JUNE 2015

RBC WEALTH MANAGEMENT

GLOBAL INSIGHT

PERSPECTIVES FROM THE GLOBAL PORTFOLIO ADVISORY COMMITTEE

The Price of Water Scarcity

A fresh water shortage is making our blue planet thirsty. But some interesting trends and solutions could help quench the thirst.

Page 4

IN THIS ISSUE ››

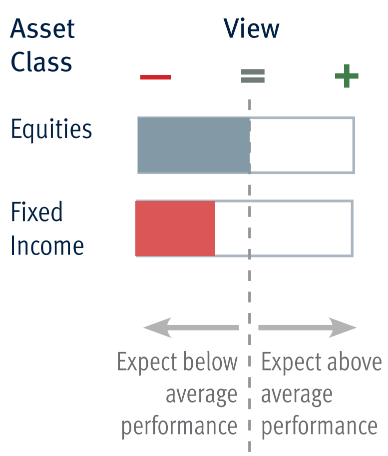
For Important and Required Non-U.S. Analyst Disclosures, see page 21.

Table of Contents

All values in U.S. dollars and priced as of May 29, 2015, market close, EST, unless otherwise noted.

RBC's Investment Stance

Global Asset Views



See "Views Explanation" below for details

Source - RBC Wealth Management

Equities – Average Performance =

- We remain constructive on the global equity market and anticipate worthwhile returns for the year. Monetary policies are supportive, corporate earnings should continue to grow, and many companies have capacity to return more cash to shareholders in the form of higher dividends and additional stock buybacks.
- Valuations for most markets are at or slightly above long-term averages, but are not so high as to warrant reducing exposure. However, all equity markets are cheap relative to bonds.
- While markets in China, Japan, and Europe have led year to date, the U.S. should gain ground in the second half of the year as domestic growth accelerates and corporate earnings improve.

Fixed Income – Below-Average Performance –

- We doubt the recent rise in government bond yields will continue unabated given that European growth should remain subdued, the U.S. economy is unlikely to achieve "escape velocity" in the near term, and global disinflationary pressures linger.
- Nevertheless, volatility and liquidity episodes will likely be a "new normal" for investors as central bank policies move toward divergence. Even though the timing is uncertain, the Federal Reserve and the Bank of England are preparing to raise rates while other major central banks are set to maintain easy monetary policies.
- Central bank policy expectations will continue to play a role in determining investment decisions. Whether the bias is toward further easing (Asia and Europe) or tightening (U.S. and U.K.), it is our opinion the best opportunities come from extending duration to take advantage of steep yield curves.

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

The Price of Water Scarcity

Executive Summary

Deane Dray
New York, United States
deane.dray@rbccm.com
RBC Capital Markets, LLC

The fresh water crisis touches our entire blue planet. From drought in California to the unavailability of clean, secure fresh water in many developing regions, urgent water issues are spilling over. But while this is a global crisis, it is critical to approach solutions locally. In our new special report we look at this fragile resource and how investors should approach water trends.

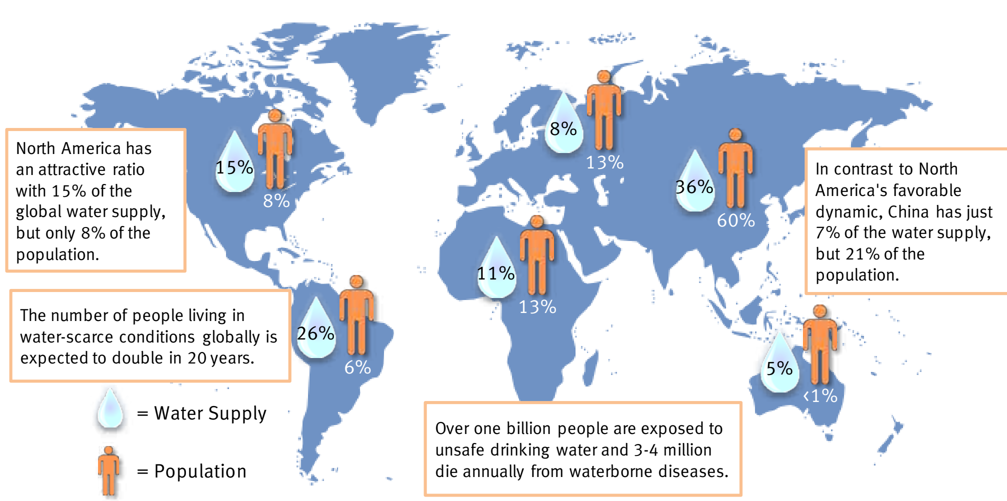
Following is an executive summary of a special report, *The Price of Water Scarcity*. Please find the full report **here**.

RBC Capital Markets, LLC Analyst Deane Dray brings a unique insight to the complex issues around fresh water. With 20 years as a capital markets industrial sector analyst, Deane has put his skills and values into action in many ways, including serving on the Advisory Board to the United Nations Environment Programme Finance Initiative on water issues. We are pleased to share Deane's insights on the subject of water in the following interview summary.

Q. Deane, your deep understanding of industrial technologies and end markets has encouraged world global organizations to tap your expertise. Water is a renewable resource, but there seem to be many issues at play.

A. Of course. Many issues center around conservation, reuse, and new sources of fresh water. Fresh water, including glacial packs, is only placed at 2.5% of total global water. Within this, fresh water lakes and rivers are estimated to represent only 0.3% of total fresh water. The problem gets bigger because in so many parts of the world, fresh water needs do not line up with availability.

Global Water Supply vs. Population Imbalance



Source - United Nations

The example that everyone should look at is the technology and service integration that Singapore has done.

Q. Can you point to any water management successes?

A. Singapore defines the big global trend toward urbanization and population growth in coastal cities that are typically in water-stressed regions. Part of the work that I've done with the United Nations focuses on these trends. In Singapore, "necessity is the mother of invention." From a geological standpoint, Singapore has zero natural sources of water. You are not going to find a river, there's not a brook, there's not a swamp, and there's not a lake.

For many years, the city piped in water from Malaysia. The exciting development is that beginning more than 15 years ago, Singapore started to change everything about their water management to develop one of the biggest water reuse systems in the world. This should be an example for other communities.

