RBC WEALTH MANAGEMENT

GLOBAL INSIGHT

PERSPECTIVES FROM THE GLOBAL PORTFOLIO ADVISORY COMMITTEE

Wild, Wild East

China's (long) transition from an investment-led to a consumption-based economy is underway. Not everyone is happy.

Jay Roberts | Page 4

IN THIS ISSUE ››

For Important and Required Non-U.S. Analyst Disclosures, see page 21.

RBC Wealth Management

There's Wealth in Our Approach.™

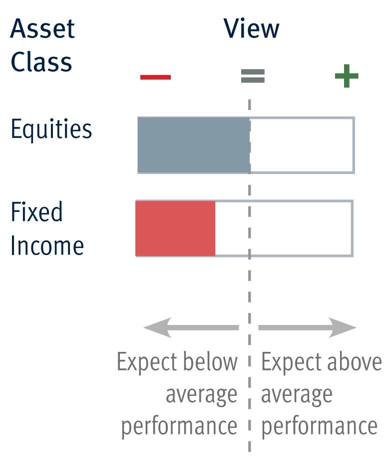
Table of Contents

All values in U.S. dollars and priced as of August 31, 2015, market close, EST, unless otherwise noted.

Global Asset Class View

RBC's Investment Stance

Global Asset Views



See "Views Explanation" below for details

Source - RBC Wealth Management

Equities – Average Performance =

- While equity markets could experience more turbulence and downside in the near term, we believe the correction will eventually run its course without much more damage to the global economy than has already occurred. The consensus forecast for 2015 global GDP growth has adjusted down to 3%, which reflects the strains on emerging markets and commodity economies, yet a wide range of indicators suggests markets are pricing in a much lower rate. In our view, 3% growth is achievable despite China's challenges.
- We recommend investors with a 12-month or longer time horizon maintain a targeted, full allocation to equities. Earnings growth should persist for major developed markets and their valuations are reasonable given the recent correction and low interest rate environment.

Fixed Income – Below-Average Performance –

- As the Federal Reserve heads toward its first rate hike, it will likely embark on a strategy to merely "normalize" interest rate policy, not to tighten financial conditions outright. We continue to expect the Fed's rate hike cycle will be slow, gradual, and shallow, and that the Fed Funds rate will eventually crest at a lower level than in previous cycles.
- However, such a relatively tame rate hike cycle would not necessarily shield the global fixed income market from volatile swings. The volatility that has transpired in recent months could be the norm over the near term, at least. We recommend maintaining appropriate liquidity to meet short-term needs and take advantage of market opportunities as they arise.

Views Explanation

(+/=/–) represents the Global Portfolio Advisory Committee's (GPAC) view over a 12-month investment time horizon.

+ **Positive** implies the potential for better-than-average performance for the asset class or for the region relative to other asset classes or regions.

= **In-line** implies the potential for average performance for the asset class or for the region relative to other asset classes or regions.

– **Negative** implies the potential for below-average performance for the asset class or for the region relative to other asset classes or regions.

Focus Article

Wild, Wild East

Extreme equity market volatility and soft economic data from China have produced outsized selloffs in Asian equity markets. Valuations in the region are historically attractive. But markets are likely to remain cheap until a catalyst emerges that materially improves the outlook for the Chinese economy. We are lowering our recommended Asia ex-Japan exposure to market weight.

Jay Roberts
Hong Kong, China
jay.roberts@rbc.com

We moved to an overweight position in Asia ex-Japan equities in September 2014 based on an outlook for superior earnings growth and relatively low valuations. By April, the MSCI AC Asia ex-Japan Index had risen to its highest level since the global financial crisis. However, the reversal in many Asian equity markets over the summer has been extreme. From peak to trough, the index declined 27% in four months, second only (since the financial crisis) to the 28% drop over two months in 2011 when equities reacted violently to the escalation in the European sovereign debt crisis.

As a result of the summer selloff, a number of Asian equity markets are trading at very depressed valuations. On a price/book value basis, indexes in Hong Kong, Indonesia, Korea, Malaysia, Singapore, and Taiwan are at their lowest level since the global financial crisis.

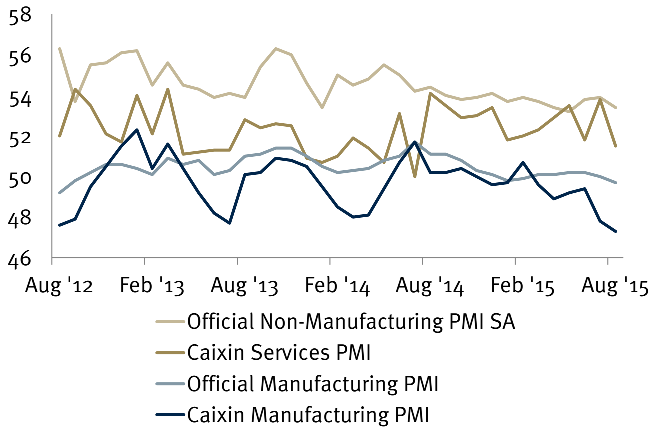
The negative backdrop created by dollar strength and significant weakness in commodity prices was compounded by recent events in China, including the extreme movements in Chinese equities, the devaluation of the Chinese yuan against the dollar, and weak manufacturing data.

Certainly, the gyrations in mainland Chinese equities over the past two months have been wild and generated plenty of grim headlines. The 150% rally in mainland equities in less than a year was associated first with positive and wide-ranging economic and financial reform measures, and subsequently with market momentum and speculation. The retracement has been associated with a rapid reversal of market excesses as well as confusion generated by the government's unprecedented efforts to prop up an overvalued equity market.

Not the Sole Arbiter

Most importantly, though, the roller-coaster ride in Chinese stocks should not be viewed as the sole arbiter of the health of the Chinese economy. The evidence from leading economic indicators is mixed and paints a familiar picture that has played out over at least the last three years. Both official and unofficial data points to weakness in manufacturing, still a vital part of the economy (see chart on following page). The "flash" reading of 47.1 in the unofficial PMI for August received widespread coverage as a particularly poor number. However, there have been similar troughs each year since 2012.

China Services and Manufacturing PMIs



Source - RBC Dominion Securities, Bloomberg

PMIs point to strength in services and weakness in manufacturing.

By contrast, both surveys indicate continued strength in the services sector, now the largest economic sector in China and the biggest employer.

However, we would caution that history suggests transitions from investment-led economies to consumption-based ones are often fraught with volatility. Investors intermittently underestimate and overestimate the risks of a material slowdown. While we continue to believe that the Chinese economy will pull through the current slowdown, we acknowledge that the risks of a longer, bumpier landing have grown.

Levers Left to Pull

The Chinese economy continues to expand but at a decelerating pace, as has been the case for a number of years. However, China has finally begun to ease policy to support growth. For example, interest rates have been cut five times since November. There is considerable scope for further easing. Changes in monetary conditions usually take six months to a year to be felt in the real economy. So any positive effects from the easing already undertaken aren't likely to show up in the form of faster growth before next spring or summer.

China has other policy levers available to it, including fiscal spending on housing and infrastructure. So far the government has resisted going this route in more than a targeted way designed to alleviate some regional hardships. Debt outstanding, although slowing, continues to grow somewhat faster than nominal GDP and policy makers are wary of setting off another surge in borrowing that would inevitably present even more serious policy challenges down the road.

That said, the government is unlikely to accept a harder landing for the economy without using whatever policy alternatives are available to it.

China's Services Sector – Good for China's Growth but Not for Its Suppliers

From an investment standpoint, we are less concerned with the outlook for mainland shares, which are relatively small in relation to GDP, aren't widely held by the Chinese public, and are difficult to access by foreign investors in any case. However, the nature and composition of China's slowdown does hold ramifications for other economies of the world. For example, the solid growth of China's services sector has provided an important offset domestically to weakness in manufacturing, exports, and slower growth in fixed asset investment. Moreover, growth from this sector is much less debt-intensive, nor does it require as much attendant development of infrastructure (roads, rails, power generation, etc.) as do manufacturing and housing construction.

