

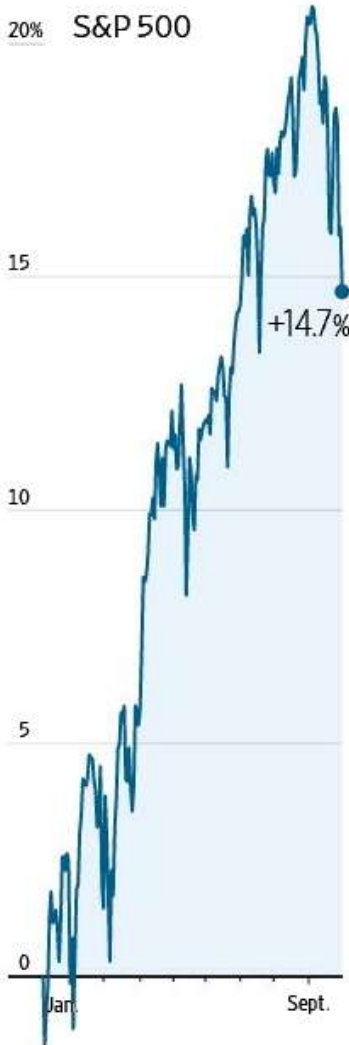
September 2021

From the front page of Friday's WSJ:

The S&P 500 rose for a sixth straight quarter, despite registering a 4.8% decline for September.

Index performance, year to date

20% S&P 500



Nasdaq Composite



Dow Jones Industrial Average

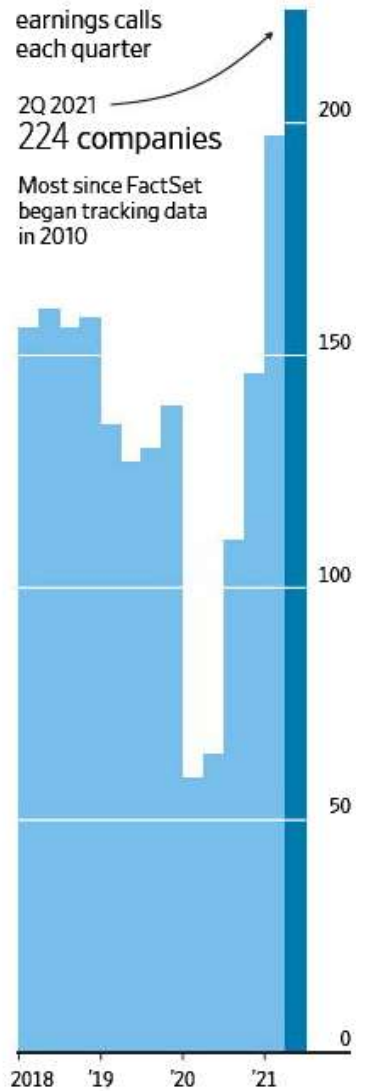


Source: FactSet

Number of S&P 500 companies mentioning inflation on their earnings calls each quarter

2Q 2021
224 companies

Most since FactSet began tracking data in 2010



Stocks End Quarter in Turmoil, Worst Month Since March '20

BY AKANE OTANI

Markets closed out the quarter on a tumultuous note.

Stocks pulled back from all-time highs. Shares of large, fast-growing companies had their worst month since the pandemic-fueled selloff of March 2020, and Treasury yields are around their highest level since June. ...

Central bankers who had thought this year's rise in inflation would wind up being a short-term phenomenon aren't sure how long transitory pressures will persist. Strategists who had predicted another strong quarter of economic growth are cutting estimates because of supply-chain bottlenecks and the highly contagious Delta

variant of Covid-19. Economic data have also been falling short of expectations. Citigroup's Economic Surprise Index, which tracks how much U.S. reports have been exceeding or undershooting estimates, fell this month to its lowest level since June 2020. ...

One of the most vexing issues for investors and analysts over the past few months has been how quickly the market has churned through winners and losers.

Markets behaved relatively predictably in the first half of the year. Investors favored shares of economically sensitive companies such as banks, manufacturers and airlines and rebuffed relatively pricey technology stocks when it looked as though the rollout of Covid-19 vaccines would help supercharge the economy's recovery.

This quarter, as the reopening trade stalled, it became harder for investors to pick dominant trades. Technology stocks surged but then took the brunt of market selloffs in early September and this week—sending the S&P 500 Growth Index to its biggest monthly pullback since March 2020.

The bond market also caught many investors off guard. The yield on the 10-year U.S. Treasury note flitted about a narrow range for much of the quarter, only to stage a six-day rise above 1.50% between last week and Tuesday—its biggest such advance since June 2020, according to Dow Jones Market Data. The move came after the Federal Reserve indicated it was ready to begin reversing its pandemic stimulus programs as early as November and considering raising interest rates next year, given a jump in inflation.

“Even though there's all this discussion about the market being resilient, the churn under the surface has shown more weakness,” said Liz Ann Sonders, chief investment strategist of Charles Schwab.

Ms. Sonders attributed the swift rotations taking place in the market to a bevy of investor worries.

“You have concerns about the virus, then you add on top of it concerns about the debt ceiling, some arguably more mixed economic data recently [and] uncertainty about monetary policy,” she said. “I don't know if we'll get out of this mode anytime soon.”

Another issue weighing on investors' minds: inflation.

So far this year, companies have been able to post robust profits despite rising costs for raw materials and labor. Earnings for S&P 500 companies have beaten analysts' estimates by double-digit percentages since the second quarter of 2020, according to Morgan Stanley equity strategist Michael Wilson. That is compared with a median beat rate of 5% going back to 2008.

Yet with supply-chain disruptions and labor shortages persisting around the country, Mr. Wilson said it is hard to believe companies will be able to maintain that momentum.

Between June and September, 224 S&P 500 companies mentioned inflation on their second-quarter earnings calls, according to FactSet. That is the highest number since Fact-Set began tracking the data in 2010.

Historically, when a relatively high number of companies have mentioned inflation, profit margins have shrunk, Mr. Wilson said.

Investors are left grappling with one big question: How much of that has already been priced into markets? ...

From Bespoke:

How Has the 10 Year Yield Historically Correlated to Growth Stock Performance?

Wed, Sep 29, 2021

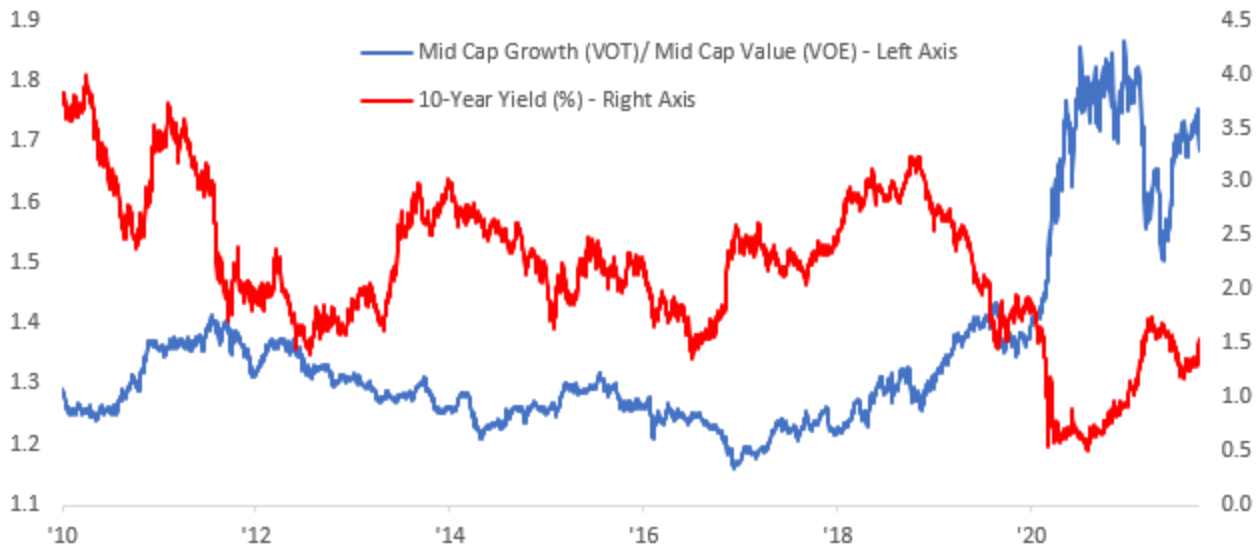
Recently, all it seems investors can talk about is the relationship between the performance of growth stocks and interest rates. The general idea is that rising yields have a negative impact on the performance of growth stocks as the risk-free rate of return increases and future cashflows for high-growth companies are discounted at a higher rate. To highlight this relationship, today we wanted to take a look at a comparison between the relative strength of the Vanguard Mid Cap Growth ETF ([VOT](#)) versus the Vanguard Value ETF ([VOE](#)) versus the yield on the 10-year US Treasury.

Looking first just at the relationship between the two this year, the chart below shows the relative strength of growth vs value (blue line) compared to moves in the 10-year US Treasury (red line). When the blue line is rising, it indicates that growth stocks are outperforming value and vice versa. For pretty much the entire year, when yields have moved higher, growth stocks have underperformed, but when yields have pulled back, growth stocks start to lead the market. Over the last several days, the inverse relationship has been even more pronounced where the two lines have completely moved in the opposite direction. For this year at least, higher interest rates have been kryptonite for growth stocks.



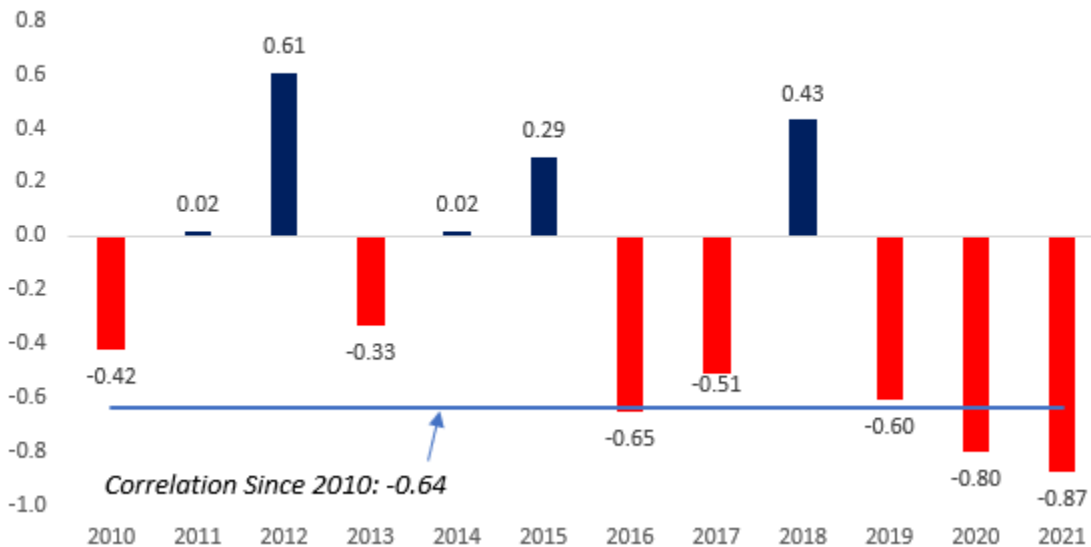
The chart below is the same as above but goes all the way back to 2010 instead of just this year. Looking at the chart, while there were periods of inverse correlation in the early and mid-2010s, the trend really didn't fully take hold until late 2018/early 2019. Since then, when rates have fallen, growth has outperformed and vice versa.

Relative Strength of Growth vs Value and 10-Year Yield: 2010 - 2021



The inverse correlation has reached extreme levels this year. The chart below shows the correlation coefficient between the daily ratio of the VOT (mid-cap growth) versus VOE (mid-cap value) versus the yield on the 10-year US Treasury. Since 2010, there have been five years where the correlation coefficient was positive and in only three of those years was the positive reading anything more than negligible (2012, 2015, and 2018). In each of the past three years, what we've seen is the inverse correlation only intensify. Back in 2019, the only other year before that where the inverse correlation was more pronounced was in 2016, but then 2020 saw what was at the time the most inverse correlation since 2010. Based on this year's relationship, though, 2020's record may not last long. Through Tuesday's close, the correlation coefficient between the relative strength of growth stocks and the 10-year yield was -0.87. While the inverse relationship between growth stock performance and interest rates may not continue to be as pronounced as it is now in the future, any continued increase in long-term interest rates is likely to act as a headwind for the performance of growth stocks.

Correlation Between Growth vs Value RS and 10-Year Yield By Year



October 1, 2021

2021 Fourth Quarter Strategy Outlook: TINA's Siren Song

I. Macroeconomic Outlook

Global Growth To Remain Above Trend

Global growth has peaked, but at very high levels. According to Bloomberg consensus estimates, real GDP in the G7 rose by 6.0% in Q3, down from 6.8% in Q2 (Table 1). G7 growth is expected to soften to 4.9% in Q4, mainly reflecting somewhat softer growth in Europe following a blistering third quarter which saw real GDP expand by more than 9% in the UK and the euro area.

Not all countries have reached peak growth. Japan is projected to see faster growth in Q4, with GDP rising by 3.8% compared to 1.6% in Q3. Canadian growth should pick up from 4.5% in Q3 to 5.8% in Q4. Australia's economy is projected to grow by 7.4% in Q4 after having contracted by 10.7% in Q3. Chinese growth is expected to accelerate to 5.9% in Q4 from 2.6% in Q3.