Singapore now treats all of their waste water instead of dumping it into the ocean. They created man-made lakes to hold treated water. This water is treated again for use as drinking water. They have built large-scale desalination systems that basically make the city drought-proof and lower the reliance on piping water from Malaysia. And they have lots of point-of-use treatment systems at both homes and businesses. Overall awareness throughout Singapore treats water as a precious resource.

On the negative side, you look at deferred water infrastructure maintenance and its costs. London is one of the worst cities in the world with respect to old, leaking water pipes. The city loses up to 30% of all its treated water as it passes through pipes and is lost through leaks. The developed markets of the U.S. and Europe are only updating and upgrading the water system with band-aids. Looking at the U.S. alone, the dollar estimates for the backlog of water projects the EPA concludes need to get done range from $300B to $1T.

If you compare this with what is actually being spent on upgrading the system, it will take the U.S. 800 years to complete the cycle. I know that's an absurd number, but it just shows perspective on the drawn out re-investment. When I tell people in Europe, they all kind of chuckle about how foolish the U.S. infrastructure deferral is. But I say, "Oh, in Europe that same math is 1,000 years."

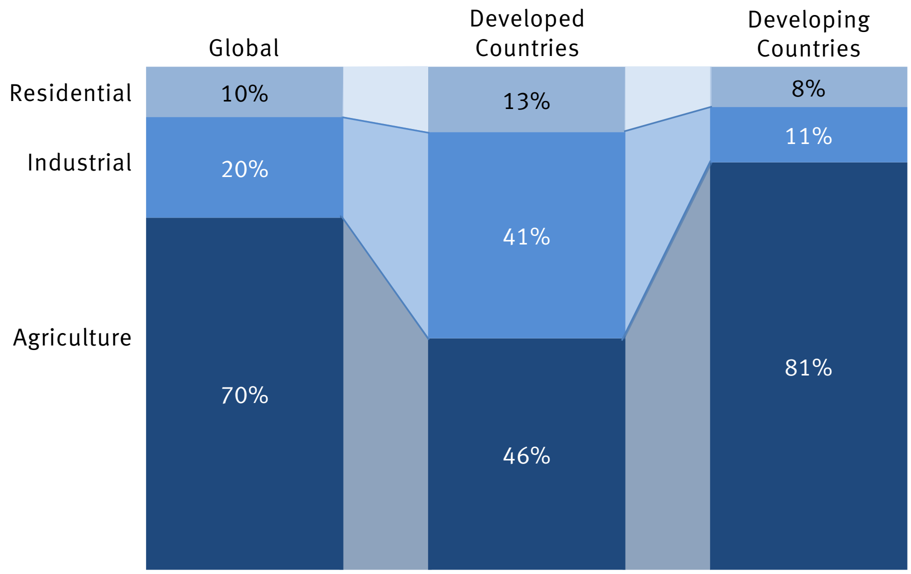
Q. Could you give some perspective on California's water issues?

A. We have all seen this crisis unfolding with California residents now in their fourth year of a drought. Governor Jerry Brown very recently called for domestic water restrictions cutting domestic use by 25%. More focus is good.

Here you have California, one of the richest states in the union with some of the most populated regions. We talk globally in terms of a water sector and water issues, but at the end of the day, water is always a very local issue (or, in this case, a state issue). There are legal jurisdictions unique to California as to who owns the water.

As a second issue, there is the California farmer. In the northern region, this group consumes 80% of all water used within the state. I find the lack of thought over really efficient use of water in agriculture discouraging. The state allows big acreage devoted to growing rice. Globally, water dedicated to agriculture is 70%. In developed markets such as Europe and the balance of the U.S., Ag use is typically much lower—

Global Profiles of Water Demand



Source - United Nations

around 45%. California is just out of scale. Resource use decisions need to be made. This means finding a balance between the water rights of a few thousand farmers and 39 million people living in the state.

Q. How do you approach the water theme as an investor?

A. If we aggregate products and services, you start getting to a number of $450B in annual product and services revenue that comprise a global water sector. People quickly conclude that they need to seek out investments in the sector. However, there is really an aggregate of at least 15 different end-markets including a separate water market related to pumps, valves, control systems, water tests, meters, water utilities, and then you can talk about desalination and irrigation as separate markets.

We think investors should be focusing on areas that are higher up the technology scale. At the higher end is the engineering and knowhow that goes into building a desalination plant or the technology that is integrated into water test measurement where contaminants are measured in a sensitivity of parts per trillion. That's where you get differentiated businesses. This includes membrane filtration including nanofiltration, pressure vessels that drive the system, and ultraviolet (UV) filtration. UV can be thought of as disinfecting water by putting it over a tanning bed. It provides an alternative to using chlorine. You will also see a number of products that use real-time sensors to fine-tune water treatment equipment—another offshoot of the "Internet of Things." In addition, I find it fascinating that there are still new water markets developing.

We invite readers to download the full interview with this link. Discussion includes several of these developing water markets and investment recommendations from Deane.

Focus Article

Canada Health Check

An Interview With Eric Lascelles

Eric Lascelles
Toronto, Canada
eric.lascelles@rbc.com
RBC Global Asset Management Inc.

With Canada trying to recuperate from the oil shock, we had an illuminating conversation with Eric Lascelles, chief economist for RBC Global Asset Management Inc., on this and other dynamics that warrant investor attention. From the economic handoff from West to East to a potential housing bubble and more, Eric highlighted what this all means to Canada's economy.

Q. Let's start with the drop in oil prices and how you see this impacting the Canadian economy.

A. Lower oil prices are bad—but not awful—for the Canadian economy. Without question, oil producers and their employees are hurt badly, with trickle-down effects that corrode fiscal coffers. Fortunately, there are several mitigating factors. For instance, oil production continues largely unabated in Canada—it is just the investment side of the business that is in freefall. Meanwhile, a weaker loonie, the Bank of Canada's rate cut, and a reasonably healthy U.S. economy (once first-quarter wiggles are out of the system) provide a powerful offset that substantially dampens the blow. Our modelling argues that around half a percentage point has been lopped from the Canadian economy's annual growth rate, which nevertheless leaves it firmly in growth mode, if diminished.

Quality-adjusted hiring has been surprisingly fine since the oil shock, and housing activity is holding up fairly well. However, greater weakness is evident at the provincial level, where our proxies show that Alberta, Saskatchewan, and Newfoundland are all experiencing much slower-than-usual economic growth.

