RBC Capital Markets

Global Market Trajectories 2016

Evolving Diversity

NOVEMBER 2015

For Required Conflicts Disclosures, please see page 136.

Executive Summary

As the head of Global Research at RBC Capital Markets, I take great pride in the insightful work of our best-in-class team of researchers. We are recognized around the world for our work in helping corporates understand the constantly shifting investor & capital markets landscape and providing insight to asset managers on their investments in equity, credit, rates, commodities and foreign exchange.

The enclosed 2016 strategy outlook, entitled "Global Market Trajectories", is intended to provide you with a holistic macro view across geographies and asset classes. Our senior strategists and economists have worked to produce an integrated perspective on the key themes we expect to drive markets over the next year. In the pages that follow, we elaborate on the theme of evolving diversity in global asset and policy direction. These include:

- Diverging growth and central bank policy as a catalyst for change in global money flow
- Reassessment of global growth expectations and the interplay between inflation, rates and risk
- Differentials in G10 & Emerging Markets performance and where pockets of value lie
- Assessing the geopolitical, supply and demand variables that could point towards "lower for longer" for oil

This piece is intended as the start of a broader conversation that continues to foster the partnership you expect from RBC Capital Markets. I encourage you to reach out to any member of our strategy team for counsel and assistance on your investment process in the year ahead.

Best wishes for a successful and profitable 2016!

Marc Harris
Head of Global Research
RBC Capital Markets

Table of contents

[1] Applies to Fundamental Strategy 2015 Review; 2016 & Beyond and US Equities Technical Outlook. Required Fixed Income & Currency Strategy Conflicts Disclosures apply to all other articles.

US Economics: Firming inflation clears path for Fed tightening

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- 2–3% top-line US growth a low hurdle given robustness in domestic-sensitive areas; more upside if global headwinds abate.
- Unemployment heads all the way down to 4.0% by year end as the payroll breakeven pace continues to drop.
- Some acceleration in both prices and wages in the offing; the spread between core CPI and core PCE will close on firming medical inflation.
- Jobs landscape has gone from one of modest slack to one where shortages are now quite prevalent.
- December liftoff nearly a foregone conclusion; Fed likely to tighten at every other meeting in 2016 and accelerate the pace in 2017.
- Fed could soften the impact of rate hikes by altering expectations of the "neutral" funds rate.

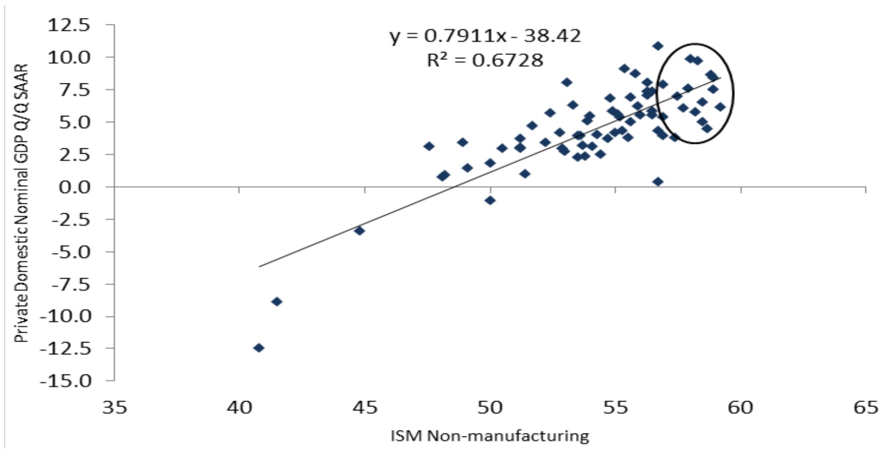
There is a great irony about the US backdrop that needs to be highlighted: at long last, the Fed has highlighted that a rate hike is appropriate, and it appears poised to begin that process in just a few short weeks—assuming the period between now and then is devoid of any troublesome headlines. Whether the pundits want to admit it or not, there is no question the Fed changing its tune has caused the conversation to flip from one of concern about the backdrop to now believing that the backdrop looks sturdy, sound, or even strong. Of course, this is exactly what the Fed hoped would happen—its seal of approval lending credibility to the sturdiness of the US economic landscape. Count us amused at this outcome.

As we have highlighted for many months now—a view that some may have labeled dogmatic—the US economy is as good today as it was prior to people seemingly suspending their good judgment a couple of months back, when they thought it would succumb to the malaise that has gripped much of the globe. In fact, for some additional perspective (and just so our bigger point is not lost), keep in mind that the Fed was inserting its hiking bias into the FOMC statement when some folks in the market were still tossing around unfounded fears as a real threat to the expansion.

The reality about this six-year-old US expansion is that domestic demand remains strong, strong enough that achieving another year of 2.5–3.0% top-line growth with the consumer clocking in toward the upper end of that range is quite achievable. Our view on the consumer's ability to chug along thanks to sound fundamentals has been well covered in our various recent notes, so we will not belabor that point here. Instead, we would highlight that while our "domestic demand versus global touch" divergence theme nicely suited the last few months, the headwinds in the latter appear to be stabilizing, at least to some extent. Indeed, the internals from the recent ISM manufacturing report showed that new orders and production rose back to the best readings since during the summer, and there was a decidedly positive shift in tone from respondent comments.

But make no mistake, while it would be nice if the global headwinds abated, it is not a necessary requirement for our relatively modest growth profile to be achieved (of course, this also assumes the global malaise does not deteriorate from here). The reality is that the service-orientated sectors of the economy remain extremely buoyant thanks in part to those sound consumer fundamentals. Indeed, ISM non-manufacturing at these levels augurs for greater than 5% private domestic nominal GDP.

Exhibit 1: ISM non-manufacturing augurs for >5% private domestic nominal GDP



Source: Haver, RBC Capital Markets

Having said that, as the new year unfolds, we can see a scenario playing out that could spook some folks and even get them to question the consumers wherewithal. It may have gone unnoticed, but job growth is slowing. Just two years ago, job gains clocked in around 3 million for the full year; this year, we are on pace for about 2.5 million; and next year, our expectation is for another downshift to about 2 million job gains or about 175,000 on average per month. The bottom line is given the limited level of "excess unemployment" that remains in the system, it will be increasingly difficult to continue to print job gains on the order of 200,000 per month on a sustained basis.

While job growth is likely to remain well ahead of the "potential" pace and the unemployment rate will continue to drop as long as the cyclical expansion remains in place, the aesthetics of much lower job gains might be difficult for the market to embrace without a forceful message from the Fed stating the real cutoff in gauging whether job numbers are "good" or "bad" should be around 100,000—not 200,000 (a process the Fed has started).

The decline in "potential" job growth is a demographic reality. This year, the working age population is expanding by 92,000 per month, and if we assume an 80% participation rate from that group, the speed limit for new job growth in a world without any work-down on the unemployment rate is really closer to 74,000. This drops to 68,000 in 2016 and just 57,000 in 2017. So even at 100,000 we would be making progress on closing the so-called "output gap"—which is inevitably of importance when considering implications for inflation. We believe this will be an important theme in the coming year.

Inflation: firming trends in both prices and wages

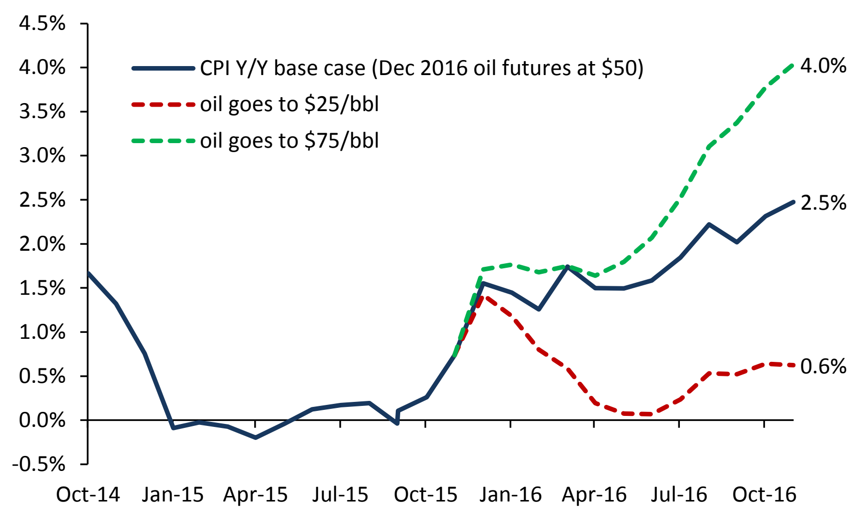
The inflation backdrop in 2016 is likely to be characterized by acceleration in both prices and wages. The price front—that is CPI or PCE prices—will reverse course sharply as the comps in the energy space become extremely easy. Wages should continue to accelerate as we not only eliminate slack altogether but also play catch-up to all of the leading indicators of wages that have been pointing up and to the right for months and quarters now.

We take a conservative approach to headline prices and merely bake in wholesale gasoline futures and what that profile suggests for retail pump prices. Suffice it to say that at present, the December/December implied change in gasoline prices is quite marginal. However, all we need is for this commodity to stop declining in order for headline inflation to revert back to 2%. Keep in mind December 2016 crude oil is currently sitting at $50/bbl. So unless you think oil prices will be significantly below that level by the end of next year, your base case has to be that headline and core inflation will look awfully similar on a Y/Y basis.

