

Quarterly Investment Perspective

Lessons from the Peak



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Executive Summary

- **As we approach the 10-year anniversary of the 2008–2009 financial crisis, we examine the current economic expansion and stock market rally with the benefit of hindsight to uncover lessons from a decade ago that can help us to anticipate risks and opportunities ahead.**
- **The upshot? Despite some notes of caution, we think the peak for the economy and the equity market is still likely some time away.**
- **As we start the third quarter, we continue to want equity exposure in our portfolios, though we are comfortable with a neutral position versus strategic benchmarks, and including some defensive strategies and a U.S. tilt, both of which we believe will help performance should a peak and sustained market descent unfold more quickly than we anticipate.**

Ten years ago marked the beginning of the end — the end of an extended, globally synchronized economic expansion and equity market rally that created trillions of dollars in wealth, lifted millions of people out of poverty, and fundamentally changed how global investors and corporations looked at emerging markets.

While the S&P 500 didn't peak until early October 2007, by the summer of that year — 10 years ago today — the cracks in the financial system were already showing. U.S. ratings agencies were quickly downgrading the credit quality of subprime mortgages (see sidebar on page 3). Countrywide Financial Corp. in July warned of “difficult conditions.” By the end of the month, Bear Stearns announced it was liquidating two hedge funds that had invested in a variety of mortgage-backed securities (Exhibit 1).

In this edition of our *Quarterly Investment Perspective*, with the benefit of hindsight, we look at the current economic expansion and elongated equity market rally with perspective from the 2008–2009 financial crisis.

Specifically, we identify three lessons from a decade ago that may help us anticipate risks and opportunities ahead:

- **Lesson #1:** Peaks are often further away than you think.
- **Lesson #2:** It's not just this time but every time that is different when it comes to economic and equity cycles.
- **Lesson #3:** Never underestimate the power of emotion.

Where do those lessons lead us today? Despite some small cracks and thin air starting to be felt in this expansion and market cycle, we think the peak is still likely some time away. We continue to want equity exposure in our portfolios, though we are comfortable with a merely neutral position versus strategic benchmarks, and including some defensive strategies and a U.S. tilt, both of which we believe will help performance should a peak and subsequent sustained market descent unfold more quickly than we anticipate.

Lesson #1: Peaks Are Often Further Away Than You Think

Equity performance, intuitively and simply put, is heavily influenced by economic trends. Peaks and sustained equity declines almost always emerge into and during recessions. Since the late 1960s, there have been six bear markets registering a 25%-or-greater decline for the S&P 500, and five of these coincided with a U.S. recession. That means looking for an equity

Exhibit 1: S&P 500 and the Start of the Financial Crisis



1. **Feb 2007:** Freddie Mac will no longer buy the most risky subprime mortgages.
2. **Apr 2007:** New Century Financial Corp. (mortgage lender) files Chapter 11 bankruptcy.
3. **Jul 2007:** Bear Stearns liquidates hedge funds holding mortgage-backed securities.
4. **Aug 2007:** American Home Mortgage Investment Corp. files Chapter 11 bankruptcy. France's BNP Paribas halts redemptions on three investment funds.
5. **Sep-Dec 2007:** FOMC cuts federal funds rate three times, to 4.25%. Fed also supports market liquidity via domestic Term Auction Facility (TAF) and currency swap lines with the European Central Bank (ECB) and the Swiss National Bank (SNB).
6. **Jan 2008:** Bank of America buys Countrywide Financial Corp. for approximately \$4 billion. FOMC cuts fed funds rate twice in month, to 3%.
7. **Feb 2008:** President Bush signs Economic Stimulus Act of 2008.
8. **Mar 2008:** FOMC cuts fed funds rate 75 basis points to 2.25% and provides term financing to facilitate JPMorgan Chase's acquisition of Bear Stearns.
9. **Apr 2008:** FOMC cuts fed funds rate 25 basis points to 2%.
10. **Jun 2008:** Fed approves Bank of America acquisition of Countrywide Financial Corp.
11. **Jul 2008:** SEC prohibits short selling in certain securities. President Bush signs into law the Housing and Economic Recovery Act of 2008.
12. **Sep 2008:** Fannie Mae and Freddie Mac placed in government conservatorship. Bank of America says it will buy Merrill Lynch. Lehman Brothers files for Chapter 11. Fed authorizes Federal Reserve Bank of New York to lend up to \$85 billion to American International Group (AIG). Net asset value of shares in the Reserve Primary Money Fund falls below \$1. JPMorgan Chase acquires banking operations of Washington Mutual. FDIC says Citigroup will purchase banking operations of Wachovia Corp.
13. **Oct 2008:** President Bush signs into law the Emergency Economic Stabilization Act, establishing \$700 billion Troubled Asset Relief Program (TARP). FOMC cuts fed funds rate twice, to 1% and Fed approves Wells Fargo purchase of Wachovia Corp.
14. **Nov 2008:** Fed and U.S. Treasury announce restructuring of government's financial support of AIG. Executives of Ford, General Motors, and Chrysler request access to TARP for federal loans. Fed approves Bank of America acquisition of Merrill Lynch.
15. **Dec 2008:** NBER announces that the U.S. economy has been in a recession since December 2007. FOMC sets target range for effective federal funds rate of 0 to 0.25%.

Freddie Mac is the Federal Home Loan Mortgage Corporation. Fannie Mae is the Federal National Mortgage Association. SEC is Securities Exchange Commission. NBER is the National Bureau of Economic Research. FOMC is the Federal Open Market Committee. Fed is the Federal Reserve System.