Finally, there is some additional bad news and good news. The bad news is that the Canadian economy feels much worse to the average person than the official numbers indicate. Low oil prices and higher import prices don't feed directly into real GDP, but they nevertheless undermine the effective incomes of Canadians.

The good news is that oil prices have already substantially recovered. As this trend continues, some of the recent suffering will abate. Furthermore, the Bank of Canada believes that the economic hit from this oil shock is especially front-loaded, meaning the economy should enjoy some additional momentum over the coming quarters, even if oil prices don't cooperate.

Overall, the Canadian economy is no longer the high flyer of the developed world, but talk of an imminent recession appears overblown and the country was lucky that it ate through most of its economic slack before being hit by this shock.

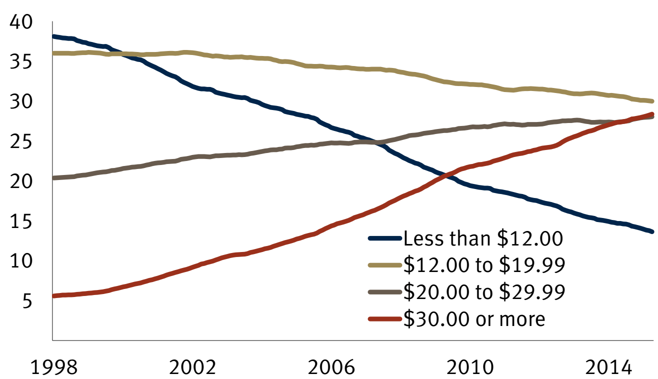
Q. Along the same lines, we have read much about the handoff from the West to the East as manufacturing takes over for energy in helping to support the economy. However, at the same time we have examples such as Toyota leaving Canada for Mexico and some discussions that other auto manufacturers may follow suit. How do you see this handoff playing out?

A. The handoff from West to East is probably overstated. There is admittedly something to it in the short run, as our provincial proxies find that Alberta and Saskatchewan are barely expanding while Ontario manages nation-leading growth. The obvious catalysts are low oil prices that hurt the West (and help the East), while the softer currency helps everyone (export-oriented Eastern manufacturers most).

Beyond the next year or two, the West will probably take the lead again, if less commandingly. The resource sector is not totally cooked, and the region has a young population and new infrastructure. British Columbia has mild weather and attracts significant Asian immigration and wealth. Meanwhile, the manufacturing provinces are helped by a weaker currency, but many of the lost jobs aren't coming back from China or Mexico.

Employment Distribution by Hourly Wage

Share of all employees, 12-month moving average



Source - RBC Economics Research; dollar figures in CAD

Higher-paying jobs trending up.

Q. Let's move to housing and the much-discussed issue of a Canadian housing bubble. Are you worried about this, or has the issue been blown out of proportion?

A. Canadian housing has a few near-term pressure points that relate to the latest price surge in some of the larger markets, and to Alberta vulnerabilities given the oil shock. These seem manageable for now. Meanwhile, the rate of national construction is actually well aligned with demographic demand, and affordability is surprisingly normal thanks to ultra-low mortgage rates.

Leaks start to form over the medium term. Rising mortgage rates—should interest rate normalization ever actually happen—will take housing affordability offside, with home prices potentially 15% too high. This doesn't have to be resolved via lower prices (rising incomes would also do the trick), but it might be. The condo market is less problematic than many people think, but should still be softer than the detached market throughout.

We tend to regard the housing market as a coming economic drag, but not a coming crisis. Reflecting this view, we maintain moderately below-consensus Canadian economic forecasts in the anticipation of eventual housing weakness. In contrast, the systemic (crisis) risks seem pretty limited, in sharp contrast to the U.S. experience.

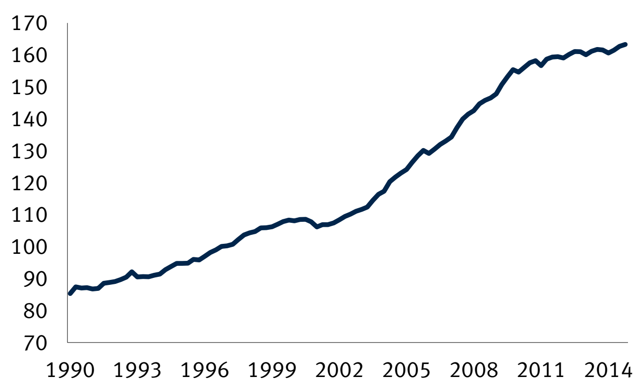
Q. What about household debt levels, which continue to boldly go where no household debt levels in Canada have gone before. Is this an area of concern and, if so, to what degree?

A. Household debt levels have risen in Canada, and are now higher than the U.S. and U.K. However, they are not nearly as high as several Scandinavian countries, and the fraction of household income needed to service this debt is at a record low level. Moreover, the vast majority of the debt is backed by an asset—real estate.

There are certainly still ways that this can go wrong—if home prices fall, then the cozy balance between assets and liabilities suddenly looks less viable. If interest rates rise significantly, then the cost of servicing all of this debt goes up. This issue is essentially one and the same with the housing market, and similarly translates into less economic growth in the future. The problem has been to get the timing right, as many have been incorrectly (or at least prematurely) prophesying doom for six years now.

Household Debt-to-Income Ratio: Canada

Credit market debt as a % of personal disposable income



Source - Statistics Canada, RBC Economics Research

Household debt levels continue to rise; but low interest rates act as an offset.

Q. Lastly, we have seen the Canadian dollar decline sharply over the past several years, but more recently, we have seen it start to stage a bit of a recovery. What are your views on the Canadian dollar from here?

A. The loonie has weakened significantly over the past two years, and then reclaimed some of that ground more recently. The fundamental tug-of-war is between oil prices, which are likely to rise somewhat further, and the U.S. dollar—which is on its own secular strengthening trend. In the end, the greenback should dominate, meaning that the Canadian dollar loses a few more cents, even if oil continues to recover. This is not an argument about valuation: the loonie has gone from significant overvaluation on a purchasing-power parity basis to modest undervaluation. It has far more to do with the U.S. dollar and the fact that the greenback traditionally goes through five- to ten-year cycles. The strengthening cycle doesn't appear to be done yet.

