Investment Commentary

- Global stock markets rallied again.
- Emerging-market stocks were strongest, followed by European stocks.
- Core bonds inched higher as yields were flat.

September Benchmark Returns (Preliminary)	Sept	Q3	YTD
Larger-Cap Benchmarks			
Vanguard 500 Index	2.1%	4.4%	14.1%
iShares Russell 1000 ETF	2.1%	4.3%	13.9%
iShares Russell 1000 Growth ETF	1.2%	5.8%	20.4%
iShares Russell 1000 Value ETF	2.9%	3.0%	7.6%
Smaller-Cap Benchmarks			
iShares Russell 2000 ETF	6.3%	5.9%	11.0%
iShares Russell 2000 Growth ETF	5.5%	6.4%	16.9%
iShares Russell 2000 Value ETF	7.2%	5.3%	5.6%
Other Benchmarks			
Vanguard FTSE Developed Markets ETF	2.5%	5.5%	21.2%
Vanguard FTSE Europe ETF	3.2%	6.2%	24.6%
Vanguard FTSE Emerging Markets ETF	-0.5%	8.0%	24.2%
Vanguard REIT Index	-0.1%	0.8%	3.4%
Vanguard Total Bond Market Index	-0.5%	0.7%	3.1%
Vanguard Intermediate-Term Tax-Exempt	-0.4%	1.0%	4.3%
BofA Merrill Lynch U.S. High Yield Cash Pay Index	0.9%	2.0%	7.0%
S&P/LSTA Leveraged Loan Index	0.4%	1.0%	3.0%

Despite its reputation as the worst seasonal period for stocks, the U.S. market delivered strong returns in the third quarter, extending its winning streak to eight consecutive quarters and a remarkable 18 out of the last 19 quarters. The S&P 500 Index closed at an all-time high, gaining 4.5%. But foreign markets did even better, led by emerging markets (Vanguard FTSE Emerging Markets ETF), which surged 8%. European stocks were also very strong performers (Vanguard FTSE Europe ETF), gaining 6.2%. More broadly, developed international stocks (Vanguard FTSE Developed Markets ETF) rose 5.5%. For the third consecutive quarter, the U.S. dollar depreciated against foreign currencies, boosting dollar-based investor returns in these markets.

Within the U.S. market, larger-cap growth stocks—technology stocks in particular—continued their year-to-date dominance over smaller-cap and value stocks, a sharp reversal from what we saw last year. Larger-cap growth stocks (iShares Russell 1000 Growth ETF) are up more than 20% this year, while smaller-cap value stocks (iShares Russell 2000 Value ETF) have gained 5.6%. The Vanguard 500 is up 14.1% for the year, while the iShares Russell 2000 ETF has gained 11% (helped by a 6.3% surge in September). Looking at industry sectors, energy stocks had a big rebound in September (up 10%) as oil prices rose above $50. But for the year, the sector is still *down* 6.6%, while technology and health care have soared 27% and 20%, respectively.

After spiking briefly in August on geopolitical concerns (North Korea), the VIX volatility index dropped back below 10 by quarter-end, near its all-time low. Another indicator of how calm the stock market has been this year is that its largest decline (drawdown) has been a loss of 2.8% (from March 1 to April 13). Going back to 1929, there has been only *one* calendar year when the largest drawdown was smaller than that (in 1995, with a 2.5% intra-year decline), according to Ned Davis Research.

Moving to the fixed-income markets, core investment-grade bonds (Vanguard Total Bond Market Index) inched up 0.7% for the quarter. Core bond prices peaked in early September, with the benchmark 10-year Treasury yield (which moves inversely to bond prices) bottoming at 2.06% on a confluence of flight-to-safety fears around tensions with North Korea, catastrophic hurricanes in Texas and Florida, and a potential U.S. debt ceiling crisis/government shutdown. But the yield shot up into month-end, closing the quarter at 2.3%—right about where it stood three months earlier. Credit-sensitive (higher-risk) sectors of the fixed-income market outperformed core bonds for the quarter, with the high-yield bond index gaining 2% and floating-rate loans up 1%.

