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Global financial markets delivered mixed performance in the fourth quarter, finishing off a year that saw strong gains for U.S. equities, respectable returns for developed markets, and small declines for emerging markets and core bonds. Investors grappled with the uncertain economic effects of the highly contagious (though less fatal) Omicron variant of Covid-19, continuing global supply chain disruptions, and rising inflationary pressures. Reflecting the varied global experiences fighting Covid-19, in the fourth quarter decision makers around the world began unveiling divergent strategies regarding the eventual normalization away from low interest rates, record fiscal stimulus, swollen central bank balance sheets, and episodic restrictions on travel and other social activity. Investors shrugged off many of these concerns and uncertainties, and continued to put more capital into risk assets, especially in sectors with already stretched valuations (e.g., large-cap growth and real estate stocks in the U.S.).

As we entered the new year, market volatility suddenly intensified as investors had to digest a series of negative developments – record inflation in the U.S., a more hawkish Federal Reserve aiming to accelerate rate hikes and balance sheet tapering, rising geopolitical tensions, and disappointing earnings guidance citing higher costs and ongoing supply chain disruptions. Prices of the

most speculative assets (particularly shares of unprofitable firms and digital currencies) fell sharply in December and January as investors revalued their true growth potentials against higher discount rates and the unwinding of easy-money support to capital markets.

That said, amid all this revaluation, market volatility (as measured by the VIX Index<sup>1</sup>) remains near its long-term historical average and far below the extremes witnessed in 2020 or 2008. As we commented in our previous letter, the mid-stage of the business cycle is typically when markets are the most turbulent – this cycle is no exception. It is these moments when volatility picks up that the virtues of prudence, patience, and discipline are the most valuable to investors.

Our message to clients is simple: do not attempt to time the local peaks and valleys of markets (it is almost always a fruitless endeavor) – active managers are topping up high-conviction positions on your behalf as markets decline. Avoid the urge to blindly buy the dip in a company's stock just because it had a headline-making bad day in the market – some stocks may be oversold, yet others may be re-rating lower for a reason. Do not overload portfolios with alternative asset classes that are marketed as guardians against inflation – over the long term, many are not value-adders when compared to holding

<sup>1</sup> The VIX Index is a calculation designed to produce a measure of constant, 30-day expected volatility of the U.S. stock market, derived from real-time, mid-quote prices of S&P 500® Index (SPX<sup>SM</sup>) call and put options.

(Continued from page 1)

diversified equities. At the same time, do not fear entering or staying in the market. Volatility is a normal phenomenon and is the risk one must take in order to achieve

a higher return over risk-free assets. Investors should rely on broad diversification to protect their wealth against the risk of permanent loss of capital, especially in choppy markets.

## Financial Markets Performance

### Equities

*“In the final three months of 2021, U.S. stocks recorded strong gains (see Exhibit 1). The fear of the fast-spreading Omicron variant and the prospect of higher interest rates periodically weighed on sentiment, yet a still dovish Fed and news of the relatively benign nature of the variant reinforced the strong upside momentum.”*

In the final three months of 2021, U.S. stocks recorded strong gains (see Exhibit 1). The fear of the fast-spreading Omicron variant and the prospect of higher interest rates periodically weighed on sentiment, yet a still dovish Fed and news of the relatively benign nature of the variant reinforced the strong upside momentum. Large-cap stocks outperformed small caps by a wide margin, and growth stocks beat value (but only among large caps). Investors were betting that large-cap growth stocks would be less susceptible to rising rates (vis-à-vis small-cap growth). Most S&P 500 sectors delivered double-digit returns, with real estate and technology shares adding the most, advancing 46.2% and 34.6% in 2021, respectively. Energy and financials delivered only slight gains for the quarter but ended the year as the best-performing sectors, up 54.7% and 35.0%, respectively.

Performance for developed market equities outside the U.S. was mixed for the quarter. European shares gained 5.7% in U.S. dollar terms as the European Central Bank (ECB) signaled it would tighten monetary policy very gradually despite inflation hitting its highest level since the euro was introduced in 1999. Other contributors to the region’s positive return were the formation of a new governing coalition in Germany with a

mandate to upgrade infrastructure and modernize the economy, as well as the approval of expansionary budgets in Italy and Spain. Meanwhile, Japanese stocks declined 3.9% in U.S. dollar terms over the same period, pressured by political uncertainty earlier in the quarter and the spread of the Omicron variant in November. Waning global demand continued to pressure economic growth, and export-sensitive Japanese GDP contracted in the third quarter. However, signs of a turnaround were emerging by November, as easing supply-side pressures helped local industrial production expand.