Source: Bloomberg, Bessemer Trust

peak requires an understanding of where an economy is in the business cycle and how near the next recession might be. This is easier said than done.

Since the end of World War II, the U.S. has had 11 business cycles, with expansions lasting an average of about six years. The expansion of the 2000s was in its fourth year, and the equity “bull market” in its third, when then Federal Reserve Chairman Alan Greenspan told Congress that some local housing markets were exhibiting “froth” and that he saw signs of risky financing. He added at the time, though, that he did not see a national bubble and that the economy did not appear at risk. Just over a year

later, U.S. Treasury Secretary Hank Paulson noted, “When there is a lot of dry tinder out there, you never know what will light it. We have these periods every six, eight, ten years and there are plenty of excesses.” Another six months later, in March 2007, after the U.S. housing market had started its decline, then Fed Chairman Ben Bernanke testified to Congress that “the impact on the broader economy and the financial markets of the problems in the subprime markets seems likely to be contained.”

All three policymakers, with reams of data at their fingertips and supported by armies of trained economists and analysts, knew there might be a problem but could not put a finger on

the timing, much less the scale, of the economic or market downturn to come. In hindsight, many of us now can recall anecdotal warnings. For me, a vivid pre-peak memory was when I heard about a popular reality show that debuted in 2005 called “Flip This House,” in which people bought homes and renovated them for a quick profit. At around the same time, the windows of local bank branches across New York City were advertising home equity loans “on sale” with minimal paperwork required to “cash out.”

So what do we watch to try to see equity peaks and recessions on the horizon? First, what we do not watch: index levels. Despite the hype in the media about “record highs,” the Dow Jones Industrial Average at 20,000 or the S&P 500 at 2,400 are just numbers. For markets, we care more about underlying economic fundamentals, investor positioning, and valuation metrics.

We start with trends in economic and financial data that can shed light on the probability of a looming recession. Our short list includes labor market and housing data, business and consumer confidence, and consumer credit, among other economic metrics. It also includes financial data that can be causes and/or symptoms of economic vulnerability, such as energy prices, corporate profit margins, credit spreads, mortgage interest rates, and monetary policy

The Subprime Crisis: A Refresher

The “subprime crisis” followed a housing boom and bust. U.S. home prices peaked in December 2006, falling roughly 30% over the next 26 months. Many homeowners found that the values of their mortgages exceeded their reduced home values; as a result, some chose to default on those mortgages. (Subprime mortgages are a type of mortgage normally issued to borrowers with low credit ratings, thus having a relatively greater risk of default.)

This chain reaction touched firms that initiated mortgages, such as Countrywide Financial and Washington Mutual. It also hurt Fannie Mae and Freddie Mac, which purchased and securitized mortgages (creating mortgage-backed securities, or MBS). Next in the chain were investment banks and other financial firms that created and sold instruments such as collateralized debt obligations (CDOs) backed by MBS. Firms, such as AIG, that insured against the risk of these securities defaulting by selling credit default swaps (CDS) also were hit. At the end of this chain were investors, including banks, pensions, government institutions, and households that had purchased these housing-related instruments.

To note, all these products were monitored by ratings agencies and regulated by a variety of public-sector bodies.

Exhibit 2: Taking Cues from the Economy

	October 2007	June 2017
S&P 500	1565	2433
Unemployment Rate	4.70%	4.30%
Housing Starts (SAAR)	1,264K	1,092K
Consumer Confidence	95.2	117.9
ISM Manufacturing	51.1	54.9
WTI Oil (\$/bbl)	80.26	44.74
Mortgage Interest Rate	6.09%	3.80%
U.S. 10-Year Treasury Yield	4.65%	2.15%

For the June 2017 column: as of June 16, 2017, for financial market data and May 30, 2017, for economic indices. For the October 2007 column: as of October 9, 2007, for market data and October 31, 2007, for economic indices. SAAR is Seasonally Adjusted Annual Rate. Mortgage interest rate is the Bankrate.com US Home Mortgage 30 Year Fixed National Average.

Source: Bloomberg, Bankrate.com, Conference Board, Dow Jones, Federal Reserve, Standard & Poor's, U.S. Bureau of Labor Statistics, U.S. Census Bureau

variables (Exhibit 2). Backtests of our recession model have correctly “flashed red” before recessions in 1990, 2001, and 2007, although the model has not always picked up all input signals adequately (it underestimated the degree of housing vulnerability in 2007). As of June of this year, our proprietary model suggested only a 38% chance of a U.S. recession over the next few quarters, with some of the greatest *relative* risk currently coming from a slowing labor market (note that nonfarm U.S. payroll growth has declined from a monthly average of 187,000 last year to 121,000 over the last three months). Historically, equities have been much more likely to see sustained declines when recession probability readings reached 70% or higher.

Barring some shock, the economy for now doesn't look at risk of imminent recession, though we continue to believe we are in the later stages of this economic cycle. This expansion is now the second longest since World War II. All else equal, our next equity peak is likely still a ways off.