However, faster services sector growth in China is much less helpful to regional Asian economies that have prospered from more than a decade of growing goods trade with China. Nor does it do much, if anything, to help clear the glut of excess capacity that has become apparent for oil, coal, iron ore, most other industrial metals, and some agricultural commodities. This oversupply has and may continue to weigh on many emerging economies—e.g., Russia, Brazil, Chile, Mexico—and several developed ones, notably Australia and Canada.

Taking Exposure Down

While valuations for many regional Asian equities are historically compelling, they may remain so, or be subject to further volatility as markets await further clarity on Chinese policy. We are taking our overweight rating for the region down to market weight.

Focus Article

Federal Reserve: "Later This Year" Is Here!

Craig Bishop
Minneapolis, United States
craig.bishop@rbc.com

After years of extraordinarily "loose" monetary policy, we believe the time is fast approaching when the Federal Reserve will begin to "normalize" interest rates. The September Federal Open Market Committee (FOMC) meeting may produce the first rate hike in over nine years.

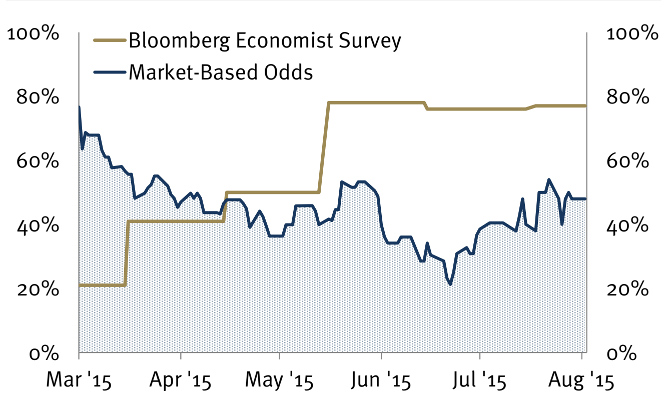
Our expectation is that global and domestic issues will ensure a slow and gradual interest rate normalization process; this won't prevent rates from rising, but, in our opinion, should keep them fairly well contained. On the other hand, the increased volatility investors have been subjected to in recent months won't be limited by a gradual, shallow tightening cycle; it likely creates a new risk for investors to consider going forward.

Higher Rates or Volatility, Which Is the Greater Concern?

We feel that despite recent global developments, the Fed will in fact begin the normalization process at the September FOMC meeting based upon our interpretation of the July FOMC meeting minutes.

At the July FOMC meeting, it was noted that (economic) conditions are approaching the point where a rate hike is appropriate and the Fed said it would be appropriate to raise rates when it has seen "some" further improvement in the labor market. Recent comments from various Fed officials indicate a strong desire to raise rates; the addition of the word "some" likely makes it easier for it to do so. If we look at this in the context of recent U.S. employment data, "some" would mean the unemployment rate continues its march to "full employment" levels of 5.0%–5.2% and payrolls continue to post monthly gains of approximately 200,000 workers.

September Rate Hike Odds Since March FOMC Meeting



Source - RBC Wealth Management, Bloomberg, Bloomberg News Surveys (surveys conducted monthly; market data based on Fed Funds Futures)

Markets still see September as a coin flip while economists remain confident.

Rate hike expectations have breathed new life into forecasts for rising interest rates and generated significant market volatility despite the message from the Fed that this tightening cycle would be different—slow, gradual, and shallow. Therefore, we believe the greater issue for investors in coming months will be learning how to live with increased market volatility rather than a sharp upward move in rates.

Domestic Focus Has the Fed on Track

While many global issues continue to make headlines, notably Greece and China, the Fed has made it clear that it has a domestic focus. This comes through in recent comments from various Fed officials as well as the July FOMC meeting. International developments were not mentioned while at the same time the Fed indicated that as long as the U.S. economy and employment continue to further progress, it will feel comfortable raising rates.

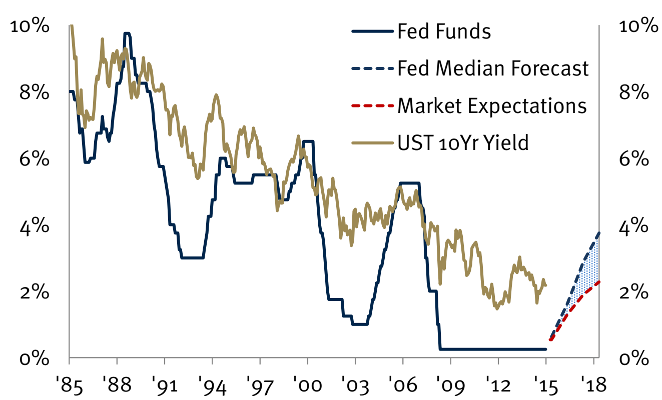
Past that first rate hike, however, global considerations—prolonged economic weakness and accommodative central banks—could, in our view, play a greater role in policy deliberations. We believe that the Fed will need to balance removing policy accommodation with a U.S. economy that continues to grow more slowly than in past expansions. The Fed has made it clear that its policy will be "data dependent" which, in our view, could yield a tightening cycle that is much more gradual than past cycles as the Fed potentially pauses when the economic data warrants.

The Tightening Cycle Matters

Despite Fed Chair Janet Yellen's repeated statements that the upcoming tightening cycle will be different—gradual, slow, and shallow—markets have remained fixated on the first rate hike. We believe investors are looking at the upcoming cycle through the lens of the 2004–2006 experience. Over that two-year period, the Fed raised rates in 17 successive meetings for a total increase of 425 basis points (bps). The 2-year and 10-year Treasury yields rose 255 bps and 45 bps, respectively, as both converged on the 5.25% peak Fed Funds rate.

We believe that the current cycle is likely to take considerably longer than the 2004–2006 cycle and is likely to see the Fed Funds rate eventually peak at around 3.75%. This provides a target as to where we believe short and long rates might converge, and based upon current levels would result in 2-year and 10-year T-note yields rising approximately 300 bps and 150 bps, respectively.

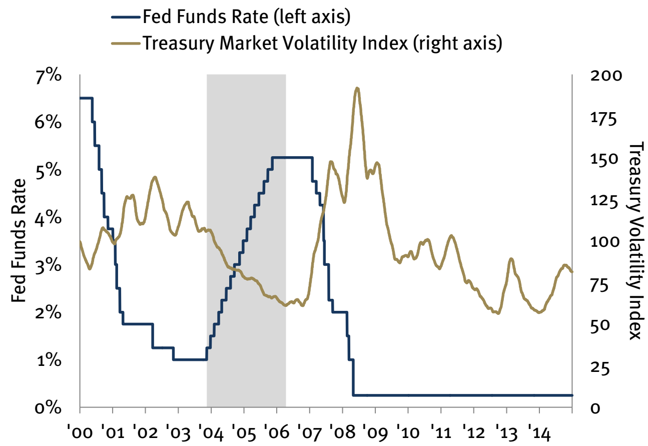
Path to Normalization: Fed Funds to Rise, but to a Lower Peak



Source - RBC Wealth Management, Bloomberg; Market expectations based on Eurodollar Futures contracts, as of 08/18/2015

Mind the Gap: The FOMC sees 3.75% as the terminal Fed Funds rate, the market still sees a lower path.

"Data Dependency" May Keep Treasury Market on Its Toes



Source - RBC Wealth Management, Bloomberg; Volatility based on Merill Lynch MOVE Index, 90-day Moving Average

Volatility declined over the past tightening cycle as the Fed proceeded +25 bps at each meeting, "data dependency" should keep volatility elevated this time around.

