June 2021

"as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns -- the ones we don't know we don't know." - former Defense Secretary Donald Rumsfeld

From the front page of Thursday's WSJ:

Stocks Close Out Record Half, But Unease Grows Over Risks

BY AKANE OTANI

Stocks closed out the first half of the year with double-digit percentage gains, powered by an economic recovery that many investors believe is still gathering pace.

The S& P 500 is up 14% this year, closing June at a record, while the Dow Jones Industrial Average has climbed 13%. This quarter will mark both indexes' fifth consecutive quarter of gains, their longest such streak since a nine-quarter stretch that lasted through 2017.

The mood should be ebullient. Data on everything from hiring to consumer spending to small business-owners' confidence have bounced back and stayed above their pandemic lows. Yet, for many money managers, the past few months have felt like anything but a straightforward win. After a 12-month period in which it seemed stocks could do nothing but go up, many say the outlook is growing increasingly opaque. ...

Investors are heading into the second half of the year weighing whether a recent acceleration in inflation is shaping up to be transitory, or the start of a longer-term trend that might force the Federal Reserve to pick up its pace of interest-rate increases.

Yields on 10-year U.S. Treasurys, meanwhile, suggest that after snapping back from the Covid-19 shutdown, longer-term economic growth might be more muted than investors expected just a few months ago. That is in part because of dimming prospects for additional, huge stimulus from the federal government.

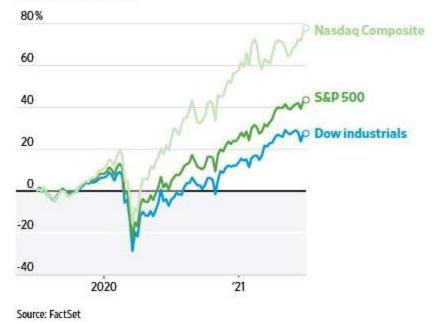
So even as stocks march upward, and volatility is subdued, there is growing anxiety that future gains will be harder won.

In June alone, stocks logged both their worst week since October and their best week since February. Value stocks were among the best performers for the quarter, but growth stocks held their own, too. ...

Underneath the surface, market moves have been unusually sharp and swift—hinting at

U.S. stocks have now notched five straight quarters of gains, their longest such streak since 2017.

Index performance



just how undecided many traders are about the direction of the economy. ...

The bull case for markets goes something like this: The economy's rebound has been undeniable. Corporate earnings have shined, too; a record number of S& P 500 companies have issued positive earnings and sales guidance for the second quarter, according to FactSet.

Warning signs still abound, though. Many investors believe much of the economy's rebound has been priced in. Money managers also say they believe that with major indexes trading at records, markets look priced for perfection. This means it might not take much to send stocks lower.

Goldman Sachs is forecasting that the core consumer-price index, which excludes the often-volatile categories of food and energy, will pull back from recent highs to around 2.3% next year. The Labor Department's reading of core inflation had come in at 3.8% in May, the biggest year-over-year increase since 1992.

But the bank's team acknowledges it could be wrong. If so, investors could be in for a tougher trading environment. Since 1960, the median return for the S& P 500 has been 15% in low-inflation periods and 9% in high-inflation periods, Goldman's team found.

Even seasoned investors say they have struggled to discern whether soaring prices across markets are being caused by one-time issues, or are a prelude to more long-lasting and broad inflation. ...

From Global Investment Strategy:

June 30, 2021

2021 Third Quarter Strategy Outlook: The Path To Normal

I. Macroeconomic Outlook

Global Vaccination Campaign Kicks Into High Gear

Nearly 18 months after the pandemic began, the global economy is on the mend. In its latest round of forecasts released on May 31st, the OECD projects that the global economy will expand by 5.8% this year, up from its March projection of 5.6%. The OECD also bumped up its growth forecast for 2022 from 4% to 4.4%.

After a rough start, the vaccination campaign is progressing well in most advanced economies. The US and the UK were the first major developed economies to roll out the vaccines, followed by Canada and the EU. While Japan has lagged behind, the pace of vaccinations has picked up lately. Twenty percent of the Japanese population has now received at least one dose.

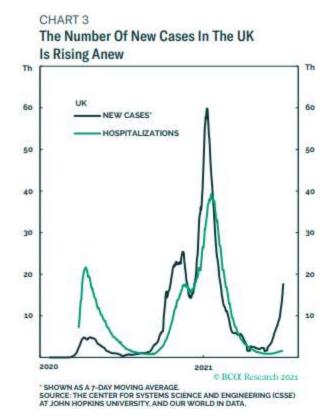
Developing economies are still struggling to secure enough vaccine. Fortunately, this problem should abate over the next six months. The Global Health Innovation Center at Duke University estimates that pharmaceutical companies are on track to produce more than 10 billion vaccine doses this year. While perhaps not enough to inoculate everyone who wants a jab, it will suffice in providing protection to the most vulnerable members of society – the elderly and those with pre-existing medical conditions.

New Variants And Vaccine Hesitancy Are Risks

Novel strains of the virus remain a concern. First identified in India, the so-called "Delta variant" is spreading around the world. The number of new cases in the UK, where the Delta variant accounts for over 90% of all new infections, is rising again (**Chart 3**). The latest outbreak has forced the government to postpone "Freedom Day" from June 21st to July 19th.

