4Q15 REVIEW & 2015 OUTLOOK

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2016 MARKET SUMMARY: 75% Bull Continues; 25% Start of Bear Market

Similar economic factors are currently impacting 2016 as they did in 2015, but we believe the results will be more extreme. Oil prices and the movement of the dollar are likely to be the most important macro drivers of the market this year. We believe the 5% decline in U.S. equities in January, represents a market trying to 1) re-price the expectation that market risk and volatility will be higher in 2016 via lower Price/Earnings multiples for stocks and 2) determine whether current 2016 earnings estimates need to be adjusted downward to reflect a strengthening dollar, falling oil, and rising interest rates. We are currently placing a 75% probability that oil, the dollar, and equity markets stabilize in 2016 and the Bull market continues. We see a 25% probability that oil/dollar concerns push markets another 10%+ lower into Bear market territory (S&P 500 <1708, represents a 20% decline from the May 20 market peak of 2135). In our opinion, current U.S. economic data and the structure of interest rates do not support a bear market scenario this year.

Table 1

	2014	2015		Comments
S&P 500	13.7%	1.38%	0% – +5%	Volatile oil prices and a rising dollar caused markets to fall 7% in the first three trading weeks of 2016. Nevertheless, corpoarte earnings have already been revised downward prior to the correction. We believe the market has a 75% chance of recovering as earnings are revised upward in 1H16, except for energy and materials. Corporate fundamentals should slow in second half, which may result in negative revisions later in the year. As a result we forecast the S&P 500 could finish in a range from 2000 – 2110 for a total return of 0% to +5% in 2016. We place 25% chance the market finishes in bear territory in 2016 (S&P 500 <1708).
Barclays Bond Aggregate	5.7%	0.55%	0% – 3%	Bond valuations are stretched, but the ECB, Japan and China must stimulate to fight deflation and reach policy targets. Meanwhile, the Fed may continue on a path of raising rates with two 0.25% increases expected in 2016.
Volatility/ Risk	Low	Above Average	High	We expect volatility with a higher frequency in 2016, with possibly larger magnitudes in market swings. Assuming oil prices stabilize in 1H16, we expect more swings in the second half due to deteriorating fundamentals and the political calendar. We think there is a higher probability of unexpected geopolitical swings associated with ISIS, oil and the U.S. President election in 2016.
Source: Commonwealth Bank & Trust				

2015 REVIEW

As expected, 2015 was the most volatile year since 2011. In the third quarter, the S&P 500 fell 12.5% from a record intra-day high of 2135 on May 20. Markets remained volatile in September after the Fed failed to give anxious markets a vote of confidence by launching a program to raise the Fed Funds rate. After Fed Chair Yellen assured investors that the economy was strong and the Fed would raise rates before year end, the S&P 500 rebounded 7.03% in the fourth quarter (after losing -6.43% in 3Q15) to deliver a 1.38% return to investors for 2015. With the threat of higher rates, fixed income investors were not able to escape volatility or reap reasonable returns in the bond market as the Barclays Bond Aggregate delivered a 0.55% return for 2015. Although stock and bond returns were positive in 2015, the price of each index fell below its closing price at the end of 2014 and relied on dividend and interest income to avoid a loss. A 50/50 stock/bond portfolio barely kept ahead of "headline" inflation, generating a return of 0.97% vs. 0.86% for inflation, which was only so due to falling oil prices. In addition, 2015 was a rare year when diversification hurt portfolios. Most asset classes except domestic large cap stocks and core bonds lost money in 2015.

