

Hawthorn Global Market Snapshot

Key Market/Economic Observations

United States

Markets Shrug Off Natural Disasters and Geopolitical Risk

- Equity markets reached all-time highs in September, pausing only briefly for North Korean missile launches and two devastating hurricanes.
- Financial markets continue to take cues from economic data indicating synchronized global growth stability with little inflation pressure. Barring a true geopolitical catastrophe or blatant policy misstep, markets tend to move past natural disasters and presumed transient geopolitical tensions fairly quickly.
- That said, the potential market risks may be a bit more worrisome than your run-of-the-mill uncertainties. The tail outcomes (such as a North Korean missile attack) are quite bad, and although unlikely to materialize, markets may react in the short term as some of the more pressing variables take shape.
- The Federal Reserve (Fed):
 - The Fed has announced the initiation of its much-anticipated balance sheet reduction plan. Although the shrinkage of the balance sheet is going to be glacially slow, once it begins it will likely continue.
 - Other central banks around the world, for example, the European Central Bank (ECB), have also indicated a potential change in monetary policy. Motivated by a persistently benign economic backdrop and stable financial markets, many central banks have signaled a change in policy direction.
- U.S. import prices perked up month over month in August, signaling that inflation may begin to firm. In response, markets are now pricing in a 50.6% chance of a rate hike in December, up from 33.8% in August.
- Overall, we believe balance sheet shrinking will have only a small impact on longer-term interest rates and the yield curve is unlikely to steepen significantly. Several studies have indicated the \$3.6 trillion Fed balance sheet expansion compressed longer-term rates by about 1.0%. Therefore, the anticipated \$1.6 trillion reduction should help push rates higher by about 0.44%. Spread over a five-year period, the impact should be minimal.¹ Also, the Fed will likely keep raising rates, and that creates a natural flattening bias to the yield curve.
- Tax Reform:
 - Investors continue to weigh the probability of a successful tax reform effort. But to date, we have seen little concrete progress, and the market does not appear to be pricing in any form of tax cuts or reform. We expect any tangible policy progress to support markets in the short term.
 - The influential “Big Six,” as they have become known, of Paul Ryan, Orrin Hatch, Mitch McConnell, Kevin Brady, Steven Mnuchin, and Gary Cohn, still appear to be far apart on some critical issues related to details of a final tax proposal.

¹ Cornerstone Macro, “Fed Balance Sheet Set to Shrink: Impact on the Yield Curve,” September 19, 2017.

- House Republicans have indicated a plan will be released the week of September 25, but things such as state and local tax deduction and corporate interest expensing are still major sticking points.
 - We believe a framework will be released on schedule, but it may be light on specifics. This is unlikely to inspire confidence that a tax bill will be completed by year end.
 - Our view is that the survival instincts of Republicans as we approach the 2018 mid-term elections will be powerful enough to help encourage a successful effort on taxes at some point late in first-quarter 2018.
 - It is likely a fool's errand to attempt to predict what the final bill will look like (or the timing of such a bill), but we do have conviction it will include some form of a repatriation tax change. Such a tax change could allow companies to repatriate their foreign-sourced profits back to the United States free of tax. In 2005, the last repatriation tax holiday, companies that repatriated the most relative to their size outperformed the S&P 500[®] by four times after the bill was passed.
- We believe the simultaneous rally in both stocks and bonds will likely come to an end as we move toward the end of 2017. Over the past few months, stocks have managed to reach new highs and bond yields have moved lower.
 - Our view is that the U.S. Treasury market will continue to price-out a doomsday scenario with North Korea, and the safe haven flows that compressed interest rates beyond what economic fundamentals would dictate will slowly dissipate. Firmer inflation readings may also give the Fed enough confidence to hike rates again in December, in our view, putting an additional floor under rates moving into year end.
 - We still believe U.S. interest rates will remain somewhat range-bound at historically low levels, but we may not revisit the lows experienced over the summer.