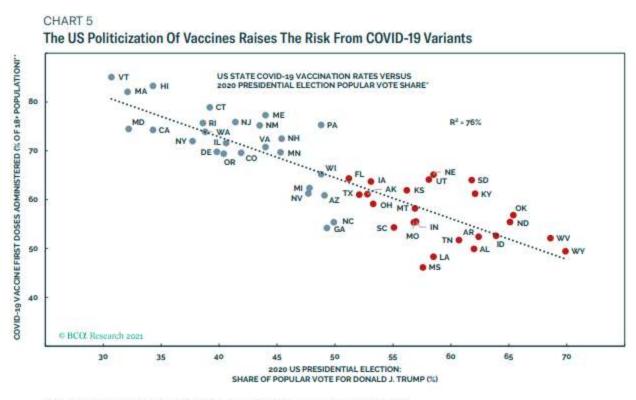
It is highly likely that the Delta variant will produce another wave of cases in the US this summer. Despite ample availability, one-third of Americans over the age of 18 have yet to receive a single dose of a vaccine. As is the case with most everything in the United States, the question of whether to be inoculated has become politicized. In many Republicanleaning states, more than half the population remains unvaccinated (**Chart 5**).

Vaccine hesitancy will likely diminish as the evidence of their effectiveness continues to mount. According to analysis by the Associated Press using CDC data, fully vaccinated people accounted for less than 1% of the 18,000 COVID-19 deaths in the US in May. A study out of the UK showed that two doses



of the Pfizer-BioNTech vaccine was 96% effective against hospitalization from the Delta variant, while the Oxford-AstraZeneca vaccine was 92% effective.

While another wave of the pandemic will curb growth this summer, the economic impact will be far smaller than in the past. At this point, the initial terror of the pandemic has faded. Politically, it will be more difficult to justify lockdowns in countries such as the US where almost everyone who wants a vaccine has already been able to get one.



* SOURCE: US CENTERS FOR DISEASE CONTROL AND PREVENTION AND THE COOK POLITICAL REPORT. ** AS OF JUNE 30, 2021.

Macro Policy Outlook: Tighter But Not Tight

After cranking the fire hose to full blast during the pandemic, policymakers are looking to scale back support. On the fiscal side, governments are slowly starting to rein in budget deficits. The IMF expects the fiscal impulse in advanced economies to average -4% of GDP in 2022, implying an incrementally tighter fiscal stance.

Tighter does not necessarily mean tight, however. The IMF sees advanced economies running an average cyclically-adjusted primary budget deficit of 2.6% of GDP between 2022 and 2026, compared to an average deficit of 1.1% of GDP between 2014 and 2019.

In the US, Congress is debating an infrastructure bill, a key element of President Biden's "Build Back Better" agenda. If the bill fails to move out of the Senate, our geopolitical strategists expect Congress to use the reconciliation process to pass most of Biden's legislative program. This should result in an additional 1.3% of GDP in federal spending per year over the next 8 years, offset only partly by higher taxes.

In the euro area, the IMF expects fiscal policy to remain structurally looser by nearly 2% of GDP in the postpandemic period. After six months of parliamentary debates, all 27 EU countries ratified the €750 billion Next Generation fund on May 28th. The allocations from the fund for southern European countries are relatively large. Most of the money will be spent on public investment projects with high fiscal multipliers.

Japan has a habit of tightening fiscal policy at exactly the wrong moment, with the October 2019 hike in the sales tax from 8% to 10% being no exception. Unlike in other developed economies, both the Japanese manufacturing and services PMI remain stuck in the mud. The odds are rising that Prime Minister Yoshihide Suga will announce a major stimulus package after the Olympic Games and ahead of the general election due by October 22nd.

China: Normalization Not Deleveraging

In China, strong export growth, propelled by the shift in global spending towards manufactured goods during the pandemic, allowed the government to tighten fiscal policy modestly in the first half of the year.

Looking out, fiscal policy should turn more stimulative. Local governments used only 16% of their bond issuance allocation between January and May, compared with 59% over the same period last year and 40% in 2019. Proceeds should benefit infrastructure spending, which has been on the weak side in recent years.

After a sharp decline, Chinese credit growth should stabilize in the second half of the year. The current pace of credit growth of 11% is near its 2018 lows and is broadly in line with nominal GDP growth. Given that the authorities have stated their desire to stabilize the ratio of credit-to-GDP, they are unlikely to proactively suppress credit growth further. ...

Nevertheless, changes in fiscal and credit policy tend to affect the Chinese economy with a lag. Thus, the tightening in fiscal policy and the deceleration in credit growth that occurred early this year could still weigh on economic activity during the summer months.

Don't Sweat The Dot Plot

Markets interpreted the June FOMC meeting in a hawkish light. Both the 2-year and 5-year yield jumped 10 basis points following the meeting. The US dollar, which is quite sensitive to changes in short-term rate expectations, strengthened by nearly 2%. In contrast, long-term bond yields declined following the meeting, with the 10-year and 30-year bond yield falling by 6 and 19 basis points, respectively.

As long duration assets, stocks take their cues more from long-term yields than short-term rates. Hence, it was not surprising that equities held their ground, and that growth stocks reversed some of their underperformance against value stocks this year.

This publication agrees with BCA's bond strategists that the market overreacted to the changes in the Fed's projections (aka "the dots"). As Chair Powell himself noted during the press conference, the dot plot is "not a great forecaster of future rate moves," before adding that "Lift-off is well into the future."

