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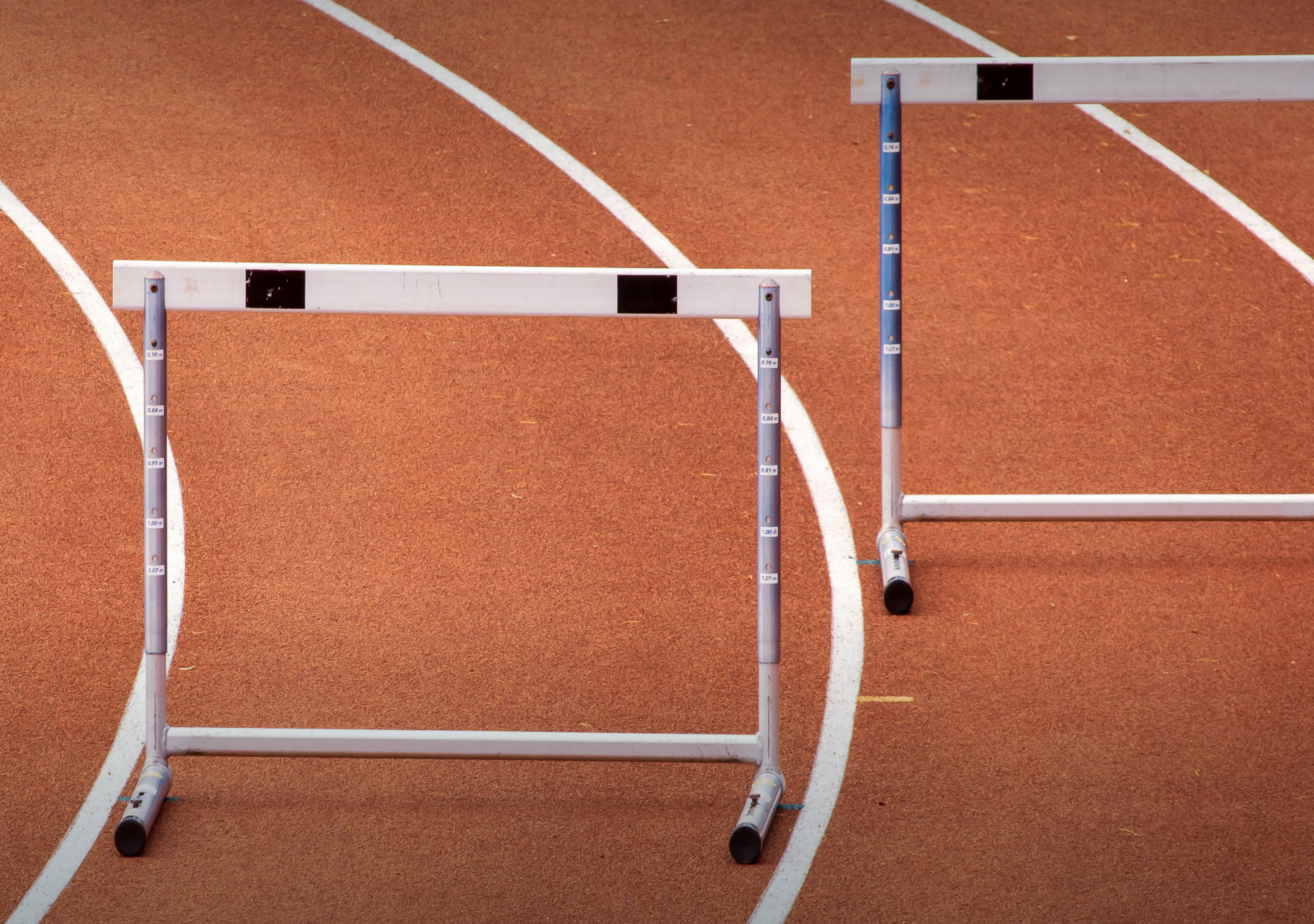


VIEWPOINTS FROM THE GLOBAL INVESTMENT COMMITTEE
2022 OUTLOOK

Slower. But still pretty fast.

As we head into the new year, we think 2022 should look quite a bit like 2021 — with some key differences. The positives: Economic reopening should continue and global economic and corporate earnings growth should be above trend. The negatives: Inflationary pressures have grown, interest rates are rising and fiscal and monetary support are waning. Thus our 2022 theme: "Slower. But still pretty fast." The economic cycle isn't ending, but conditions are getting more difficult and gains are going to be tougher to come by. Nevertheless, Nuveen's Global Investment Committee still sees opportunities across asset classes and remains committed to offering our clients ideas for how to navigate financial markets.

Global Investment Committee members

Bill Huffman *Head of Nuveen Equities and Fixed Income*

Nick Liolis *CIO, TIAA General Account*

Saira Malik *Equities*

John Miller *Municipals*

Brian Nick *Chief Investment Strategist*

Amy O'Brien *Responsible Investing*

Justin Ourso *Private Real Assets*

Anders Persson *Global Fixed Income*

Jay Rosenberg *Public Real Assets*

Mike Sales *CEO of Nuveen Real Estate and Real Assets*

Carly Tripp *Real Estate*

OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Recovery, risks and relationships

Nick Liolis
CIO, TIAA General Account

As part of his participation in Nuveen's Global Investment Committee, Nick Liolis offers his views from the perspective of one of the world's largest institutional investors. Neither Nick nor any other member of the TIAA General Account team are involved in portfolio management decisions for any third-party Nuveen strategies.

Looking back over the last couple of years, it seems that while so much in our world has changed, much has remained the same. Yet we've learned a few lessons along the way. We seem to be emerging from the worst of the crisis and, though we expect elevated volatility and an economic recovery that is likely to be uneven globally, the overall outlook is good. From an investment perspective, the main takeaway is that the core strategies and approaches we use to manage the General Account (GA) remain as relevant as ever.