Constructive Economic Underpinning

Despite a first quarter rocked by severe weather, a port strike on the West Coast, and a slowdown in the energy sector, the U.S. private sector managed to expand by 3.2% y/y. Most developed economies look to have established encouraging forward momentum in recent quarters, including the EU and Japan.

Importantly, banking conditions are improving, suggesting the credit cycle is not about to ambush the economic outlook. Borrowing rates are low and banks are looking for opportunities to lend money to credit-worthy borrowers. Loans to the private sector in the eurozone have risen for four consecutive months to April after falling for two years.

Positive economic growth in the developed economies should translate into further growth in corporate earnings, the underpinning for higher share prices. And most major markets are trading only slightly above long-term average price-to-earnings multiples, suggesting investors are confident—but not complacently overconfident—those earnings will be delivered.

While monetary conditions are easy and supportive of higher earnings and share prices the Fed has been clear about its intention to begin "normalizing" interest rates later this year, probably at its September meeting. In our view, a normalized Fed funds rate would be about 2.50% in late 2017 or early 2018. The Fed will have to "tighten" to get to that level but "normal" does not equal "tight." We expect this constructive underpinning

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.

for share prices will deliver worthwhile all-in returns for equity portfolios for some time.

There is a "left field" within the economic/investing playground that can often offer up unsettling developments. Greece, geopolitics in the Middle East, Ukraine, and flashpoints in Asia, together with elections in Europe, the U.S. and Canada, are already on the investor's radar; undoubtedly several others are not. It would be unusual were equity markets not to encounter some setbacks or periods of uncomfortable volatility over the course of the next 12 months. For example, the first Fed rate hike in a tightening cycle, once it arrives, has typically produced 2–4 months of stock market jitters.

That said, we expect the long-term uptrend, underway since the financial crisis lows of 2009, has further to run, perhaps much further.

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

Regional Highlights

United States

- The S&P 500 inched above its three-month trading range and reached an all-time high in May. For the market to clearly break out into rally-mode, the bellwether transportation sector needs to get moving. It fell 3.4% last month, underperforming the Dow Jones Industrial Average by 436 basis points (bps), the widest margin since September 2012. Freight carriers, truckers, and airlines weakened as April's bounce in crude oil led to higher gasoline prices. Airlines were also hit on concerns about potential capacity additions and fare discounts. While the transport correction could have further to go, we believe the selloff in railway stocks, a key subsector, is overdone.

- The transport sector and broader market should ultimately be supported by a pickup in GDP growth in Q2, and stronger, above-trend economic activity in the second half of the year. Leading indicators, including a surge in housing starts, signal that soft Q1 GDP growth should prove transitory.

- Corporate earnings estimates are showing signs of stabilization. The full-year consensus forecast for S&P 500 earnings growth has hovered around 1%–2% y/y for the past three months, according to Thomson Reuters I/B/E/S. While at first blush that's nothing to get excited about, it includes a massive drag from the energy sector. Excluding energy, S&P 500 earnings could rise roughly 9% this year, which we think is achievable, if not beatable.

- We continue to favor large-cap stocks, and would overweight financials, health care, and technology. Financials seem likely to deliver the strongest earnings growth among all 10 sectors this year. Bank stocks should outperform as the timing of the Fed's first rate hike comes closer in view. And as the Fed's rate hike cycle progresses in 2016, banks with the highest interest rate sensitivity should benefit from a notable uptick in net interest margins.

Canada

We recommend market weight exposure to Canadian stocks, a stance we have held since October 2014. While we have concerns about the glide path of oil over the next 12–18 months, we continue to believe that the S&P/TSX offers pockets of value. We position our portfolios in the following manner:

- **Market Weight Financials**: We expect the year to be front-end loaded as benign credit conditions are likely

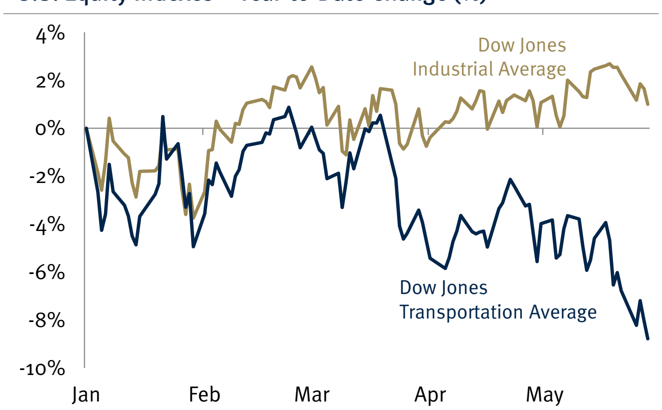
Kelly Bogdanov
San Francisco, United States
kelly.bogdanov@rbc.com

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

Frédérique Carrier
London, United Kingdom
frederique.carrier@rbc.com

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

U.S. Equity Indexes – Year-to-Date Change (%)



Source - RBC Wealth Management, Bloomberg

U.S. transports continue to underperform, calling into question the sustainability of the broader market's move.

to deteriorate to some degree in the back half of the year. We would be roughly market weight bank stocks, although better buying opportunities could emerge in the coming months. We regard the REIT space as a good source of income, but our view is tempered by the group's sensitivity to increases in interest rates.

- **Underweight Telecom**: While valuations relative to other areas of the market have grown more interesting, we are concerned about government regulation and the potential emergence of a fourth national wireless competitor.

- **Overweight Consumer**: While valuations have pushed to the high-end of historical norms, we expect the sector to continue to benefit from the decline in oil prices (which puts more money in consumers' pockets). Furthermore, the weaker loonie should boost domestic consumption.

- **Overweight Industrials**: We favour names that offer exposure to the U.S. economy. The recent weakness in rail stocks presents an opportunity to add exposure, in our view.

- **Underweight Energy**: The sector gave up much of its year-to-date gains in May. We remain concerned that valuations already reflect significantly higher oil prices than are likely to prevail over the next several quarters. We remain cautious.