Still, it is useful to look at what different oil scenarios in 2016 would mean for the rate of headline CPI. On a completely static basis, oil at $25/bbl on either side of where futures are currently priced would yield very divergent headline CPI scenarios. The argument for using a static analysis by the way is supported by the fact that despite a considerable drop-off in energy prices over the last 12–18 months, the core measures of inflation and the ex-energy metrics have remained steady. Thus, the issue of “pass-through” on a multi-quarter horizon seems negligible.

Alas, as the chart below shows, if oil managed to witness a gradual decline all the way down to just $25/bbl, headline CPI would be sitting at just north of +0.5%. The alternate scenario, where oil drifts up to $75/bbl, would yield a headline Y/Y CPI of around 4.0%. Now, the Fed would undoubtedly harp on the notion that the moves in the energy complex are transitory in nature. But as has been the case, this rhetoric would fall on deaf ears when it comes to the breakeven market. Additionally, the news headlines of a 4% inflation rate as the employment complex tightens well beyond full employment could pose a challenging PR environment for the committee.

Exhibit 2: Headline CPI under various oil scenarios

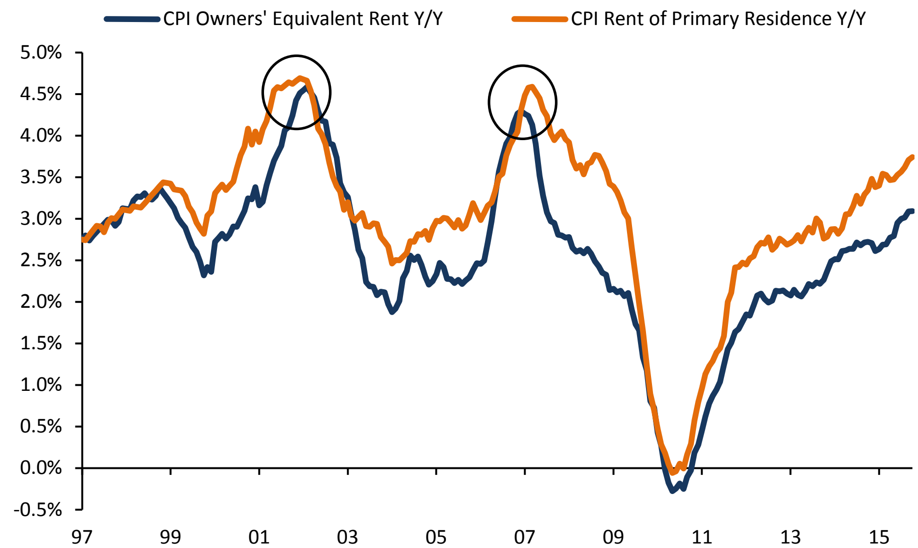


Source: Haver, RBC Capital Markets

In terms of the core inflation picture, we think shelter prices will continue to provide a considerable buttress to this metric. Even with the recent uptick, the rental vacancy rate remains at the lowest levels since 1994 and points to continued upside in shelter CPI. That component is already running at a heady 3.2% and accounts for 42% of the core CPI. Interestingly, “owners equivalent rent” at 3.1% is running well below “rent of primary residence” at 3.7% Y/Y. In past cycles, the former has played significant catch-up to the latter. The likelihood that overall shelter CPI is closer to 4% by year-end 2016 seems high.

We do not expect this renter-demand narrative to change anytime soon either. The percentage of mortgages in arrears (whether delinquent or in outright foreclosure) is sitting 1.2ppts above a historically “healthy” level. This is a process that typically has a lengthy resolution phase. What this still-high delinquency rate suggests is that we probably have to resolve another 0.5 million mortgages before hitting bottom. This amounts to another 0.5 percentage-point decline in the homeownership rate (which is already sitting at just 63.7% and one of the lowest levels since the late 1960s). Shelter inflation momentum is likely here to stay.

Exhibit 3: OER has played significant catch-up to Rent CPI historically



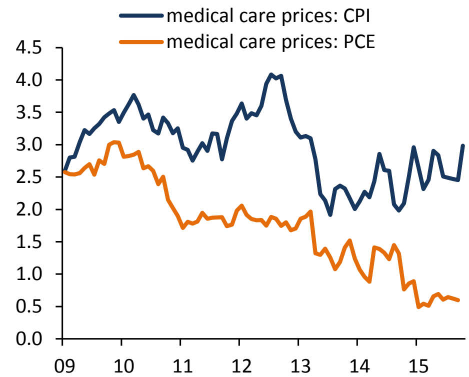
Source: Haver, RBC Capital Markets

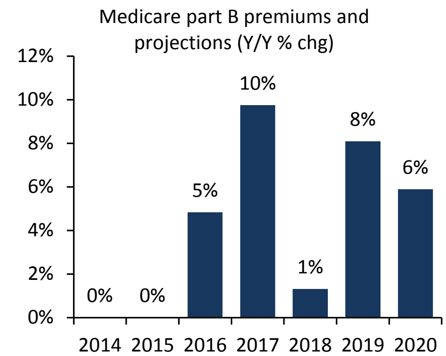
Despite what is likely to be a core CPI at or above 2% in 2016, the debate about how weak or firm inflation is may still center around what the PCE price metrics are doing. Even now, despite the rampant contention that the Fed is missing on its inflation target, core CPI on a Y/Y basis continues to track just shy of 2—it has been sitting at 1.8% for the better part of the last six months. Yet the Fed continues to promote the idea that we should focus on the core PCE price index instead. For starters, the historical record for core PCE in terms of guiding the "proper" bias of monetary policy is extremely suspect. Not only are we talking about an indicator that in the lead-up to the frothiest stages of the tech bubble—circa the late 1990s—was sitting at a lowly 1.3% Y/Y (coincidentally, where it is today). But we are also talking about a core PCE that was erroneously flagging risks of deflation back in late 2003 to early 2004—when it initially printed reads of 0.7% Y/Y before this was revised away in subsequent years.

From our lens, the fatal flaw in the core PCE index is the medical care component. This component includes government subsidized medical payments, which not only eliminate the consumers' price sensitivity for such costs but also are obviously sensitive to legislative action. Indeed, the sequestration and commensurate cuts to health care payments have had a discernible impact on prices for subsidized medical care versus private plans. Prices for the former are in negative terrain with Medicaid at -0.4% and Medicare at an even softer -1.4%, while private plan care prices are accelerating at a 2.8% Y/Y rate.

Keep in mind health care is a heavyweight in core PCE, accounting for 24% of that index (it is 10% of the core CPI). If we strip out the impact of the subsidized portion of medical care on core PCE prices, then we would be looking at a Y/Y pace closer to 1.7% and not the advertised 1.3%. Despite demand for subsidized medical care services up markedly in recent years (see the surge in Medicaid recipients), pricing trends in this particular area have been quite weak. This is a testament to the impact of the aforementioned spending cuts and freezing of premiums. With the recent budget deal, the Y/Y impact of these is set to roll off in 2016 (Medicare premiums in particular are set to rise more than 2.5% on average by our estimation). This should close the gap between the core metrics of PCE and CPI.

Exhibit 4: Increasing Medicaid premiums will help close the gap between core CPI and PCE





Source: RBC Capital Markets US Economics, Haver, Medicare Trustees report

In terms of the wage picture, we noted in the aftermath of the October NFP that the uptick in Y/Y average hourly earnings is confirmation of what the leading indicators of wages have been flagging for months now. As a reminder, AHE accelerated to a 2.5% Y/Y pace for the first time since 2009. While this has been met with disbelief in some circles, we would note that it is entirely consistent with the morphing labor backdrop. In recent months and quarters, we have witnessed a jobs landscape that has gone from one of modest slack to one where shortages are now quite prevalent. Not only are mentions of shortages in the Fed *Beige Book* at highs not seen since the tightest labor market phase of the last cycle, but also businesses in the non-manufacturing arena (i.e., 90% of the US economy) have noted that labor is both "up in price" and "in short supply" in 10 of the last 12 months—which handedly takes out the highs from last cycle.

Among the leading indicators of wage pressures, we have the job leavers' rate and the most pertinent compensation metric in the NFIB small business survey trending at or near cycle highs. Both are consistent with the employment cost index (ECI) of wages heading toward 3% Y/Y toward the end of 2016 (from the current 2.1% pace).

With the doves on the FOMC using the lack of upside pressure in wages as a major point to their argument that slack remains in the employment backdrop, any significant change in direction on this front is likely to soften their stance dramatically. What this means is a likely end to the continued moving of the goal posts when it comes to what the committee consensus is on so-called NAIRU, which over the course of the last year has been knocked all the way down to just 4.9% from 5.4%. This is significant since the degree to which the unemployment rate is below NAIRU will dictate to the Fed how "easy" monetary policy is. A higher benchmark means the Fed looks exceedingly "easier" as the unemployment rate continues to drop precipitously.

Fed: Dec liftoff will shift focus to "pace"

The Fed was already promoting the idea of a December rate hike well ahead of that very strong October payroll report, thus the odds that liftoff begins at the upcoming meeting are extremely elevated. We noted weeks ago that the largest precondition to tighten in December would be the ability to get the market to "buy in" to the idea of a hike. With market odds now sitting at roughly 75% that they go, it looks as though the committee has done its job from a communications standpoint (an area that has been significantly lacking in recent years).

