Quarterly Investment Perspective

Below Zero

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The advent of spring a few weeks ago was especially welcomed this year after a winter of record-low temperatures across much of the United States. Subfreezing conditions were recorded as far south as Lake Okeechobee, Florida, while parts of Michigan saw the thermometer fall to minus 32 degrees Fahrenheit (even before factoring in wind chill). We were in Dallas last month and found schools closed for snow and ice at a time of year when most folks are normally planting flower gardens.

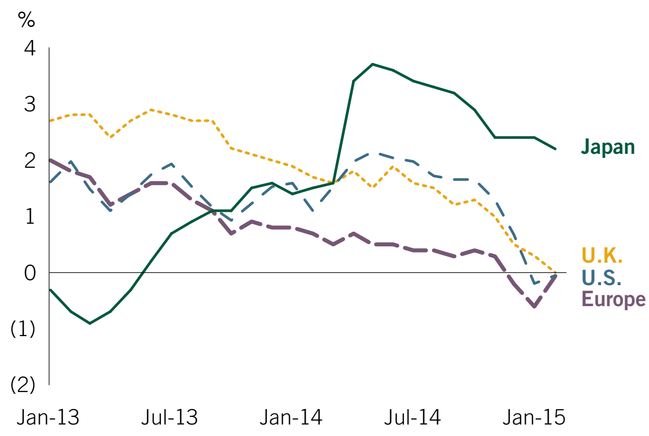
Temperatures were not the only thing below zero in the first quarter. Around the world, countries saw inflation entering negative territory, and with it, government and even corporate bond yields (Exhibit 1). Indeed, by the middle of the first quarter, there were nearly $4 trillion worth of government bonds worldwide with negative yields.

In this *Quarterly Investment Perspective*, we choose to look beyond the winter chill, focusing instead on the macroeconomic and financial landscape. We both examine what drove inflation and yields below zero and look ahead to answer some key questions: Is the world entering a sustained deflationary environment, or was this a one-off event tied to the collapse in oil prices? Will central bank easing push yields even lower? How does one construct a portfolio in such an environment?

The Oil Deflator

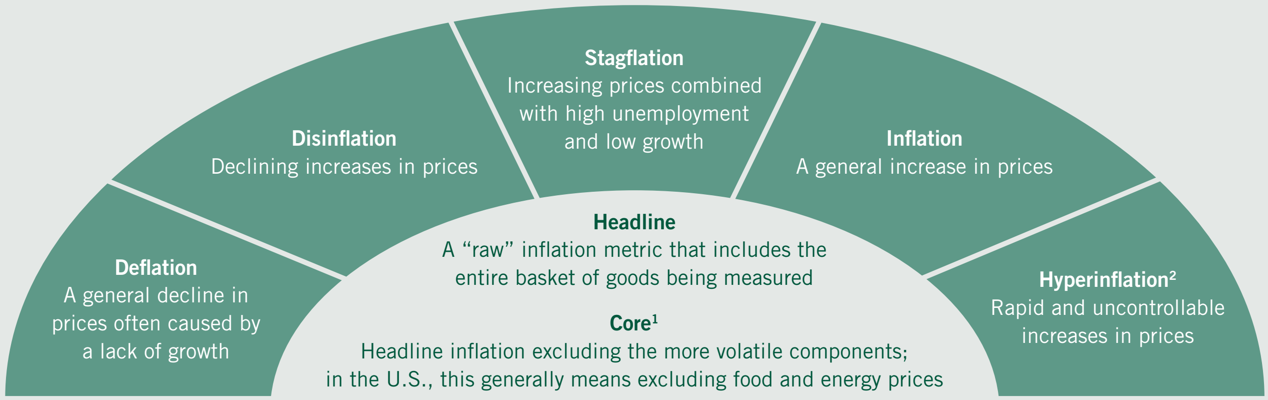
One of the most notable — and unexpected — market developments last year was the collapse in the price of crude oil. Between June and December, Brent crude fell from around $115 per barrel to less than $60 per barrel (with losses continuing into early 2015; see *A Closer Look*, "Positioning in Energy after the Collapse in Prices," March 2015). Energy prices are a material component of most countries' broader inflation measures (in the U.S., energy represents 8% of the government's Consumer Price Index, or CPI). Indeed, the International Monetary Fund (IMF) has estimated that a 10% fall in the price of oil lowers global headline inflation by 0.3% over the following one to two quarters, all else equal. With that in mind, it is perhaps not surprising that global consumer prices have been heading lower in recent months. Still, the magnitude and speed of the inflation decline has caught many off guard. In China, CPI rose just 0.8% year-on-year in January, the lowest level since the financial crisis. In Europe,