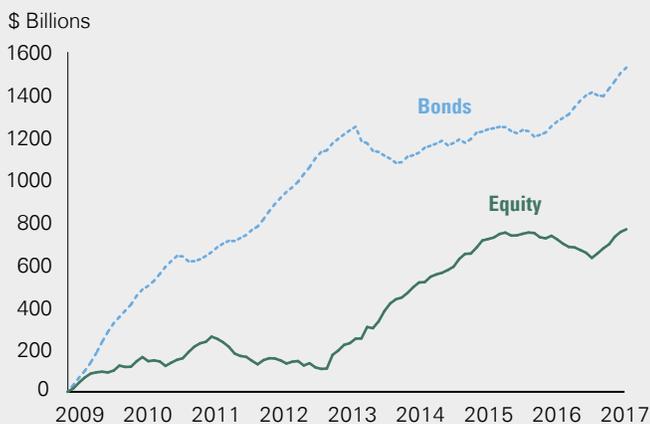
A similar takeaway can be reached by looking at positioning. Equities will be relatively more vulnerable when there are more owners who could get spooked (see Lesson #3) and suddenly sell en masse. That was definitely the case back in 2007 and 2008: between October 2002 and October 2007, equity inflows totaled \$947 billion compared to \$259 billion for bonds.

The 2008–2009 equity bear market, perhaps alongside some short-lived but still-painful crises in subsequent years (the 2011 U.S. debt-ceiling standoff, the 2012 European debt crisis, and the 2015–16 oil shock), resulted in an investor base much more skeptical toward stocks. Indeed, since March 2009, when the S&P bottomed, net fund flows into bonds have far exceeded flows into stocks (Exhibit 3). This is not a “crowded” market.

While economic momentum and investor positioning both give reason for near-term calm or even optimism toward equities, valuations provide a different, somewhat more cautious message. Equities are relatively more vulnerable to whatever shock emerges at higher valuations. While one can use a number of metrics here, most today at least directionally paint a similar picture. We would highlight price-earnings ratios (PEs), or the value of a company measured by its share price relative to its per-share earnings, as well as a PE adjusted for the business cycle (referred to as CAPE). The current global PE ratio of about 16x (as of May 31 for the MSCI All Country World Index, on a next-12-months basis) has reached its highest level post-tech bubble; U.S. levels are higher overall than those of other developed and emerging markets.

Exhibit 3: Cumulative Bond and Equity Mutual Fund and ETF Net New Cash Flow

Key Takeaway: The next equity peak is likely a ways off, given that equities are under-owned relative to bonds.



Indexed to 0 on March 31, 2009.

As of April 30, 2017. Time period is based on when the market reached its trough during the financial crisis. ETF stands for exchange-traded fund.

Source: Strategas

Lesson #2: It's Not Just This Time But Every Time That Is Different When It Comes to Economic and Equity Cycles

While economic trends, investor positioning, and valuations are all important inputs when assessing the probability of an equity-market peak, we have to acknowledge that these metrics, in absolute terms or in a historical context, are not sufficient to form a view. Just as economies and financial markets evolve, so too do catalysts for downturns. Every cycle is different in this regard.

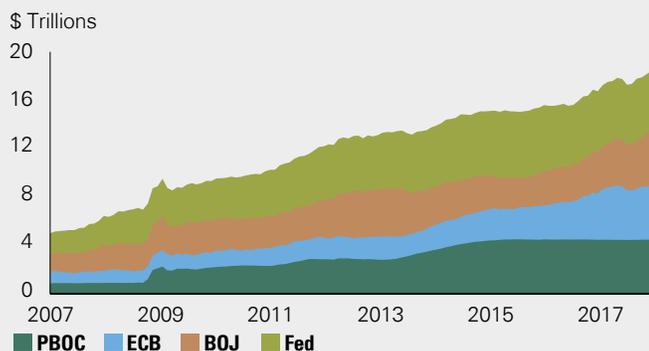
The 2008–2009 crisis that followed the October 2007 equity peak has been thoroughly researched and discussed. While many factors contributed to this downturn, most would agree that at least near the top of the list would be a bubble in the U.S. housing market, in turn exacerbated by subprime mortgages; a bullish commodity market that, along with home prices, pushed inflation higher and led central banks to tighten monetary policy; a relatively relaxed regulatory environment; and a significant increase in leverage and the use of various financial derivative instruments that were not sufficiently understood by relevant parties (as highlighted in detail in Andrew Ross Sorkin’s book “Too Big to Fail”).

Looking at the current economic and market backdrops, we see some forces that leave us thinking this cycle could extend substantially longer, maybe even becoming the longest expansion and equity bull market in modern times (the current equity uptrend, at 99 months old as of the end of June, is surpassed only by the October 1990 to March 2000 bull market, totaling 113 months). Other factors, however, could even now be sowing the seeds for the next equity peak and descent. We have to consider both sides as we construct portfolios.

In our minds, global monetary policy today creates two-way risks for this cycle. The 2008–2009 crisis led the Fed and its global counterparts to slash interest rates and expand balance sheets to provide liquidity and credit to the global economy. While baby steps to reverse low or negative interest rates are now under way in a few countries, balance sheets remain at a cumulative record high, having more than tripled in the last decade. The combined total assets of the four major central banks (Fed, European Central Bank, Bank of

Exhibit 4: Total Assets of the Federal Reserve (Fed), People’s Bank of China (PBOC), Bank of Japan (BOJ), and European Central Bank (ECB)

Key Takeaway: The combined assets of the world’s largest central banks have more than tripled in the last decade.



As of April 30, 2017. Central bank assets generally include cash, gold, short- and long-term corporate and government debt, and foreign currency-denominated assets, among others.

Source: Bloomberg, Bank of Japan, European Central Bank, Federal Reserve, The People’s Bank of China

Japan, and People’s Bank of China) stood at over \$18 trillion as of May 2017, compared to approximately \$5 trillion in early 2007 (Exhibit 4).

