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Viewpoints from the Global Investment Committee
4Q | 2021 OUTLOOK

Past peak growth, but a long way to go

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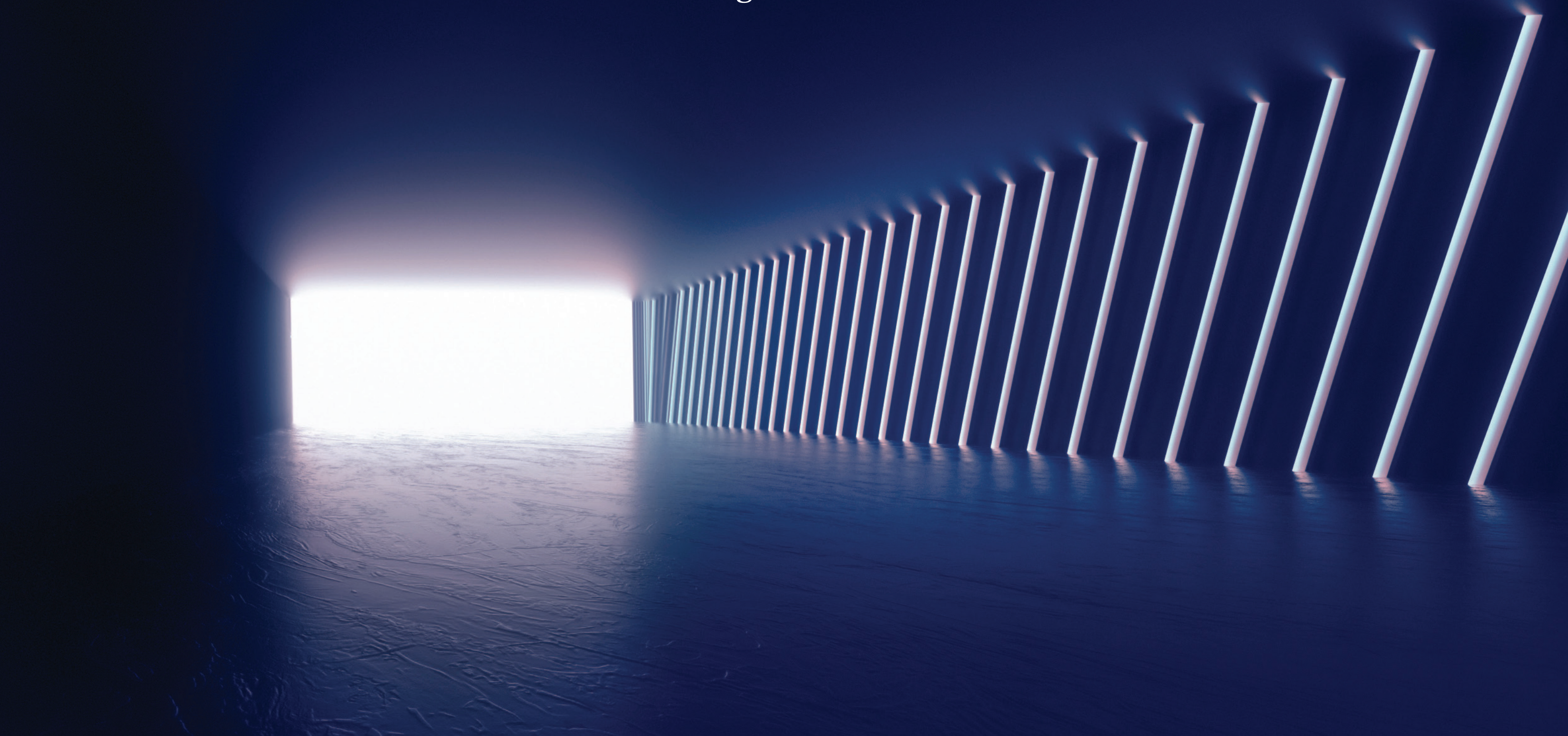
Way back at the end of 2020, our year-ahead outlook featured the theme, *"Dark tunnel. Bright light."* While we saw strong potential for economic and market upside, we also anticipated a difficult path ahead. As it turned out, that upside scenario materialized quicker than we expected, and investors are actually already focusing on when the current cycle might end — and what that ending could look like. That's causing both investment opportunities and investment risks to shift rapidly. Amid this changing environment, 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.



