

Global Insight

Perspectives from the Global Portfolio Advisory Committee

The long and winding road

The reality of Brexit has the U.K. embarking on a lengthy and uncertain journey.

Frédérique Carrier | Page 4



Global equity
A world beyond Brexit



Global fixed income
Lower for much, much longer



Commodities
Oil change



Currencies
Pounded

For important and required non-U.S. analyst disclosures, see page 22.



**Wealth
Management**

Table of contents

4 The long and winding road

The U.K. is standing before a door to the unknown. Its political leadership is in upheaval, and given that it will take years for the U.K. to unravel from the EU, financial markets will likely feel the reverberations of the Brexit vote for some time.

11 Global equity: A world beyond Brexit

Driven by the murky outlook for the U.K. and Europe in the aftermath of the Brexit vote, we have trimmed our recommended global equity exposure. Meanwhile, the U.S. economic expansion remains resilient and as Energy sector stability feeds into earnings growth, we maintain full commitments to North America and Asia.

15 Global fixed income: Lower for much, much longer

As markets and central banks wade through Brexit's uncertain aftermath, ultraloose monetary policy will remain the order of the day. Low sovereign bond yields are with us to stay for now and investors should have a judicious approach to adding credit exposure.

Inside the markets

3 RBC's investment stance

11 Global equity

15 Global fixed income

17 Commodities

18 Currencies

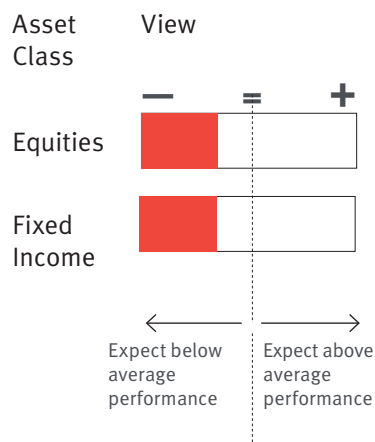
19 Key forecasts

20 Market scorecard

All values in U.S. dollars and priced as of market close, June 30, 2016, unless otherwise stated.

RBC's investment stance

Global asset views



See “Views explanation” below for details

Source - RBC Wealth Management

Equities

- The U.K.'s vote to leave the EU will have consequences. The global economy will be hard-pressed to accelerate, as growth will likely retreat in the U.K. and moderate in the EU. Earnings estimates are vulnerable to some downward revision.
- Brexit justifies modest changes to equity portfolios, in our assessment. We have [downgraded](#) global equities to Underweight from In-line, which translates into holding equity exposure below the long-term targeted allocation level. This shift is primarily driven by our Continental Europe downgrade. (See [pages 11–14](#) for details.)
- This is not a call to raise cash significantly. Rather, it is a recommendation to trim equities and temporarily park some cash on the sidelines. If post-Brexit volatility is not the start of a global bear market—and we don't think it is—then opportunities should eventually emerge to buy attractive businesses at bargain prices.

Fixed Income

- In the Brexit vote's aftermath, major central banks will likely keep monetary policy quite loose for much longer or ease further. The Bank of England and European Central Bank seem ready to act if economic activity deteriorates significantly. The Federal Reserve is likely on hold until mid-2017. Government bond yields could possibly retreat even lower given it may take months to get more clarity on how Brexit will unfold and to gauge its potential economic implications.
- We remain constructive on the credit sector overall, but continue to recommend being selective about adding exposure as spreads are significantly tighter than they were last February. Over time, U.S. corporate bonds should benefit from an influx of foreign funds as the market offers relatively attractive yields compared to other regions.

Views explanation

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

+ Overweight 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.

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



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

The long and winding road

The Brexit vote has opened Pandora's box. One question has been answered only to be replaced by a myriad of unknowns. While the U.K. voted against the EU, it is unclear what exactly it has voted for. The collapse of political leadership adds a significant new complication that won't be resolved until autumn (if then) with the election of a new prime minister. Whatever the political resolution, the new shape of the U.K.'s relationship with the EU will not be known for many years. This will weigh on the U.K. economy and is likely to periodically rattle financial markets for some time to come.

Perfidious politics

Having made the momentous decision to leave the EU, the U.K. is in the grips of intense political uncertainty.

Prime Minister David Cameron, who had campaigned for "Remain," decided new leadership would be needed to take the country down the Brexit path and immediately resigned. A new prime minister will be chosen by all Conservative Party members by September 9. The leadership campaign will be inextricably linked to:

- Discussions regarding the timing of triggering Article 50 of the Lisbon Treaty, the mechanism to start the exit negotiations. EU officials are adamant that no negotiations will start (not even soft ones) without this. Article 50 sets out a two-year deadline for the terms of departure to be agreed to by all other 27 EU countries.
- The shape of negotiations concerning the new model the U.K. wishes to seek to adopt.

The Conservative Party may have a relatively free rein in forming this strategy as the Labour Party is in disarray, depriving the country of a credible opposition. The Labour leader, blamed for a poor endorsement of the Remain campaign, has so far resisted a vote of no confidence. Here too, a new leader may emerge.

Many are referring to this as the worst political crisis since the Second World War.

A roadmap to Brexit

Despite uncertainties and unanswered questions, it can be useful to map out a plausible process which could unfold as the U.K. reshapes its relationship with the EU.

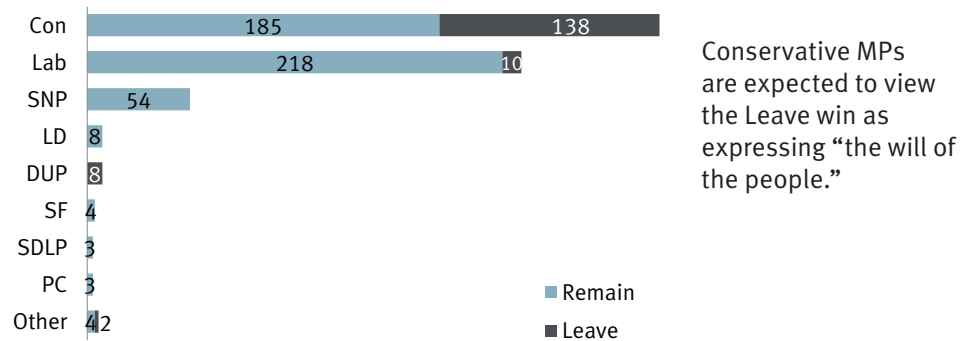
The process will begin with the election of a new Conservative leader and prime minister (PM) by September 9. While members of parliament (MPs) will conduct the initial vote, the new PM will be chosen by the 150,000 Conservative Party members, the large majority of whom voted for "Leave," according to polls such as that conducted by ConservativeHome. It is reasonable to expect the new PM will thus seek to implement the result of the referendum.

The new PM could either unilaterally trigger Article 50 or seek parliamentary approval for submitting the request to leave the EU. Given the referendum was not legally binding, it is more likely parliamentary approval would be sought.

How the 650 MPs vote would then be crucial. As the chart below shows, the House of Commons is largely pro-Remain. However, Conservative MPs are expected to support their leader and regard the 51.8% referendum vote for Leave as expressing “the will of the people.”