While one can debate the costs and benefits of prolonged, exceptionally easy monetary policy, it does appear to have helped lift equity and credit prices, in part as investors reached for yield (in the last 10 years, the dividend yield of the S&P 500 exceeded the yield on the 10-year Treasury about one-third of the time on a monthly basis — which is rare relative to longer-term history). With inflation remaining stubbornly low around much of the world (thanks in part to technology and demographics), there is potential for this easy monetary backdrop to persist well into 2018 or longer. Central bankers are subject to the same emotional biases as the rest of us (see Lesson #3). Given the choice between tightening too early and threatening a recession (not a legacy many policymakers seek) or tightening too slowly and possibly creating asset-price bubbles and/or inflation, they tend to lean toward the latter.

Easy monetary policy may be helping to support equities today, but it has also contributed to some of the economy’s growing vulnerabilities. Indeed, low interest rates factor directly and indirectly into several of the potential

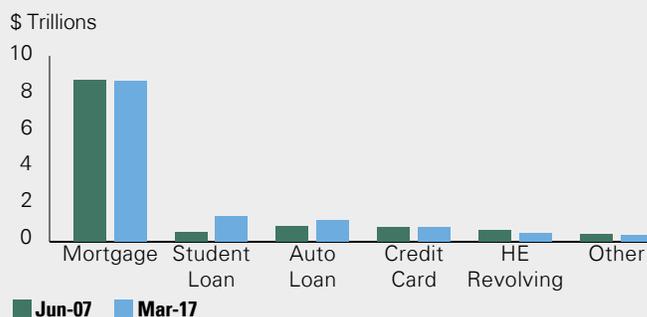
catalysts we are watching for the next equity-market descent — sparks that could set off the “dry tinder,” as the Treasury’s Paulson described it back in 2006.

Vehicle sales. One area of the U.S. economy that is showing signs of moderating is the automobile industry (see our May 5 *Investment Insights*, “Autos: Concerns Overblown, or the Next Subprime Crisis?”). Sales of new automobiles in the U.S. have slowed since December, when total sales hit their highest level since 2005 at a rate of over 18 million annualized (according to WARD’s Automotive Group). In addition, an increase in defaults of subprime auto loans is leading some to fear that autos will be the next subprime crisis.

We see several structural and cyclical forces suggesting that the auto cycle could be peaking, and historically the auto cycle has coincided with the broader business cycle (i.e., autos decline dramatically in a recession before rebounding in the recovery). However, this cycle has been different in that we have seen a decoupling of the historic relationship between auto and housing sales. In the wake of a housing inventory overhang caused by the slow processing of foreclosures, as well as aggressive tightening of mortgage credit standards following the crisis, the housing market has been much slower to rebound versus prior cycles. The auto market is important, with auto sales representing a \$500 billion per year industry, but the housing market is nearly three times the size, suggesting housing remains a better gauge of the overall economy’s health (Exhibit 5).

Exhibit 5: U.S. Consumer Debt Balance by Type

Key Takeaway: Residential mortgages are by far the largest category of U.S. consumer debt, with nearly \$9 trillion outstanding at the end of the first quarter of 2017.



HE stands for Home Equity.

Source: New York Fed Consumer Credit Panel/Equifax

Additionally, the systemic risk tied to subprime auto loans is much more limited than that of subprime housing. Not only do auto loans have a shorter duration than most mortgages, even after accounting for principal prepayments on mortgages, but the outstanding balance of loans and securitized products tied to subprime auto loans (i.e., auto-related asset-backed securities) is less than 5% that of the pre-crisis balance of subprime non-agency mortgage-backed securities — and that is not even accounting for the value of mortgage-backed securities (MBS) from agencies like Fannie Mae or Freddie Mac (Exhibit 6). Simply put, the U.S. auto market's best days may be behind it — at least until the next cycle — but we do not see this by itself as the catalyst for the next recession.

Retail. Our concerns around the American retail sector are *not* about consumers. Household wealth hit a record high earlier this year, helped by rising home prices and equity valuations. Consumer confidence, meanwhile, is well above pre-crisis peaks, suggesting a willingness to spend. Our peak-related worry is instead tied to a technology disruption not seen in previous cycles. We could spend pages discussing the impact of technology across the economy but for now want to focus on one area in particular: online shopping, or e-commerce. We see online shopping, including but not limited to Amazon, as increasingly threatening traditional brick-and-mortar retail. This

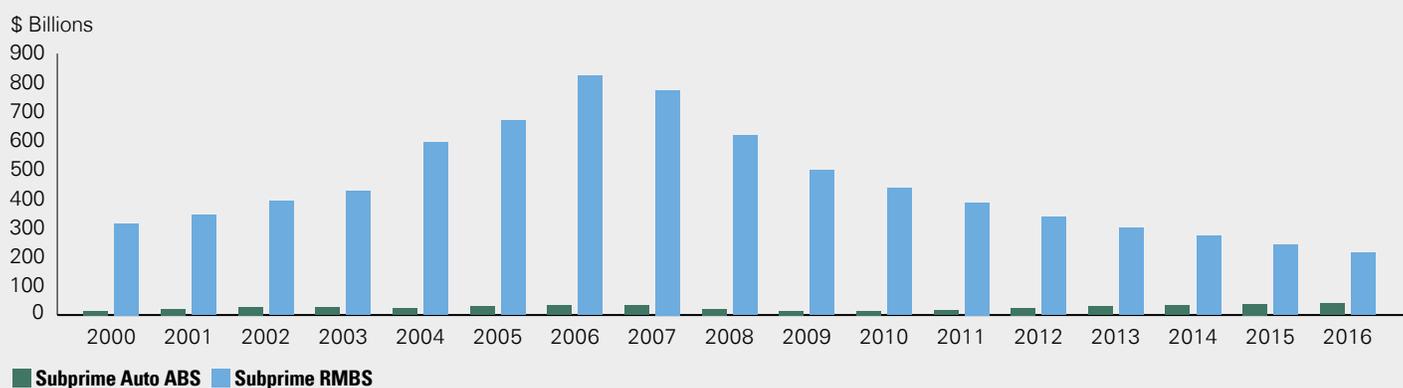
structural change comes at a challenging time — it follows a recovery in nonfood retail employment to near pre-crisis levels, and physical store footprints have also recovered. Indeed, U.S. online sales are projected to total 20% of total retail sales over the next decade,¹ a significant jump from the 8.4% current level (Exhibit 7).