OPINION PIECE. PLEASE SEE IMPORTANT DISCLOSURES IN THE ENDNOTES.

Views from the TIAA General Account

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.

Combining ESG with financial outcomes

Interest in responsible investing among governments, policymakers, asset managers and investors shows no signs of slowing. By the end of 2020, assets under management with environmental, social and governance (ESG) objectives reached a record of nearly $37.8 trillion, per Bloomberg. But the evolution and use of different factors has been uneven.

When it comes to ESG investing, the G – governance – appears well in hand. Institutional investors are long practiced at proxy voting and engaging with company boards and management. The E – environmental factors, especially climate change – are in sharp focus, as governments, seeking to limit global warming, consider different policy options and as investors increasingly make the connection between the science of climate change and capital markets. Strategies to decarbonize businesses, portfolios and the economy, including commitments to net zero carbon targets, are generating action. The S – the social component – however, looks less clear cut.

It seems that the market's attitude and approach to the social side of responsible investing is changing. For many years, U.S. insurance companies were encouraged by some state regulators to have a small portion of their portfolio in socially oriented investments. In the past, this was often perceived as "doing good," while potentially sacrificing return potential. But over time, we found that these types of investments can deliver compelling risk-adjusted returns for our portfolios.

The TIAA GA has invested over $1 billion in social impact projects, across private equity, real estate and real assets, over the past decade. We've focused on themes such as affordable housing, financial inclusion and broadening diversity. We've done this not only because we want to be a responsible investor but, more importantly, because it contributes to our fiduciary duty of delivering retirement income to our participants. It has allowed us to diversify and spread risk across a wider range of assets while seeking attractive returns.

Just as investors have made the connection between climate change and investment returns, and are directing capital to solutions, we expect similar connections to be made for social inequalities and underserved areas of the market, especially as many of these inequalities have become increasingly apparent during the pandemic.

Underserved and previously excluded groups represent a growing majority of consumers and an untapped market. We believe inclusion and diversity in company leadership and portfolio management teams should lead to better financial performance and better outcomes for clients. An increasingly broader understanding of these factors should create a virtuous cycle in which capital markets can attract funds for investments with social goals as well attractive risk-return profiles. Eliminating disparities in wealth should grow the economy and the opportunity set for all investors — not just those with a focus on responsible investing. Social impact investments will no longer be categorized just as "doing good," but will also be judged on returns to capital.

As an investor, we want to be able to identify these trends and capitalize on them. This allows us to drive capital to profitable projects that benefit society, offer appealing returns and diversify our portfolio.

Past peak growth, but a long way to go

Brian Nick
Chief Investment Strategist

- Global growth is slowing from its fastest pace in decades as the Delta variant disrupts the recovery, governments gradually withdraw stimulus and policy risks multiply.
- Even so, our outlook remains upbeat as economies reopen and more workers return to jobs, allowing companies to ramp up production and restock inventories.
- While the global economy remains in an early stage of recovery, market valuations across asset classes have risen to or exceeded their peaks from late in the last cycle.
- As markets begin to price in growth risks over inflation risks, we expect only moderate upward pressure on interest rates and choppier performance from global equities.
- This will likely prove to be a challenging environment to generate both income and total returns. A greater emphasis on selectivity, as well as allocation to less liquid asset classes, may be necessary to meet long-term portfolio goals.