MPs’ declared EU referendum stances

Number of MPs



Note: As of June 22, 2016; excludes MPs who did not declare their position
Source - BBC

The longer the delay in triggering Article 50, the more the reality of an untethered Britain may sink in, possibly making a compromise easier to reach.

However, a confidence vote and potentially a new general election are possible should a small number of Conservative MPs rebel against their leader and vote according to their own personal preferences, on the grounds that the vote was won by too narrow a majority. Observers assign a low probability to this outcome.

Once Article 50 has been triggered, negotiations regarding the exit would ensue shortly after. These should take two years, though an extension is likely. With general elections in France and Germany in 2017, European leaders may want to stall the negotiations.

While the U.K. may be willing to start negotiating the terms of the new relationship once a new prime minister has been installed in September, the EU has ruled out even soft negotiations until Article 50 has been formally activated. The U.K. does not have a strong negotiating position given it loses several trading relationships representing half its exports in one go, while the EU loses only one. The EU sends a mere 10% of its exports to the U.K.

Brexiters currently aim to maintain access to the single market while restricting the free movement of labour, a key pillar of the EU, and without contributing to the EU budget. There is no precedent for such an arrangement, and it is difficult to see how this may be agreed to early or quickly, if at all. The EU will not wish to set a precedent which could encourage other EU members to seek changes to existing agreements.

A compromise will eventually have to be forged. The longer the delay in triggering Article 50, the more the reality of an unmoored Britain may sink in, possibly making a compromise easier to reach. The U.K. could opt for membership of the European Economic Area (EEA), the so-called Norway model, retaining access to the single market in exchange for a contribution to the EU budget and free movement of labour. It would have no say in EU politics. Many question the

We expect the negotiations to be lengthy, tricky, and to weigh on economic activity.

advantage of that arrangement over the previous model, though it would be the least damaging to the U.K. economy.

Alternatively, the U.K. could be adamant about rejecting the free movement of labour and accept restricted access to the single market (i.e., excluding some services or some goods).

Once negotiations with the EU are concluded, all remaining 27 EU nations and the U.K. will have to ratify the outcome, either through their respective parliaments or by referendum. This will be a challenge.

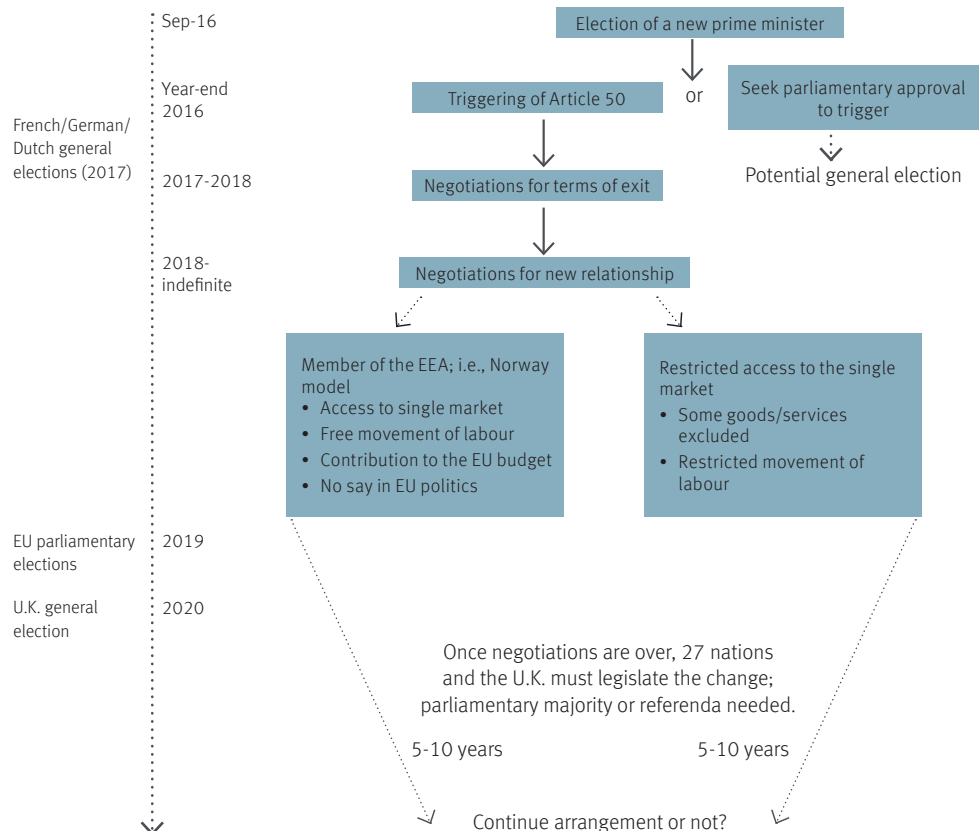
Whatever path is taken, a time limit could be imposed, perhaps five to 10 years, after which the U.K. could decide to continue with the arrangement or opt out of the EEA and seek a complete exit through bilateral agreements. Other options may be available then.

The negotiation process with the EU, due to its opacity, will create deep uncertainty. We expect the negotiations to be lengthy, tricky, and to weigh on economic activity.

Moreover, other negotiations will need to take place. The U.K. will have to negotiate trade arrangements with over 50 countries that the EU has trading relationships with as they will no longer apply once the U.K. exits the EU. The government no longer has a deep pool of expertise to deal with trade issues

Brexit timeline

Key scheduled elections in Europe



Source - RBC Wealth Management

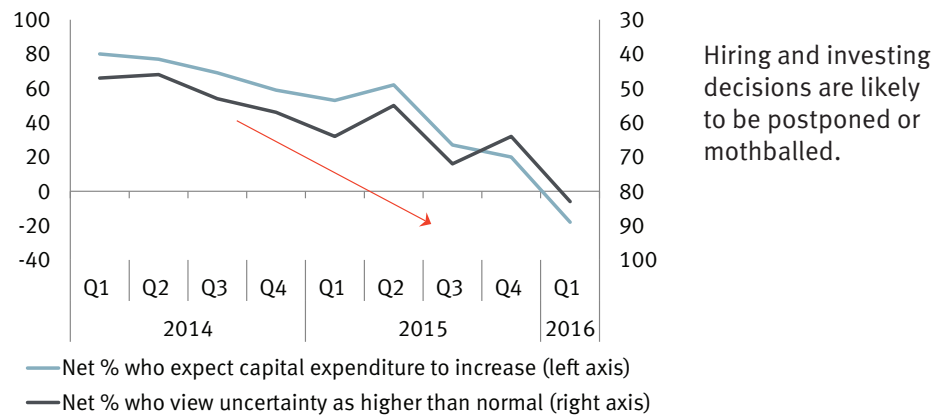
given the EU has long handled these matters. The newly established Brexit Unit of the U.K. government will have its work cut out.

Slippery slope economy

Given the lack of clarity on the path ahead, there is an unusual amount of risk attending any economic forecast. Nevertheless, one can surmise that this level of uncertainty will dampen growth.

A mild recession in the U.K. should begin in the second half of this year, in our view. Business investment, already weakening prior to the vote, is likely to deteriorate even more. The most recent construction PMI fell further than anyone had expected (to 46 from 52). Hiring decisions are likely to be postponed, while households may hold back on purchases. Upcoming data will be closely scrutinised.

