

Hawthorn Global Market Snapshot

Key Market/Economic Observations

United States

Markets Focus on the Positive

- For financial markets, we believe progress toward tax reform may be the most critical element of President Donald Trump's policy agenda.
- U.S. stocks received another injection of optimism after the president said a "massive tax plan" would be unveiled in the near future. In reaction to his comments, the S&P 500® added another 2.5% after trading mostly sideways since mid-December.
- Equity markets continue to exhibit signs of a so-called "confirmation bias" toward information that helps support the policy optimism that has already been priced into financial assets. News that could be interpreted as more troublesome for markets (for example, headlines regarding trade, immigration, policy timing), in our view, has been largely dismissed.
- In our opinion, we will likely see something concrete with regards to tax policy late in 2017, but there are no shortage of road blocks, including the complexity of Obamacare repeal/replace, concerns regarding the deficit, and border adjustment negotiations.
- It is also possible investors are giving more credit to what is going on outside of Washington, D.C., as an explanation for at least some of the market's recent strength, which seems justified in our view.
 - Retail sales data, investor/business confidence measures, and PMI surveys all indicate the economy remains on stable footing.
 - Earnings data for fourth-quarter 2016 have been better than expected. According to FactSet Research Systems Inc., blended earnings per share growth is 4.6%, ahead of expectations of 3.1%.
- In the near term, we believe equity market momentum can continue to the upside, but the path is likely to be bumpy. The S&P 500 has not seen a 1% decline since October 2016 (71 trading days). Although far from the record of 184 days set in the mid-1960s, it is the longest such streak since the financial crisis, and bullish investor sentiment is likely a near-term risk.
- Our macro-economic analysis continues to indicate a moderation of positive data, with the effects of tighter policy, higher energy prices, and a stronger dollar filtering through the economy. That said, we also believe that from a longer-term perspective we could be years away from a recession.
- With equity valuations extended, earnings will be critical to sustained price appreciation in the broad market this year, especially if interest rates drift higher. Our view is that the earnings environment is relatively favorable compared to recent years, but Street expectations are probably still too high, and the impact of tax policy is uncertain in terms of both magnitude and timing.
- Even with consensus estimates for S&P 500 earnings projecting a 20% increase (\$108 in 2016 versus estimates of \$131 in 2017), forward price-to-earnings multiples are still above average (17.9x versus an average of about 14x). This may cap upside for the year, although we believe modestly positive returns are likely.
- In fixed income, credit spreads continue to trend lower (a positive sign for overall market conditions), although the pace has moderated. We continue to believe 2017 will be a healthy year for credit markets; however, the ability for tighter spreads to offset a potential increase in interest rates is now somewhat reduced. We still think interest rates could remain range bound in the near term.

Europe

Positive Economic Data amid Election Uncertainty

- February flash composite PMI data hit a 70-month high in the Eurozone. Within the report, employment data, new orders, and optimism readings all indicated positive economic momentum.
- Our view is that although economic data appear to be on solid ground, the European Central Bank will be slow to make any changes to policy amid a number of key elections as well as initial Brexit negotiations.
- Recent reports indicate that the Brexit negotiator for the European Union prefers to reach an agreement on the exit bill before addressing critical elements related to trade. We believe this may prolong uncertainty related to the ultimate economic impact of the final agreement.
- A survey of some of Britain's largest companies indicated that 58% of senior executives felt that Brexit was already having a negative effect on their businesses.¹ That said, the vast majority of companies felt confident they will be able to successfully adapt to the post-Brexit paradigm.
- Our view continues to be that developed international markets offer a better value than the United States in terms of policy accommodation, valuation, and potential for expansion in profit margins. From a price perspective, since European stocks peaked in June 2007, they are down roughly 30% in dollar terms. The S&P 500 is up over 49% over the same period.
- That said, we believe political developments throughout the year could prevent European equities from outperforming. Our base case is that populist parties do not take control across Europe, but we believe markets may find it hard to make significant progress until the political landscape becomes more certain.

