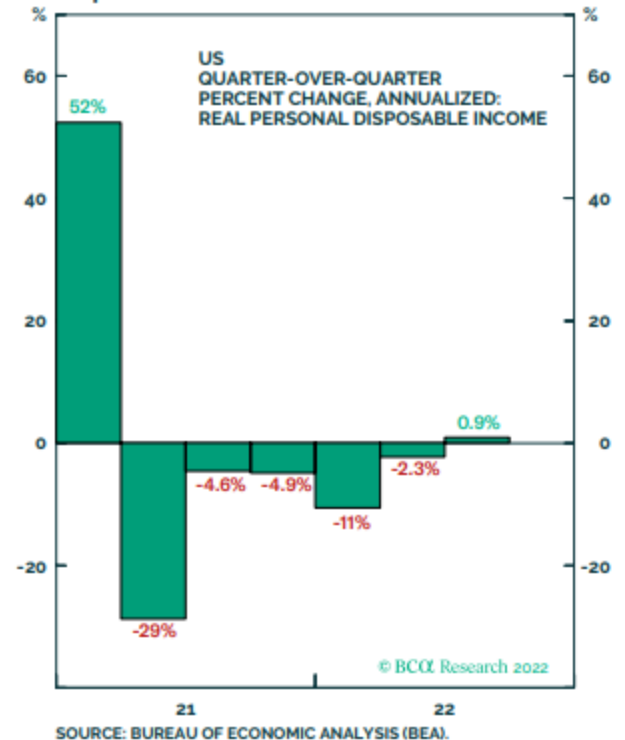
CHART 23

The Impact Of Higher Mortgage Rates On Consumption Will Be Gradual Thanks To The Prevalence Of Fixed-Rate Mortgages And Historically Low Housing Turnover



CHART 26

Rebound In Aggregate Real Disposable Income Should Continue

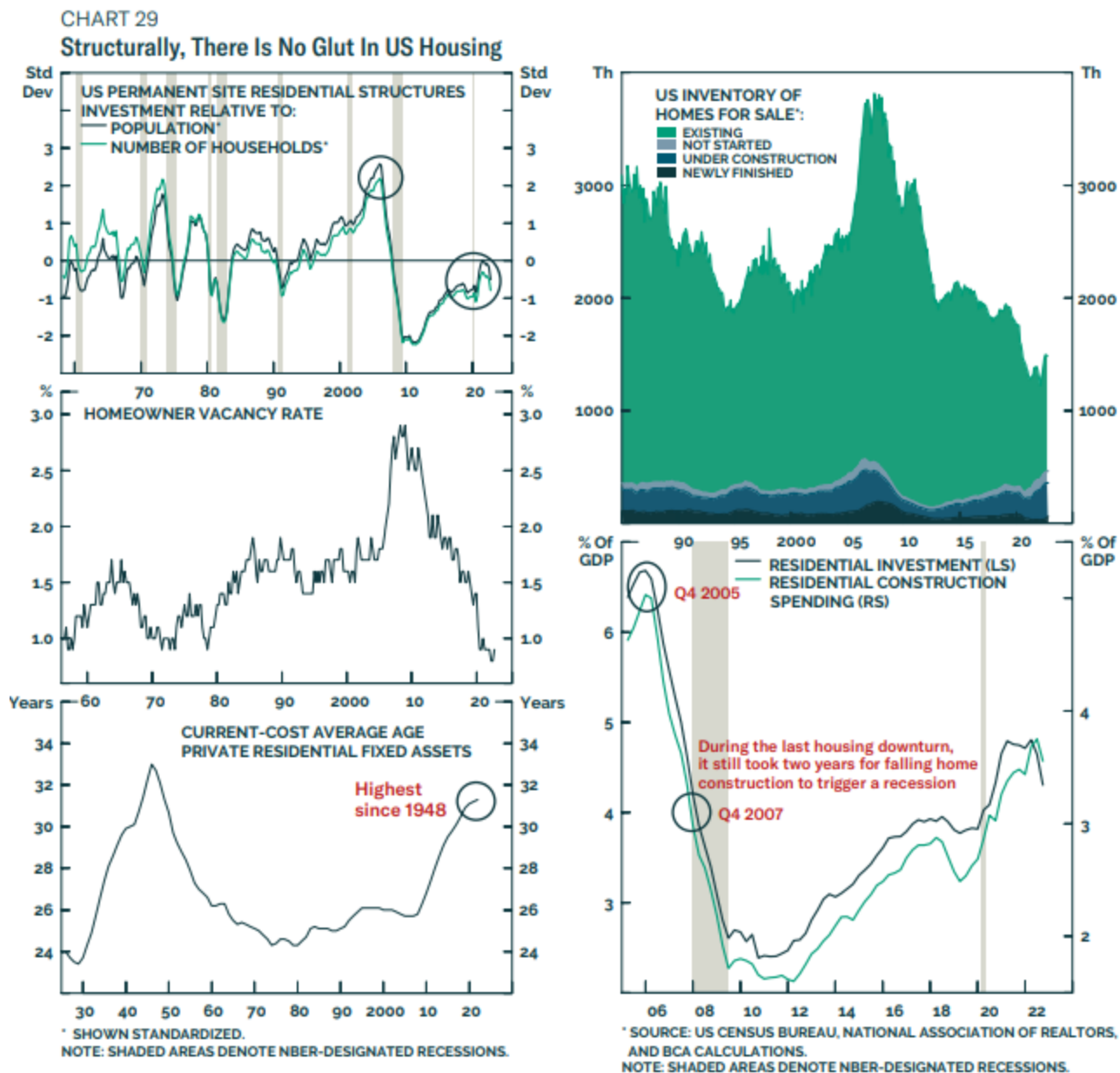


Third, US households are still flush with cash. We estimate that US households are holding about \$1.5 trillion (5.8% of GDP) in excess savings. Admittedly, these savings are skewed towards higher-income earners. Nevertheless, even the highest-earning 10% of households spend about 80% of their income, suggesting that the bulk of these savings will eventually enter the economy.

The fact that real PCE is on track to rise by 3.7% in Q4, according to the Atlanta Fed's GDPNow model, indicates that the combination of rising real incomes and pent-up savings is having a stimulative effect.

Fourth, there is plenty of pent-up investment demand. Real core capital goods orders are 21% below where they were in 2000. The average age of the nonresidential capital stock has increased to the highest level since 1962. US manufacturing capacity has been shrinking since 2008. Thus, while business surveys of capex intentions point to some softness ahead, the decline in capital spending is unlikely to be dramatic.

Likewise, there is not much scope for homebuilding to fall significantly from current levels (**Chart 29**). The homeowner vacancy rate is at a record low, reflecting the fact that homebuilding has failed to keep up with household formation growth for the past 15 years. The average age of US homes now stands at over 31 years,



the highest since 1948. While rising, the overall inventory of homes available for sale is still 16% below pre-pandemic levels. During the last housing bust, there was a gap of two years between when home construction peaked and when the recession began. The gap could end up being even longer this time. ...

If inflation continues to decline over the course of 2023, the Fed will be able to cut rates more easily in 2024 in response to a slowing economy. The zero-lower bound constraint is no longer a major impediment to easing monetary policy.

Unlike in 2008, there is no glut of homes. And unlike in 2001, there is no capex glut. Today, the more interest-rate sensitive sectors of the US economy are not suffering from any major supply imbalances. These sectors will respond relatively quickly to lower interest rates, buffering the economy in the process.

Lower interest rates will also bring down the discount rate used for valuing stocks, partially offsetting the impact on equity prices from lower corporate earnings. Thus, if the US does experience a recession in 2024, it is likely to be a mild one.

Europe: Light at the End of the Tunnel

In contrast to the US, Europe's inflation problem largely stems from the disruption to energy supplies. Wage growth across most of the euro area has been lackluster, and unlike in the US, durable goods spending is still well below its pre-pandemic trend.

Thankfully, despite the recent cold snap, longer-term weather forecasts call for a milder-than-normal winter. This is important considering that natural gas accounts for about 40% of Europe's heating usage.