Update on the Macro Backdrop

- The global economy remains supportive of stocks and other riskier assets.
- The global economic recovery remains in sync, but still subpar.
- Global central bank policies remain broadly accommodative, while the Federal Reserve continues to signal its intention to gradually tighten.

The synchronized global economic growth recovery that we wrote about in the first quarter continues apace, providing a solid foundation for corporate earnings and financial assets in general.

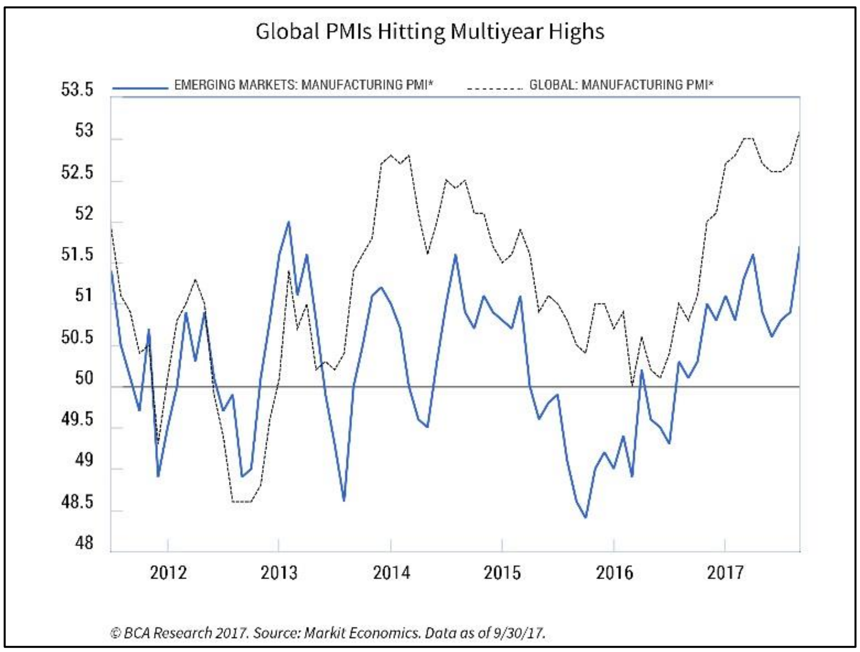
Below we highlight a few of the positive global economic indicators:

LEADING INDICATORS REFLECT A HEALTHY EXPANSION

The OECD Composite Leading Indicator recently hit its highest level since October 2014. Growth is broadly distributed across OECD countries, reflecting a healthy global expansion. For the first time since 2007, all 45 economies tracked by the OECD have positive GDP growth this year. This is expected to be the case next year as well. Further, consensus global GDP estimates for 2017 and 2018 have been revised higher throughout the year, according to the Bank Credit Analyst, led by rising growth expectations for the Eurozone, Japan, and several emerging economies (including China).

THE GLOBAL ECONOMY REMAINS ROBUST

In August, the Global Manufacturing PMI hit its highest level in over six years. The Eurozone PMI also hit a new six-year high, while the Emerging Market PMI rose to its highest level since January 2013.