- From a currency perspective, we view hedged exposure as still favorable, but we maintain both hedged and unhedged exposures in our portfolios. Although the dollar likely will not appreciate to the extent it did toward the end of 2016, it is hard to make the case that it will weaken dramatically versus other major currencies. Although President Trump and some cabinet members have tried to talk down the dollar in recent weeks, actual policy proposals are dollar-bullish: policies on trade, the potential for boarder adjustability, and interest rate hikes are examples.

China

Chinese Exports Prove Resilient; Foreign Currency Reserves Fall

- Amid worrisome headlines related to potentially disruptive U.S. trade policies, Chinese exports beat expectations in January.
- Exports to the United States jumped 9%, reflecting better U.S. economic data and stronger demand.
- Manufacturing PMI data also outpaced expectations in January, which we view as additional evidence of economic stability.
- Chinese policy makers, and the Chinese economy, still face a number of challenges.
- We believe Chinese data have been bolstered by government stimulus measures that are now being withdrawn: government spending has slowed, the central bank has tightened policy, a higher auto sales tax has been implemented, and mortgage lending standards have tightened.²
- China also continues to battle between reducing its foreign exchange (FX) reserves versus allowing the yuan to depreciate further, which would likely risk additional capital outflows.
- In January, China's FX reserves fell below \$3 trillion (to \$2.998 trillion) for the first time since 2011. We believe China will only be able to

¹ Ipsos Mori survey, *Financial Times*, "Business Leaders Say Brexit Already Having Negative Effect" (February 5, 2017).

² Nancy Lazar, Cornerstone Macro Economic Research (February 17, 2017).

manage its exchange rate policy if policy makers are willing to allow currency reserves to fall further.

- Over the long run, a free floating currency could be a positive development, resulting in an improvement in net exports, an influx of foreign investment, higher inflation, and therefore a reduction in real debt service.
- However, we believe a free-floating yuan would be painful for the global economy in the short run, increasing financial market volatility, placing significant pressure on commodity demand and prices, and adding to global deflationary pressures.³
- We continue to identify the yuan as a key tail risk to the global economy.

Japan

Domestic Demand the Key to Unlocking Sustainable Growth

- With the consensus GDP growth forecast to be about 1.0% for 2017, exports have been a primary growth driver.
- Although there was a slowdown in exports during January, many economists believe external demand will remain strong enough to sustain moderate export growth.
- Consumer demand within Japan continues to be weak, with wages rising only slightly despite a tight labor market.
- Our view is that without wage growth and stronger internal demand, it will be difficult for the Japanese economy to accelerate much past current growth levels.
- Japanese equities are flat this year, as the yen has stopped depreciating versus the dollar. We continue to believe that Japanese fundamentals remain challenged, but U.S./Japan interest rate differentials should ultimately promote a weaker yen, which would likely support Japanese share prices.

Energy

Prices Remain Flat as Gasoline Glut Creates Demand Concerns

- Crude oil prices have remained flat near the \$54 per barrel level for most of 2017 so far.
- According to the U.S. Energy Information Administration (EIA), storage levels jumped to 259 million barrels as of February 15, the highest on record dating back to 1990.
- January gasoline consumption was near a 15-year low, per the EIA, leaving analysts concerned that weak demand could significantly affect oil prices.
- We think it possible the dip in demand was temporary, but the risk is that it is reflective of a more persistent trend.
- With many asset managers positioned for rising oil prices, a shift in sentiment could lead to a swift move in prices.
- Our view is that prices remain constrained but not substantially below current levels. If prices were to move sharply lower, concerns about credit markets, earnings, and emerging markets would likely again become front-page news.