Emerging market equities lost additional ground during the quarter to end the year in negative territory. Chinese stocks, by far the largest component of the emerging market investment universe, declined 6.1% despite strong external trade performance. Investors fretted that a strict zero-tolerance Covid-19 policy would have dire implications for growth, even as policymakers pivoted towards easing on the back of moderating inflation. Furthermore, an escalation in investment and trade restrictions between China and the United States weighed on sentiment. Meanwhile, Russian and Brazilian shares were also down as geo- and domestic political uncertainties weighed.

## Financial Market Performance Cont.

### Exhibit 1

| Total Return* for Selected Equity Indices         | Fourth Quarter            | Year-to-Date<br>(2021)    | Year-to-Date               |
|---|---------------------------|---------------------------|----------------------------|
|   | (09/30/21 to<br>12/31/21) | (12/31/20 to<br>12/30/21) | (12/31/21 to<br>1/31/2022) |
|   | %                         | %                         | %                          |
| S&P 500 Index                                     | 11.03                     | 28.71                     | (5.17)                     |
| S&P 500 Growth Index                              | 13.37                     | 32.01                     | (8.37)                     |
| S&P 500 Value Index                               | 8.31                      | 24.90                     | (1.62)                     |
| Russell 3000 (Total U.S. Market) Index            | 9.28                      | 25.66                     | (5.88)                     |
| Russell 2000 (Small-Cap) Index                    | 2.14                      | 14.82                     | (9.63)                     |
| Russell 2000 (Small-Cap) Growth Index             | 0.01                      | 2.83                      | (13.40)                    |
| Russell 2000 (Small-Cap) Value Index              | 4.36                      | 28.27                     | (5.83)                     |
| MSCI All Country World ex-U.S. Index (Net)        | 1.82                      | 7.82                      | (3.69)                     |
| MSCI All Country World ex-U.S. Growth Index (Net) | 2.37                      | 5.09                      | (8.06)                     |
| MSCI All Country World ex-U.S. Value Index (Net)  | 1.24                      | 10.46                     | 0.89                       |
| MSCI EAFE (International) Index (Net)             | 2.69                      | 11.26                     | (4.83)                     |
| MSCI Emerging Markets Index (Net)                 | (1.31)                    | (2.54)                    | (1.89)                     |
| MSCI ACWI Commodity Producers (Net)               | 6.28                      | 28.14                     | 7.77                       |

Source: FactSet \*Includes price appreciation plus dividends and/or interest.

## Fixed Income

The broad fixed income market was mostly flat during the fourth quarter (see [Exhibit 2](#)), capping a year of negative total returns. The strong economic recovery in the U.S. was largely offset by concerns about persistently higher inflation, the spread of Omicron, and a potential slowdown in China's growth.

U.S. Treasuries were generally flat, but quarterly performance was uneven along the yield curve – yields on two-to-five-year Treasuries rose in anticipation of several Fed rate hikes and the earliest innings of balance sheet tapering, while

longer maturities declined. Total returns for 2021 were negative across the board, aside from TIPS, which benefited from higher inflation expectations.

Returns of global sovereign debt were also flat for the quarter, but only thanks to positive returns in some of the largest constituents of the universe<sup>2</sup> (e.g., the U.S., the U.K., and Canada). Most other issues extended their negative total returns for the year.

Investment-grade U.S. corporate debt was slightly positive for the quarter, reducing its negative year-to-date total returns. Higher quality assets

*“The broad fixed income market was mostly flat during the fourth quarter (see Exhibit 2), capping a year of negative total returns.”*

<sup>2</sup>As measured by the FTSE World Government Bond Index.