Table 2

Index Returns ending 12/31/15	4Q15	2015
S&P 500	7.03%	1.38%
Russell 2000 (Small Cap)	3.59%	-4.41%
MSCI EAFE (International)	4.75%	-0.39%
MSCI EME (Emerging Markets)	0.73%	-14.60%
Barclay's Bond Aggregate	-0.57%	0.55%
Oil bbl. Price Change	-17.85%	-29.75%

Global Stock Markets: As volatile as U.S. equity markets were during 2015, international equity markets fared worse. The global MSCI EAFE index fell over 10% in 3Q15, but recovered to return

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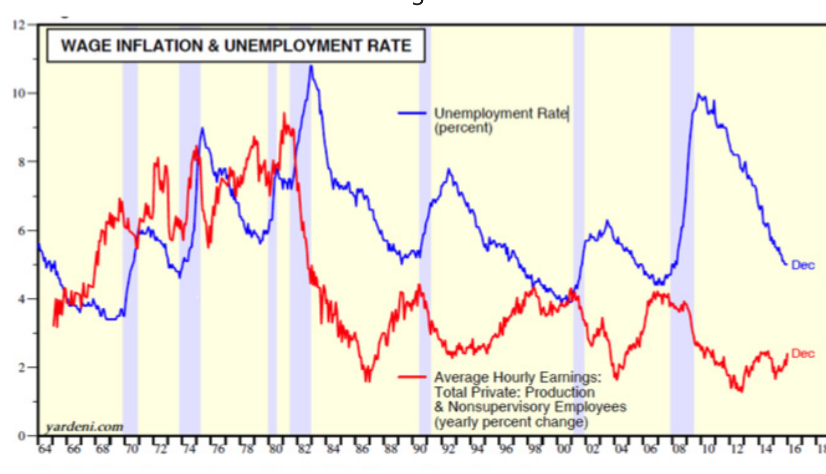
just a slight loss (-0.39%) for the year. The MSCI Emerging Market index remained in the red throughout 2015 finishing the year down almost 15%. Over the last twelve months many commodity-based EM currencies have fallen 30%+ against the U.S. dollar. Plummeting oil and metal prices heightened concerns that an EM country could face a currency crisis or default on its debts. We believe markets overestimated problems in China last summer due to gyrations of the Shanghai stock market. While China's economy may be stable, markets remain concerned that its slowing growth and waning demand for commodities will result in a crisis for an EM country dependent on exporting commodities to China.

Interest Rates: Although the Barclays Aggregate Bond Index delivered an anemic 0.55% return, its moves were mostly counter-correlated the stock market, helping investors in the third quarter by rallying 1.25% as the S&P 500 fell 6.43%. The bond index ended the first half of 2015 roughly flat, when the S&P 500 was up about 1%, but the index lost 0.6% as the S&P 500 rallied 7.0% in 4Q15. A Fed Funds rate increase from a range of 0.00%-0.25% to 0.25%-0.50% on December 16, sent the index lower at the end of the year. The bond market exhibited range-bound volatility as the 10-year Treasury yield fluctuated between 1.90% and 2.50% several times in 2015.

2016 ECONOMIC OUTLOOK

U.S. GDP growth was also volatile in 2015. GDP fell to 0.6% in the first quarter after being impacted by winter storms. In the second quarter, growth rebounded and GDP increased 3.9% before falling back to 2.1% in the third quarter. It is expected fall below 1.0% in 4Q15, resulting in a 2.4% estimated increase for the full year 2015, which is much slower than the 3.0%+ growth forecast at the beginning of the year. We expect the U.S. economy to grow 2.3% in 2016, a little below the 2.5% consensus estimate. The IMF forecasts 2016 global growth to accelerate to 3.4%, an improvement over the 2015 growth estimate of 3.1%.

Figure 1



Note: Shaded areas denote ressions according to the National Bureau of Economic Research
Source:: U.S Department of Labor, Bureau of Labor Statistics.