Rate (and income) risks aren't fading any time soon

In the short term, interest rates are likely to creep up due to growth expectations and pandemic-related supply and demand issues. But the long-term structural impacts of demographics, technology and productivity that have kept rates low for so long are still in place. This will make income generation an ongoing challenge. There is also the potential for a medium-term inflationary impetus spurred by the massive expenditures that will be required to combat climate change, currently the world's biggest challenge. For the GA, proper diversification, appropriate risk taking and disciplined asset allocation remain key to managing these risks.

Our strategic asset allocation framework provides the guardrails for managing our portfolio, given our long-term expectations of risks and return. To maneuver appropriately inside those guardrails, we apply a dynamic asset allocation process on an annual basis, which allows us to act on shorter-term views based on available relative value opportunities. Our more frequent tactical allocation view allows us to adjust quickly to take advantage of changes in relative value due to market movements. This approach affords us the ability to guide ourselves toward a view of long-term optimality, while also giving us the flexibility to assess short-term risks and opportunities and act on them.

Diverse and dedicated relationships are more important than ever

Along with reinforcing the need for diversification and a flexible asset allocation framework, the pandemic has also taught us the importance of building relationships with trusted investment partners, especially in private markets.

When travel stopped and economies locked up, all investors (us included) had to continue our jobs, but the degree of difficulty soared. Due diligence activities and management of physical assets were massively disrupted, as was the ability to source private assets. Fortunately, the GA benefited from its well-established relationship with our asset manager, Nuveen, whose scale, geographic scope and expertise allowed us to continue closely managing our assets and resume our private investing activities quickly.

For me, the bottom line is that while our world may never look exactly the same as it did two years ago, the foundational strategies we've been relying on to manage the GA for a lot longer have kept us strong and resilient. And the pandemic, while humbling, has served to make us stronger and smarter.

2022: Slower. But still pretty fast.

Brian Nick
Chief Investment Strategist

- After a 2021 dominated by upside risks — to growth, inflation, interest rates and investment returns — we see a more balanced outlook heading into 2022.
- Global economic growth and inflation are set to slow next year from their fastest rates in decades, but will likely remain relatively high.
- Many factors that propelled the economy forward in 2021 will fade in 2022, but some key risks holding us back will remain.
- As companies' profit growth decelerates, we expect returns on risk assets like stocks to come in closer to their long-term averages after three years of stellar returns.
- Don't laugh: The global goods shortage *is* transitory and should fade by the second half of 2022. If central banks are forced to tighten, it will likely be due to a labor shortage in the services sector.
- We expect short-term interest rates to increase by somewhat less than the market has currently priced in, but longer-term rates should rise even if inflation abates.

We're slowing down...

2021 was a year of historically strong growth, fueled by a combination of unprecedented fiscal and monetary stimulus and a once-in-a-century global economic reopening. Growth was suppressed mainly by the unexpected surge in COVID-19 over the summer that interrupted the global recovery and exacerbated issues with products reaching consumers. Most factors that contributed positively to growth will fade in 2022, but strong consumer demand and the inflation it helped create remain as we head into a new year.

Despite being accompanied by some negative side effects, the fastest economic growth in decades helped propel equity markets to their third straight year of well-above-average returns. Vaccinations and fiscal stimulus helped companies achieve historically high earnings growth, which was helped by inevitably flattering comparisons to conditions in 2020. That will not be the case next year, when global earnings growth will slow from greater than 50% to a mid-single digit increase.

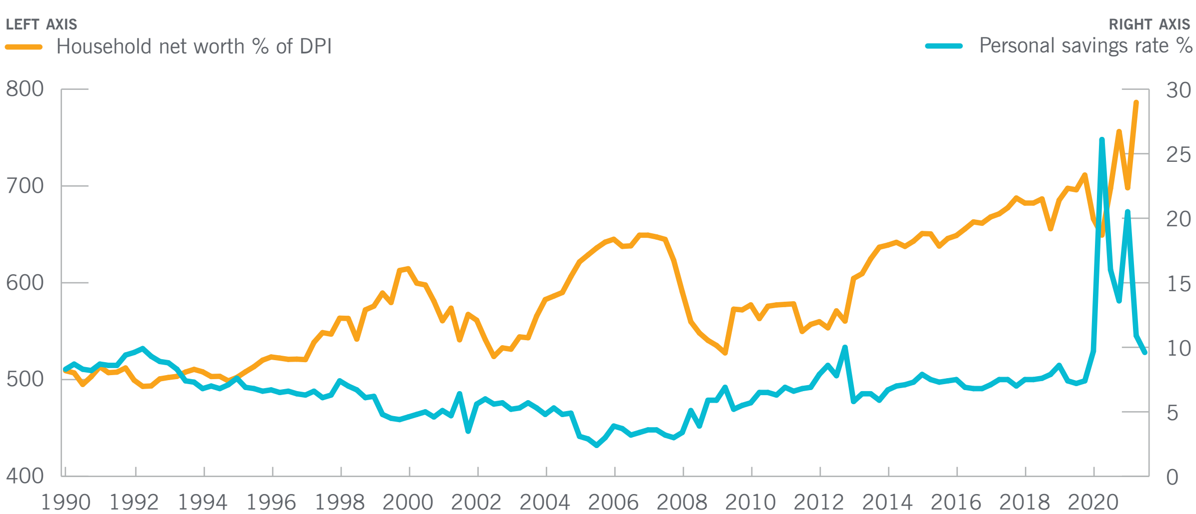
While new spending out of Washington, D.C., is earning lots of press coverage, far more government assistance will roll off this year than roll on. Expiring stimulus will dwarf any increase in discretionary spending for infrastructure, child care or a variety of other programs. And the fact that much of the new spending will be offset by higher revenues further reduces its immediate economic impact.

Monetary policy has managed to keep financial conditions loose throughout the recovery, but central banks have already begun to wind down their liquidity provisions as they weigh when and whether to begin tightening policy outright through interest rate hikes. To the extent that equity, credit and real estate markets have benefited from extraordinarily easy monetary policy — and they have — they'll find it less helpful in 2022.