Exhibit 1: Global Headline Inflation Rates



As of February 28, 2015.
Source: Bloomberg

Key Inflation Terms



[1] Definitions of core inflation differ by country. However, generally removing the volatile and shock-susceptible components remains consistent internationally.
[2] Hyperinflation is generally associated with inflation rates over 50%.

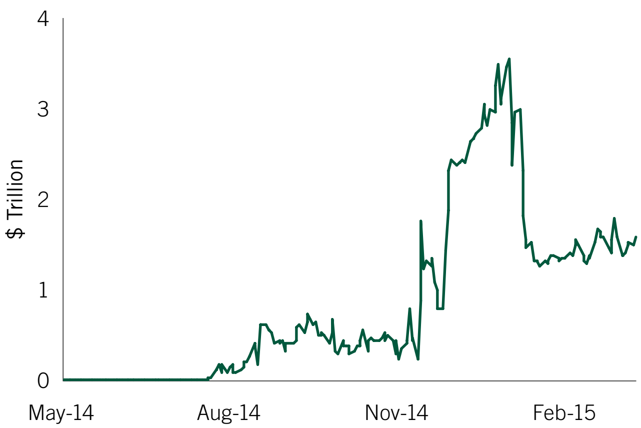
back-to-back negative CPI reports in December and January were the first such measurements outside of recessions. Today, 15 out of 19 member countries in the European Monetary Union (EMU) are experiencing deflation. The U.S. printed a negative year-on-year CPI in January for the first time since October 2009.

This dramatic inflation decline is critical for fixed income. Bond owners are promised fixed cash flows in the future in nominal terms; real returns depend on inflation over the bond's lifetime. Falling inflation, especially if combined with increased expectations for even further inflation declines, can support bond prices and in turn create even lower yields. Remember, a bond's market yield reconciles the bond's cash flows (coupon payments and principal repayment) with its price. So a bond's yield and its price are inversely related — when yields go up, prices go down, and vice versa. Diving deeper, a bond's yield is made up of two components: a real yield and inflation expectations (real yield + inflation expectations = nominal yield). That means, if inflation expectations decline — as they certainly have recently — bond yields decline as well.

Bond yields in many countries have been pressured lower by an additional factor: central banks. In an effort to fight deflation risks and boost growth, a growing number of central banks globally have been cutting interest rates, often unexpectedly. Over the last quarter, the biggest easing step came from Europe: The European Central Bank (ECB) announced in January that it would launch an aggressive quantitative easing (QE) program. Starting in March, the ECB began buying €60 billion of bonds per month, indicating it would continue to do so through late 2016 — or longer, if policymakers felt it necessary to reach their 2% inflation target. Japan's central bank is pursuing an even more dramatic asset-purchase program. In both cases, bond buying has helped push down yields — as of late March, both Germany and Japan had 10-year government bond yields hovering around 30 basis points, approaching the lowest levels seen in more than a century. Yields on French and Spanish government bonds are at lows not seen in 200–300 years.

While these exceptionally low bond yields are dramatic, perhaps even more dramatic in the first quarter was the amount of bonds trading with

Exhibit 2: Global Government Bonds Trading With Negative Yields



As of March 31, 2015.
Source: Bloomberg, J.P. Morgan

yields below zero — negative yields. A negative yield essentially means that the investor pays the issuer rather than being paid for holding the issuer's debt. More than one-quarter of European government bonds and about 16% of the JPMorgan global government bond index had negative yields as of mid-March (Exhibits 2 and 3). Negative yields even started spilling over to corporate debt. Nestlé, the Swiss food company, saw its four-year debt trade with a negative yield in February.