Despite the volatility, most leading economic indicators in 2015 remain healthier than their five-year average from 2010 to 2014. Many economic indicators in 2015, however, were weaker year-on-year. For instance, the U.S. economy added an average of 221,000 jobs per month in 2015, which is about 15% fewer than the 260,000 average added in 2014. Nevertheless, monthly job additions remained 21% higher than the average rate of post-crisis monthly job additions (182,000 per month) for the prior five years. Wages are growing around the 2% level, but this remains below pre-crisis levels and the Fed's target for 3%-4% growth. After months of concern over deflation, the U.S. economy finally reached the threshold where core inflation exceeded the 2.0% Fed inflation target in 4Q15 [Note: "headline" inflation was 0.9% and includes the impact of a large drop in oil prices in 2015, while the 2.1% "core" inflation number excludes the impact of volatile oil and food prices]. Consumer sentiment and other leading economic indicators remain strong, while the manufacturing Purchasing Managers Indices (PMIs) are slipping. Overall the U.S. economy is healthier than it was in 2010, 2011, 2012 and 2013, when the stock market was posting large gains, but it is showing signs of deceleration versus 2014. We believe we are in the 7th or 8th inning of the business cycle based on fundamental and economic indicators. The big question for markets is whether Central Bank QE and stimulus efforts in China, Europe and Japan will be enough to let the U.S. business cycle wind down in 2017 or 2018 naturally as fundamentals suggest (soft landing), or will the cycle end abruptly (hard landing) as markets lose faith in monetary policy?

2015-2016 MARKET OUTLOOK

We see similar economic factors impacting 2016 as we did in 2015, but we believe the results will be more extreme. In 2015 we identified four variables that would have the greatest impact on markets: 1) the Dollar vs. Euro Exchange Rate, 2) an expected Fed Rate Increase, 3) Oil Prices, and 4) the Chinese Economy/Shanghai Stock Market. Of these variables, we think the market will

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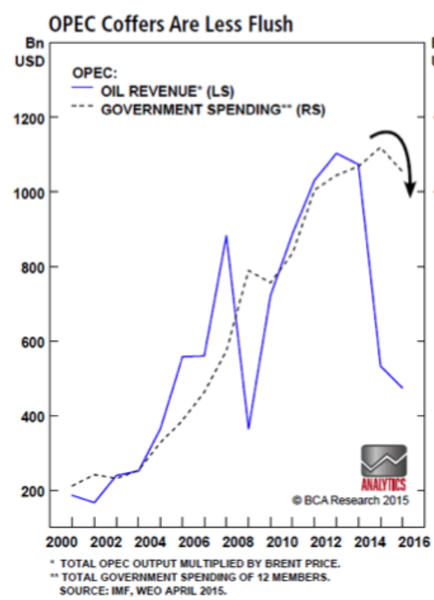
be mostly impacted by oil prices and the dollar in 2016. We believe China warrants close monitoring not so much for moves in the Shanghai markets or a change in expectations over its GDP growth rate, but for its secretive moves to let the Yuan drift lower, creating further pressure on the dollar in 2016.

Figure 2

U.S. Dollar: The rise of the Dollar against other currencies continues to weigh on domestic corporate earnings as cheaper currencies make dollar denominated goods more expensive. U.S. multi-nationals have lost sales to substitute local goods, lowering earnings for U.S. companies to the benefit of foreign exporters and economies. Three major factors are causing the dollar to rise: 1) U.S. GDP growth vs. the GDP growth of other countries, 2) U.S. interest rates vs. the interest rates of other countries, and 3) oil prices.