...But still moving pretty fast

Despite fading stimulus and continued supply/demand imbalances, we retain a positive outlook for growth and investment returns for several reasons. First, private sector balance sheets are uncommonly strong. Figure 1 tells us a story of not only where U.S. consumers — as always, the lynchpin for global growth — have been, but also where they might be going. Household net worth has hit new all-time highs thanks to higher savings and rising asset prices, and the trillions now sitting in cash should continue to fuel high spending growth well into 2022. These measures are far better predictors of economic behavior than consumer sentiment opinion polls, which have become too skewed by political party identification to use for economic forecasting.

Figure 1 – U.S. consumers are still supported by growing wealth, rising incomes and excess savings



Data source: Federal Reserve, Bureau of Economic Analysis, Bloomberg, L.P.; Household net worth as of 2Q 2021, Personal savings rate as of 3Q 2021.

The positive demand shock of 2021 has receded, but it has not gone away entirely. The hole left by expiring stimulus is being filled by robust wage growth in a prematurely tight labor market. For the first time in recent memory, workers have a clear upper hand over employers in negotiations over terms of employment. We think the economic benefits of this realignment outweigh the potential costs for now.

Meanwhile, the supply/demand imbalance in the global market for goods should begin to fix itself. Global manufacturing output and trade are already at all-time highs, but production can rise further to catch up with demand and help businesses replenish depleted inventories. More countries will be able to fully reopen as their populations are vaccinated against COVID-19, and global consumers will resume activities in areas like leisure and travel that have yet to see full recoveries.

There are encouraging signs of reacceleration in China and other Asian economies after a recent series of lockdowns, with Japan likely in store for better growth after a recent Delta-induced contraction. More countries returning to normal can help stimulate both global supply and global demand. As factories return to full production capacity across East and Southeast Asia, supply chain stress will ease. At the same time, higher consumer spending in reopening countries will lift overall growth in the region and around the world.

As 2022 approaches, the world economy shows signs of heating up. Data releases are once again surprising on the upside. Global manufacturing activity has reaccelerated, and unemployment rates continue to fall quickly in countries that are further along in their recoveries. We can't foresee anything happening in 2022 to match the explosive demand growth generated by the global reopening, but the economy still has clear pillars of support and is gathering new momentum as vaccine doses are administered across the world. Financial markets will likely take notice.

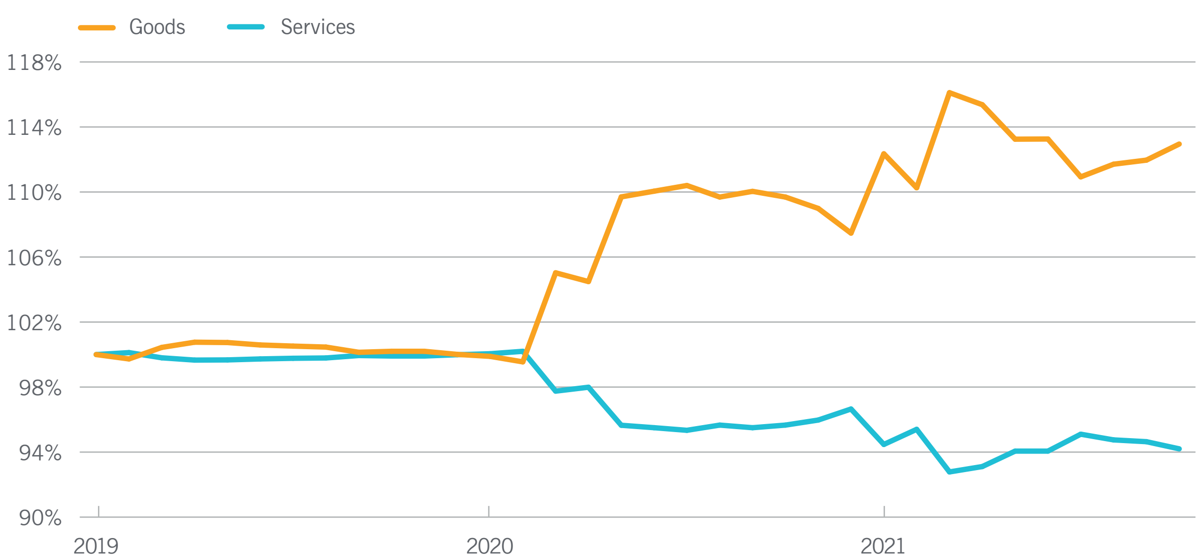
A high pressure (economic) system

For the first time in decades, investors find themselves in a high-pressure economic system. Inflation is running high in developed economies, while unemployment continues to trend lower and wage growth is accelerating. Global production, orders and shipments are at or near all-time highs, but so are input costs and delivery delays. Despite this, we do not think inflation should be investors' main focus as they consider adjusting their portfolios heading into 2022.

"Transitory" inflation has now become a familiar punchline, but we continue to expect monthly goods

Figure 2 — Share of U.S. consumption spent on goods is still abnormally high

U.S. personal spending, % of all spending by category, January 2019 = 100



Data source: Bureau of Economic Analysis, Bloomberg, L.P., 01 Jan 2019 – 31 Oct 2021.

price increases — which peaked in the first half of 2021 — to moderate as supply increases and consumer preferences shift. U.S. personal spending is well above its pre-pandemic trend, but the mix of that spending remains skewed toward goods over services (Figure 2). Even a partial reversion to January 2020 conditions would have a disinflationary effect, as service prices have not been under nearly as much pressure as goods prices.