While Bessemer is highly reluctant to consider a negative-yielding investment, we acknowledge that there are other market participants who will own such bonds:

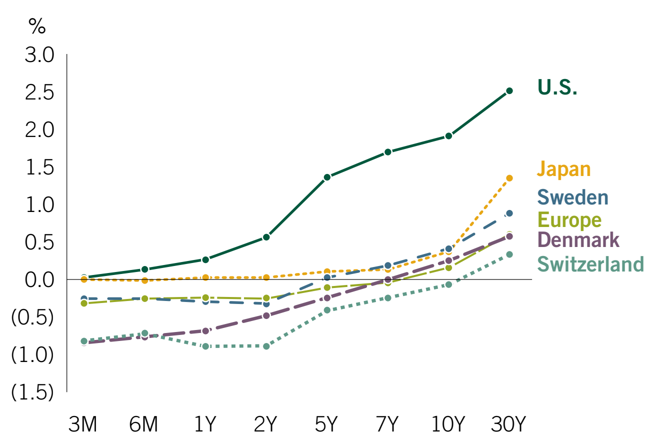
- Investors speculating that the currency in which the bond is issued will appreciate sufficiently to generate a total positive return when profit is taken in U.S. dollars;
- Investors positioning for a sustained bout of global deflation in which yields could fall even further; or
- Investors such as central banks, sovereign wealth funds, and some investment banks that have to own a certain amount of fixed income for regulatory or other reasons.

Where Next for Inflation?

As we look ahead, our view on asset allocation broadly, and fixed income in particular, is certainly influenced by inflation. Should deflationary pressures persist or worsen from here, we would likely become more cautious on risk assets. Deflation makes cash more attractive, and both corporations and households may put off spending as they expect prices to fall even further; that weighs on growth more broadly. It also makes debt more expensive and difficult to repay (especially for places like Greece and Italy, where tax revenues remain challenged).

Fortunately, we see sustained deflation as an unlikely outcome (with the exception of one or two countries). First, we believe energy prices will likely stabilize and potentially start to recover at some point this year. U.S. oil rigs are quickly shutting down, with production likely to fall in subsequent quarters. Further, central bank easing, together with lower energy prices, is likely to support global growth sentiment. The supply/demand rebalancing may take a while longer, and the speed of any recovery in oil prices over the coming years remains uncertain. That said, we see this deflationary pull as more likely than not to abate over the course of this year.

Exhibit 3: Global Yield Curves



As of March 31, 2015.
Source: Bloomberg

In addition, there are other factors offsetting the oil drag, especially in the U.S. While the broader economy's wage growth remains lackluster, there are signs from small businesses that wages are biased higher. The National Federation of Small Businesses (NFIB) survey of compensation plans increased to 16% in the last year, which coincided with an acceleration in the Employment Cost Index (a broader measure of U.S. wage pressures) to the fastest pace in four years (Exhibit 4). Even a few large U.S. firms, including Wal-Mart, Ikea, and Gap, announced wage increases for 2015.