## Financial Markets Performance Cont.

### Exhibit 2

| Total Return* for Major Fixed Income & Hedge Fund Indices | Fourth Quarter<br>(09/30/21 to<br>12/31/21) | Year-to-Date<br>(2021)<br>(12/31/20 to<br>12/31/21) | Year-to-Date<br>(12/31/2010 to<br>1/31/22) |
|---|---|---|--|
|   | %   | %   | %  |
| Bloomberg Barclays U.S. Aggregate Bond Index              | 0.01  | (1.54)  | (2.15)                                     |
| Bloomberg Barclays U.S. Government/Credit Index           | 0.18  | (1.75)  | (2.44)                                     |
| ICE BofAML 1-3 year U.S. Broad Market Index               | (0.53)                                      | (0.63)  | (0.66)                                     |
| ICE BofAML U.S. High Yield BB-B Bond Index                | 0.76  | 4.66  | (2.85)                                     |
| JP Morgan Non-U.S. Global Bond Index (GBI) Hedged         | (0.03)                                      | (2.81)  | (1.38)                                     |
| JP Morgan EMBI Global Index in USD (Emerging Markets)     | (0.2)                                       | (1.51)  | (2.89)                                     |

Source: FactSet \*Includes price appreciation plus dividends and/or interest.

outperformed, reversing the year-to-date trend, as investors likely added some portfolio insurance on lower quality high-yield assets. European investment-grade bonds extended their year-to-date declines.

U.S. high-yield debt posted another quarter of positive returns, as investors were willing to take on more credit risk in return for higher yields. European high

yield delivered slightly lower returns, but assets on both sides of the pond posted solid annual returns.

Local currency emerging market debt produced negative quarterly returns, mostly due to the strengthening of the U.S. Dollar. Dollar-denominated debt ended flat for the quarter, yet both asset types were down for the year.

*“U.S. real GDP grew by 6.9% in the fourth quarter, bringing initial estimates of 2021 economic growth to 5.7%, the fastest annual rate since 1984.”*

## Global Economic Update

### United States

U.S. real GDP grew by 6.9% in the fourth quarter, bringing initial estimates of 2021 economic growth to 5.7%, the fastest annual rate since 1984. Growth was driven in large part from investments in inventories (particularly by auto dealers hit hard by chip shortages earlier this year), personal consumption (especially on recreation and transportation), and a rise in exports. The

strong economic expansion came despite a receding tide of fiscal stimulus (which is expected to continue into 2022) and the rapid spread of the Omicron variant late in the quarter.

The unemployment rate ended the year at 3.9% and could be on track to reach 3% by the end of 2022.<sup>3</sup> Labor force participation has yet to recover to its pre-pandemic levels, remaining stubbornly below 62%. A record number of workers have quit

<sup>3</sup> The Federal Reserve Bank of St. Louis

## Global Economic Update Cont.

their jobs and many industries are reporting difficulties finding new hires, even after increasing wages.<sup>4</sup> The prolonged uncertainty around in-person schooling and childcare due to Covid concerns may continue to limit the number of workers that return to the labor force. Further complicating matters for employers (and consumers), a majority of industries are currently experiencing labor shortages as a direct result of the Omicron variant.<sup>5</sup>

Alongside an abundance of demand from consumers and a shortage of workers, supply chain bottlenecks continue to plague the economy. Economists at the Federal Reserve Bank of New York estimate the current level of congestion in the economy is over four standard deviations above its long-term average.<sup>6</sup> All of this is feeding into inflationary pressures the U.S. economy has not seen in decades. Year-over-year CPI growth reached 7% in December and accelerated to 7.5% in January, driven by a surge in price increases for durable and nondurable goods, such as automobiles and energy, while services inflation remained relatively tame (see [Appendix A](#)). While some pricing pressures are beginning to ease, the timing of a broader plateauing (and subsequent decline) in inflation rates is unclear and will be determined by easing supply chain congestion and changes in consumer behavior.

Current consumer spending in the U.S. is unusually skewed towards goods (versus services). In the ten years prior to the pandemic, goods consumption in the U.S. grew by an average of 3.4% per year, but it increased by 4.7% in 2020 and a whopping 12.1% in 2021.<sup>7</sup> Material goods are significantly more reliant on imports, and by extension are more sensitive to the global shortage of semiconductors, continuing bottlenecks, and labor shortages. Repeated virus outbreaks and lockdowns around the globe will make it more difficult for supply to catch up to extensive demand. To counteract this, an increasing number of companies are announcing plans to “re-shore” and/or better automate methods of production to avoid similar disruptions in the future, but it will likely take several years for new production facilities (even in industries deemed crucial to national security, such as semiconductors) to fully come online. In the interim, bottlenecks may persist, and inflation may remain elevated.