Across almost all the major economies, growth should remain at an above-trend pace in 2022. G7 growth is expected to hit 4.1%, well above the trend rate of 1.4%.

Usually when growth peaks, investors start to worry that a recession is around the corner. Given that growth is coming down from exceptionally high levels, this is not a major risk at the moment.

TABLE 1
Global Growth Will Remain Above Trend Well Into Next Year

BLOOMBERG SURVEY OF ECONOMISTS GDP GROWTH EXPECTATIONS											
	2021*				2022*				2021**	2022**	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
US	6.3%	6.6%	5.0%	5.1%	4.2%	3.3%	2.9%	2.4%	5.9%	4.2%	
EURO AREA	-1.2%	9.1%	9.1%	4.5%	3.2%	2.8%	2.4%	2.4%	5.0%	4.3%	
UK	-6.2%	20.6%	9.5%	6.1%	3.6%	2.6%	2.4%	2.4%	6.8%	5.4%	
JAPAN	-4.2%	1.9%	1.6%	3.8%	3.4%	2.6%	1.5%	1.3%	2.4%	2.5%	
CANADA	5.5%	-1.1%	4.5%	5.8%	4.1%	3.8%	3.3%	2.8%	5.3%	4.0%	
AUSTRALIA	7.9%	2.8%	-10.7%	7.4%	7.8%	-4.9%	4.1%	3.2%	4.0%	3.4%	
BRAZIL	4.9%	-0.4%	2.8%	2.2%	1.6%	1.8%	1.6%	1.6%	5.2%	2.1%	
CHINA	1.6%	5.3%	2.6%	5.9%	5.7%	6.1%	5.7%	5.7%	8.4%	5.5%	
INDIA***	...	...	...	...	...	...	...	...	9.3%	7.0%
RUSSIA	...	...	...	...	...	...	...	...	4.0%	2.5%
G7****	1.7%	6.8%	6.0%	4.9%	3.7%	3.0%	2.5%	2.2%	5.2%	4.1%	
G7**** EX. US	-3.2%	7.0%	7.0%	4.7%	3.3%	2.8%	2.2%	2.0%	4.4%	3.9%	

* QUARTERLY RATE OF CHANGE, ANNUALIZED.

** ANNUAL RATE OF CHANGE.

*** THE 2021 FORECAST FOR INDIA REFERS TO THE APRIL 2021-MARCH 2022 PERIOD, WHILE THE 2022 FORECAST REFERS TO APRIL 2022-MARCH 2023.

**** INCLUDES US, CANADA, JAPAN, GERMANY, FRANCE, ITALY, AND THE UK.

SOURCE: BLOOMBERG FINANCE L.P.

NOTE: ACTUAL VALUES ARE USED FOR Q1 AND Q2 2021.

Most Countries Are Easing Lockdown Restrictions

Ten months after the first Covid vaccines became publicly available, 3.5 billion people, or 45% of the world's population, have received at least one shot (**Chart 1**). At this point, most people in developed economies who want a vaccine have been able to receive one.

While vaccine availability in many emerging markets remains a problem, the situation is improving rapidly. India is currently vaccinating 7.5 million people per day. Over 45% of Indians have had at least one shot, something that would have seemed unfathomable just a few months ago.

New medications are on the way. Just today, Merck announced a breakthrough pill that lowers the risk of hospitalization from Covid by 50%.

Globally, the number of new daily cases has fallen from over 650,000 in August to 450,000 today. Lower case counts, along with increased vaccinations, have allowed most countries to loosen lockdown measures.

Goldman's Effective Lockdown Index has eased to the lowest level since the start of the pandemic (**Chart 2**).

Monetary Policy: The Slow March To Neutral

As the pandemic recedes from view, central banks are starting to dial back monetary support. Last week, Norway became the first major developed economy to hike rates. New Zealand, having already ended QE, may raise rates before the end of the year.

Other central banks are looking to normalize policy. The Bank of Canada has cut its asset purchases in half. The Reserve Bank of Australia has begun tapering asset purchases. The Swedish Riksbank has indicated that it will end asset purchases this year. The Fed will formally announce the tapering of asset purchases in November, while the Bank of England's latest round of QE expansion will expire in December.

The ECB, Swiss National Bank, and Bank of Japan remain firmly in the dovish camp. That said, the ECB has cracked open the exit door ever so slightly by announcing that it will stop buying assets through the Pandemic Emergency Purchase Programme in March (The ECB will continue to buy bonds under the existing Asset Purchase Programme, however).

Taper Tantrum Redux?

The prospect of Fed tapering has stoked worries of a replay of the 2013 Taper Tantrum. We think such worries are overstated. For one thing, tapering is not the same thing as tightening. The Fed will still be adding to the size of its balance sheet; it will simply be doing so at a diminished pace. Thus, tapering implies a slower pace of easing rather than outright tightening, a subtle but important distinction.

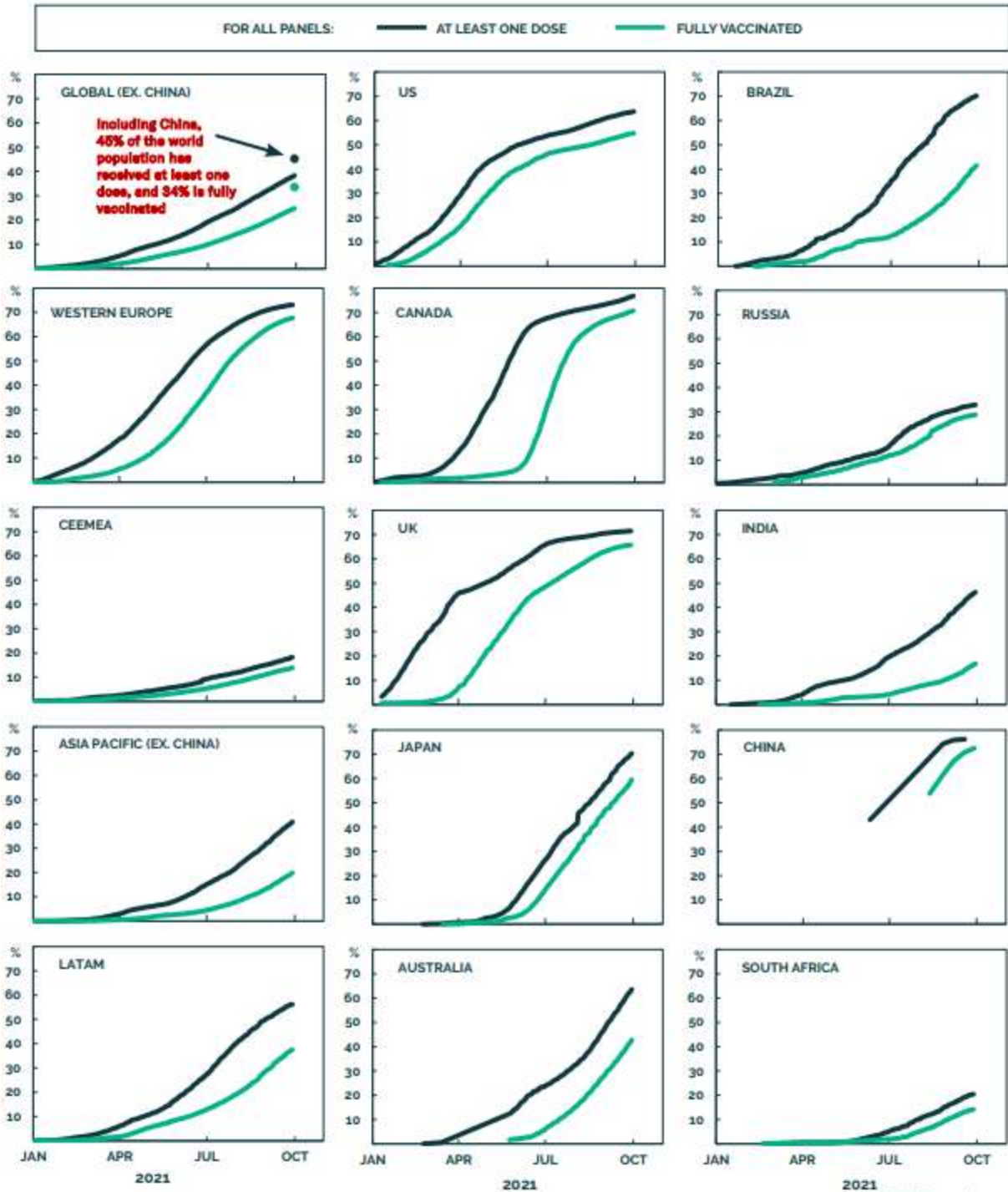
Tapering could be regarded as tightening if, as in 2013, the very act of tapering sends a signal to investors that rate hikes are forthcoming. However, in the years following the Taper Tantrum, the Fed has gone out of its way to delink balance sheet policy from interest rate policy, stressing that the two are substitutes not complements.

The Fed is unlikely to start hiking rates until late 2022 or early 2023. It will probably take another year or two beyond then for interest rates to rise into restrictive territory, and even longer for the lagged effects of monetary policy to work their way through to the economy.

There is an old saying: "Expansions don't die of old age. They get murdered by the Fed." The Fed will probably kill the expansion. However, the deed is unlikely to be committed until 2024 at the earliest, giving the bull market in stocks further scope to continue.

CHART 1

Nearly Half Of The World's Population Has Received At Least One Covid Vaccine Shot

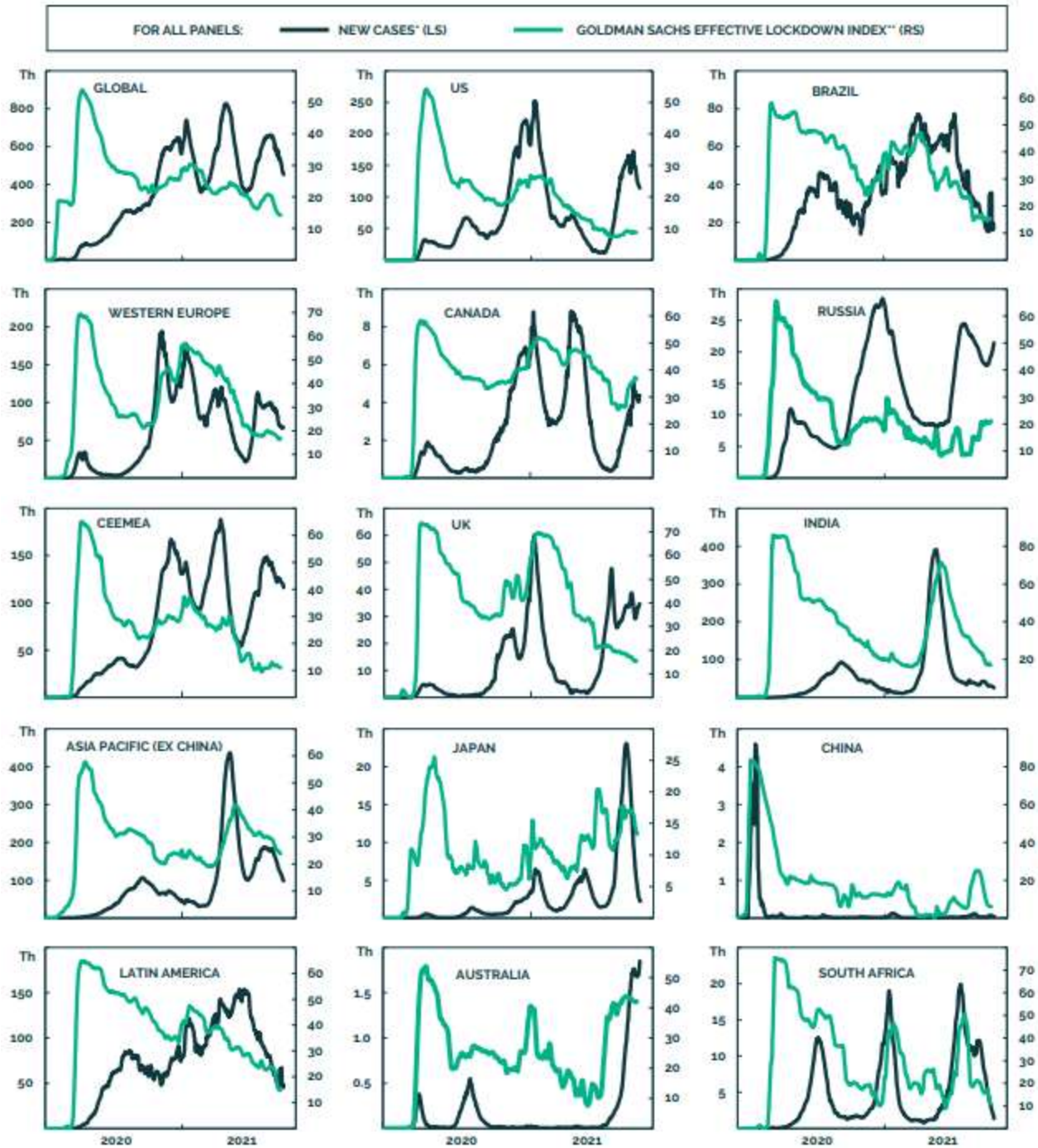


SOURCE: OUR WORLD IN DATA.

© BCG Research 2021

CHART 2

Covid Restrictions Are Easing In Many Places



* SOURCE: THE CENTER FOR SYSTEMS SCIENCE AND ENGINEERING (CSSE) AT JOHNS HOPKINS UNIVERSITY.
** SOURCE: GOLDMAN SACHS.
NOTE: SERIES ARE SHOWN AS 7-DAY MOVING AVERAGES.