U.K. CFOs are growing more cautious

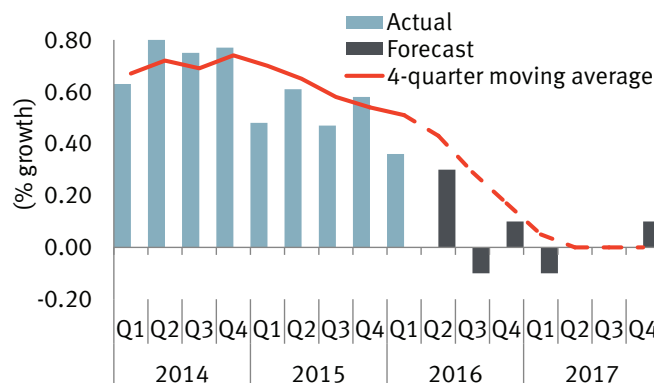


Source - Deloitte Chief Financial Officer Survey Q1 2016

Sam Hill, RBC Capital Markets, LLC's senior U.K. economist, has lowered his 2016 GDP growth forecast to 1.4% from 1.8%. For 2017, he expects GDP growth of 0%, down from 2.1% previously. Forecasts are likely to be revised as the Brexit process becomes clearer.

GDP growth grinds to a halt

U.K. GDP growth (q/q %)



A mild recession is likely in the second half of 2016.

Source - RBC Capital Markets (forecast data), RBC Wealth Management, Haver Analytics

The longer-term effect on the economy could be more moderate though not insignificant.

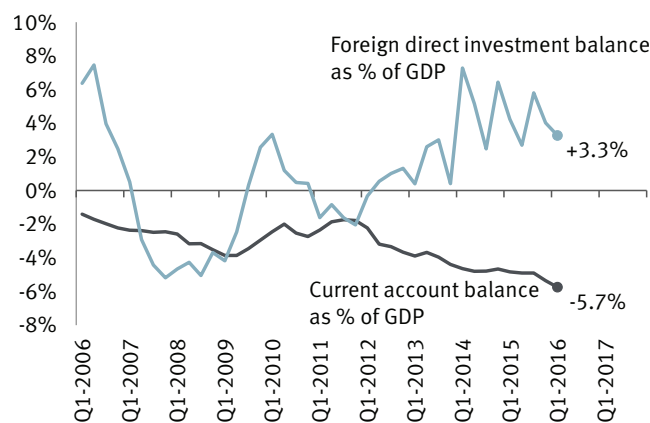
With the growth background threatened, the Bank of England (BoE) has been quick to say it will step in, as widely expected. RBC Capital Markets expects the Bank Rate to be cut to 0.25% in July and an additional cut to 0.10% in August, accompanied by a £50B increase in asset purchases, bringing the quantitative easing (QE) programme to £425B.

With the currency weakening—GBP/USD has plunged more than 12% since the vote, hitting a 31-year low—inflation would be expected to increase. In the 2007–08 financial crisis when the pound fell 30% against its trade-weighted average, inflation rose to 5%. In the current environment Hill expects U.K. inflation to climb to 3%. Any increase may prove transient as the deflationary effects of the economic slowdown take root.

Despite a weaker pound boosting exports, lower business investment could lead to a sharp deterioration of the balance of payments. The U.K. runs a current account deficit of over 5% of GDP, the largest in the developed world. This has been financed largely by foreign direct investment (FDI), for which the U.K. has been a prime destination thanks to the lure of unrestricted access to the EU market of 500 million people, the country's flexible labour laws, and a well-functioning judiciary system.

Should FDI dry up, the currency will have to weaken further to redress the balance. The impact of exchange rate depreciation should boost the U.K.'s net trade position, but this is unlikely to fully offset the drop in business spending.

U.K. foreign direct investment balance vs. current account balance (latest 12 mos.)



The current account deficit is vulnerable to FDI drying up.

Source - RBC Global Asset Management, RBC Wealth Management

In the longer term, the effect on the economy could be more moderate though not insignificant. Eric Lascelles, chief economist at RBC Global Asset Management, expects higher tariffs, less immigration, and the slight diminishment of London as a financial hub could shave as much as a quarter percentage point off growth annually over the coming decade. Potential savings on transfers to Brussels and greater regulatory sovereignty may help but are unlikely to compensate for these factors completely.

Any assessment significantly depends on the new relationship the U.K. is able to negotiate with the EU.

We have lowered our expectations for the pound and are adopting a more cautious stance for fixed income.

A number of other factors could further weigh on growth:

- Scotland holding another referendum on independence, as First Minister Nicola Sturgeon seems to intend, would add further uncertainty.
- A negative feedback loop, as slower growth in Europe due to Brexit feeds back into the U.K. economy.
- Whether the new PM appoints a new chancellor of the exchequer with a more stimulative approach.

Financial markets

Due to the uncertainty regarding the U.K.'s extrication from the EU, we are now adopting a more cautious stance regarding fixed income and equities in the region. We have also lowered our expectations for the pound. Concerted central bank action could play against this view and rallies in oversold markets are possible.

Currency

We have moved to a negative outlook for sterling. Discussions on the shape of the U.K.'s position on issues, such as trade, will greatly affect the degree to which sterling declines further from here. Our base case is for GBP/USD to reach 1.20, though a full-blown balance of payment crisis could drag the currency down further, perhaps to as low as 1.10–1.15.

We expect EUR/GBP to move higher as the euro should weaken, though not to the same extent as the pound. While economic activity in the EU has been stronger than in the U.K. recently, investors are concerned that given its links to the U.K., European economic activity will not escape unscathed. We expect EUR/GBP to peak somewhere near 0.8600 over the next year or so.

Fixed Income

The 10-year Gilt now trades with a yield of 0.74% (as of July 6)—almost 60 basis points lower than pre-Brexit. With the U.K. growth outlook weakening, BoE Governor Mark Carney was swift to reassure markets that monetary policy will be accommodative during this period.

Credit rating agencies S&P, Moody's, and Fitch have all made downward adjustments, with S&P removing the U.K.'s AAA rating. Questioning the stability and effectiveness of policymaking, S&P is concerned over external financing conditions and retains a negative outlook. A further downgrade could be on the table.

U.K. corporate bonds have suffered. Domestic banking names have been the most affected along with those corporate issuers with a heavy U.K. focus. Corporate bond exposure should be re-evaluated across currencies, specifically around U.K. banks and retail-focused companies where the outlook for U.K. growth looks unclear.

Equities

We are retaining our Underweight position for U.K. equities while also adopting a more defensive stance in our equity selection.

The weaker pound will benefit USD earners and exporters, such as Pharmaceutical companies and Consumer Staples.

Investors may seek refuge in commodity plays. However, we would note that while the weak pound may be a tailwind, unless commodities markets fully

The long and winding road

The weaker pound will benefit USD earners and exporters; we are cautious on U.K. domestic cyclicals.

reassert themselves, many in this sector are likely to continue to endure cash flow difficulties which may imperil dividends.

We are more cautious on domestic cyclicals, particularly those facing weaker demand as well as a higher cost of raw materials if paid for in USD. However, a great deal may already be discounted. Sharp price movements may present opportunities for investors who can withstand heightened volatility over a longer-term horizon.