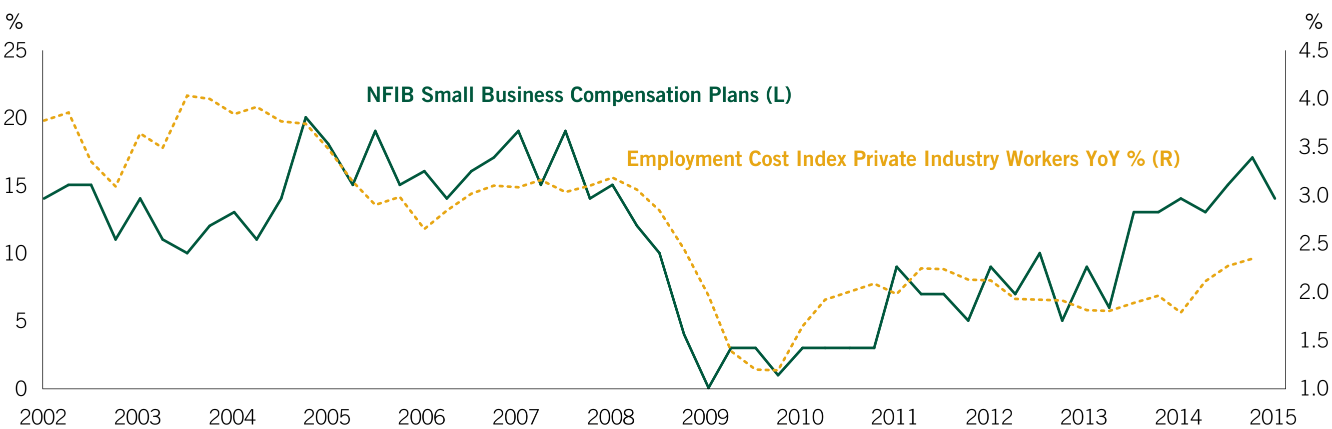
Third, housing-related inflation in the U.S. has momentum, helped by an improvement in household formation — people moving out of existing homes and starting new households. The U.S. Census Bureau reported that household formation rose nearly 1.7 million last year, the largest one-year increase in a decade. As more form households, they often rent before they buy; not surprisingly, U.S. rental vacancy rates have been falling quickly and ended last year at their lowest level in two decades. That supports prices for owned and rented housing, which have eight times the weight of gasoline in the U.S. consumer price basket.

Where Next for Bond Yields?

While we are fairly sanguine about global inflation trends, we are less confident that all global bond yields are about to march higher in lockstep. Indeed, even if global inflation stabilizes, we feel the divergence between the U.S., and to a degree the U.K., versus most of the rest of the world will likely persist, thanks to central bank policy.

In the U.S. and U.K., central banks seem to be regarding recent low inflation reports as temporary and are instead focusing on improved growth backdrops and signs of inflation away from energy. We believe that both sets of policymakers are eager to start moving interest rates back to a normal level, in part to create a monetary "cushion" of sorts for their economies when the cycle eventually turns, or if there is a shock and growth stalls. These central banks also want to minimize asset-bubble risks tied to a desperate "search for yield." We expect that, barring some unexpected negative event, the Federal Reserve will start raising interest rates in the coming months (likely between June and September). The Bank of England seems likely to follow shortly thereafter.

Exhibit 4: NFIB Compensation Plans and Employment Costs For Private Industry Workers



As of February 28, 2015. For compensation plans, a number above zero indicates more companies are planning to raise wages in coming months than those planning to reduce wages. A number below zero indicates more companies plan to reduce wages than raise them.
Source: National Federation of Independent Business, U.S. Bureau of Labor Statistics

In contrast, the ECB and Bank of Japan, and even China's central bank, cannot (yet) take comfort in growth momentum. Those three economies, representing a third of 2014 nominal global GDP in purchasing power parity terms, are likely to keep easing. That will continue to weigh on their bond yields. In addition, low (and even negative) bond yields across much of the world will keep investors searching for better yields elsewhere. Capital coming to the U.S. to buy higher-yielding U.S. Treasury bonds will limit the increase in longer-dated U.S. yields, even with the Fed starting to tighten policy. This tug of war, between a rising federal-funds interest rate and foreign demand weighing

Measuring Inflation

Changes in prices never occur equally across all categories of goods and services, so each consumer's individual spending pattern will lead to a different inflation experience. To better measure inflation for our clients, we conducted a careful analysis of the U.S. Consumer Price Index (CPI). A weighted average of price changes for a basket of goods and services, the CPI is fueled by data supplied by government-employed field agents, who perform approximately 80,000 price checks every month. While the CPI is a popular and robust measure of broad U.S. inflation, adjustments to this index enable us to more accurately represent the experiences of wealthy households.