1. **Relative GDP Growth Rates**: If the growth of the U.S. economy, and consequently its companies, is better than the growth of foreign economies and foreign companies, investors will sell companies denominated in their local currencies and buy companies denominated in dollars.
2. **Relative Interest Rates**: The Fed Funds rate increase from a range of 0.00%-0.25% to 0.25%-0.50% on December 16 caused the dollar to increase incrementally as investors overseas bought U.S. bonds with higher coupons. Furthermore, QE and stimulus programs announced by the EU, China and Japan in early 2016 pushed local interest rates lower, causing additional upward pressure on the dollar.
3. **Oil Prices**: As oil continues to drop, the dollar increases relative to prior levels. For example, in 2014 when U.S. oil importers bought oil from the French oil exporter, Total, for $100 per barrel, $100 of U.S. currency was sold and $100 of Euros were bought – the dollar fell a little and the Euro increased a little. In late 2015, when oil was bought from Total for $30 per barrel, only $30 are sold and only $30 worth of Euros bought. The dollar does not fall as much and the Euro does not rise as much as the prior year. For about every 10% that oil prices fall, the dollar rises about 3%.
4. **Oil**: Oil supplies are at an all-time high and we do not see a material reduction in supply in the near future. We believe that the fundamental economic laws of supply and demand are being over-ridden by short-term geopolitics and behavioral economics. Saudi Arabia has the lowest cost to pump oil at an estimated $10 per barrel and it refuses to relinquish its 9%-10% market share of global oil, so it keeps pumping even as the price falls. Oil companies and countries with large debts – Russia, Brazil, and Venezuela – need to pump at any price to make their debt payments, so they continue to push oil supply onto the market, driving prices lower. History tells us that the pumping will eventually slow to meet demand, but it could take several months to a few years to reach equilibrium. The linch pin, Saudi Arabia, is financially stressed because the high costs of its social programs require $70-$90 oil to maintain a balanced budget. As a result, the country has redeemed foreign investments, floated more debt and is considering selling assets, such as the stock of state-owned oil giant, Aramco. After reported redemptions of stock and bond holdings by Saudi Arabia's Sovereign Wealth Fund in October and comments made at the World Economic Forum in Davos in January, we suspect that much of the rout in global markets year-to-date may be related to selling by the secretive Sovereign Wealth Funds (SWFs) of oil nations. The top 25 SWFs control roughly $6.0T in investments. Almost $4.0T or 2/3 of these funds represent the investments of oil and commodity based economies, which

Figure 3



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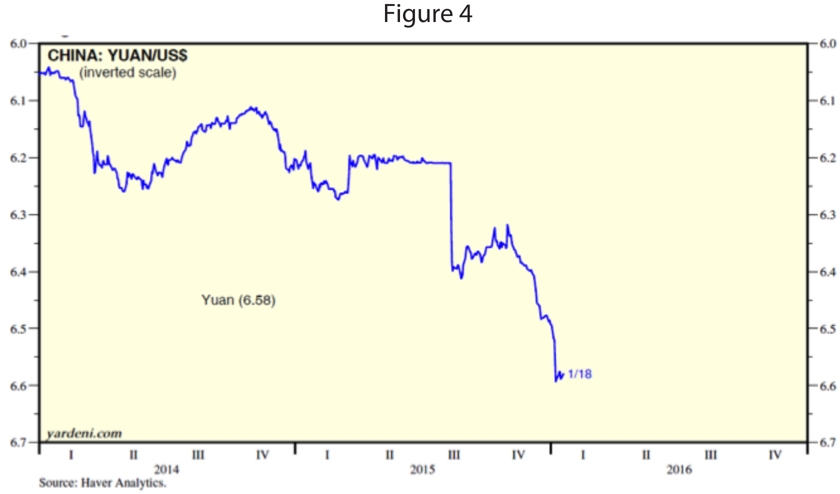
may need to withdraw funds to shore up local currencies and fund fiscal deficits. Unfortunately, information about these flows are protected by tight confidentiality agreements between the SWFs and the trading desks and/or investment managers that handle these funds. It may be some time before we can confirm our hypothesis that SWF action is leading the downturn in January 2016.

Figure 4



5. **China**: The Shanghai market continues to make wild swings, but market declines are having little effect on Chinese consumers or its economy. We believe Western markets are beginning to understand that wild market fluctuations and government intervention are the status quo in China. Western markets are more concerned about China's transition from a high growth manufacturing to a lower growth service economy and how that lower growth will impact the growth of Europe and emerging market economies. A bigger concern for us is the lack of transparency around the devaluation of China's currency. The Chinese Yuan has dropped 10% in value vs. the U.S. dollar since the beginning of 2014 following a nine year period of steady appreciation within a tightly controlled band of exchange rates. From late 2012 to the middle of 2015, the trading band was just 4% wide. China's official narrative asserts that the devaluation last summer facilitates the Yuan's inclusion in the basket of four reserve currencies recognized by the International Monetary Fund. The Yuan, however, has continued to fall after it was officially included as a reserve currency in October, leading many to suspect China needs a lower exchange rate to boost exports and maintain GDP near its 7% long-term target. While the Shanghai market makes the headlines that usually results in down days in European and U.S. equity markets, we think the gradual drift of the Yuan to lower levels will be much more troubling for markets and the dollar, as it could lead to an iterative cycle of currency devaluations from other EM and possibly developed countries.