> **Resilient markets may make it costly to sit on the sidelines.**

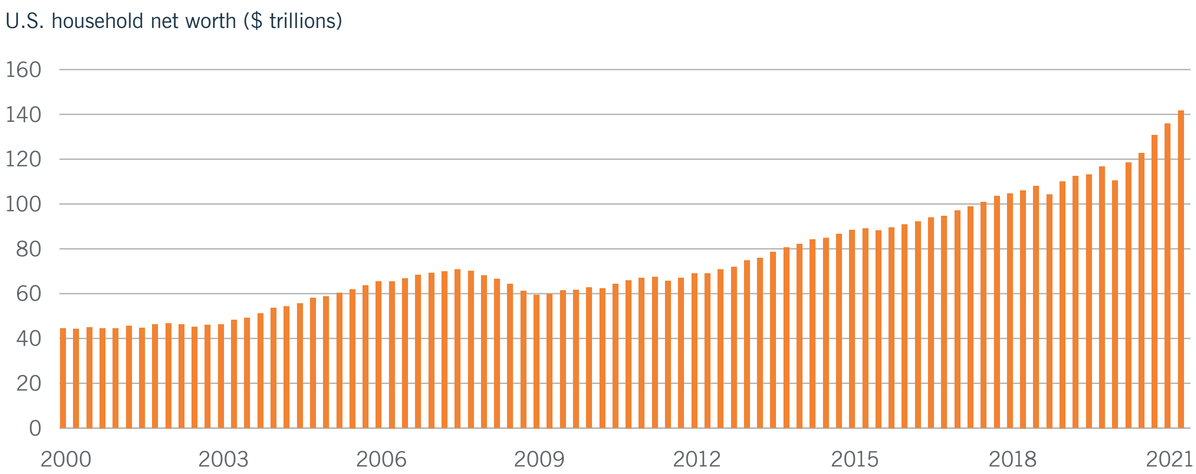
Late-cycle markets in an early-to-mid-cycle economy

In our midyear outlook from June, we pointed out that global growth was peaking, and we asked what would come next. Well, now we know. As the reopening boom fades and global stimulus winds down, financial markets have entered a choppier environment in which investors who take a lot of risk are no longer assured a big reward.

Let's start with the good news: The global economic cycle is still young with – we think – years of solid growth ahead. Unemployment rates are falling rapidly as workers return to jobs, and global inventories are being frantically restocked as producers catch up to the surprising demand surge during the first half of the year. Residential and commercial real estate construction is cycling back up after a wobbly spring. Financial conditions are still quite loose thanks to easy monetary policy. And, most importantly, consumers have emerged from the pandemic with high levels of savings and unusually strong balance sheets (Figure 1).

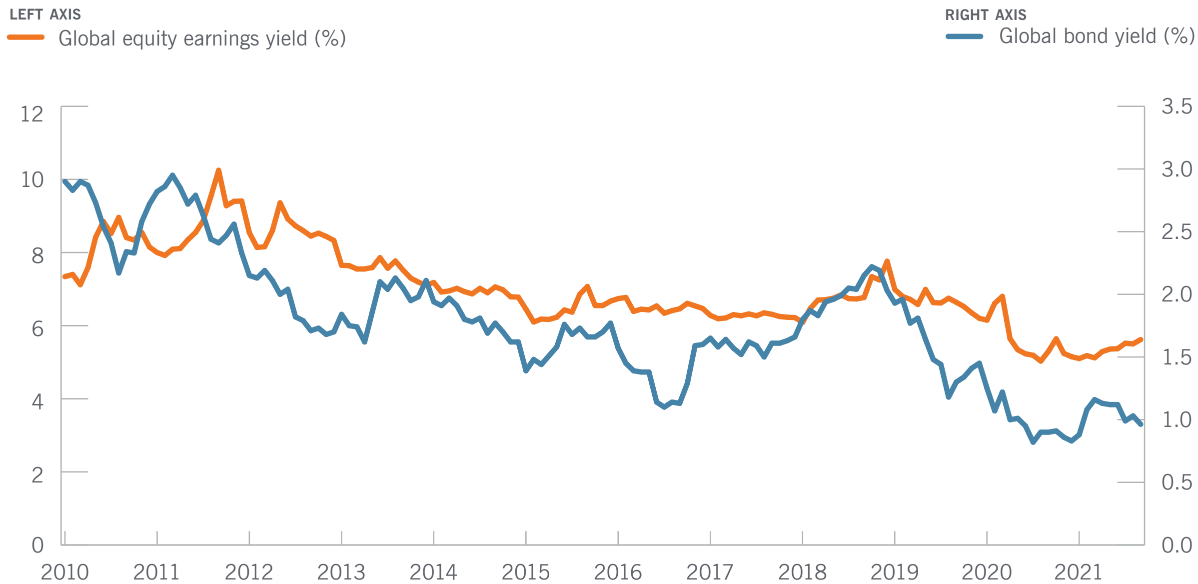
Now for the less good news: Prices across most financial markets have snapped back to their pre-pandemic valuations. Some assets like global equities and credit are actually even more expensive than before the pandemic (Figure 2). And the peak for global growth, including in the world's largest economies, is now firmly in the rearview mirror, providing less of a macroeconomic tailwind. Our most important question for the balance of this year is: How do markets process slowing demand growth in the context of fully valued asset prices?