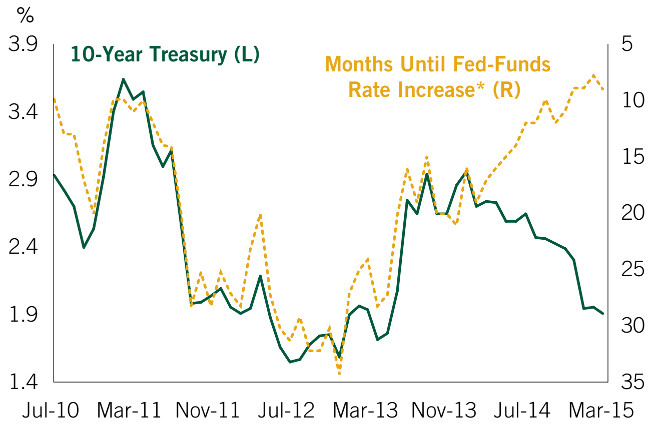
Building an adjusted CPI entailed these steps:

- **Analyze government data.** We developed a thorough understanding of many published measures of inflation, ultimately selecting the CPI as the best starting point.
- **Adjust for index limitations.** We eliminated the CPI's substitution adjustment, which we believe overstates the likelihood that families with higher discretionary income will alter their purchase intentions when prices fluctuate.
- **Study spending patterns.** We analyzed thousands of government surveys of individual households — especially from higher-end consumers — and drew insights from the firm's extensive experience with our clients.
- **Reweight spending "basket."** We reweighted each category in the CPI to reflect the expenditure patterns of wealthy households.

Education, medical, and travel-related expenses play a larger role in the adjusted CPI, as these areas tend to make up a larger percentage of spending for higher-income consumers. In turn, less weight is given to housing and energy. Overall inflation levels in the adjusted CPI differ from the reported CPI — sometimes by a material margin. Over the long term, the adjusted CPI has averaged 3.4% per year, versus the reported CPI's 2.7% average increase.

In combination with the expertise of our seasoned professionals, and the many tools they leverage, this adjusted CPI approach helps us augment our advice and service to clients, leading to more appropriate financial goals, asset allocation strategies, and wealth planning decisions. We look forward to sharing additional information in our April 16 webcast.

Exhibit 5: Treasury Yields and Federal Reserve Expectations



As of March 31, 2015.
*Months until fed-funds rate increase are estimated from the fed-funds futures curve.
Source: Bloomberg

on longer-dated Treasuries, is already evident: Exhibit 5 shows that, historically, the 10-year Treasury yield has closely tracked market expectations for the fed-funds rate (here shown by the amount of time until the first U.S. rate hike). In recent months, as oil prices and inflation expectations have collapsed, prompting foreign central banks to ease further, fed-funds expectations and U.S. 10-year yields have decoupled. While we would expect the historical relationship to reassert itself as oil prices and inflation expectations stabilize, we would not be surprised if longer-term yields remain somewhat depressed thanks to overseas demand.

Portfolio Construction in a "Below Zero" World

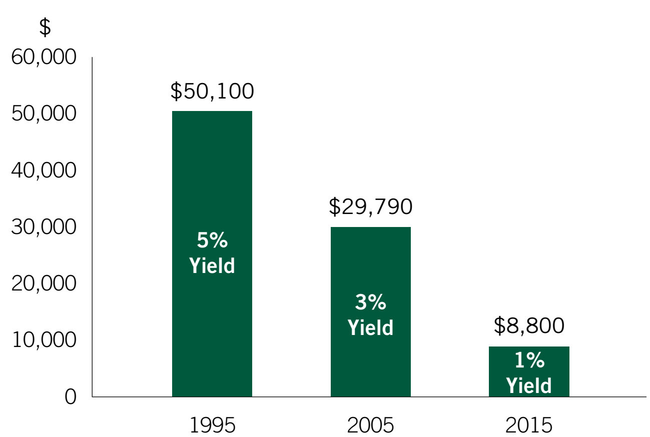
The collapse in yield, and the prospect of yields staying low a while longer, create challenges for many investors, especially those who live off income from portfolios.

Exhibit 6 helps illustrate how much times have changed. If you created a $1 million global bond portfolio in 1995, that portfolio would have yielded 5% at the time, giving you about $50,000 in annual income. A decade later, that same portfolio's yield would have fallen to 3%, while income would have slid to roughly $30,000. Today, the same portfolio doesn't even have 1% in yield; annual income is down to just over $8,800.

