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The Most Important Rate in the Whole Wide World

"The most important person in the whole wide world is you, and you hardly even know you…"

The Most Important Person and *The Kingdom of Could Be You* (1972 – 81, produced by Sutherland Learning Associates)

As a child I would often settle down to watch the after-school TV specials. I remember quite a catchy segment called *The Most Important Person*, and in later years *The Kingdom of Could Be You*, where lessons of self-esteem, respect for others and the world of potential opportunity were taught through the medium of quick cartoon segments.

Occasionally, I would hear a tune telling me, "The most important person in the whole wide world is you." Some say that this program had such an influence that it created a generation of narcissists! Well, maybe. More interesting to me are the curious words of the next part of the song: "… and you hardly know you!" I guess it was meant to make us think about the unlimited possibilities we were growing up into.

I've had that song in my mind again lately. Why? Because I've been thinking about real interest rates. For their influence on the recent performance of global assets and the outlook for the coming year, I have no hesitation in calling them the most important rates in the whole wide world. However, judging from investment strategy calls for 2021, and how violently they reversed in the second half of the year, it seems that investors "hardly know" how important they are.

In this article, we explain why we think the level of real rates will be the primary and broad-based determinant of asset class performance next year. While we respect the structural forces that have been suppressing them, we believe investors should also be aware of what could change this apparent "mispricing"—because if and when it occurs, it is likely to have large consequences.

Let's start by explaining what we mean about the strategy calls for 2021. If you were told at the start of 2021 that by the end of the year …

- Despite COVID-19 concerns, the global economy would have grown well above trend, and be forecast to grow well above trend in 2022
- The consensus forecast for the next 12 months' S&P 500 Index earnings would be above $200 per share
- U.S. and European equity indices would make new highs
- The Federal Reserve (Fed) would have acknowledged the strength of the recovery by introducing, as early as June, the possibility of rate hikes into their 2023 "dot" forecast
- The majority of G7 central banks would be forecasting hikes in 2022 and the end of tapering by June
- Australia would abandon yield curve control
- Many emerging markets would already be well into a hiking cycle
- U.S. and European five-year breakeven inflation rates as well as oil would trade at new five-year highs
- U.S. CPI would print above 6%
- U.S. 2y2y CPI swaps would trade at 3%
- Professional inflation forecasters' surveys would be at levels unseen since the Great Financial Crisis (GFC)

… and then you were asked to provide your outlook for the following…

- The U.S. 10-year and German Bund yields
- The U.S. terminal rate, as defined by 5y5y Overnight Index Swaps (OIS)
- U.S. five-year and 10-year real rates
- The relative performance of value to growth equities, small caps to large-cap tech, non-U.S. developed markets to the U.S. market
- Credit spreads
- The U.S. Financial Conditions Index

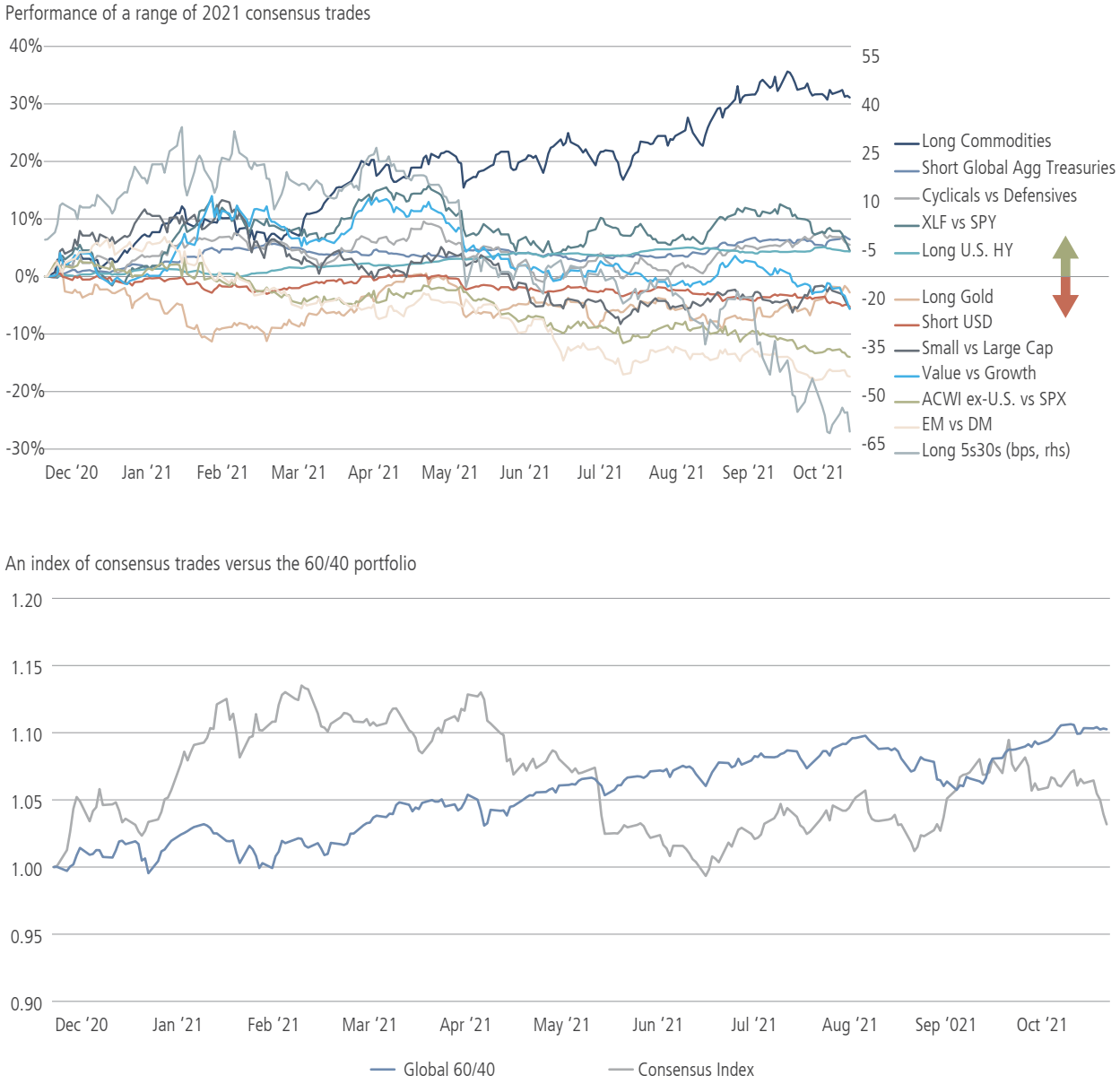
… how well would you have done on your outlooks?