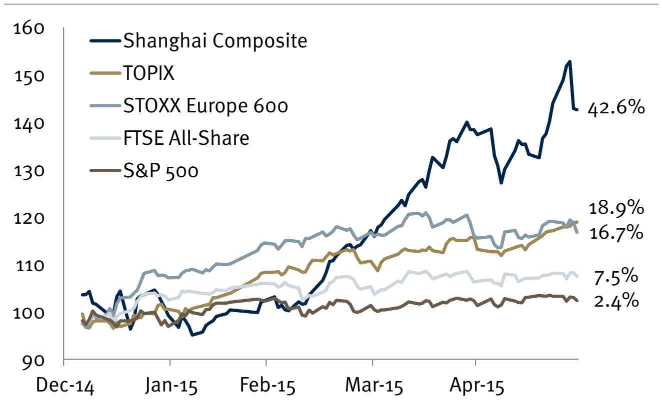
- **Underweight Materials**: China, the main driver of the commodity demand story, continues to manage down its growth rate, leaving many companies struggling to right-size production.

Continental Europe & U.K.

- Equities seem better underpinned in the short term on the stepping up of ECB quantitative purchases, U.K. policy continuation under the new Conservative government, and signs of progress on Greek debt negotiations. However, risks remain as the slim Conservative majority in the U.K. may erode over time, uncertainty caused by prospects of a referendum on EU membership could crimp growth, while the Greece issue remains unresolved.

- Valuation levels reflect much optimism. Both the U.K. and Europe trade on a 2016E (consensus) P/E of 15.0x. This is a substantial discount to U.S. equities, though not entirely unwarranted in the face of benign inflation, historically low interest rates, and profitability levels that

Year-to-Date Performance of Select Indexes (Rebased to 100)



Source - RBC Wealth Management, Bloomberg

Chinese equities have outperformed other major markets by a wide margin.

remain below those of the U.S. corporate sector.

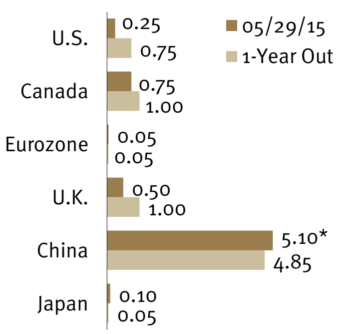
- Many European stocks have rallied since the beginning of 2015. The weak euro boosted international earnings and led to a pickup in takeover activity, which was further helped by low financing costs.
- Such price action presents opportunities to prune lesser quality holdings and focus on stocks with genuinely better prospects. The recent international ASCO oncology conference highlighted the potential for pharma sector companies involved in immuno-oncology. Telecoms benefit from more friendly regulation, market consolidation, and pricing improvement in many countries.

Asia

- After a strong start to 2015, the Shanghai Composite dropped 9% at the start of May only to regain most of the ground lost.
- The People's Bank of China reduced its one-year lending rate 25 bps, to 5.1%, which helped to bring about the mid-month reversal in stocks. This is the third cut in an easing cycle that began in November 2014, and we expect further policy easing in China in the months to come. Manufacturing and housing remain lackluster; however, the services sector, now the largest sector in the economy, continues to provide some offset. Low valuations are no longer a support for equities, however, as the index now trades at 18x forward earnings estimates and 2.6x book value vs. a forward P/E of 7.7x and (trailing) P/B of 1.3x when the rally started in July 2014.
- Japan's TOPIX Index reached a new cycle-high last month. We have been surprised by the consistent strength in Japanese stocks in recent weeks after strong gains earlier in the year. We remain cautious on a tactical basis. Longer term, we maintain our overweight position.

Spike in Yields Unlikely to Last

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

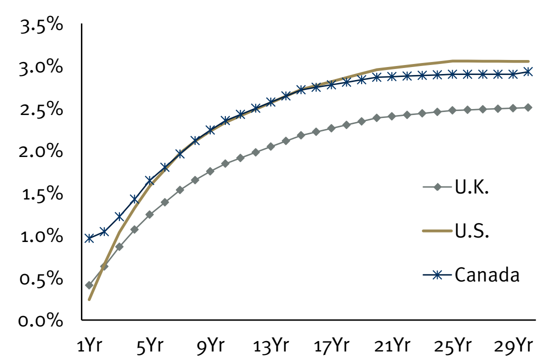
Tom Garretson
Minneapolis, United States
tom.garretson@rbc.com
RBC Capital Markets, LLC

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

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

Government bond yields recorded a notable rise in much of the developed world in May. We believe the recent move in yields has been the function of certain technical factors, including the reversal of what was likely an overbought market in parts of the world (i.e., Germany), but we would note that disinflationary pressures remain strong. As a result, we doubt the recent rise in yields will continue unabated.

Sovereign Yield Curves



Source - RBC Wealth Management, Bloomberg

Much has been made of negative yields in Europe, and the subsequent reversal that began in mid-April, but we believe this volatility is mostly a case of the financial markets finding their way in a world featuring enormous central bank intervention amidst a deflationary backdrop. Barring a significant acceleration of growth in Europe or the U.S., or a surge in commodity prices, we don't feel a further rise in government bond yields is likely given a dearth of fundamental catalysts.

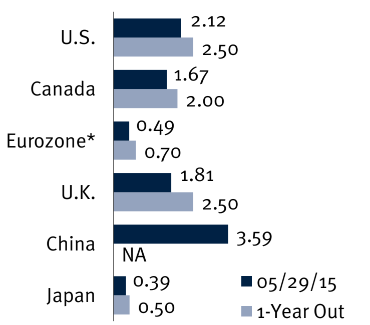
U.S. and Canadian fixed income investors should consider extending duration given the steeper yield curves that are in place. Specific to the U.S., we would prefer to add exposure to the BBB-rated segment of the corporate bond market in light of the spread differential existing between that segment and the A-rated part of the market.

Regional Highlights

United States

- U.S. bond yields stabilized over the course of May, following a sharp rise at the beginning of the month led by a selloff in the German 10-year bund. U.S. yield curves steepened in the process, creating a prime opportunity for investors to explore curve extension swaps ahead of a shift in focus back to the Federal Reserve and the forthcoming tightening cycle.
- The back-up in yields has negatively affected the performance of investment grade bonds, while the less interest rate-sensitive high-yield market has outperformed. As focus turns back to the Federal Reserve, we believe investment grade bonds are likely to regain some footing, with BBB-type credits offering the best mix of interest rate and positive economic sensitivity, in our view.
- The latest meeting minutes from the Federal Reserve's April 29 Federal Open Market Committee (FOMC) meeting confirmed what many already expected—a June rate hike is likely off the table. Attention will now likely turn to the September FOMC meeting, with the focus on incoming data for signs that the labor market is getting back on track, inflation is firming, and economic growth is rebounding from a weak Q1.