The December 2023 futures contract has risen from last month's lows but is still 49% below its August 2022 peak. The futures market points to the potential of a further drop in gas prices in 2024.

With uncharacteristic haste, Europe is moving to displace Russian gas. Germany completed the construction of its first floating LNG terminal last month. A total of five such floating units are slated to be operational by the end of 2023. New pipelines are being constructed. Just last week, gas started flowing through from Norway to Poland.

In the meantime, efforts to conserve gas are proving less onerous than previously feared. According to a recent Ifo Institute survey, 75% of German companies reported that they were able to curb gas usage without cutting production. Defying expectations of a big decline, euro area industrial production has remained resilient this year.

Fiscal policy is helping matters. European governments have announced €700 billion (4% of GDP) in income support measures for households and businesses. In Germany, the tally has reached over 7% of GDP.

Households have the ability to draw down accumulated savings to finance spending until the energy shock subsides. Excess savings in the euro area stand at around €900 billion. Credit growth remains above pre-pandemic levels.

The competitiveness gap between Germany and the periphery has disappeared. Along with a more proactive ECB, this reduces the odds of a repeat of the euro crisis.

China: A Covid Superwave is Inevitable... But Markets Will See Through it

The Chinese authorities had hoped to keep the virus at bay until next spring, by which time the combination of warmer weather, a larger stockpile of anti-viral drugs, and possibly new mRNA vaccines would have permitted a more orderly reopening campaign.

That may no longer be possible. While the number of new daily cases have declined over the past week, they still stand above 25,000. In the age of Omicron, the only way to lower the replication number to below one, and keep it there, is by imposing the sort of extended draconian lockdowns that residents of Shanghai were subjected to earlier this year. That does not appear to be politically feasible anymore, which means that the number of new infections will likely increase exponentially over the winter months.

Officially, China reported 610 deaths from 0.76 million cases during the Covid wave this spring, implying a fatality rate of only 0.08% (slightly less than that of the seasonal flu). Government officials have begun to highlight this point in an effort to mollify public concerns.

They have also ramped up efforts to vaccinate the elderly. While 58% of China's population has received the recommended three-dose regiment, that falls to only 40% for those over the age of 80.

A recent study based on Hong Kong residents published in *The Lancet* indicates that three doses of Sinovac are nearly as effective in preventing severe illness and death as the Pfizer BioNTech vaccine. According to a study in *Nature Medicine*, China could cut the death toll by 61% by fully vaccinating everyone over the age of 60.

A huge wave of Covid cases across China would undoubtedly disrupt global supply chains. Fortunately, inventories of key inputs are generally higher now than they were a year ago, which will help insulate the global economy from the shock. Investors have been on this rollercoaster before and are likely to look through the near-term dislocations, focusing on the inevitable growth boost that the end of lockdowns will produce.

Goldman Sachs estimates that the zeroCovid policy has reduced Chinese GDP by 4-to-5 percentage points. Given that China accounts for one-fifth of global output, jettisoning the policy could raise global GDP by as much as one percentage point – a growth dividend that does not appear to be incorporated in the current downbeat consensus GDP forecasts (**Chart 39**).

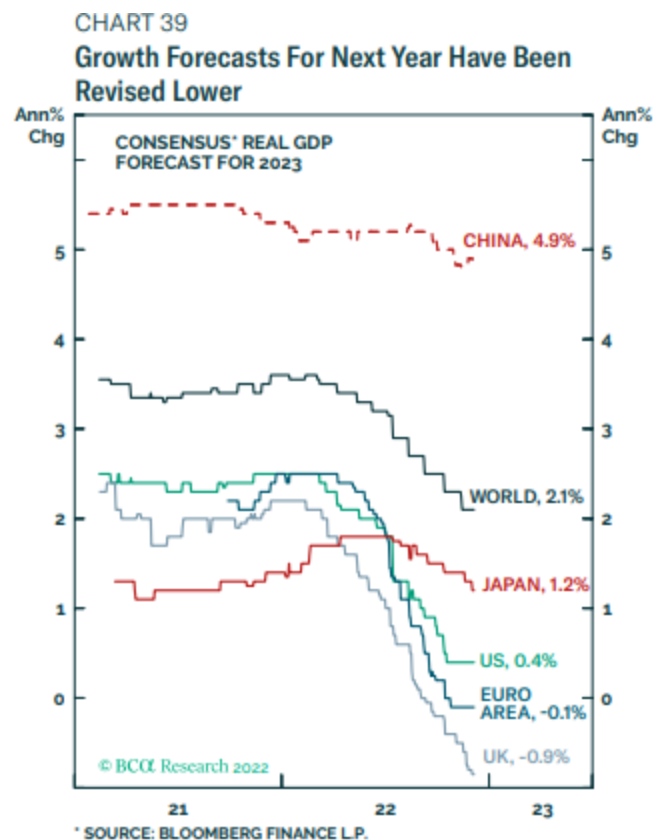
The end of pandemic restrictions will not end all of China's problems, of course. The housing market remains in dire straights. To counteract the drag from housing, the authorities are likely to boost fiscal support for the economy, including for property developers who are struggling to secure enough financing to complete projects.

...

II. Financial Markets

A. Global Asset Allocation

The conventional wisdom appears to be that stocks will fall in the first half of 2023 as the US succumbs to



recession but will then rebound in the second half of the year once the first “green shoots” emerge.

We think the exact opposite will happen: Stocks will rise in the first half of 2023 as US inflation falls and unemployment edges only slightly higher, fanning hopes of a soft landing. Stocks will then dip in the second half of the year as the perceived risks of a recession in 2024 escalate.

For the S&P 500, our target is 4,400 for end-June and 4,100 for the end of 2023. As we discuss below, non-US stocks are likely to outperform their US peers next year, with EM equities faring relatively well.

Global bond yields should move sideways in the first half of next year, as the impact of falling inflation broadly offsets the impact of better-than-expected growth data. Yields should drop modestly in the second half of the year as the US economy edges closer to recession. ...

B. Equities

While the rebound in equities since mid-October has lessened their attractiveness, we would not go as far to say, as some strategists have, that stocks are not pricing in any meaningful near-term economic risks. ...

Earnings Estimates Have Fallen

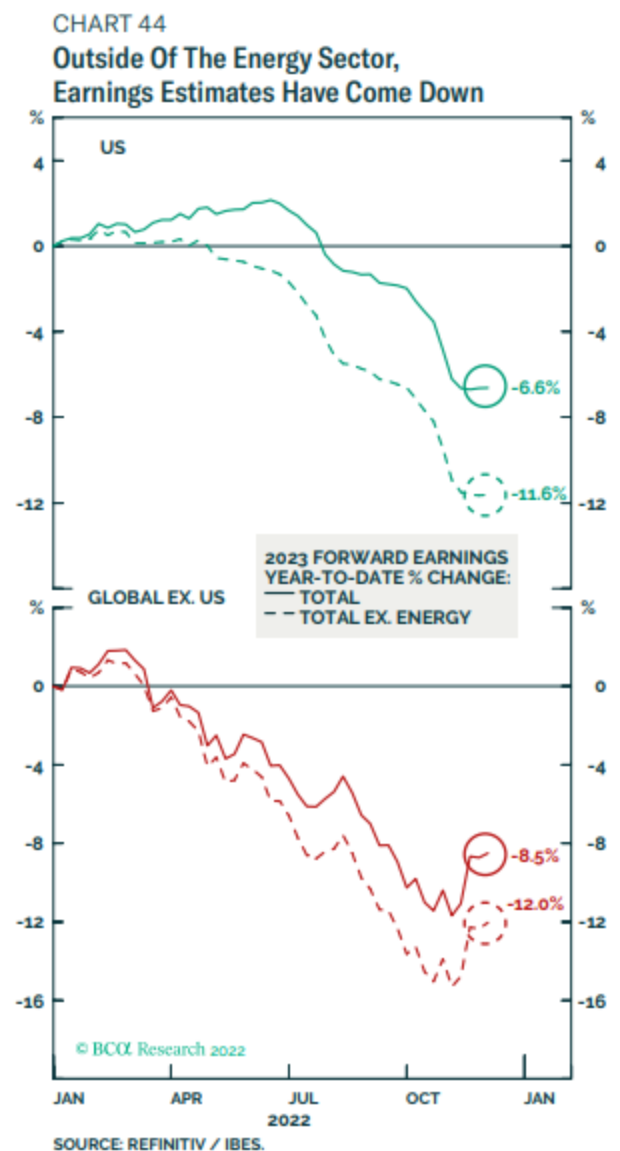
One often hears the argument that this year’s drop in stocks mainly reflects multiple compression, while next year’s drop will reflect earnings downgrades. This ignores the fact that earnings estimates for 2023, outside of the energy sector, have already fallen by around 12% in nominal terms, and by over 15% in real terms, both in the US and abroad, since the start of the year (**Chart 44**).