Investors Used History as a Guide—And Got 2021 All Wrong

It would have been almost impossible to make anything close to an accurate outlook, primarily because most estimates of the nominal 10-year rate and terminal neutral rate—the estimated Fed Funds rate that would give us full employment and full capacity utilization with stable inflation—would have been off by at least 100 basis points. Remember, even at the start of the year, before all the above conditions were fulfilled, the terminal rate, extrapolated from market pricing of forward rates, was already as high as 2.5%. Today it is just 1.6%.

In our view, this dynamic in rates was what led to the unwind of the consensus equity-style and regional trades that many investors embraced at the start of the year, and to the outperformance of U.S. markets, primarily due to long-duration technology stocks. As the data in figure 1 suggest, very few of the consensus trades proposed at the start of 2021 worked beyond the first quarter—despite the consensus call for higher growth and higher inflation being correct. The total collapse of the U.S. five-year versus 30-year curve-steepener trade ("long 5s30s") is the quintessential example of just how difficult it has been to forecast asset price developments in this environment, due to how sensitive the market's outlook for longer-term growth and inflation is to shifts in central bank policy, and particularly Fed policy. If we consolidate these consensus trades into a simple index, it becomes more evident to us that the point of capitulation coincided with the Fed's June meeting "pivot," when the possibility of 2023 rate hikes first entered the "dot plot." Since then, the tech-focused Nasdaq 100 Index has outperformed the small-cap Russell 2000 Index, as well as European and emerging market equities, by some 15 – 20 percentage points in dollar terms.

FIGURE 1. WHY HAVE SO MANY 2021 CONSENSUS TRADES FARED SO BADLY?



Source: Bloomberg, Neuberger Berman. As of November 19, 2021. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. Indexes are unmanaged and are not available for direct investment. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**
Indices used: Bloomberg Commodity Index Total Return (Long Commodities); Bloomberg Global Agg Treasuries Total Return Index Unhedged USD (Short Global Agg Treasuries); Goldman Sachs Cyclicals Versus Defensives Index (Cyclicals vs. Defensives); Financial Sector SPDR Fund and ProShares S&P 500 Ex-Technology Fund (XLF vs SPXT); Bloomberg U.S. Corporate High Yield Total Return Index Unhedged USD (Long U.S. HY); XAU/USD (Long Gold); Bloomberg Dollar Spot Index (Short USD); Russell 2000 Index Total Return and ProShares S&P 500 Ex-Technology Fund (Small vs Large Cap); Russell 1000 Value Index Total Return and Russell 1000 Growth Index Total Return (Value vs Growth); MSCI All Country World ex-USA Index and ProShares S&P 500 Ex-Technology Fund (ACWI ex-U.S. vs SPXT); MSCI Emerging Markets Index and MSCI World Index (EM vs DM); U.S. Sell 5 Year & Buy 30 Year Bond Yield Spread USCYC5Y30 (Long 5s30s); MSCI All Country World Index and Bloomberg Global Aggregate Total Return Index Hedged USD (Global 60/40); Equal weighted index of ACWI ex-U.S. vs SPXT, Short Global Agg Treasuries, Long U.S. HY, Long Bitcoin (XBT/USD), Small vs Large Cap, XLF vs SPXT and Long 5s30s (Consensus Index).

What has been going on here?

Most investors can identify "mispricing" or "anomalies" in markets. It is far more important to determine what is causing those "anomalies" before simply assuming that they will revert. Assumptions like that are what have kept some investors long "cheap" European banks since 2014, while watching them underperform the market by 60 percentage points over five years; or favoring value over growth over the same time period, and for the same reasons. Mispricings don't just randomly occur. Some investor or non-economic price-setter is driving them, and their hands can remain on the steering wheel for quite a long time—think of the European Central Bank (ECB) and Europe's negative long-dated yields, or the Fed buying TIPS at the lowest real yields in over 30 years.

This also explains why analogs from economic and market history can be poor reference points for investors, especially in the post-GFC world, in which analog after analog has been broken. One can be correct in the assessment and outlook for economic conditions, and yet asset class performance can drift substantially from that observed in previous, similar economic environments. That could be due to what is already priced into the market relative to the forecasts, or it could be due to underlying investor preferences influencing some "anchor" asset price, which in turn acts as a primary determinant of the value of other assets. That "anchor" asset, and investors' views about it today, could be significantly different than in previous, analogous economic environments.