Europe

Inflation Firms and Stocks Rebound from a Difficult Summer

- Eurozone inflation surprised to the upside in August. Eurozone consumer inflation as measured by the benchmark Harmonized Index of Consumer Prices (HICP) rose to 1.5% in year-over-year terms in the August preliminary report from 1.3% in July.
- On the surface, this should encourage the ECB to announce further reductions in its quantitative easing (QE) program. According to the PNC Economics team, the ECB will likely leave benchmark interest rates unchanged and announce asset purchases at a somewhat slower rate than the 60 billion euros in monthly purchases the central bank made between April and December 2017. Purchases of 40 billion euros per month between January and March 2018 would be unsurprising. A benchmark interest rate hike is unlikely in 2018 given the ECB's forward guidance that interest rates will stay at present levels "well beyond the horizon" of when QE ends, according to PNC Economics.
- Interestingly, the ECB also pays very close attention to unit labor costs, which measure labor costs relative to output per worker. The ECB's index of unit labor costs slowed from a 1.0% year-over-year increase in first-quarter 2017 to a 0.9% increase in the second quarter. This will likely be an important talking point during the ECB's October meeting when deciding how much to reduce QE asset purchases.
- We believe that the weakness in European equities throughout the summer was temporary. After a roughly -8.0% correction, European stocks appear to be in the process of bottoming. Notably, Germany's 20-day highs are expanding, which is historically consistent with momentum returning. We also note the continued leadership from Italian stocks as well as the positive response from the European Industrials

sector as positive signs for broad European stocks.²

- We continue to have a favorable longer-term outlook on European equities. Coupled with attractive relative valuations, we believe that after the economic double dip experienced in Europe, the European business cycle is less advanced compared to the United States.
- Our currency view takes into account multiple time horizons:
 - Short term: The euro's recovery to near \$1.20 per U.S. dollar may be more reflective of U.S. uncertainties than European strength. If the United States can get through the next couple of months without any major issues (especially on the political front), we expect the euro's current strength could recede by year end. Further, the dollar relative to the euro has decoupled from what would historically be dictated by the interest rate differential between the two regions. This gap may be closed via a firmer dollar in the near term.
 - Long term: The interest rate differential between the United States and Europe will likely be critical in the longer-term currency equation. Through the 19 years of the euro's life, the Eurozone versus U.S. long bond yield spread has averaged -40 basis points (bps). Over this same period, the Eurozone versus U.S. annual inflation differential has also averaged -40 bps. Therefore, the real interest rate differential has averaged zero, meaning the neutral real interest rates in the Eurozone and the United States have been exactly the same.
 - On this basis, a logical expectation might be that the Eurozone versus U.S. yield spread has the scope to compress much further from its current -130 bps. This means that after a possible near-term retracement, the cyclical and the structural rally in the euro could continue.

China

Growth Still Stable, but Money/Credit Indicators Flash Warning

- Official manufacturing PMI was 51.7 in August compared with 51.4 in the prior month. Data suggest deceleration in economic growth momentum will be marginal in the third quarter.
- Most investors believe the Chinese government is committed to stable economic and financial conditions prior to the national Communist Party congress this fall. Some additional growth pressure is then expected in the fourth quarter, but the deceleration is unlikely to be dramatic.
- That said, other metrics are indicating a more impactful slowdown for broad emerging market (EM) earnings per share (EPS) as we move into the early part of 2018. Chinese money supply growth has a fairly robust track record in helping forecast EM EPS, and all measures of Chinese broad money growth have fallen to near record lows, signifying to us the potential for a major growth slump.³
- Further, China's yield curve may also be signaling weaker PMI data after its recent strength.
- We continue to believe that the gradual tightening of monetary policy seen in China this year will manifest in slower growth and weaker EM share prices. We have already seen the effects on money growth, and our view is that equity markets will react in the coming quarters. This may lead to a better entry point when allocating to this asset class.
- Our long-term perspective for EM equities, however, is much more positive. Even after the extreme recent outperformance, fund manager data suggest investors remain underweight the asset class. This means there is the potential for significant fund flows into EM stocks when this underweight ultimately shifts.⁴

²Strategas Research Partners, *Technical Analysis Report*, September 14, 2017.

³BCA Research, *Emerging Markets Strategy*, September 20, 2017.

⁴Driehaus Capital Management, "The Metamorphosis of Emerging Markets," September 2017.