Implications for Investors – Higher Rates, More Volatility

We believe higher rates are inevitable, but so is volatility. While there is broad acceptance of the former, there has been an inadequate level of focus on the latter.

The interest rate normalization process will see the Fed Funds rate move toward the 3.75% level, but we do not expect the process to be smooth given the 0%–0.25% range that has been in place for nearly seven years. The Treasury market, which has seen the yield on the 10-year note swing in a wide range between 1.64% and 2.48% over the past seven months, may already be exhibiting the levels of volatility investors will soon be facing throughout the fixed income markets.

Investors cannot fully insulate portfolios, but they can position them to weather what is shaping up to be a challenging several years. Maintaining an appropriate level of liquidity to meet short-term needs and to take advantage of opportunities in the corporate and municipal bond markets will be a critical element of success. Selectivity with respect to sector allocation and issuer exposure will also be important, as will be duration positioning.

Stormy Weather

Over the past several weeks, global equity markets have endured corrections of varying degrees, accompanied by (and in some cases caused by) increasingly negative headlines from China and other emerging markets (EMs), a sharp selloff in commodities, and concern about the prospective first Fed rate hike.

This corrective phase could play out through the fourth quarter. However, we still believe the secular bull market in stocks that began in 2009 has significant room to run.

Equity Views

Region	Current
Global	=
United States	=
Canada	=
Continental Europe	=
United Kingdom	–
Asia (ex-Japan)	=
Japan	+

Source - RBC Wealth Management; see "Views Explanation" on page 3 for details.

What Is Causing the Selloff?

There are several related issues weighing on investor sentiment:

- **Fed Tightening**: Much of a Fed tightening cycle is often accompanied by equity market strength because it speaks to the strength of the U.S. economy. Typically, however, there is two to three months of market volatility around the time of the first Fed hike as the market repositions for higher rates.
- **China Weakness**: (See *Wild, Wild East* article). China's economy has begun what will likely be a multidecade shift from one overly dependent on fixed asset/infrastructure investment to one driven more by consumption. As expected, this has led to a slowing of the Chinese economy; however, markets have become concerned that Chinese growth has slowed too much and the economy is in danger of stalling. China has many policy levers at its disposal to stimulate its economy and mitigate these risks. We believe China will continue to grow, albeit more slowly than recent years.
- **Commodity Selloff**: The sharp decline in crude and most other commodities has spooked investors worried that global growth, especially Chinese growth, is dangerously low. While weaker Chinese demand is a factor, the bigger concern for most commodities is too much supply, built up over many years to position for a China growing at 10%+. With growth well below that level (6.5% estimated), there is a large supply overhang, trumping whatever demand increases have emerged in the U.S. and Europe.
- **EM Risk**: EMs typically struggle to adjust to Fed policy changes as debt costs rise and capital flows towards higher, safer rates. Add to this the commodities selloff and slowing Chinese demand and you have a potentially toxic mix for many EMs.

The U.S. Economy Remains on Firm Ground

There remain strong underlying fundamentals at play within the world's largest, most important economy.

We believe the U.S. consumer is in great shape. Employment is growing at a solid 200,000 per month (1.4% per

Jim Allworth
Vancouver, Canada
jim.allworth@rbc.com

Kelly Bogdanov
San Francisco, United States
kelly.bogdanov@rbc.com

Matt Barasch
Toronto, Canada
matt.barasch@rbc.com

Davide Boglietti
London, United Kingdom
davide.boglietti@rbc.com

annum), wage rates are moving higher, as are average hours worked. Consumer confidence is elevated. Household debt has fallen back to much-lower levels in relation to disposable income and will likely fall further as households continue to save about 5% of monthly income.

Debt service costs are low, and most mortgages have been refinanced to lock in low rates for the long term. Add in the sharp decline in gasoline prices and consumers have a significant amount of dry powder available.

Housing and residential construction goes from strength to strength with starts recently hitting eight-year highs. Banks are in very good shape and increasingly willing to lend, providing a further tailwind for the economy—one largely absent for much of the past decade.

Emerging Markets Bear Watching

EM economies are under a significant amount of pressure. A strong U.S. dollar and the prospect of rising U.S. rates make their foreign debt harder to service and to refinance. Weak Chinese demand and low prices for the commodities that many of these economies export is adding to the pressure on currencies and markets. Two of the biggest EMs, Russia and Brazil, are in recessions, which are likely to worsen before improving.

The U.S. economy and most developed European economies are reasonably well insulated from EM weakness; however, negative headlines out of EMs and the depressive effect of low commodity prices could continue to produce volatility in high-yield debt markets and weigh on investor sentiment.

That said, we do not expect a replay of the 1998 EM crisis because, unlike then, most EMs have built up large reserves of foreign currency, giving them staying power, but not by each providing a solution to their slow growth problem. Until such time that commodity prices find a bottom (many are trading at or below cash costs, which has often served as a floor in the past) and/or the U.S. dollar stabilizes, EMs are likely to be under pressure.

The Stock Market May Have Been Overdue

The S&P 500 went more than 1,400 days without a 10% price correction. While this is not unprecedented (there have been runs of more than 2,000 days), it is more usual for the market to experience a 10%–20% correction roughly every one to two years. These corrections often present useful long-term buying opportunities as good businesses sell off with the broader market.

Corrections of greater than 20% in the stock markets of developed economies have almost always been associated with U.S. recessions. Recessions, in turn, have always been preceded by a period of “tight money” when credit became prohibitively expensive and hard to get. Today, credit is cheap and accessible. We see U.S. recession risks as very low and believe that any corrective phase in most major markets is likely to be just that—a correction, not a bear market.

Patience Is Called For

In addition to the normal two to three months of market volatility that typically accompanies the first Fed rate hike, we think tax-loss selling will also figure into the mix this year.

Some stocks, notably in the energy and commodity sectors, are down very substantially. Many others, especially those with direct exposure to China, have retreated by a significant amount from earlier highs. Many investors paid capital gains tax on profits realized last year or will have to pay for gains realized earlier this year. Similarly, mutual fund and hedge funds that have realized gains in the first half of this tax year will be looking to offset those by realizing some losses.

We expect the correction to eventually present opportunities to buy outstanding business at very attractive prices. However, the selling pressures that are providing that opportunity may not fully abate for some weeks or months yet.

Outlook

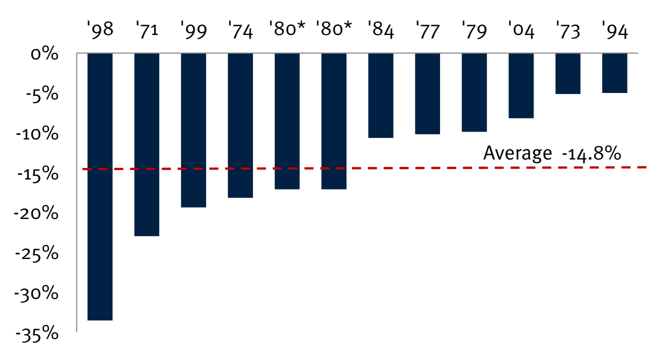
We believe the long-term secular bull market that began at the financial crisis lows of 2009 has further to run. This is the first correction of consequence for the S&P 500 since the 21% pullback in the teeth of the European debt crisis in 2011. From the lows of that correction to the peak this May, the S&P 500 added approximately 1060 points or almost 100% over four years. In a correction, it would not be unusual to give back 25%–35% of that advance while remaining inside the confines of a long-term uptrend that would eventually take the market to new all-time highs. We believe that is where stock markets find themselves.