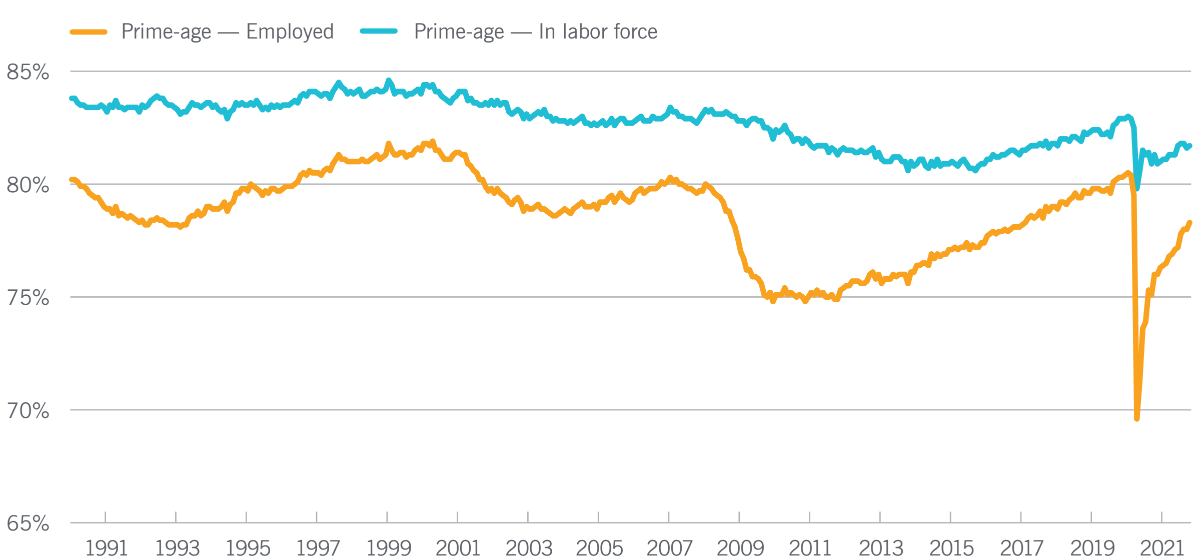
While we expect supply chain pressures to ease in 2022, we are also concerned that pressures may be shifting to the labor market, particularly for in-person service workers. Job creation was strong across the U.S. and Europe in 2021, but employment remains well below prior peaks even as GDP has returned to its 4Q 2019 level. Over 10 million jobs sat open in the U.S. as recently as September, and employment is still down four million from its December 2019 peak. Where have these workers gone, and are they coming back?

To answer this question, we are chiefly concerned with prime-age workers (25 – 54). We know that demographic forces are bringing a larger share of the populations of developed economies into retirement age. A few million people who were working two years ago have simply chosen to retire as scheduled or early if their nest eggs permitted. On the flipside, a larger percentage of younger workers are eschewing additional schooling to take entry level jobs that pay considerably more than they did two years ago. But understanding the drop in employment and, more distressingly, the desire to seek employment among prime-age workers is the key to answering investors' questions about inflation, interest rates and risk-taking in 2022 (Figure 3).

Let's start with a sunny prediction. Most working-age people who have left the job market, for whatever reason, since the start of the pandemic will at some point be compelled to return. For many, it will be when their savings wind down or their child care needs are met. Others who have been reluctant to return for fear of contracting COVID-19 continue to find good news on booster efficacy and coming therapeutic treatments. For these reasons and more, labor force participation should increase in 2022.

Now for a more ominous forecast: If workers don't return quickly enough, the already-tight labor market could get tighter, pushing wage growth even higher. That in itself is not a concern, but if those costs are added to rising raw materials prices and delivery delays, they could threaten businesses' profit margins and force central banks to preempt an inflationary spiral with tighter monetary policy. This "non-transitory" style of inflation could threaten markets next year.

Figure 3 — Where are the missing prime-age workers?



Data source: Bureau of Economic Analysis, Bloomberg, L.P., 01 Jan 1990 – 31 Oct 2021.

Central banks are, for now, ably absorbing the pressure in the system...from markets, politicians and armchair economists. Keeping monetary policy easy during a year of high inflation in the service of fostering a faster jobs recovery would, just a few years ago, have been a revolutionary concept. But it seems clear that the pedal-to-the-metal response to the COVID-19 crisis by legislators and central banks helped engineer the strongest bounce back from a severe recession on record.

It now appears, however, that markets do not expect central banks' newfound dovishness to withstand a second year of elevated inflation. A rate increase from the Bank of England may be imminent, while markets are pricing in Fed rates hikes as early as July. In the case of the Fed, we think markets are being too hasty. The Fed has promised not to even consider raising interest rates until the economy is at full employment, a term around which there is considerable wiggle room. The lesson of the last cycle was that central banks stepped in too quickly and slowed things down too much. We don't think the Fed will need to be taught that again.

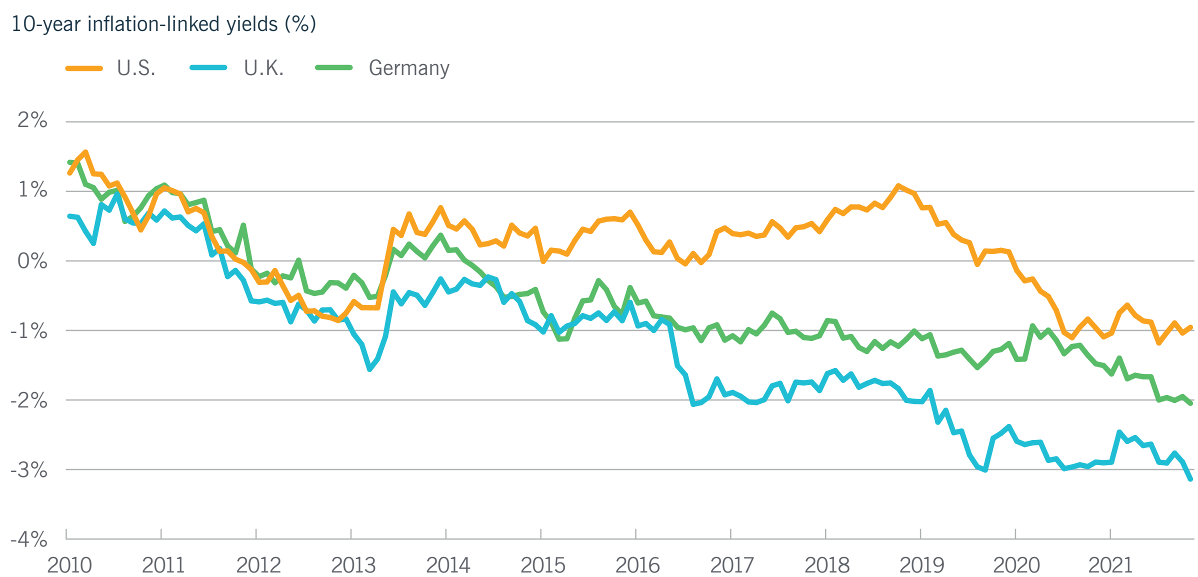
How investors should regard inflation in 2022