The market is currently pricing in 105 basis points of tightening by the end of 2023. Prior to the meeting, investors were expecting 85 basis points in rate hikes. The regional Fed presidents tend to be more hawkish than the Board of Governors. Our guess is that Jay Powell himself only penciled in one hike for 2023. Lael Brainard, who may be replacing Powell next year, likely projects no hikes for 2023.

The Path To Full Employment

Rather than obsessing over the dots, investors should focus on the questions that will actually drive Fed policy, namely how long it takes the US economy to return to full employment and what happens to inflation in the interim and beyond.

There is a lot of uncertainty over these questions – both on the demand side (how fast will spending recover?) and the supply side (how much labor market slack is there and how quickly can firms ramp up hiring?).

On the demand side, the pandemic led to unprecedented changes in household spending and saving behavior. ... goods spending surged while services spending collapsed. Overall spending declined, and together with increased transfer payments, savings ballooned. As of May, US households were sitting on \$2.5 trillion in excess savings.

Looking at disaggregated bank deposit data as a proxy for the distribution of household savings, the wealthiest 10% of households accounted for about 70% of the increase in savings between Q1 of 2020 and Q1 of 2021. Given that richer households have relatively low marginal propensities to spend, this suggests that a large fraction of these excess savings will remain unspent.

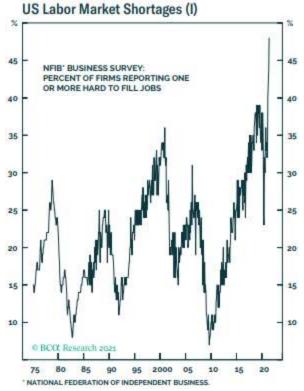
Nevertheless, \$2.5 trillion is a lot of money – it's equal to almost 17% of annual consumption. Hence, even if a third of this cash hoard were to make its way into the economy, it could buoy aggregate demand significantly.

A Labor Market Puzzle

Turning to the supply side, there were over 4% fewer people employed in the US in May than in January 2020). On the face of it, this would suggest the presence of a significant amount of labor market slack.

Yet, the NFIB small business survey tells a different story. It revealed that 48% of firms reported difficulty in filling vacant positions in May, the highest percentage of respondents in the 46-year history of the survey (**Chart 17**).

Along the same lines, the nationwide job openings rate reached a record high of 6% in April, up from 4.5% in January 2020.



The quits rate, a good proxy for worker confidence, is also at a record high (**Chart 18**).

How does one reconcile the low level of employment with other data pointing to a tight labor market? ... four explanations stand out:

- Generous unemployment benefits, which have depressed labor force participation among low-wage workers.
- Pandemic-related school closures. As **Chart 20** shows, they have had a noticeable impact on labor force participation among women with young children.
- Reduced immigration. At one point during the pandemic, visa issuance was down 99% from prepandemic levels (**Chart 21**).
- An increase in early retirements. We estimate that about 1.5 million more workers retired during the pandemic than would have been expected based solely on demographic trends (**Chart 22**).

All but the last effect is likely to be fleeting. Enhanced unemployment benefits expire in September; President Biden has reversed President Trump's ban on most worker visas; and schools should fully reopen by the fall. And even for the retirement effect, most recent retirees were approaching retirement age anyway. Thus, there will likely be fewer incremental retirements over the next few years.

A Speed Limit To Hiring?

Assuming that a large fraction of sidelined workers return to the labor market in the fall, how fast will firms be able to hire them? In general, we are skeptical of arguments claiming that there is much of a speed limit to the pace of hiring.

1.2

There is a lot of churn in the labor market. Gross job flows are much larger than net flows. Between 2015 and 2019, 66.1 million people were hired on average per year compared with 59.6 million who quit or were discharged.

Churn is especially strong in the retail and hospitality sectors, the two segments that account for the bulk of today's shortfall in jobs. In April of this year, retailers hired nearly 800,000 workers. An additional 1.42 million workers found jobs in the leisure and hospitality sectors. This is equivalent to 5.3% and 10.1% of total employment in those sectors, respectively. And remember, we are talking about only one month's worth of hiring.

During past V-shaped recoveries, employment growth often surpassed 5% on a year-over-year basis (**Chart 24**). Such a growth rate would produce net 670K new jobs per month, enough to restore full employment by mid-2022.

The Fed's Three Criteria For Lift-Off

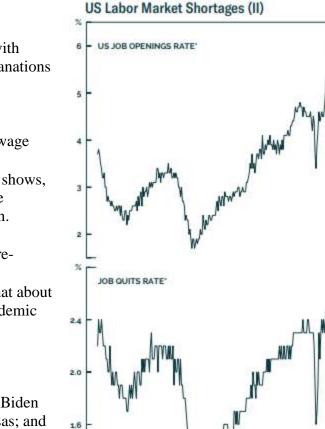
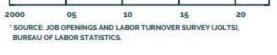


CHART 18



© BCCI Rest

such again

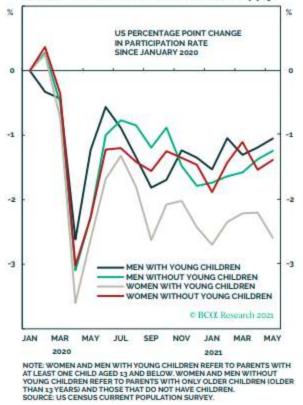
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1.6

1.2

CHART 20 School Closures Have Curbed Labor Supply



In August of 2020, the Fed formally adopted a "flexible average inflation targeting" framework. It seeks to offset periods of below-target inflation with periods of above-target inflation. The goal is to better anchor long-term inflation expectations, while giving households and firms more clarity over where the price level will be many years out.