Hawthorn Strategy Views

Looking into the Future of Hedge Funds: A Long-Term View

It has become fashionable (and rightly so) for many of our clients to challenge the assumption that hedge funds still command a place in diversified portfolios. After all, underperformance has become the rule rather than the exception. According to Strategas Research Partners, hedge funds have, on average, underperformed the S&P 500 every year since 2009. Consistent underperformance coupled with relatively high costs is not a sustainable model. So why do we think alternative investments still make sense?

³ PNC Economics, "Chinese Foreign Reserves Drop Under \$3 Trillion in January to Lowest Since Feb 2011; Yuan Free Float Is China's Most Immediate Tail Risk to the Global Economic Outlook in 2017" (February 7, 2017).

General Asset Allocation Considerations

It is important to understand the purpose of owning alternative investments within a diversified asset allocation. Perhaps most importantly, we believe hedge fund strategies can offer a way to mitigate overall portfolio volatility with a potentially lower opportunity cost than fixed income. In reality, with a 25-year or more investment horizon (typical for many investors), it almost never makes sense to own anything other than equities from a wealth creation standpoint. According to analysis conducted by the PNC Investment Advisor Research group, there are only 10 months in the past 140 years in which a person who invested in bonds instead of stocks would have come out ahead over the following 25-year period. The average advantage for the stock portfolio was over \$36,000 on an original \$10,000 investment—a big number.

So why, then, would investors with a 25-year time horizon ever choose anything other than stocks? Stocks may be “risky” in the short term, but over the typical investment horizon an all-equity portfolio nearly always maximizes wealth. The primary issue with a portfolio of 100% equities is the inevitability of having to experience some very nervous moments. A family who started a trust in October 2007 with \$100 million and a 4% constant spending rate (that is, the family drew \$4 million per year to cover spending and taxes, adjusted for inflation only) would have had less than \$50 million in February 2009—half of what they had less than a year and a half into investing! Over this same period, introducing a diversified portfolio of 65% stocks and 35% bonds would have greatly mitigated losses in the portfolio (Chart 1).⁴

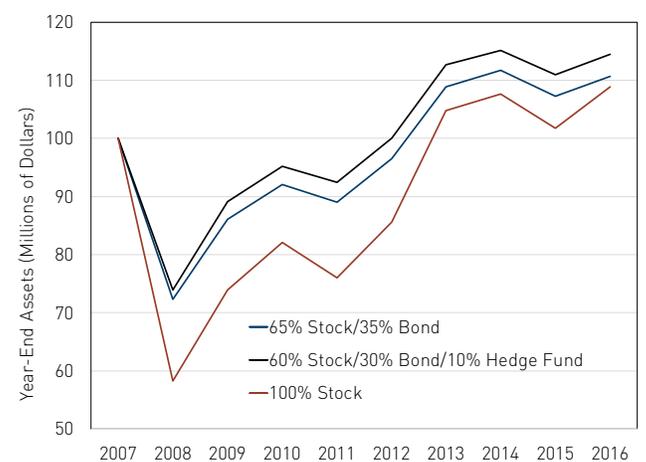
Notice that adding hedge funds, even including some “high risk” funds which had significant losses in 2008, helped reduce the “opportunity” cost of adding stabilizers to the portfolio. This may be even timelier given the level of fixed income valuations. To be clear, the all-equity portfolio will likely outpace both diversified options over time (and just recently started outpacing the 2007 stock/bond

portfolio in early 2017), but using hedge funds within a diversified asset allocation has the ability to reduce the long-term diversification drag on returns.