Figure 1 — U.S. household net worth has shot up on savings and stimulus



Data Source: Federal Reserve and Bloomberg, January 2000 – June 2021.

Figure 2 — Financial markets have returned to "late cycle" valuations quite quickly



Data source: Bloomberg, 29 Jan 2010 – 30 Sep 2021. **Past performance is no guarantee of future results.** Representative indexes: **global equities:** MSCI All-Country World Index; **global bonds:** Bloomberg Global Aggregate Bond Index.

Turning from inflation risks to growth risks

The Delta variant of COVID-19 has exacerbated the slowdowns already underway in the U.S. and Europe. More pressingly, it has delayed reopenings in areas like Asia and Latin America where vaccinations have only recently ramped up. But Delta is not the primary factor driving down growth rates. Government stimulus played a huge role in sustaining household incomes and spending throughout 2020 and into 2021. In the U.S., for example, individual tax credits enacted as part of the CARES Act were responsible for a nearly 7% net swing in income growth last year.

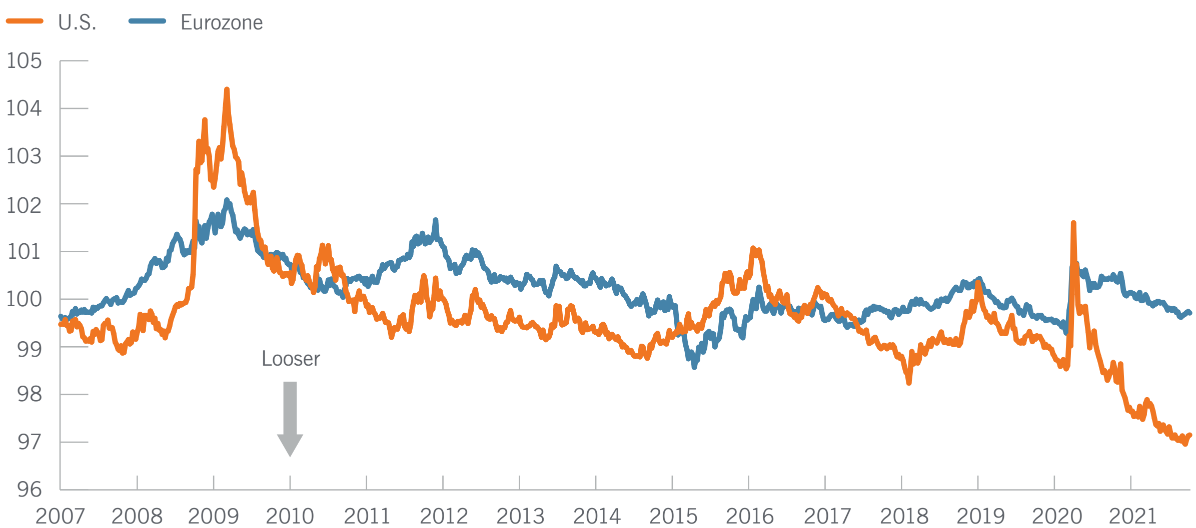
Moving forward, we expect fiscal policy will actually start dragging on growth. The U.S. has borrowed nearly $6 trillion since March 2020. Even the most ambitious versions of the spending bills currently winding their way through Congress would only maintain a fraction of that borrowing rate. Much of the new spending seems likely to be offset by tax increases and other sources of revenue, and it is allocated over a much longer time period, limiting its stimulative effect. And while other countries haven't matched the U.S. in terms of fiscal stimulus, the global trend is clearly toward less, not more, stimulus in the years ahead.