Regional Highlights

United States

- The global equity rout reached all corners of the U.S. market in August. The S&P 500 and Dow Jones Industrial Average fell 12.4% and 16.1% below their all-time highs, respectively, before paring their losses toward month end.
- We view this mainly as an imported correction from China rather than one caused by systemic risks within the domestic economy or financial system. Furthermore, it is not unusual for the market to struggle ahead of the Federal Reserve's first rate hike (see chart).
- While U.S. stocks could experience more turbulence in the near term, we believe the correction will run its course without much damage to S&P 500 profits and revenues. The domestic economic recovery remains intact and could gain ground in coming months. Earnings estimates for China- and commodity-exposed companies are vulnerable to further cuts, but estimates for domestically oriented companies and those with meaningful European exposure should hold steady or improve, in our opinion.

S&P 500 Declines Within 12 Months Prior to the First Rate Hike



* Two distinct tightening cycles in 1980 separated by a rate cut cycle in between (Volcker era).
Source - RBC Wealth Management, Bloomberg

The U.S. equity market usually corrects before the Fed moves.

- The S&P 500 now trades at a P/E ratio of 15.4x the 12-month forward consensus forecast. This below-normal valuation should lend support to the market.

Canada

We remain cautious on Canadian stocks for a number of reasons:

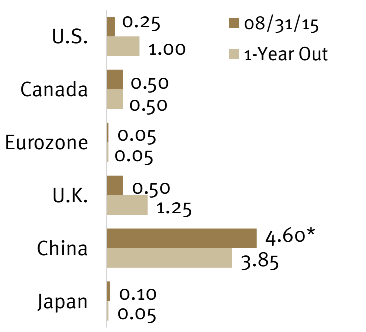
- Recent weakness in Canadian bank stocks has pushed the sector below long-term valuation averages; however, we remain concerned that loan growth will be challenged over the next several quarters and credit could deteriorate modestly from benign levels, as the oil rout takes a toll.
- Energy stocks have been hit hard over the past year. We believe the recovery in crude prices is likely to play out over several years, which will continue to put pressure on sector balance sheets and cash flows. Absent another sharp leg down in oil, the high-quality large-cap names likely have limited downside, in our view.
- While we remain market weight with a negative bias, we would note that some high-quality names, such as the rails and utilities, have sold off considerably in the past few weeks and we would look to add exposure in these areas.

Continental Europe & U.K.

- The recent earnings season has been positive for European equities. Improvements in macroeconomic data, positive bank lending figures, and relatively attractive valuations remain potential catalysts for European stock markets. The ongoing turmoil in EMs, however, could continue to drive volatility in the short term given the high percentage of corporate revenues coming from the region. The recent strengthening of the euro could represent another headwind in the short term. As a result, we favour domestic sectors, especially those with pricing power and/or consolidation potential, such as telecoms, or sectors exposed to positive fundamentals, such as pharma and media.
- We remain underweight U.K. equities given their high exposure to the oil and mining sectors. Lower commodity prices and risks of dividend cuts in those two sectors are the main reasons for the year-to-date FTSE100 underperformance, in our opinion. Exposure to EMs for some large consumer staples companies is another concern in the short term. Domestically, we see opportunities in select consumer discretionary and retail stocks that can benefit from lower unemployment figures and improvements in wage inflation.

More than *Yuan* Concern

Central Bank Rate (%)



*1-yr base lending rate for working capital, PBoC
Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee (GPAC), Consensus Economics

Rajan Bansi
Toronto, Canada
rajan.bansi@rbc.com

Tom Garretson
Minneapolis, United States
tom.garretson@rbc.com
RBC Capital Markets, LLC

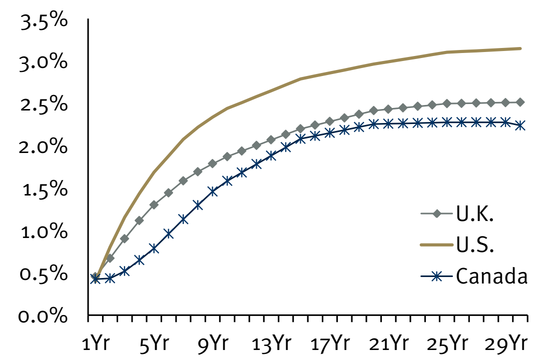
Alana Awad
Toronto, Canada
alana.awad@rbc.com

Hakan Enoksson
London, United Kingdom
hakan.enoksson@rbc.com

Concerns about a potential spillover from a slowdown in key international markets into the U.S. make it a close call as to whether the Federal Reserve moves at the September FOMC meeting. U.S. economic data leading up to the meeting will hold the key. A September Fed rate hike seemed to be a near certainty a few weeks ago; however, the odds have fallen to less than 35% according to the futures market. New York Fed President William Dudley's statement on August 26 that "the normalization process at the September FOMC meeting seems less compelling" was a reflection of the Fed's desire to not tighten monetary policy until economic data confirms that the U.S. has maintained its favourable growth trajectory. We believe U.S. growth remains resilient and that an October or December rate hike is likely should the Fed remain on hold in September.

Investors have recently been reminded of the ballast bonds provide to portfolios. We believe financial market volatility will continue in the coming months and investors should maintain an appropriate asset allocation that includes fixed income. This "ballast effect" was evidenced in August as bonds rallied as risk aversion increased. We expect volatility to remain elevated through the end of 2015. Matching liquidity needs with appropriate positioning will remain critical, as well as ensuring portfolios are diversified by maturity, sector, and issuer.

Sovereign Yield Curves



Source - Bloomberg

Regional Highlights

United States

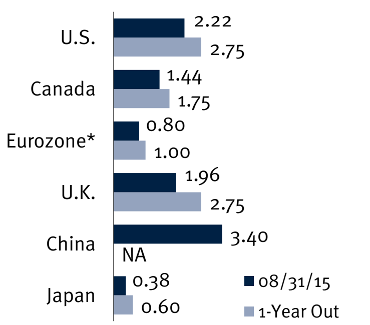
- Will the Fed's "data dependency" give way to "market dependency" at the September 17 FOMC meeting? Recent data, including strong upgrades to initially reported GDP estimates and solid job gains, would signal a green light for the Fed, but if recent market volatility and tighter financial conditions don't dissipate meaningfully, that will likely prove more than sufficient to push September off the table for a still-wary Fed.

- We see China's recent move to de-peg its currency from the dollar as a prudent move amid its rebalancing economy. While it has since stabilized, downside risk looking forward remains, particularly if other countries in the region also seek to devalue, boosting global disinflationary concerns and biasing U.S. Treasury yields lower.

- Credit spreads have consistently widened over the past three months, both on an energy and ex-energy basis and joined only recently by weakness in equity prices, raising business-cycle concerns amid an aging economic expansion. We still believe that, market corrections aside, this recovery has room to run fundamentally, which should be generally supportive for credit products.

Global Fixed Income

10-Year Rate (%)



*Eurozone utilizes German bunds.

Source - RBC Investment Strategy Committee, RBC Capital Markets, GPAC

Canada

- Spreads in the corporate bond markets reached the widest levels seen in the last three years as liquidity conditions remain challenging, especially in the lower-rated segments of the market. Investors looking to sell corporate bond positions should be cognizant that liquidity is likely to remain thin for some time.

- Rate-reset preferred shares continued to trade lower as 5-year Canada yields hit new lows, compounded by recent credit spread widening. Valuations on some issues are attractive even though headwinds are likely to continue.

- GDP growth in Canada is poised to be negative for Q2, which would mark a technical recession given the contraction recorded in Q1. Yet, some economic data points for June are spurring hopes that the second half could see a rebound in growth. The June retail sales report showed sales climbing 0.6% m/m together with the second straight increase in manufacturing sales. This suggests the Canadian economy may have expanded in June, which would be the first month of positive GDP growth this year.