Real Rates Appear to Be Anchoring Markets

That is why we regard real rates as the most important rates in the whole wide world. On the Multi-Asset Strategies team, our view is that today's "anchor"—the one dragging and distorting the natural flow of economic fundamentals into a variety of asset prices and all indices of financial conditions—is the level of real rates, largely due to how subdued longer-dated rates and the terminal rate have been to the shift in the growth and inflation outlook over the past year.

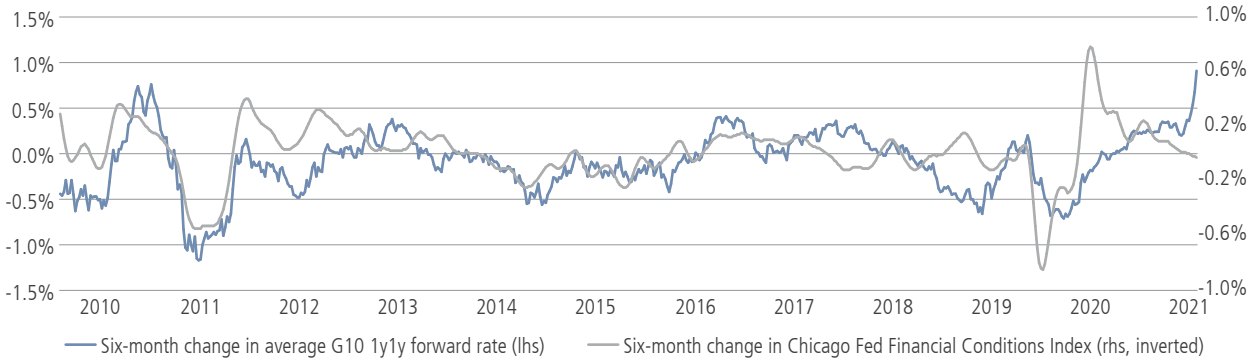
At the beginning of the year, most fixed income strategists were calling for a move higher in real rates as the economy normalized. That was quite a reasonable assumption based on past recovery analogs: persistent negative real rates have been very rare, and generally associated with wars, crises or lengthy, deep recessions.

And yet negative real rates are still with us, and they have deepened. This has baffled the investment community as well as the majority of fixed income analysts. The extent to which negative and declining real rates are perceived to be misaligned with the fundamentals outlined at the start of this article appears to be what led to the mid-year capitulation in all those consensus trades.

For a stark illustration of how much real rates are currently distorting things, take a look at figure 2. It shows the G10 1y1y forward rate (the interest rate starting in one year and lasting one year) versus the widely referenced Chicago Fed Financial Conditions Index.

We have seen in the past that an increase in 1y1y rates of this magnitude would have tended to result in tighter financial conditions. This seems quite logical. However, not only did the most recent move in front end rates not tighten financial conditions, it coincided with conditions easing. Why is this time so different? Because in this period, as short rates rose, 10-year real yields fell: as inflation kept rising, longer-dated nominal yields collapsed as investors unwound the yield curve-steepener trades we mentioned earlier.

FIGURE 2. HOW CAN FINANCIAL CONDITIONS EASE WHEN SHORT RATES RISE THIS MUCH?



Source: Bloomberg, Neuberger Berman. As of October 29, 2021. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. **Past performance is no guarantee of future results.**

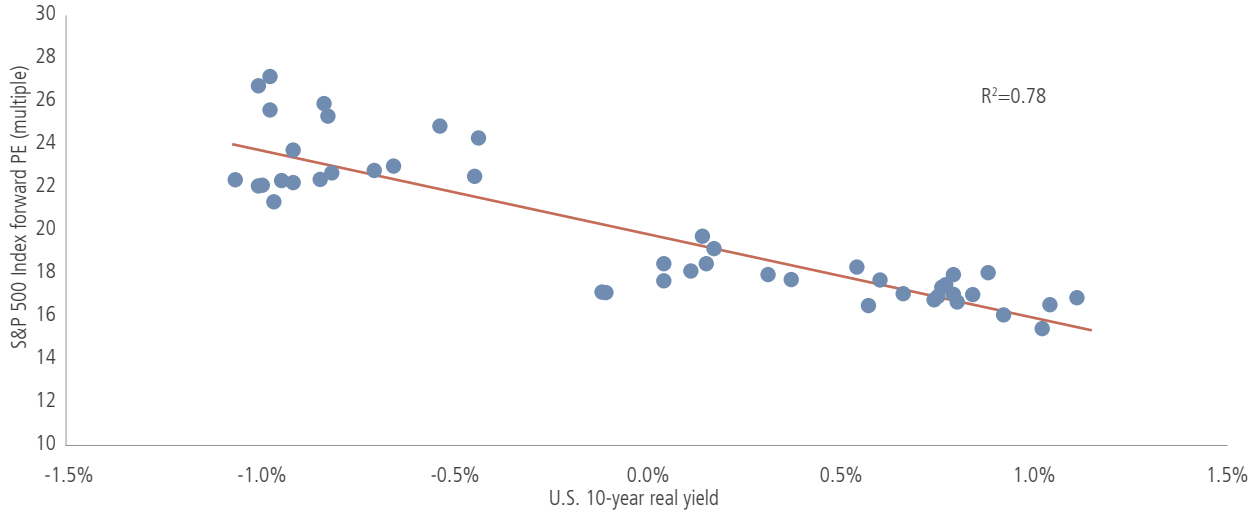
Similarly, real rates appear to be a significant determinant of the S&P 500 Index—a relationship that is stronger than that of non-U.S. equity indices, due to the longer-duration inherent in the sectoral profile of the U.S. market.