Fiscal Policy: Tighter But Not Tight

On the fiscal side, the IMF expects the aggregate cyclically-adjusted primary budget deficit in advanced economies to decline from 7.7% of GDP in 2021 to 3.7% of GDP in 2022, implying a negative fiscal impulse of 4% of GDP.

Normally, such a negative fiscal impulse would weigh heavily on growth. However, since this fiscal tightening is set to occur against a backdrop of continued strong private domestic demand growth, the economic fallout should be limited.

The absolute stance of fiscal policy also matters. While budget deficits will decline over the next few years, the IMF expects deficits to be larger in the post-pandemic period than they were before the pandemic.

If anything, the IMF's projections understate the likely size of future budget deficits as they do not incorporate any fiscal measures that have yet to be signed into law. These include the proposed \$550 billion US infrastructure bill, an election-season stimulus package in Japan, and increased investment spending by what is likely to be a center-left coalition government in Germany.

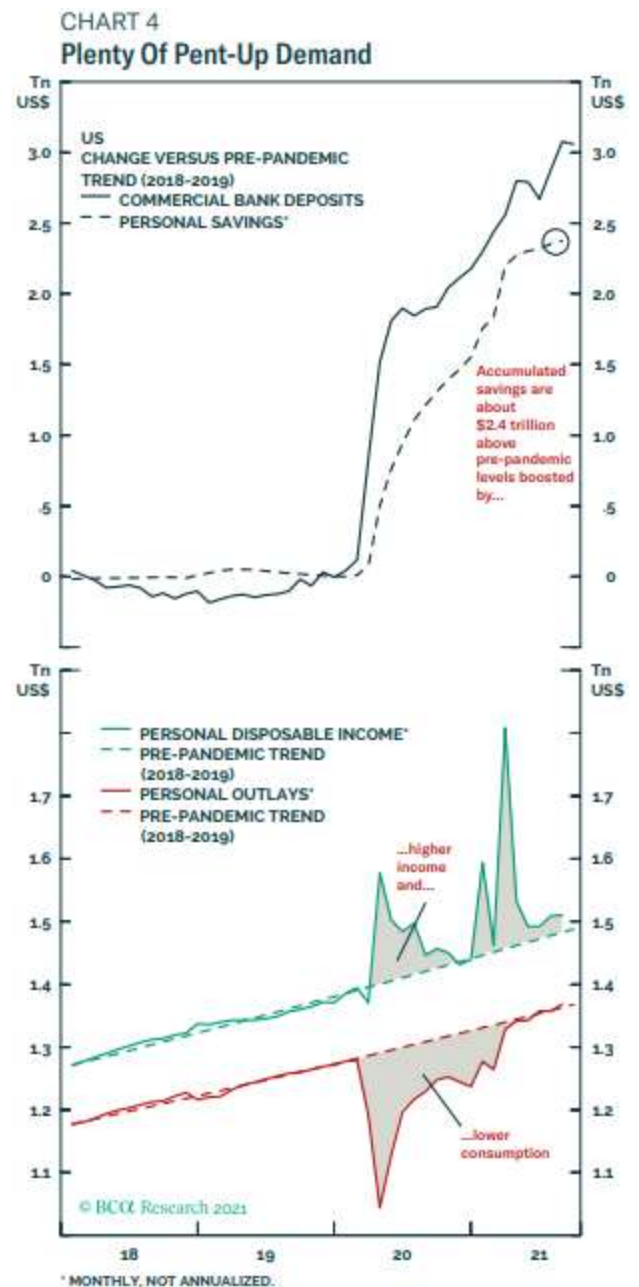
Perhaps one of the most important, and largely overlooked, consequences of the pandemic is that the bond vigilantes have been banished into exile. Governments ran record budget deficits last year and bond yields fell anyway. Post-pandemic fiscal policy is likely to end up being structurally more expansionary than it was following the Global Financial Crisis.

Plenty Of Dry Powder

It should also be noted that not all the stimulus funds that have been disbursed have made their way into the economy. US households are currently sitting on \$2.4 trillion in excess savings, equivalent to about 15% of annual consumption (Chart 4). About half of these excess savings stem from decreased spending on services during the pandemic. The other half stem from increased transfer payments – stimulus checks, unemployment insurance benefits, and the like.

Some investors have expressed concern that these savings will remain idle. Among other things, they note that a record high share of households in the University of Michigan survey think that this is a bad time to be purchasing big-ticket items.

We would downplay these concerns. A review of the evidence from the original CARES act suggests that households spent about 40% of the stimulus checks within three months of receiving them. That is a reasonably high



number considering that precautionary savings typically rise during times of economic uncertainty.

Despite the improvements in the economy, consumer confidence remains below pre-pandemic levels. There is a strong correlation between consumer confidence and household consumption. As confidence continues to recover, household spending should hold up well.

As far as the reluctance to buy big-ticket items is concerned, we would paint this in a positive light. When households are asked why they are not in a rush to buy, say, a new automobile, they answer, quite rationally, that they expect prices to fall and availability to improve. Concerns over job security are far down on the list.

In this sense, the market mechanism is doing what it is supposed to do: Supplying goods to those who are willing to pay up in order to get them immediately, while giving those with a bit more patience the opportunity to buy them later at a lower price.

From a macro perspective, this means that demand for durable goods is unlikely to fall off a cliff anytime soon. There is enough pent-up demand around to ensure production stays buoyant well into next year. This is especially the case for autos, where nearly half of US shoppers have decided to defer purchases. And with inventory levels at record lows, firms will need to produce more than they sell (**Chart 7**). It is difficult to see

CHART 7
Firms Will Need To Maintain High Production To Replenish Inventories

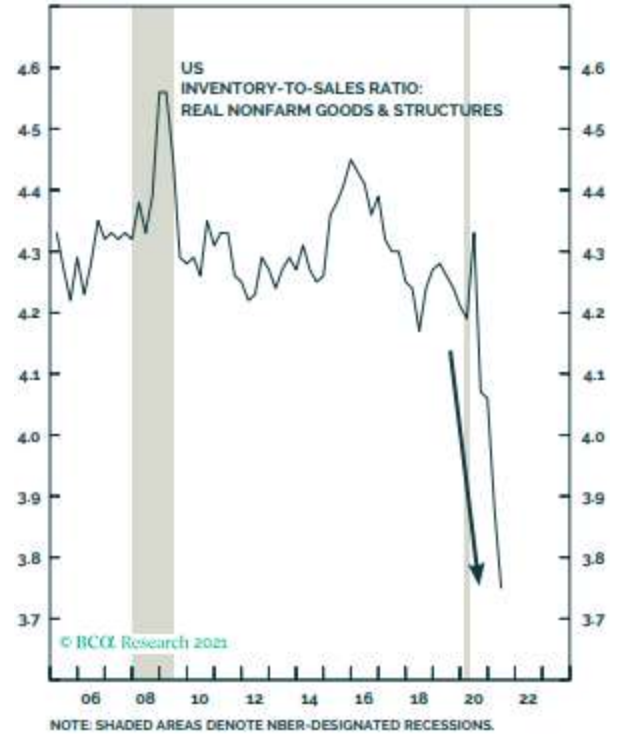
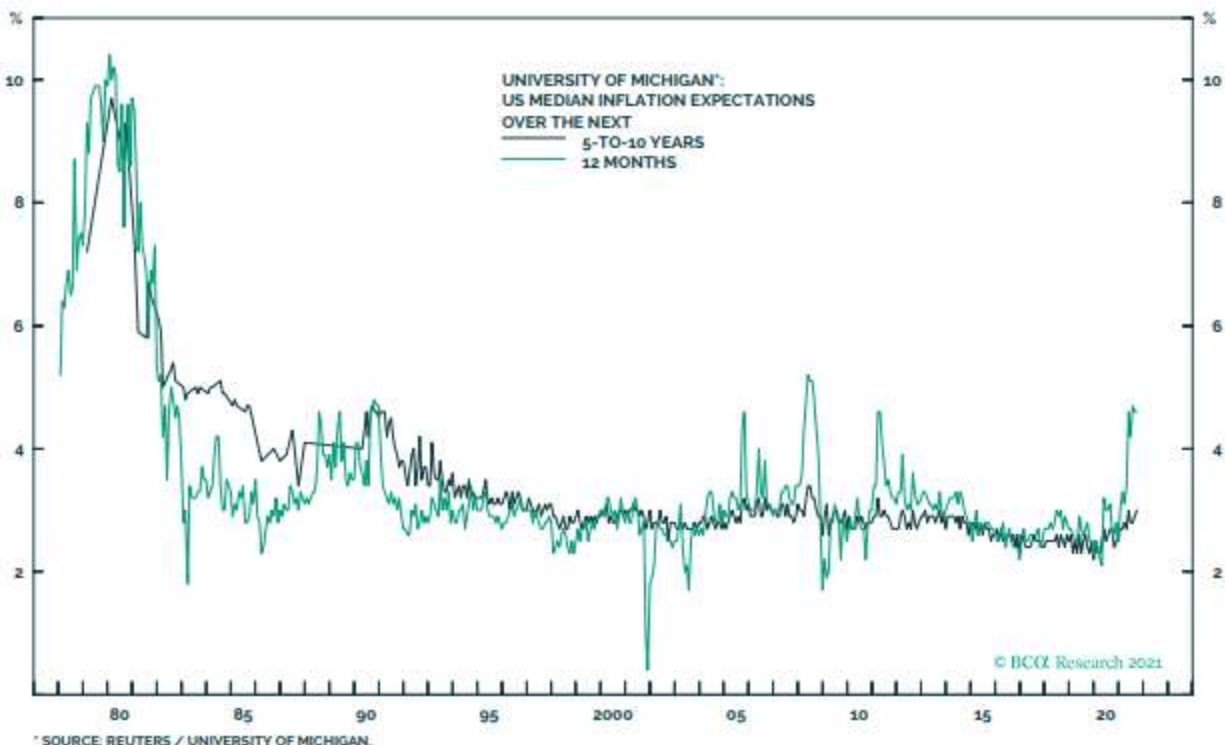


CHART 8
Long-Term Inflation Expectations Have Risen But Remain At Historically Low Levels



growth slowing dramatically in such an environment.

Pandemic-Induced Inflation Spike Should Fade

The willingness of households to postpone spending until supply has had a chance to catch up to demand should help mitigate inflationary pressures. It would be much worse if households thought that today's high consumer goods prices presaged even higher prices down the road. Such a dynamic could easily unmoor inflation expectations, forcing the Fed into action.

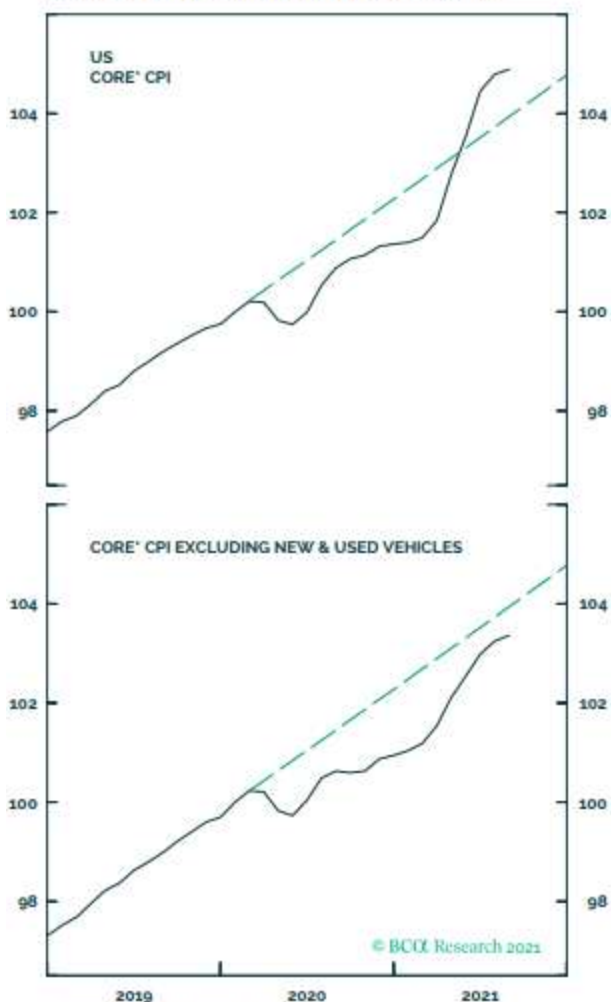
Despite the recent spike in inflation, household long-term inflation expectations have not increased that much. Inflation expectations 5-to-10 years out in the University of Michigan survey ticked up to 3% in September. While this is above the average level of 2.5% in 2017-2019, it is broadly within the range of expectations that prevailed between 1997 and 2014 (**Chart 8**).

Wages have risen briskly at the bottom end of the income distribution. The jump in wage growth in the leisure and hospitality sector – where workers have been given the unenviable task of enforcing mask mandates and other requirements – has been particularly pronounced. However, wage growth for high-skilled salaried employees has been flat-to-down. As a consequence, overall wage growth, as measured by the Atlanta Fed Wage Tracker, has moved sideways.

Rising CPI inflation remains contained to only a few categories. Median CPI inflation registered 2.4% in August, below where it was in late 2019. Excluding vehicle prices, the level of the core CPI remains below its pre-pandemic trend line (**Chart 11**).