The ongoing and looming hit to retail profitability is starting to leave firms with no choice but to close stores. Indeed, recent months saw companies — including Macy's, JCPenney, and Sears — announce large-scale store closures with corresponding reductions in workforces. Looking ahead, we assume this traditional retail consolidation will continue, exerting a negative influence on this corner of the commercial real estate market as well as hitting the labor market. Job losses could prove substantial, even accounting for new jobs created via e-commerce. As with autos, we do not see this retail trend as big enough to trigger a recession — U.S. retail trade, at 6% of GDP, is material but does not dominate the economy. However, companies could use a recession, when it occurs, as an opportunity to speed up consolidation — potentially exacerbating the next downturn.

Corporate and consumer debt. Retail weakness figures prominently in the next risk we are monitoring: corporate debt levels, specifically for non-financial corporations.

Exhibit 6: Securities Markets for Subprime Auto and Housing Loans

Key Takeaway: The market for subprime auto asset-backed securities is a fraction of the size of the subprime residential mortgage-backed securities market.



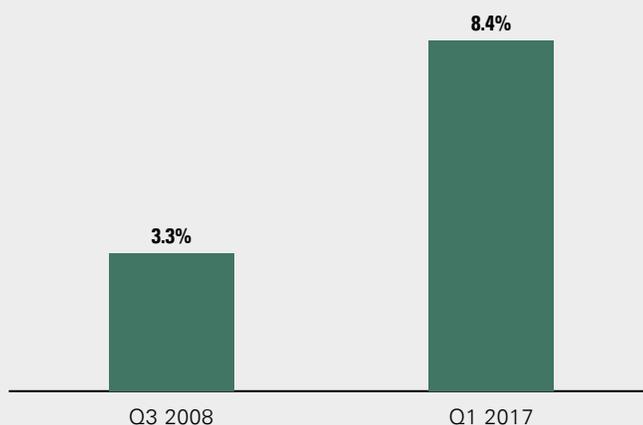
As of December 31, 2016. ABS is asset-backed securities. RMBS is residential mortgage-backed securities.

Source: Securities Industry and Financial Markets Association

¹ The U.S. Online Retail Forecast: Omni-channel Retailing Challenged by its Success, FTI Consulting.

Exhibit 7: E-Commerce Sales as a Percentage of Total Retail Sales

Key Takeaway: As a percentage of total retail sales, online sales have nearly tripled in a little under a decade.



Source: U.S. Census Bureau

Regulations since the crisis forced the financial sector to reduce leverage. This is helping mask the fact that non-financial corporations have significantly *added* to debt on their balance sheets during this expansion. Debt of non-financial corporations as a percentage of GDP is the highest it has ever been in the period for which we have data (since 1951), at over 72%. Though this debt burden may be manageable at current low interest rates, it could quickly change as rates normalize. With investor positioning biased toward yield-oriented fixed income and credit (see Lesson #1), a faster exit from any weak sector could quickly spread throughout the broader market — we saw this contagion vividly in early 2016, when energy credit weakness triggered a sharp, albeit temporary, exodus from broader U.S. credit markets.

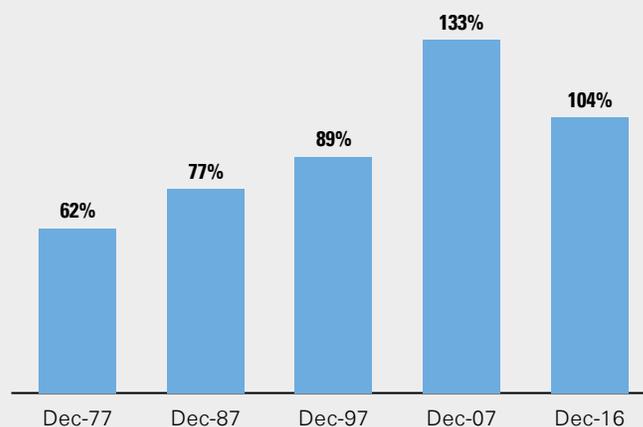
Another related pocket of vulnerability is consumer debt, even with jobless claims near multidecade lows and overall consumer debt as a percentage of income levels at its lowest since before the crisis. These upbeat headline figures, in our view, mask underlying weakness specifically for lower-income consumers or borrowers with less pristine credit. Consumer deleveraging has really only taken place this cycle within mortgage debt, while other consumer debt, such as credit cards and auto loans (noted earlier), has steadily increased

to 26% debt/income, above its pre-crisis average. Even more concerning is the fact that excluding the top 5% of income-earners from that figure increases the debt-to-income level to 42%. Consumer debt payments to income — in other words, the cost to service existing debt as a percentage of income — have risen in recent years, though are not back to pre-crisis levels. Non-debt obligations (e.g., payments for rent, tax, insurance, etc.) as a percentage of income remain near 25-year highs. As interest rates ultimately rise, these obligations and debt payments could quickly become more burdensome, eroding support for the broader economy from the all-important consumer (Exhibit 8).