The data in the first chart in figure 3 suggest a strong relationship between U.S. large-cap valuation multiples and the U.S. real yield. Reinforcing the point, the second chart from Brian Friedman of Goldman Sachs compares the performance of the S&P 500 Index with the U.S. 30-year breakeven inflation rate minus the 30-year real rate. To put that another way, it is the 30-year yield minus two-times the 30-year real yield, so it emphasizes just how important the real yield is for U.S. large-cap equity performance. The data suggest that a 25-basis-point move higher in real yields has tended to result in a 10% sell-off in the S&P 500 Index.

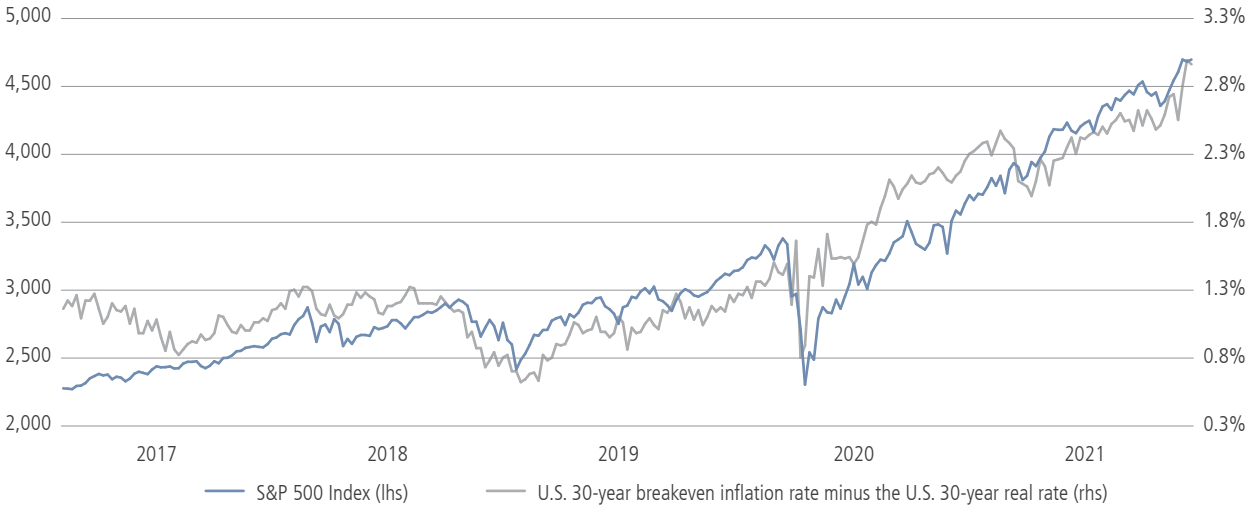
Obviously, we would not suggest that historical tendencies should be regarded as mathematical law, but time and time again we see exhibits such as these pointing to just how sensitive U.S. equities are to changes in real rates. As real rates decline, U.S. equity valuations tend to rise—and that, too, feeds into easier financial conditions.

FIGURE 3. U.S. EQUITY VALUATIONS HAVE EXHIBITED A TIGHT RELATIONSHIP WITH U.S. REAL YIELDS

S&P 500 Index forward P/E ratio versus U.S. 10-year real yield, January 2018 – October 2021



S&P 500 Index versus U.S. 30-year breakeven minus the 30-year real rate, June 2017 – November 2021



Source: Bloomberg, Goldman Sachs, FactSet, Neuberger Berman. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed.

Why Are Real and Terminal Rates So Low?

It appears impossible to answer with any certainty why global real and terminal rates are so low. We suspect a blend of many factors. We propose a few well-known possibilities here.

The current inflation shock is primarily supply-side driven. Many argue that once supply chains return to normal, inflation pressures will subside and the next hiking cycle will therefore be a very short and shallow one. For example, Goldman Sachs has estimated that the contribution of supply-constrained categories such as cars, housing appliances, and video and audio equipment to the core PCE inflation rate will top out at +115 basis points at the end of this year, but turn negative by the third quarter of 2022.

We are in a period of longer-term sub-trend growth and inflation, largely due to global demographic trends and the shift in China's economic policy mix. Supporters of this view point to the persistence of structurally low growth and inflation despite the best efforts of central banks to address this "secular stagnation" trend. They suggest that current growth and inflation could be idiosyncratic, given that fiscal stimuli actually increased personal disposable income during the pandemic "recession," and at least some current inflation is due to temporary supply-chain disruption. If this camp is correct, even more aggressive fiscal measures could be needed once the widely forecasted fiscal drag comes into effect in 2022, and hiking back to the 2018 levels would seem difficult.