What are investors to do? Frankly, for the next few years, even if the U.S. central bank starts to raise interest rates, we would not expect much from traditional U.S. bonds. However, while foreign demand should help limit increases in longer-dated Treasury yields, we believe the Fed will also move slowly, for at least two reasons. First, the stronger U.S. dollar will itself help to tighten monetary conditions (see our July 1, 2014 *Quarterly Investment Perspective*, "All About the Dollar"). Second, the Fed wants to move carefully so as to avoid undermining the economic recovery.

We are left in yield purgatory: Prices are likely to fall (at least in the U.S. and U.K.), but yields are still too low to generate satisfactory income. Consider a 5-year Treasury in late January, where the yield was about 1.28%. If, one year from then, that yield falls (not our base case) to 1%, the total return on that bond will be 2.3% — positive, but not terribly compelling. In our base case, if yields start to edge higher, investors are set to see a negative total return. A yield 12 months from January of 2% would suggest a total return over that period of -1.5%. Remember, rising yields mean falling prices.

Exhibit 6: Income Generated by a $1,000,000 Portfolio

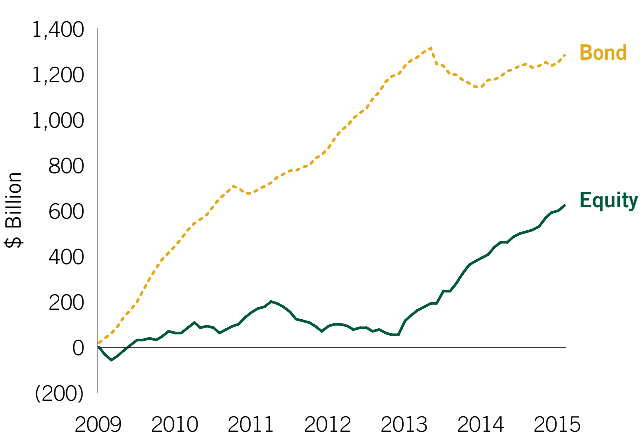


As of March 31, 2015. Reflects the effective yield on the Bank of America Merrill Lynch Global Government Bond Index.
Source: Bank of America, Bloomberg

Despite these risks, the broader investor universe has not lightened up on fixed income. (We went underweight traditional bonds in December of 2010 and reduced exposure further this January.) Quite the contrary: Despite exceptionally low yields and sharply stronger equity markets, capital has kept pouring into bonds (broadly defined). Since 2009, looking at global flows into mutual and exchange-traded funds, $1.3 trillion has moved into fixed income (including credit) while only $624 billion has gone into equities (Exhibit 7). We assume some of this reflects lingering fear from the 2008–2009 crisis — investors are simply too scared to go back into equities, or more recently felt it was "too late" to buy.

But reaching for yield, as seems to be reflected in some of these fund flows, is a dangerous game. If investors were solely focused on yield, they might be tempted to increase allocations to emerging-market debt or U.S. high-yield bonds. In the case of the former, any additional yield could quickly be lost through foreign currency depreciation. Consider just one example: A 10-year Brazilian government bond yielded around 5% in March, but the local currency lost nearly 15% against the dollar just in the first 10 weeks of 2015. A dollar-based investor would have been better off sitting in cash. U.S. high-yield debt, meanwhile, has become increasingly volatile in recent months — in part because of its ties to the energy market, but also because of increasingly rich valuations. In this case, we do not see the yield as compensating adequately for risk, especially considering deteriorating liquidity conditions for these bonds (with the exception of a few select corners of the market).

Exhibit 7: Cumulative Net Fund Flows



As of February 28, 2015. Flows include mutual fund and exchange traded funds.
Source: Investment Company Institute, Strategas