Firms, as seen in their strong profit margins, have so far been able to pass most of their higher input and labor costs onto consumers without any interruption in demand. Consumer balance sheets are (in aggregate) stronger than they were prior to the pandemic and certainly healthier than in the lead up to the Financial Crisis 14 years ago. However, with the recent lapse of several fiscal stimulus programs (e.g., child tax credits,

*“Current consumer spending in the U.S. is unusually skewed towards goods (versus services). In the ten years prior to the pandemic, goods consumption in the U.S. grew by an average of 3.4% per year, but it increased by 4.7% in 2020 and a whopping 12.1% in 2021.”*

<sup>4</sup> Per the Federal Reserve Bank of Atlanta, wage inflation reached 4.5% in December, a level not seen since the early 2000s, with the largest gains seen by workers aged 16-24.

<sup>5</sup> Source: Goldman Sachs Global Investment Research

<sup>6</sup> Gianluca Benigno, Julian di Giovanni, Jan J. J. Groen, and Adam I. Noble, “A New Barometer of Global Supply Chain Pressures” Federal Reserve Bank of New York Liberty Street Economics, January 4, 2022.

<sup>7</sup> As based on the seasonally adjusted annual rate of change of real personal consumption expenditures for all goods. Source: The Federal Reserve Bank of St. Louis

## Global Economic Update Cont.

*“While the central bank previously hinted at a minimum of three 25 basis point hikes, rate markets are anticipating the Fed will have to move faster, currently pricing in seven 25bp hikes before the end of 2022, which would put the cap on the Federal Funds Rate at 2.0% by December.”*

expanded unemployment benefits, and rental assistance), consumers, broadly speaking, now have less disposable income. This reduction in support to households comes as inflation in housing costs, a significantly larger component of CPI than headline-grabbing autos and energy, remains elevated at 5% (see [Appendix B](#)). Therefore, even with higher wages, consumers may soon be forced to decide between spending less and dipping into their savings to maintain current consumption levels. Any slowdown in consumer spending, or at least any shift toward more services spending (e.g., travel, hospitality) as the Omicron wave subsides, could help ease pressures on supply chains, and by extension aggregate inflation.

Meanwhile, the Fed is expected to raise overnight interest rates several times this year to combat rising prices. While the central bank previously hinted at a minimum of three 25 basis point hikes, rate markets are anticipating the Fed will have to move faster, currently pricing in seven 25 basis point hikes before the end of 2022, which would put the cap on the Federal Funds Rate at 2.0% by December. Furthermore, the Fed is on track to fully end its bond buying program by March and has signaled it may begin the process of offloading securities from its balance sheet once it begins raising overnight rates. However, monetary policymakers must walk a fine line. They are mandated to control inflation, but they also seek to support maximum employment (i.e., economic growth), and they also seem increasingly sensitive to the reactions of

financial markets in the U.S. and around the world. Therefore, its policy decisions may adjust as economic data and market conditions evolve.

Regardless, investors should not confuse higher rates with high rates. Even after seven hikes, interest rates would still be remarkably low by historical standards. Furthermore, given the longer-term demographic trends facing the U.S. economy, the final “terminal rate” for the Fed is arguably lower than it has been in past rate hiking cycles.

## Europe

The Eurozone economy grew by a collective 5.3% in 2021, the highest since the currency union was established in 1999. However, activity began to decline late in the fourth quarter as the Omicron variant spread across the continent and several countries reimposed strict lockdown measures (especially on unvaccinated populations). Inflation is also rising in Europe but soaring energy costs and potential conflict on its eastern flank are the primary drivers; wage inflation meanwhile remains moderate, in contrast to the United States. While the ECB, unlike the Fed, is not expected to begin raising overnight rates in 2022, its board will be keeping a watchful eye on energy and wage prices as aggregate inflation creeps above the Bank’s 2% medium-term target.