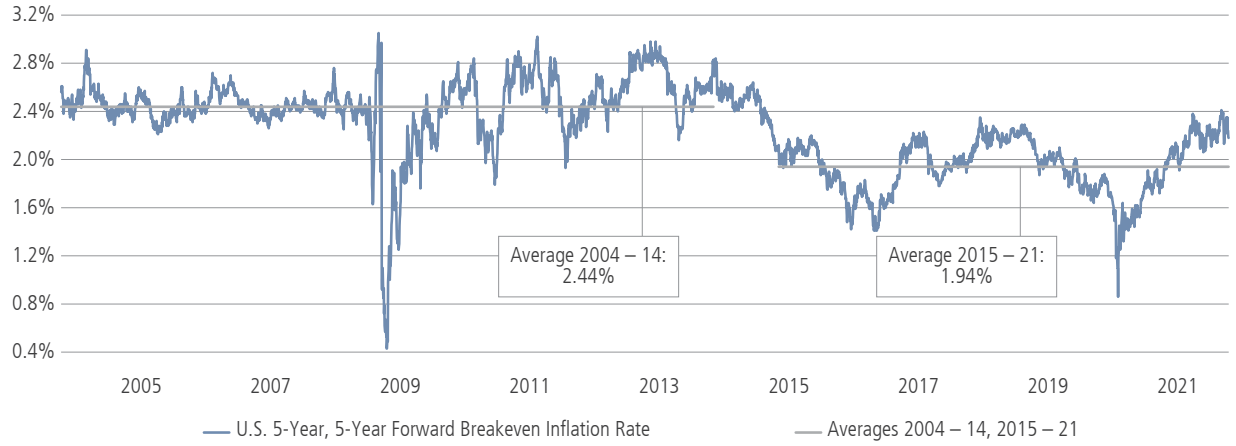
There is still strong demand for yield and income, especially U.S. yield and income, from pension funds and global excess savings. Despite being low in an absolute sense, U.S. yields are still attractive to a wide array of investors on a relative basis and for non-economic reasons. As pension funds become more fully funded due to the strong recovery in asset markets, they are more likely to reduce risk in favor of longer-dated risk-free yield. Around the world, cumulative excess savings are now at the highest levels in modern history—as much as 6 – 12% of GDP in most developed economies. Given our aging population, some portion of this is likely to find its way into safe havens (alongside that which goes into apparently ever-rising equity markets).

Governments are heavily indebted. Market participants may simply be concerned that governments are too indebted to be able to afford a significantly higher cost of debt.

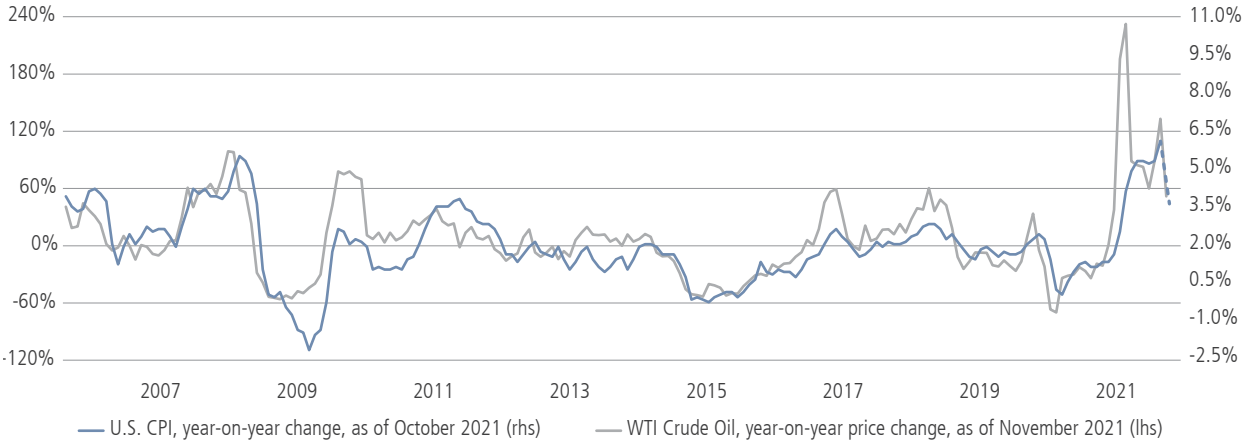
Inflation is largely due to energy prices, as the velocity of money is in a continual state of decline. It amazes us to see so many complex narratives being built up about the causes and nature of inflation, when so many of the market inflation indicators that receive attention simply correlate with the oil price. As the first chart in figure 4 suggests, the decline in the oil price in 2014 caused a new regime in the range of breakeven inflation rates, and we now appear to be witnessing the same thing as oil prices recover. The second chart suggests that, with all else equal, even a stabilization of the oil price, not to say a decline, would imply a substantial moderation in U.S. CPI inflation. And the third chart compares the Fed's index of Common Inflation Expectations (CIE) and the U.S. 5y5y forward breakeven inflation rate with the price of oil. For all intents and purposes, it appears that oil is the sole determinant of inflation expectations.

FIGURE 4. INFLATION: IS IT ALL ABOUT OIL?