Geopolitics and policy. Identifying possible sources of geopolitical risk today, including North Korea, ISIS, and Russia, among others, is fairly straightforward. Predicting when a geopolitical risk becomes a market-moving reality, and especially one significant enough to trigger a downturn, however, is nearly impossible. That said, we continue to monitor all such potential risks as closely as we can, knowing that they can be meaningful catalysts, especially if an economy is already slowing or otherwise vulnerable. As an example, think back to the 1990–1991 Gulf War. Just before the U.S. invasion of Iraq, then Fed

Exhibit 8: U.S. Household Debt to Disposable Income Ratio

Key Takeaway: Relatively high consumer debt levels are a pocket of vulnerability in the U.S. economy.



Source: Bloomberg

Chairman Greenspan warned of a possible U.S. recession (as did many private-sector economists at the time), in part because of sharply rising oil prices and subsequent inflation pressures. (Oil prices had risen largely on perceived and real reductions in supply tied to Iraq and Kuwait.)

Today, in contrast with the 1990s, unconventional U.S. energy production has reduced the preoccupation with Middle East oil supply. Still, we see an oil supply shock as a risk we want to watch, as it could increase business and consumer uncertainty and lift inflation. Separately, we are watching political developments closely this year in Europe: the U.K.'s negotiations to leave the European Union create uncertainty, while Germany and Italy both face major elections in the coming months (Germany this September, and Italy sometime this year or next). While benign outcomes in the Netherlands and France have calmed market fears somewhat about a potential "disintegration" of Europe, the support for anti-Europe parties (especially in Italy) and risk of surprise should not be underestimated. Another area of uncertainty is within the U.S.: the pro-growth agenda supported by the new administration is proving more difficult to enact than most observers initially anticipated. What actually becomes legislation and when will almost certainly shape the length and character of the current economic expansion and equity rally.

China. While much has changed in the U.S. since the 2008–2009 financial crisis, including monetary policy and technology, the same is true in China, now the world's second-largest economy. The 2008–2009 crisis had a profound impact on China due to its reliance on exports to consumption-heavy economies, such as the U.S. In 2007, China's GDP was increasing at a double-digit clip; GDP growth reached a cyclical peak of 15% (year on year) in 2007. At the bottom of the financial crisis in 2009, China's GDP growth had slowed to a cyclical low of 6.4%. Although its economy recovered, the pace of growth has slowed significantly as the economy has matured. Over the past couple of years, Chinese growth has averaged a little under 7% if official numbers are to be believed. On a global basis, it should be noted that although China represents roughly 15% of global GDP, it makes up approximately 25% of global GDP *growth*.

Like counterparts around the world, Chinese policymakers relied on massive fiscal stimulus to limit a demand shock at the height of the crisis. This credit

expansion has continued largely unabated since, and as a result, China's total debt-to-GDP ratio has ballooned from 162% in 2007 to 258% currently (Exhibit 9). This rapid increase in debt resulted in a rating downgrade from Moody's, which cut China's long-term currency issuer rating to A1 from Aa3 (the downgrade was the first since 1989, during the Tiananmen Square protests). Many investors have been expecting that China will eventually have to go through a nonperforming loan cycle to help cleanse the economy of excessive leverage. It is beyond the scope of this piece to forecast if or when that may occur, but we believe that China's ability to stimulate growth through credit expansion was a key factor in the global recovery after the crisis, and given the current degree of leverage in the Chinese economy, it is unlikely such growth can continue without also increasing risk.

China's economy today is all the more important to monitor given the country's ties to the rest of the world. China has increasingly become a lead export destination for other countries, as shown in Exhibit 10, which in turn has increased global usage of its currency, the renminbi. This interconnectedness has been reflected in recent bouts of global market volatility: a small currency devaluation in August 2015 and a correction in local equity markets in January 2016 meaningfully contributed to global market weakness.

Exhibit 9: China Total Debt-to-GDP Ratio

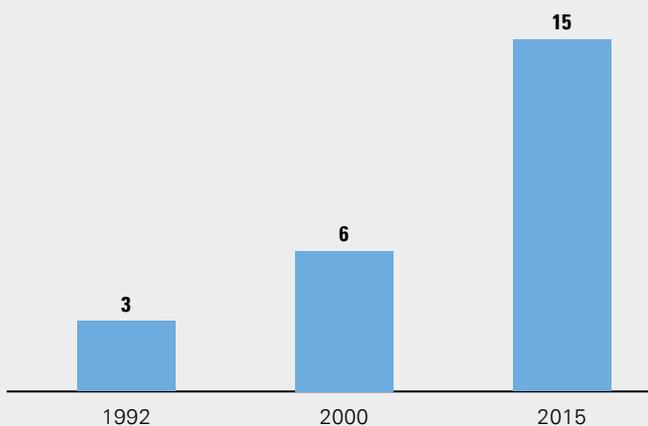
Key Takeaway: China's total debt as a percentage of GDP climbed to nearly 260% as of year-end 2016.



Source: Bloomberg

Exhibit 10: Number of G20 Countries with China as a Top Five Export Destination

Key Takeaway: In the last two decades, the number of G20 countries that have China as a top five export destination has increased fivefold.



The G20 is an international forum for the governments and central bank governors from 20 major economies.