10-Year Rate (%)



*Eurozone utilizes German bunds.
Source - RBC Investment Strategy Committee, RBC Capital Markets, GPAC

Canada

- Widespread uncertainty in interest rate markets was felt in Canada as a global sentiment shift, oil price volatility, and economic data releases contributed to large fluctuations in bond yields. Rates were lower to end the month, but the most notable trend was the increased volatility experienced as various data releases provoked significant moves in government bonds.

- A broad-based rally in the U.S. dollar resulted in the Canadian dollar giving back most of its recent gains. The loonie sits 4.21% off its mid-month high of CA$0.8363.

- Early Q2 economic data has begun to trickle in. Recent data points have been mildly disappointing as both employment and inflation numbers for April came in below expectations. Q1 GDP declined at a rate of 0.6%, surprising markets with the first quarterly contraction since 2009. We continue to monitor economic data in order to gauge any potential for a sentiment shift at the Bank of Canada. For now the central bank remains on hold.

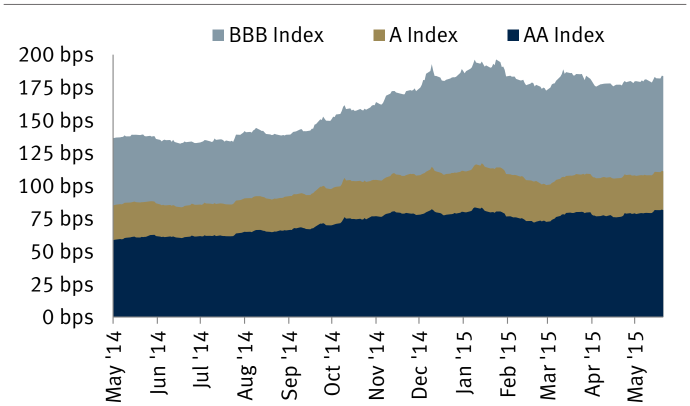
Continental Europe & U.K.

- The Greek debt crisis continues to loom in the background. However, the German bond market selloff has been the main market theme over recent weeks. German growth has weakened, and this, coupled with continued Greek resistance to bail-out terms, could result in the 10-year bund retesting recent lows, in our view. We see little value in core eurozone government bonds, whereas second-tier sovereigns may rally on the back of further purchases by the ECB.

- The U.K. election result has calmed the market, but triggered new concerns regarding the EU referendum expected to be held by 2017. We anticipate the Gilts market will be well-correlated to the U.S. Treasury market in the medium term as the U.K. economy, the Bank of England, and the market are all more in-line with their U.S. counterparts than those of the eurozone.

- Corporate spreads, unchanged in the GBP universe, rallied somewhat in the EUR in May. Corporate results have been bond-friendly so far, and defaults remain at very low levels. Furthermore, the ECB's QE is likely to cause spreads to tighten as a second round effect, leaving us with a continued positive view on corporate bonds. Finally, the recent selloff has resulted in a higher yield level, which we see as an opportunity to invest into the market.

U.S. Corporate Bond Spreads Over Treasury Yields: by Credit Quality



Source - RBC Wealth Management, Bloomberg Bond Indices; Data as of 5/28/2015

BBB-rated credits now yield 72 bps more than comparable A-rated credits, compared to an average of 62 bps over the past year.

Commodity Forecasts

	2015E	2016E
Oil (WTI $/bbl)	54.00	74.00
Natural Gas ($/mmBtu)	2.97	3.45
Gold ($/oz)	1,242	1,300
Copper ($/lb)	2.75	3.00
Corn ($/bu)	3.94*	4.20
Wheat ($/bu)	5.40*	5.61

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

Gold

- Gold remains weak ahead of an anticipated rate hike cycle from the U.S. Federal Reserve, which may lead to further U.S. dollar strength.
- In the near term, concerns around Greek debt could provide a positive catalyst for gold.
- Supply/demand trends remain unremarkable with steady demand from central banks and investors in bar and coin. Exchange-traded funds (ETFs) saw a modestly positive demand trend in Q1 2015, the first since 2012. Mine supply is steady.
- We continue to expect gold to trade in a range of $1,150–$1,400.

Copper and Industrial Metals

- Overall, the copper market has been in surplus from H2 2014 through Q1 2015, but RBC Capital Markets expects this to gradually change beginning in H2 2015.
- Production disruptions and a pickup in Chinese imports this spring has provided relief to the market. We believe a reasonable range for copper prices is $2.50–$3.00/lb in the near term.

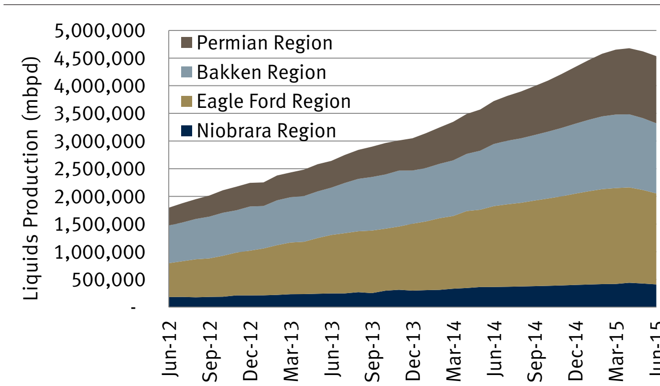
Oil

- Oil prices are up about 35% from the March 2015 lows on a supply response from U.S. producers, with the Energy Information Administration estimating that U.S. shale oil production is cresting.
- After record U.S. oil production growth in 2014 of 1.2 million barrels/day (bbl/d), RBC Capital Markets expects growth to decelerate to 630,000 and 580,000 bbl/d in 2015–16, respectively.
- While U.S. production growth is abating, global supply was up over 3 million bbl/d year over year in April. This increase compares with the International Energy Agency's total demand growth forecast of 1.1 million bbl/d for full-year 2015.
- Key near-term catalysts include: OPEC's June 5 meeting, Iranian nuclear sanction discussions, and U.S. production and storage levels.

Natural Gas

- Volume growth driven by Marcellus production continues to leave the market oversupplied. Summer weather and coal-to-gas switching dynamics will be key near-term catalysts for natural gas prices.
- We see $2.00–$3.50/mmBtu as a reasonable range for natural gas given the strong supply growth expected in 2015.