- We also see a significant valuation benefit in favor of EM equities. On a cyclically adjusted price-to-earnings (PE) ratio, which measures valuation on a multiple of 10-year trailing earnings, developing markets are trading near the historical trough. Conversely, the U.S. cyclically adjusted PE is near the high end of its historical range. On a relative multiples basis, the discount of emerging versus developed is one standard deviation stretched versus history.⁵

Japan

Stocks Make Sharp Move Higher; Yen Takes a Breather

- As we have discussed throughout the year, the yen's persistent strength has been an important headwind to Japanese equities. Year to date through September 8, the yen had strengthened roughly 8.5% versus the dollar. Over the same period, local currency equity returns were relatively muted, at just 4.5% versus over 8.0% for the broad developed international markets.
- From a technical analysis perspective, Japanese stocks have improved. Since the first week of September, the yen has depreciated close to 3.0% versus the dollar, and Japanese equities have increased over 5.0% from recent lows and are now close to a 10-year high.
- Breadth in the market is the strongest in months, with the advance/decline ratio at its highest levels since May. The auto sector has also strengthened, which is important for market momentum given its relatively high weighting in Japan's equity indexes.
- The Bank of Japan (BOJ) is likely to wait some time before tapering its stimulus program, in our view. The BOJ also looks likely to continue buying equities at its current pace through at least year-end 2018. There has been some debate among investors as to the ultimate impact the BOJ

is having on equity market prices, but we feel central bank activity is likely to help support the equity market in Japan as we move into next year.

- The economic backdrop has not changed materially, in our view. We think the 4.0% GDP growth in the second quarter was a clear outlier, especially after being revised down to 2.5%, and the BOJ has acknowledged that growth should track more closely to 2.0%, with an official fiscal 2017 forecast of 1.8%.

Energy

Oil Prices Move Steadily Higher; Energy Sector Stocks Improve

- Oil prices have stabilized, even into a typically weak seasonal period. It is possible that additional discussion among OPEC members to extend current output limits through the end of 2018 has had an impact. The U.S. Energy Information Administration also reported that oil output will rise less than 100,000 barrels per day in October for the first time in seven months.
- West Texas Intermediate crude oil prices are up close to 19% from year-to-date lows, and Energy sector stocks have started to follow. Energy stocks completed their first four-week period of gains this year, up 7.0% from the 2017 low. If oil prices remain at current levels, or continue to move higher, it is likely the Energy sector would continue to recover.
- We also believe the fundamentals of master limited partnerships (MLPs) remain intact, which should serve the asset well. Further, unlike prior selloffs during which MLP credit spreads also widened significantly, the current MLP weakness has not coincided with credit weakness. In fact, this is the first time the MLP equity index has fallen 20% and credit spreads have not widened. Consequently, we believe the 2017 selloff in MLP equities has nothing to do with underlying cash flow problems or deteriorating industry fundamentals.

⁵Ibid.

Hawthorn Strategy Views

How to Turn \$10,000 into over \$500 Million— A Perspective on Bitcoin

If we were to tell you that you could invest \$10,000, and seven years later that investment would be worth over \$555 million, is that something you might be interested in? If the answer is yes, you wouldn't be alone. In fact, there were more Google searches for "Bitcoin" in August and September than for "Donald Trump."⁶ In 2010, Bitcoin traded for \$0.09; a little more than seven years later the price crossed \$5,000, an astounding 5,555,456% gain over that period. Besides the staggering price appreciation, or perhaps because of it, Bitcoin has been front and center in the press over the past few weeks, and we are beginning to field more questions from clients regarding the appropriateness of investing in the digital currency market. For many investors, the fear of missing the next big thing may be even more powerful than the fear of losing money. So is Bitcoin a "fraud," as JPMorgan Chase Chief Executive Officer Jamie Dimon recently claimed, or is it something worth taking more seriously?

Let us start by saying we believe the proper answer to that questions is "we don't know," and for now we will gladly continue our role as passive observers. If one thinks back to the internet initial public offering craze in the mid to

late 1990s, we may find an interesting parallel. Many of the companies that turned public during that period traded for sky-high prices but ultimately were unable to deliver on investors' expectations. We should remember, however, that a large number of the ideas initially brought to the fore during the Tech Bubble eventually proved valid. A problem for investors was picking the right company amid the frenzied speculation. For example, are we investing in Amazon or Pets.com? Truthfully, it is hard to know in advance. Even Pets.com, the quintessential Tech Bubble cautionary tale, had the right idea. In fact, Chewy.com (essentially providing a similar value proposition as Pets.com) was sold to PetSmart recently for \$3.5 billion. In that light, is Bitcoin the next big thing? Perhaps. Will digital currencies change the way individuals and business transact with one another? Certainly a possibility. Is Bitcoin currently trading at a price conducive to a reasonable return considering the risk? Frankly, it's hard to say, but we offer some perspective.