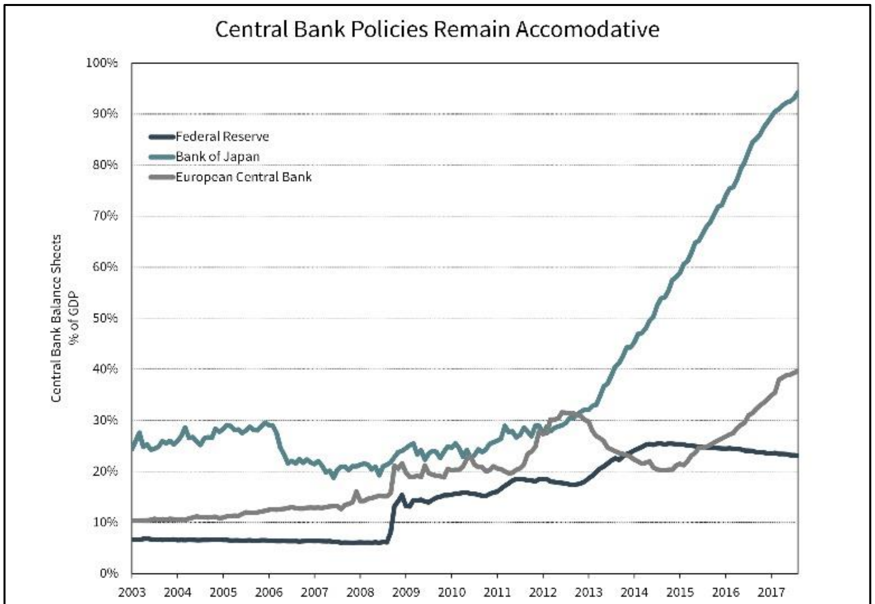


Meanwhile, easing inflationary pressures in emerging markets have allowed numerous emerging-market central banks to lower interest rates this year (including Brazil, Russia, India, and South Africa). Lower inflation and lower central bank policy rates are typically positive for local stock markets, and they can also help offset the impact of policy tightening by the Fed on emerging markets.

U.S. GDP GROWTH GRINDING ALONG

Turning to the U.S. economy, real GDP growth remains subpar by historical standards but continues to grind along at around a 2% annual rate. Looking ahead, a positive sign for the economy is that financial conditions have eased (become looser) over the past year—despite the three Fed rate hikes—due to factors such as the declining dollar, higher stock prices, narrower corporate bond spreads, and lower Treasury bond yields. This could bode well for economic growth over the next few quarters at least.

GLOBAL CENTRAL BANK POLICY REMAINS ACCOMMODATIVE AND STIMULATIVE



Source: Federal Reserve, Bureau of Economic Analysis, Bank of Japan, European Central Bank, Eurostat. Data as of 8/31/17.

Real (net-of-inflation) policy rates remain in negative territory across all the major developed economies, and the European Central Bank and Bank of Japan continue purchasing assets via quantitative easing (see chart to the right).

In contrast to Europe and Japan, the Fed continues to very gradually tighten, reflecting that the United States is further along in its economic and market cycles. As expected, at its September 19 meeting, the Fed left its policy rate (federal funds rate) unchanged at a range of 1% to 1.25%, but it kept a potential December rate hike on the table and detailed its plan to begin shrinking its $4.5 trillion (quantitative easing) portfolio of Treasury and mortgage-backed bonds. Starting in October, the Fed will allow $10 billion worth of bonds to mature and roll off their balance sheet each month, increasing the total roll-off by $10 billion each quarter until it reaches $50 billion per month. The financial markets took the Fed announcements largely in stride, although the dollar bumped up a bit versus the euro and yen.