In terms of the profile following a December liftoff, we think 3% real top-line growth coupled with an unemployment rate heading to 4.0% and rising inflationary trends (even on a modest basis) should embolden the Fed to tighten at every other meeting in 2016—ending the year at 1.5% (IOER). With the unemployment rate falling to well below the natural rate by the end of 2016, and in the context of inflation and wage trends that continue to pick up, the Fed will very likely accelerate the pace of tightening from every other meeting to every meeting in 2017—hitting 3.5% (and close to what we believe will be the cyclical peak) by the end of that year.

As we have garnered from experience, the evolution of this "pace" is likely to be anything but orderly, however. Aside from the discussion and debate about the impact of letting the balance sheet roll off, we think more attention also will be paid to how it manages its view of the long-run "neutral" fed funds rate.

While the latest FOMC economic projections in September showed a median long-run funds estimate at 3.5%, recent musings suggest that thinking could shift materially in the future. At least a couple of members (Williams, Lockhart, and Dudley) recently opined that the neutral **real** rate of interest is probably right around zero. Williams, specifically, sits near the center of the dove/hawk spectrum, so his views are a good read on the consensus.

To be sure, if you think the long-run trajectory of nominal GDP growth is somewhere in the neighborhood of 4% (potential of 2% real and an explicitly targeted inflation rate of 2%), then a real long-run fed funds rate of right around 0% seems consistent with the (albeit messy) historical pattern—which is to say that a nominal long-run growth path of roughly 4% correlates with a nominal fed funds rate of about 2%. The cyclical peak in FF, however, will depend on how far above and for how long nominal GDP can expand above potential (thus, our call for a well above neutral cyclical peak). The US economy has averaged roughly 4% nominal growth during the last few years, which in itself already argues for a "neutral" policy stance at minimum—not one of emergency levels of accommodation. But even if the Fed is poised to embark on a tightening cycle, it might rely on the lowering of its "long-run" Fed Funds estimate to dampen any tightening of financial conditions out the curve.

Exhibit 5: Real long-run FF near 0% seems consistent with (albeit messy) historical pattern

Source: Haver, RBC Capital Markets

US Rates Outlook: Markets poised to re-price inflation and the terminal rate

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In 2016, we think the major themes in the US rates space will be:

- **The Inflation Narrative & Fed pace:** Rising CPI, widening breakevens, and a low unemployment rate may change the tone of the inflation conversation. A shift in sentiment should lead investors to re-think terminal rate assumptions, which means rates are too low and the curve is too flat.
- **Liquidity:** Seasonality, impaired Sharpe ratios, shifts in Treasury issuance.
- **Swap spreads:** Focus shifting from RP to ICE LIBOR?
- **Treasury demand:** Foreign demand ebbing, but will bank and non-bank regulation offset that?

Inflation narrative poised to change, will impact discussions about the Fed's pace

Market sentiment is weighted heavily toward inflation remaining at low levels, as indicated by 10yr breakevens near their post-crisis lows; by the very low forward rates implied by the flat curve; and by the market pricing for an extremely slow tightening cycle (the Fed funds futures contracts are only priced for ~59bps of tightening in 2016 and 57bps in 2017). Much of this sentiment is driven by perceptions around the weak global backdrop, USD strength, and drag from a collapse in energy prices.

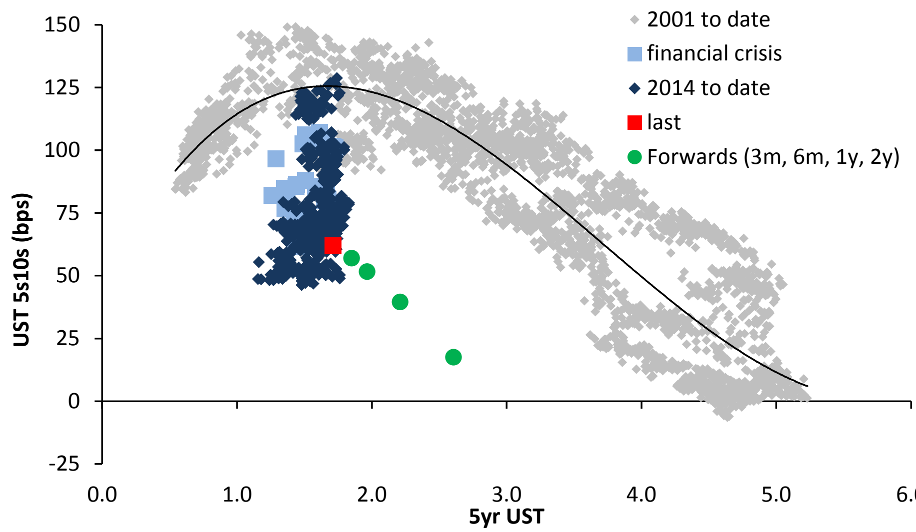
However, we believe the narative on inflation will change for several reasons. For starters, shelter prices, which account for 42% of the core CPI, are running 3.2% Y/Y and this is a trend we expect to continue. Our economists also expect medical care prices to accelerate, which should help erase much the gap between core PCE and core CPI. On the headline level, current Y/Y prints are referencing oil at $80/bbl, but that year-ago referece will drop below $50 by January. In other words, comps in the energy space will be very easy in 2016, and we expect headline CPI to be running near 2.5% by September.

Lastly, from a market perspective, as we discuss below, breakevens are poised to widen sharply in H1/16 (attractive entry point, low base in oil, and very favorable carry profile). All of this will happen against a backdrop where our economists are looking for the unemployment rate to fall to 4% by the end of 2016 – so the notion of slack dragging down inflation should shift dramatically.

Together, this makes us believe that the market is likely to start paying attention to both tails of the inflation distribution. And if there are both upside and downside risks to inflation, then the market is likely to price for a much higher terminal funds rate. As we have repeatedly discussed, even though we believe the average funds rate is likely to be lower in the future than it has been in the past, that does not mean that the peak in Fed funds in this cycle will be close to the new long-run average. The Fed virtually always overshoots, and the risk of an overshoot in a cycle where the monetary policy transmission mechanism is dramatically different is much higher than normal.

A higher terminal rate means forward rates need to be higher, or that the curve needs to be steeper. Technically, that means the curve won't flatten as quickly as the forwards suggest: the forwards are pricing for 5s10s to flatten 25bps at the end of 2016, where we think a flattening of 10bps or less is more realistic.

Exhibit 6: The curve is unlikely to flatten as quickly as the forwards suggest.



Source: RBC Capital Markets US Interest Rate Strategy, Bloomberg

To reach that higher terminal rate, eventually the Fed will have to accelerate the pace of tightening—a 300bp+ tightening cycle takes too long if the Fed is moving at 25bp a quarter (every other meeting). Remaining at 25bp a quarter only makes sense if the Fed is going to stop at 2%, as going that slowly in a longer cycle would put it behind the curve. We look for the market to start focusing on a faster tightening pace in late 2016 (note we expect the Fed to accelerate to a 50bp/quarter pace in 2017).

Breakeven redux? We think inflation fears will be compounded by a coming rise in breakevens. Much like 2015, we expect stabilization in commodity prices, a low base in oil and favorable seasonals will make it very attractive to be long TIPS breakevens in H1. But all of these factors are even more compelling this time around.

Since the middle of the year, oil is down ~30%, and retail gasoline prices (what matters for CPI) are down ~20%. On the back of this, 5yr and 10yr breakevens are ~40bps and ~30bps tighter, respectively. These moves are eerily similar (see table below) to those witnessed in the second half of 2014 and preceded a sharp H1 widening in breakevens earlier this year (5yr and 10yr BE's were 43bp and 18bp wider respectively in H1/15).

Exhibit 7: The recent move in energy prices and breakevens has been eerily similar to this period last year.

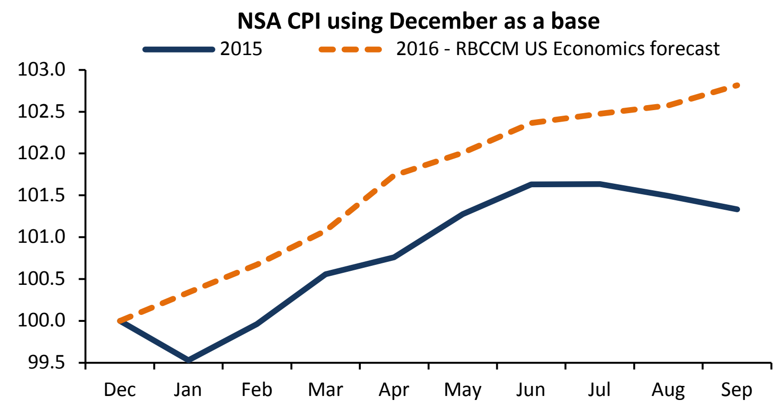
Move from June 30th to November 12th	WTI (% chg)	Gasoline (wholesale, % chg)	Gasoline (retail, % chg)	5yr BE (bp, chg)	10yr BE (bp, chg)
2014	-27%	-32%	-21%	-47	-32
2015	-30%	-39%	-21%	-43	-33
Move from Jan 1 to June 30					
2015	13%	46%	25%	43	18

Source: RBC Capital Markets US Interest Rate Strategy, Bloomberg

The better entry point (10yr BE's are at 1.58% vs. 1.86% at this point last year, 1.68% at year-end), lower base in oil ($41/bbl vs. $75/bbl this time last year and $53/bbl at year-end), and stronger carry profile make us think early 2016 widening may be sharper than what was witnessed a year ago.