If global growth surpasses beaten-down expectations next year, history suggests that earnings revisions will be positive not negative. If we are wrong and growth surprises on the downside, bond yields will probably fall more than our baseline projections. While this will not prevent stocks from weakening, it will buffer the blow to equities.

Favor Non-US Stocks and Small Caps in 2023

Non-US stocks trade at 12.1-times forward earnings compared to 17.5-times for the US, one of the biggest valuation discounts on record.

Valuations are never a great timing tool, but when combined with the right macro drivers, they can reveal untapped opportunities. Outside of the US, profit margins are not exceptionally stretched. If growth in economies such as Europe and China surprise on the upside, profits could surprise on the upside as well.



A weaker dollar would disproportionately benefit non-US stocks. As we discuss later, we expect the greenback to weaken next year. ...

Cyclical sectors generally fare best when growth surpasses expectations. That said, cyclicals have had a good run over the past 10 weeks and are no longer as attractively priced as they once were. Energy stocks, in particular, have moved a lot more than one would have expected based on the path of oil prices.

Instead of cyclicals, investors should turn to small caps. US small cap stocks remain very cheap and will benefit from a weaker dollar and stronger-than-expected growth (**Chart 50**).

From Morningstar:

25 Charts on Value Stocks' Big Comeback

Having been out of favor for more than a decade, value stocks have caught back up with growth.

Lauren Solberg

Dec 21, 2022

After more than 10 years of growth stocks leaving value stocks in the dust, the tables have turned. Value is catching up and starting to show signs of leadership.

The past two years had brought some of the widest performance gaps in favor of growth stocks, largely driven by high-flying technology giants. But as the same tech names collapsed in 2022, value stocks have remained buoyant during the bear market, with some value names managing to carve out gains.

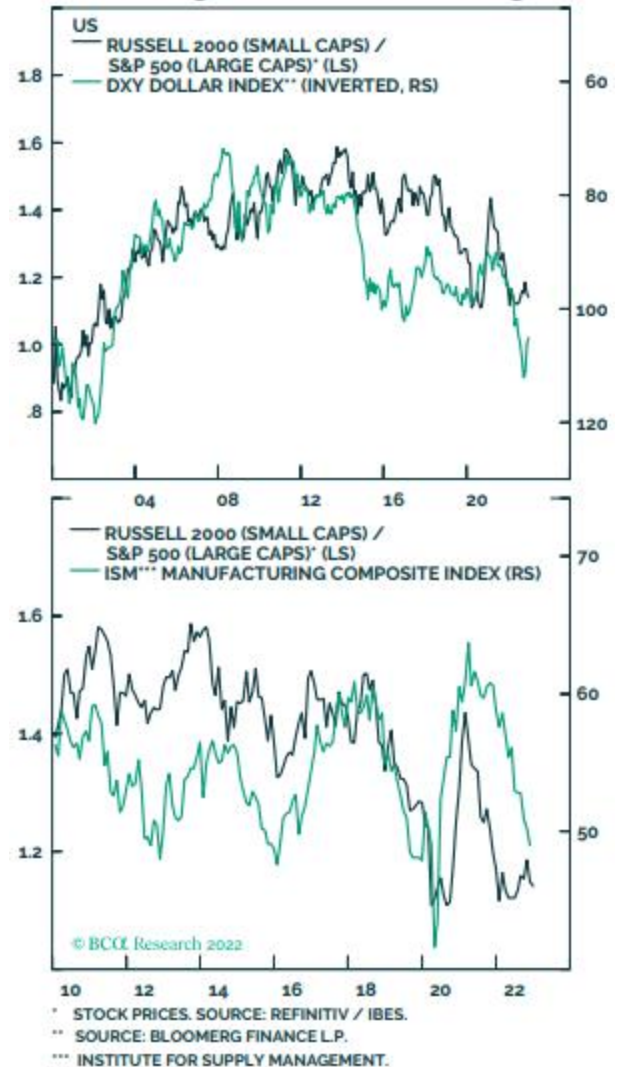
This year through Dec. 16, the Morningstar US Value Index is ahead of its growth counterpart by 33.9 percentage points, the widest that gap has been since the year 2000. Heading into 2022, the Morningstar US Growth Index had beaten the Morningstar US Value Index in nine of the past 10 calendar years. ...

Of course, value's outperformance in 2022 has been relative to the huge losses of growth stocks, and it didn't mean investors necessarily made money on value stocks. The value index lost 1.7% through Dec. 16 compared with a 35.5% decline in growth stocks. ...

Leadership trends between growth and value tend to shift in multiyear cycles ... **and** there are signs that value stocks are starting to take a more durable lead again, because of factors such as rising interest rates and tailwinds for the energy sector.

CHART 50

Small Caps Tend To Fare Well When The Dollar Is Weakening And Growth Is Rebounding

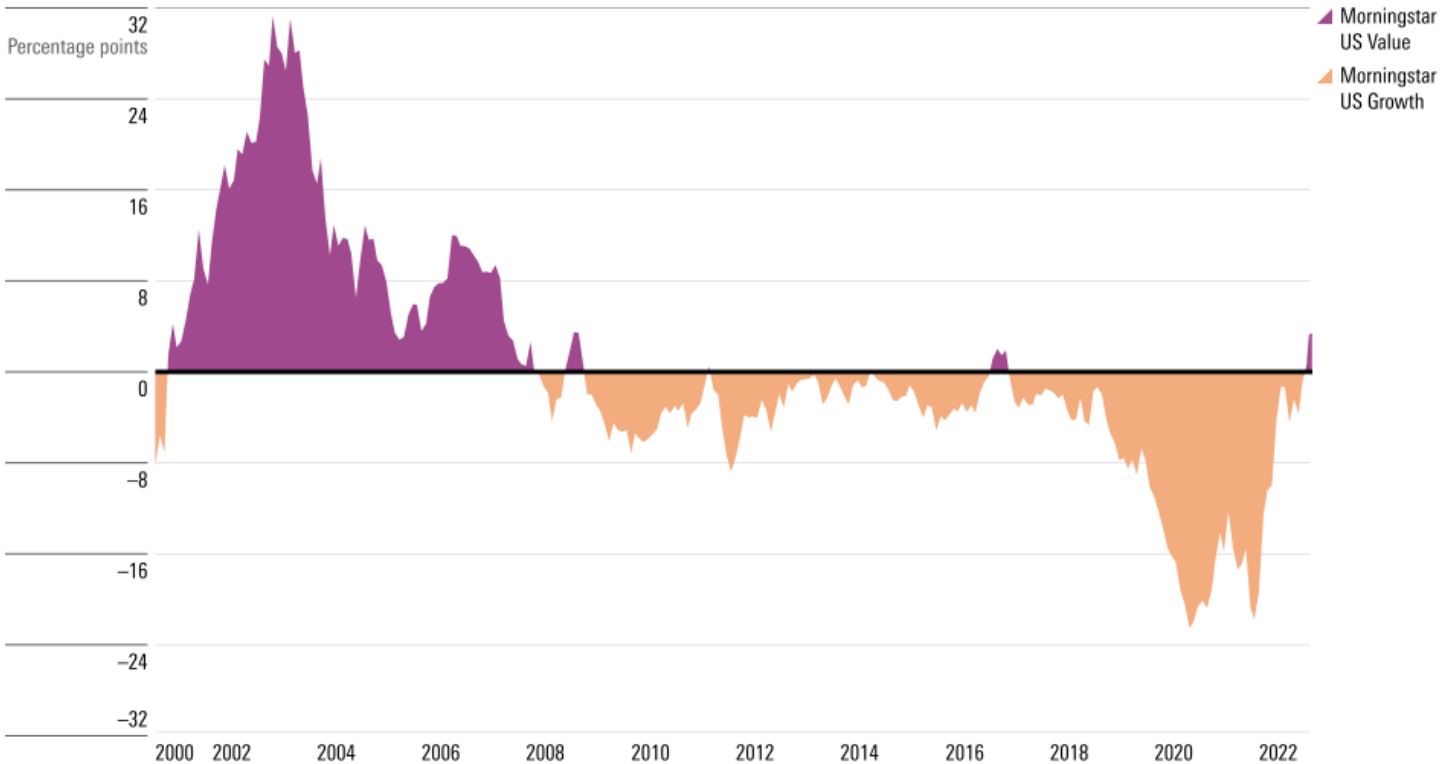


2022 Value vs. Growth Performance



Source: Morningstar Direct, Morningstar Indexes. Data as of December 16, 2022.