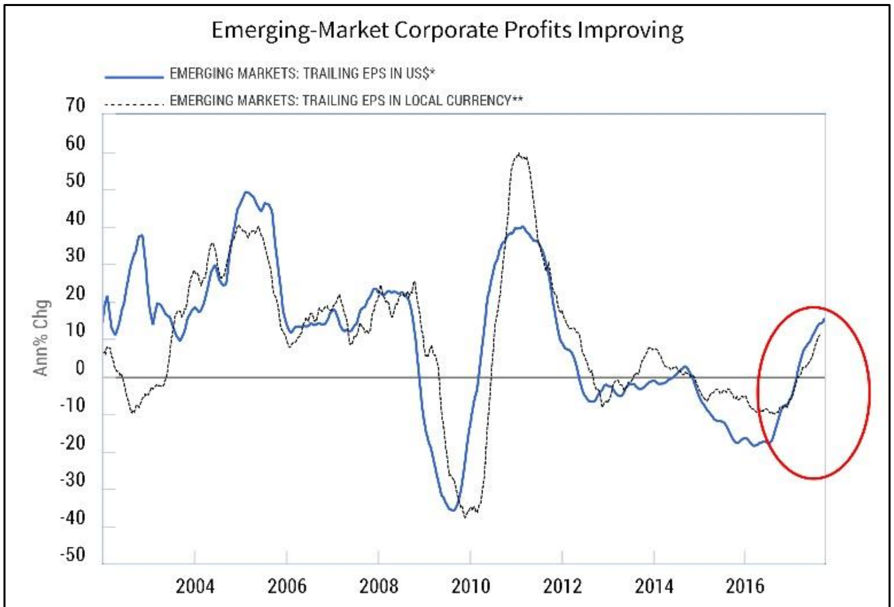
The Fed's preferred measure of inflation, the core PCE, stands at 1.4% (year over year), down from 1.9% in January and below the Fed's 2% inflation target. At her post-meeting press conference, Fed chair Janet Yellen acknowledged the Fed's puzzlement about persistently low inflation despite the continued strength in the labor market, rising oil prices, and a depreciating dollar—all of which should be inflationary. "This year the shortfall of inflation from two percent … is more of a mystery," Yellen said. "I will not say that the [Fed] committee clearly understands what the causes of that are." This admission is a refreshing, if long overdue, acknowledgement of the limits of the omniscience of our central bankers.

Outside the Fed as well, there is disagreement and debate among economists and strategists as to whether inflationary or deflationary risks should be paramount for investors at this point in the cycle, and related to that, whether Fed policy is too dovish or hawkish. We see analytical support from reputable sources on both sides of the debate (except at the extremes). Regardless, we think the Fed must be taken at is word: The journey to policy "normalcy" has begun, however cautiously.

But, as always, there are significant uncertainties and "unknowables" when it comes to economic forecasting. Humility and intellectual honesty—knowing what you don't know and what you *can't know* and can't accurately predict—are crucial. As such, we always consider a range of potential scenarios in our investment decisions and portfolio management rather than betting heavily on any single macro forecast. As the proverb goes, "It's difficult to make predictions, especially about the future."

Our Outlook for U.S., International, and Emerging-Market Stocks

- European and emerging-market stocks continue to look very attractive *relative* to U.S. stocks and offer solid *absolute* expected returns.
- U.S. stocks continue to look overvalued and unattractive in *absolute and relative basis*.



*© BCA Research 2017. Data as of 9/30/17. *3-month moving average. Source: IBES. **3-month moving average. Calculated as stock price divided by price-to-earnings ratio. Source: MSCI.*

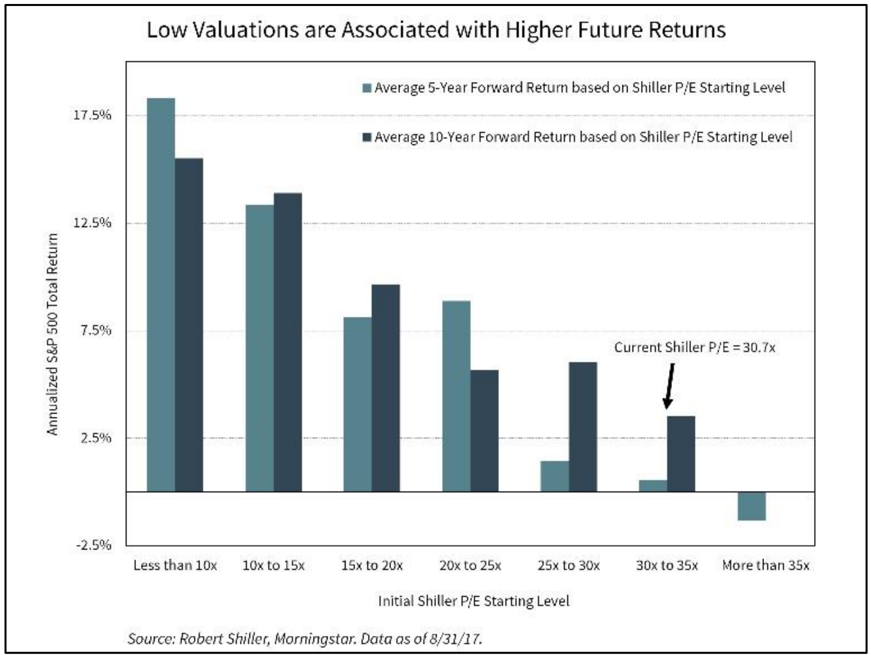
International and emerging markets have been the star performers in 2017. Based on our analysis, these markets still look very attractive *relative to U.S. stocks*, and offer solid *absolute* returns, in the mid- to upper-single-digit range, at least, over our tactical investment horizon in our base case scenario. This compares to the zero to low single-digit returns we expect from U.S. stocks in our base case.