Monetary policy is primed to make a directionally similar but far less dramatic move from "extremely accommodative" to merely "quite accommodative" after central banks helped stabilize financial markets and created the loosest financial conditions in modern economic history (Figure 3). The winding down of quantitative easing and an eventual – though not imminent – rise in global policy rates should help allay inflation fears, which already appear to be declining. Breakevens in the U.S. TIPS market, for instance, remain remarkably stable and below their spring peaks, while incoming inflation data shows a clear deceleration in the price increases that raised eyebrows in the second quarter.

The focus heading into 2022 may be on interest rate hikes and the return of pre-pandemic growth rates or something close to them. That environment could pose challenges to investors expecting the reflation trade to reignite and anything but U.S. large cap growth stocks to outperform. But if we do see another rotation into

Figure 3 — Global monetary policy can only really tighten from here, but it will do so slowly

Goldman Sachs Financial Conditions Index



Data source: Goldman Sachs and Bloomberg, January 2007 – September 2021.

cyclicals, it will benefit areas of the market that have fallen to unusually inexpensive levels relative to the broader market: **U.S. small cap stocks** as well as **emerging markets equities and credit**.

This leads into one of our main portfolio themes for the fourth quarter: **casting a wider net for income**. After a wild ride over the first half of 2021, interest rate volatility has calmed down a bit. As the recovery moves forward, even at a slower pace, we still expect rates to move higher over the next six to twelve months. But the trajectory of the increase should be quite a bit flatter than it was in the first quarter, when the 10-year U.S. Treasury yield nearly doubled to 1.75%. Since then, it declined quickly from this level and has not come close to returning.

While we believe yields could increase back to that level before year end, we know that income-focused investors have long since given up on government bonds to produce adequate rates of return. Instead, it has made sense to turn to **credit-sensitive parts of the fixed income market and municipal bonds**, as well as **dividend growth strategies within the equity market**, and a **robust portfolio of alternative assets** that provide rents or other sources of income. While it's natural to focus on *changes* in interest rates, we are more interested in what appears to be a *lower equilibrium level* for rates, both on cash and longer-duration bonds, making them less-useful strategic asset classes.

Of course, with both equity and credit markets already fully valued, looking outside of the public market sphere is increasingly necessary for us as investment managers. That's why another of our themes this quarter is to **take advantage of illiquid assets**, which tend to have low correlations to those that trade publicly and often offer better risk-adjusted return profiles. In particular, we are focused on **middle market private debt**, a widening variety of **direct real estate** investments and **agricultural investments in timberland and farmland**. Investors should not expect the equity market gains of the last two years – or, indeed, the last 10 years – to continue given where valuations are today. We think **the keys to achieving a desirable rate of return are 1) diversification and 2) a tolerance for illiquidity**.

Risk 1: China's economic policy uncertainty and our approach to emerging markets

Every quarter, it seems we face some sort of new idiosyncratic risk in the markets. Most recently, that role was filled by China and its more aggressive approach to regulatory policy, specifically in its treatment of companies within its technology, education and real estate sectors. Because of its size and importance to the global economy and to emerging markets (EM) in particular, China's ad hoc policy announcements contributed to acute underperformance by EM assets, particularly in equities, given China's prominence in that market.

Nuveen's GIC discussed this issue in depth to prepare for this quarter, but came away with no strong tactical bias regarding China itself. We do, however, see **strengthening tailwinds for EM as a whole**. These include an improving macroeconomic situation, with vaccinations sharply on the rise and Delta finally fading, as well as favorable valuations and increasing demand for income drawing investors into higher yielding markets with lower valuations.

Even so, we remain cautious in our approach toward the single largest emerging market. China's economic policy has been inexorably tied to the political machinations happening in the country, which are, in turn, affected by the country's need to address its demographic challenges as the population ages rapidly in the coming years. China's global ambitions in areas like technology and manufacturing give us continued reason to invest there, albeit selectively. Indeed, **selectivity is one of our core investment themes** in all markets this quarter, as political risks multiply and broad index-based strategies have less to offer.

Risk 2: We need an even bigger labor market comeback in the U.S.

It is impossible to study the global economy today without coming across supply and demand imbalances. While these have been well documented in areas of the manufacturing sector, the most concerning imbalance today is the apparent U.S. worker shortage. Or more precisely, a shortage of workers willing to take jobs at the wages being offered.