Our approach towards banks is guarded. Margins will likely be suppressed by lower for longer interest rates. A recessionary environment may lead to an increase in nonperforming loans and provisions. As a result, less capital generation could endanger banks' capital adequacy position, which in turn would limit their ability to remunerate shareholders.

Adapting ... again

The Brexit vote has changed the course of history for the U.K. But the country is no stranger to these abrupt changes. The loss of the thirteen colonies in the 18th century heralded a period of instability for the U.K. before it recuperated. As politicians begin to unravel the current relationship with the U.K.'s largest export market, the domestic economy will bear the brunt of the change and ensuing uncertainty. It will take several years before a new relationship is established. For now, we adopt a more cautious view of sterling, U.K. domestic fixed income, and equities.

A world beyond Brexit

For a global portfolio we have moved our recommended equity exposure to Underweight, which translates into a somewhat less than full commitment to stocks. This can be almost entirely ascribed to our decision to shift down to an Underweight for Continental Europe in the wake of the Brexit referendum result. Together with the U.K., where we were already Underweight, Europe accounts for some 21% of the MSCI World Index.

We have also moved our recommended allocation for Japan down to In-line from Overweight. We continue to have a full commitment to the U.S. market as well as to Asia ex-Japan. We are Overweight the Canadian market.

In our view, both the U.K. and to a lesser extent Europe will lose some economic momentum in the post-referendum world (see [The long and winding road](#) article on page 4). More importantly from the investor's standpoint, we expect the next several years might serve up intervals of intense political and policy uncertainty in the region. These would likely dampen valuations and leave investment returns almost entirely dependent on earnings growth in what was already a slow growth environment before Brexit.

The Bank of England and the European Central Bank have both indicated an intention to pursue appropriately accommodative monetary policies, but the same can't be said with confidence for government fiscal policies. 2017 elections in Germany and France look unlikely to improve this picture.

By contrast, North America looks positively serene. Our largely constructive outlook for North American equities rests, as it has done

Equity views

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

Source - RBC Wealth Management

since 2009, on one principal plank: give equities the benefit of the doubt as long as there is no U.S. recession in sight. The precursor to recessions in the past has been a big negative shift in credit conditions wherein interest rates rise to “prohibitive” levels and a growing majority of banks are aggressively raising lending standards.

By our reckoning neither of those conditions exists today. Nor are they likely to anytime soon given the consensus view that the Fed won't move again before next year—and only slowly when it does.

In the absence of a negative turn in the credit cycle, we see a U.S. economy where both manufacturing and non-manufacturing sectors are growing, inventories are low, unemployment is not far off 40-year lows, home prices are rising as are wages, households have accumulated a large pool of savings, credit card delinquencies are at all-time lows, and confidence is high. The word “resilience” comes to mind.

Earnings for the S&P 500 have gone nowhere for two years and neither have the averages. That stasis masked the fact that below the surface Energy sector earnings and share prices were collapsing into February of this year. With some stability returning to Energy

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

we expect earnings to grow by 5% y/y this year and 7% next. In Canada, where Energy figures more importantly into the mix, we expect an 11% earnings gain for 2017.

At 15.4x our projected 2017 earnings, the odds favour the U.S. market delivering all-in returns including dividends in the high single digits. A modest expansion of the market's P/E multiple, which we regard as likely, would add to those expected returns.

We are Underweight the U.K. and Continental Europe where challenges and uncertainty will continue to dominate the investment environment through next year. We maintain full commitments in North America and Asia where the continuation of the U.S. economic expansion underpins a favourable earnings outlook.

Regional highlights

United States

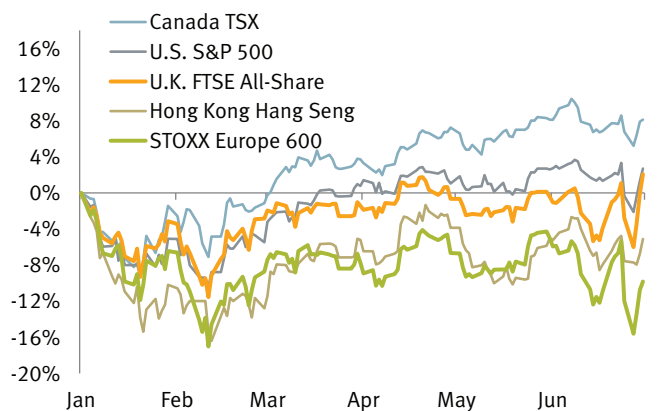
- Despite our global equity downgrade, we continue to anticipate the U.S. market will break through its two-year trading range later this year as confidence firms and earnings growth picks up modestly. We maintain our In-line (benchmark) weighting on U.S. equities, and would add quality stocks if the correction deepens.

- The U.S. has minimal direct exposure to Brexit risks. In 2015, the U.K. represented only 3.8% of total U.S. exports. S&P 500 sales attributed to the U.K. averaged a mere 1.2% of total sales from 2012 to 2014, and sales to Europe excluding the U.K. averaged only 6.7%, according to Standard & Poor's. Even if we incorporate foreign sales for companies that don't break out data by country, it would not boost the above figures by much. The most visible Brexit risk comes from exchange rates. If the dollar continues to strengthen, earnings estimates of U.S.-based multinationals would probably come down due to unfavorable translation effects.
- In our view, the U.S. equity market can weather the Brexit challenges and should prove to be a relative safe haven. We would focus on our Overweight sectors: Information Technology, Consumer Discretionary, and Consumer Staples. We also continue to favor small-cap stocks for investors with higher risk tolerances. They are attractively valued and have greater domestic revenue exposure.

Canada

- We maintain our Overweight recommendation in Canadian equities as we remain constructive on the outlook for the market's key

Year-to-date equity market performance



Equity markets slid following the "Leave" vote, then rebounded.

Source - RBC Wealth Management, Bloomberg; data through 6/30/16

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

Patrick McAllister
Toronto, Canada
patrick.mcallister@rbc.com

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

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

sectors over the next 12 months. We believe that earnings growth expectations for the banks are achievable, the Energy sector should benefit from further rebalancing in the crude oil market, and heightened uncertainty suggests some gold exposure could be useful.

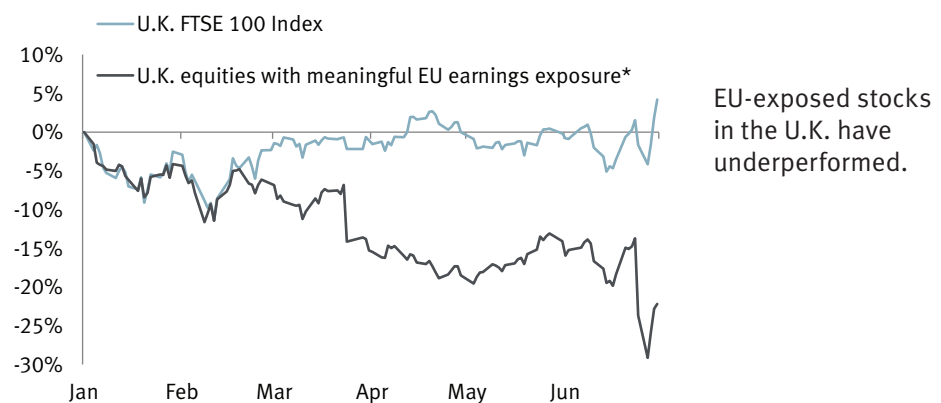
- The Canadian banks experienced share price pressure after the Brexit referendum; however, declines were limited relative to those suffered by European and U.S. peers. Declining sovereign bond yields and deferred expectations for the next Fed rate hike look set to weigh on the outlook for net interest margins.
- Global growth expectations are likely to moderate as the U.K.'s prospective relationship with the EU is shaped in the months ahead. Potentially, a reassessment of crude oil demand growth could weigh on the commodity and producers alike. While this could slow the adjustment process, we continue to see a path to a more balanced oil market.
- The uncertainty brought about by the U.K.'s "Leave" vote provided a strong case for the diversifying element that gold exposure can provide. With

bullion prices near break-even levels, we expect producer share prices to remain highly sensitive to the price of the underlying commodity. In an environment where many producers are grappling with overleveraged balance sheets and production declines, we favour gold exposure through high-quality royalty companies.