For perspective on the latter point (NSA CPI/BE carry), consider that from December 2014 to August 2015 NSA CPI increased 1.6%, and given our current tracking, NSA CPI looks poised to advance more than 2% over this same horizon (2.4% as of this writing). This means that owning a TIP from February (there is a two-month lag on inflation accruals) through August will come with an inflation accrual that on an annualized basis will be worth ~4%. This profile is very attractive, especially when you consider the downside risks to oil seem more limited at this juncture. In other words, a decline of the same magnitude in oil would put WTI at ~$33/bbl and this does not seem to be even the risk case for most investors.

Exhibit 8: Our base case suggests the TIPS carry profile will be more attractive than H1 2015.



Source: RBC Capital Markets US Economics & Interest Rate Strategy, Bloomberg

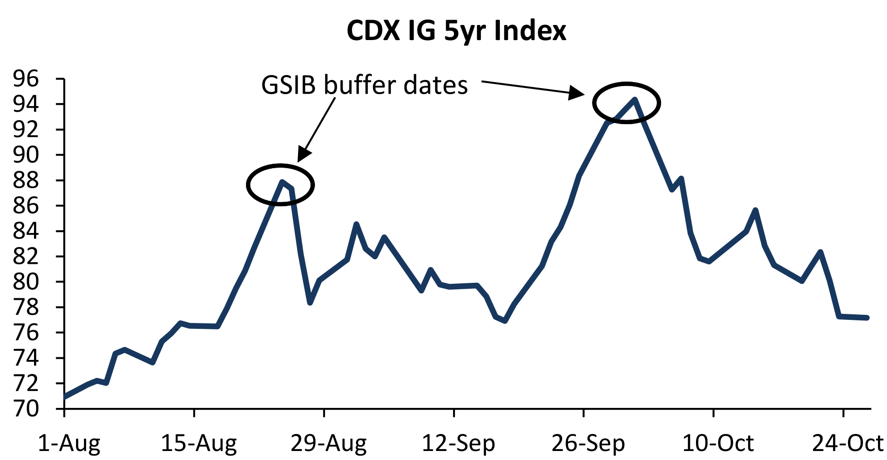
Another factor that could be bullish for breakevens is the potential for cuts to issuance. The Treasury seems committed to increasing bill issuance given the supply/demand imbalance in that market. Cuts to coupons is one way to increase the level of bills in the market and this could spill into the TIPS space, particularly if the Fed is very slow in allowing its Treasury portfolio to run-off (an earlier start here would help ramp up bill issuance).

Liquidity continuing to deteriorate: Seasonality, Sharpe ratios, & issuance shifts

Regulatory costs to market making have not yet peaked: the Net Stable Funding Ratio (NSFR) and the Fundamental Review of the Trading Book are likely to be the two bank regulations getting the most attention in 2016. As a result, the downward trend in capital/balance sheet allocated to market making is likely to persist. That means less market depth, and less ability to absorb sizable flows without a dramatic impact on prices.

Seasonality: There is a seasonal component to liquidity. Balance sheets on specific dates are used to calculate capital requirements over a longer period, so there is a significant disincentive for banks to provide liquidity by bidding on large blocks of bonds in advance of one of those balance sheet snapshots. The classic example of this was the behavior of corporate bond spreads over two of the dates used to determine GSIB buffers- August 24th and September 30th. The next major seasonal low point in liquidity will be year-end, which makes the upcoming FOMC meeting extremely risky: if the odds of a hike/odds of no hike are not north of 75%/25%, someone is likely to need to do a large enough portfolio adjustment that we will see the market move significantly. This is a two-sided risk, as investors would need to chase the market if they were surprised by no move as well.

Exhibit 9: That corporate spreads widened sharply on GSIB buffer calculation days suggests liquidity will be seasonal going forward.



Source: RBC Capital Markets US Interest Rate Strategy, Bloomberg

Sharpe ratios and spreads. Reduced depth means that markets are more likely to move violently periodically. We think this will happen frequently enough (particularly around the turn in the policy cycle) to cause an elevated level of delivered vol. The impact will be worse in less liquid products – periodic panics in risk assets should be common enough to have a meaningful impact on the Sharpe ratio of owning those securities. This means spreads will need to widen to get Sharpe ratios back up to normal levels.

That is also true for off-the-run Treasuries – dislocations are likely to get larger as the ability to warehouse large flows (potentially from central bank sales) continues to shrink. The more costly it is to trade off-the-runs, the cheaper they should trade.

Issuance shift? One of the obvious places where there is a structural supply/demand mismatch is in the bill market. With the Fed looking like it is going to move very slowly in allowing its portfolio to shrink, the Treasury financing need is not likely to be large enough to eliminate the supply shortfall in the bill market. As a result, there will be pressure for the

Treasury to modestly cut issuance of 5yr and 7yr notes (10s are 30s are likely to remain unchanged as the Treasury continues to extend the average maturity of its debt). As we mentioned above, the bigger effect will come if the Treasury trims TIPS in order to free up capacity for more bills. Because liquidity in TIPS is lower, a moderate change in the issuance profile could have an outsized impact.

Swap spreads: From RP to ICE LIBOR.

The recent collapse in swap spreads has been driven by several factors: higher RP rates, fear of central bank sales of Treasuries, heavy corporate issuance, stop-outs of long spread positions, and fear of year-end liquidity. None of these factors are going to disappear immediately (although corporate issuance will slow into year-end), but we think that after year-end the fear of these issues will fade enough so that they will all be trumped by ICE LIBOR concerns. We think that spreads will widen sharply in 2016, with the 5yr sector leading the way. **This is one of our highest conviction views of the new year.**

Higher RP. Elevated bank balance sheet costs mean that there is a widening gap between where banks borrow cash in the repo market from money funds, and where they will relend that cash (the rate that should matter for swap spreads). The ICE LIBOR setting seems to heavily weight where banks borrow unsecured cash from money funds. But the RP rate that impacts market pricing is where a bank will lend cash on a secured basis. So we have seen a tightening of RP and ICE LIBOR—where a bank will lend cash in the overnight RP market has actually been higher than overnight ICE LIBOR.

Higher RP costs are not going away. In fact the NSFR rule is likely to boost the cost of balance sheet in 2016.

However, there is a limit to how high RP can trade. If RP is above IOER, then part of the $2.7T of reserves at the Fed should start to find its way into the RP market, as both reserves and Tsy RP are 0% risk weighted assets, and for most banks there is no impact on LCR. If one bank asset is converted into another bank asset, there is no Leverage Ratio cost. Accordingly, we don't believe the current level of spreads can be justified by the RP story.

Central bank sales. The swap spread collapse started shortly after China devalued its currency, increasing worries that central banks might be selling Treasuries to fund FX intervention. This concern is likely to stick with us throughout 2016.

Heavy corporate issuance. As long as rates remain low and corporate spreads are relatively tight and stable, we expect issuance to hold up. However, if rates or spreads rise sharply, we would expect a slowdown in issuance by some of the corporations that are currently pre-funding future issuance or are buying back stocks.

Stop out of long positions. Spreads have tightened significantly since mid-August, with spreads on TU in 17bp, FV in 22bp, TY in 22bp, and WN in 28bp. We would be surprised to see if many spread longs that were initiated prior to mid-August are still in place. There will clearly be some longs that tried to pick the bottom that are suffering, but we suspect that the overall long is much smaller now.

Fear of year-end liquidity. While many investors believe that the spread tightening is significantly overdone, they are extremely wary of improperly priced assets getting even more mispriced in a year-end liquidity vacuum. Any surprises at the December FOMC meeting would greatly amplify risks of extremely erratic price movements into year end.

But higher ICE LIBOR is coming. Today most of the swap spread discussion is on higher RP rates, but we think it will shift to higher ICE LIBOR rates in early 2016. New money fund regulations will become effective in October 2016, and the regulation for Prime money funds (that are the biggest buyers of the CD and CP bank liabilities that feed into the ICE LIBOR setting) is much more restrictive than the regulation for Government money funds. As a result, we think that a very large amount of cash will move from Prime funds to Government funds.

In 2011, fears about money funds exposure to European banks caused roughly $200bn to leave Prime funds. That caused 3m ICE LIBOR to jump from 24.5bp to 58bps. We think the Prime fund outflow will be much larger than $200bn this time. Since the funds will be better positioned for the outflow, we do not expect quite the same gearing on ICE LIBOR for each $100bn of outflow. Nonetheless, a repeat of the 2011 ICE LIBOR spike seems like a reasonable expectation.

That should cause the majority of the recent collapse in spreads to reverse—this is one of our highest conviction views in 2016.

Demand for Treasuries: EM drop offset by regulation-driven bank and non-bank demand?