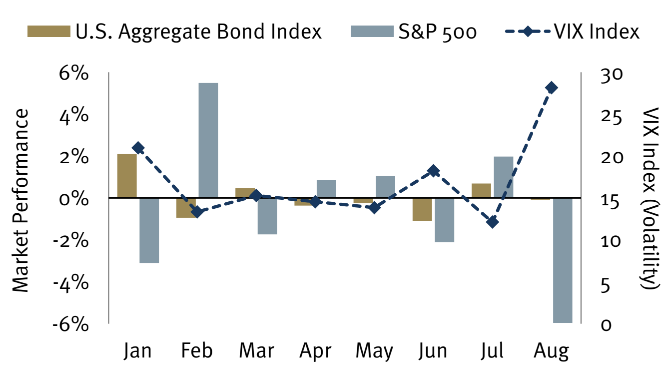
Continental Europe & U.K.

- We expect the combination of investor aversion to emerging market debt and the commodity price adjustment over the summer months to serve as a tailwind for the eurozone bond market in the fall. We see value in select peripheral sovereigns versus core-European government bonds. Markets and rating agencies alike cheered the announcement of a snap election by former Greek Prime Minister Alexis Tsipras, although growth concerns in China overwhelmed sentiment in August.

- The UK Gilts market continues to exhibit sensitivity in the short end of the curve to the prospect of an interest rate hike by the Federal Reserve in September. We expect heightened volatility in the near term given uncertainty about a September hike and the future path of the Fed Funds rate. Value can be found in the 3- to 6-year segment of the curve as expectations for inflation and near-term volatility seem to be priced appropriately.

- We see value in the corporate bond market after spreads widened in August in response to Chinese growth concerns. Our preference is for issuers that are likely to weather a possible slowdown and are less exposed to China's economy.

Monthly Market Performance YTD Amid Bouts of Volatility



Source - RBC Wealth Management, Bloomberg, Barclays

Despite historically low yields and looming Fed rate hikes, bonds have returned +0.5% this year compared to -4.0% for equities.

Commodities

Commodity Forecasts

	2015E	2016E
Oil (WTI $/bbl)	52.00	63.00
Natural Gas ($/mmBtu)	2.96	3.45
Gold ($/oz)	1,165	1,200
Copper ($/lb)	2.75	2.75
Corn ($/bu)	3.94*	4.20
Wheat ($/bu)	5.27*	5.57

*H2 2015
Source - RBC Capital Markets forecasts (oil, natural gas, gold, and copper), Bloomberg consensus forecasts (corn and wheat)

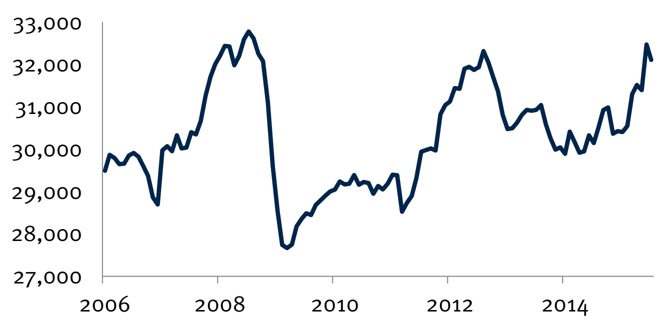
Oil

- Earlier this year, oil rallied as investor expectations centered around demand strengthening on weak prices and global supply backing off as capex budgets were severely reined in.
- Since then, sticky production from U.S. shale producers, strong OPEC supply growth, and uncertainty around Chinese economic growth have driven oil prices lower.
- While official global demand forecasts remain robust for 2015 and 2016, the outlook has become murkier as the economic data from China indicates a fragile backdrop.
- Capex has ratcheted down and industry experts now expect non-OPEC supply to contract slightly in 2016. However, OPEC supply remains very high at 31.8 million bbl/d, its highest in three years.
- The role of swing producer has been thrust onto U.S. shale players by Saudi Arabia as the latter continues to hike production. The challenge, in our view, is that the former cannot be as responsive as the Saudis, and production levels have remained stubbornly high despite several quarters of price pain. Access to capital, whether bank lines or public raises, will very likely force curtailed development in a prolonged price rout.
- Expected production growth from Iraq and Iran exacerbate supply-side risks.
- The International Energy Agency estimates the market was oversupplied by about 3.0 million bbl/d in Q2 2015, its highest level since 1998; industry observers expect this oversupply to persist for several quarters.
- RBC Capital Markets' commodity strategy team sees WTI averaging $52/bbl this year and $63 in 2016. Our strategists are constructive on the crude oil market over the medium and longer term.

Gold

- Gold has spiked off its recent lows as investors flock to safe-haven assets amid emerging market growth fears and an equity market selloff.
- ETF holdings remain low, albeit with a small uptick of late.
- A pushback of the Fed's first rate hike beyond the September 2015 FOMC meeting would be positive for gold.
- Potential sales of gold reserves from Russia or other emerging market governments as in the 1997–98 Asian financial crisis could present a negative catalyst.
- We would expect global economic growth fears related to China and emerging markets broadly to be the key driver of gold prices in the near future.

OPEC Crude Oil Production (thousand bbl/d)



Source - Bloomberg, RBC Dominion Securities; data through 7/31/15

While non-OPEC is reeling, OPEC is charging ahead with production at full tilt.

Mark Allen
Toronto, Canada
mark.d.allen@rbc.com

Currencies

Currency Forecasts

Currency Pair	Current Rate	Forecast Sep 2016	Change*
USD Index	95.82	93.11	-3%
CAD/USD	0.76	0.76	0%
USD/CAD	1.31	1.31	0%
EUR/USD	1.12	1.16	4%
GBP/USD	1.53	1.68	10%
USD/CHF	0.97	0.98	1%
USD/JPY	121.23	123.00	1%
AUD/USD	0.71	0.72	1%
NZD/USD	0.63	0.62	-2%
EUR/JPY	135.90	142.68	5%
EUR/GBP	0.73	0.69	-5%
EUR/CHF	1.08	1.14	5%
Emerging Currencies			
USD/CNY	6.38	6.90	8%
USD/INR	66.48	66.00	-1%
USD/SGD	1.41	1.55	10%
USD/TRY	2.91	2.75	-5%
USD/PLN	3.78	3.41	-10%
USD/MXN	16.75	15.00	-10%
USD/BRL	3.62	3.95	9%

* Defined as the implied appreciation or depreciation of the first currency in the pair quote.
Examples of how to interpret data found in the Market Scorecard.
Source - RBC Capital Markets, Bloomberg

U.S. Dollar

- Recent volatility in the stock and bond markets may dissuade the Fed from raising interest rates in September. This change in sentiment has weakened the dollar against other developed market currencies.
- We expect this weakness to persist until Fed officials provide more detail regarding the extent to which global growth concerns might affect its decision to tighten policy. However, we note the dollar is not particularly overvalued at present (see chart).

Euro

- The euro has become a risk-off proxy, one of the side effects of quantitative easing in the eurozone. Low European interest rates make it easy to borrow euros to fund more risky investments; however, when risk appetite fades, investors are forced to unwind these trades and buy back euros to repay their loans.
- Global market turmoil, therefore, is supportive of the euro, and we now expect the currency to hold its value until risk appetite returns.

Chinese Yuan

- The People's Bank of China (PBoC) dropped the yuan's de-facto peg against the U.S. dollar on August 11. Although the currency is still tightly controlled, the PBoC now wants market forces to play a greater role in determining its value.
- We believe this will put greater pressure on the yuan, given that (1) economic data from China continues to deteriorate and (2) its erstwhile dollar peg made the yuan significantly overvalued against the currencies of its regional neighbors.