In Europe and the emerging markets, we are seeing the corporate earnings (and stock market) recovery we have been expecting. Yet, earnings remain far below their pre-crisis highs and also below what we view as their normalized (longer-term) trend growth level. Absolute valuations remain reasonable if no longer depressed. Meanwhile, the opposite is true for the U.S. market.

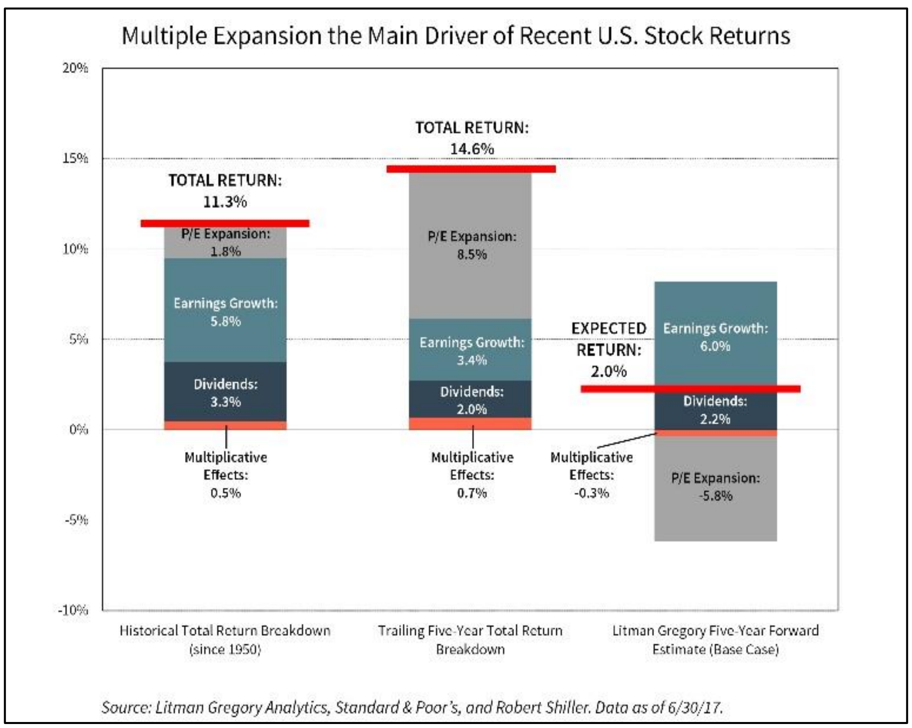
The relative strength chart to the right shows that U.S. stocks' large return advantage since the financial crisis has only begun to reverse. As we've written before, and financial market history demonstrates, asset classes go through cycles of relative performance—driven not just by their underlying economic fundamentals but by human herd behavior and market sentiment that swing to excess. We may be in the early stages of the pendulum swinging back in favor of non-U.S. stocks. While we can't predict short-term swings in sentiment, our forward-looking analysis of the fundamentals and valuations certainly supports that view.