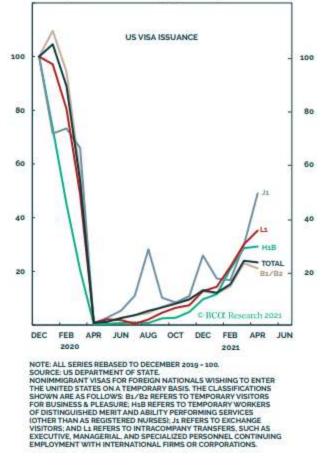
In the spirit of this new framework, the Fed has made it clear that it needs to see three things before it considers raising rates:

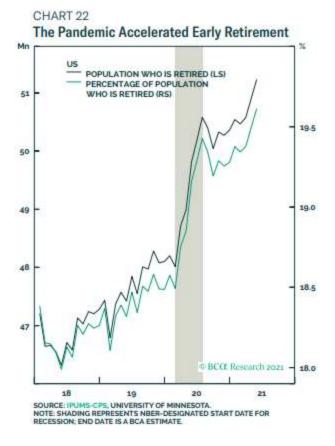
- The labor market must be at "maximum employment"
- 12-month PCE inflation must be above 2%
- The FOMC must expect inflation to remain above 2% for some time

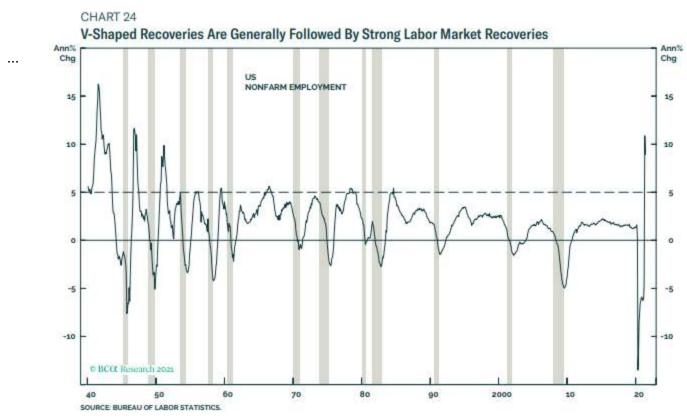
If the US economy achieves full employment by the middle of next year, the first criterion will be satisfied. PCE inflation clocked in at 3.9% in May, so at least for now, the second criterion is satisfied as well. The big question concerns the third criterion.

How Transitory Is US Inflation Likely To Be?

CHART 21 US Migrant Worker Supply Is Depressed







more than half of the increase in the CPI in April and May can be explained by higher vehicle prices, along with a rebound in pandemic-affected service prices (airfares, hotels, and event admissions). Outside those sectors, the level of the CPI still remains below its pre-pandemic trend, while the level of the PCE deflator is barely above it.

Aside from a few low-wage sectors such as retail and hospitality, overall wage growth remains contained. Neither the Atlanta Fed Wage Growth Tracker nor the Employment Cost Index – the two cleanest measures of US wage inflation – is signaling a brewing wage-price spiral (**Chart 27**).

While inflation expectations have risen, they should fall in the second half of the year as gasoline prices descend from their seasonal highs (**Chart 28**). Market expectations of inflation have already dipped back below the Fed's comfort zone (**Chart 29**). Inflation expectations 5-to-10 years out in the University of Michigan's Survey of Consumers also dropped from 3% in May to 2.8% in June.

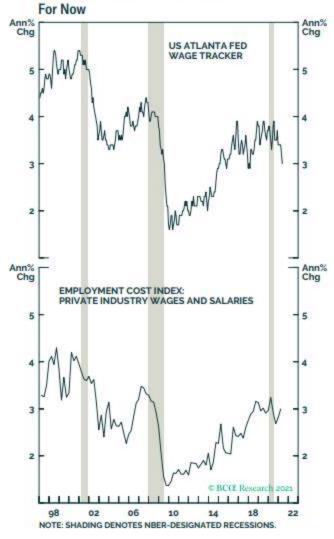
Overall producer price inflation should decline. **Chart 31** shows that lumber prices, steel prices, agriculture prices, and memory chip prices have all peaked. Taken together, all this suggests that the recent surge in inflation is indeed likely to be "transitory."

Risk-Management Considerations Favor A "Go Slow" Approach

The financial press often characterizes the Fed's monetary policy as ultra-accommodative. With policy rates near zero, one would be forgiven for agreeing. However, the reality is that neither the Fed nor, for that matter, most market participants think that monetary policy is all that easy.

Using expectations for the terminal Fed funds rate as a proxy for the neutral rate of interest, the Fed's estimate of the terminal rate has fallen from 4.3% in 2012 to 2.5% at present. Surveys of primary dealers and other market participants suggest that investors think the terminal rate is even lower than what the Fed believes it to be.

CHART 27 No Sign Of A Wage-Price Spiral...