Value vs. Growth Performance Gap Three-year trailing excess return.



Source: Morningstar Direct, Morningstar Indexes. Data as of December 16, 2022. Three-year rolling return periods are annualized.

Closing the Gap

By several measures, value stocks are now catching up to growth beyond just 2022's performance.

Except for two brief periods when the Morningstar growth and value indexes ran neck and neck, growth has outperformed consistently since 2008 on a trailing three-year basis.

But now, for the trailing three-year period ended Dec. 16, the Morningstar US Value Index is ahead of the growth index by 3.3 percentage points on an annualized basis. In contrast, at the end of 2021, three-year average annual returns on growth stocks were ahead of value by 19.3 percentage points. ...

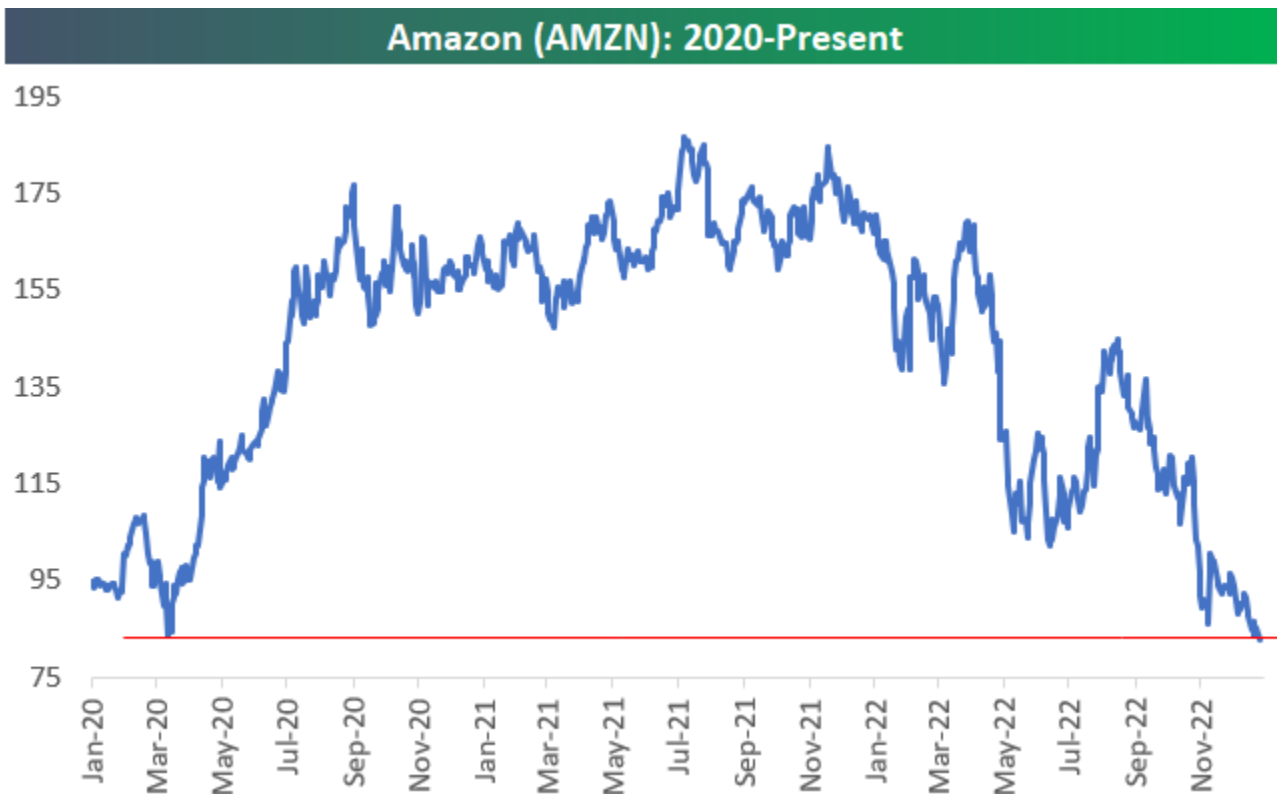
Follow-ups

From Bespoke:

Falling FAANG+

Wed, Dec 28, 2022

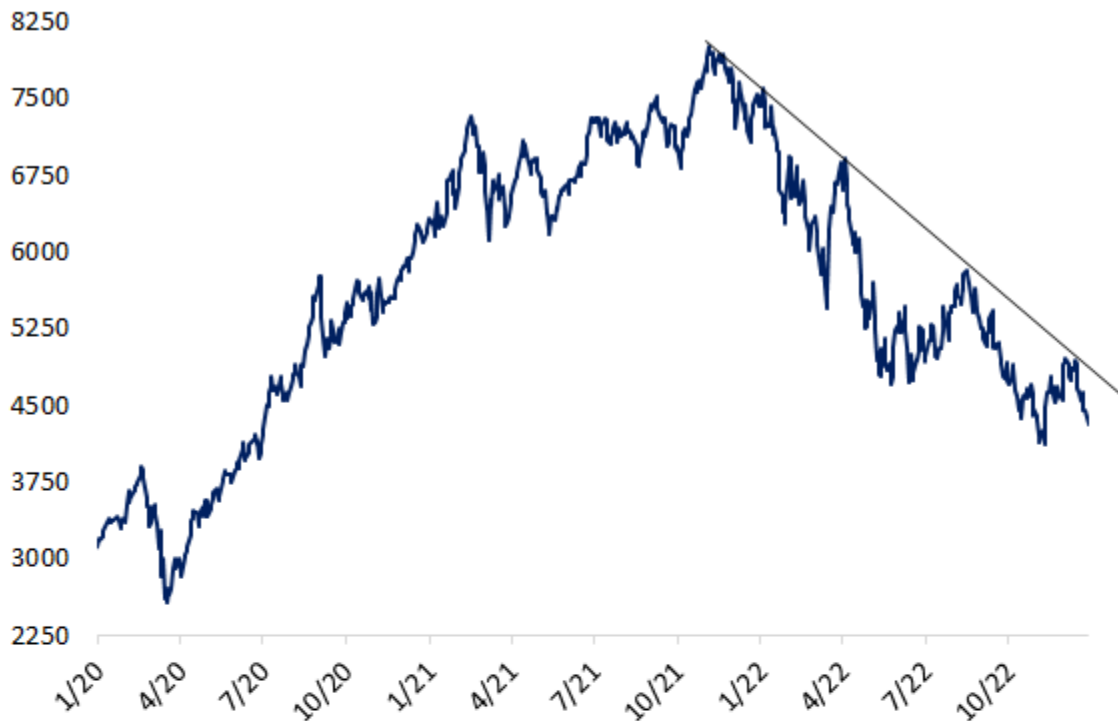
Yesterday Amazon ([AMZN](#)) became the third of the mega-cap FAANG+ stocks (along with META and NFLX) to close below its closing low made during the COVID Crash in March 2020. Not only have all of AMZN's post-pandemic gains been erased, but it's now trading below its lowest close made during the COVID Crash!