Source: WITS Database, DB Global Markets Research

While causality goes both ways, it is striking how U.S. and Chinese equity market correlations have risen over the years, no doubt in part because of these economic interdependencies (Exhibit 11).

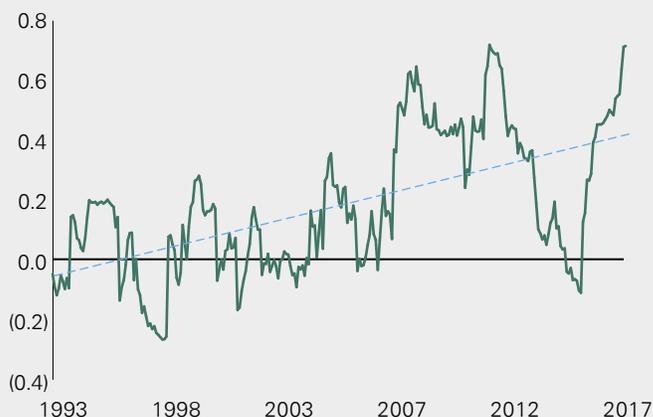
Chinese policymakers have been able to successfully respond to small crises, but they have not yet faced a major test. Investors are quick to point out that China has approximately \$3 trillion (USD) in foreign exchange reserves that can be used to help meet balance-of-payment financing needs, intervene in exchange rate markets, or other related purposes to help shore up the economy, but we note that in a relatively short time (18 months), its foreign exchange reserves declined by roughly \$1 trillion, leaving it with the current \$3 trillion. Additionally, these are China's gross reserves; its net reserves (gross reserves less foreign debt) are thought to be closer to \$2 trillion, which gives it less of a buffer. Lastly, in the event of a downturn, Chinese policymakers are unlikely to allow their FX reserves to fall to zero before taking more drastic action, and thus, it's our view that China's currency reserves are not as potent a tool as many investors think. That said, Chinese policymakers have

had a long track record of success over the past 30 years, and they certainly have levers they can pull if needed, but as developed economies like the U.S. can attest, the larger and more complex a system becomes, the harder it can become to keep it running smoothly.

When we put these trends and risks together, we are left with three big-picture takeaways. First, the U.S. economic cycle may be getting more mature, as evidenced by slowing payroll growth, but it doesn't look like it is facing imminent recession. Second, specific vulnerabilities we see in the U.S. economy, even accounting for potential spillover effects, do not look sufficient in and of themselves to trigger a recession. More likely, in our view, they could all contribute to the degree of a post-peak market/economic decline as monetary policy normalizes. Third, we think China is playing a larger role in the current global cycle and, if a deleveraging cycle were to occur in earnest, it could be substantial enough to trigger a post-peak downturn in the U.S. as well. A U.S. peak and downturn, and related U.S. recession, could be either triggered or exacerbated materially by a slowdown in China.

Exhibit 11: Rolling 24-Month Correlation Between S&P 500 and Shanghai Stock Exchange Composite

Key Takeaway: The correlation between U.S. and Chinese equities has risen markedly in the last several years.



As of May 31, 2017. Correlation is based on monthly price return data. Dotted line represents the trendline over the entire time series.

Source: Bloomberg

Lesson #3: Never Underestimate the Power of Emotion

Over the last decade, thousands of pages have been filled with how emotion, and specifically greed and fear, helped shape the October 2007 peak and subsequent crisis. Testimony to Congress, depositions, and interviews with the press all show financial executives who pushed to move up various league tables, in some cases by hiring consultants who in turn recommended taking on more leverage and/or increasing business footprints in the U.S. housing market.² By its own account, Lehman Brothers increased its gross leverage by 34% between the end of 2003 and the end of 2007, a time by which the financial services sector had grown to 40% of the total corporate profits in the U.S.

Corporate executives were certainly not the only parties driven by emotion here. Ratings agencies faced the same business desire to succeed — easing standards for credit ratings of certain securities ahead of the peak. Homeowners, taking out home equity loans or “flipping,” gladly increased their net worth. So too did retail investors, rushing into the equity market in a way not seen before. Government officials were happy to benefit from the positive economic backdrop (in turn helped by lax regulations around mortgages) — voters were more likely to be willing to keep their representatives in office as long as their wallets were expanding and they were able to buy a home (or, even better, monetize it). And as noted earlier, even as economists and policymakers started to see the beginning of the end, they were reluctant to act too fast or too harshly, as an error could undermine the economy unnecessarily. When times are good, risks tend to be downplayed.

After October 2007, however, greed was quickly replaced by fear. The breadth and depth of the crisis meant that the same fear is still felt in corners of the economy and financial markets even a decade later. Central banks, even now with the strongest labor markets in years, are hesitant to tighten too quickly, lest the recovery lose momentum. Investors, as noted earlier, have been reluctant to go back into equities (even though, since the market trough in 2009, the S&P 500 has returned about 330% on a cumulative basis, including dividends).

At the same time, there are signs that greed is making another run for it today. The extended period of ultra-low interest rates and expectations for policy to remain relatively loose has clearly contributed to the growing auto and consumer debt issues noted earlier. It has also helped to create a lower-volatility environment across asset classes. Both low rates and low volatility have encouraged investors to “reach for yield,” taking on more duration and/or credit risk for a higher return. Other investors are trying to directly profit from this backdrop through volatility itself. The market in related “vol” financial products has mushroomed in recent years, creating its own risk should it quickly unwind (especially if exacerbated by algorithmic selling). Corporations, seeing low borrowing costs, are more willing to issue debt, assuming rates will not rise quickly enough to make refinancing or servicing that debt an issue.³

We care about and consider the emotional aspect of the market — behavioral finance — as it can help shape peaks and market pullbacks. Appreciating that emotional part of investing also helps us try to separate greed and fear from economic and market facts and trends.