Recent indications suggest that used car prices have peaked (**Chart 12**).

CHART 11
Core Inflation With And Without Autos



* EXCLUDING FOOD AND ENERGY.
NOTE: REBASED TO JAN. 2020 = 100. DASHED LINE DENOTES 2.4% ANNUAL GROWTH FOR CPI SERIES. HIGHER TREND INFLATION FOR THE CONSUMER PRICE INDEX IS EXPLAINED BY A HIGHER SHELTER COMPONENT VIS-A-VIS THE PERSONAL CONSUMPTION EXPENDITURES PRICE INDEX.

CHART 12
Used Car Prices Have Peaked



* SOURCE: MANHEIM.

CHART 14
The Demographic Turning Point In Japan And China

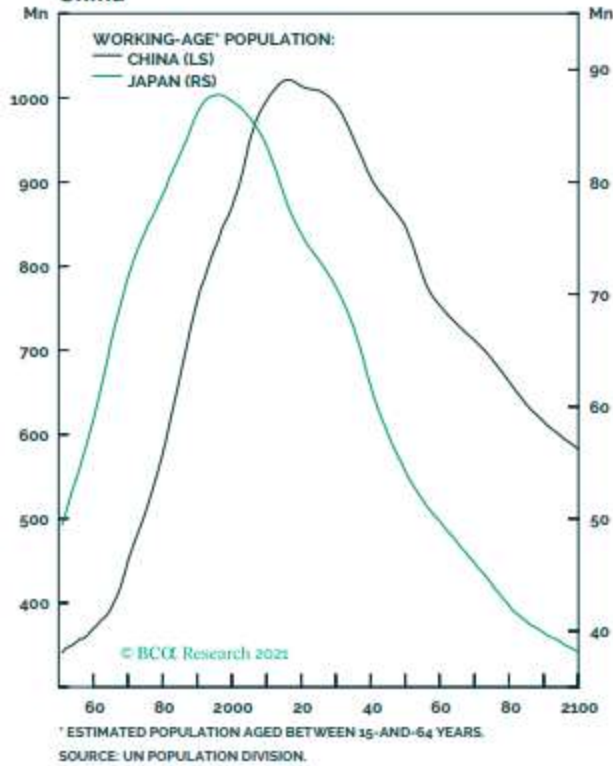
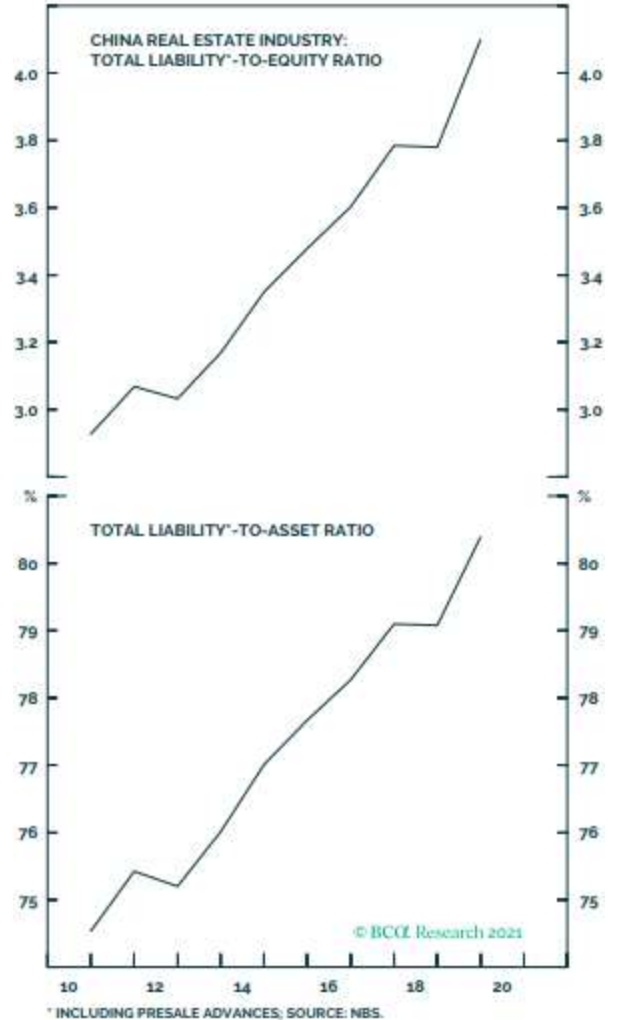


CHART 15
Rising Leverage Ratios In China's Real Estate Sector



Memory prices are trending lower, suggesting that the worst of the semiconductor shortage may be behind us. The Drewry World Container Index also inched lower this week for the first time in five months.

In capitalist economies, gluts may or may not lead to shortages; but shortages always lead to gluts.

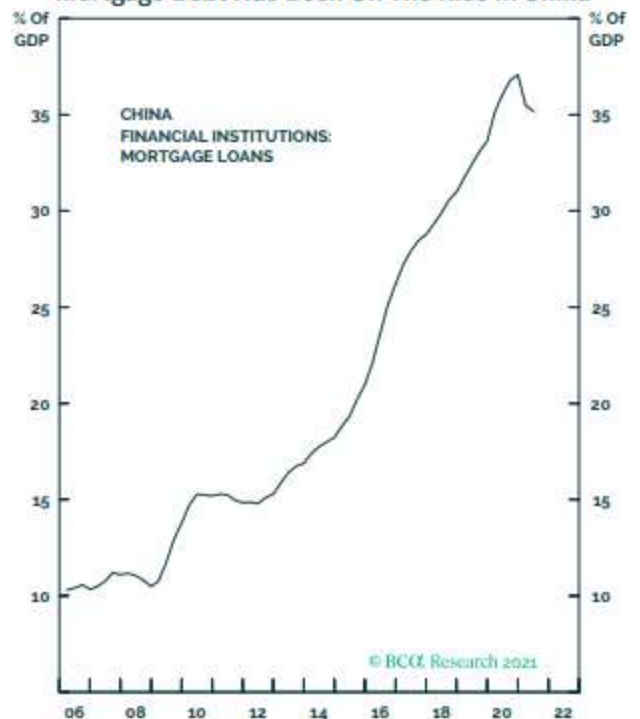
II. Feature: The Real Risk From China's Property Market

Lehman Moment Or Japan Moment?

The turmoil surrounding Evergrande, one of China's largest property developer, has sparked fears that China is experiencing its own "Lehman moment". Such worries are misplaced. The Chinese government has enough control over the domestic financial system to keep systemic risks in check. The more appropriate analogy is not with Lehman, but with Japan.

The Japanese property bubble burst in the early 1990s, sending the country into a prolonged deflationary funk. As was the case in Japan three decades ago, Chinese property prices are very high in relation to incomes. Moreover, as was

CHART 16
Mortgage Debt Has Been On The Rise In China



the case in Japan, China's working-age population has peaked, which is likely to translate into lower demand for housing down the road (**Chart 14**). As it is, studies using night light data suggest that 20% of apartments are sitting vacant.

Similar to Japan, debt has fueled China's housing boom. Chinese property developers are amongst the most leveraged in the world (**Chart 15**). Households have also been borrowing aggressively: Mortgage debt has risen from around 15% of GDP in 2010 to 35% of GDP (**Chart 16**).

Differences With Japan

Despite the clear parallels between Japan in the early 1990s and China today, there are a number of key differences.

First, Japan was already an advanced economy in the early 1990s. Today, labor productivity in China is still 40% of what it is in neighboring South Korea (and 25% of what it is in the US). As productivity in China continues to rise, GDP will increase, even if the number of workers continues to shrink.

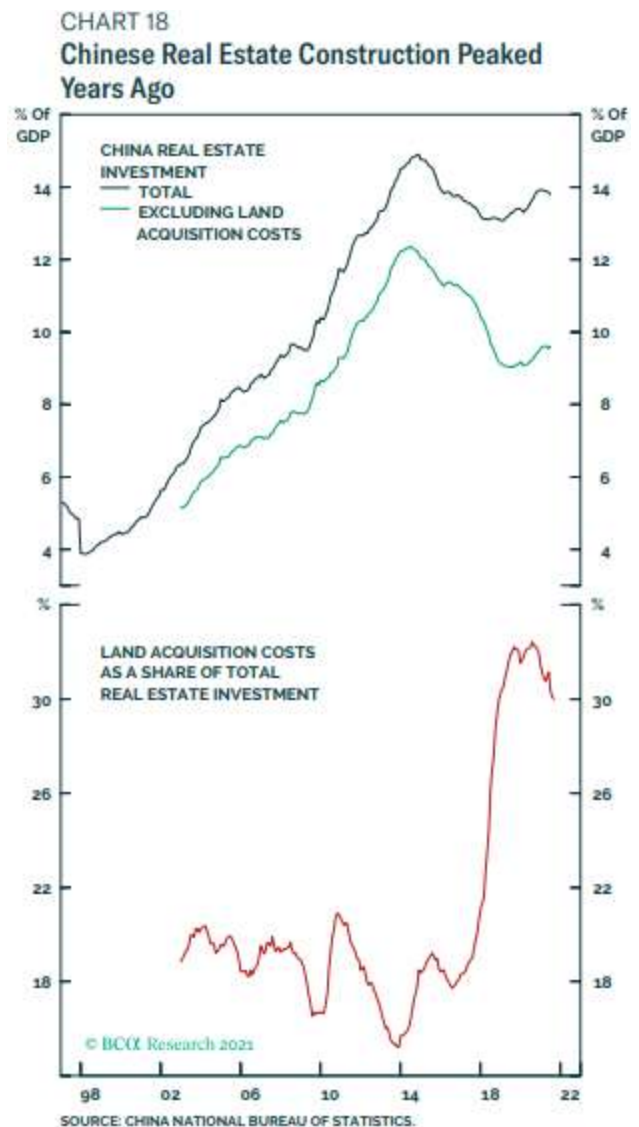
... China would need to grow by at least 6% per year over the next decade for output-per-worker to converge to South Korean levels by the middle of the century. It is easier to reduce leverage when incomes are growing quickly.

Second, while real estate investment in China is still too high for what the country needs, it has been falling as a share of GDP since 2014 (**Chart 18**). This is not obvious from the monthly fixed asset investment data that investors track because this data counts land purchases as investment.

Property developers have been buying land and holding on to it in anticipation that it will appreciate in value. This carry trade will end, but the impact on the real economy may be limited if, as is likely, the assets of bankrupt property developers end up being shuffled into quasi state-owned entities, allowing existing housing projects to continue. After all, if the goal of the government is to make housing more affordable, stopping construction would be precisely the wrong thing to do.

Third, China has learned from Japan's policy mistakes, especially when it comes to the appropriate role for government stimulus in the economy. Japan's biggest mistake in the 1990s was not that it failed to listen to western experts, but that it listened to them too much.

The whole narrative about how Japan could have revived its economy through "structural reforms" never made any sense. Japan's problem was not one of poor resource allocation; it was one of inadequate demand: The property sector collapsed, leaving a big hole in GDP that needed to be filled.



Shutting down “zombie companies” arguably made things worse, not better.

Chinese Stimulus On The Way

Standard debt sustainability equations imply that paradoxically, a country with a high debt-to-GDP ratio can run a larger primary budget deficit than a country with a low debt-to-GDP ratio, while still achieving a stable debt-to-GDP ratio over time. In China’s case, bond yields are well below nominal GDP growth, which gives the government significant fiscal leeway.

The Ministry of Finance has expressed its intention to ramp up fiscal spending by increasing local government bond issuance. As of the end of August, local governments had used up only 50% of their annual debt issuance quota, compared to 77% at the same time last year and 93% in 2019. Increased bond issuance will allow local governments to trim their reliance on land sales to finance spending.

For its part, the PBOC cut bank reserve requirements in July. In the past, cuts in reserve requirements have been a reliable predictor of faster credit growth. With credit growth back to its 2018 lows, there is little need for further actions to reduce lending.

Rebalancing The Chinese Economy

Over the long haul, China will need to encourage consumer spending in order to allow for the continued contraction of the construction industry without depressing overall employment.

At 38% of GDP, China’s consumption share is one of the lowest in the world. A weak social safety net has forced Chinese households to maintain high levels of precautionary savings. Rampant inequality has shifted income towards richer households which tend to save more than the poor. Sky-high home prices only amplified the need to save more to buy a flat. All this has depressed overall consumption.

For all its faults, President Xi’s “common prosperity” campaign could help redress all three of these problems, ultimately creating a stronger and more balanced economy. **(Our previously shared concerns remain.)**

In summary, while China does represent a risk to the global economy, the threat at the moment is not severe enough to warrant turning bearish on equities and other risk assets.

III. Financial Markets

A. Portfolio Strategy

Above-Trend Global Growth Will Support Equities

Investors often express skepticism about the benefits of using macroeconomics as an input into their investment process. ...

For the most part, the change in the value of the stock market is closely correlated with the level of economic growth.

As noted earlier, global growth is peaking but at very high levels. This suggests that stock returns will be reasonably strong over the next 12 months, although not as strong as they were over the preceding 12 months.

Higher Bond Yields Unlikely To Undermine The Stock Market

Treasury yields have moved up since the conclusion of the FOMC meeting on September 22nd. The market narrative of a “hawkish surprise” does not make much sense to us. The yield curve usually flattens after a central bank delivers a hawkish surprise. That is what happened following the June FOMC meeting. This time around, the 2-10 curve has steepened by 13 basis points.