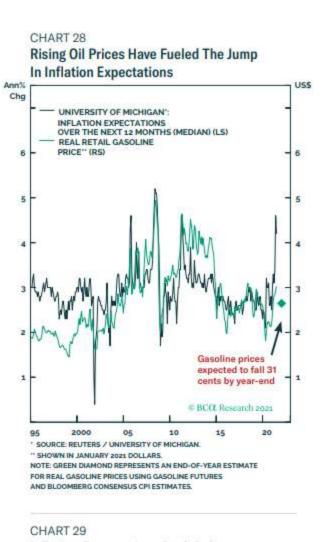


It is an open question as to whether the neutral rate really is as low as widely believed. But if it is, raising rates prematurely would be a grave mistake. Given the zero lower bound constraint on nominal policy rates, the Fed would be hard-pressed to ease monetary policy by enough to respond to any future deflationary shock. In contrast, if inflation proves to be more persistent, raising rates to cool the economy would be relatively straightforward.

All this suggests that the Fed is likely to maintain its "go slow" approach. This publication expects tapering of QE to begin early next year, with no rate hike until December 2022 or early 2023.

Other Central Banks Constrained By The Fed

The Fed's dovish bias limits the ability of other developed economy central banks to tighten monetary policy. For some central banks, such as the ECB and BoJ, raising rates is the last thing they want to do. In both the euro area and Japan, long-term inflation expectations remain well below target.





The Bank of England is in a better position to tighten monetary policy than the ECB. Inflation expectations are relatively high in the UK and a frothy housing market poses a long-term threat to economic stability. Nevertheless, the need to maintain a competitive currency to facilitate post Brexit economic adjustments will limit the BoE's ability to raise rates. Moreover, the departure of BoE Chief Economist, Andy Haldane, from the MPC will silence the sole voice sounding the alarm over rising inflation.

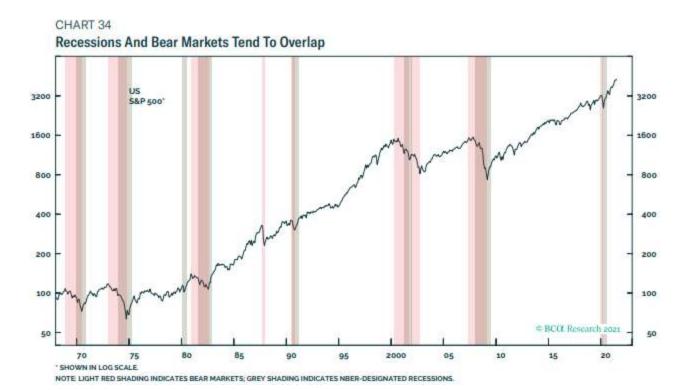
Among the G7 economies, the Bank of Canada is the closest to raising rates. After a slow start, the vaccination campaign is now progressing well there. Property prices have gone through the roof. The Western Canada Select oil price has reached the highest level since 2014. The discount to WTI has shrunk from a peak over 50% in November 2018 to about 20% in recent weeks. The Bank of Canada has already begun tapering asset purchases. While concerns about a stronger loonie will tie the BoC's hands to some extent, the first rate hike is still likely in mid-2022.

II. Financial Markets

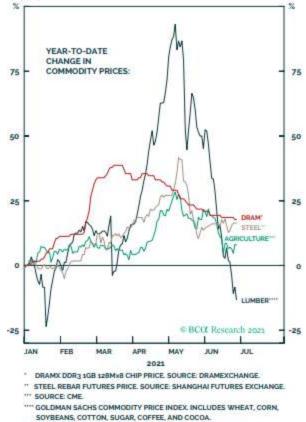
A. Portfolio Strategy

The Golden Rule embraced by this publication is "remain

bullish on stocks as long as growth is likely to remain strong for the foreseeable future." Historically, bear markets rarely occur outside of recessions (**Chart 34**). With both fiscal and monetary policy still supportive, and households in many countries sitting on plenty of dry powder, the odds that the global economy will experience a major downturn in the next 12 months are low.

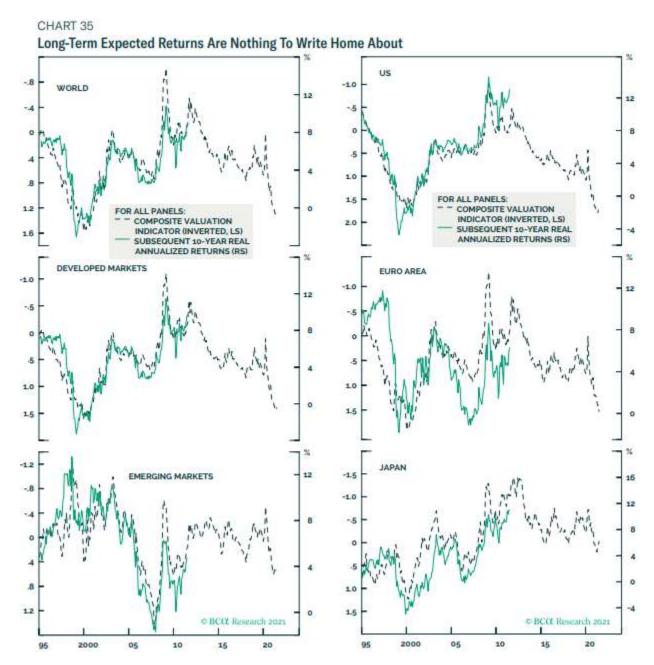






NOTE: DATA SHOWN AS PERCENT CHANGE SINCE BEGINNING OF 2021.