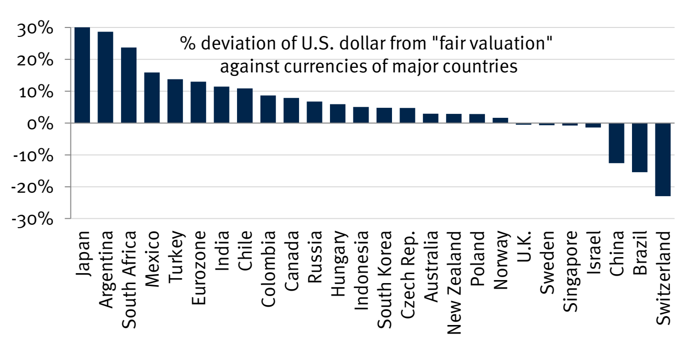
British Pound

- The U.K. and U.S. economies are at a similar cyclical phase, with growth in both causing traders to focus their attention on the eventual removal of monetary stimulus.
- As long as robust economic activity persists, we expect the pound will remain well supported against other developed nation currencies.

Japanese Yen

- The yen has strengthened from its 125 USD/JPY multiyear low, but we expect further yen weakness and new lows if the recent devaluation of the Chinese currency triggers deflation in Japan.
- This may prompt Japanese pension funds to buy higher-yielding foreign bonds, adding to selling pressure on the yen.

Dollar Valuation Strong, but Still Not at Extreme Levels



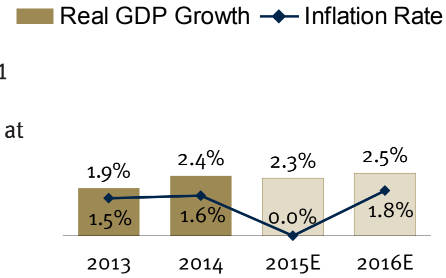
Fair valuation is based on purchasing power parity for developed nation currencies and on proprietary RBC "POLAR" model for emerging currencies; value for Japanese yen (+37%) is truncated.
Source - RBC Wealth Management, RBC Capital Markets, Thomson Reuters

Dollar bull markets typically continue until the trade-weighted average overvaluation exceeds 20%.

Alan Robinson
Seattle, United States
alan.robinson@rbc.com

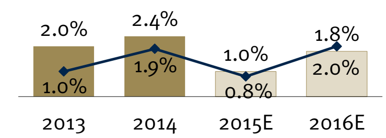
Key Forecasts

United States — Solid Growth



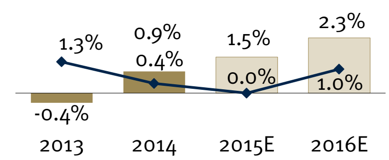
- In H1 private sector grew by 3.3% y/y despite severe Q1 weather and port strike. Home sales surging. Housing permits, starts near 8-year high. Unemployment claims at 40-year low. Leading indicators, confidence elevated.
- ISM indexes, including new orders, all in expansion territory. Construction spending, capex higher.

Canada — Weak



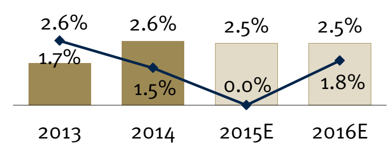
- Q2 was 2nd quarter of GDP decline, but June saw first monthly GDP increase this year. House construction firm, business capex and government weak. Consumer attitude restrained by resource sector job loss, stagnant wage growth.
- Mfg. sales and new orders up 2 mos. running. Energy capex plans down sharply. Loonie weakness helping services and tourism, but not yet manufacturing.

Eurozone — Improving



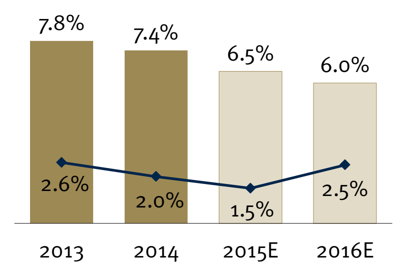
- Q2 will have been 9th successive quarter of positive growth, including for Spain, which has been accelerating. France picking up, Italy improving. Private sector lending up year over year for 7 mos. running after almost 3-year decline.
- PMIs solid, business confidence, industrial production on the rise. Spanish/Portuguese elections in the fall could be contentious, dampen sentiment.

United Kingdom — Growing



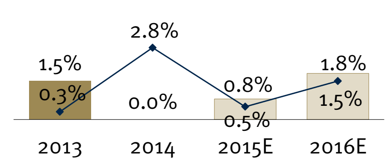
- Q2 GDP met expectations, up 2.6% y/y. Led by large services sector, trade. Construction and business capex flat. Oil sector subtracted from growth. Employment softer. PMIs positive. New orders healthy.
- Growth pace sustainable for 2015, but uncertainty around EU membership referendum may weigh on business investment/confidence.

China — Slowing



- Q2 GDP at 7.0% in line with gov't full-year target, but internals are mixed/weaker. Fixed asset investment slowing, as is loan growth. Manufacturing PMI has turned negative. Consumer, business confidence softer.
- Government easing credit conditions, more to come. Some firming in house prices.

Japan — Conflicted



- GDP growth sagged in Q2, but up year over year. Leading indicators, PMIs, corporate earnings, and business confidence all firm.
- Consumer confident, but spending flat. Weak oil prices putting inflation targets in jeopardy.

Source - RBC Investment Strategy Committee, RBC Capital Markets, and GPAC

Market Scorecard

Index (local currency)	Level	1 Month	YTD	12 Months
S&P 500	1,972.18	-6.3%	-4.2%	-1.6%
Dow Industrials (DJIA)	16,528.03	-6.6%	-7.3%	-3.3%
NASDAQ	4,776.51	-6.9%	0.9%	4.3%
Russell 2000	1,159.46	-6.4%	-3.8%	-1.3%
S&P/TSX Comp	13,859.12	-4.2%	-5.3%	-11.3%
FTSE All-Share	3,434.66	-6.0%	-2.8%	-5.6%
STOXX Europe 600	362.79	-8.5%	5.9%	6.1%
German DAX	10,259.46	-9.3%	4.6%	8.3%
Hang Seng	21,670.58	-12.0%	-8.2%	-12.4%
Shanghai Comp	3,205.99	-12.5%	-0.9%	44.6%
Nikkei 225	18,890.48	-8.2%	8.3%	22.5%
India Sensex	26,283.09	-6.5%	-4.4%	-1.3%
Singapore Straits Times	2,921.44	-8.8%	-13.2%	-12.2%
Brazil Ibovespa	46,625.52	-8.3%	-6.8%	-23.9%
Mexican Bolsa IPC	43,721.96	-2.3%	1.3%	-4.2%
Bond Yields	**8/31/15**	**12/31/14**	**8/31/14**	**12-mo. Chg**
US 2-Yr Tsy	0.738%	0.661%	0.488%	0.25%
US 10-Yr Tsy	2.218%	2.180%	2.343%	-0.13%
Canada 2-Yr	0.439%	0.409%	1.104%	-0.67%
Canada 10-Yr	1.493%	1.441%	1.995%	-0.50%
UK 2-Yr	0.687%	0.568%	0.838%	-0.15%
UK 10-Yr	1.962%	1.882%	2.368%	-0.41%
Germany 2-Yr	-0.203%	-0.232%	-0.029%	-0.17%
Germany 10-Yr	0.798%	0.644%	0.890%	-0.09%
Commodities (USD)	**Price**	**1 Month**	**YTD**	**12 Months**
Gold (spot $/oz)	1,134.80	3.6%	-4.2%	-11.9%
Silver (spot $/oz)	14.63	-1.1%	-6.9%	-24.9%
Copper ($/metric ton)	5,147.00	-1.4%	-19.2%	-26.6%
Uranium ($/lb)	36.75	2.1%	-8.1%	28.9%
Oil (WTI spot/bbl)	49.20	4.4%	-7.6%	-48.7%
Oil (Brent spot/bbl)	54.15	3.7%	-5.5%	-47.5%
Natural Gas ($/mmBtu)	2.69	-1.0%	-6.9%	-33.8%
Agriculture Index	279.97	-2.1%	-13.2%	-13.1%
Currencies	**Rate**	**1 Month**	**YTD**	**12 Months**
US Dollar Index	95.82	-1.6%	6.2%	15.8%
CAD/USD	0.76	-0.4%	-11.6%	-17.2%
USD/CAD	1.31	0.4%	13.1%	20.8%
EUR/USD	1.12	2.1%	-7.3%	-14.6%
GBP/USD	1.53	-1.8%	-1.5%	-7.5%
AUD/USD	0.71	-2.7%	-13.0%	-23.8%
USD/CHF	0.97	0.1%	-2.7%	5.3%
USD/JPY	121.23	-2.1%	1.2%	16.5%
EUR/JPY	135.90	-0.1%	-6.2%	-0.6%
EUR/GBP	0.73	3.9%	-5.9%	-7.7%
EUR/CHF	1.08	2.1%	-9.9%	-10.1%
USD/SGD	1.41	2.9%	6.5%	13.1%
USD/CNY	6.38	2.7%	2.8%	3.8%
USD/BRL	3.62	5.8%	36.2%	61.9%

Equity markets declined across the board in August, and Asia underperformed.