Wage growth is accelerating as the number of job openings continues to surge, creating close to an ideal environment for anyone actively looking for a job or considering returning to the labor force after an extended absence. The federal supplement for state unemployment insurance expired in early September, providing yet another impetus to return to work for the millions who were working in January 2020, but aren't today.

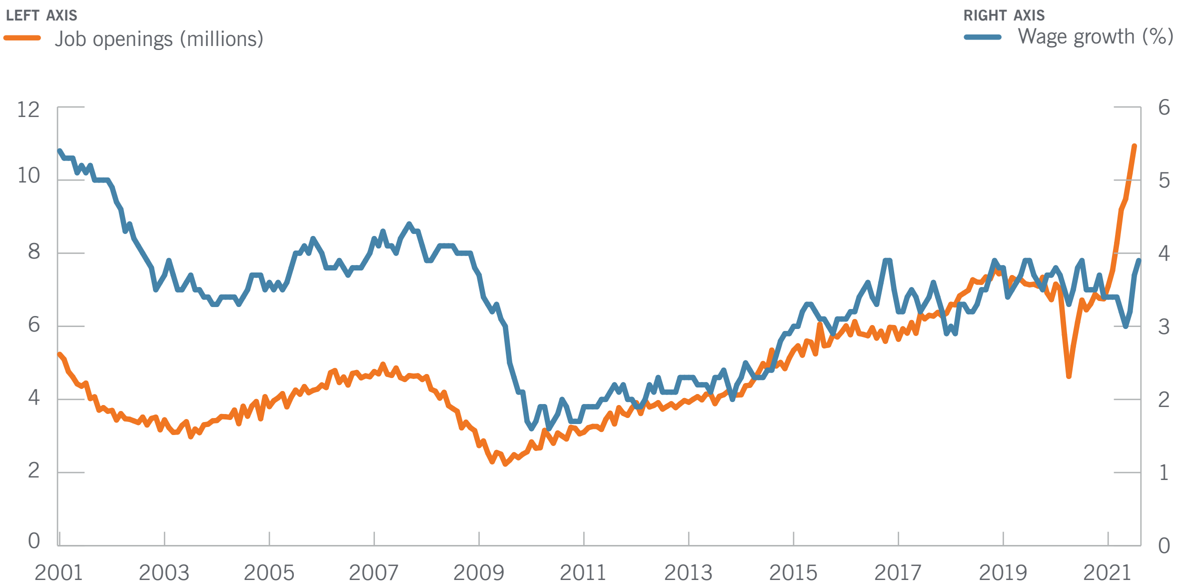
We are optimistic that job creation will continue apace or even reaccelerate after the worst of the Delta variant has passed. But a permanent shrinkage in labor supply remains a key risk to our outlook. The U.S. and other large economies with aging populations need participation rates among prime age workers (25-54) to return to at least their pre-pandemic highs. If they don't, we anticipate a growing risk that we'll see a mix of higher inflation and lower profit margins for companies big and small.

Profit margins may already be under pressure starting in 2022 if the U.S. corporate tax rate increases are passed as part of the spending packages this fall. Adding surging input costs and higher wages to the equation – without a commensurate rise in worker productivity – presents a significant risk to equity markets.

Still a long way...

This is an area where **leveraging environmental, social and governance (ESG) factors** can help us identify opportunities and avoid unnecessary risks. Our survey of research on wages and equity performance suggests that stocks of companies that pay the highest wages do not, in a vacuum, outperform the market. However, firms that report higher rates of employee satisfaction – including pay considerations and a host of other factors like training, internal mobility and benefits – do tend to outperform their peers. This may be especially valuable for security selection in an environment of faster wage growth, and it's why a key investment theme for the quarter is to **focus on ESG factors that matter for performance**.