That said, we do acknowledge that the risk-reward profile for equities has deteriorated since the start of the year. Global stocks have risen 12% year-to-date, implying that investors have priced in an increasingly optimistic economic outlook. Our equity valuation indicator points to very poor long-term future returns, particularly in the US (Chart 35).



Democrats in Congress will likely use the reconciliation process to raise corporate taxes. While this is unlikely to cause major problems for the economy, it could weigh on stocks. ... neither analyst earnings estimates nor market expectations are baking in much impact from higher tax rates.

Meanwhile, economic growth has peaked in the US and China, and will peak in the other major economies over the balance of 2021. Slower growth is usually associated with lower overall equity returns. Stocks are also likely to face headwinds as spending shifts back from goods to services. Goods producers are overrepresented in stock market indices compared to the broader economy. The fact that global growth is peaking at exceptionally high levels will soften the blow for stocks. Likewise, the need to rebuild inventories and satisfy pent-up demand for some manufactured goods that have been in short supply will keep goods production from falling too drastically. ...

B. Equity Sectors, Regions, And Styles

While we continue to favor cyclical equity sectors over defensives, non-US over the US, and value over growth, our conviction is lower than it was at the start of the year.

In the near term, the lagged effects from the slowdown in Chinese credit growth could weigh on global cyclicals. Cyclicals could also stumble as the Delta variant rolls through the US and other countries. In addition, the US dollar could sustain recent gains as investors continue to fret that the Fed is turning hawkish. A stronger dollar is usually bad for cyclicals and non-US stocks.

Ultimately, as discussed earlier in this report, the Fed is likely to push back against the market's hawkish interpretation of its dot plot. The resulting reflationary impulse should cause the dollar to weaken over a 12-month horizon while allowing for a re-steepening of the yield curve. Higher long-term bond yields tend to benefit banks, which are overrepresented in value indices.

A stabilization in credit growth and more stimulative Chinese policy later this year should temper concerns about EM growth. Greater access to vaccines will also allow more EM economies to partake in reopening euphoria, thus benefiting local EM stock markets (our oft repeated concerns about most of these markets remain) and global cyclicals.

C. Fixed Income

If stocks are pricey, government bonds are even more dear. Real yields are negative in most G10 economies. And while persistently higher inflation is not an imminent threat, it is a longer-term risk that bond valuations are not discounting.

We expect the 10-year US Treasury yield to rise to 1.9% by the end of the year, above current market expectations of 1.61%. As of today, we are expressing this view by going short the 10-year Treasury note

D. Currencies

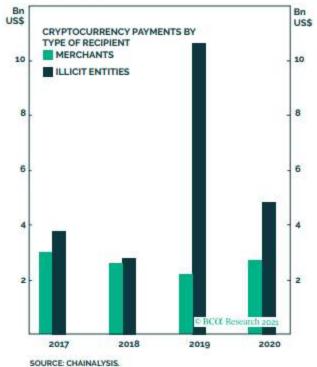
... we expect the dollar to weaken over a 12-month horizon. The dollar's downdraft will likely begin in earnest during the fall when Chinese policy turns more stimulative and fears that the Fed has turned hawkish subside. ...

What about cryptocurrencies? ... To make a long story short, I think it is highly unlikely that cryptos will ever thrive.

More than 13 years since Bitcoin was created, cryptos continue to be mainly used to facilitate illicit transactions. According to Chainalysis, there were fewer cryptocurrency payments processed by merchants in 2020 than in 2017 (**Chart 46**). Meanwhile, Bitcoin mining continues to



To Criminals



produce significant environmental damage (**Chart 47**). And if there is any place where there is hyperinflation, it is in the creation of new cryptocurrencies. There are over 5000 cryptocurrencies at last count, double the number at this time last year (**Chart 48**). We are currently short Bitcoin

CHART 47 Ethereum: How Dare You!

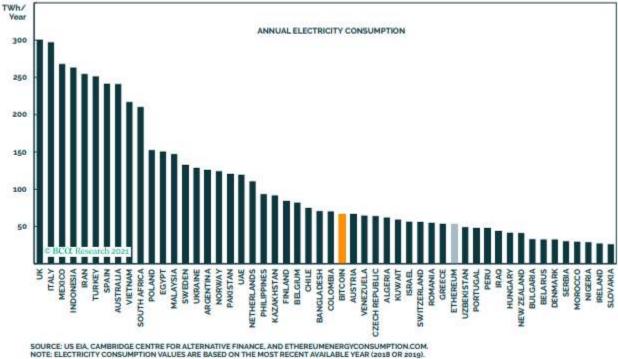
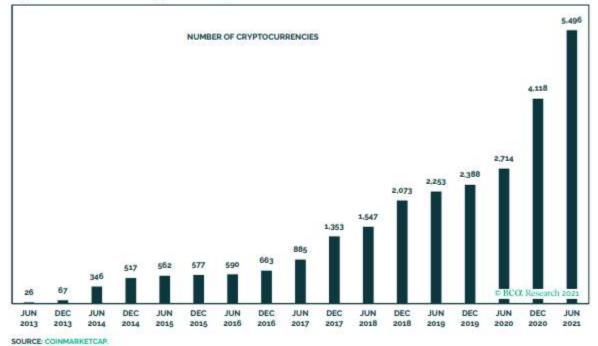