Continental Europe & U.K.

- We maintain an Underweight position in the U.K. and have downgraded exposure in Continental Europe to Underweight. The Brexit vote will cloud the outlook for both regions for a considerable time.
- The historic U.K. vote to leave the EU may continue to rattle financial markets. We expect the uncertainty regarding the process for EU withdrawal to impose a cost on economic activity. In particular we worry about a negative impact on foreign direct investment, which is much needed to finance the current account deficit. Without it, a much weaker currency would be required to redress the balance.
- In the U.K. we are particularly cautious on banks and domestic

Year-to-date U.K. equity performance



* Bloomberg BREXIT Equity Index designed to reflect British exposure to the EU across multiple sectors. The index is an equally weighted basket of 10 U.K. stocks listed on the London Exchange: Rolls Royce, Barclays, Berkeley Group Holdings, Next, Thomas Cook Group, Vodafone Group, SThree, Kingfisher, Severn Trent, and Regus. Source - RBC Wealth Management, Bloomberg; data through 6/30/16

cyclicals. We would favour defensives, such as Consumer Staples, and expect that an already weaker pound will help USD earners and exporters.

- Given the links with the U.K., European economic activity will not escape unscathed. But more than the economic consequences, the political tremors sent by the vote could be acute if a right-wing, anti-euro party, emboldened by the U.K.'s leap into the unknown, is able to leverage the situation to its advantage.
- For investors, such levels of uncertainty are ill-received at a time when a European economic recovery needs to take hold more firmly. We reduce our bias toward domestic cyclicals here as well, focusing on Health Care and Telecoms.

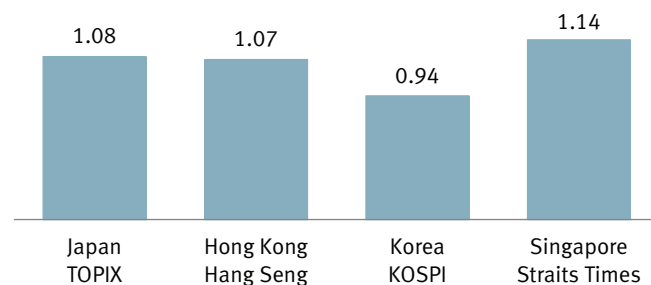
Asia

- Asian currencies and equities stabilized quickly after the Brexit-induced selloff.
- In China, fears of major capital flight and rapid currency depreciation, which caused a knee-jerk selloff in global equities at the start of the year, have receded. We forecast the renminbi to move gradually lower against the dollar. Chinese economic data has in general been steady, as

has the Shanghai Composite for the past five months. A number of major Asian equity markets continue to trade at particularly low valuations. These include Hong Kong, Japan, Singapore, and South Korea. We maintain our In-line weighting for Asia ex-Japan.

- We have moved to In-line from Overweight on Japanese equities. RBC Capital Markets revised its forecast for the Japanese yen higher again to USDJPY92 by mid-2017 as a result of the Brexit vote. Further yen strength, which is deflationary and impacts aggregate earnings, would be a meaningful headwind for equities. Additionally, Japanese equities show a greater sensitivity to changes in global leading economic indicators.
- However, Japanese stocks are the least expensive among developed markets on a price-to-book basis, despite a big improvement in return on equity and government policy continuing to have a positive impact on certain areas in the corporate landscape, such as share buyback activity. Separately, expectations of a stimulus package from the government have risen following the Brexit vote.

Price-to-book values of Asian indices

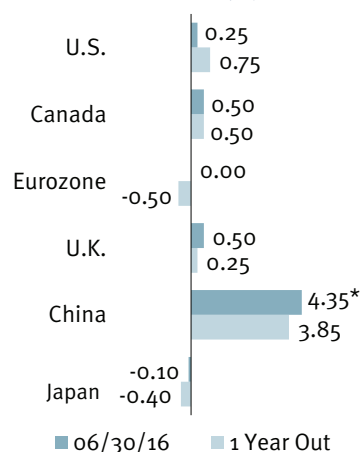


Major Asian indices are trading at depressed valuations.

Source - RBC Wealth Management, Bloomberg, data through 6/30/16

Lower for much, much longer

Central bank rate (%)



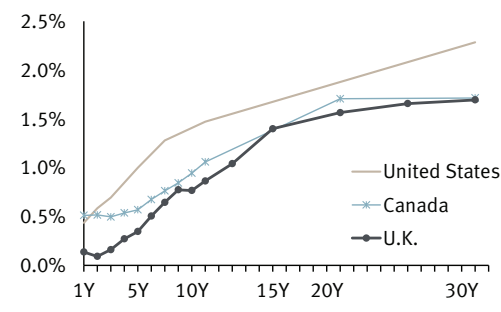
*1-yr base lending rate for working capital, PBoC
Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee, Consensus Economics

The immediate impact of the “Leave” victory in the U.K. referendum on all market sectors has been fast and furious. Bonds were caught leaning the wrong way and in the post-Brexit aftermath yields moved sharply lower, but overall activity in fixed income has been rather orderly compared to equities and signs of stability have returned. Even so, it’s likely we haven’t yet seen the low yields for the year as it may take months to get more clarity on the direction Brexit takes, so financial market conditions should remain very fluid.

Federal Reserve policymakers proved prescient in their concerns over Brexit and the decision to hold policy steady in June. Unfortunately, the headwinds from heightened global risks will also complicate the path to monetary policy normalization, in our view. The Fed’s rate hike timetable will be even more gradual to the point that we don’t expect to see another rate hike until mid-2017 at the earliest. The Bank of England is expected to cut rates by 25 basis points at its July meeting and other global central banks will also remain accommodative, so for the immediate future low and/or negative sovereign yields are with us to stay.

Brexit aside, yields have been moving lower for months due to global investor demand for higher-yielding, high-quality assets. In our view, easier central bank policy coupled with this strong investor demand will continue. We remain constructive on credit in general, but with spreads significantly tighter than levels seen in February we continue to recommend investors take a cautious, selective approach to increasing credit exposure.