U.S. Shale Oil Production



Source - Energy Information Administration estimates through June 2015

U.S. shale oil production appears to be cresting.

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

Currency Forecasts

Currency Pair	Current Rate	Forecast Jun 2016	Change*
USD Index	96.91	93.36	-4%
CAD/USD	0.80	0.78	-2%
USD/CAD	1.25	1.28	2%
EUR/USD	1.10	1.16	5%
GBP/USD	1.53	1.63	7%
USD/CHF	0.94	0.97	3%
USD/JPY	124.15	126.00	1%
AUD/USD	0.76	0.74	-3%
NZD/USD	0.71	0.67	-6%
EUR/JPY	136.35	146.16	7%
EUR/GBP	0.72	0.71	-1%
EUR/CHF	1.03	1.13	9%
Emerging Currencies			
USD/CNY	6.20	6.90	11%
USD/INR	63.83	66.00	3%
USD/SGD	1.35	1.47	9%
USD/TRY	2.66	2.80	5%
USD/PLN	3.74	3.34	-11%
USD/MXN	15.38	14.25	-7%
USD/BRL	3.18	3.65	15%

* 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

- The Q1 2015 weather-related slowdown in the U.S. economy appears to have abated, and jobs data look to be rebounding. In our view, this should refocus the market's attention on the first rate hike of the cycle and support the dollar after its spring selloff (see chart).
- Longer-term, we still expect the dollar to end the year higher, but with more modest gains than in 2014.

Euro

- The April/May rally in the euro hit a wall near the end of the month as several ECB members voiced concerns over a strong currency. This "verbal intervention" was backed up by a pledge to accelerate quantitative easing which, combined with ongoing Greek woes, led to renewed weakness.
- We expect further weakness through the summer months before a modest recovery later in the year when foreign fund flows seeking to participate in the region's economic recovery should buoy the currency.

Japanese Yen

- The yen has traded in a surprisingly narrow range against the dollar so far in 2015. We believe opposing factors have balanced out: Japanese government pension fund outflows have likely been offset by the unwinding of short yen positions by speculative traders.
- As a result, we believe short positioning is less extended now, and may spark the next leg higher for the dollar against the yen, particularly if Japanese private investors continue to move funds offshore.

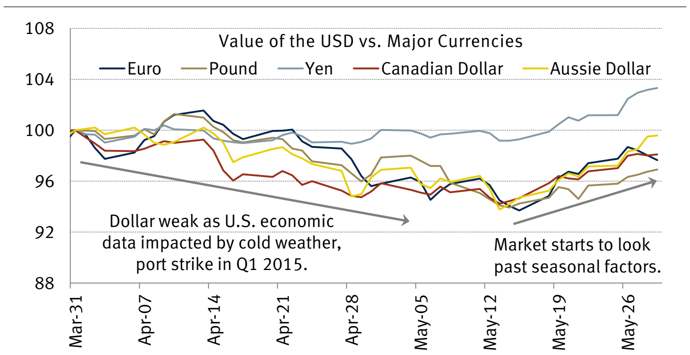
British Pound

- The unexpected margin of victory for the Conservative Party in the recent U.K. election pushed sterling higher on the expectation of a tighter budget deficit. Combined with stronger economic data, we expect further sterling strength as the market looks to a more rapid rate hike cycle.
- Over the long term we expect the pound to steady in 2016 as the prospect of an EU membership referendum or Scottish independence fears add negative risks to the currency.

Canadian Dollar

- The combination of firmer oil prices and a less dovish tone from the Bank of Canada has pushed the loonie higher against the dollar recently.
- We expect longer-term concerns over tepid Canadian growth relative to that of the U.S. and uncertainty over the price of oil to continue to put downward pressure on the loonie.

Seasonal U.S. Weakness Appears to Fade, Rate Hike Back on Agenda



Source - RBC Wealth Management, Thomson Reuters. Currency units per dollar, 3/31/15 = 100.

The spring swoon in the dollar reversed in May as the one-off impacts from Q1 2015 started to drop out of the economic data. Rate hike chatter should support the dollar through year-end.

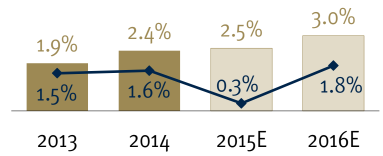
Alan Robinson
Seattle, United States
alan.robinson@rbc.com

Key Forecasts

Real GDP Growth — Inflation Rate

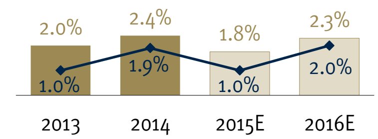
United States — Solid Growth

- Q1 economy contracted, hit by weather, port strike, energy sector woes, gov't drag. Nonetheless private sector grew by 3.2% y/y. Wage growth speeding up. Home sales strong. Leading indicators, confidence elevated. Construction spending improving.
- ISM manufacturing index rebounded in May. New orders and backlogs up. Unemployment claims at 30-yr low. 2.2% more jobs in last 12 months.



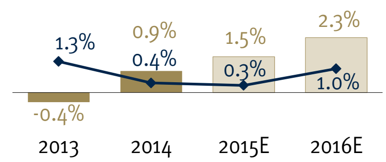
Canada — Energy Weakness

- Q1 GDP contracted modestly. House construction firm, business capex and gov't weak, consumer restrained by weather, uncertainty in energy sector.
- Mfg. unfilled orders off in April but near all-time high. Energy capex plans down sharply. Bank of Canada on hold.



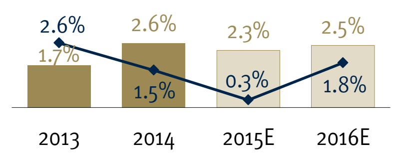
Eurozone — Improving

- Q1 was 7th successive quarter of positive growth, including for Spain, which is accelerating. Germany, Netherlands, Ireland solid. France lagging. Private sector lending up 4 mos. running after 2-year decline.
- Region's PMI off in April, still solidly above "50" expansion/contraction boundary. Germany, Spain leading the way, Italy in positive territory, France soft. Russia, Greece weighing.