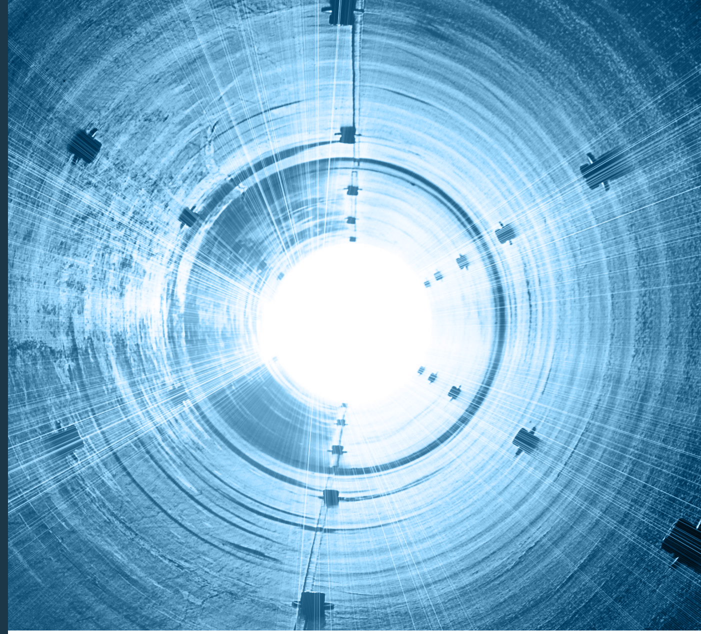
Figure 4 – The best labor market for workers in recent memory



Data source: Federal Reserve Bank of Atlanta, Bureau of Labor Statistics and Bloomberg, January 2001 – August 2021. Job openings represented by Job Openings and Labor Survey (JOLTS). Wage growth represented by the Atlanta Fed Wage Growth Tracker.

…to go before the end

As the world reaches the light at the end of the pandemic, the road back to normal may have a few bumps. Chief among them is the struggle of global supply to match extremely high levels of demand, something that has led to bursts of inflation but been consistent with record high company profits. As the delicate removal of policy stimulus helps cool things off, investors will have to look outside their comfort areas to find better income and return opportunities. But the experience of the third quarter told us that markets can remain resilient in the face of policy risks, and the opportunity cost of being on the sidelines may still be high.



Five portfolio construction themes

While valuations across asset classes are looking fuller, economic growth appears to be slowing down. At the same time, investors remain concerned about inflation and are increasingly focused on prospects for tighter monetary policy. No doubt the investing environment is looking more challenging, with both growth and income opportunities becoming increasingly hard to come by. So how to build portfolios? Nuveen's Global Investment Committee offers a set of portfolio construction themes for our clients to consider.

1 Balance inflation risks with growth risks

We still appear to be in the early phases of the current economic cycle, with central banks encouraging (or at least tolerating) higher inflation. Monetary policy is slowly becoming less accommodative and fiscal policy is likely to become more volatile.

From a broad macroeconomic and investment perspective, we're slowly becoming less focused on inflation risks and more focused on how the eventual economic landing will look. As of now, we still see opportunities from the "reflation trade," and are particularly favorable toward U.S. small caps, fixed income credit sectors (especially loans and preferred securities) and select opportunities across emerging markets debt and equities. We also see compelling investments in areas such as industrial real estate, public infrastructure benefiting from increased economic reopening and higher-yielding municipal bonds.

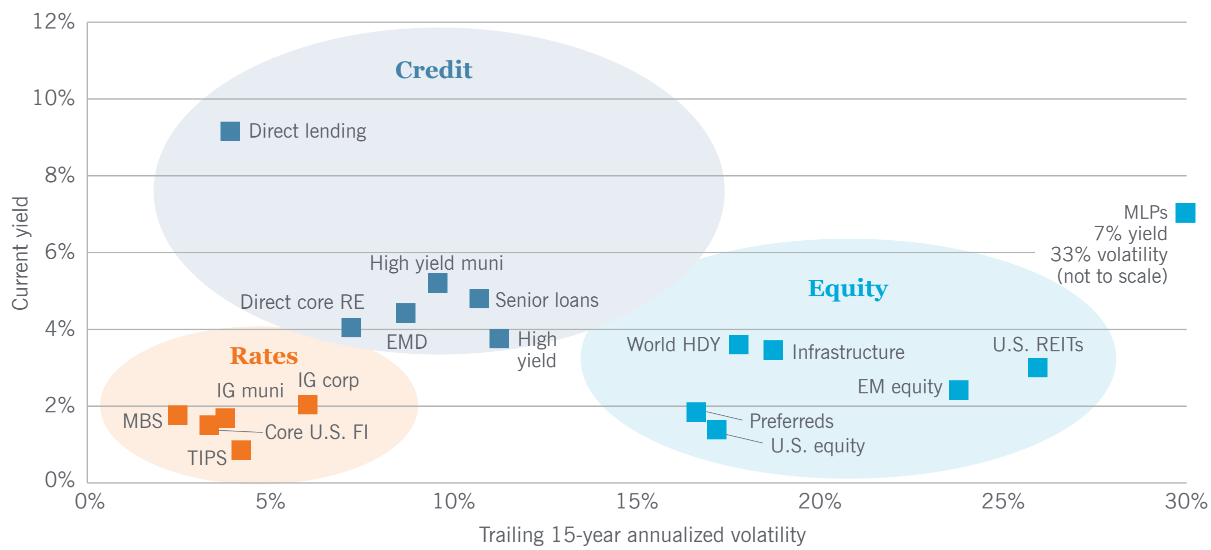
But we're also increasingly looking to complement these views by considering investments that can prosper in a slower growth environment. This includes areas such as select growth at reasonable prices in equities (like health care), as well as a variety of private real estate and real assets that offer diversification and resilience.