Sovereign yield curves



Source - Bloomberg

Regional highlights

United States

- The Brexit vote is likely to have put the Fed’s rate hike plans on hold, perhaps indefinitely. RBC Capital Markets has shifted its call for the next rate hike to mid-2017, but acknowledged what is expected to be a drawn-out process between Britain and the EU could tie the Fed’s hands beyond that. A Fed on pause, rising global risks, and slow growth should keep a cap on yields; we recommend extending duration to pick up extra yield in this lower for even longer yield environment.
- We remain constructive on the outlook for investment-grade and high-yield credit despite elevated levels of market volatility. U.S. corporate bonds, on net, should benefit from easier Fed policy and from an influx of buying by foreign investors as the U.S. market continues to offer globally attractive yields.
- Fixed-to-float preferred shares have outperformed their fixed-coupon counterparts over the past year, but without rate hikes on the horizon, we shift our preference to fixed-coupon products for new money. We would

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

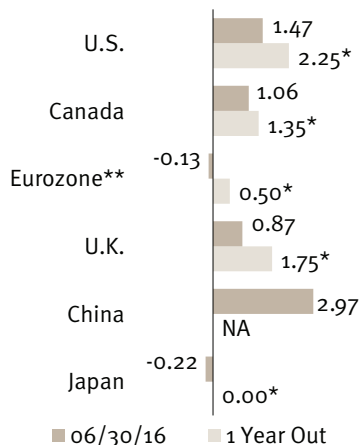
Tom Garretson
Minneapolis, United States
tom.garretson@rbc.com

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

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

Global fixed income

10-year rate (%)



* Under review

** Eurozone utilizes German Bunds

Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee

advise swaps out of fixed-to-float issues that enter their floating-rate period within two years.

Canada

- Canadian fixed income markets were not immune from the global risk-off trade that followed the Brexit vote. Yields in the 10- to 30-year component of the Government of Canada yield curve moved over 20 basis points lower during the month.
- In credit markets, the risk-off tone over the final days of the month has not been pronounced enough, in our opinion, to warrant increasing exposure at this time. Despite having widened somewhat, credit spreads are nowhere near the levels seen in February. For investors who are looking to add preferred shares, rate-resets trading at discounts that have recently locked in new dividends and perpetuums are the best areas to get exposure to parts of the asset class that will have limited response to a short-term move in rates, while still offering a 5%–5.5% dividend yield.

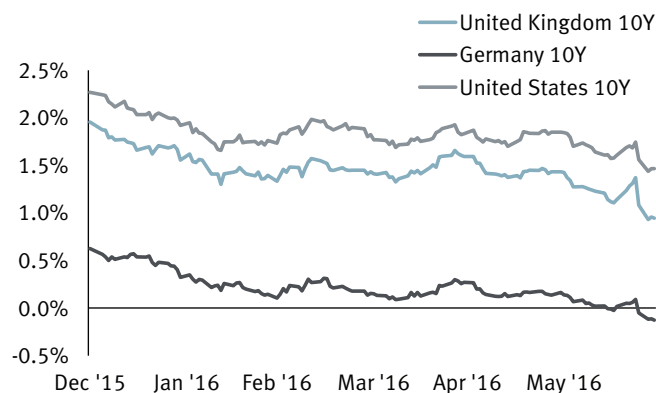
Continental Europe & U.K.

- The U.K. referendum outcome surprised the market and triggered a significant safe-haven trade

across both the GBP- and EUR-denominated markets. The 10-year U.K. Gilt benchmark bond rallied around 40 basis points to yield below 1%; similarly, the 10-year German Bund benchmark bond rallied to further negative yield levels at around -0.12%.

- The Brexit vote has created political turmoil in addition to uncertainty around the exit process; both will play a role in market activity in coming months. In our view, both the Bank of England and European Central Bank will be ready to take the necessary policy actions dictated by the general macroeconomic picture. As a consequence, we expect lower yields for longer in both currencies.
- Corporate bond spreads have widened significantly since the referendum and we see continued stress in this space. Sectors such as retail and financials will likely be subject to significant volatility going forward and, in general, we see limited value in some of the issuers until the exit process and outcome become clearer.

Global yields slip further on Brexit vote



Even as global equity markets staged a comeback after the Brexit vote, global yields continued to languish near all-time lows. The German 10Y joins \$12T of global debt trading with negative yields.

Source - RBC Wealth Management, Bloomberg; data through 6/29/16

Oil change

Commodity forecasts

	2016E	2017E
Oil (WTI \$/bbl)	48.00	64.00
Natural Gas (\$/mmBtu)	2.18	2.88
Gold (\$/oz)	1,250	1,300
Copper (\$/lb)	2.10	2.25
Corn (\$/bu)	3.90	4.08
Wheat (\$/bu)	4.77	5.34

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

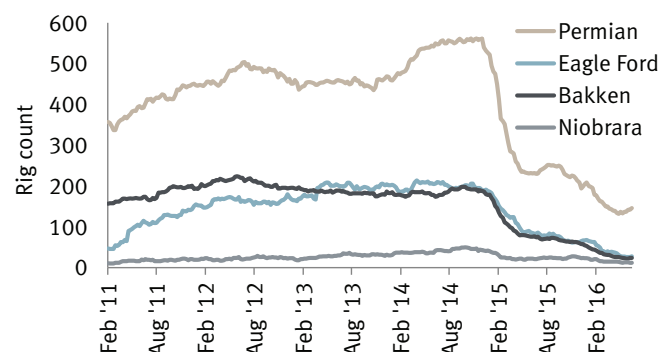
A rebalancing of the oil market is now in sight for H2 2016 as reflected by a near doubling of the West Texas Intermediate benchmark from its bottom of \$26 per barrel (/bbl) on February 11, 2016. Market fundamentals have improved on stronger-than-expected global demand, continued declines in U.S. production, and outages in Nigeria that have helped to partially offset the rise in volumes from Iran.

Global oil demand has increased at roughly 1%–1.5% per annum over the past 10-, 20-, and 30-year periods. While these increases seem small, when applied to a base of 1.2 billion cars and commercial vehicles in operation, it leads to a tremendous thirst for oil that grows over time. In 2015, global demand for oil grew by 1.8 million barrels per day (bbl/d) or 1.9% (global demand is about 95 million bbl/d). In the first five months of this year, global demand increased by 1.6 million bbl/d or 1.7%, exceeding authoritative industry forecasts. In the late 1980s, demand grew by 2.4% per annum for five years following the 1985 collapse in oil prices. These trends suggest to us that demand may continue to surprise to the upside should a subdued price environment persist.

The supply response to low oil prices has also been pronounced. Industry consultancy, Wood Mackenzie, estimates that planned development capital for the 2015–2020 period has been cut by over \$1T. The near-term impact of severe spending cuts is an expected decline in non-OPEC production by 900,000 bbl/d this year (including 500,000 bbl/d from U.S. shale oil) as forecast by the International Energy Agency. OPEC supply dynamics have been dominated by Iran increasing production by approximately 700,000 bbl/d since the start of the year, while sabotage in Nigeria has partially offset this with about 500,000 bbl/d taken offline.

The market is poised to rebalance in H2 2016, in our opinion, as falling non-OPEC production is met with solid expansion of demand. Potential delays to this rebalancing process include a return of volumes from Nigeria or Libya, while the potential for outages in Venezuela could meaningfully tighten market dynamics. In the longer term, we see the potential for healthy demand in the context of a modest price environment combined with the effect of supply side spending cuts to have a constructive multiyear impact on market conditions.