To correctly gauge the investment implications of inflation in 2022, we need to know two things: First, how quickly will inflation slow, if it does at all? And second, what will central banks do about it?

We learned in 2021 that a 40-year high for consumer price inflation is just fine for equity markets and pretty benign for bond markets as long as there's a very dovish central bank at the helm. Assets often seen as inflation hedges like TIPS or gold performed well in some moments, less well in others. But investors in these assets must now consider whether to renew their inflation insurance — with a much higher premium for 2022 (Figure 4) — or turn to a more balanced mix of assets that can reliably perform well when both inflation *and* growth are above average. We obviously prefer the latter approach, particularly because we expect core inflation to fall back close to 2% in the second half of the year.

Despite high inflation, interest rates were very well behaved throughout most of 2021. This, again, is

Figure 4 – Investors wishing to guard against inflation are being asked to accept a very low return



Data source: Bureau of Economic Analysis, Bloomberg, L.P., 01 Jan 2010 – 24 Nov 2021. **Past performance is no guarantee of future results.**

due to central banks' willingness to anchor policy rates at zero even as prices ticked up. In fact, because monetary policy is rightly seen as central to the outlook for both rates and inflation, the correlation between the two has been turned on its head. Consider:

- Higher inflation raises the risk that the Fed and its peers will have to step in to tighten policy, flattening the yield curve by sending short rates higher and longer-term rates lower.
- Lower inflation takes pressure off the Fed to tighten and lengthens the runway for easy money, which steepens the yield curve with cash rates anchored at zero.

Market returns may be lower in the years ahead, but that doesn't mean we're not seeing opportunities.

As inflation eases in 2022, markets should become less concerned with imminent and aggressive rate hikes, and the yield curve should gently steepen. In this scenario, we foresee continued challenges for interest rate sensitive fixed income, but further narrowing of corporate credit spreads. This is why we prefer keeping portfolio duration shorter than normal at this time while maintaining slightly more credit risk. Within equities, global cyclicals and financials tend to perform better when the curve is steepening and the path for growth becomes clearer. And while private assets like real estate can be sensitive to rising rates, they should not be too troubled by moderately higher yields in the context of above-trend economic growth. Finally, real assets can thrive in an environment of good growth and elevated inflation, and those tied to infrastructure can benefit from further investments in green energy and overdue investments by governments and businesses to raise productivity.

Expect more balance heading into 2022

2021 provided close to ideal conditions for economic growth and risk assets like equities, but we see the environment as more balanced heading into 2022. Households are saving less now than they were a year ago and government stimulus is likely tapped out, but underlying fundamentals continue to strengthen, pointing to positive performance from credit markets, infrastructure investments, private real assets and cyclical parts of the global equity market.

The major risk to our outlook remains a sudden tightening of financial conditions if central banks are forced to respond to inflation driven by an overly tight labor market. As the global economy continues along its road back to normal and market returns settle back to Earth, now is an opportune time for investors to consider their financial goals and adjust their asset allocation strategies accordingly.

Asset allocation views

We're expecting 2022 to feature slower (but still solid) economic growth, ongoing inflation pressures, slowly rising interest rates and diminishing fiscal and monetary policy support. Investment in this environment could be tricky, but here we offer broad allocation views we think should prove effective and — equally important — our thoughts about what might work against our positioning. In the following sections of our outlook, we offer asset class-specific "best ideas" and overall portfolio construction themes.

1.

2022 should still be a "risk-on" year.

Global financial markets seem priced for the middle or perhaps later stages of an economic cycle, but we don't see a recession on the horizon. In fact, we expect global economic growth to remain firmly above trend in 2022. Even though valuations appear relatively full across many areas of the global financial markets, we still believe it will pay to **stick with risk-on positioning**.

In particular, we think this means emphasizing **public equities and a range of alternatives** in portfolios. For equities, we generally have a cyclical tilt and see value in **U.S. small caps and non-U.S. developed markets**. We would also focus on **public infrastructure investments,** which we like more than public real estate. Across alternatives, we're quite positive on **private credit markets** and see select opportunities across **private real assets and real estate**.

Across public taxable and municipal fixed income markets, we would emphasize **credit risk over interest rate risk**. We believe investors can find yield and total return opportunities by moving lower on the credit spectrum. And while we see some value in longer-duration municipals, for global taxable fixed income markets, we favor a lower duration stance given the relative flatness of the yield curves and our belief that central banks will not over-tighten.

Finally, **we do not think investors should be strategically holding cash**. Having some cash and liquidity is necessary, but we encourage investors to enter 2022 fully invested, as aligned with their investment policies and long-term goals.

2. Expect (but don't overreact to) elevated inflation and higher interest rates.

This is the corollary of our growth views. We anticipate interest rates will move somewhat higher over the course of 2022, and, while it is not our base case, we wouldn't be surprised if the U.S. Federal Reserve starts increasing rates before the end of the year. Likewise, we think inflation will remain above its pre-pandemic average throughout 2022.