Our sense is that the rise in bond yields mainly reflects the lagged effect from the decline in Covid cases, along with the realization that the pandemic-induced rise in inflation may be a bit stickier than previously believed.

Equities often suffer some indigestion when bond yields rise. However, history suggests that as long as yields do not increase enough to imperil the economy, stocks usually end up recovering and reaching new highs (**Table 2**).

TABLE 2
As Long As Bond Yields Don't Rise Into Restrictive Territory, Stocks Will Recover

		US 10-Year Treasury Yield (%)			S&P 500		
Trough	Peak	At Trough	At Peak	Change (ppt)	At Trough	At Peak	Change
Oct 15, 1993	Nov 07, 1994	5.19	8.05	2.86	470	463	-1.4%
Jan 18, 1996	Jul 05, 1996	5.53	7.06	1.53	608	657	8.1%
Oct 05, 1998	Jan 20, 2000	4.16	6.79	2.63	989	1,446	46.2%
Jun 13, 2003	Jun 12, 2007	3.13	5.26	2.13	989	1,493	51.0%
Dec 18, 2008	Apr 05, 2010	2.08	4.01	1.93	885	1,187	34.1%
Jul 25, 2012	Dec 31, 2013	1.43	3.04	1.61	1,338	1,848	38.2%
Jul 05, 2016	Nov 08, 2018	1.37	3.24	1.87	2,089	2,807	34.4%
Aug 04, 2020	Mar 31, 2021	0.52	1.74	1.22	3,307	3,973	20.2%

The 10-year Treasury yield has already risen halfway to our 2022H1 target of 1.8%. Any further upward move is likely to be more gradual than what has transpired over the past few weeks. As such, we expect the pressure on stocks to diminish.

The fact that bearish sentiment in the AAI survey reached a one-year high this week suggests we may be nearing a bottom in stocks. **(The AAI survey is just one of the indicators that SentimenTrader tracks, with overall Sentiment currently neutral.)** Ultimately, TINA’s siren song will be impossible to resist.

What Is The True ERP?

While equity valuations are not cheap, they are not at extreme levels either. The MSCI All-Country World Index currently trades at 18-times forward earnings. Unlike in most years, analysts have been revising up earnings estimates this year, both in the US and abroad. This suggests the currently quoted forward PE ratios are not excessively optimistic.

Relative to bonds, stocks still trade at a healthy discount. The forward earnings yield for the MSCI All-Country World index is 640 basis points above the global real bond yield. Even in the US, where valuations are more

stretched, the implied equity risk premium (ERP) stands at 580 basis points. Amazingly, this is exactly where the US ERP stood in May 2008.

The equity risk premium, as measured by the gap between the earnings yield and the real bond yield, will overstate the magnitude to which stocks are expected to outperform bonds if the PE ratio ends up falling over time.

Nevertheless, for stocks to underperform bonds, PE multiples would need to fall by an implausibly large amount. For example, suppose US companies manage to grow real EPS by a modest 2.5% per year over the next decade. The US dividend yield is 1.3%. Assuming dividends rise in line with earnings, investors would receive a real total return of 3.8%. The 10-year TIPS yield is -0.9%. Thus, the US PE multiple would need to shrink by an average of 4.7% (3.8% plus 0.9%) per year over the next 10 years for stocks to underperform bonds on a real total return basis. This would take the US forward PE multiple down to 13.

It is not unfathomable that the US PE multiple would fall this much. However, as a baseline scenario, it is too pessimistic. A more plausible baseline forecast would be a terminal PE multiple of 18. That would be consistent with a “true” ERP of 3%.

B. Equity Sectors, Regions, And Styles

Favor Cyclical, Value Stocks, And Small Caps

As one might expect, cyclical equity sectors tend to outperform defensives in strong growth environments.

The pandemic has exposed a shortage of industrial capacity across a wide range of industries from semiconductors to automobiles. US capital goods shipments have lagged orders for 18 straight months. Industrial stocks stand to benefit from increased capital spending. Materials and energy stocks will gain from strong commodity prices and a weaker US dollar.

Like cyclicals, value stocks do best during periods when global growth is strong and the US dollar is weak. Rising bond yields should help bank shares, which are heavily overrepresented in value indices. In contrast, tech shares, which are overrepresented in growth indices, usually struggle in rising yield environments. Value stocks are also cheap – three standard deviations cheap based on a simple composite valuation measure that compares price-to-earnings, price-to-book, and dividend yields (**Chart 31**).

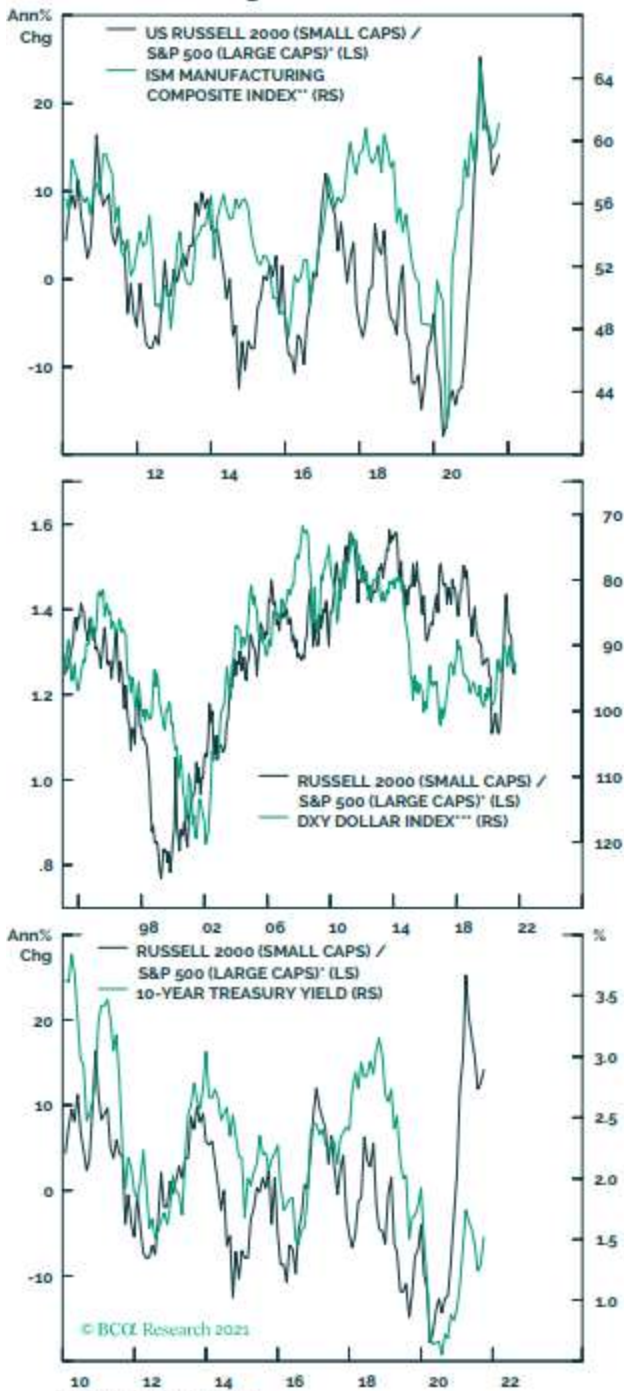
CHART 31
Value Is Cheap



TABLE 3
Financials And Industrials Have A Larger Weight In US Small Caps

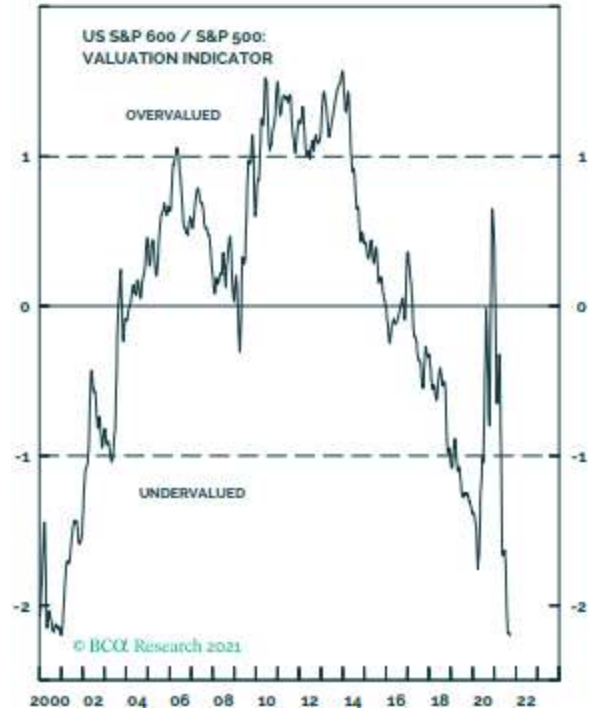
SECTOR	MARKET CAP WEIGHT	
	S&P 600 (%)	S&P 500 (%)
FINANCIALS	18.4	11.4
INDUSTRIALS	16.8	8.1
CONSUMER DISC	14.0	12.4
TECHNOLOGY	13.1	27.5
HEALTH CARE	12.1	13.3
REAL ESTATE	8.0	2.6
MATERIALS	5.1	2.5
ENERGY	4.9	2.8
CONSUMER STAPLES	4.3	5.8
COMM SERVICES	1.7	11.2
UTILITIES	1.7	2.4

CHART 32
US Small Caps Tend To Outperform When Growth Is Strong, The Dollar Is Weakening, And Bond Yields Are Rising



* SOURCE: REFINITIV / IBES.
 ** SOURCE: INSTITUTE FOR SUPPLY MANAGEMENT.
 *** SOURCE: BLOOMBERG FINANCE L.P.

CHART 34
US Small Caps Are Attractive Relative To Large Caps



Financials and industrials are overrepresented in US small caps indices, while tech and communication services are underrepresented (**Table 3**). Thus, it is not surprising that small caps usually outperform their large cap peers when growth is strong, the dollar is weakening, and bond yields are rising (**Chart 32**).

Like value stocks, small caps are reasonably priced. The S&P 600 small cap index trades at 16-times forward earnings, compared to 17-times for the S&P 400 mid cap index and 21-times for the S&P 500. Small cap earnings are also expected to grow by 30% over the next 12 months, easily beating mid caps (19%) and large caps (15%). BCA's relative valuation indicator suggests that, compared to large caps, small caps are now as cheap as they were in the late 1990s (**Chart 34**).

Regional Equity Allocation: Better Prospects Outside

The US

Stock markets outside the US have more of a cyclical/value tilt (**Table 4**). Hence, they tend to fare best when global growth is strong and the dollar is weakening.

TABLE 4

Cyclicals Are Overrepresented Outside The US

SECTOR BREAKDOWN OF BROAD MSCI INDICES*							
	ACWI INDEX	US INDEX	ACWI EX US INDEX	EUROPE INDEX	EURO AREA INDEX	JAPAN INDEX	EM INDEX
ENERGY	3%	2%	4%	4%	4%	1%	5%
MATERIALS	5%	3%	8%	8%	7%	5%	9%
INDUSTRIALS	10%	8%	12%	15%	15%	22%	5%
CONSUMER DISCRETIONARY	12%	12%	13%	12%	17%	19%	15%
CONSUMER STAPLES	7%	6%	8%	12%	8%	7%	6%
HEALTH CARE	12%	13%	10%	15%	8%	10%	5%
FINANCIALS	14%	11%	19%	15%	14%	9%	19%
INFORMATION TECHNOLOGY	23%	29%	13%	9%	15%	15%	21%
COMMUNICATION SERVICES	9%	12%	6%	4%	4%	8%	11%
UTILITIES	3%	2%	3%	4%	6%	1%	2%
REAL ESTATE	3%	3%	2%	1%	2%	4%	2%

* AS OF AUGUST 31, 2021. SOURCE: MSCI INC. (SEE COPYRIGHT DECLARATION).

NOTE: BOLD CELLS REPRESENT SECTORS WITH HIGHER MARKET CAP WEIGHTS RELATIVE TO THE ALL COUNTRY WORLD INDEX.

Probable tax changes could hurt the relative performance of US stocks. BCA's geopolitical strategists expect the Democrats to raise the corporate tax rate from 21% to about 26%. Additional tax hikes are likely to apply to overseas earnings, something that will disproportionately affect tech companies.

Non-US stocks are reasonably priced, trading at a forward PE ratio of 15. EM equities are especially cheap. (In most cases for valid reasons, as we have repeatedly stressed.) They currently trade at a forward PE ratio of 13. The EM discount to the global index is as large now as it was during the late 1990s.

After a blistering period of rapid earnings growth during the 2000s, EM EPS has been trending sideways during the past decade. However, the combination of increased global capital spending and rising commodity prices should buoy EM profits in the years ahead. Improved performance from EM banks should also help. Chinese banks are trading at 4.2-times forward earnings, 0.5-times book, and sport a dividend yield of over 6%. Such valuations discount too much bad news.