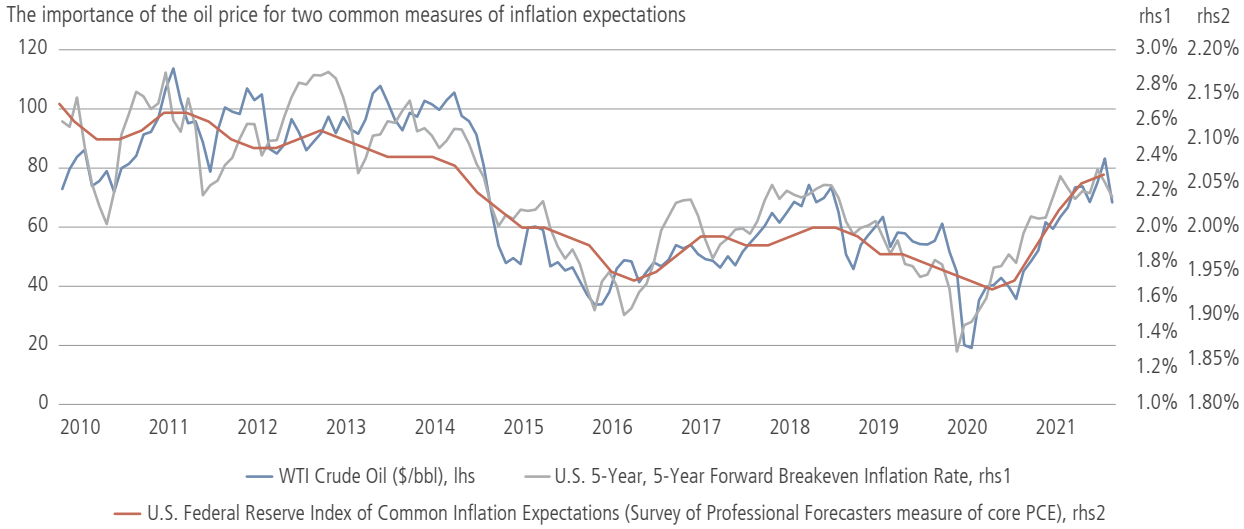
The change in breakeven inflation regime during the oil price collapse in 2014



Could a stabilization in the oil price lead to a decline in inflation?



The importance of the oil price for two common measures of inflation expectations



Source: FactSet, FRED (Federal Reserve Bank of St. Louis), U.S. Federal Reserve, Neuberger Berman. Forward breakeven rates and oil price as of November 2021, CPI data as of October 2021, CIE Index data as of September 2021. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

Could There Be a "Real Rates Taper Tantrum"?

Does it follow that we favor a reduction in portfolio U.S. equity weightings due to an imminent correction in the apparently "artificial" low level of real rates? No. For real rates to move higher, the market's estimation of the terminal rate must have the space to move higher, or longer-dated nominal rates need to price for a more persistent inflation outlook relative to current breakeven rates. That effectively means either that inflation needs to move from being supply-led to demand-led, or the market needs to come to terms with a permanent shift in the supply curve. We currently lack anything like certainty on this question: as the list above suggests, the potential factors keeping real and terminal rates low are varied, and adopting a high-conviction, longer-term view on these variables is difficult and fraught with risk.

As it stands, however, our Multi-Asset Strategies team is starting to consider more risk-hedged equity positioning, and that is because we think it is possible that the market is overlooking an imminent change that could well be the force that finally moves real rates—the tapering of central bank asset purchases as the growth and inflation outlook potentially becomes less friendly. Supply-side shocks are not growth-friendly. Monetary policy responses aimed at reducing demand to contain inflation are also not growth-friendly. China's growth policy has clearly undergone a structural shift. And, finally, the amount of global fiscal stimulus enacted over the past 18 months should probably not be considered the status quo.

What makes us so concerned about tapering?

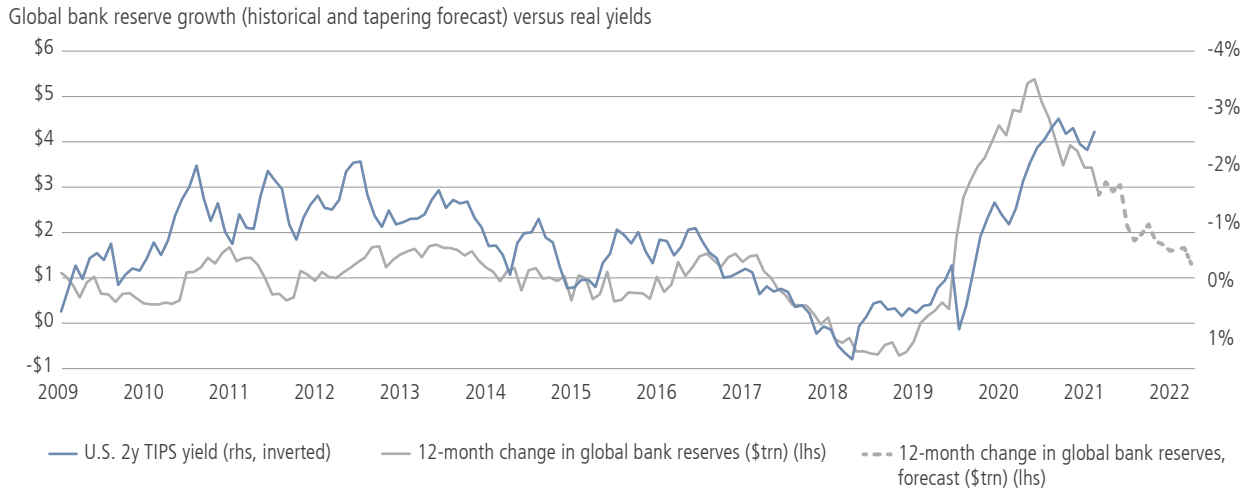
The first chart in figure 5 shows the relationship between U.S. two-year TIPS yields and the 12-month growth rate of global bank reserves, as well as Citibank's forecast for the growth rate of reserves as tapering commences. Correlation is not causation, but given that central banks are set to fully taper more than double the amount of asset purchases in less than half the amount of time, relative to the last tapering episode, the market has become remarkably comfortable with the idea that it is likely to have minimal impact on real yields and, by extension, the valuation of risk assets.