Global FX reserves are down 4% yr/yr, the majority of which are dollar reserves. This has pushed foreign *official* holdings of Treasury coupons down $189bn. Nonetheless, *total* foreign holdings of Treasury coupons are up $10bn y/y. We review this to stress that while reduced central bank demand is important, it is not the only story in foreign demand.

We also caution against simply paying attention to the headline swing in foreign holdings. Some foreign investors, particularly some central banks, huddle toward the front of the curve—changes in their flows do little to alter the amount of duration that other investors must absorb.

For this reason, we think the slowdown in foreign buying is important, but nowhere near as important as the large flows that caused the conundrum (the extremely flat curve) in the mid-2000s. At that time, there were both large foreign flows into the Treasury market, and many central banks were extending the average maturity of their portfolios—many moved from a bill-only portfolio to a portfolio dominated by Treasury coupons.

Regulatory offsets?: There are potential regulatory offsets to the slump in foreign demand. First, if the Fed drains reserves relatively quickly (primarily through a very large RRP program), it will start to eat into banks Level 1 HQLA positions. We think this will be more of a 2017 story than a 2016 story, but we could see a large uptick in demand for Treasuries and Ginnies to replace the reserves leaving bank balance sheets.

Second, we have started to see the regulatory focus shift from market makers to market users. The SEC has proposed liquidity management rules for mutual funds. The more whippy the movements in market prices are in the coming year, the more likely it becomes that regulators pressure the buy side to boost their holdings of liquid assets. We believe the regulatory impact on market pricing has not peaked yet and we could see increased demand for Treasuries and Ginnies.

Fundamental Strategy 2015 Review: 2016 & Beyond

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2016 S&P 500 Price Target of 2,300

Our 2016 S&P 500 price target of 2,300 represents 9.5% upside from our 2015 target of 2,100. This is based on a 16.8x multiple (currently 16.2x) applied to our 2017 EPS estimate of $137. Our estimates are predicated upon 6.7% and 7.0% EPS growth in 2016 and 2017, respectively. While there is a similar contribution in each year from revenues (3–4%), margins (2%), and buybacks (1%), the difference results from the elimination of commodity headwinds in 2017.

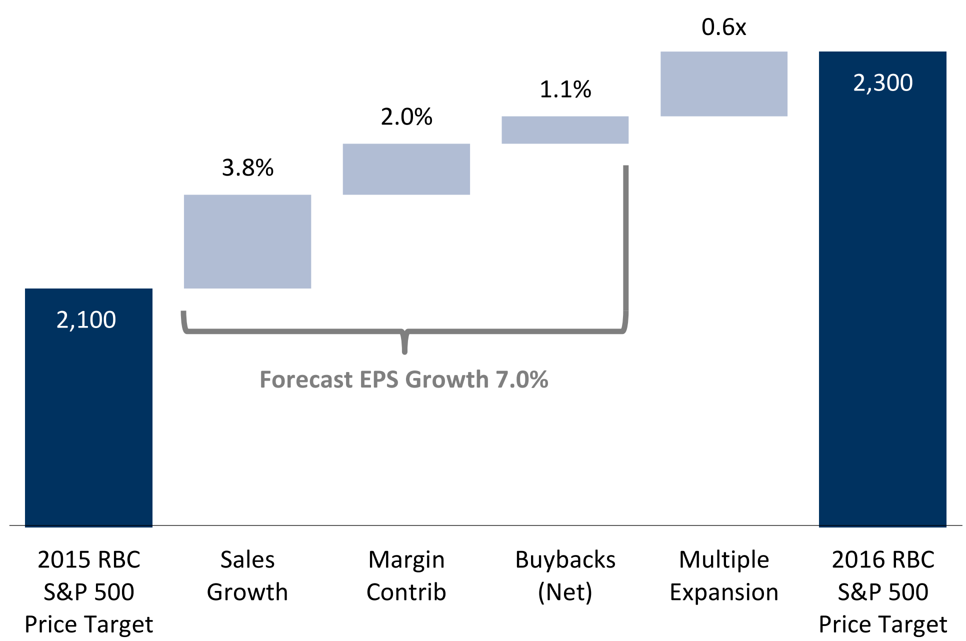
2015 vs. 2016

We begin this outlook by exploring how market behavior will likely differ in 2016 relative to 2015. 2015 was marked by falling oil prices, a diminishing global growth outlook, and flat rates. Our constructive 2016 outlook is predicated upon stabilizing commodity prices, and an incrementally higher dollar and rates. All of this should result in a substantially higher earnings trajectory as well as a modest re-rating of stocks.

Scarcity of Growth Drives Sector Opportunities

With growth scarce, investors should favor secular and stable growing investment ideas, while underweighting more cyclical and economically sensitive themes. This presents opportunities at the sector and subgroup level, detailed on pages 25–26. Based on these opportunities, we are moving Discretionary and Staples to Overweight, Financials to Market Weight, and Materials and Industrials to Underweight.

Exhibit 10: 2016 RBC S&P 500 Price Target Breakdown



Source: S&P, FactSet, and RBC Capital Markets estimates

2015 in Review

As we look back at 2015, four trends stand out:

1. The impact of falling commodities on earnings, notably oil & the Energy sector,
2. The slowdown in global growth,
3. The decline in forward expectations for the fed funds rate, and
4. The broad-based underperformance of commodity-related sectors.

2015 returns were lackluster due to falling commodities, a higher dollar, and slower growth.

Exhibit 11: 2015 Review

	12/31/14	Current	Diff (%)
Interest Rates (%)			
10-Year Yield	2.2	2.3	0.1
Expected Fed Funds at 12/31/16	1.1	0.8	-0.3
Commodities ($)			
WTI Oil	53.5	41.3	-22.8
CRB Raw Industrials	492.6	402.5	-18.3
Currency (%)			
Trade-Weight Dollar	85.1	94.1	10.5
Economics (%)			
Expected 2015 GDP Growth	3.0	2.1	-30.0
Equities ($)			
S&P 500 Level	2059	2050	-0.4

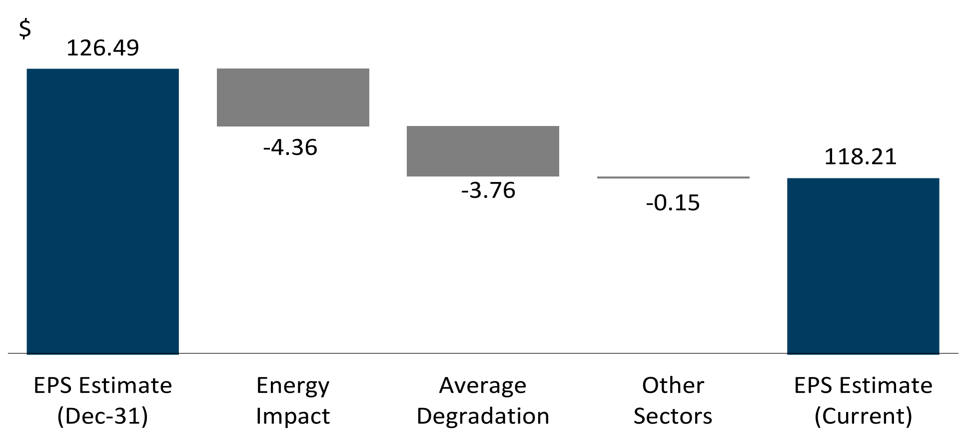
Note: Bloomberg Consensus GDP; Blend of actuals where available and Bloomberg Consensus for estimates;
Interest rate differences are 12/31/14 minus current; all others are percent change.
Source: Federal Reserve, EIA, CRB, Haver, Bloomberg, and RBC Capital Markets

2015 earnings for the S&P 500 should finish well below expectations held at the beginning of the year. However, our work shows that much the decline can be attributed to two factors: 1) the Energy sector and, 2) normal degradation of estimates throughout a typical year. These two factors explain virtually all of the degradation in 2015 estimates. Put differently, 2015 did not experience a broad-based decline in underlying trends.

The decline in Energy weighed on 2015 EPS.

Earnings in other sectors were in line with expectations.

Exhibit 12: Revisions to 2015 Consensus EPS

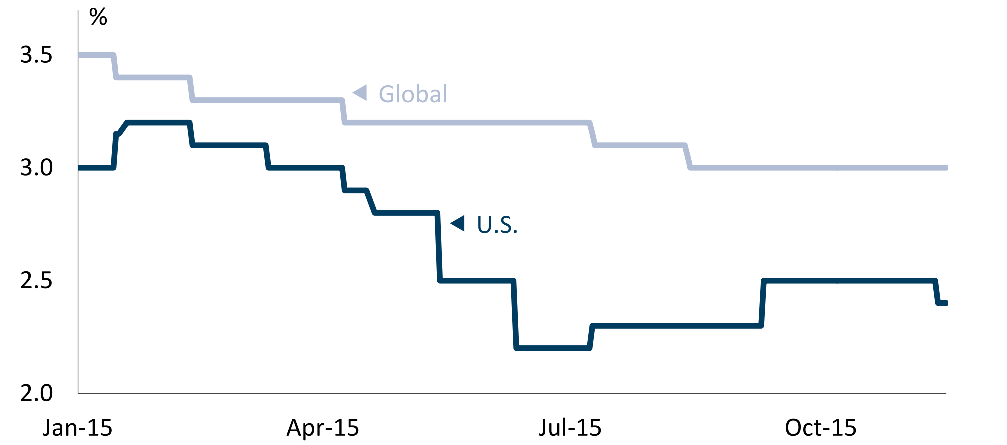


Source: S&P, Thomson Financial, Compustat, FactSet, and RBC Capital Markets

Despite a consensus forecast for 3% GDP growth on January 1, 2015, RBC's earnings expectations assumed a less optimistic 2.5%. This largely played out over the course of the year, as growth expectations in the US and globally were tempered.