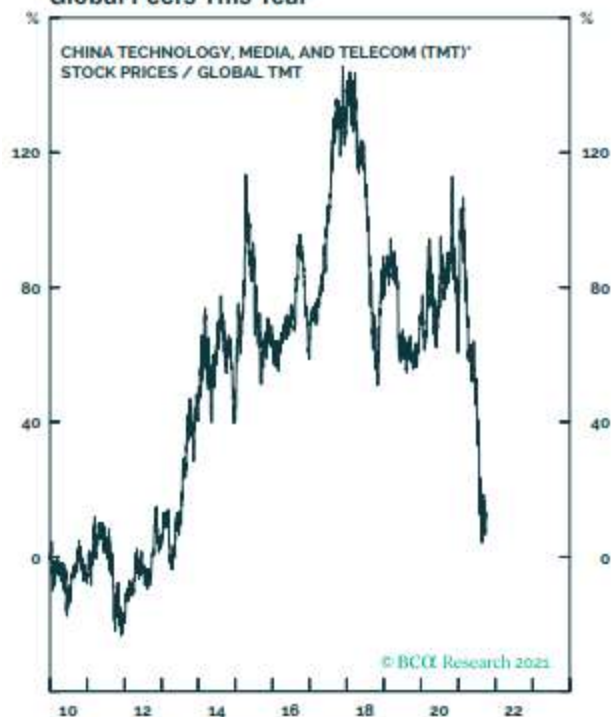
Outlook For Chinese Tech Stocks

The regulatory crackdown on Chinese tech companies has weighed on the sector. Chinese tech stocks have underperformed their global tech peers by 46% since February (Chart 39). Chinese tech is 44% of the China investable index and 15% of the MSCI EM index. Thus, the outlook for Chinese stocks is relevant not just for China-focused investors, but for EM investors more broadly (especially those who invest in index products).

The current crackdown bears some resemblance to the one in 2018, which saw Tencent lose \$20 billion in market

CHART 39

Chinese Tech Stocks Underperformed Their Global Peers This Year



* SOURCE: MSCI INC. (SEE COPYRIGHT DECLARATION);

NOTE: SERIES REBASED TO BEGINNING OF 2010 = 0%. IT SECTOR BEFORE DECEMBER 2018; INCLUDES IT, MEDIA & ENTERTAINMENT, AND INTERNET & DIRECT MARKETING RETAIL AS OF DECEMBER 2018.

capitalization in a single day. Like other Chinese tech names, Tencent shares quickly recovered from that incident.

Contrary to popular perception, the Chinese government has not launched an indiscriminate attack on tech companies. If anything, heightened geopolitical tensions have made it more important than ever for China to buttress its tech sector. Rather, what the government has done is restrain companies that it either perceives as working against the national interest (i.e., addictive video game makers and expensive after-school tutoring companies) or that have too much sway over the public. Private tech companies in sectors such as semiconductors or clean energy continue to receive government support. (A country in which the government now overwhelmingly determines the winners and losers is not where we want to invest.)

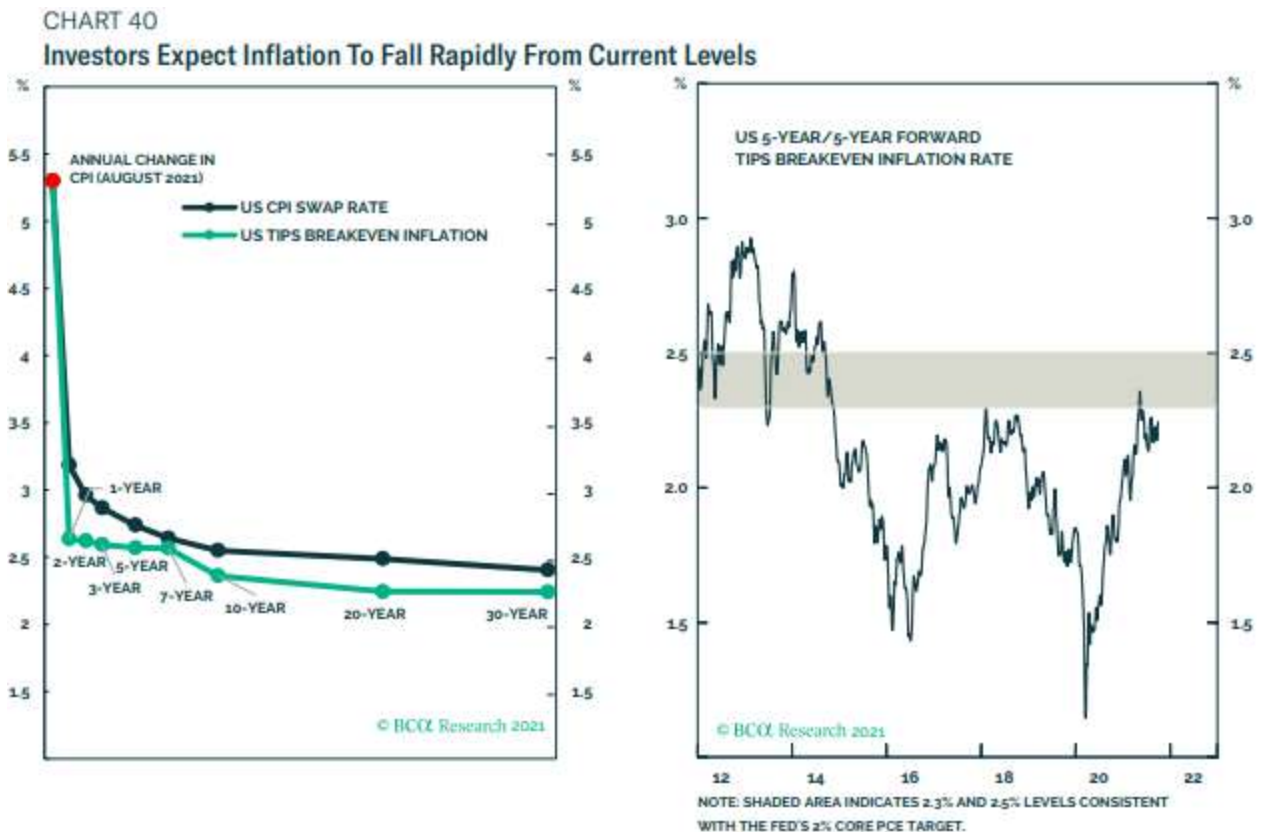
A plausible outcome is that China's leading consumer-oriented internet companies will go out of their way to pledge allegiance to the Communist Party. If that were to happen, the Chinese government may allow them to operate normally, cognizant of the fact that it is easier to monitor a few large internet companies than many small ones.

While such an outcome is far from assured, current valuations offer enough cushion to prospective investors. As we go to press, Alibaba is trading at 15.9-times 2021 earnings, Baidu is trading at 17.1-times earnings, and Tencent is trading at 27.1-times earnings. In comparison, the NASDAQ Composite trades at 31.9-times 2021 earnings. (In our view, NASDAQ tech stocks are also extremely overvalued in most cases.)

C. Fixed Income

Why Are Bond Yields So Low Even Though Inflation Is So High?

While global bond yields have moved higher in recent days, they remain well below pre-pandemic levels. Investors are understandably puzzled about how today's high inflation rates can coexist with such low bond



yields.

Two explanations stand out: First, despite the recent uptick in inflation expectations, investors still believe inflation will come down and stay down (**Chart 40**). In fact, the 5-year/5-year forward TIPS breakeven inflation rate is below the Fed's comfort zone, suggesting that investors expect inflation to ultimately undershoot the Fed's target.

Second, and related to the point above, investors believe that the neutral rate of interest is very low. According to the New York Fed's survey of market participants, investors think that the Fed will not be able to raise rates above 2% during the forthcoming tightening cycle (**Chart 41**). This is even lower than the terminal rate of 2.5% that the Fed foresees. When the Federal Reserve first introduced the dot plot back in 2012, it believed the neutral rate was 4.25%.

If the neutral rate really is this low, then monetary policy is not as hyperstimulative as is often asserted. In that case, a 10-year yield of 1.5% would be entirely appropriate given that it will take a few years for rates just to reach 2%. Indeed, an even lower yield could be justified on the grounds that there is a high probability that the economy will be hit by an adverse shock over the next decade, requiring a return to zero rates and more QE.

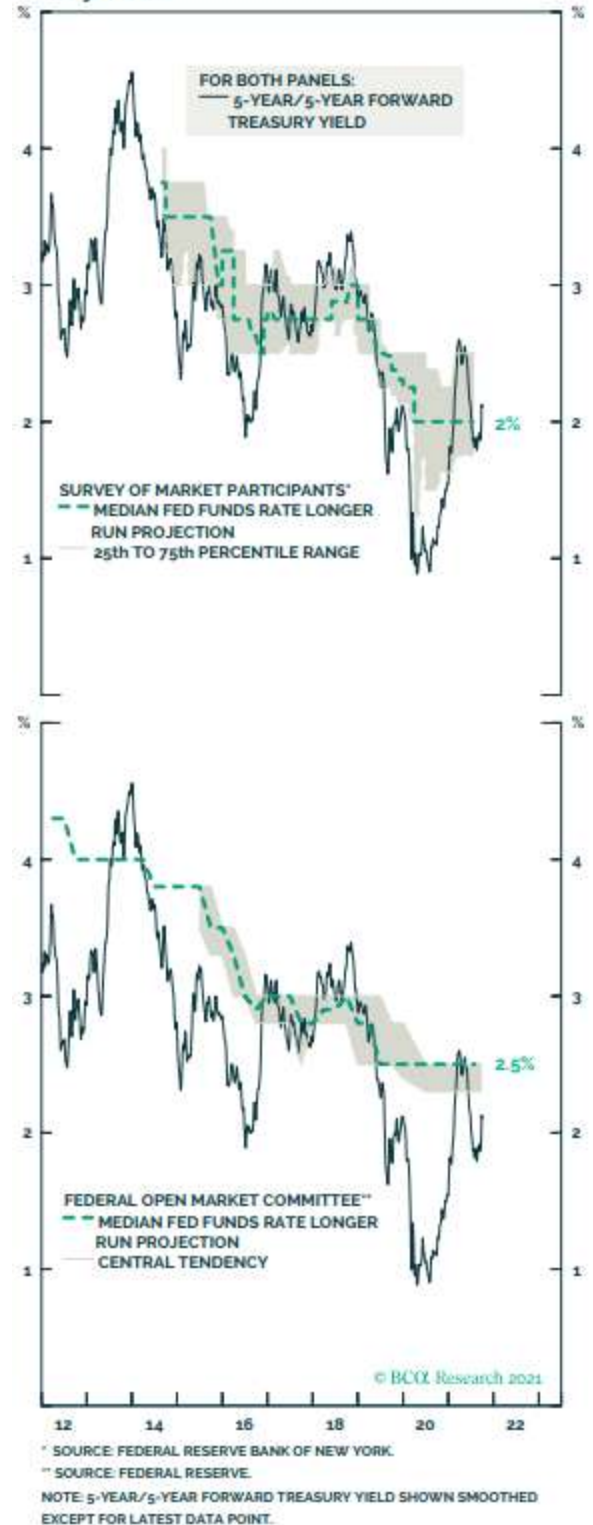
Maintain Below-Benchmark Duration (We continue to recommend a zero allocation to Fixed Income.)

Our view is that the neutral rate is higher than most market participants believe. The end of the household deleveraging cycle in the US, structurally looser fiscal policy, and the exodus of well-paid baby boomers from the labor market will all deplete national savings, pushing up the neutral rate of interest in the process.

If a central bank underestimates the neutral rate, it is liable to keep interest rates too low for too long. This could cause inflation to rise more than anticipated, putting further upward pressure on bond yields.

It will take some time for the market's view to converge to our view (provided we are correct, of course!). Investors have bought into the secular stagnation thesis hook, line, and sinker. Thus, they will require plenty of evidence that the Fed can raise rates without strangling the economy. We expect the US 10-year yield to move to 1.8% by early next year

CHART 41
The Market Thinks The Fed Will Raise Rates Only To 2%



D. Currencies And Commodities

Fade Recent Dollar Strength

The US dollar is a countercyclical currency, meaning that it tends to move in the opposite direction of the global business cycle. The US dollar has strengthened in recent weeks, spurred on by a more cautious tone to markets (the VIX is around 22, up from 16 in late August). As risk sentiment improves, the dollar will weaken.

The composition of global growth also matters. Growth momentum is rotating from the US to the rest of the world. The dollar usually struggles when this happens.

Despite the uptick in US yields, short-term real rate differentials are heavily skewed against the dollar. The US trade deficit has surged over the past 16 months. Equity inflows have been financing the trade deficit, but these could tail off if US stocks start to lag their overseas peers.

The US dollar remains pricey relative to its Purchasing Power Parity (PPP) measure of fair value. Speculators are also net long the dollar, making the dollar vulnerable to a positioning reversal. ...

A New Supercycle In Metals?

China consumes over half the world's industrial metals. Thus, fluctuations in the Chinese economy tend to drive metals prices. ... If Chinese credit growth picks up over the coming months, this should support metals.

Aside from iron ore, it is quite striking that most metals prices have remained firm this year even as China has cut back imports. Copper prices are up 45% year-over-year despite the fact that Chinese imports of copper are down 40% during this period.

As in the early 2000s, the combination of a multi-year period of underinvestment in new mining capacity and new sources of demand could set the stage for an extended bull market in the metals complex.