Bond yields rose modestly for the month amid volatile trading. U.S. 2-year jumped to its highest level since December 2014.

Crude oil bounced in August following severe losses in July.

Commodity currencies hit hard.

U.K. rate hikes delayed.

Equity returns do not include dividends, except for the German DAX. Equity performance and bond yields in local currencies. U.S. Dollar Index measures USD vs. six major currencies. Currency rates reflect market convention (CAD/USD is the exception). Currency returns quoted in terms of the first currency in each pairing. Examples of how to interpret currency data: CAD/USD 0.76 means 1 Canadian dollar will buy 0.76 U.S. dollar. CAD/USD -17.2% return means the Canadian dollar has fallen 17.2% vs. the U.S. dollar during the past 12 months. USD/JPY 121.23 means 1 U.S. dollar will buy 121.23 yen. USD/JPY 16.5% return means the U.S. dollar has risen 16.5% vs. the yen during the past 12 months.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 8/31/15.

Research Resources

This document is produced by the Global Portfolio Advisory Committee within RBC Wealth Management's Portfolio Advisory Group. The RBC Wealth Management Portfolio Advisory Group provides support related to asset allocation and portfolio construction for the firm's Investment Advisors / Financial Advisors who are engaged in assembling portfolios incorporating individual marketable securities. The Committee leverages the broad market outlook as developed by the RBC Investment Strategy Committee, providing additional tactical and thematic support utilizing research from the RBC Investment Strategy Committee, RBC Capital Markets, and third-party resources.

Global Portfolio Advisory Committee members:
Jim Allworth – Co-chair; Investment Strategist, RBC Dominion Securities Inc.

Rajan Bansi – Co-chair; Head of Fixed Income Strategies, RBC Wealth Management Portfolio Advisory Group, RBC Dominion Securities Inc.

Maarten Jansen – Head, Investments & Trading, RBC Wealth Management Global Wealth Services Group, RBC Dominion Securities Inc.

Mark Allen – Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group, RBC Dominion Securities Inc.

Matt Barasch – Head of Canadian Equities, RBC Wealth Management Portfolio Advisory Group, RBC Dominion Securities Inc.

Craig Bishop – Lead Strategist, U.S. Fixed Income Strategies Group, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Kelly Bogdanov – Portfolio Analyst, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Frédérique Carrier – Director, European Equities, Royal Bank of Canada Investment Management (U.K.) Ltd.

Janet Engels – Head of U.S. Equities, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Alan Robinson – Portfolio Advisor, RBC Wealth Management Portfolio Advisory Group, RBC Capital Markets, LLC

Jay Roberts – Head of Equity Advisory, Wealth Management Hong Kong, RBC Dominion Securities Inc.

The RBC Investment Strategy Committee (RISC), consists of senior investment professionals drawn from individual, client-focused business units within RBC, including the Portfolio Advisory Group. The RBC Investment Strategy Committee builds a broad global investment outlook and develops specific guidelines that can be used to manage portfolios. RISC is chaired by Daniel Chornous, CFA, Chief Investment Officer of RBC Global Asset Management Inc.

Required Disclosures

Analyst Certification
All of the views expressed in this report accurately reflect the personal views of the responsible analyst(s) about any and all of the subject securities or issuers. No part of the compensation of the responsible analyst(s) named herein is, or will be, directly or indirectly, related to the specific recommendations or views expressed by the responsible analyst(s) in this report.

Important Disclosures

In the U.S., RBC Wealth Management operates as a division of RBC Capital Markets, LLC. In Canada, RBC Wealth Management includes, without limitation, RBC Dominion Securities Inc., which is a foreign affiliate of RBC Capital Markets, LLC. This report has been prepared by RBC Capital Markets, LLC which is an indirect wholly-owned subsidiary of the Royal Bank of Canada and, as such, is a related issuer of Royal Bank of Canada.

Non-U.S. Analyst Disclosure: Mark Allen, Jim Allworth, Alana Awad, Rajan Bansi, Matt Barasch, and Jay Roberts, employees of RBC Wealth Management USA's foreign affiliate RBC Dominion Securities Inc.; and Frédérique Carrier, Davide Boglietti, and Hakan Enoksson, employees of RBC Wealth Management USA's foreign affiliate Royal Bank of Canada Investment Management (UK) Limited; contributed to the preparation of this publication. These individuals are not registered with or qualified as research analysts with the U.S. Financial Industry Regulatory Authority ("FINRA") and, since they are not associated persons of RBC Wealth Management, they may not be subject to NASD Rule 2711 and Incorporated NYSE Rule 472 governing communications with subject companies, the making of public appearances, and the trading of securities in accounts held by research analysts.

In the event that this is a compendium report (covers six or more companies), RBC Wealth Management may choose to provide important disclosure information by reference. To access current disclosures, clients should refer to http://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2 to view disclosures regarding RBC Wealth Management and its affiliated firms. Such information is also available upon request to RBC Wealth Management Publishing, 60 South Sixth St, Minneapolis, MN 55402.

References to a Recommended List in the recommendation history chart may include one or more recommended lists or model portfolios maintained by RBC Wealth Management or one of its affiliates. RBC Wealth Management recommended lists include the Guided Portfolio: Prime Income (RL 6), the Guided Portfolio: Large Cap (RL 7), the Guided Portfolio: Dividend Growth (RL 8), the Guided Portfolio: Midcap 111 (RL9), the Guided Portfolio: ADR (RL 10), and the Guided Portfolio: Global Equity (U.S.) (RL 11). RBC Capital Markets recommended lists include the Strategy Focus List and the Fundamental Equity Weightings (FEW) portfolios. The abbreviation 'RL On' means the date a security was placed on a Recommended List. The abbreviation 'RL Off' means the date a security was removed from a Recommended List.

Distribution of Ratings
For the purpose of ratings distributions, regulatory rules require member firms to assign ratings to one of three rating categories - Buy, Hold/Neutral, or Sell - regardless of a firm's own rating categories. Although RBC Capital Markets, LLC ratings of Top Pick (TP)/Outperform (O), Sector Perform (SP) and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis (as described below).

Distribution of Ratings - RBC Capital Markets, LLC Equity Research
As of June 30, 2015

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
Buy [Top Pick & Outperform]	935	53.16	293	31.34
Hold [Sector Perform]	707	40.19	124	17.54
Sell [Underperform]	117	6.65	6	5.13

Explanation of RBC Capital Markets, LLC Equity Rating System
An analyst's "sector" is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average. Although RBC Capital Markets, LLC ratings of Top Pick (TP)/Outperform (O), Sector Perform (SP), and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis (as described below).

Ratings: Top Pick (TP): Represents analyst's best idea in the sector; expected to provide significant absolute total return over 12 months with a favorable risk-reward ratio. **Outperform (O):** Expected to materially outperform sector average over 12 months. **Sector Perform (SP):** Returns expected to be in line with sector average over 12 months. **Underperform (U):** Returns expected to be materially below sector average over 12 months.