The real question when thinking about something that is almost impossible to analyze in terms of intrinsic value is, how much am I willing to lose? When investing, we believe one must consider not only the reward side of the ledger but also the risk. Bitcoin's massive returns have been accompanied by a number of severe declines (Table 1).

Table 1
Major Corrections in Bitcoin Since 2010

| | <u>Length (# of Days)</u> | <u>% Decline</u> | <u># of Days Until New High</u> |
|-------------------------|---------------------------|------------------|---------------------------------|
| 9/2/2017 to 9/13/2017 | 11 | -25% | ? |
| 6/11/2017 to 7/16/2017 | 35 | -39% | 55 |
| 3/10/2017 to 3/24/2017 | 14 | -33% | 48 |
| 11/30/2013 to 1/14/2015 | 410 | -85% | 1181 |
| 4/10/2013 to 7/7/2013 | 88 | -76% | 211 |
| 6/8/2011 to 11/17/2011 | 162 | -94% | 631 |
| 5/13/2011 to 5/21/2011 | 8 | -34% | 12 |
| 2/10/2011 to 4/4/2011 | 53 | -49% | 66 |
| 11/6/2010 to 11/10/2010 | 4 | -72% | 86 |
| 9/14/2010 to 10/8/2010 | 24 | -94% | 40 |

Source: C. Bilello, *Pensionpartners.com. How Much Bitcoin Are You Willing To Lose? September 13, 2017.*

⁶BCA Research, "Bitcoin's Macro Impact," September 15, 2017.

The major declines highlighted above average about 60%. Will you be able to maintain an allocation to Bitcoin when the next wild swing inevitably occurs? How heavily should your portfolio be weighted to something like this? The answers to these questions are very individual; however, these are some of the basic considerations one must wrestle with before even considering an investment in this type of asset.

Thinking About the Potential Implications of Digital Currencies

The digital currency market is about 2% that of the traditional cash and currency market. This is not a particularly large percentage, but neither is it completely insignificant. For now, digital currencies are being used less as a medium of exchange and more as a store of value. For example, China accounts for a disproportionately large percentage of the overall demand, with Chinese investors searching for “safe” investable assets (real estate, and now Bitcoins).⁷ In that sense, the macroeconomic impact has been somewhat limited. If people began to transact on a larger scale using Bitcoin, central banks would likely need to react by taking some amount of paper currency out of circulation to account for the liquidity uptick via digital currencies. Necessity for such action would depend of the macroeconomic backdrop, most importantly the level of inflation. In an environment such as there is today, we believe central banks may welcome anything that would boost liquidity and inflation.

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Eventually, governments could introduce their own digital currencies, and may be thinking about ways now to do that. Government-sponsored digital currencies are unlikely to retain all the characteristics of today’s digital currencies (for example, full anonymity when transacting). However, many users may not care so much about anonymity while being more concerned with things like security. In 2014, 6% of all outstanding Bitcoins were stolen from the Mt. Gox exchange and the holders had no recourse.⁸ A digital currency with government backing could provide a certain level of security, in our view, helping to make it more attractive as both a store of value and medium of exchange.

Conclusion

Without being experts in the digital currency area, we view the current interest in Bitcoin as more speculation than investing. It is hard to know what the future holds for the digital currency market, and for all we know that future could be bright. However, from where we sit today, we have many more questions than answers, and it is difficult to apply a properly formulated investment and risk management approach to the digital currency market. For now, we will continue to watch from the sidelines. Does that mean we could miss the next 5,000,000% gain? It may. But it also may mean we will miss the next 94% selloff. Without being able to come to a clear conclusion regarding which of those two outcomes is more likely, we will continue to let this market mature before recommending that our clients invest.

⁷ BCA Research, “Bitcoin’s Macro Impact,” September 15, 2017.

⁸ Ibid.