The Current Environment

From 1990 through 2008, hedge funds outperformed the S&P 500 63% of the time. What changed after the financial crisis? We believe a critical variable that has affected active managers’ ability to outperform is the compression of interest rates and, in turn, the cost of capital across the corporate credit spectrum. The cost of capital for a company is at the bedrock of what allows good businesses to operate more efficiently, and the manipulation of market interest rates has made it much easier for less attractive businesses to enjoy the funding benefits typically reserved for top-tier corporations. Within such an environment, it has been more difficult for active managers (and, in this case, specifically hedge funds) to do what they do best, that is, identify specific characteristics that will enable certain companies to outperform. As correlations between stocks fall and interest rate

Chart 1
Effect of a Diversified Portfolio of 65% Stocks and 35% Bonds



Source: PNC Investment Advisor Research

⁴ Source: PNC Investment Advisor Research. Typical 65/35 diversified stock/bond portfolio (including allocations to mid cap, small cap, and international stocks along with intermediate municipal bonds); a portfolio with a 10% allocation to hedge funds, 60% diversified equity, and 30% bonds; 100% diversified equity portfolio.

policy slowly normalizes, we believe the environment for hedge funds will become more attractive.

Also, when thinking about valuations and volatility, our view is that the environment for hedge funds will improve. We believe stock market valuations in the United States are generally extended. History tells us that when that is the case, longer-term forward volatility tends to be higher, maximum drawdowns tend to be higher, and average annual returns tend to be lower (Chart 2).⁵ Timing these outcomes is anyone's guess since market mispricing can persist for years, but over the longer term we expect the risk/reward in U.S. stocks to be generally tilted toward risk from current levels.

Based on our Capital Market Assumptions of expected return and volatility for the next 10 years, the Sharpe ratio (return expected per unit of volatility) is slightly better on average for hedge funds compared to equities. Adding in other alternatives such as private debt, equity, and real estate further improves the ratio.

Our view is that the risk to our volatility assumptions is to the upside, meaning we believe it is likely we get more volatility versus our assumptions than less. As such, the environment may prove to be more constructive for hedge funds that correlate less to the overall market and are able to employ strategies that are agnostic to market direction or can specifically capitalize during unsettled markets.

It may just be that investors are abandoning hedge funds, and active management in general, at precisely the wrong time.

Chart 2
Extended Stock Market Valuations

		S&P 500 Average Forward Volatility (1928 - 2016)									
Valuation Percentile	CAPE Ratio	1-Yr	2-Yr	3-Yr	4-Year	5-Year	6-Year	7-Year	8-Year	9-Year	10-Year
0-10%	5.57 to 9.68	21.8%	20.2%	18.9%	18.4%	18.1%	18.5%	18.7%	18.7%	18.6%	18.3%
10-20%	9.69 to 11.22	15.1%	14.9%	15.0%	15.8%	15.9%	15.8%	15.6%	15.5%	15.2%	15.0%
20-30%	11.23 to 12.67	15.8%	15.7%	15.7%	16.3%	16.5%	16.3%	16.0%	15.6%	15.4%	15.2%
30-40%	12.68 to 14.98	15.8%	15.7%	15.7%	16.3%	16.5%	16.3%	16.0%	15.6%	15.4%	15.2%
40-50%	14.99 to 17.03	18.2%	18.2%	17.8%	17.3%	17.5%	16.9%	16.5%	16.1%	15.9%	15.8%
50-60%	17.04 to 18.84	14.8%	15.6%	16.3%	15.9%	15.4%	15.1%	15.1%	15.2%	15.1%	15.2%
60-70%	18.85 to 21.03	12.8%	13.7%	13.4%	13.7%	14.2%	14.9%	15.4%	15.7%	15.9%	15.8%
70-80%	21.03 to 22.21	14.0%	15.7%	16.7%	17.1%	17.7%	18.2%	18.7%	18.9%	18.9%	18.8%
80-90%	22.22 to 26.40	11.8%	13.4%	15.7%	17.4%	18.0%	18.3%	18.2%	17.7%	17.4%	17.5%
90-100%	26.41 to 44.20	17.1%	18.0%	18.8%	19.7%	19.5%	18.6%	18.0%	17.7%	17.7%	17.8%
All	All	16.2%	16.6%	16.9%	17.0%	17.0%	16.9%	16.8%	16.7%	16.6%	16.5%