Of course, the greatest threat currently facing the region’s economy is the

<sup>8</sup> As measured by the USD Overnight Index Future Swap Rates on 11 February 2022. Source: JPMorgan Asset Management

## Global Economic Update Cont.

potential for war between Russia and Ukraine. Neither country is a large importer of Eurozone goods, so conflict should not materially impact exports. However, the union imports between 15-20% of its natural gas from Russia. Rising tensions have already put upward pressure on gas prices, but the increased costs are not likely to be felt by households (at least not immediately) thanks to the longer-term nature of energy contracts and generous government subsidy programs. For the time being, therefore, policymakers and analysts believe the economic risk is manageable. However, if supply is cut off, either due to disruptions directly attributable to hostilities or more generally in retaliation for stiff economic sanctions, there could be temporary (but significant) disruptions across the continent.

Fortunately for the region, the European Union has already reduced its reliance on Russian gas by nearly half in the past six months alone (see [Appendix C](#)), replacing it with liquid natural gas imported from other countries (most notably Qatar, Algeria, and Nigeria).<sup>10</sup> The crisis will also likely accelerate the Union's push to diversify its energy sources, both traditional and renewable.

## China

The Chinese economy grew by an annualized 4.0% in the fourth quarter, a relatively modest pace for the country,

held back by a continued downturn in the property sector and persistent virus outbreaks. The government's zero-Covid strategy means that the more infectious Omicron variant requires tighter border controls and more frequent regional lockdowns, further impacting economic activity. Indeed, fiscal revenue declined in December, and preliminary January data suggest manufacturing and services growth moderated, likely due to local outbreaks.

While policymakers signaled no intention of stimulating the cooling economy only a few months ago, Beijing is now pulling forward projects from the 14th Five-Year Plan, namely subsidized rental housing, and investment in renewable energy infrastructure. Local governments are also stimulating private consumption with coupons instead of direct cash transfers (the latter of which previously went no farther than individuals' savings accounts). Nevertheless, while these projects will be large on a notional basis, they are still dwarfed by the size and scale of the slump in the country's residential property market.

China's restraint on using stimulus stands in sharp contrast to the United States and Europe. However, the country's moderating inflation trajectory allowed Chinese policymakers to pivot toward easing in late 2021, in an effort to support growth. The economy is expected to grow 4.5% in 2022 and 5.0% in 2023.<sup>11</sup>

*"China's restraint on using stimulus stands in sharp contrast to the United States and Europe. However, the country's moderating inflation trajectory allowed Chinese policymakers to pivot toward easing in late 2021, in an effort to support growth."*

<sup>9</sup>Source: Goldman Sachs Global Investment Research

<sup>10</sup>Sources: Goldman Sachs Global Investment Research, the European Commission

<sup>11</sup>Source: Goldman Sachs Global Investment Research

## Global Economic Update Cont.

### Emerging Markets

The Omicron variant is spreading rapidly across emerging markets, but with the exception of a few countries taking hardline zero-tolerance containment policies, most economies have remained open. Many emerging markets are net energy importers, and the rising cost of oil may add to

inflationary pressures in some countries (with Turkey top-of-mind). Finally, a more hawkish Fed in the U.S. typically triggers spillover effects into the exchange rates and borrowing costs of the more indebted emerging economies. However, even in the face of these converging headwinds, real GDP growth in emerging markets is expected to be 4.8% in 2022, still above trend.<sup>12</sup>

### Investment Strategy

*“...we would also task our clients with one crucial piece of homework: to tune out the noise and consider if their long-term asset allocation targets are still appropriate for their investment goals, risk tolerances, and liquidity needs.”*

In the introduction to this letter, we offered a few simple “dos and don’ts” for investors navigating volatile markets. However, we would also task our clients with one crucial piece of homework: to tune out the noise and consider if their long-term asset allocation targets are still appropriate for their investment goals, risk tolerances, and liquidity needs. As we frequently mention, expected returns for financial assets going forward are not as high as they have been. The recent returns of a “traditional,” balanced 60/40 portfolio have been well above the norm (see [Appendix D](#)). Clients, especially those that depend on income from their portfolios, should not rely on similar returns from a 60/40 portfolio indefinitely. Instead, they may need to take more equity risk (or at least more risk within fixed income allocations) to reach the rate of return required to fund their liquidity needs and preserve the purchasing power of their portfolio.