*Source: Morningstar. Data as of 8/31/17. *International stocks represented by the MSCI World ex USA Index from 1970 to 1988 and by the MSCI ACWI ex USA Index from 1988 onward. The MSCI ACWI ex USA Index includes emerging markets.*

As noted earlier, the near-term macroeconomic (fundamentals) backdrop for U.S. stocks still looks pretty solid. But U.S. stocks have high valuation risk. Across almost every absolute valuation metric, U.S. stocks look expensive to very expensive.



As a reminder, the stock market's total return can be decomposed into an earnings growth contribution, a dividend yield contribution, and a change-in-valuation (price-to-earnings ratio) component. Historically and over the long term, it is dividends and earnings growth that drive total returns. They are the fundamentals we so frequently refer to. And over long-term periods, they have been fairly predictable, at least within a reasonable range. S&P 500 earnings per share have grown at roughly a 6% annualized rate over the past 65 or so years, and that is our base case earnings growth assumption.



In contrast, the market's P/E multiple (whether on a trailing-12-month or a multiyear normalized basis) has fluctuated across a very wide range over time. But the evidence is clear that over longer-term periods (e.g., five to 10 years or more), when starting valuation multiples are in the upper end of their historical range, as they are now, realized returns are likely to be poor if not downright terrible. Of course, there is no *certainty* of that outcome this time around. But successful investing is about weighing the probabilities and magnitudes of various outcomes.

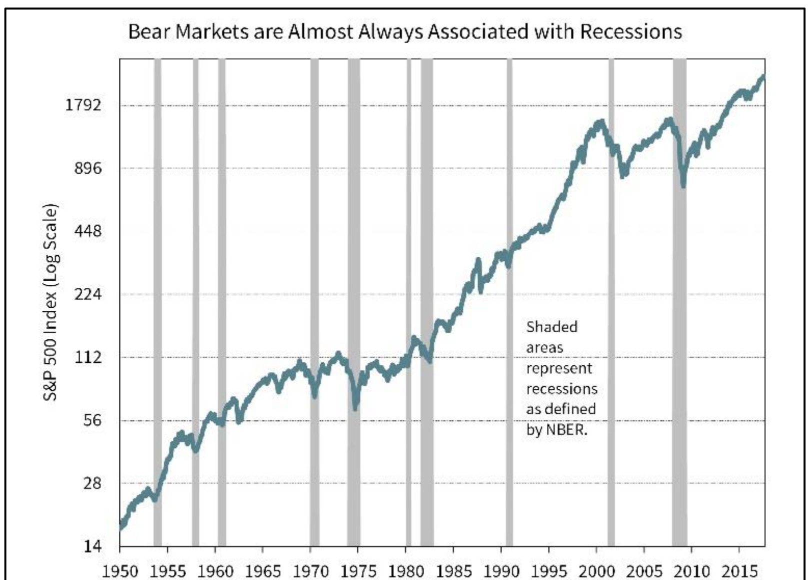
As such, in our base case scenario, we expect the market P/E multiple to decline toward historical norms over the next several years. If this happens, it will be a meaningful drag on total market returns. As shown in the chart to the right in the third column, it would cut 5.8% per year from the five-year annualized return. Effectively, this would reverse some (but not all) of the large positive impact the sharp P/E multiple expansion has had on market returns over the *past* five years (the 8.5% annual return contribution shown in the second column of the chart.

In our assessment, this argues for caution when it comes to U.S. stocks, looking out over the next five-plus years, despite what may continue to be a supportive macro backdrop for them over at least the next few quarters.

Closing Comments

- Stock market corrections can happen any time, but bear markets are usually associated with recessions, typically caused by central bank monetary policy tightening.
- The U.S. recovery probably has more room to run, but a recession/bear market is highly likely within the next five years.
- Investors in more risk-tolerant portfolios must be prepared—psychologically and financially—for transitory market dips and drops along the way.