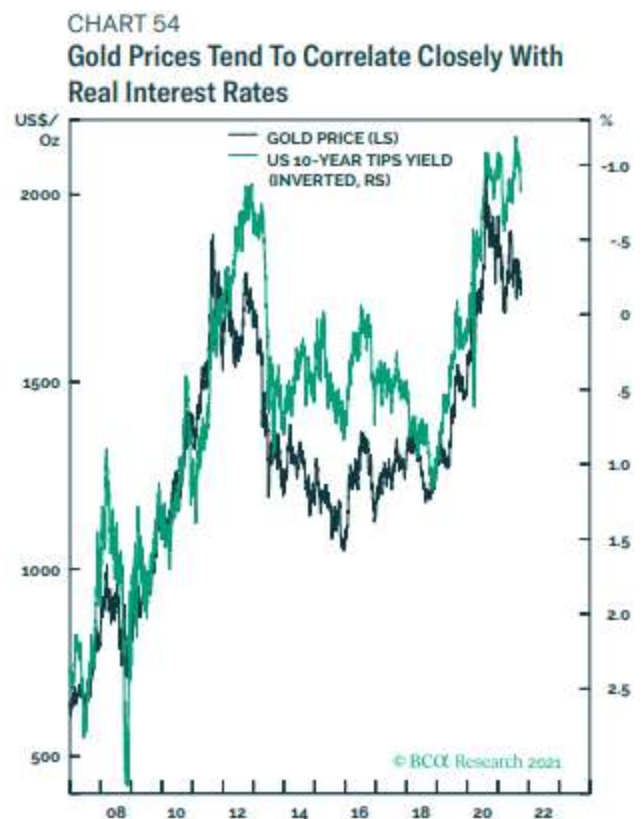
The shift to electric vehicles will boost demand for many metals. The typical electric vehicle uses four times as much copper as a typical gasoline-powered vehicle.

Many pundits argue that because Chinese growth is slowing, China will not need as much commodities as in the past. However, this argument ignores the fact that China is slowing from a very high base. ... China consumes five times as much industrial metals as it did in the 2000s. In absolute volume terms, China's incremental annual increase in metal consumption is twice what it was in the 2000s. Thus, Chinese demand is likely to support the commodity market for years to come.

Gold Facing Crosswinds

Gold prices tend to correlate closely with real interest rates (Chart 54). This is not surprising since the real yield can be regarded as the "opportunity cost" of holding a yield-less asset such as gold.

What is somewhat surprising is that gold prices have dipped more than one would have expected based on the evolution



of real yields. The US 10-year TIPS yield is only slightly higher than where it was in early August 2020, when the price of gold reached \$2,067 per ounce.

Although it is difficult to be certain, the shift in investor interest from gold to cryptos has probably depressed gold prices. Both gold and cryptos are seen as “fiat money hedges”. Our expectation is that tighter regulation will imperil the cryptocurrency market, causing some funds to flow back into gold. Nevertheless, with real yields likely to edge higher over the coming years, the upside for gold prices is limited.

Two from Morningstar:

Strategic Beta Is Active Management

The two approaches to portfolio construction are more similar than they are different.

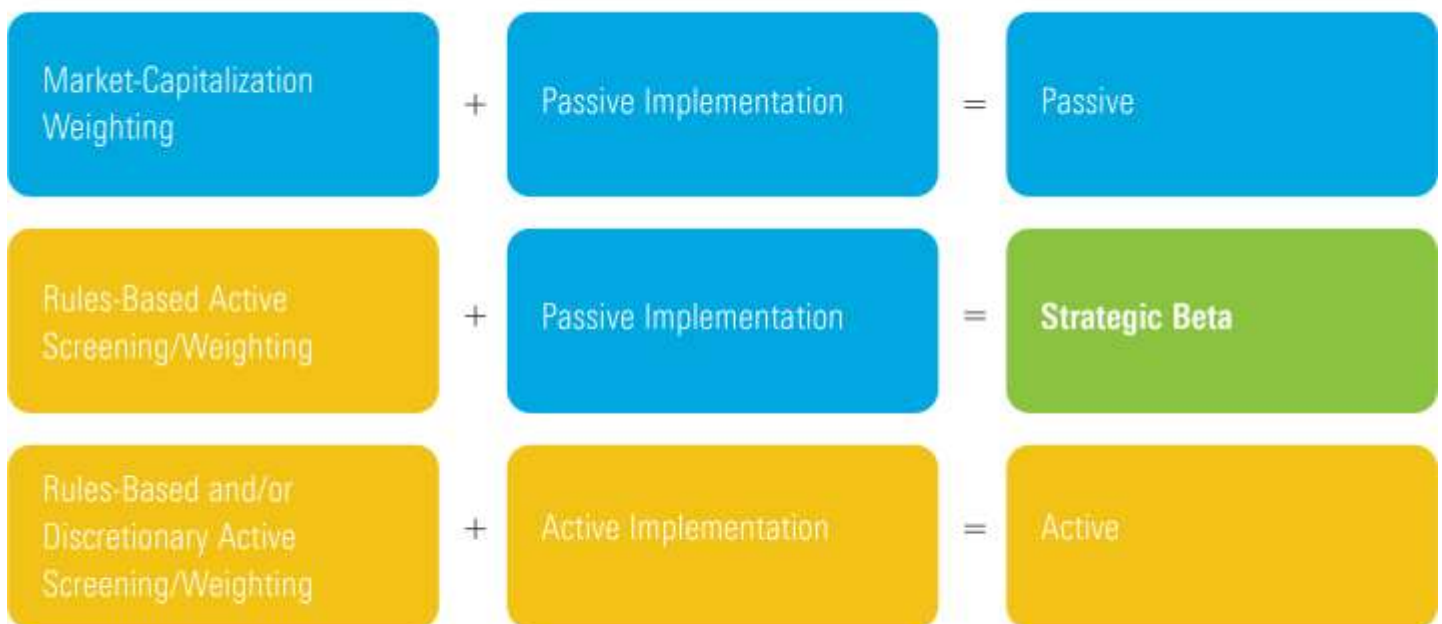
Ben Johnson, CFA

Sep 28, 2021

Strategic beta, also called smart beta, is a form of active management. Strategic-beta exchange-traded funds and mutual funds are linked to indexes that make active bets, of varying types and degrees of magnitude, against the broad market-cap-weighted benchmarks that are their starting point—more purely passive “market” exposures. These wagers are embedded in the funds’ index methodologies, which are their active playbook. But unlike conventional active managers, strategic-beta funds cannot make adjustments. After the play has been called in the huddle, there is no option to call an audible. With respect to the ongoing implementation of the strategies built into their benchmarks, they are strictly passive.

Reframing strategic beta as active management is a useful thought exercise. It allows us to better understand the

Exhibit 1 Strategic-Beta Funds Try to Marry the Best Attributes of Active and Passive



Source: Morningstar.

nature of these funds, their potential pitfalls, and the features that differentiate them from traditional active strategies. I'd argue that much of what investors need to know about strategic-beta funds they have already learned from decades of examining active strategies, vetting them, and putting them to use.

Caveat Emptor

You are probably familiar with the concept of survivorship bias. It describes our tendency to focus only on winners, forget losers, and make some poor statistical inferences as a result. The tendency to strike failed funds from the historical record results in an upward bias to measures of fund managers' success. What you might not realize is that survivorship bias presents itself in many forms. Not only does it stem from a failure to account for those funds that crash and burn, it also reflects issues with accounting for those that never make it out of the hangar. In "Mutual Fund Incubation," [1] University of Virginia finance professor Richard Evans examined the practice of incubation among mutual fund managers. Incubation involves registering and seeding a number of public funds. At first, the funds aren't given a ticker symbol and as such are effectively private. The sponsoring fund company will ultimately select the better-performing funds, slap a ticker on them, and begin marketing them to the investing public. The underperformers are left to die on the vine. Evans found that this process led to an upward bias in fund returns. He also discovered that, while incubated funds outperformed nonincubated funds during their incubation period, on average they subsequently underperformed their nonincubated counterparts following their incubation periods.

What has mutual fund incubation got to do with strategic beta? From a product-development perspective, the resemblance between Evans' findings and trends in the introduction of new strategic-beta ETFs is uncanny. Vanguard research [2] has shown that a very similar performance pattern has emerged among the strategic-beta ETFs that have been launched to track newly minted indexes:

"... [W]e find that ETFs are most likely to be created with indexes that have performed well relative to the broad U.S. stock market before the inception date, but that such performance, on average, does not persist. Even so, new ETFs that use indexes with backfilled data appear to have more success in attracting assets, suggesting that the availability of hypothetical performance data may contribute to the viability of a new ETF. Overall, our research suggests that investors need to be cautious in considering historical index performance, especially for indexes constructed for use in new ETFs." (This is an issue I have previously addressed.)

Underperforming funds never leave the incubator. Bad back-tests never see the light of day. Investors know that past performance is not indicative of future results, but they sure hope it will be. In vetting strategic-beta ETFs, keep in mind that survivorship bias comes into play immediately--don't let it cloud your judgment.

Starstruck

Despite all we know about the peril of extrapolating past performance into the future, we just can't help ourselves. This habit is evident in the manner in which investors select funds. It is widely known that investors have relied heavily on the Morningstar Rating for funds (aka the star rating) to inform their fund-selection process for years. The rating is a strictly quantitative, backward-looking measure of a fund's risk-adjusted performance relative to its Morningstar Category peers. Historically, the funds earning the highest ratings have tended to receive the lion's share of investors' money. In my opinion, this pattern is driven by a number of factors. One of them is classic performance-chasing behavior. Another is aggressive marketing of highly rated funds: We've all seen the ads touting that XX% of XYZ Fund Company's mutual funds have 4- or 5-star Morningstar Ratings. Career risk is also at play. For example, it is hard for an advisor to make the case for an otherwise solid 2-star fund that might simply be going through a rough patch. (As mentioned above, a fund's

star rating is "relative to its Morningstar Category peers." It "going through a rough patch" that isn't effecting its peers would require us to find a reason not to sell. As an example, while MTUM is currently rated 2 stars, we consider it a solid hold based on process and past performance. However, we don't recommend buying funds rated below 3-stars.) Whatever the case might be, investors are starstruck.

Exhibit 2 The Pattern In Strategic-Beta ETF Flows Is Familiar

Morningstar Rating	Assets Under Management (\$Bil)	% of Assets Under Management	Trailing 3-Yr Flows (\$Bil)	% of Trailing 3-Yr Flows	# of ETPs
★★★★★	111.6	8.4	46.4	20.7	38
★★★★	660.0	49.8	105.5	47.1	120
★★★	361.3	27.2	52.2	23.3	176
★★	151.4	11.4	12.9	5.7	107
★	31.1	2.3	1.6	0.7	74
Total	1,326.0	100	224.0	100	640

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

As it is for active, so it is for strategic beta. When it comes to selecting strategic-beta ETFs, investors' purchasing decisions appear to be following a familiar pattern. As you can see in Exhibit 2, 58% of the total assets invested in strategic-beta ETFs reside in those funds with a 4- or 5-star rating. Additionally, during the past three years, 68% of net new inflows went into these same funds.

Performance

The similarities between strategic beta and active management don't end with how these funds are brought to market and how investors choose them. There are also important commonalities with respect to how investors might improve their odds of long-run success, the ups and downs that strategies of each ilk will experience across a market cycle, and how investors might respond to this cyclicity.

This isn't the first time I've used this Jack Bogle quote, and I promise it won't be the last: "In investing, you get what you don't pay for." Every study I've ever seen on the relationship between fees and performance corroborates this bit of wisdom. Be it an active manager or a strategic-beta ETF, lower fees represent a lower hurdle and, thus, greater odds of market-beating returns. Focusing on fees is the most reliable way to improve your odds of picking a winner. (We maintain that Process, backed by Performance, is the most important consideration, although fees do matter, which is why we get our clients into a fund's institutional class whenever possible.)

Disciplined active managers and strategic-beta ETFs will also share the common experience of prolonged droughts: periods during which their investors will be subjected to excruciating pain as their style falls and remains out of favor. We previously detailed [value's current dry spell](#), so I won't belabor the point here. (Value's "current dry spell" depends in part upon your choice of valuation metric, as we have previously shared, and as detailed on our website.) Suffice it to say that, in order to beat the market, you must be different from the

market. Being different won't always be pleasurable. You will be paid in proportion to your discomfort--assuming there's any payout at all.

For some investors, this pain will be too much to bear. Regular cycles of performance-chasing, disappointment, and retreat have led many investors to miss out on the moments when funds deliver the goods. Investors generally select good funds, but they tend to use them poorly--buying after a strong run and selling just before a rebound. We have seen this exact pattern emerge within strategic-beta ETFs as well.

This Time Is Different

Reframing strategic beta as a new form of active management reveals some striking similarities between the two. That said, there are very important differences worth noting:

- 1) *Lower fees.* As you can see in Exhibit 3, the fees charged by strategic-beta ETFs are typically substantially lower than those levied by actively managed mutual funds. That said, they often charge a multiple of the fees levied by their more traditional, purely passive peers.
- 2) *Tax efficiency.* ETFs tend to be more tax-efficient than mutual funds, largely because they distribute fewer (if any) and smaller capital gains. ETFs' structure is the primary driver of their tax efficiency. The ability to regularly purge low-cost-basis securities in-kind is a key advantage over traditional open-end mutual funds and has allowed even high-turnover strategies to avoid distributing gains. For example, there are 68 strategic-beta ETFs that had average annual turnover in excess of 100% over the trailing five years through 2020. There were just 12 capital gains distributions among those 68 funds over that span--representing just 3.5% of the fund years in the sample.
- 3) *Relative predictability.* I'm borrowing from Bogle again here. This takes a number of forms in the context of strategic-beta ETFs. The fact that these funds are making active bets based on a set of (usually) transparent rules makes them somewhat more predictable relative to active strategies. Also, they aren't susceptible to key-person risk. Few could likely name the managers of Vanguard Dividend Appreciation ETF ([VIG](#)) off the top of their head. Should these managers up and leave their post, you wouldn't know the difference.