Our bottom-line view about rising rates and high inflation: We think **markets have mostly priced in these risks and can handle modest inflation and a couple of Fed rate hikes**. Public equity and credit markets can still thrive in environments of low-but-climbing rates and elevated inflation. Real assets and real estate remain important inflation hedges in addition to their fundamental attractiveness.

While we think investors should keep an eye on the rates and inflation backdrop, **there is no need to overpay for inflation hedges or prepare portfolios for runaway inflation or massive interest rate spikes**.

3. Structure portfolios for yield and income.

Interest rates should rise over the course of 2022, but yields are still at or near historical lows. Generating the income needed to sustain an individual's retirement or structuring a portfolio to match assets to liabilities will remain a challenge.

We say more about finding specific income ideas and managing different income risks in the following sections of our outlook, but for now, we offer two high-level income-related asset allocation views:

- **Lean into areas where lower credit quality and solid fundamentals overlap in fixed income:** We are particularly keen on areas like floating-rate loans, preferred securities and high yield municipal bonds.
- **Take on more liquidity risk to boost yields:** This needs to be a careful balancing act, but for those who can handle illiquidity, focus on investments in areas such as private credit, real estate debt and private real assets.

But what if we're wrong?

Risks to consider

We've outlined a pretty optimistic (though tempered with caution) view toward 2022. But what if we're wrong in our forecast? What trends might work against this positioning? Consider these counterpoints:

COVID-19 resurgence: We're expecting the pandemic to remain a humanitarian crisis in many parts of the world, but believe most of the associated economic and market risks are behind us. If we see new coronavirus strains, problems with vaccine rollouts or (shudder) a new and equally horrible virus, that would certainly work against our risk-on positioning.

Runaway inflation and a loss in central banks' credibility: If interest rates spike on a further dramatic rise in inflation expectations, our advice against overweighting explicit inflation hedges like gold or TIPS will have been proven wrong. At the same time, equity and real estate markets would feel the sting of higher rates and a dramatic steepening of the yield curve.

An organic growth slowdown or a Fed policy error: If an economic threat emerges that triggers slower growth or even a recession — or if the Fed panics and tightens monetary policy too quickly or by too much — our outlook would be in bad shape. Long-duration fixed income and defensive sectors of the equity market like utilities and consumer staples would be on the short list of safe harbors.

Asset class outlooks

EQUITIES

Saira Malik

Investment positioning

- Broadly speaking, valuations across public equities around the world appear full, but we see opportunities across sectors and markets. We expect valuations to be relatively flat next year. And at the same time, earnings growth is likely to decelerate (but remain above trend). As such, we expect equities will rise next year, but volatility should increase and opportunities will be harder to source. This will make stock selection increasingly important. A key risk would be if the Fed tightens policy too quickly as a result of unforeseen wage increases.
- We see opportunities across both value and growth styles, but with a mostly cyclical bias. Regarding geographic positioning, U.S. returns have dominated developed markets due to a faster reopening and stronger economic growth. We expect other developed markets (especially Europe) to catch up in 2022. Emerging markets look undervalued, but the regulatory overhang from China remains a dark cloud.
- Private equity demand remains exceptionally high and fundamentals still look sound, but some valuations are becoming inflated.

BEST IDEAS: *U.S. small caps should benefit from higher inflation, solid economic growth and rising interest rates. We also favor non-U.S. developed markets, which are relatively undervalued and should experience solid earnings growth.*

FIXED INCOME

Anders Persson

Investment positioning

- A combination of healthy economic growth and moderate inflation should lead to modest continued upward pressure on interest rates in 2022. The U.S. Fed has already started tapering, and we could see interest rate increases before the end of next year. Central banks around the world are also becoming more biased toward tightening.
- We favor spread sectors over government bonds. Credit markets look fully valued, but we think current prices reflect strong fundamentals rather than excess optimism. We expect default rates to be very low next year, and think it makes sense to generate extra yield by moving down in quality. We also favor a shorter duration stance across taxable fixed income markets.
- The key risk next year would be higher-than-expected inflation that results in a policy mistake of too much tightening.

BEST IDEAS: *Floating-rate loans look attractive given our preference for taking on credit risk over duration risk. Technicals in this market are also strong with strong ongoing demand. We also think a focus on preferred securities makes sense, as issuers have strong fundamentals and supply should be limited.*

MUNICIPALS

John Miller

Investment positioning

- Solid economic growth, rising tax revenues, low default rates and strong technicals provided tailwinds for municipal bonds in 2021, and we expect these trends will persist into next year. Federal stimulus and new infrastructure spending should also provide multiyear benefits for state and local governments through increased municipal project funding.
- We expect demand to remain high: Market inflows remain solid and non-U.S. buyers of municipal bonds show no signs of slacking. Prospects for higher U.S. tax rates could push even more investors into munis.
- Given this optimistic backdrop, we see value in lower credit areas (especially in certain high yield municipals) and think it makes sense to take advantage of times when the

yield curve offers the opportunity to extend duration. We also continue to emphasize ESG themes, with a focus on issuers who are providing more transparency about how municipalities are addressing climate change risks.

BEST IDEAS: *With Puerto Rico likely experiencing a full exit from bankruptcy next year, we're seeing value in select bonds from the territory — especially in the electric power space. Additionally, we think select health care-related bonds have been held back by regulatory concerns and appear undervalued.*

REAL ESTATE

Carly Tripp

Investment positioning

- Continuing global economic reopening and strong capital flows should provide ongoing tailwinds for private real estate investments.
- In the U.S., we're focused on alternative sectors (single-family rentals, self storage and manufactured housing), as well as growth opportunities across the Sunbelt. In Europe, we see value in storage, convenience retail and suburban housing. And in Asia/Pacific, we prefer industrial distribution centers, as well as multifamily and senior living properties.
- We're also continuing to work with the properties we own to drive renewable energy and sustainability to help enhance value.