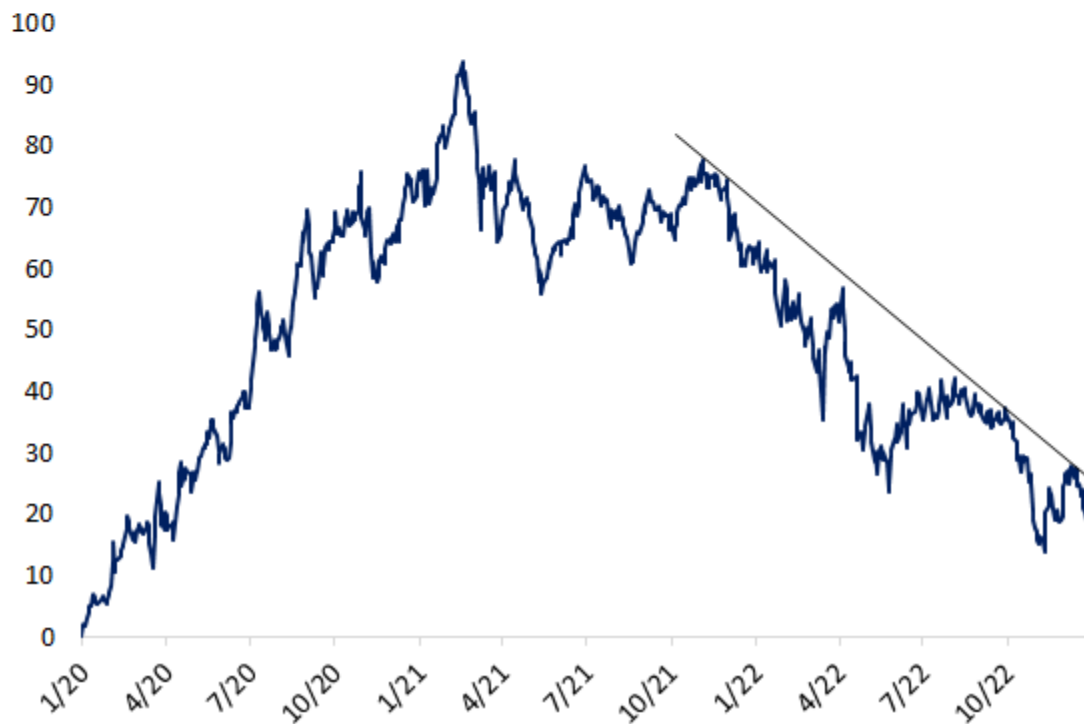
[NYSE's FAANG+ index](#) is described as an index of "10 of today's highly-traded tech giants." Given that most of the FAANG+ stocks account for a massive portion of the market cap weighted S&P 500, they are an

impactful group. As shown below, the FAANG+ index peaked in early November last year and has dropped 46% since then. The ... index is now back to within 5% of this past November's low. On a relative basis, the group has been underperforming the broader market for even longer with a high in February of last year.

FAANG+ Index Since 2020



FAANG+ Index vs. S&P 500 Relative Strength Since 2020



Below is a look at the ten FAANG+ stocks. As shown, they came into the year with a combined market cap of \$12.3 trillion, and they're ending the year with a combined market cap of just over \$7 trillion. While Apple has

fallen the least YTD in terms of share price change, it has lost the most in market cap at \$844 billion. Amazon has seen its market cap fall the second-most at \$843 billion, essentially getting cut in half. Tesla, along with AMZN, is one of two names that lost their "\$1 trillion market cap" club status this year. TSLA is now down 69% on the year, and its market cap has fallen from \$1.06 trillion down to just \$344 billion. The other FAANG+ stocks that are down 50%+ on the year include Meta (Facebook), NVIDIA, Netflix, AMD, and Snowflake.

With markets continuing to drop in these final trading days of December, on an absolute basis, 2022 is going to go down as the biggest year of wealth destruction ever for the US equity market. In 2008, the Russell 3,000 saw its market cap fall by \$6.7 trillion. As of today, the Russell 3,000's market cap has fallen about \$11.2 trillion so far in 2022. \$5.2 trillion of that \$11.2 trillion decline has come from just the ten FAANG+ stocks shown below.

FAANG+ Stocks In 2022							
Ticker	Name	Sector	Price	Market Cap (bn \$)			YTD %
				End of 2021	Current	Change	Change
AAPL	Apple	Technology	130.03	\$2,913.28	\$2,068.53	-\$844.75	-26.77
AMZN	Amazon.com	Cons. Discret.	83.04	\$1,691.00	\$847.15	-\$843.86	-50.19
GOOGL	Alphabet	Comm. Svcs.	87.39	\$1,921.78	\$1,134.61	-\$787.16	-39.67
MSFT	Microsoft	Technology	236.96	\$2,525.08	\$1,766.41	-\$758.67	-29.54
TSLA	Tesla	Cons. Discret.	109.10	\$1,061.29	\$344.51	-\$716.78	-69.03
META	Meta Platforms	Comm. Svcs.	116.88	\$935.64	\$306.48	-\$629.16	-65.25
NVDA	NVIDIA	Technology	141.21	\$735.27	\$347.38	-\$387.90	-51.99
NFLX	Netflix	Comm. Svcs.	284.17	\$266.85	\$126.46	-\$140.39	-52.83
AMD	Advanced Micro Devices	Technology	63.27	\$173.78	\$102.01	-\$71.76	-56.03
SNOW	Snowflake	Technology	137.76	\$103.76	\$44.30	-\$59.46	-59.33
Total:				\$12,327.74	\$7,087.85	-\$5,239.89	

Another asset that we repeatedly warned against over the years. From December 13th's WSJ:

STREETWISE | By James Mackintosh

Blackstone's BREIT Highlights Looming Risks of Private Funds

Top executives at **Blackstone** declared themselves baffled that so many individual investors want their money back from its giant private property fund, given its strong performance.

They shouldn't be surprised. The very design of the fund encourages investors to withdraw when they see others doing so. My worry is, those same incentives could hit other parts of the financial system as central banks pull back from easy money.

A slow-motion dash for cash is under way across the whole of finance as the Federal Reserve sucks liquidity out of the system. Most harmed will be those who piled into private assets without thinking about how much cash they might need.

The basic principle of the Blackstone Real Estate Income Trust, or BREIT, is that it took \$46 billion from ordinary investors, added debt and bought a bunch of property, mostly Sunbelt housing and warehouses. It was good at it, or perhaps lucky, and the value of the fund went up a lot, so it was very popular.

But this year mortgage rates soared and recession fears rose, and house prices began to come down. They have dropped only a bit so far, and not everywhere, but enough to make it less obvious to investors that they ought to be piling cash into a leveraged bet on property prices.

Blackstone isn't dumb, and it thought in advance about the possibility that one day people would want their money back. The contracts limit withdrawals from BREIT to 2% of the fund each month, or 5% a quarter, to avoid the need for fire sales of property. Now people want some of their money back, and the limits have kicked in.

The problem is that investors in BREIT now know that other investors in BREIT (and a similar fund, from **Starwood Capital Group**, known as SREIT) are trying to withdraw. Just as with a bank run, an investor who thinks others will try to withdraw should get out first. Even those who think everything will soon calm down—and there are reasons to think it might—should still be concerned about the effects of others leaving.

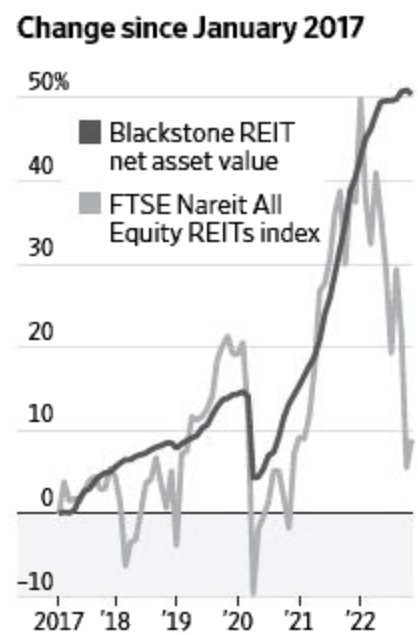
It isn't just BREIT. Private credit funds became wildly popular over the past decade and mutual funds bought into private equity, part of increasingly creative attempts to make money in a world of zero interest rates. Some, which hold hard-to-trade assets and allow withdrawals, also are vulnerable to self-fulfilling fears about liquidity.