Strategic-beta ETFs are arguably a new and more efficient way of making the same bets that investors hired active managers to make on their behalf for decades. Most of what investors need to know about these funds they have already learned from years of investing in active strategies. Though the ante might be lower, the odds may be a bit better, and it is less likely there will be any wild cards, investors are still making an active bet against the market. There's no guarantee it will be a winning bet, and their ability to collect will require them to

Exhibit 3 A Flavor of Active Management at Near-Passive Prices

	Median Expense Ratio %		
	Strategic Beta	Active	Passive
U.S. Core Equity	0.31	0.89	0.20
U.S. Core Fixed Income	0.20	0.50	0.10

Source: Morningstar Direct. Data as of July 31, 2021. Data reflect the prospectus net expense ratio of funds' oldest share classes. Morningstar Categories included: large value, large blend, large growth, mid value, mid blend, mid growth, small value, small blend, small growth, intermediate core bond, and intermediate core-plus bond.

stay at the table even when they don't feel they have a hot hand.

[1] Evans, R.B. 2010. "Mutual Fund Incubation." *The Journal of Finance*, Vol. 65, No. 4, P. 1581.

[2] Dickson, J., Padmawar, S., & Hammer, S. 2012. "Joined at the Hip: ETF and Index Development." <https://www.vanguardcanada.ca/documents/joined-at-the-hip.pdf>

Two Perils for Investors: Big Governments and Bad Governments

The latter is worse, but neither are helpful.

John Rekenhaller

Sep 27, 2021

Potential Concerns

The business press [constantly derides governments](#) that spend heavily. The mindset requires little justification. Companies in the former state-controlled nations of the Soviet Union and East Germany, which featured nationalized industries, were abominably run. So are those that currently reside in Cuba and North Korea. Should a fool decide to invest in one of those countries' businesses, he would soon be parted with his money.

However, such criticism often not only addresses the tenets of communism, namely common ownership of production and (in reality, if not necessarily in theory) centralized planning, but also other government initiatives. By this argument, known as "[crowding out](#)," each additional penny spent by the government is a penny that would have been better spent by the private sector. When the government does more, the people ultimately receive less.

This column cannot hope to tackle the full implications of the crowding-out hypothesis. However, it can address one specific aspect: Does government spending harm stock market performance? If so, investors should favor countries that have relatively stingy governments. On the other hand, if there is no discernible relationship between government expenditures and stock market gains, then we can safely leave the crowding-out discussion for political forums.

In contrast with government spending, the optimal level of official corruption cannot be debated. It is zero. No doubt, companies that bribe the right officials, during the right circumstances, can succeed by stealing business from more deserving competitors. But when personal favors outweigh professional merit, the overall effect on a country's economy, consumers, and corporate profitability is negative. With government corruption, less is certainly more.

Presumably, the damage caused by corruption will appear in equity returns. Companies from nations that don't allocate their productive assets efficiently because of official corruption will struggle to compete with businesses that prosper on merit. Also, when high incomes can accrue from government positions, ambitious young workers are less likely to work in the private sector.

Testing the Data

Let's see what the numbers indicate. This article evaluates only developed economies, as emerging countries march to a different drummer. It compares the 2001-20 total returns for the 20 largest developed markets against various measures of government spending, along with one of public-sector corruption. Those measures

come from the year 2000, meaning that they represent the information available to investors at that time. (True, they would not have been released until sometime during 2001, but let's not be overly technical.)

Calculating total returns was straightforward, thanks to Morgan Stanley Capital International's single-country indexes. So, too, was obtaining an indicator of government corruption, from Transparency International's [Corruption Perception Index](#). However, determining the levels of government spending was trickier. The World Bank and the Organization for Economic Co-operation and Development, or OECD, each offer various statistics, which vary in their details. However, as we shall see, their conclusions are broadly similar.

I started the inquiry into the effect of government spending indirectly, sorting countries by their tax rates. My source was the World Bank's ["Tax Revenue \(% of GDP\)"](#) ratio. The highest two countries by this statistic were Sweden and Denmark, while the lowest two were Australia and Switzerland. (The latter were surprises to me ... I confess to being not entirely convinced of the accuracy of government-spending data, which is why I took multiple bites of that apple.)

The correlation between the inverse of the countries' tax-revenue ratios and their stock market returns was 0.21. In other words, nations that had relatively low tax rates entering 2001 tended to post stronger equity returns over the ensuing 20 years. The effect was not overwhelming, as Denmark notched the second-highest stock performance despite its steep taxes. Nonetheless, the pattern was evident even through a simple eye test. For example, the countries that possessed the five lowest tax ratios all posted above-average equity gains.

I then switched to evaluating spending directly, through the OECD's ["General Government Spending"](#) statistic, which attempts to capture a country's entire government costs, as a percentage of gross domestic product. Once again, Sweden and Denmark led the way, and again Switzerland landed near the bottom. The correlation was almost identical to the tax-rate exercise, at 0.23.

Finally, I returned to the World Bank's data, this time using its ["Expense \(% of GDP\)"](#) measure, which also purports to quantify overall government costs. Its figures, however, differ substantially from that of the OECD's spending statistic. As does the result: With the Expense % of GDP calculation, the correlation between lower

Government Activities & Stock Returns

(Correlations between government activities and stock returns for 20 developed markets, 2001-20)

Statistic

Correlation

Tax Revenue/GDP

0.21

OECD Government Spending/GDP

0.23

World Bank Government Spending/GDP

0.56

Average for Government Spending Indicators

0.33

Government Corruption Index

0.58

Sources: Morningstar Direct, World Bank, OECD, Transparency International.

amounts of government activity and stock market returns soars to 0.56. The two figures are strongly related.

Such was the story for big governments. Now comes the easier task, that of assessing the waste caused by bad governments. Transparency International sorts countries by the honesty of their government officials. (Currently, the top-rated nations on the firm's Corruption Perception Index are New Zealand and Denmark, with South Sudan and Somalia as bottom feeders.) Measuring the effect of public-sector corruption on stock market returns was as simple as comparing its rankings to those of the total returns.

This comparison had the steepest correlation of all, at 0.58. In the grand scheme of Transparency International's index, none of these countries are deeply corrupt because they are relatively wealthy--corruption is strongly associated with national poverty. However, as evidenced by the outcome, even the difference between scrupulously clean, as with the Nordic countries, and partially unethical, as with Greece and Italy, looks to have a major effect on stock market results.

In Conclusion

Corrupt governments are unambiguously bad, save for those who profit from the take. The same does not apply to large governments. Although such countries' stock markets have fared somewhat worse, one cannot conclude from that evidence alone that politicians should favor small-government policies. A country has many more stakeholders than its stock market's investors.

However, when viewed solely from the investor's perspective, going small appears to be the correct prescription. Of even greater importance is ensuring that those who do hold public-sector jobs work honestly. There is no excuse for tolerating bad governments. ...

Follow-ups

From Morningstar:

3 Investment Mistakes to Avoid

Bypassing the traps.

John Rekenhaller

Sep 23, 2021

In the News

This is not the first time that I have written about [these three investment blunders](#). Fortunately, they are becoming less common. But, until they disappear altogether, admonitions are still warranted.

The investment industry currently features two scandals: 1) the [lawsuits](#) filed against the German financial-services conglomerate Allianz, for the collapse of its Structured Alpha suite of funds; and 2) [the woes](#) of Chinese property developer Evergrande Property Services Group. (The company is not "ever grand," as it turns out.)

The inclusion of Allianz's funds makes sense, but you might wonder how the problems of a property developer qualify as an investment topic. Although Evergrande's main business is real estate, it also offers "wealth

management products” to customers who buy its apartments. Who better to manage your retirement savings than the people who built your house?

(In the United States, property developers’ brand extensions are less ambitious.)

Unhappily, the answer is "pretty much anybody." Evergrande allegedly ran a Ponzi scheme, using incoming proceeds to pay off older accounts. In addition, stated one of the company’s executives, the firm used investor accounts to “bridge various funding gaps faced by the parent company.” Whatever the reasons, the money is gone, and Evergrande is now bartering with its customers. Rather than cash, the company says, it will provide those who wish to redeem their investments with IOUs for a future apartment. Such a deal!

Not that Allianz’s Structured Alpha shareholders can do much boasting. The funds, which invested heavily in options, got clocked by the highly volatile marketplace of February-March 2020. The tamer funds in the series dropped 30% during the period and never recovered. The more aggressive entrants lost almost everything. The Structured Alpha funds have since been shuttered.

Mistake 1: Aiming Too High

Everybody knows that if something is too good to be true, it probably is. Yet every year millions of investors override their better judgment and buy investments that can’t possibly deliver on their word.

The boldest of Allianz’s funds, Structured Alpha 1000, had a goal of outgaining cash by an annualized 10 percentage points while “generating returns in times of rising or falling equity markets and both low and high market volatility.” (Technically, it followed through on that claim: The fund did generate a return during March 2020. It was deeply negative.) Ten percentage points better than cash, through thick and thin! Don’t try that at home.

Evergrande’s investments were equally optimistic. According to the daughter of one of Evergrande’s investors, the product that her father bought guaranteed him an 11.5% annual gain. Some guarantee! Chinese bond yields are above Treasury levels, with Chinese government 10-year bonds currently paying 2.87%, but they are nowhere near high enough to support casually promising an 11.5% return.

When I encounter such offers, I back away slowly, with a tight grip on my wallet. Not just from that product, but from the company entirely. Organizations that want my money must earn my trust, from top to bottom.

Mistake 2: Accepting Complexity

This precept is not as ironclad as the first warning, because not every elaborate strategy fails. Several famous hedge funds, most notably Renaissance Technologies’ Medallion, have posted excellent long-term returns while using strategies that can’t easily be described. Just because a fund’s approach is complicated doesn’t mean it will prove to be a poor investment.

Nonetheless, the odds do not favor intricacy--particularly with publicly traded funds, which boast no equivalent of Medallion. Among mutual funds and exchange-traded funds, the top 20-year performers (as measured by risk-adjusted returns) have adopted straightforward approaches. The exceptions have been a handful of bond funds that use derivatives, such as Pimco Total Return.

Accepting complexity usually means investing on faith. Few who bought either Evergrande’s products or the Structured Alpha funds knew what they held. Evergrande informed investors that it would use their money to

provide financing to obscure privately held companies, while apparently doing otherwise. For their part, the Structured Alpha funds employed options tactics that have been appreciated only by subject-matter experts.

Mistake 3: Flying Blind

It is crucial to receive timely news on portfolio holdings.

It's one thing to invest in convoluted strategies that report their positions often, as with exchange-traded funds. Although few shareholders will directly use that information, as they won't closely monitor their funds (and would be unlikely to know how to interpret the data if they did), the mere act of reporting creates a record that deters funds from straying too far off their stated paths.

It's quite another thing when the snapshots occur infrequently. Depending upon their country of issuance, the Allianz funds reported their holdings quarterly or semiannually; that's sufficient for a typical mutual fund that turns over its portfolio gradually, but it is a hopelessly long period for funds that trade options. Such funds could begin the quarter investing in one fashion, change for two months, then resume their previous ways. No outsider would ever know.

The Evergrande products were even more opaque, being effectively blind pools. Their owners could only trust that their monies were invested as the sales literature described, into companies that were solvent and could pay their obligations. As it turned out, their trust was misplaced.

In Conclusion

As these two examples come from Germany and China, it's tempting to think that U.S. investors have outgrown such mistakes. To some extent, that is true. With experience, the U.S. marketplace has evolved and improved. It is unlikely we will see an American equivalent of Evergrande. But U.S. investors should not be too smug. Among the plaintiffs in the Structured Alpha lawsuits are Blue Cross Blue Shield, the City of Milwaukee, Lehigh University, and the Arkansas Teacher's Pension.

Oops. ...

Positions

CNDT - Added 2% positions in this IT Services IVA System pick for 5 clients on 9/20 @ 6.372.



Insider Buying:

Trade Date	No. Part Participants	Net Sell (Shares)	Net Buy (Shares)
08/26/2021	1 Simon Mark		3,703
08/12/2021	1 Prout Mark		3,000
08/10/2021	2 Skelton Clifford, Letier Sco...		24,970

ENGIY - Added 2% positions in this French Power Generation IVA System pick for 6 clients on 9/20 @ 13.70.



Insider Buying:

Trade Date	No. Part Participants	Net Sell (Shares)	Net Buy (Shares)
08/04/2021	1 DEMAILLE FRANK JEAN ALAIN		2,500
08/02/2021	3 Macgregor Catherine, Clam...		45,000

HQH - We had purchased this Health Care CEF at a significant discount to NAV on 3/24/20 for 2 clients, and sold it on 9/17 @ 26.58, which was now at a slight premium to NAV (orange line).



LMRK - We sold this Diversified REIT that is being acquired by its Sponsor for 16.5 for 3 clients on 9/20 @ 16.512.



VLVLY - Added 2% positions in Volvo ADRs (its former car manufacturing division is now owned by a Chinese company), an IVA System pick, for 6 clients on 9/20 @ 21.29-.34.



Insider Buying:

Trade Date	No. Part Participants	Net Sell (Shares)	Net Buy (Shares)
08/23/2021	1 INDUSTRIVARDEN A		4MLN
08/18/2021	1 Lundstedt Martin		10,000
07/21/2021	1 INDUSTRIVARDEN A		3MLN
07/20/2021	4 Rosenberg Joachim, ALM R...		47,450