GDP growth expectations slowed during the course of the year.

Exhibit 13: 2015 GDP Expectations

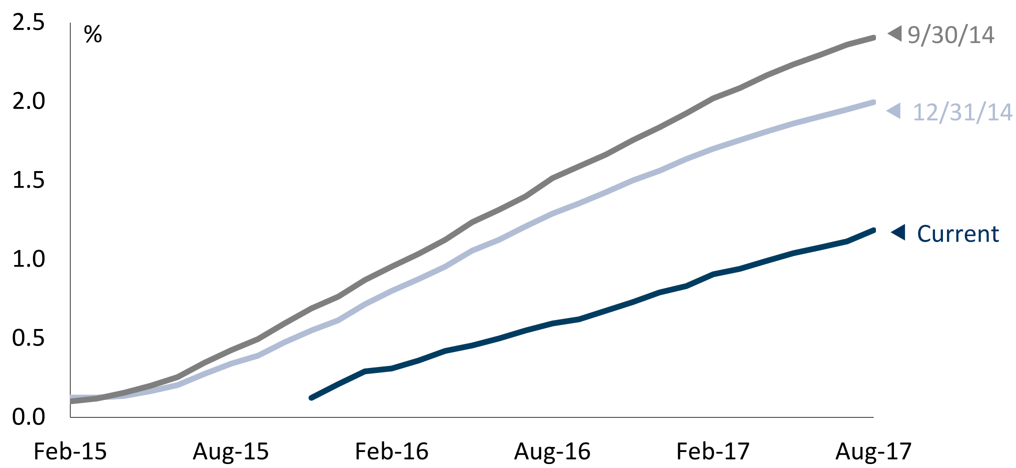


Source: Bloomberg and RBC Capital Markets

Heading into 2015, expectations were for a summer 2015 Fed liftoff. However, slowing global growth and volatile financial conditions led to a delay in the initial rate hike. As shown below, declining rate expectations were tantamount to an easing of Fed policy.

Lowering forward expectations is equivalent to easing.

Exhibit 14: Fed Funds Futures



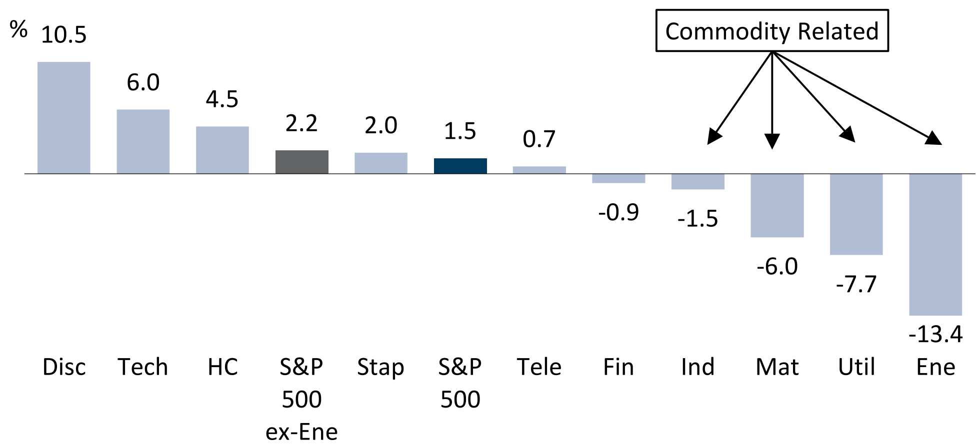
Source: Federal Reserve, Bloomberg, and RBC Capital Markets

The four worst-performing sectors were commodity exposed.

Less economically sensitive sectors fared much better.

Given the difficult backdrop for commodities and slower economic growth (emanating from China), the uninspiring returns for equities are not all that surprising. As Exhibit 15 shows, the four worst-performing sectors were commodity-related groups. While Financials were held back by weaker than expected short rates, other sectors fared much better.

Exhibit 15: S&P 500 YTD Total Return – Sectors



Source: S&P, FactSet, and RBC Capital Markets

2016 versus 2015

We believe that 2016 will be defined by many of the same characteristics as the year gone by. However, there are several areas that we believe will be quite different. These are detailed below.

Similarities

- **US Economic Backdrop:** 2015 is on track to be the tenth consecutive year of sub-3% GDP growth. Forecasts for 2016 and 2017 point to a continuation of this trend.
- **Global Economic Backdrop:** The economic backdrop remains uninspiring. Imbalances are expected to weigh on the Chinese economy, while Europe is projected to see another year of tepid growth. While Japan will likely exit its modest recession in the year ahead, we believe global growth should remain constrained in 2016 and 2017.
- **Margins:** The slower for longer economic environment should result in continued modest revenue growth. As such, we believe CEOs will feel pressure to deliver EPS growth through continued buybacks and expense management, pushing margins higher than historical norms.

Differences

- **Modest Multiple Expansion:** Our work shows that multiples move directionally with rates in a low yield environment. As such, we believe that a move toward more normal Fed policy will be accompanied by a modest re-rating in stocks. Further, lower than normal volatility, leverage, and rates are supportive of higher P/Es, in our view. At the start of 2015, stocks traded at 16.3x forward earnings versus 16.2x currently. Our forecasts imply 16.8x at the end of 2016.
- **Oil:** Oil saw large declines in early 2015, pressuring earnings growth and Energy-sector returns. Futures point toward a stabilization in oil prices, while easier 2016 comps should result in modest growth for Energy names.
- **Sector Leadership:** In 2015, the market punished Energy and commodity-related sectors, while rewarding secular (New Tech and Health Care) and stable (Staples) growers. In the year ahead, we believe that Energy will be more in line, while infrastructure and industrial groups will remain under pressure. Further, we believe both secular and stable growth should continue to lead.

Summary of Target and Forecasts

We are introducing our 2016 year-end Price Target of 2,300 on EPS of $128 and $137 in 2016 and 2017, respectively, and a 2016 year-end P/E of 16.8x. In late September, we lowered our forecast 2016 EPS to reflect slower global growth and a larger than initially forecast drag from commodity weakness. Our 2017 projections assume commodity price stability and slow, but positive, US and global economic growth.

RBC Capital Markets' 2,300 target for 2016 implies 9.5% upside from our 2015 year-end 2,100 target.

Exhibit 16: S&P 500 Price and Earnings Target

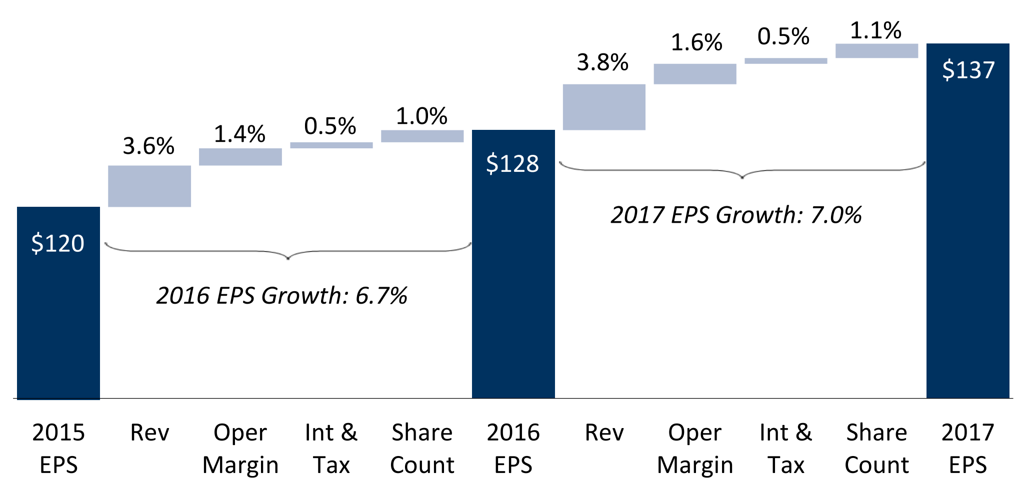
S&P 500 Price Level	Price	% Change
2015 Year-End Target Price	2,100	
2016 Year-End Target Price	2,300	9.5%
Operating Earnings	**EPS**	**YoY Growth**
2014 Actual	118.83	7.6%
2015 Estimate	120.00	1.0%
2016 Estimate	128.00	6.7%
2017 Estimate	137.00	7.0%
P/E Multiple	**Current**	**Change**
Current on NTM RBC EPS Estimates	16.2x	
Year-end 2016 on RBC 2017 EPS	16.8x	0.6x

Source: S&P, Thomson Financial, FactSet, and RBC Capital Markets estimates

Our 2016 and 2017 EPS estimates imply 6.7% and 7.0% growth, respectively. As shown in Exhibit 17, these numbers are predicated on contribution of 3–4% from revenues, 2% from margins, modest upside from interest and taxes, and 1% from net buybacks. Importantly, 2017's modest growth acceleration is entirely the result of the elimination of oil headwinds.