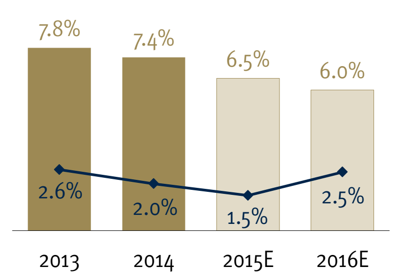
United Kingdom — Solid but Slower

- Q1 GDP up (9th in a row) but weakest since Q4 2012. Services eased, construction and business capex weak. Oil sector subtracted from growth. Employment and wages solid. April PMI weaker. New orders and export orders both higher.
- Growth pace sustainable for 2015, but uncertainty around EU membership referendum weighing on business investment.



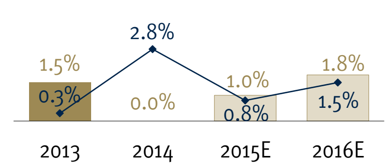
China — Stabilising

- Q1 GDP at 7.0% in line with gov't full-year target but industrial output, fixed asset investment, and retail sales all slowed. Manufacturing PMI back above 50. Business and consumer confidence improved.
- Loans still growing faster than GDP. Gov't easing credit conditions.



Japan — Volatile

- GDP growth rate improved again in Q1. Leading indicators, new orders, corporate earnings, and business confidence all better.
- Consumer confident, starting to spend, wages growing. 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	2,107.39	1.0%	2.4%	9.6%
Dow Industrials (DJIA)	18,010.68	1.0%	1.1%	7.7%
NASDAQ	5,070.03	2.6%	7.1%	19.5%
Russell 2000	1,246.53	2.2%	3.5%	9.9%
S&P/TSX Comp	15,014.09	-1.4%	2.6%	2.8%
FTSE All-Share	3,797.12	1.0%	7.5%	3.9%
STOXX Europe 600	399.87	1.0%	16.7%	16.2%
German DAX	11,413.82	-0.4%	16.4%	14.8%
Hang Seng	27,424.19	-2.5%	16.2%	18.8%
Shanghai Comp	4,611.74	3.8%	42.6%	126.2%
Nikkei 225	20,563.15	5.3%	17.8%	40.5%
India Sensex	27,828.44	3.0%	1.2%	14.9%
Singapore Straits Times	3,392.11	-2.7%	0.8%	2.9%
Brazil Ibovespa	52,760.48	-6.2%	5.5%	3.0%
Mexican Bolsa IPC	44,703.62	0.3%	3.6%	8.1%
Bond Yields	**5/29/15**	**12/31/14**	**5/30/14**	**12-mo. Chg**
US 2-Yr Tsy	0.605%	0.567%	0.373%	0.23%
US 10-Yr Tsy	2.121%	2.032%	2.476%	-0.35%
Canada 2-Yr	0.569%	0.676%	1.049%	-0.48%
Canada 10-Yr	1.624%	1.581%	2.246%	-0.62%
UK 2-Yr	0.509%	0.535%	0.666%	-0.16%
UK 10-Yr	1.813%	1.834%	2.570%	-0.76%
Germany 2-Yr	-0.225%	-0.221%	0.064%	-0.29%
Germany 10-Yr	0.487%	0.366%	1.358%	-0.87%
Commodities (USD)	**Price**	**1 Month**	**YTD**	**12 Months**
Gold (spot $/oz)	1,190.55	0.5%	0.5%	-4.7%
Silver (spot $/oz)	16.75	3.7%	6.7%	-11.0%
Copper ($/metric ton)	6,005.25	-5.6%	-5.7%	-13.2%
Uranium ($/lb)	35.00	-8.5%	-12.5%	23.9%
Oil (WTI spot/bbl)	60.30	1.1%	13.2%	-41.3%
Oil (Brent spot/bbl)	65.56	-1.8%	14.4%	-40.1%
Natural Gas ($/mmBtu)	2.64	-4.0%	-8.5%	-41.8%
Agriculture Index	280.43	-3.5%	-13.0%	-28.0%
Currencies	**Rate**	**1 Month**	**YTD**	**12 Months**
US Dollar Index	96.91	2.4%	7.4%	20.6%
CAD/USD	0.80	-3.0%	-6.7%	-12.9%
USD/CAD	1.25	3.1%	7.2%	14.8%
EUR/USD	1.10	-2.1%	-9.2%	-19.4%
GBP/USD	1.53	-0.4%	-1.8%	-8.7%
AUD/USD	0.76	-3.3%	-6.5%	-17.9%
USD/CHF	0.94	0.8%	-5.4%	5.0%
USD/JPY	124.15	4.0%	3.6%	22.0%
EUR/JPY	136.35	1.8%	-5.9%	-1.7%
EUR/GBP	0.72	-1.7%	-7.5%	-11.7%
EUR/CHF	1.03	-1.2%	-14.1%	-15.3%
USD/SGD	1.35	1.8%	1.7%	7.5%
USD/CNY	6.20	-0.1%	-0.1%	-0.8%
USD/BRL	3.18	5.4%	19.6%	41.8%

Shanghai Comp rises in 12 of the past 13 months.

U.S. 10-year ends May well below the 2.29% monthly high.

Nat gas retreats again on strong U.S. supply growth.

Yen sellers re-emerge.

Expect Brazil economy to contract in '15.

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 0.80 means 1 Canadian dollar will buy 0.80 U.S. dollar. CAD/USD -12.9% return means the Canadian dollar has fallen 12.9% vs. the U.S. dollar during the past 12 months. USD/JPY 124.15 means 1 U.S. dollar will buy 124.15 yen. USD/JPY 22.0% return means the U.S. dollar has risen 22.0% vs. the yen during the past 12 months.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 5/29/15.

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:

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

Jim Allworth – Co-chair; Investment Strategist, 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.

Rajan Bansi – Head of Fixed Income Strategies, 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.

George King IV – Head of Portfolio Strategy, Royal Bank of Canada Investment Management (U.K.) Ltd.

René Morgenthaler – Head of Investment, RBC (Suisse) SA, RBC International Wealth Management

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: Eric Lascelles, an employee of RBC Global Asset Management Inc.; 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, 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).

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).

Distribution of Ratings - RBC Capital Markets, LLC Equity Research
As of March 31, 2015

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
Buy [Top Pick & Outperform]	909	52.33	280	30.80
Hold [Sector Perform]	713	41.05	125	17.53
Sell [Underperform]	115	6.62	5	4.35

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.