### Equities

Within equity allocations, we maintain a diversified positioning across all

sectors, styles, capitalizations, and geographies. We seek to hold inexpensive, passive exposure to broad markets and complement it with actively managed strategies that can more aggressively take advantage of market volatility. We also, where appropriate, continue to utilize quality-focused managers to better insulate portfolios, a strategy that has helped protect against the wild swings we have seen recently in the more speculative (and overvalued) areas of the market.

International equities admittedly have not fared as well as U.S. equities in recent years, but their valuations remain relatively attractive. Furthermore, we believe they are primed to benefit as their economies catch up with the U.S. in terms of reopening and normalization of economic activity. Also, their diversification value cannot be understated. The global experience fighting Covid-19 has been varied, as we noted above, and the normalization strategies are divergent, warranting broad diversification to capture the different cycles and timetables while reducing

<sup>12</sup>Source: Goldman Sachs Global Investment Research



## Investment Strategy Cont.

exposure to individual policy errors. A simple look at year-to-date returns in 2022 will illustrate this, as non-U.S. equities have weathered the volatility better than their more expensive U.S. peers.

### Fixed Income

**W**e remain judicious within fixed income allocations, as the global tapering of swollen central bank balance sheets is on the horizon and portends more volatility ahead. In past tapering cycles in the United States, we have seen the yield curve move higher well ahead of any rate hikes, only to then decline once tapering begins. The Fed has not disclosed the pace and policy path of unwinding, but its balance sheet is significantly larger than the prior cycle following unprecedented support related to the pandemic.

We continue to overweight lower duration securities and anticipate the asset class as a whole to act more as ballast than as an income-generator in the near future. We favor nimble, flexible managers that can capitalize on individual opportunities and more actively respond to central bank balance sheet operations, and given the expectation of rising rates this year, we prefer taking more credit risk than duration risk. We also continue to use municipal bond strategies, where appropriate.

We recommend that all clients take the time to anticipate their liquidity needs in advance, as best they can. Cash management in times of ultra-low yields is a delicate balance. On one hand, it is not wise to rush to raise cash in volatile markets. On the other, it is not prudent to leave cash in zero-yielding securities indefinitely if that liquidity will never be needed.

*“We recommend that all clients take the time to anticipate their liquidity needs in advance, as best they can. Cash management in times of ultra-low yields is a delicate balance.”*

## In Conclusion

**G**lobally diversified portfolios of equities and bonds delivered solid returns over the course of 2021. While no such portfolio could expect to match the return of the single best-performing sector or asset class, they provided robust returns while mitigating downside risk.

As we move deeper into 2022, the era of ultra-cheap money is rapidly coming to an end and markets are beginning to reassess what future growth is worth now that the cost of borrowing money will no longer be immaterial. Markets will also continue to face challenges from supply chain disruptions, inflation, waning economic growth, and geopolitical tensions. Amid all these risk factors, we once again stress the importance of remaining diversified and staying focused on the long term.

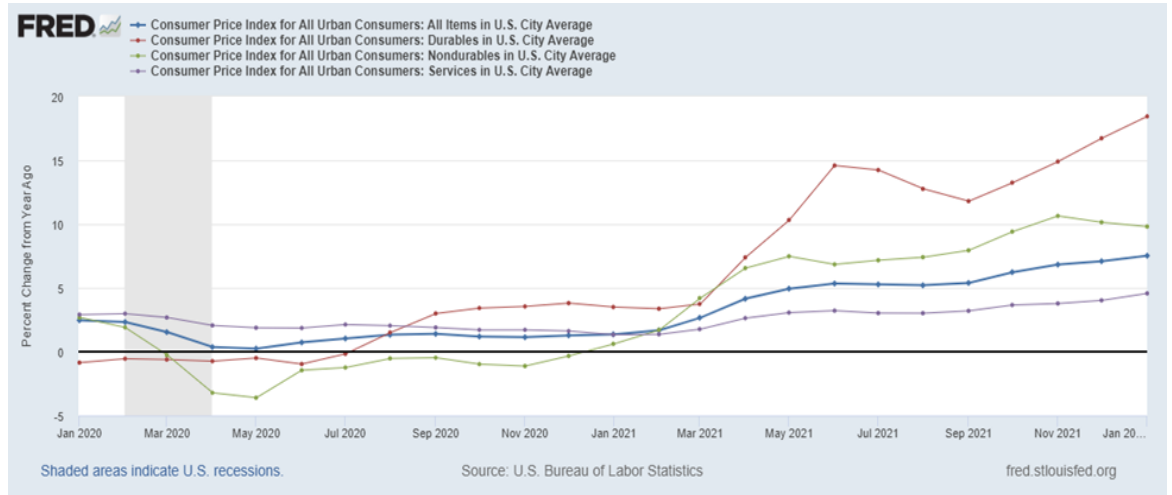
If there are any changes in your risk tolerance, liquidity needs, and/or investment goals, please contact us so we may have a constructive conversation about any changes that may (or may not) need to be made to your investment portfolio. Additionally, if you have any questions or concerns about financial markets, please never hesitate to call us at +1 (301) 881-3727 or email us at [client.services@sol-capital.com](mailto:client.services@sol-capital.com).