Faster 2017 EPS is due solely to easier comps in Energy.

Exhibit 17: 2016 & 2017 Projected S&P 500 EPS Growth Breakdown



Source: S&P and RBC Capital Markets estimates

Revenues, Margins, & Earnings

Throughout the current recovery, economists have been forecasting a more rapid recovery than has been experienced. Each year, forecasts have been ~3% (or higher), only to disappoint. US economic growth has averaged just 2% over the past five years, with 2015 on pace to be a paltry 2.1%. Importantly, forecasts for 2016 and 2017 have fallen toward this lower trajectory, shown below.

Expectations are for continued modest GDP growth

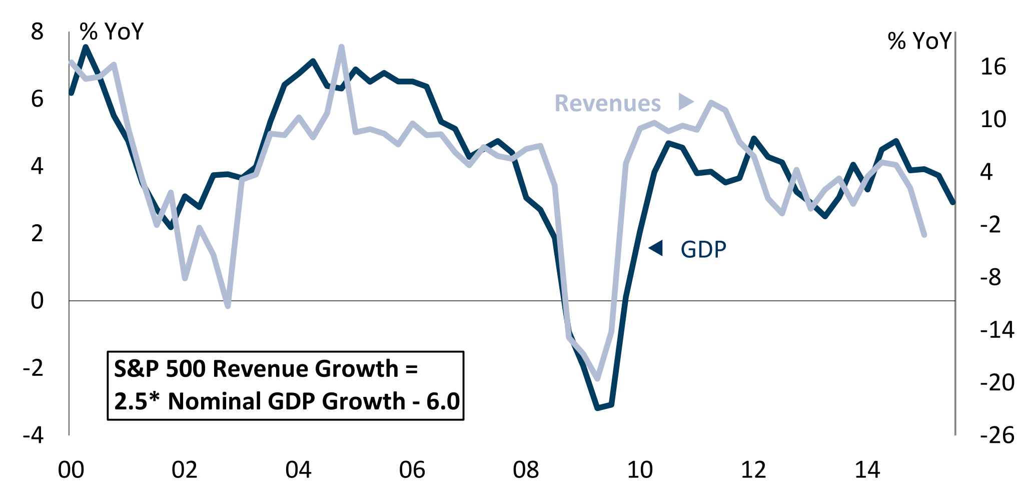
Exhibit 18: Calendar-Year GDP with Consensus Expectations

Note: Blend of actuals where available, and Bloomberg Consensus for estimates.
Source: BEA, Statistical Office of the European Communities, Cabinet Office of Japan, Bloomberg, Haver, and RBC Capital Markets

Our work indicates that S&P 500 revenue growth tends to mimic the overall direction of the economy. Our model reflects slower economic growth estimates and has been further adjusted to account for commodity price impacts.

Revenues tend to mimic the direction of the economy

Exhibit 19: S&P 500 Revenues vs. Nominal GDP

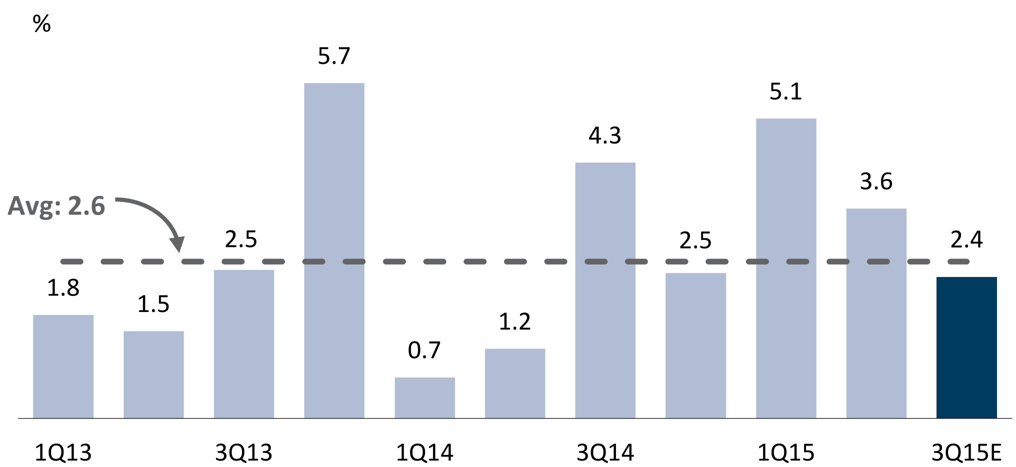


Source: S&P, BEA, Haver, and RBC Capital Markets

CEOs continue to manage bottom-line growth in the slower revenue environment. As shown below, margins have been a source of earnings growth for the last several years. We expect this to continue in 2016 and throughout the recovery. That said, our forecast assumes only modest margin upside with a contribution to growth of 2%, substantially less the recent trend.

Margins should continue to add to EPS growth.

Exhibit 20: Margin Contribution to S&P EPS Growth

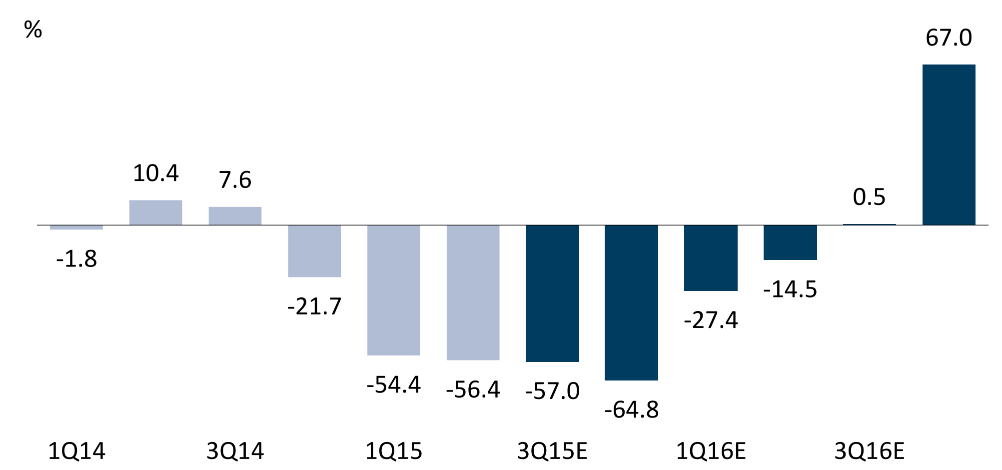


Source: S&P, Thomson Financial, Compustat, FactSet, and RBC Capital Markets

The Energy sector has been a significant drag on S&P 500 earnings in 2015, the result of the sharp decline in oil prices. Easy comps in 2016 should benefit earnings growth for the group, and the market more broadly. In aggregate, weak Energy-sector earnings should have a 40 bp drag on 2016 S&P 500 earnings growth while 2017 should benefit from easy comps.

The drag from Energy should abate in 2016.

Exhibit 21: Impact of Energy (Energy Sector Earnings)



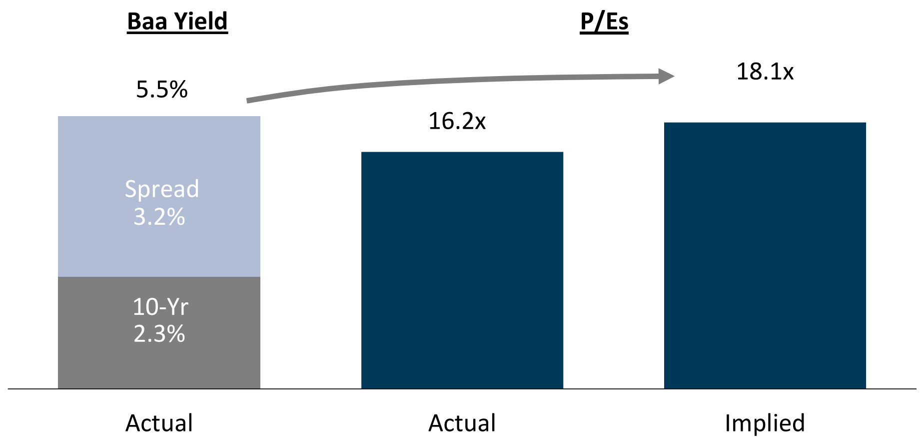
Source: S&P, Compustat, Thomson Financial, FactSet, and RBC Capital Markets

Valuations

As a result of the financial crisis (and its ensuing events), stock multiples became dislocated from the cost of capital (corporate yields). As this relationship continues to re-normalize, stocks should re-rate higher. Importantly, Baa yields suggest stocks should be trading at 18.1x, well above their current 16.2x level.

Corporate yields imply P/Es that are two turns higher than where stocks currently trade.

Exhibit 22: Bond Yields vs. S&P 500 Multiples



Source: S&P, Federal Reserve, Thomson Financial, FactSet, Haver, and RBC Capital Markets estimates

Sector and Subgroup Opportunities

With growth scarce, we believe investors should tilt their portfolios toward faster and stable growing investment themes. Below and on the following page, we lay out our preferred portfolio tilts, including sector recommendations.

Secular Growers (30% of S&P 500)

Faster growing names that are less tied to the health of the economy frequently command a premium. However, they should be considered relative to their growth prospects. On this basis, we believe Health Care, New Tech, and New Discretionary are quite attractive.