BEST IDEAS: *In addition to these region-specific ideas, we have a global theme of leveraging digitization and technological advancements when selecting and managing real estate. Additionally, we're seeing emerging opportunities in retail spaces as that sector recovers from the pandemic.*

REAL ASSETS

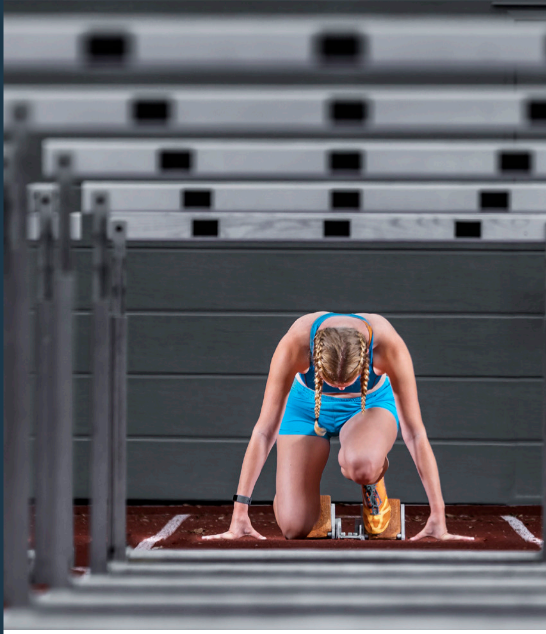
Justin Ourso

Jay Rosenberg

Investment positioning

- We have a relatively neutral view toward publicly traded real estate given price appreciation over the past year and valuations that generally are no longer discounted versus private real estate. Fundamentals remain solid, however, and continue to improve in COVID-impacted sectors. Within this asset class, we prefer companies less impacted by rising rates with shorter lease durations and those with improving cash flow prospects.
- We are broadly favorable across many areas of public infrastructure, and would emphasize companies with assets that can offer an inflation hedge such as transportation investments that could benefit from improving trade and increasing passenger travel, utilities focused on renewable energy and waste-related companies that should be helped by continued economic reopening.
- Private real assets should continue to benefit from high investor demand and relative insulation from economic cycles. We expect many areas able to pass through price increases should benefit from inflation.
- In this space, we're focused on a number of different investment themes, including rising demand for timber and carbon sequestration, continued strong appetite for clean energy, opportunities across infrastructure, agribusiness and farmland and assets that are better able to cope with supply chain disruptions.

BEST IDEAS: *In public markets, we point to road and rail transport enjoying the tailwinds of recovering traffic levels and competitive pricing, as well as waste companies that should benefit from rising prices and increased demand. Across private real assets, we favor investments that align with climate transition themes such as carbon sequestration in natural resources, clean energy and storage, renewable fuel sources and greenfield sustainable infrastructure.*



Five portfolio construction themes

In line with our broad cross-asset allocation views, as well as considerations and best ideas within specific asset classes, Nuveen's Global Investment Committee offers a broad set of portfolio construction themes for our clients to consider as we enter 2022.

1 Look for rebalancing opportunities

The key word here is "rebalancing." The beginning of the year is a natural time to reassess long-term portfolio goals, adjust asset allocation if needed and rebalance portfolios based on market movements.

But we're aware that many investors don't regularly rebalance, which could mean being exposed to unintended risks. Our view is that all institutional and individual investors should explicitly choose and manage their portfolio exposure risks in line with their long-term goals and the prevailing market environment. Whether those are achieved via a risk-budgeting approach, diversification and asset allocation or through asset class-specific positioning, all of these exposures should be intentional.

2 Balance economic growth and inflation risks

As reflected in the title of our overall 2022 outlook, we expect global economic growth to be a notch slower than it was in 2021, but still above the long-term trend. And we also think inflation pressures will continue through the coming year. We expect this combination to likely result in a multiyear trend of decent growth and some upward pressure on interest rates (perhaps somewhat similar to between 2016 and 2019).

When it comes to "balance," investors should focus on "growth + inflation" investments rather than explicit inflation hedges. For now, we think key elements of the reflation trade we have been discussing for some time still have legs. Fixed income credit sectors, U.S. small cap equities and public and private real estate and real assets all look like good opportunities in a modest growth, modest inflation, modestly rising rates environment.

3 Stick with that wider net for income

We've been hitting this point for a long time and the basic message holds true: With ultra-low yields across traditional fixed income asset classes, investors need to expand their universe. As such, we suggest exploring different areas of the fixed income landscape, dividend-paying equities and alternatives such as real estate, real assets and private credit.

In doing so, it is critical to understand the associated risks and to be deliberate in choosing those risks. To aid this process, we broadly categorize asset classes into buckets of interest rate risk, credit risk and equity risk. Each offers a different yield and volatility profile, and we suggest investors diversify across income opportunities and risks, as shown in Figure 5.