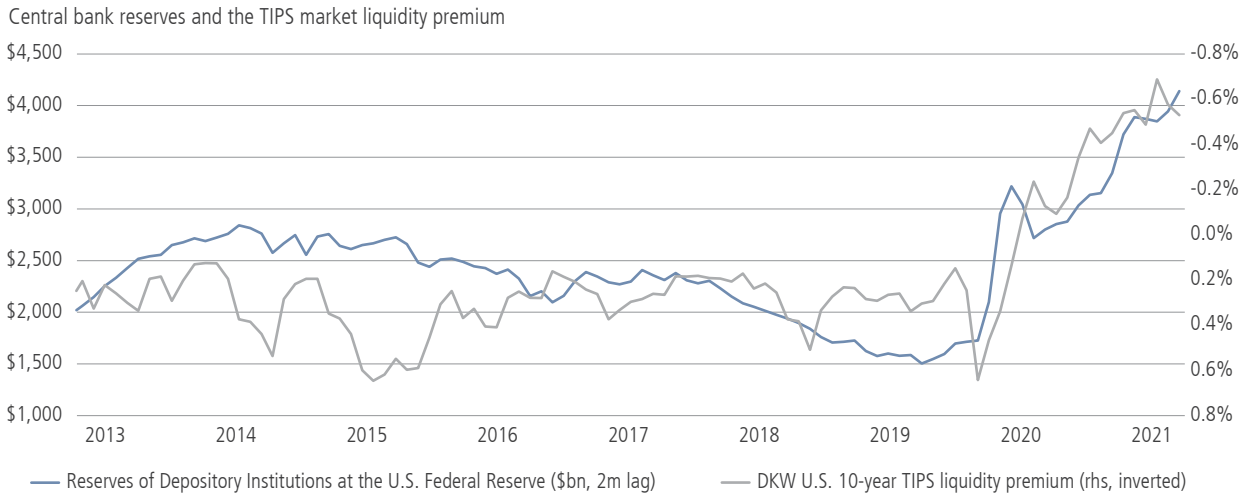
In our view, the second chart, which suggests a relationship between Fed reserves and the liquidity premium in the TIPS market, further challenges that idea. Calculating the TIPS liquidity premium is more art than science, but it is always worth noting when a methodology that is consistent across time starts generating anomalous results, particularly when they correlate so closely with another series, and particularly when they appear to show a typically illiquid market trading with a negative liquidity premium.[1] We reiterate that the Fed is buying TIPS at their lowest real yields in 30 years—is it not possible that, when it stops, it might have some impact on this liquidity premium? Should the correlation shown in this chart persist, it suggests that a simple return to historic levels of TIPS liquidity premium, with no change in the inflation outlook at all, would lead to a 50- to 70-basis-point move higher in real rates. Might the potential taper tantrum that the market was so concerned about in the first quarter of 2021 end up being a taper tantrum in real rates?

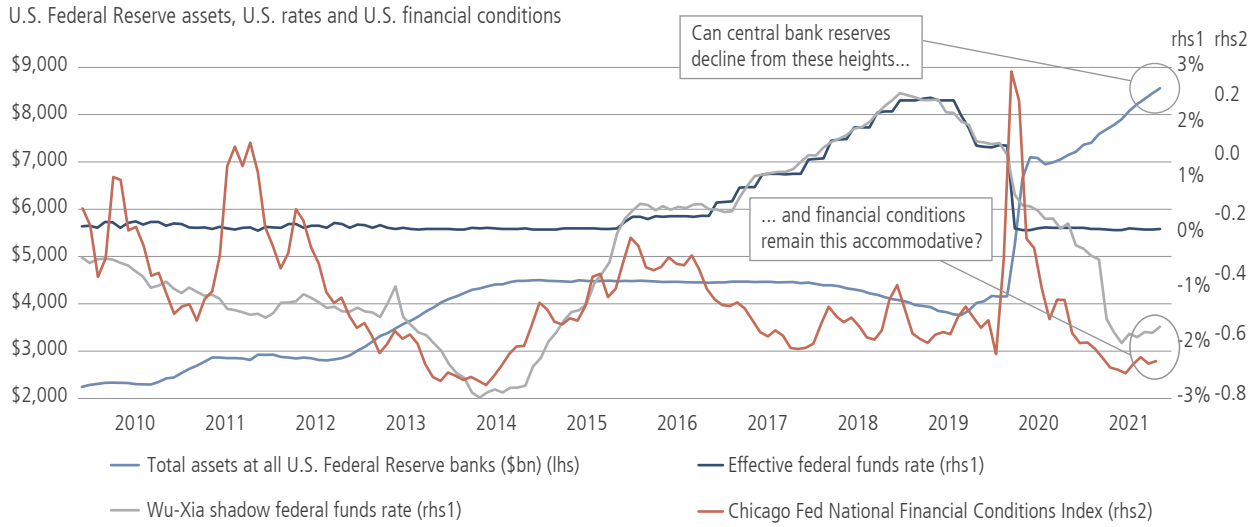
Finally, the third chart broadens this observation to more general financial conditions. These remain at very accommodative levels because central banks are still easing, but again, we would question the assumption that tapering can be completed within three to six months with no tightening of financial conditions or increase in risk premia, given the amount of accommodation provided since the start of the COVID-19 crisis.