		S&P 500 Average Forward Returns (Annualized, 1928 - 2016)									
Valuation Percentile	CAPE Ratio	1-Yr	2-Yr	3-Yr	4-Year	5-Year	6-Year	7-Year	8-Year	9-Year	10-Year
0-10%	5.57 to 9.68	25.6%	20.1%	19.4%	19.6%	18.3%	16.8%	16.7%	16.4%	16.1%	15.6%
10-20%	9.69 to 11.22	19.2%	20.7%	17.5%	16.7%	15.9%	16.7%	16.7%	16.8%	16.5%	16.2%
20-30%	11.23 to 12.67	15.3%	16.7%	15.6%	15.6%	15.0%	14.4%	14.5%	14.8%	14.6%	14.8%
30-40%	12.68 to 14.98	15.6%	13.1%	13.1%	11.1%	12.0%	12.2%	12.1%	11.7%	12.3%	13.3%
40-50%	14.99 to 17.03	3.4%	8.1%	8.1%	7.6%	9.3%	10.4%	10.6%	10.3%	11.3%	11.8%
50-60%	17.04 to 18.84	6.4%	5.1%	6.9%	7.7%	8.4%	9.2%	9.5%	10.5%	10.8%	10.1%
60-70%	18.85 to 21.03	10.7%	11.2%	12.6%	13.1%	13.7%	13.6%	12.1%	10.7%	9.3%	8.6%
70-80%	21.03 to 22.21	8.2%	8.5%	7.6%	7.7%	7.4%	5.5%	5.4%	4.9%	5.0%	4.7%
80-90%	22.22 to 26.40	7.9%	8.0%	7.8%	7.8%	6.1%	4.8%	4.9%	5.9%	5.9%	6.3%
90-100%	26.41 to 44.20	3.0%	0.9%	0.5%	0.0%	0.1%	1.5%	2.6%	3.0%	3.0%	3.1%

		S&P 500 Average Forward Maximum Loss (1928 - 2016)									
Valuation Percentile	CAPE Ratio	1-Yr	2-Yr	3-Yr	4-Year	5-Year	6-Year	7-Year	8-Year	9-Year	10-Year
0-10%	5.57 to 9.68	-4.1%	-4.5%	-4.5%	-4.5%	-4.5%	-4.5%	-4.5%	-4.5%	-4.5%	-4.5%
10-20%	9.69 to 11.22	-3.6%	-3.6%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%	-3.7%
20-30%	11.23 to 12.67	-3.7%	-4.0%	-4.7%	-4.8%	-4.8%	-4.8%	-4.8%	-4.8%	-4.8%	-4.8%
30-40%	12.68 to 14.98	-6.5%	-8.3%	-9.1%	-9.5%	-9.7%	-9.7%	-9.7%	-9.9%	-9.9%	-9.9%
40-50%	14.99 to 17.03	-12.7%	-15.5%	-17.4%	-18.9%	-18.9%	-18.9%	-18.9%	-19.9%	-19.7%	-19.7%
50-60%	17.04 to 18.84	-6.0%	-11.1%	-13.7%	-15.0%	-15.2%	-15.2%	-15.2%	-15.6%	-15.6%	-15.6%
60-70%	18.85 to 21.03	-4.8%	-7.3%	-8.2%	-9.4%	-10.2%	-10.7%	-11.2%	-11.6%	-10.9%	-10.9%
70-80%	21.03 to 22.21	-8.1%	-13.0%	-16.0%	-19.0%	-20.8%	-21.9%	-23.0%	-23.0%	-22.2%	-22.2%
80-90%	22.22 to 26.40	-5.4%	-9.2%	-15.6%	-22.3%	-24.4%	-26.1%	-26.3%	-26.3%	-25.0%	-23.9%
90-100%	26.41 to 44.20	-9.0%	-18.9%	-26.8%	-30.3%	-32.8%	-33.3%	-33.3%	-33.3%	-33.3%	-32.4%

Source: Pension Partners

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⁵ Pension Partners

February 2017

Appendix

Table 1: Equity Market Snapshot

(total returns in U.S. dollars; through February 21, 2017)