As we look at the world today, we see an economy that is still growing and central banks that are still supportive. That said, we also see slowly building risks — some with no historical precedent. Rather than let fear take us out too early, or greed make us reach for the last crumbs of returns in the cycle, we take an incremental approach. Higher valuations, a more mature expansion, and growing risks, in our minds, warrant small steps to moderate portfolio risk. We reduced equities from overweight to neutral versus our strategic benchmarks last year in part for these reasons. We’ll likely take a similar step in the quarters ahead, especially should valuations rise further and risks continue to slowly build. Our goal is to slowly de-risk into the peak, so we are less reactionary when the eventual downturn emerges. Equally, we hope to be sufficiently liquid and defensive as that downturn progresses so we can add back market exposure at better levels. Simply put, we want to “sell when others are greedy and buy when others are fearful,” ideally not too early or late.

² “How Psychological Pitfalls Generated the Global Financial Crisis,” Hersh Shefrin, Leavey School of Business, Santa Clara University.

³ “Monetary Policy Strategy: Lessons from the Crisis,” Frederic S. Mishkin, National Bureau of Economic Research.

We believe our approach toward asset allocation around equity peaks, along with a diversified portfolio, should help reduce client fears about putting money to work, even now a decade after the last crisis (see our recent *Investment Insights*, “Getting Invested”). It certainly helped a decade ago, during 2008, when a Balanced Growth 70/30 stock/bond portfolio lost 21.7% compared to its index, which was down 25.8%, and the S&P 500, which lost 37% that year. Perhaps even more importantly, we believe such an approach will result in robust, longer-term, risk-adjusted returns.

A Final Word on Second-Quarter Performance

The second quarter ended with solid gains for global equities and modest returns for bonds as yields stayed largely range-bound. The quarter was marked by two highlights: the unwinding of the “reflation trade” and the conclusion of the presidential election in France. The reflation trade began after the Republican victory in the November 2016 U.S. election, as investors sought assets that would benefit from potential tax cuts, infrastructure spending, and deregulation. Not surprisingly, global equities in the energy, financial, and industrial sectors all outperformed in the months following the election, while U.S. yields rose and the dollar strengthened. As difficulties arose in recent months with this agenda, this trend reversed. At the same

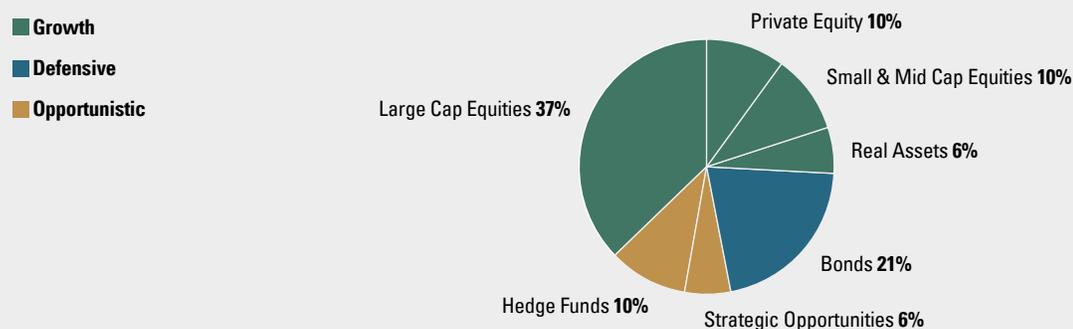
time, lower oil prices in the second quarter also weighed on bond yields, in part by dragging inflation expectations lower.

Meanwhile, the Macron victory in France eliminated a key risk factor for markets, and as expected, capital flowed to European assets following the vote. The surprise outcome of the June snap U.K. general election — a loss of the Conservative majority in Parliament — did not significantly rattle global markets, though sterling weakened in the aftermath. Bessemer portfolio managers increased European equity exposure opportunistically into and following the Macron win, but purposefully avoided the U.K. given the political uncertainty there. Broadly, our client portfolios remain modestly underweight Europe and overweight the U.S. These regional tilts modestly hurt our performance vis-à-vis our benchmark during the quarter.

Overall, a Bessemer Balanced Growth portfolio, with a 70% equities/30% bonds risk profile, has gained approximately 8.1% on a preliminary year-to-date basis through June 30, slightly trailing the benchmark by 20 basis points. As noted earlier, we continue to maintain some degree of defensiveness within our equity holdings given the mature stage of the economic cycle and valuation levels, but we are comfortable with a neutral positioning versus our benchmark.

We wish all of our clients and readers a happy, healthy summer.

Bessemer’s Positioning (70/30 Risk Profile with Alternatives)



Positioning as of July 3, 2017. This model displays Bessemer’s Balanced Growth with Hedge Funds and Private Assets target portfolio allocation guidelines. Each client situation is unique and may be subject to special circumstances, including but not limited to greater or less risk tolerance, classes, and concentrations of assets not managed by Bessemer, and investment limitations imposed under applicable governing documents and other limitations that may require adjustments to the suggested allocations. Model asset allocation guidelines may be adjusted from time to time on the basis of the foregoing or other factors. Alternative investments, including Bessemer private equity, real assets, and hedge funds of funds, are not suitable for all clients and are available only to qualified investors.

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