[1] The methodology is set out in D'Amico, S., D. H. Kim, and M. Wei, "Tips from TIPS: The Informational Content of Treasury Inflation-Protected Security Prices," *Journal of Financial and Quantitative Analysis,* 53(1), 2018, pp.395-436.

FIGURE 5. CAN CENTRAL BANKS DO THIS MUCH TAPERING WITHOUT TIGHTENING FINANCIAL CONDITIONS?







Source: Citibank, FRED (Federal Reserve Bank of St. Louis), U.S. Federal Reserve, Federal Reserve Bank of Atlanta. Data as of October 2021. For illustrative purposes only. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. Investing entails risks, including possible loss of principal. **Past performance is no guarantee of future results.**

Conclusion: Marrying Conviction With Humility

Given no significant disruption in the global economy, we argue that the level of global real rates will be the primary and broad-based determinant of the performance of a significant range of assets next year—but, most importantly, of the level of U.S. equity multiples. It is likely to determine the overall level of equity allocations, as well as their regional, style and sector tilts. It is also likely to drive currencies and yield curves, globally. While we respect the structural forces in play that have allowed real yields to remain this low, we believe investors should also be aware of what could change this apparent "mispricing"—because, if and when it occurs, it is likely to have large consequences.

However, the market is unlikely to get clarity on this call until well into the second quarter of 2022 unless there is a quick market repricing due to some significant expressed shift in the mandate of a major central bank. That is when we anticipate having enough data to potentially assess whether inflation pressures are broadening out, and whether the "inflation forces previously known as transitory" are beginning to subside without a continuing rise in measures such as wages and owner-equivalent rents.

Therefore, we do not yet have enough conviction to embrace the view that "the terminal rate is too low" or "real rates are too low." We need to respect the potential that the market is pricing for a more negative long-term growth outlook.

We do have conviction that this is where the *current* asymmetry is. In our minds, real rates are the most important rates in the whole wide world. We also have conviction that a sustained tightening of monetary policy would, through the medium of a repricing of real rates, have a more adverse impact on risk assets than is currently being priced—it appears to us that there is zero risk being priced around central bank tapering. For that reason, in tactical portfolios over the coming weeks and months, our Multi-Asset Strategies team will be more likely to look for opportunities to trade this asymmetry, and less likely to embrace "risk-on" relative positions, unless we can observe some type of volatility premium or event risk premium embedded in a market or asset.

The next few months are going to be tricky, and I have no doubt that this time next year things will be different, and things will have occurred that none of us foresee today—even if we do manage to get most of our big calls correct. They don't teach you this in any after-school TV specials, but that is just the way it works…

Index Definitions

The **S&P 500 Index** consists of 500 U.S. stocks chosen for market size, liquidity and industry group representation. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

The **MSCI World Index** is a market value-weighted index of more than 1,500 stocks from 23 developed countries.

The **MSCI All Country World Index** is a market value-weighted index of more than 2,700 stocks from 23 developed and 24 emerging countries.

The **MSCI Emerging Markets Index** is a market value-weighted index of more than 1,400 stocks from 27 emerging countries.

The **NASDAQ 100 Index** is a modified market value-weighted index of the stocks of the 100 largest non-financial companies on the NASDAQ stock exchange.

The **Bloomberg Commodity Index (BCOM)** is designed to be a highly liquid and diversified benchmark for commodities investments. The index provides broad-based exposure to commodities as an asset class, since no single commodity or commodity sector dominates the Index. This index is composed of futures contracts on 20 physical commodities traded on U.S. exchanges, with the exception of aluminum, nickel and zinc, which are traded on the London Metal Exchange (LME).

The **Bloomberg Global Aggregate Treasuries Total Return Index** tracks the performance of government bonds from the Bloomberg Global Aggregate Index, which is measure of global investment grade treasury, government-related, corporate and securitized fixed-rate bonds from 24 developed and emerging local currency markets.

The **Bloomberg US Corporate High Yield Total Return Index** measures the total return of a more liquid component of the USD-denominated high-yield fixed-rate bond market.

The **Goldman Sachs Cyclicals Versus Defensives Index** tracks the performance of a basket of traditionally cyclical stocks relative to the performance of a basket of traditionally defensive stocks.

The **Russell 1000 Index** consists of the 1,000 largest stocks by market capitalization in the Russell 3000 Index, which contains the 3,000 largest listed U.S. stocks by market capitalization. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

The **Russell 2000 Index** consists of the 2,000 smallest stocks by market capitalization in the Russell 3000 Index, which contains the 3,000 largest listed U.S. stocks by market capitalization. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

The **Russell 1000 Value Index** consists of those Russell 1000 companies with relatively lower price-to-book ratios, lower I/B/E/S forecast medium term (2 year) growth and lower sales per share historical growth (5 years). The Russell 1000 Index consists of the largest stocks by market capitalization in the Russell 3000 Index, which contains the 3,000 largest listed U.S. stocks by market capitalization. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

The **Russell 1000 Growth Index** consists of those Russell 1000 companies with relatively higher price-to-book ratios, higher I/B/E/S forecast medium term (2 year) growth and higher sales per share historical growth (5 years). The Russell 1000 Index consists of the largest stocks by market capitalization in the Russell 3000 Index, which contains the 3,000 largest listed U.S. stocks by market capitalization. It is a market value-weighted index (stock price times number of shares outstanding), with each stock's weight in the Index proportionate to its market value.

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