	<u>Month to Date</u>	<u>Total Returns Quarter to Date</u>	<u>Year to Date</u>
S&P 500®	3.98%	5.96%	5.96%
Small Cap (Russell 2000)	3.63%	4.04%	4.04%
S&P 500 Value	3.93%	4.62%	4.62%
S&P 500 Growth	4.03%	7.14%	7.14%
S&P 500/Industrials-SEC	4.41%	5.88%	5.88%
S&P 500/Consumer Discretionary-SEC	2.77%	7.12%	7.12%
S&P 500/Consumer Staples-SEC	4.71%	6.44%	6.44%
S&P 500/Health Care-SEC	5.10%	7.46%	7.46%
S&P 500/Financials-SEC	5.50%	5.75%	5.75%
S&P 500/Real Estate-SEC	3.60%	3.54%	3.54%
S&P 500/Information Technology-SEC	5.34%	9.99%	9.99%
S&P 500/Telecommunication Services-SEC	-0.46%	-2.92%	-2.92%
S&P 500/Utilities-SEC	1.88%	3.15%	3.15%
S&P 500/Energy-SEC	-0.87%	-4.43%	-4.43%
S&P 500/Materials-SEC	1.03%	5.72%	5.72%
MSCI EM (Emerging Markets)	4.07%	9.77%	9.77%
MSCI FM Frontier Markets	0.67%	7.37%	7.37%
MSCI Europe	1.14%	3.25%	3.25%
MSCI China	4.53%	11.63%	11.63%
MSCI Japan	0.95%	4.71%	4.71%

Source: FactSet Research Systems Inc., Hawthorn

Table 2: Fixed Income Market Snapshot

(total returns in U.S. dollars; through February 21, 2017)

	<u>Month to Date</u>	<u>Total Returns Quarter to Date</u>	<u>Year to Date</u>
<u>Bloomberg Barclays US Aggregate</u>	0.23%	0.43%	0.43%
Bloomberg Barclays Global US Treasury (1-3 Y)	0.06%	0.19%	0.19%
Bloomberg Barclays US Aggregate Government - Treasury (1-5 Y)	0.07%	0.25%	0.25%
Bloomberg Barclays US Aggregate Government - Treasury (5-10 Y)	0.21%	0.44%	0.44%
Bloomberg Barclays US Aggregate Government - Treasury - Inter.	0.11%	0.31%	0.31%
Bloomberg Barclays US Aggregate Government - Treasury - Long	0.31%	0.71%	0.71%
<u>Bloomberg Barclays US Treasury Inflation Protected Notes (TIPS)</u>	0.01%	0.85%	0.85%
Bloomberg Barclays US Aggregate Credit-Corp-Investment Grade	0.41%	0.72%	0.72%
<u>Bloomberg Barclays US High Yield - Corporate</u>	0.96%	2.42%	2.42%
<u>Bloomberg Barclays US Floating Rate Notes Corporates</u>	0.21%	0.43%	0.43%
S&P Municipal Bond Investment Grade	0.18%	0.66%	0.66%
<u>S&P Municipal Bond High Yield</u>	1.36%	2.54%	2.54%
GS Commodity Index	0.79%	-0.63%	-0.63%
Alerian MLP	2.97%	8.01%	8.01%

Source: FactSet Research Systems Inc., Hawthorn

Table 3: F/X Market Snapshot
(through February 21, 2017)

<u>Major Currencies</u>	<u>Current</u>	<u>1 Month Earlier</u>	<u>3 Months Earlier</u>
Euro/U.S. Dollar	1.05	1.07	1.06
Australian Dollar/U.S. Dollar	0.77	0.75	0.74
British Pound/U.S. Dollar	1.25	1.23	1.25
U.S. Dollar/Japanese Yen	113.65	115.06	110.92

Source: FactSet Research Systems Inc., Hawthorn

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