CHART 48

Hyperinflation In New Cryptocurrency Creation

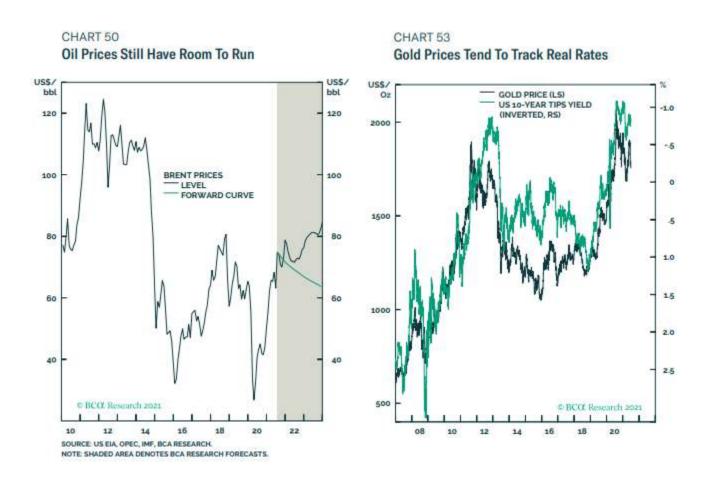


E. Commodities

Structurally, oil faces a bleak future. Transport accounts for about 60% of global oil consumption. The shift to electric vehicles will undermine this key source of oil demand.

Cyclically, however, crude prices could still rise as the global economic recovery unfolds. Supply remains quite tight, reflecting both OPEC vigilance and the steep drop in oil and gas capex of recent years. Bob Ryan, BCA's chief commodity strategist, expects Brent to rise to \$79/bbl by the end of the year, which is 9% above current market expectations (**Chart 50**). ...

We are generally positive on gold. Since peaking last August, the price of gold has fallen more than one might have expected based on movements in real bond yields (**Chart 53**). Gold will also benefit from a weaker dollar later this year. Lastly, and importantly, gold should retain its standing as a good inflation hedge.



Follow-ups

From Monday's WSJ:

Bitcoin Slumps Toward Another Bitter 'Winter'

By Paul Vigna

New bitcoin investors felt the thrill of the digital currency's most recent epic rally. Now, they are experiencing the other side of that ride.

Bitcoin rose from \$5,000 in March 2020 to nearly \$64,000 by April 2021. It then plummeted to as low as \$29,002; Friday it settled at \$32,212.

As severe as the recent selloff is, though, it isn't close to being the worst in the digital currency's 12-year history.

Since 2012, bitcoin has endured 14 selloffs of more than 30%, six of more than 50%, and three of more than 80%, according to data from Visual Capitalist.

The deepest of those selloffs have been followed by long periods of flat trading. It's a cycle that has come to be called "crypto winter."

In October and November 2013, bitcoin rose 10-fold and then fell 87% through January 2016. In 2017, the price rose nearly 20 times, and then fell 84% over the next year. It didn't recover its previous high until late 2020. ...

Each cycle's rally has been driven by a new group of buyers, and each selloff has seen many of them leave the market. That may be happening again. Bitcoin's biggest problem isn't <u>a</u> <u>crackdown by China</u> on cryptocurrencies or Elon Musk's <u>snarky tweets</u>, said J.P. Morgan analyst Nikolaos Panigirtzoglou. Its problem is money leaving the asset class. (Our view is that cryptos are speculative vehicles, not an "asset class".)

"More than a month after the May 19th crypto crash, bitcoin funds continue to bleed," he wrote in a report. "Institutional investors, who tend to invest via regulated vehicles such as publicly listed bitcoin funds or CME Bitcoin futures, still exhibit little appetite to buy the bitcoin dip."

For the week ended June 18, crypto funds saw outflows of \$79

million, according to investment firm <u>CoinShares</u>. That was a third straight week of outflows, totaling \$211 million. The skid marked the longest such streak since February 2018.

Bitcoin-only funds, the firm noted, endured a sixth straight week of outflows: \$89 million last week, and \$246 million in total for the first three weeks of June. ...

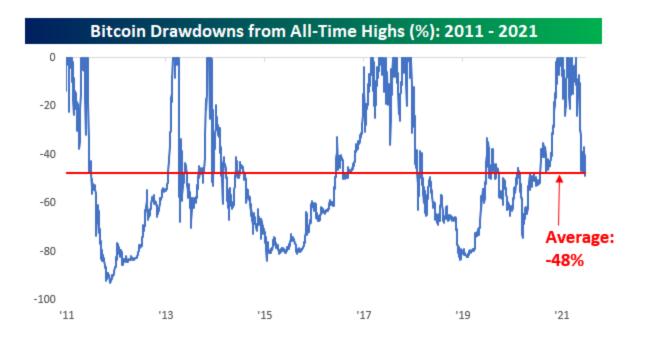
From Bespoke on 6/26:

... throughout its history dating back to 2011, this crypto has on average on any given day been down 48% from its prior all-time high. That -48% level is exactly where bitcoin closed out the week.

History Repeating

Bitcoin's 2020-21 rally and selloff resemble a run in 2017-18.