With our best regards,

SOL Capital Management Company

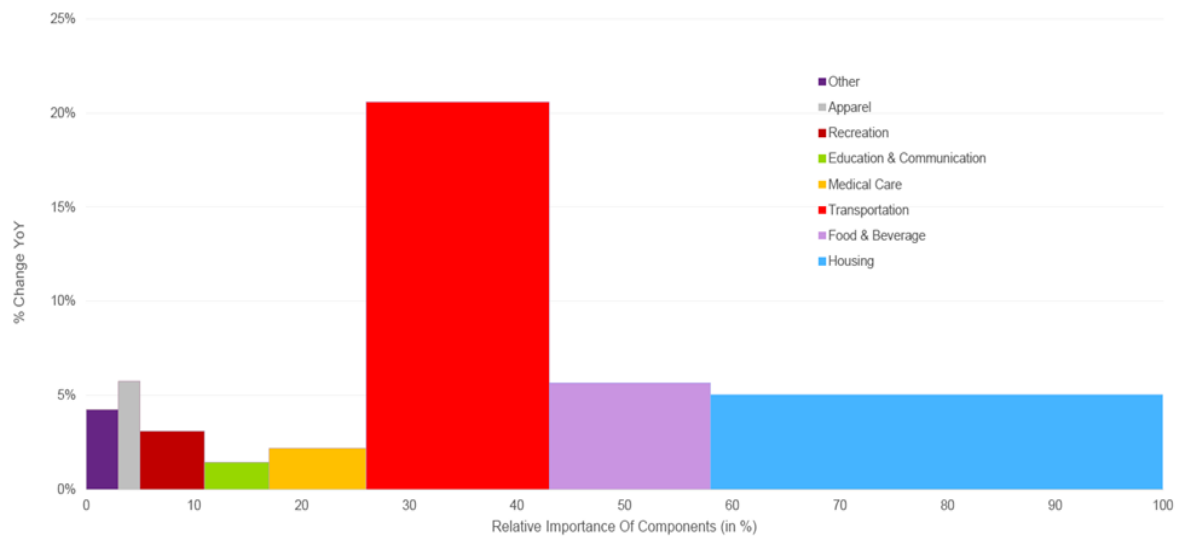
## Appendices

### Appendix A: CPI: Taking a Look Under the Hood



Source: The Federal Reserve Bank of St. Louis. Data as of 31 January 2022.