MARKET VALUATIONS & RETURNS

Figure 5

As mentioned earlier, we believe the 5% decline in the S&P 500 in January, represents a market trying to re-price higher expected market risk in 2016 and determining whether current 2016 earnings estimates need to be adjusted downward to reflect a higher dollar, lower oil prices and rising interest rates. We are currently placing a 75% probability that oil, the dollar and markets stabilize in 2016 and the Bull market continues. We are putting a 25% probability that oil/dollar concerns push markets another 10%+ lower into Bear market territory (S&P 500 <1708, which is 20% below the May 20, 2015 peak of 2135). We do not think current U.S. economic data support a bear market scenario this year. Nevertheless, one of the strongest market indicators, the level of corporate profit margins, is beginning

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to plateau suggesting the business cycle may be in the 7th or 8th inning. A fall in corporate profit margins often precedes or coincides with a bear market. We believe the data more likely point to a bear market drop in 2017 or 2018.

- **Fixed Income/Interest Rates**: Economists participating in the WSJ January 2016 Economic Survey (n=78) forecast the Fed will raise the Fed Funds rate by 0.25% twice in 2016 and the 10-year treasury will reach 2.75% in the last half of 2016. In this scenario, the Barclay's Aggregate Bond index may generate similar returns to 2015. We believe bonds will remain volatile as has been demonstrated in early 2016. We expect bond returns to range between 0.00% and 3.00% in 2016.
- **U.S. Stock Valuations**: To reach the 1700 bear market level on the S&P 500, market EPS estimates need to drop significantly lower, as equity risk premia are currently reaching crisis levels. The current economic data does not support the earnings revisions required to push the market into bear market territory. The U.S. or EU would likely need to fall into recession to revise EPS to the level required for bear market. It is possible that negative sentiment could push the market below 1700, but that should be short-lived unless accompanied by a major downward shift in economic and corporate fundamentals. We believe the market has a 75% chance of recovering as earnings are revised upward in 1H16, except for energy and materials. Corporate fundamentals should slow in second half, which may result in negative revisions later in the year. As a result, we forecast the S&P 500 could finish in a range from 2000 -2110 for a total return of 0% to +5% in 2016. We place 25% chance the market finishes in bear territory in 2016 (S&P 500 <1708).

Table 3

Implied Equity Risk Premia & Market Multiples Based on Current & Negatively Revised 2017 EPS Estimates

	Current 2017E EPS		Revised 2017E EPS	
	Base	Bear	Base	Bear
S&P 500 EOY 2016	2,150	1,700	2,000	1,700
/ 2016 S&P 500 EPS est.	$134	$134	$125	$125
Implied Market P/E Multiple	16.0x	12.7x	16.0x	13.6x
Implied Market Discount Rate	6.23%	7.88%	6.25%	7.35%
Less: 10-Yr Yield Estimate	2.25%	2.25%	2.25%	2.25%
Implied 10-Yr. Equity Risk Premium	3.98%	5.63%	4.00%	5.10%

Table 4

- S&P 500 Forward Multiple 16E	16.2x	- 2016 Estimate	$ 126
- S&P 500 Value 12.31.2015	2,044	- 2017 Estimate	$ 134

Implied S&P 500 Valuation

	$125	$130	$135	$140
14.0x	1,750	1,820	1,890	1,960
14.5x	1,813	1,885	1,958	2,030
15.0x	1,875	1,950	2,025	2,100
15.5x	1,938	2,015	2,093	2,170
16.0x	2,000	2,080	2,160	2,240
16.5x	2,063	2,145	2,228	2,310

Implied S&P 500 Price Change

	$125	$130	$135	$140
14.0x	-14%	-11%	-8%	-4%
14.5x	-11%	-8%	-4%	-1%
15.0x	-8%	-5%	-1%	3%
15.5x	-5%	-1%	2%	6%
16.0x	-2%	2%	6%	10%
16.5x	1%	5%	9%	13%