I see four areas of vulnerability in BREIT that could apply to other funds. Anyone who thinks they might need to cash in over the next year will withdraw earlier than planned. Investors who tried to pull out in November got only 43% of what they asked for, and in December the cap will limit withdrawals far more. The longer the cap is in place, the more people will need to join in.

Investors can buy much more cheaply in public markets. REITs listed on the stock market trade at a fat discount to the value of their holdings. Investors happy to REITs managed by others could sell BREIT at the still-elevated estimated value of its holdings and buy a listed REIT at less than the estimated value of its holdings.

BREIT borrows about \$1 for every \$1 of investor value, but as investors pull out, the proportion of its holdings financed by loans goes up. That is great when prices rise—one of the big reasons for investing in property is that it can use a lot of leverage—but if prices go down, more leverage amplifies losses.

Withdrawals make the fund less liquid. BREIT sits on \$9.3 billion of cash and bank facilities, so it won't have any problem repaying the investors who have asked to get out, and it is a long way from liquidity trouble. But if withdrawals continue, those who remain will be holding a fund with less and less cash, giving it less flexibility to snap up bargains in the markets or to satisfy future withdrawals.



Note: Monthly data. 2022 is through October
Sources: Blackstone; Refinitiv

The third and fourth problems can be delayed by Blackstone selling buildings, as it just did with its stake in the MGM Grand and Mandalay Bay casinos in Las Vegas, or converting the billions of dollars of other easy-to-sell assets into cash. Delay long enough and investors' concern may abate.

Hedge funds discovered all these problems in 2008, when clients rushed for the exits. Their ventures into unlisted assets—often pre-IPO stocks, but some funds bought assets as exotic as African farmland and art—left many investors holding hastily-created “side pockets” full of unsalable stuff from their funds. Others simply refused to allow withdrawals to avoid penalizing investors who remained.

Blackstone says withdrawals from BREIT have come primarily from overseas investors, particularly in Asia, who chairman and CEO Stephen Schwarzman suggested were hit by margin calls when Hong Kong stocks plunged. These are exactly the sort of people one doesn't want to invest alongside because they will become forced sellers when markets are falling.

Ultimately it is a confidence game. If you think others have lost faith, it makes sense to pull out, too. This is why Blackstone is going out of its way to point out all the good things about BREIT—which this year includes a cool \$5.1 billion made on interest-rate derivatives.

“Our business is built on performance, not fund flows, and performance is rock solid,” Blackstone said.

The problem Blackstone and its peers have is that in a world increasingly demanding liquidity, it is selling illiquidity.

From Morningstar:

Small-Cap Stocks Are Really Cheap

Valuations on small caps are at their lowest in decades, and a recession looks priced in.

Lauren Solberg

Dec 2, 2022

While many investors are wondering whether it's safe to start buying those mega-size companies that led the last bull market, it's actually small-cap stocks that may be the biggest bargains.

For smaller-company stocks, price/earnings ratios—a widely used measure for determining the value of a stock relative to its earnings—have reached their lowest levels in two decades. Lower ratios generally represent more attractive values and with a greater potential for price gains.

“Across the equity landscape, the small-cap trade is the most interesting thing I'm seeing right now,” says Lori Calvasina, managing director and head of U.S. equity strategy at RBC Capital Markets.

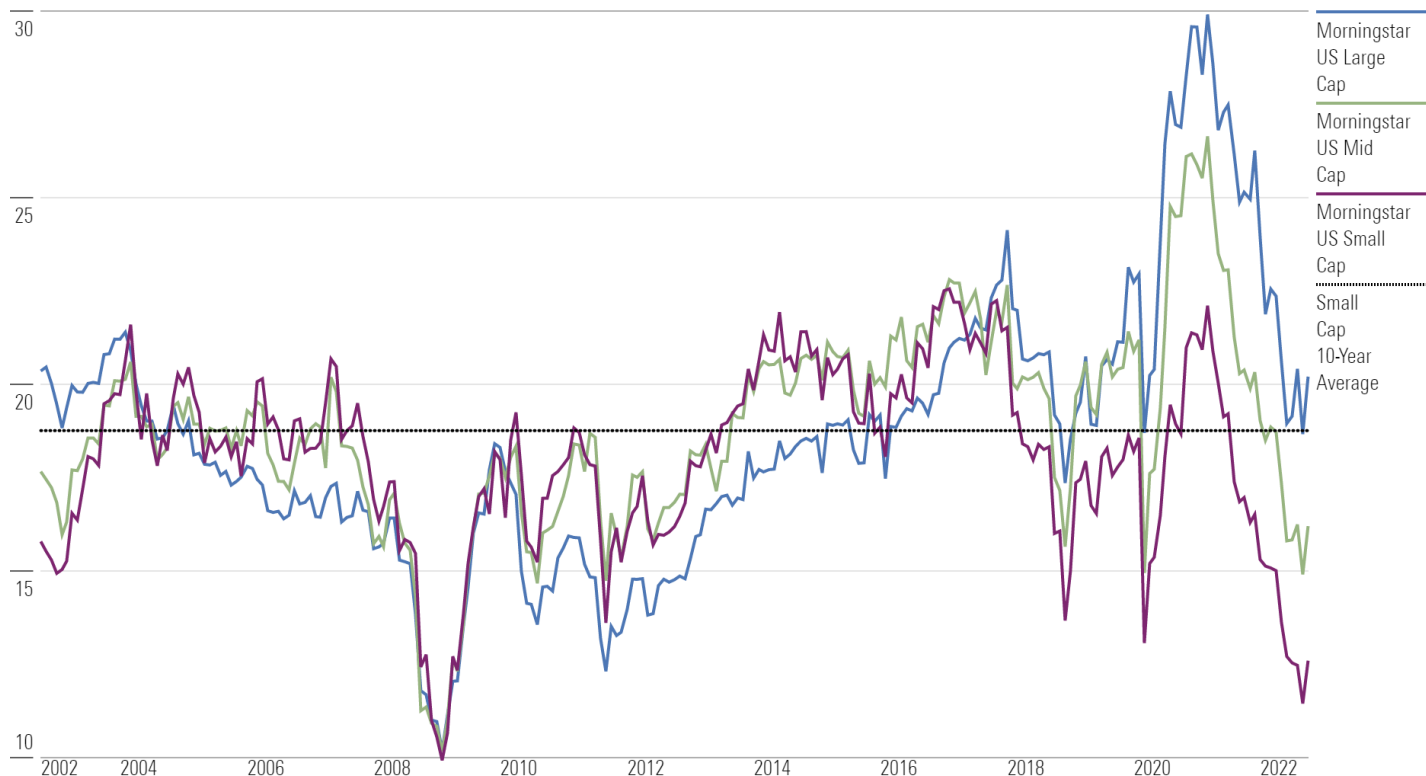
Calvasina, who spent seven years analyzing small-cap companies before taking on her current role, says that small-cap stocks are very undervalued relative to their historical levels as well as compared to large-cap stocks.

“Relative to large caps, small-cap stocks are the cheapest we've seen since the tech bubble,” Calvasina says.

The trailing 12-month price/earnings ratio for the Morningstar US Small Cap Index—a collection of the smallest 7% of U.S. stocks ...—currently lies at 12.6, while the large-cap index’s price/earnings ratio is 20.2. A gap this wide between large- and small-cap valuations hasn’t been seen since 2002.

Price/earnings Ratios by Market Cap

Trailing 12-month p/e ratios



Source: Morningstar Direct, Morningstar Indexes. Data as of October 31, 2022.

A key reason for lower valuations in small caps is that they’re generally more sensitive to the ups and downs of the U.S. economy, and as a result, rising expectations for a recession have hit the group especially hard.

But Calvasina says that at current levels, small-cap stocks are already priced at valuations that would account for “the worst that you’d expect to see in the middle of a recession.”