Appendix

Table A1

Equity Market Snapshot (total returns in U.S. dollars; through September 19, 2017)

| | Total Returns | | |
|--|---------------|-----------------|--------------|
| | Month to Date | Quarter to Date | Year to Date |
| S&P 500® | 1.51% | 3.92% | 13.62% |
| Small Cap (Russell 2000) | 2.57% | 2.02% | 7.11% |
| S&P 500 Value | 2.29% | 2.49% | 7.46% |
| S&P 500 Growth | 0.90% | 5.07% | 19.07% |
| S&P 500/Industrials - SEC | 2.43% | 2.64% | 12.40% |
| S&P 500/Consumer Discretionary - SEC | -0.10% | -0.10% | 10.89% |
| S&P 500/Consumer Staples - SEC | 1.19% | 0.69% | 8.78% |
| S&P 500/Health Care -SEC | 1.14% | 3.81% | 20.48% |
| S&P 500/Financials - SEC | 2.71% | 2.79% | 9.87% |
| S&P 500/Real Estate - SEC | -0.56% | 1.77% | 8.29% |
| S&P 500/Information Technology - SEC | 0.66% | 8.67% | 27.39% |
| S&P 500/Telecommunication Services - SEC | 2.00% | 5.21% | -6.09% |
| S&P 500/Utilities - SEC | -0.81% | 4.92% | 14.10% |
| S&P 500/Energy - SEC | 6.68% | 3.68% | -9.40% |
| S&P 500/Materials - SEC | 3.24% | 5.76% | 15.51% |
| MSCI EM (Emerging Markets) | 2.14% | 10.77% | 31.37% |
| MSCI FM Frontier Markets | 1.85% | 7.87% | 25.00% |
| MSCI Europe | 2.97% | 6.14% | 23.04% |
| MSCI China | 3.54% | 17.59% | 46.94% |
| MSCI Japan | 2.09% | 4.11% | 14.63% |

Source: FactSet Research Systems Inc., Hawthorn

Table A2

Fixed Income Market Snapshot (total returns in U.S. dollars; through September 19, 2017)

| | Total Returns | | |
|---|---------------|-----------------|--------------|
| | Month to Date | Quarter to Date | Year to Date |
| Bloomberg Barclays US Aggregate | 0.64% | 0.64% | 2.93% |
| Bloomberg Barclays US Aggregate | -0.34% | 0.99% | 3.28% |
| Bloomberg Barclays Global US Treasury (1-3Y) | -0.09% | 0.32% | 0.79% |
| Bloomberg Barclays US Aggregate Government - Treasury (1-5Y) | -0.20% | 0.44% | 1.24% |
| Bloomberg Barclays US Aggregate Government - Treasury (5-10Y) | -0.69% | 0.93% | 3.08% |
| Bloomberg Barclays US Aggregate Government - Treasury -Intermediate | -0.35% | 0.59% | 1.81% |
| Bloomberg Barclays US Aggregate Government - Treasury -Long | -1.43% | 1.33% | 6.81% |
| Bloomberg Barclays US Treasury Inflation Protected Notes (TIPS) | -0.01% | 1.50% | 2.37% |
| Bloomberg Barclays US Aggregate Credit - Corporate - Investment Grade | -0.27% | 1.23% | 5.08% |
| Bloomberg Barclays US High Yield - Corporate | 0.56% | 1.63% | 6.64% |
| Bloomberg Barclays US Floating Rate Notes Corporates | 0.10% | 0.47% | 1.74% |
| S&P Municipal Bond InvestmentGrade | -0.11% | 1.35% | 4.56% |
| S&P Municipal Bond High Yield | 0.03% | 1.36% | 5.76% |
| GS Commodity Index | 1.79% | 5.63% | -5.19% |
| Alerian MLP | 0.15% | -3.57% | -6.13% |

Source: FactSet Research Systems Inc., Hawthorn

Table A3

F/X Market Snapshot (through September 19, 2017)

| <u>Major Currencies</u> | <u>Current</u> | <u>1 Month Earlier</u> | <u>3 Months Earlier</u> |
|-------------------------------|----------------|------------------------|-------------------------|
| Euro/U.S. Dollar | 1.20 | 1.18 | 1.12 |
| Australian Dollar/U.S. Dollar | 0.80 | 0.79 | 0.76 |
| Pound/U.S. Dollar | 1.35 | 1.29 | 1.28 |
| U.S. Dollar/Yen | 111.48 | 108.81 | 111.28 |

Source: FactSet Research Systems Inc., Hawthorn

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