4 Benefit from ESG factor investing

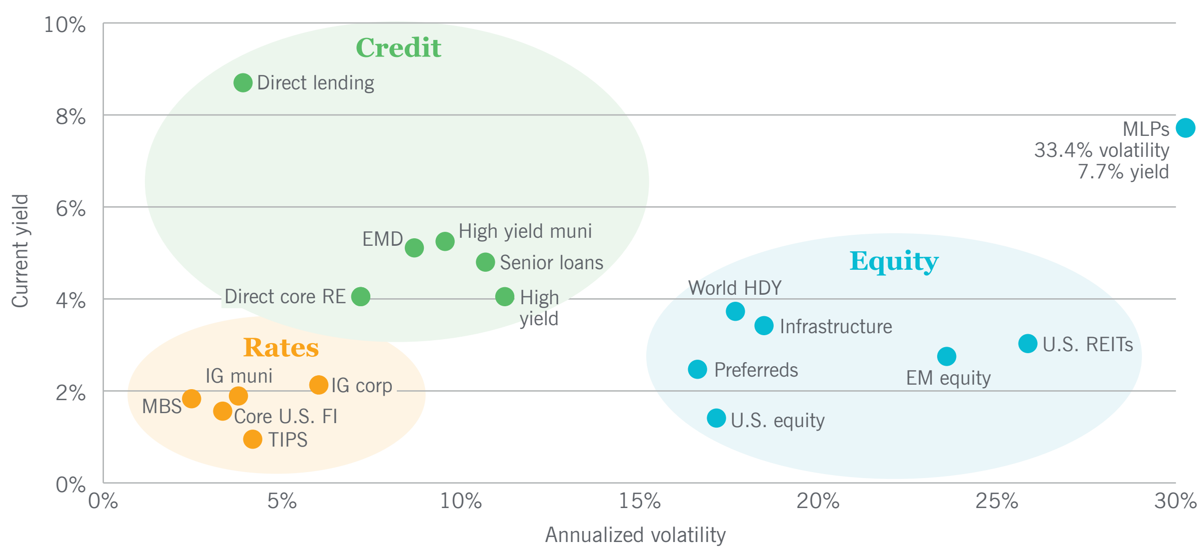
The acceleration of responsible investing themes and environmental, social and governance factors shows no sign of slowing down. And for good reason: At Nuveen, we believe ESG investing is not about excluding certain types of investments, but rather a tool to help examine opportunities as part of a broader approach designed to enhance our return generation and risk management processes.

The pandemic exhibited how strong corporate governance, business continuity, human capital and supply chain management are critical to driving performance across asset classes. We do not see that changing. Likewise, climate change-related risks and opportunities are expanding across portfolios. We are increasingly uncovering a variety of ideas in areas such as renewable energy, clean technology, food sustainability and investments that focus on diversity, inclusion and employee well-being across public and private markets.

5 Harness active management as the cycle ages

In the coming years, we expect rising volatility and harder-to-find investment returns. This is an implicit argument for the importance of active management. Without exception, all members of our Global Investment Committee and portfolio management teams are finding investment ideas that are highly idiosyncratic and fast-moving. Selectivity, research, nimbleness and confidence can make all the difference.

Figure 5 — A broader reach can help achieve income goals



Source: Bloomberg, L.P., 30 Sep 2021. **Past performance is no guarantee of future results.** Representative indexes: **core U.S. fixed income:** Bloomberg U.S. Aggregate Bond Index; **U.S. TIPS:** Bloomberg U.S. TIP 1-10 year Index; **mortgage-backed securities:** Bloomberg U.S. Mortgage-Backed Securities Index; **investment grade corporates**: Bloomberg U.S. Corporate Bond Index; **investment grade municipals:** Bloomberg U.S. Municipal Bond Index; **U.S. equity:** S&P 500 Index; **world high dividend (HDY):** MSCI World High Dividend Yield Index; **U.S. REITs:** MSCI US REIT Index; **emerging markets equity:** MSCI Emerging Market Index; **direct core real estate:** NCREIF Property Index; **emerging markets debt:** JPMorgan Monthly EMBI Index; **high yield municipals:** Bloomberg High Yield Municipal Index; **preferred securities:** BofA Preferred Stock Fixed Rate Index; **senior loans:** Credit Suisse Leveraged Loan Index; **high yield corporates:** Bloomberg U.S. Corporate High Yield 2% Issuer Capped Index; **infrastructure:** S7P Global Infrastructure Index; **direct lending:** CDLI Total Return Index. **MLPs:** Alerian MLP Total Return Index. Municipal bond yields are taxable equivalent at 37% + 3.8% ACA tax rates.

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- insights from thematic "deep dive" discussions by the GIC and guest experts (markets, risk, geopolitics, demographics, etc.)
- guidance on how to turn our insights into action via regular commentary and communications.

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Endnotes

Sources

All market and economic data from Bloomberg, FactSet and Morningstar.

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All investments carry a certain degree of risk and there is no assurance that an investment will provide positive performance over any period of time. Equity investing involves risk. Investments are also subject to political, currency and regulatory risks. These risks may be magnified in emerging markets. Diversification is a technique to help reduce risk. There is no guarantee that diversification will protect against a loss of income. Investing in municipal bonds involves risks such as interest rate risk, credit risk and market risk, including the possible loss of principal. The value of the portfolio will fluctuate based on the value of the underlying securities. There are special risks associated with investments in high yield bonds, hedging activities and the potential use of leverage. Portfolios that include lower rated municipal bonds, commonly referred to as "high yield" or "junk" bonds, which are considered to be speculative, the credit and investment risk is heightened for the portfolio. Credit ratings are subject to change. AAA, AA, A, and BBB are investment grade ratings; BB, B, CCC/CC/C and D are below-investment grade ratings. As an asset class, real assets are less developed, more illiquid, and less transparent compared to traditional asset classes. Investments will be subject to risks generally associated with the ownership of real estate-related assets and foreign investing, including changes in economic conditions, currency values, environmental risks, the cost of and ability to obtain insurance, and risks related to leasing of properties. Socially Responsible Investments are subject to Social Criteria Risk, namely the risk that because social criteria exclude securities of certain issuers for non-financial reasons, investors may forgo some market opportunities available to those that don't use these criteria. Investors should be aware that alternative investments including private equity and private debt are speculative, subject to substantial risks including the risks associated with limited liquidity, the use of leverage, short sales and concentrated investments and may involve complex tax structures and investment strategies. Alternative investments may be illiquid, there may be no liquid secondary market or ready purchasers for such securities, they may not be required to provide periodic pricing or valuation information to investors, there may be delays in distributing tax information to investors, they are not subject to the same regulatory requirements as other types of pooled investment vehicles, and they may be subject to high fees and expenses, which will reduce profits. Alternative investments are not appropriate for all investors and should not constitute an entire investment program. Investors may lose all or substantially all of the capital invested. The historical returns achieved by alternative asset vehicles is not a prediction of future performance or a guarantee of future results, and there can be no assurance that comparable returns will be achieved by any strategy.

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