U.S. shale oil drilling activity



Should oil prices stabilize in the \$50–\$60/bbl range, a resurgence of U.S. shale oil drilling and development of drilled-but-uncompleted wells is expected. A small upturn has emerged in recent weeks.

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

Source - Baker Hughes, RBC Wealth Management

Currencies

Currency forecasts

Currency pair	Current rate	Forecast Jun 2017	Change*
Major currencies			
USD Index	96.14	101.05	5%
CAD/USD	0.77	0.76	-1%
USD/CAD	1.29	1.31	2%
EUR/USD	1.11	1.02	-8%
GBP/USD	1.33	1.19	-11%
USD/CHF	0.98	1.12	14%
USD/JPY	103.20	92.00	-11%
AUD/USD	0.75	0.66	-12%
NZD/USD	0.71	0.58	-18%
EUR/JPY	114.61	94.00	-18%
EUR/GBP	0.83	0.86	4%
EUR/CHF	1.08	1.14	6%
Emerging currencies			
USD/CNY	6.65	7.20	8%
USD/INR	67.53	72.00	7%
USD/SGD	1.35	1.60	19%
USD/PLN	3.94	3.99	1%

* 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 dollar is moving higher, which has been our central scenario for some time. We were expecting better economic output in the U.S., leading to higher U.S. rates, and a stronger dollar. Instead, the greenback is rallying on its safe-haven status, as global assets decline and risk aversion dominates. It now looks like the Fed will be on hold until mid-2017. The dollar is likely to continue to rally in this environment, but for reasons that are not particularly encouraging.

Euro

ECB President Mario Draghi suggested just before the referendum in the U.K. that the ECB is likely to add to its stimulus measures. Given the outcome, extra stimulus seems a near certainty. The EUR is now moving lower, which will please the ECB, and further pressure on the single currency looks likely in the post-referendum environment. Uncertain times for the U.K. also mean uncertain times for the EU. We remain strategically bearish on the single currency.

British pound

The referendum outcome caught markets totally wrong-footed. Markets were positioned for a “Remain” outcome, and so the immediate

decline in the pound was that much more intense. Given the uncertainty, we have moved to a negative outlook for sterling. The length and challenges of the discussions on the shape of the U.K.’s position on issues, such as trade, will greatly affect the degree to which sterling declines further from here.

Canadian dollar

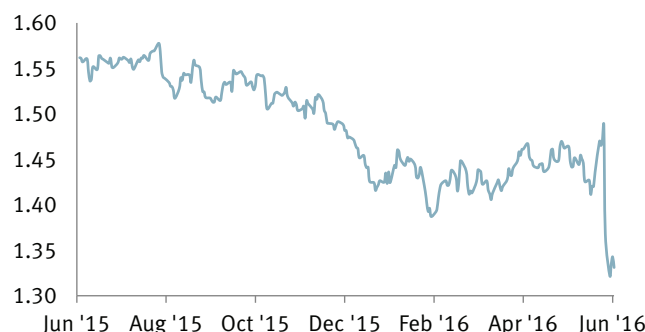
The Canadian dollar trades as a risk proxy. As such, there was initially a selloff following the Brexit vote. Despite the loonie rising to 80 U.S. cents in early May, post-referendum it has settled lower at 77 U.S. cents, which should hold in the short term. However, RBC Capital Markets’ forecast for further recovery in the price of oil should be supportive of additional CAD strength in coming quarters.

Japanese yen

The risk-off shock caused by the U.K. voting to leave the EU saw USD/JPY trade through 100 for the first time since 2013. Policymakers are restricted from intervening with the currency too directly, although given such significant fluctuations, extreme intervention cannot be ruled out. Due to uncertainty on risk appetite and Bank of Japan policy from here, the outlook for the yen is quite clouded.

GBP collapses after the U.K. vote to leave the EU

GBP/USD



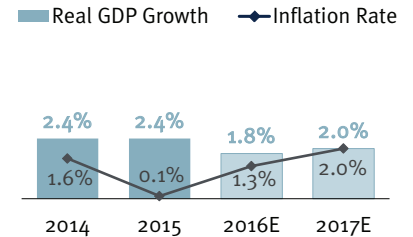
GBP/USD recorded its largest intraday fall on June 24.

Paul Bowman
London, United Kingdom
paul.bowman@rbc.com

Source - Bloomberg, RBC Wealth Management; data as of 9:25 am GMT 6/30/16

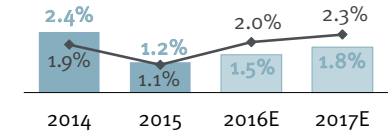
United States — sustained growth

- Q1 GDP growth revised up to 1.1%. Inventory drag largely over. Mfg. new orders and production expanding faster. Consumer balance sheets, income growth, employment, confidence all strong. Spending accelerating in Q2, saving still solid. Housing steady, permits rebounding. Capex soft, exports strengthening. Leading indicators, confidence point to sustained, albeit slow, growth.



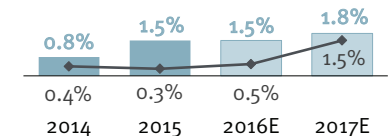
Canada — in transition

- Q1 growth improved to 2.5%. Q2 likely weaker. House construction firm, PMI off its high but steady. Business capex (mostly energy) weak. Consumer attitude restrained by resource sector weakness. Mfg. sales ex-petroleum products growing consistently. Ditto for exports including services and tourism all helped by weak loonie. Energy capex plans still falling.



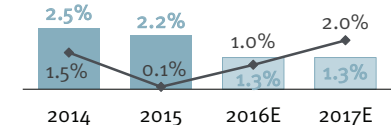
Eurozone — plateauing

- Q1 growth stronger than expected at 2.0% annualized. Germany and Spain solid. France and Italy fading after a better Q1. Bank lending standards remain mostly easy, loans to private sector up year over year.
- PMIs softer but still in expansion zone. Q2 growth should equal Q1. Refugee crisis, fractious politics, Brexit weighing on consumer and business sentiment. Full-year GDP growth to hold steady in 2016, improve in 2017.



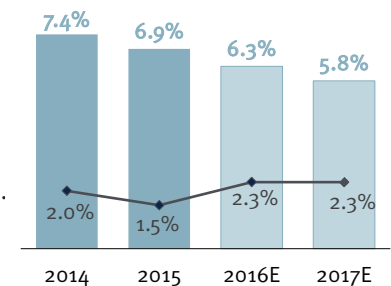
United Kingdom — weakening

- Q1 GDP weaker than Q4 at just 1.6% annualized, led by dominant services sector. Construction, industrial sectors subtracted from growth. Employment softer. Household earnings growth now below 2%. Q2 probably slower still. Construction PMI fell sharply after referendum vote.
- Mild recession expected to begin in 2nd half. Economy expected to underperform as volatile politics and challenging EU negotiations take a toll.