Despite the U.S. economy's rather healthy economic indicators, it's worth noting that a typical 5% to 10%-plus stock market correction can happen at any time, triggered by any number of unpredictable and/or unexpected events. Historically, the U.S. market has dropped at least 5% roughly *three times a year* and declined 10% or more about once a year. We are at 330 days and counting since the last 5% drop; this is the longest such streak in *26 years*. Given that historical reference, the U.S. market seems long overdue for a correction.



Source: The National Bureau of Economic Research, Yahoo! Finance. Data as of 8/31/17.

However, a true bear market in U.S. stocks (a sustained 20%-plus decline) is almost always associated with an economic recession. (The causation is not one-way or linear; rather, it's a self-reinforcing feedback loop between the two.) Absent a recession, a bear market is unlikely. Recessions, in turn, are typically caused by excessive Fed tightening (reflected in an inverted yield curve), usually in response to inflationary pressures, an overheating economy, or financial market excesses, none of which *seem* imminent in the U.S. or global economy. So although this is now the third-longest economic expansion and second-longest bull market in U.S. history, neither appears ready to die of old age just yet.

If that's the case, and if the in-sync global growth rebound persists—and absent a major exogenous macro shock (such as a major new war)—then we expect to benefit from exposure to international and emerging-market stocks as their performance "catches up" to U.S. stocks. We also expect our flexible fixed-income and floating-rate loan funds to outperform the core bond index, due to their yield advantage and lower duration (which mitigates the negative price impact from rising interest rates). Lower-risk alternative strategies should also perform well in that environment, although they may lag U.S. stock returns.

But as the cycle turns, and the Fed moves further along their rate-hiking/policy-tightening path, the likelihood of a recession increases. We'd say one is very likely within the next five years, and a bear market as well. We just don't know exactly *when*. (No one does.)

Each portfolio is built to maximize *medium- to longer-term expected returns,* while adhering to the portfolio's risk objective. To earn the more attractive medium- to longer-term returns from riskier assets (such as stocks), investors in our more risk-tolerant portfolios must be prepared—psychologically and financially—for market dips and drops along the way. They are inevitable and may be unsettling, but they are also *temporary.*

Our fundamental, valuation-based tactical asset allocation approach will tilt our portfolios away from assets with high valuation risk and toward areas where the risk/reward is more attractive on a longer-term basis. But that is not the same as completely avoiding *shorter-term* volatility or downside risk—an objective that's incompatible with building financial wealth (or at the least keeping up with inflation) over time.

Nevertheless, the "shorter term" can *feel* "longer term" amid a deep market decline. That is why it is so important for investors to follow an investment process and be invested in a portfolio allocation that is truly aligned with their individual risk tolerance, investment temperament, and financial situation. Otherwise, chances are they will make a poorly timed, emotionally charged decision to change their portfolio. This has real potential to damage their long-term financial well-being, even if it might feel better in the heat of the moment. For example, reducing exposure *after* a sharp selloff, when prices are now cheap and the risk/return attractive; or, chasing a bull market *after* it has run-up to expensive valuations and poor future expected returns. It is critical to maintain one's investment discipline during such periods, to remain focused on your long-term financial objectives, and remember why you are invested as you are in the first place.

It's also important to remember that the next bear market will surely create some table-pounding tactical investment opportunities, as many risky asset classes will get excessively beaten down in price relative to their longer-term fundamentals. Given our positioning in lower-risk asset classes, we expect to be able to take advantage of such opportunities.

In the meantime, we have built balanced portfolios that are resilient across a range of scenarios; diversified across investment strategies, asset classes, and risk exposures; and tilted to the areas our analysis indicates currently have the most attractive risk/return profiles, such as European stocks, emerging-market stocks, absolute-return-oriented and flexible bond funds, floating-rate loan funds, and lower-risk liquid alternative strategies.

Thank you for your continued confidence and trust.