2 Continue casting a wide net for income

Yields remain stubbornly low, even as the global economy has recovered over the last year. The search for income is going to be a long-term challenge for institutional and individual investors around the world. This means investors should consider different areas of the fixed income landscape, dividend-paying equities and alternatives, such as real estate, real assets and private credit as tools to build a sustainable income portfolio.

In casting this wider net, however, investors should understand which risks are entailed to generate more income and how these risks work together. Among a number of tools and options, we broadly categorize possible asset classes into buckets of interest rate risk, credit risk and equity risk. Each offers different yield and volatility profiles (Figure 5), and we see value in diversifying across different income opportunities and risks.

Figure 5 — A broader reach can help achieve income goals



Source Bloomberg, L.P., 30 Jun 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.

3 Take advantage of illiquid assets

We believe many (if not most) investors are under-allocated to alternatives in general and illiquid investments in particular. We see compelling opportunities across the alternatives landscape, including private equity driven by rising M&A activity and middle market private debt, which looks attractive on both a valuation and fundamental basis. We also see value in alternative real estate sectors (including self-storage and medical offices) as well as select farmland and timberland investments, especially those focused on low- or zero-carbon emissions.

It is important that investors understand their illiquidity tolerance, ensuring that investment time horizons match their need for capital. But taking on additional liquidity risk in exchange for diversification and return potential is a strategy we think both institutional and individual investors should consider.

4 Focus on ESG factors that matter

Investors have been increasingly focusing on environmental, social and governance factors in recent years. And for good reason: For us, ESG investing is not about excluding certain types of investments, but rather a tool to help generate returns and manage risks.

We're continuing to focus on both governance and environmental factors (especially as climate risk grows as an important investment theme), and have also been seeing increased value in leveraging the "S" in ESG factors. In our view, human capital and labor market dynamics are becoming increasingly important as investment themes. For example, companies that provide more flexible work schedules, those that invest heavily in workforce training and those that make diversity and inclusion a core part of their corporate culture appear relatively advantaged.

5 Selectivity, selectivity, selectivity

Finding relative value across and within asset classes is becoming an increasingly important and growing theme for all investors, especially as the current cycle is starting to age and as volatility may pick up. In all areas of both public and private markets, we're finding that opportunities are increasingly idiosyncratic and fast moving.

This makes selectivity (and diligent research, nimbleness and flexibility) critical to contributing to investment success.

About Nuveen's Global Investment Committee

Nuveen's Global Investment Committee (GIC) brings together the most senior investors from across our platform of core and specialist capabilities, including all public and private markets. Quarterly meetings of the GIC lead to published outlooks that offer:

- macro and asset class views that gain consensus among our investors
- 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.

For more information, please visit nuveen.com.

Endnotes

Sources

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

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Such information may include, among other things, projections, forecasts, estimates of market returns, and proposed or expected portfolio composition. Any changes to assumptions that may have been made in preparing this material could have a material impact on the information presented herein by way of example. **Past performance is no guarantee of future results.** Investing involves risk; principal loss is possible.

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A word on risk

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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