At the same time, there are factors working in favor of small caps that remain headwinds for larger company stocks. In particular, small-cap stocks tend to generate higher portions of their revenue within the U.S. compared to large caps, rendering them less vulnerable to a strong U.S. dollar.

Of course, there are risks. Calvasina says the main potential stumbling blocks for small caps are a severe recession or interest rates that stay higher for longer than expected.

Within the small-cap space, higher-quality companies across sectors are best poised to do well, Calvasina says, with financial services and consumer defensive small caps as some of the most undervalued.

Small-Cap Stocks Are Trading at Rare Discounts

In September, the price/earnings ratio of the Morningstar US Small Cap Index reached 11.4, its lowest reading since 2009. Its current value of 12.6 as of October 2022 is still well below the small-cap index’s 10-year

average price/earnings ratio of 18.7. Meanwhile, the Morningstar US Large Cap Index's price/earnings ratio of 20.2 is roughly in line with its long-term average of 20.6.

Small-cap stocks are also looking cheap according to Morningstar analysts' price/fair value estimates.

The Morningstar US Small Cap Index currently has a weighted-average price/fair value ratio of 0.84. That's meaningfully lower than the valuations for mid-cap and large-cap stocks, which both post index-level price/fair value ratios of 0.94.

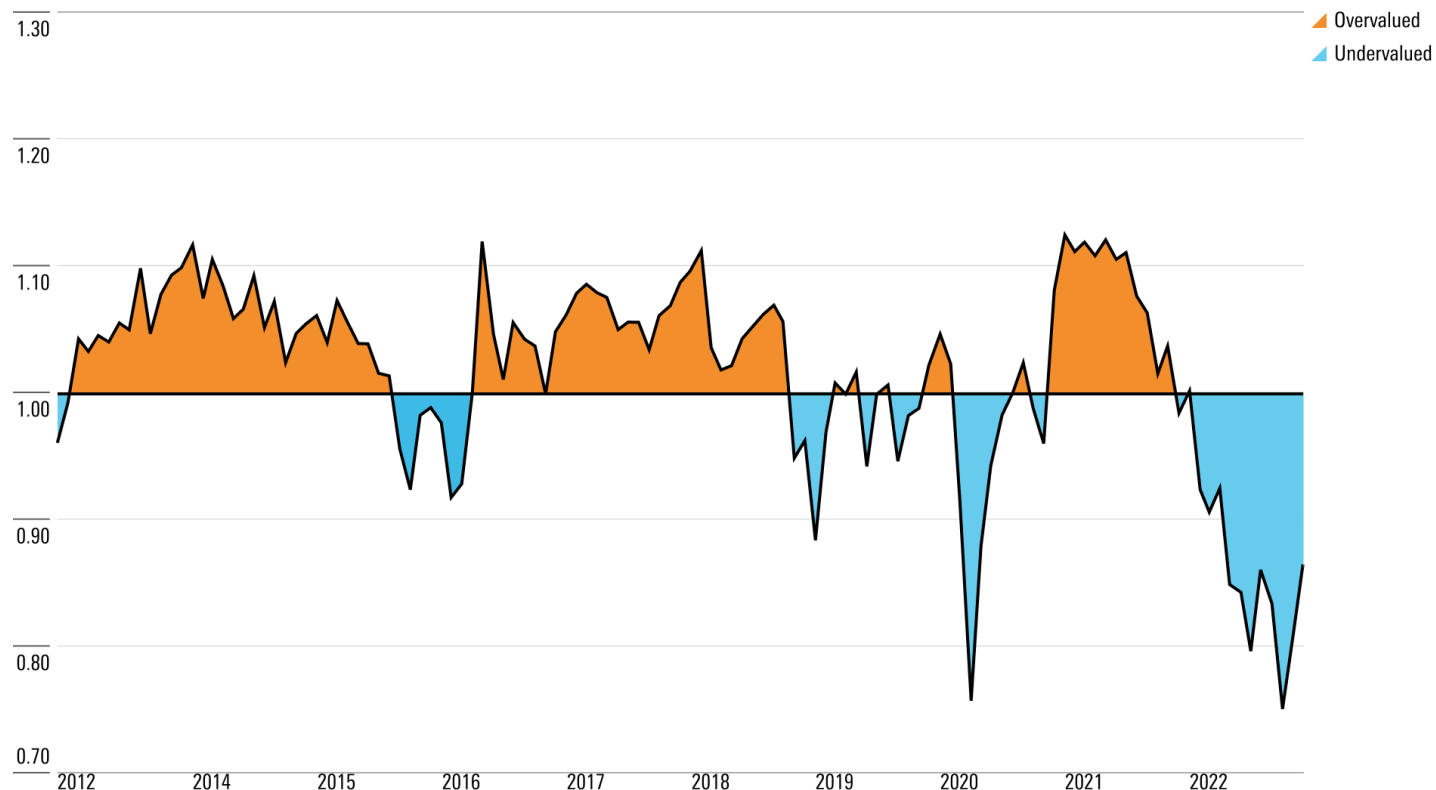
Small-cap valuations are also cheap relative to where they were at the end of 2021, when the Morningstar US Small Cap Index's average valuation stood at 0.96, signaling that small-cap stocks looked fairly valued as a group.

Why Are Small-Cap Stocks So Cheap?

A major driver behind low small-cap valuations is that they are already priced for an impending recession, Calvasina says. "We feel pretty strongly that small caps have already baked in the recession, and large caps are still in the process of pricing it in," she says.

Small-Cap Stock Valuations

Price/fair value ratio of the Morningstar US Small Cap Index



Source: Morningstar Direct, Morningstar Indexes, author's calculations. Data as of November 29, 2022.

It may seem counterintuitive. Large-company stocks have fallen more than small-company stocks this year. The Morningstar US Large Cap Index is down 18% in 2022, while the US Small Cap Index is off 15.3%. At the same time, the iShares Russell 2000 ETF IWM—one of the largest small-cap blend funds with over \$55 billion in assets under management—has fallen 17.2%.

But valuations on large stocks were much higher by historical standards heading into the bear market than on small-cap stocks, and their price/earnings ratios still haven't hit historical lows. In addition, small caps lagged far behind big-company stocks during the 2021 rally and headed into the bear market with lower valuations.

Calvasina also points to fundamental reasons for the bigger drop in valuations. Many large-cap companies have been better able to manage recent macroeconomic headwinds such as supply-chain snarls and the labor market shortage relatively well.

Small caps, on the other hand, have had a much tougher time, she says. Smaller companies often don't have as much scale, bargaining power, or negotiating power compared to larger companies. "So anything bad that happens out there, small caps absorb that a lot more directly," Calvasina says.

Is It Time to Buy Small-Cap Stocks?

Historically, small caps tend to underperform before a recession hits, start to outperform midway through a recession, then finally outperform strongly coming out of the recession, according to Calvasina. "A recession is usually the point at which you want to be thinking about adding small caps to your shopping list," Calvasina says.

That process may have been accelerated this time around. And many of the factors that have been headwinds for small caps may be turning, Calvasina says. In particular, supply chains and the labor backdrop for small companies are improving.

Those factors have "really weighed down small-cap companies over the past few years, and now, they're starting to get better," Calvasina says.

Another potential positive, according to Calvasina, is that as a group, small caps are carrying less earnings risk relative to large caps. That's mainly due to the current [strength of the U.S. dollar](#), she says.

On average, small-cap companies generate about 20% of their revenue outside the U.S., while large-cap companies make about a third of their revenue overseas.

"The growing value of the dollar is a headwind to earnings, it forces earnings to come down" she says. "It's a much, much bigger problem for" large-cap stocks.

Overall, she says, "earnings estimates are safer in small caps rather than large caps right now," Calvasina says. "You can rely on them a little bit better."

What Kinds of Small-Cap Companies Are the Most Undervalued?

Calvasina says that small-cap stocks with positive earnings, bigger market caps, lower debts, and higher return on equity have held up better than the rest and are likeliest to outperform over the long term. "Higher-quality companies do better within small caps," she says. ...

Has private equity avoided the asset-price crash?