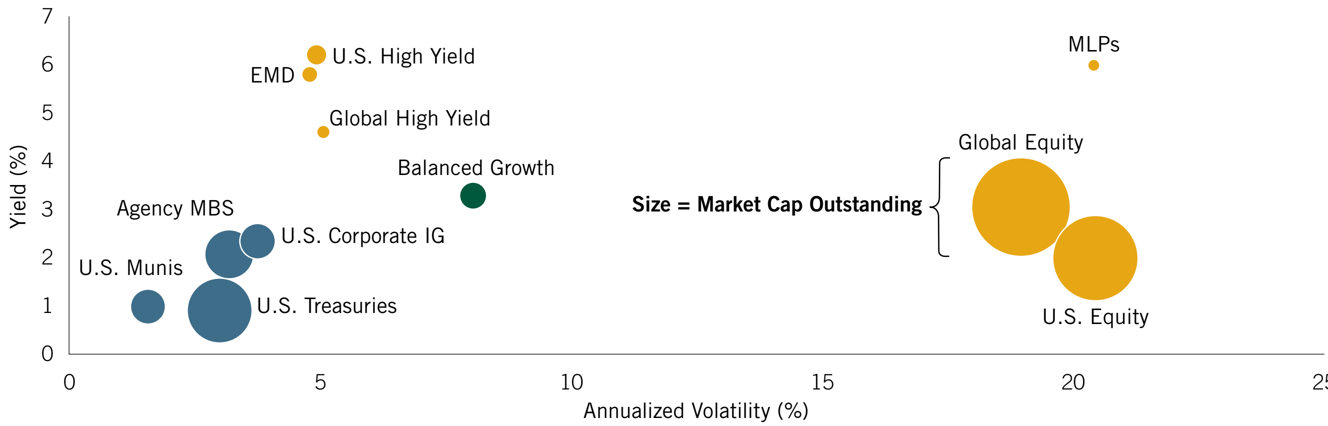
At Bessemer, we create each client's portfolio for his or her specific goals and needs. For most clients, that means some measure of diversification. We believe that investing capital across geographies and asset classes helps control portfolio risk while generating a stronger compounded return over time.

In the context of yield, that approach today means an underweight position in traditional fixed income such as municipal, Treasury, and U.S. agency bonds, and a greater tilt towards slightly higher-yielding, select credit investments such as non-agency mortgage-backed securities (MBS), which are usually floating-rate securities that tend to fare better amid rising interest rates. It also means an overweight to equities. While we know equities do not provide the defensive character of bonds for a portfolio, they do (for now) give a better yield (Exhibit 8). They also offer better valuations. Global equities today have a dividend yield around 3%, and, as noted earlier, are "under-owned" versus fixed income. Indeed, we believe when U.S. yields do finally start to rise alongside a Fed tightening cycle, and fixed income struggles as a result, equities could benefit as capital shifts from one asset class to the other. Such support is even more likely should the U.S. economy continue to gain momentum and bolster corporate earnings.

A Word on Performance

Bessemer Trust's Balanced Growth portfolio, with a roughly 70% global equity, 30% U.S. fixed income risk profile, returned 4.3% in 2014 versus the index benchmark of 3.0%. This portfolio is also beating its benchmark on a 3- and 10-year basis. Closer at hand, our portfolios have outperformed benchmarks thus

Exhibit 8: Yield, Volatility, and Liquidity



As of December 31, 2014. Volatility is measured as the trailing standard deviation over the past 10 years. EMD reflects Emerging Market Debt. MLPs reflect Master Limited Partnerships. MBS reflects Mortgage-Backed Securities. IG reflects Investment Grade securities.
Source: Investment Company Institute, Strategas

far in 2015. Support has come both from security selection, especially in large-cap equity and the Strategic Opportunities mandates, as well as from top-down, macroeconomic tilts. Portfolios have been notably overweight the U.S. dollar, hedging the euro and yen where possible. They also have benefited from underweight exposure to emerging-market equities and debt.

That said, there are always things we could do better. While being underweight European equities helped in the second half of 2014, that positioning has weighed on returns in recent months, as European equities (especially euro-hedged) significantly outperformed the U.S. Meanwhile, commodity markets have continued to lag: While a typical portfolio's neutral weighting is small at 3%, it is still capital that could have been deployed more effectively. We remain convinced that commodities provide a way to help clients achieve strong risk-adjusted returns over time, as their prices can be driven by factors that differ from those influencing stocks and bonds. That said, after thorough consideration, we are shifting our commodity approach to be more opportunistic.

At Bessemer, as individual investors and as a team, we are never driven by how much in assets we manage; we simply want to earn the best risk-adjusted return we can. In a below-zero world, that straightforward philosophy allows us to avoid the growing risks of "stretching for yield."

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