Risk Rating: As of March 31, 2013, RBC Capital Markets, LLC suspends its Average and Above Average risk ratings. The **Speculative** risk rating reflects a security's lower level of financial or operating predictability, illiquid share trading volumes, high balance sheet leverage, or limited operating history that result in a higher expectation of financial and/or stock price volatility.

Valuation and Price Target Impediments
When RBC Wealth Management assigns a value to a company in a research report, FINRA Rules and NYSE Rules (as incorporated into the FINRA Rulebook) require that the basis for the valuation and the impediments to obtaining that valuation be described. Where applicable, this information is included in the text of our research in the sections entitled "Valuation" and "Price Target Impediment", respectively.

The analyst(s) responsible for preparing this research report received compensation that is based upon various factors, including total revenues of RBC Capital Markets, LLC, and its affiliates, a portion of which are or have been generated by investment banking activities of the member companies of RBC Capital Markets, LLC and its affiliates.

Other Disclosures

Prepared with the assistance of our national research sources. RBC Wealth Management prepared this report and takes sole responsibility for its content and distribution. The content may have been based, at least in part, on material provided by our third-party correspondent research services. Our third-party correspondent has given RBC Wealth Management general permission to use its research reports as source materials, but has not reviewed or approved this report, nor has it been informed of its publication. Our third-party correspondent may from time to time have long or short positions in, effect transactions in, and make markets in securities referred to herein. Our third-party correspondent may from time to time perform investment banking or other services for, or solicit investment banking or other business from, any company mentioned in this report.

RBC Wealth Management endeavors to make all reasonable efforts to provide research simultaneously to all eligible clients, having regard to local time zones in overseas jurisdictions. In certain investment advisory accounts, RBC Wealth Management will act as overlay manager for our clients and will initiate transactions in the securities referenced herein for those accounts upon receipt of this report. These transactions may occur before or after your receipt of this report and may have a short-term impact on the market price of the securities in which transactions occur. RBC Wealth Management research is posted to our proprietary Web sites to ensure eligible clients receive coverage initiations and changes in rating, targets, and opinions in a timely manner. Additional distribution may be done by sales personnel via e-mail, fax, or regular mail. Clients may also receive our research via third-party vendors. Please contact your RBC Wealth Management Financial Advisor for more information regarding RBC Wealth Management research.

Conflicts Disclosure: RBC Wealth Management is registered with the Securities and Exchange Commission as a broker/dealer and an investment adviser, offering both brokerage and investment advisory services. RBC Wealth Management's Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on our Web site at http://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2. Conflicts of interests related to our investment advisory business can be found in Part II of the Firm's Form ADV or the Investment Advisor Group Disclosure Document. Copies of any of these documents are available upon request through your Financial Advisor. We reserve the right to amend or supplement this policy, Part II of the ADV, or Disclosure Document at any time.

The authors are employed by one of the following entities: RBC Wealth Management USA, a division of RBC Capital Markets, LLC, a securities broker-dealer with principal offices located in Minnesota and New York, USA; by RBC Dominion Securities Inc., a securities broker-dealer with principal offices located in Toronto, Canada; by RBC Investment Services (Asia) Limited, a subsidiary of RBC Dominion Securities Inc., a securities broker-dealer with principal offices located in Hong Kong, China; and by Royal Bank of Canada Investment Management (U.K.) Limited, an investment management company with principal offices located in London, United Kingdom.

The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property and a service mark of MSCI Inc. ("MSCI") and Standard & Poor's Financial Services LLC ("S&P") and is licensed for use by RBC. Neither MSCI, S&P, nor any other party involved in making or compiling the GICS or any GICS classifications makes any express or implied warranties or representations with respect to such standard or classification (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability and fitness for a particular purpose with respect to any of such standard or classification. Without limiting any of the foregoing, in no event shall MSCI, S&P, any of their affiliates or any third party involved in making or compiling the GICS or any GICS classifications have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

Disclaimer

The information contained in this report has been compiled by RBC Wealth Management, a division of RBC Capital Markets, LLC, from sources believed to be reliable, but no representation or warranty, express or implied, is made by Royal Bank of Canada, RBC Wealth Management, its affiliates or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC Wealth Management's judgment as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Every province in Canada, state in the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. As a result, the securities discussed in this report may not be eligible for sale in some jurisdictions. This report is not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. Nothing in this report constitutes legal, accounting or tax advice or individually tailored investment advice. This material is prepared for general circulation to clients, including clients who are affiliates of Royal Bank of Canada, and does not have regard to the particular circumstances or needs of any specific person who may read it. The investments or services contained in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about the suitability of such investments or services. To the full extent permitted by law neither Royal Bank of Canada nor any of its affiliates, nor any other person, accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or the information contained herein. No matter contained in this document may be reproduced or copied by any means without the prior consent of Royal Bank of Canada. In the U.S., RBC Wealth Management operates as a division of RBC Capital Markets, LLC. In Canada, RBC Wealth Management includes, without limitation, RBC Dominion Securities Inc., which is a foreign affiliate of RBC Capital Markets, LLC. This report has been prepared by RBC Capital Markets, LLC. Additional information is available upon request.

To U.S. Residents: This publication has been approved by RBC Capital Markets, LLC, Member NYSE/FINRA/SIPC, which is a U.S. registered broker-dealer and which accepts responsibility for this report and its dissemination in the United States. RBC Capital Markets, LLC, is an indirect wholly-owned subsidiary of the Royal Bank of Canada and, as such, is a related issuer of Royal Bank of Canada. Any U.S. recipient of this report that is not a registered broker-dealer or a bank acting in a broker or dealer capacity and that wishes further information regarding, or to effect any transaction in, any of the securities discussed in this report, should contact and place orders with RBC Capital Markets, LLC. International investing involves risks not typically associated with U.S. investing, including currency fluctuation, foreign taxation, political instability and different accounting standards.

To Canadian Residents: This publication has been approved by RBC Dominion Securities Inc. RBC Dominion Securities Inc.* and Royal Bank of Canada are separate corporate entities which are affiliated. *Member-Canadian Investor Protection Fund. ®Registered trademark of Royal Bank of Canada. Used under license. RBC Wealth Management is a registered trademark of Royal Bank of Canada. Used under license.

To European Residents: Clients of United Kingdom subsidiaries may be entitled to compensation from the UK Financial Services Compensation Scheme if any of these entities cannot meet its obligations. This depends on the type of business and the circumstances of the claim. Most types of investment business are covered for up to a total of £50,000. The Channel Islands subsidiaries are not covered by the UK Financial Services Compensation Scheme; the offices of Royal Bank of Canada (Channel Islands) Limited in Guernsey and Jersey are covered by the respective compensation schemes in these jurisdictions for deposit taking business only.

To Hong Kong Residents: This publication is distributed in Hong Kong by RBC Investment Services (Asia) Limited and RBC Investment Management (Asia) Limited, licensed corporations under the Securities and Futures Ordinance or, by Royal Bank of Canada, Hong Kong Branch, a registered institution under the Securities and Futures Ordinance. This material has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. Hong Kong persons wishing to obtain further information on any of the securities mentioned in this publication should contact RBC Investment Services (Asia) Limited, RBC Investment Management (Asia) Limited or Royal Bank of Canada, Hong Kong Branch at 17/Floor, Cheung Kong Center, 2 Queen's Road Central, Hong Kong (telephone number is 2848-1388).

To Singapore Residents: This publication is distributed in Singapore by RBC (Singapore Branch) and RBC (Asia) Limited, registered entities granted offshore bank status by the Monetary Authority of Singapore. This material has been prepared for general circulation and does not take into account the objectives, financial situation, or needs of any recipient. You are advised to seek independent advice from a financial adviser before purchasing any product. If you do not obtain independent advice, you should consider whether the product is suitable for you. Past performance is not indicative of future performance.