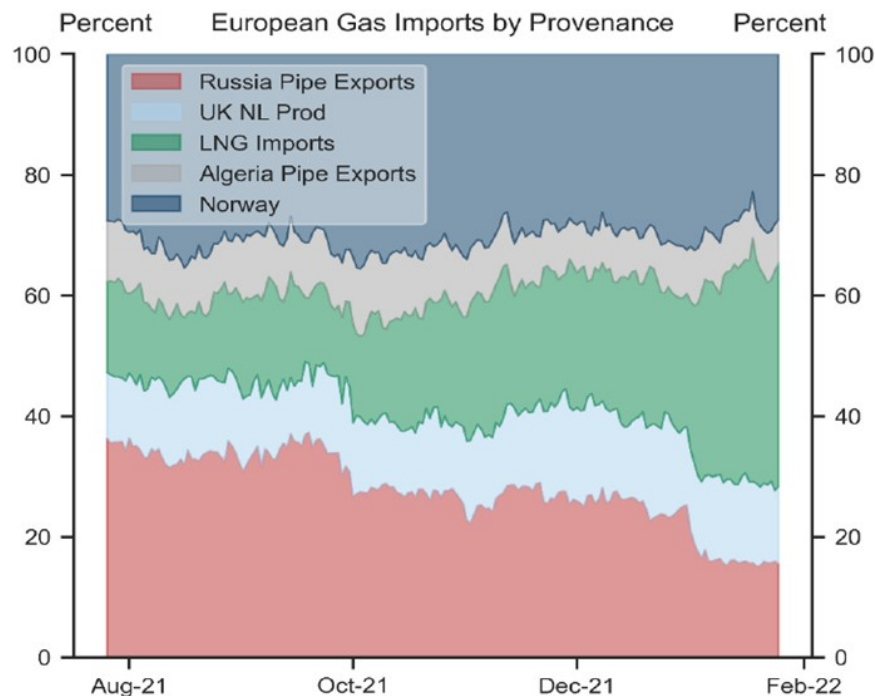
### Appendix B: CPI: Contribution to CPI and their Relative Importance



Source: Natixis Investment Managers. Data as of 31 December 2021.

## Appendices Cont.

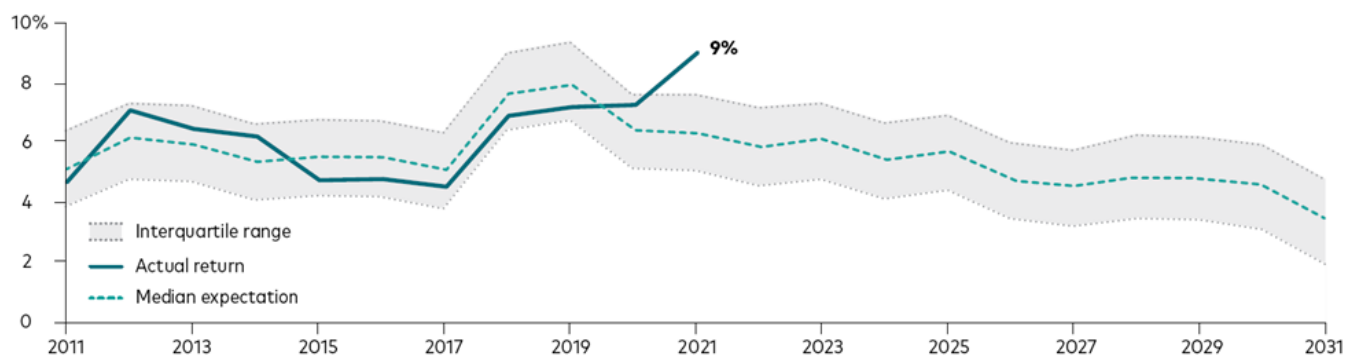
## Appendix C: Europe is Rapidly Diversifying its Gas Imports



Source: Goldman Sachs Global Investment Research

## Appendix D: Returns of a 60/40 Portfolio Have Decoupled from the Norm

10-year annualized returns



Source: Vanguard 2022 Economic and Market Outlook

**Notes:** The chart shows the actual 10-year annualized return of a 60/40 stock/bond portfolio compared with the VCMM forecast for the same portfolio made 10 years earlier. For example, the 2011 data point at the beginning of the chart shows the actual return for the 10-year period 2001–2011 (solid line) compared with the 10-year return forecast made in 2001 (dotted line). After 2021 the dotted line is extended to show how our forecasts made between 2012 and 2021 (ending between 2022 and 2031) are evolving. The interquartile range represents the area between the 25th and 75th percentile of the return distribution. The portfolio is 36% U.S. stocks, 24% international stocks, 28% U.S. bonds, and 12% international bonds. See the Appendix section titled “Indexes for VCMM simulations” for further details on asset classes.

**Source:** Vanguard calculations, as of September 30, 2021.

**IMPORTANT: The projections and other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results.**

**Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**



## Disclosures

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