No, but everyone is enjoying the charade

Dec 1st 2022

Babies lacking object permanence—the understanding that things they cannot see continue to exist—love the game of peekaboo. An adult hides their face from sight, then suddenly comes back into view, prompting squeals of delight. Grown-ups no longer enjoy being deceived—unless they invest in private equity and venture capital, where hiding bad news is part of the fun.

A huge gap between the valuations of publicly listed companies and their unlisted peers' has opened in 2022. Lincoln International, a bank, reckons the enterprise value of firms held by private-equity funds globally rose 1.9% in the third quarter, leaving them up 3.2% for the year to date. The S&P 500, by contrast, fell 22.3% in the same period.

That is a relief to many institutional investors, such as pension funds, who cannot afford big losses. In the past decade they have splurged trillions of dollars on private assets. Soon these could also be found in greater volumes in 401k plans, America's employer-sponsored retirement schemes. When interest rates were low, fans of buy-outs and venture capital were drawn to their high reported returns. Now that market chaos reigns, their lower volatility is the bigger selling point.

The gulf in valuations cannot be justified on economic grounds. All firms face the same toxic cocktail of slowing growth, rising interest rates and stubborn inflation. If anything, private ones, often more leveraged, should be more exposed when credit tightens. Instead the gap is mostly an illusion rooted in the peculiarities of private investing. One is well known. While public markets are constantly repriced in full view of the world's investors, shares in private firms are traded far more rarely and opaquely. Some founders would rather sink with their ship than agree to a cut in valuation.

Less appreciated is the array of tricks private funds use to smooth out returns. Many keep their valuation-work in house: a 2015 survey by Grant Thornton, a consultancy, found that only around a quarter of them sought an independent opinion on the growth and discount rates they use in their models. That gives managers the discretion to make assumptions that flatter the prospects of the firms they own. Many have also taken to borrowing money to do deals instead of calling for investors' capital straight away. This has the effect of artificially boosting a fund's internal rate of return, a key performance benchmark.

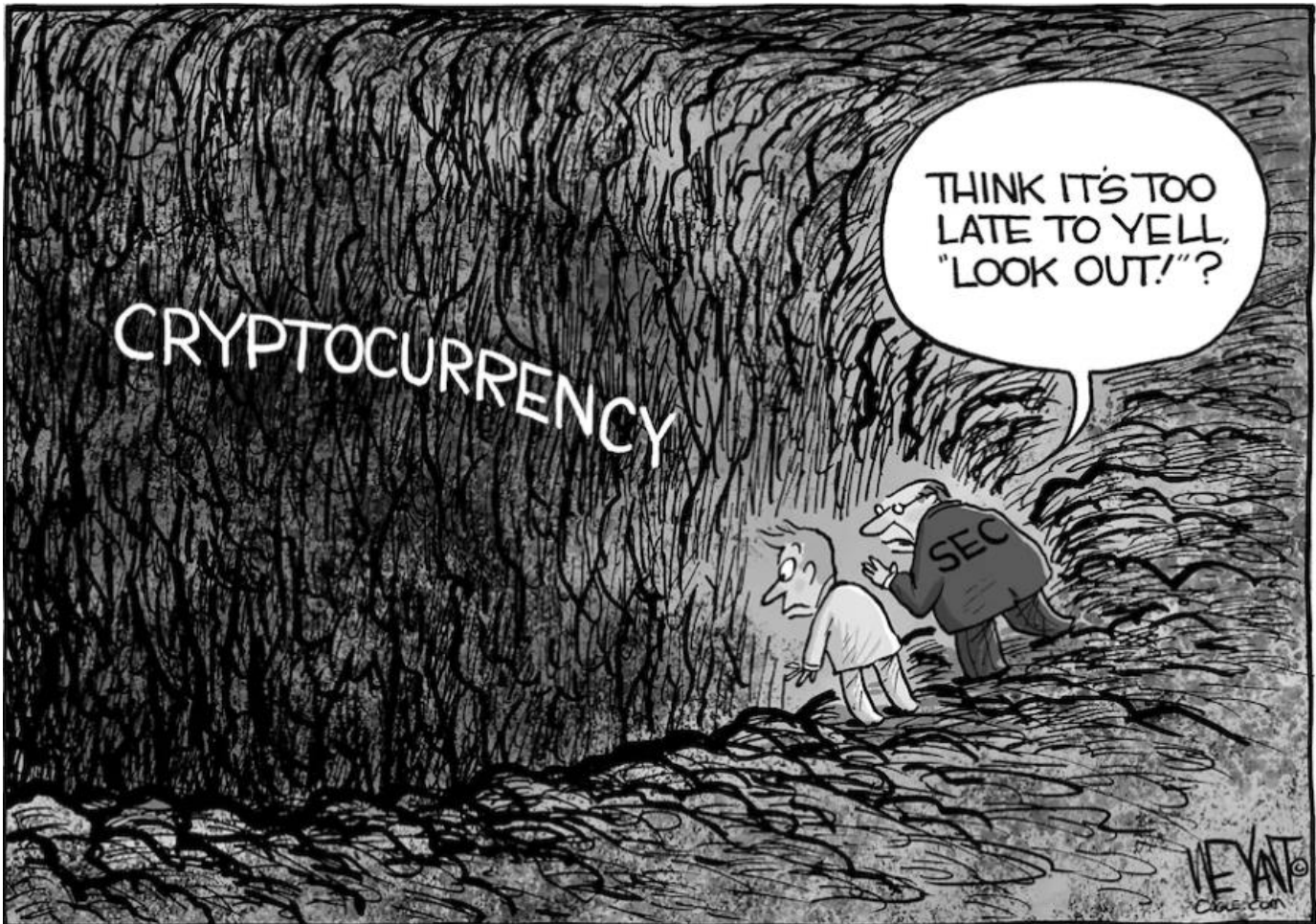
Cliff Asness of aqr Capital Management, an investment firm, once dubbed such obfuscation tactics "volatility laundering". Today they are paying off. Smoothing returns can limit the upside of private equity during the most frenetic stages of a roaring market, but it keeps returns afloat when the economy faces a storm. Private funds are still reporting gains that were made during the steroid-fed bull run of 2020 and 2021.

Massaging techniques can be used to nefarious ends. The collapse of Abraaj Group, a Dubai-based private-equity firm, was partly caused by inflated valuations intended to mask poor performance. But more often return-smoothing provides the funds' knowing clients exactly what they want. Research by academics at the University of Florida published in October shows private-property fund managers fiddle returns more when they manage a greater share of their investors' total assets—that is, when their manipulations matter more to the end clients' overall performance.

How long can the illusion last? During the bursting of the dotcom bubble in 2000, it took American venture-capital managers nearly half a year to report impairments after public markets peaked. American buy-out funds held off even longer after listed equities crashed in 2007. In fact public markets began recovering in 2009—quickly enough that private investors never had to mark down the full extent of the slump.

It is unlikely private firms will be able to levitate long enough this time. Over a year has passed since the peak of the Nasdaq Composite, a tech-heavy index. The cash holdings of some private firms are eroding, leaving little for return-smoothing financial engineers to play with. In August Masayoshi Son, the boss of Softbank Group, a Japanese investment giant, predicted private valuations would rejoin public-market ones within 12 to 18 months. Without a 2009-style recovery in public equities in sight, an unavoidable downgrade looms. No doubt many investors would prefer to continue playing along with the peekaboo charade. But soon private-fund managers will have nowhere to hide.

Our final sharing on Crypto for 2022:



Positions

As a general rule we sell any individual stock with a 20% or greater loss that we no longer consider a buy at the end of the year in all accounts, and may do so in taxable accounts even if we still consider the stock a buy and there is an equally attractive opportunity, or we believe it is likely that we will be able to profitably reenter the position after the 30 day wash-sale rule has expired.

CNDT - We sold this IVA System Pick for all 5 clients on 12/27 @ 4.1219:



HASI - We bought 2% positions in this Diversified REIT for 6 clients on 12/27 @ 29.02:



Insider Buying:

Trade Date↑	No. Part Participants	Net Sell (Shares)	Net Buy (Shares)
11/10/2022	2 Osgood Steven, Ardisana Li...		1,825
11/09/2022	5 Eckel Jeffrey, Rose Nathan...		24,500