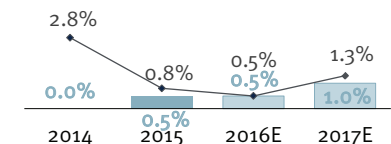
China — slowing

- Q1 slower, year-over-year GDP now at +6.7%, but some firming in recent months. Domestic loan growth distorted lately by pay-down of U.S. dollar debt. Mfg. PMI weaker, services sector PMI strengthening. Employment, wages, retail sales all growing, but somewhat more slowly. Exports, industrial production, mfg. output made further gains in April.
- Fixed asset investment slowing. Currency weaker. House prices higher year over year in major centers.



Japan — conflicted, weaker

- GDP growth regained positive territory in Q1 but barely positive over 12 mos. Leading indicators and mfg. PMI have ticked higher, services somewhat weaker. Corporate earnings solid, but business confidence weak.
- Wages growing, consumer confident, but household spending weak. Low oil prices, strong currency putting inflation targets in jeopardy. Planned sales tax increase has been put off until 2018.



Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee

Market scorecard

Index (local currency)	Level	1 Month	YTD	12 Month
S&P 500	2,098.86	0.1%	2.7%	1.7%
Dow Industrials (DJIA)	17,929.99	0.8%	2.9%	1.8%
NASDAQ	4,842.67	-2.1%	-3.3%	-2.9%
Russell 2000	1,151.92	-0.2%	1.4%	-8.1%
S&P/TSX Comp	14,064.54	0.0%	8.1%	-3.4%
FTSE All-Share	3,515.45	2.5%	2.1%	-1.5%
STOXX Europe 600	329.88	-5.1%	-9.8%	-13.5%
German DAX	9,680.09	-5.7%	-9.9%	-11.6%
Hang Seng	20,794.37	-0.1%	-5.1%	-20.8%
Shanghai Comp	2,929.61	0.4%	-17.2%	-31.5%
Nikkei 225	15,575.92	-9.6%	-18.2%	-23.0%
India Sensex	26,999.72	1.2%	3.4%	-2.8%
Singapore Straits Times	2,840.93	1.8%	-1.5%	-14.4%
Brazil Ibovespa	51,526.93	6.3%	18.9%	-2.9%
Mexican Bolsa IPC	45,966.49	1.1%	7.0%	2.0%
Bond Yields	6/30/16	5/31/16	6/30/15	12 mo chg
US 2-Yr Tsy	0.582%	0.877%	0.643%	-0.06%
US 10-Yr Tsy	1.470%	1.846%	2.353%	-0.88%
Canada 2-Yr	0.518%	0.614%	0.484%	0.03%
Canada 10-Yr	1.061%	1.319%	1.683%	-0.62%
UK 2-Yr	0.099%	0.432%	0.562%	-0.46%
UK 10-Yr	0.867%	1.429%	2.024%	-1.16%
Germany 2-Yr	-0.661%	-0.514%	-0.227%	-0.43%
Germany 10-Yr	-0.130%	0.139%	0.764%	-0.89%
Commodities (USD)	Price	1 Month	YTD	12 Month
Gold (spot \$/oz)	1,322.20	8.8%	24.6%	12.8%
Silver (spot \$/oz)	18.72	17.0%	35.0%	18.9%
Copper (\$/metric ton)	4,840.00	3.0%	2.9%	-15.9%
Uranium (\$/lb)	27.00	-5.3%	-21.5%	-26.0%
Oil (WTI spot/bbl)	48.33	-1.6%	30.5%	-18.7%
Oil (Brent spot/bbl)	49.68	0.0%	33.3%	-21.9%
Natural Gas (\$/mmBtu)	2.92	27.8%	25.1%	3.2%
Agriculture Index	310.46	0.5%	9.5%	-4.9%
Currencies	Rate	1 Month	YTD	12 Month
US Dollar Index	96.14	0.3%	-2.5%	0.7%
CAD/USD	0.77	1.3%	7.1%	-3.3%
USD/CAD	1.29	-1.3%	-6.6%	3.4%
EUR/USD	1.11	-0.2%	2.2%	-0.4%
GBP/USD	1.33	-8.1%	-9.7%	-15.3%
AUD/USD	0.75	3.0%	2.3%	-3.3%
USD/CHF	0.98	-1.8%	-2.6%	4.3%
USD/JPY	103.20	-6.8%	-14.2%	-15.8%
EUR/JPY	114.61	-7.0%	-12.3%	-16.1%
EUR/GBP	0.83	8.6%	13.2%	17.6%
EUR/CHF	1.08	-2.0%	-0.4%	4.0%
USD/SGD	1.35	-2.2%	-5.0%	0.0%
USD/CNY	6.65	1.0%	2.4%	7.2%
USD/BRL	3.21	-11.0%	-18.9%	3.5%

Despite volatility, broad indices eked out gains as expectations for stimulus overcame global growth concerns.

Easier central bank policy expectations after Brexit drove global yields toward record lows.

With no rate hikes in sight, metals amongst top performers.

The surprise Brexit result sparked a pound selloff; cheapest against the dollar since 1985.

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 0.77 means 1 Canadian dollar will buy 0.77 U.S. dollar. CAD/USD -3.3% return means the Canadian dollar has fallen 3.3% vs. the U.S. dollar during the past 12 months. USD/JPY 103.20 means 1 U.S. dollar will buy 103.20 yen. USD/JPY -15.8% return means the U.S. dollar has fallen 15.8% vs. the yen during the past 12 months.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 6/30/16.

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.

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

Alana Awad – Fixed Income Portfolio Advisor, 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

Paul Bowman – Director, Head of Structured Solutions and FX Strategy, Royal Bank of Canada Investment Management (U.K.) Ltd.

Frédérique Carrier – Director, Head of 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

Hakan Enoksson – Head of Fixed Income - British Isles, Royal Bank of Canada Investment Management (U.K.) Ltd.

Tom Garretson – Fixed Income Portfolio Advisor, RBC Capital Markets, LLC

Christopher Girdler – Fixed Income Portfolio Manager/Strategist, Royal Bank of Canada Investment Management (U.K.) Ltd.

Patrick McAllister – Canadian Equities Portfolio Advisor, RBC Dominion Securities Inc.

Jay Roberts – Head of Investment Solutions & Products, 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 Bansil, Patrick McAllister, and Jay Roberts, employees of RBC Wealth Management USA's foreign affiliate RBC Dominion Securities Inc.; and Frédérique Carrier, Hakan Enoksson, Christopher Girdler, Paul Bowman, 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 FINRA Rule 2241 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: Dividend Growth (RL 8), and the Guided Portfolio: ADP (RL 10), and former lists called the Guided Portfolio: Large Cap (RL 7), the Guided Portfolio: Midcap 111 (RL 9), 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 - RBC Capital Markets, LLC Equity Research As of June 30, 2016				
Rating	Count	Percent	Investment Banking Services Provided During Past 12 Months	
			Count	Percent
Buy [Top Pick & Outperform]	878	50.51	246	28.02
Hold [Sector Perform]	741	42.64	129	17.41
Sell [Underperform]	119	6.85	10	8.40

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).

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), the registered entity 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.

© 2016 RBC Capital Markets, LLC - Member NYSE/FINRA/SIPC

© 2016 RBC Dominion Securities Inc. - Member Canadian Investor Protection Fund

© 2016 RBC Europe Limited

© 2016 Royal Bank of Canada

All rights reserved