Our view that Commodities are an Asset Class that should be avoided, as detailed on our website, hasn't changed. From Morningstar:

For Inflation Protection, Commodities Belong in the 'Too Hard' Pile

On the pitfalls of defending against the slow, corrosive effects of inflation with an incredibly volatile asset.

Christine Benz

Jun 23, 2021

Investors are gravitating to commodities-tracking funds and exchange-traded funds: The group raked in \$16 billion in the one-year period through May 2021, with \$6 billion of that coming in the month of May alone. That one-year increase accounts for about a 10th of the total assets in the category.

It's easy to see the attraction. Commodities-tracking mutual funds, which typically use futures contracts to reflect the price of raw materials such as oil, metals, and agricultural products, have gained more than 50% on average over the past year, outperforming even red-hot U.S. stocks over that stretch.

Commodities also look like a lucrative place to be, given that demand for almost everything has been shooting up as the pandemic has receded. Consumer prices jumped 5% between May 2020 and May 2021, their biggest increase in any one-year period in 13 years. Commodities-tracking investments tend to be beneficiaries in inflationary environments, so investors often flock to them in periods when prices are running up.

Yet it's worth noting that investors have previously timed their purchases of commodities poorly, gravitating to the group after big performance runups and capitulating near the bottom. Can they avoid doing so during this cycle? I'm not hopeful, and that's why I'm much less positive on commodities for inflation protection

Learning From History

The last time commodities caught fire was in the early and mid-2000s. Pimco launched its Commodity Real Return Strategy (PCRAX) in 2002, and Invesco DB Commodity Tracking (DBC) was the first ETF to enter the fray, in 2006. Underpinning all of the launches was academic research pointing to the attractions of commodities as a diversifier for conventional portfolios consisting of stocks and bonds. In a research paper first published in 2004, professors Gary Gorton and K. Geert Rouwenhorst concluded that over 45 years' worth of history, commodities futures had offered equitylike returns and risk. Even more enticing, their research showed that commodities futures demonstrated minimal correlation with stocks or bonds but were positively correlated with unexpected inflation.

You know what happened next. Investment firms flooded the market with commodities-tracking investments, mainly commodities futures funds and ETFs, and by 2010, there were 55 such funds. Assets in commodities funds jumped from \$260 million in 2002 to \$17.5 billion in 2007. Performance helped fuel investor interest, especially among investors who were scarred by the dot-com bust. The prices of most major commodity types surged in the mid-2000s, driven by demand from emerging markets. The Pimco fund, for example, gained 27% on an annualized basis in the three-year period between 2003 and 2005. Commodities prices flatlined in 2006 before soaring again in 2007.

As is so often the case, investors crowded into the group at an inopportune time. As the global financial crisis came into view in late 2007, commodities prices held steady for a bit, soaring that year even as stocks began to struggle and delivering on their diversification promise. But commodities prices fell sharply in 2008, leading most commodities funds to losses of 30% to 50% during that year. In the subsequent economic recovery that kicked off in 2009, commodities recovered but never fully regained their former glory. From the stock market's nadir in 2009 through mid-June 2021, commodities tracking funds underperformed bonds and lagged stocks by a mile.

Commodities' much-ballyhooed ability to diversify stocks and bonds <u>has also declined</u>. Their long-running slump prompted many investors in the funds to capitulate. Asset inflows into funds in the commodities broad basket Morningstar Category peaked in 2010 at \$15 billion, but a series of outflows followed between 2013 and 2015. The group saw one of its largest single-year outflows in 2020, shedding an estimated \$3.7 billion in assets. That means those investors weren't around to benefit from the group's stunning recovery so far in 2021.

A Troubling Mismatch

Will new investors in commodities funds fare any better? I'm not hopeful. A big issue with commodities is that unlike cash-flow-producing assets like stocks or bonds, it's impossible to figure out what they should be worth and whether there's any justification for their prices to go higher in the future. A bet on commodities-tracking investments is just that--a bet. You may get lucky and watch commodities prices soar after you purchase such an investment, or you could be like the 2007 commodities-fund buyers and quickly lose a third or even half your money. That seems like a particularly big risk factor today, given that it's unclear whether the inflation we're seeing today will be ephemeral or more persistent.

One response, of course, is to forget trying to catch the upward swing in the commodities price cycle. Instead, own commodities as a long-term, strategic inflation hedge and portfolio diversifier, holding them through thick and thin. That's easier said than done, thanks to commodities' volatility. The typical commodities-tracking fund has a standard deviation of 16 over the past decade, higher than equities. That volatility invites some of the investor-timing problems that we've seen since commodities came into vogue 15 years ago. There's also the separate issue of contango, which makes commodities futures and the funds that track them imperfect

reflections of commodities prices at any given point in time. (A commodity is in contango when its futures prices are higher than its spot price. Since futures prices will usually converge toward spot prices as contracts approach expiration, contango tends to cause losses for investors in commodity funds that use futures contracts.)

To my mind, the biggest knock on commodities as a strategic inflation hedge, especially for retirees who are actively drawing upon their portfolios and want to maintain purchasing power, is that there's a mismatch between the hedge you need if you're worried about inflation and how commodities prices actually behave. In inflationary periods in the United States, rising prices take a small bite out of the purchasing power of investment assets year in and year out. Yet if you mistime your commodities investment purchase and buy at a high point in the cycle, you could lose a big share of your investment right out of the box. You're trying to offset the slow but steady corrosive effects of inflation with an investment type that's anything but slow and steady. ...