Stable Growers (19%)

Stable growers tend to deliver more consistent (yet modest) growth and typically generate reliable cash flows. Names within Consumer Staples, Tech Staples, Business Services, and Aerospace & Defense should remain in favor.

In Favor Cyclicals (2%)

Names in Autos, Airlines, and Housing Related are experiencing a cyclical upswing. We believe these represent tactical opportunities.

Old Economy (12%)

Old Tech and Old Discretionary themes are facing challenging competitive environments from changing consumer appetites and innovative products and brands. These are compounded by cyclical headwinds making these groups relatively unattractive.

Economically Sensitive (7%)

Energy and Early Stage Industrials typically produce products consumed in everyday economic activity. While they are not supported by a robust economy, these names should not experience the same pressures as those groups directly related to commodity and infrastructure activities.

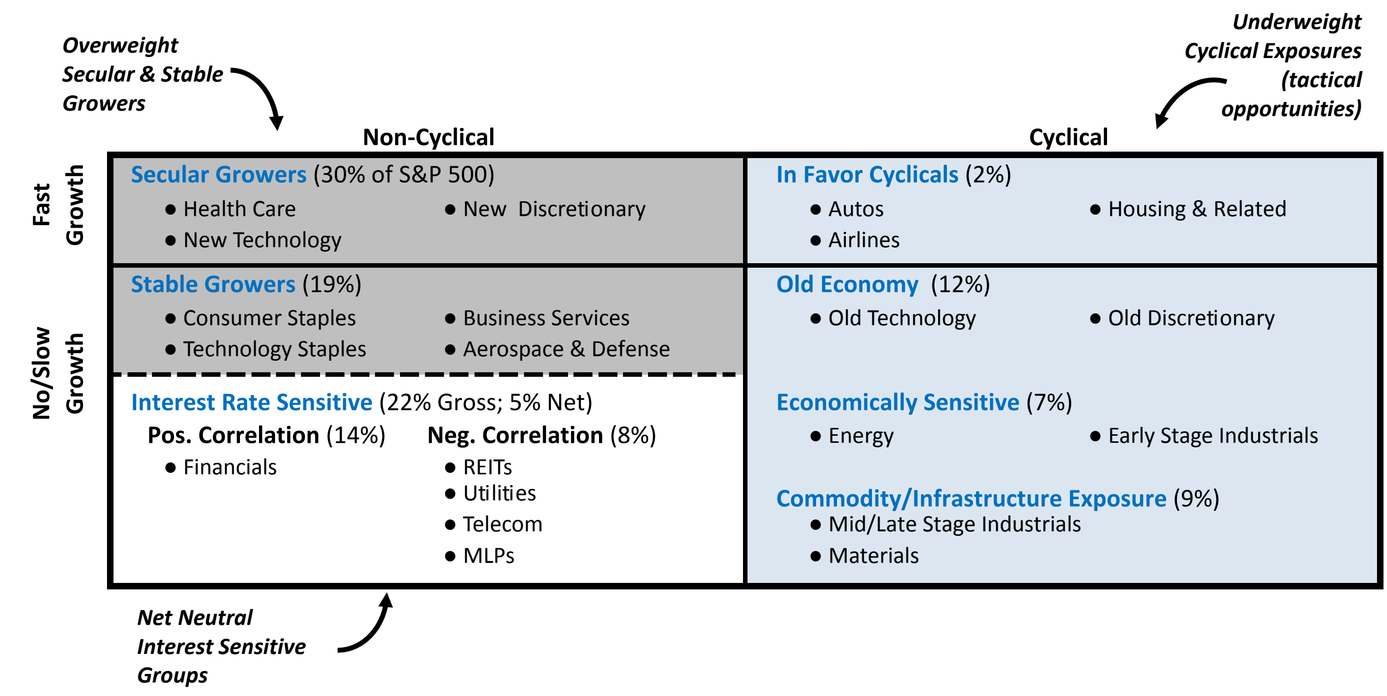
Commodity and Infrastructure Exposure (9%)

Mid and Late Stage Industrials and Materials are dependent on large-scale industrial projects. With ample spare capacity (largely eminating from China), there is less demand for these activities, pressuring the group.

Interest Rate Sensitive (22% Gross; 5% Net)

Our view on interest rates is largely in line with that expressed by the futures curve. More specifically, we expect a slow re-normalization of Fed policy accompanied by modestly higher rates at the long end. We believe investors should be focused on managing their net interest exposure. That said, we are more positively inclined to business dynamics in the Financial sector than we are on yield oriented groups (REITs, Utilities, Telecom, and MLPs).

Exhibit 23: Growth Schematic



Source: S&P, FactSet, and RBC Capital Markets

We prefer secular growth (Health Care, New Tech, and New Discretionary) and stable growth (Consumer and Tech Staples, Business Services, and Aerospace & Defense).

We prefer Energy and Early Stage Industrials to Materials and Late Stage Industrials

Below, we distill our sector recommendations from the aforementioned relative opportunities. While individual sectors often span several themes, our sector recommendations represent an aggregation. For example, New Tech and Tech Staples account for over 70% of the broader Technology sector, driving the group's overall overweight recommendation.

We are moving Discretionary and Staples to Overweight, Financials to Market Weight, and Materials and Industrials to Underweight.

Exhibit 24: Sector Recommendations

Overweight	Market Weight	Underweight
Health Care	Energy	Materials (prev: MW)
Technology	Financials (prev: OW)	Industrials (prev: MW)
Discretionary (prev: MW)		Telecom
Staples (prev: MW)		Utilities

Source: S&P and RBC Capital Markets estimates

Appendix: Detailed Earnings Model

Exhibit 25: EPS Estimate Detail

	2014	2015E	2016E	2017E
Dollars ($bn)				
Sales	10,336	10,026	10,388	10,779
EBIT	1,609	1,593	1,675	1,765
Interest Expense	168	174	178	182
EBT	1,441	1,420	1,497	1,584
Taxes	385	361	379	400
Net Income	1,056	1,058	1,118	1,184
Per Share ($)				
Sales/Share	1163.32	1136.82	1190.00	1250.00
EPS/Share	118.83	120.00	128.00	137.00
Contribution to Growth (%)				
Sales	3.9	-3.0	3.6	3.8
Operating Margins	3.1	2.1	1.4	1.6
Int & Tax	0.2	1.2	0.5	0.5
Interest	0.8	-0.5	0.3	0.3
Taxes	-0.5	1.7	0.1	0.1
Share Count	0.0	1.0	1.0	1.1
Buybacks	2.3	1.5	1.5	1.6
Issuance	-2.1	-0.5	-0.5	-0.5
Chg in EPS	7.6	1.0	6.7	7.0

Source: S&P, Compustat, FactSet, Haver, and RBC Capital Markets estimates

Exhibit 26: S&P 500 Quarterly EPS and Revenue Estimates ($)

	Operating EPS	Sales/Share
2014	**118.83**	**1163.32**
2015E	**120.00**	**1136.82**
1Q	28.60	273.19
2Q	30.09	281.35
3QE	30.00	283.66
4QE	31.31	298.62
2016E	**128.00**	**1,190.00**
1QE	30.25	285.00
2QE	32.00	295.00
3QE	32.00	297.00
4QE	33.75	313.00
2017E	**137.00**	**1,250.00**

Source: S&P, Thomson Financial, FactSet, and RBC Capital Markets estimates

US Equities Technical Outlook

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Secular trends favor equities – Buying weakness through 2016

The following pages highlight secular cross-asset market trends as well as perspectives on the current market cycle, followed by a discussion of equity sector and group themes. We explore these themes in greater detail in our ***2016 Technical Outlook*** report.

Long-term cycle data suggest 2016 is likely to be a transitional year

Long-term cycle analysis, despite its imperfections, can provide a useful long-term perspective to gauge current market volatility. The 10-year rate-of-change study of the 100+ year Dow Industrials chart, along with the thought-provoking 34- and 17-year cycle charts, raise a few questions regarding investment returns in 2016. Our interpretation of these longer-term cycle charts suggests that 2016 will likely be a transition year that should lead to a resumption of the longer-term secular uptrend heading 2017. In fact, while the bearish case has technical merit, we recommend using weakness in 2016 as a buying opportunity.

Reconciling the bullish and bearish technical views for 2016

- **Bull case** – We judge the long-term uptrend for the S&P 500 to be intact, given that a series of higher lows remain in place. Although the S&P 'only' corrected 12% in 2015, the decline for many stocks, notably Cyclicals, began in H2/14 and has been long and deep enough to begin looking for cycle lows in 2016. In fact, the S&P 500 and 400 stocks declined by an average of 26% from their 2014 highs, with many already showing indications of bottoming at long-term support near rising four-year moving averages. This sets the stage for a more durable bottoming and/or consolidation process for many groups and stocks in 2016, followed by an upside acceleration into 2017.
- **Bear case** – The negative case views 2015 as a cycle peak, wherein participation and/or breadth narrowed, culminating in the S&P breaking its five-year uptrend with further downside expected. Interestingly, the expectation of further weakness in the coming quarters *is* consistent with the long-term cycle charts illustrated on the following page but also suggests weakness is likely an opportunity to build equity exposure. In the bear scenario, we see a worst-case downside risk to S&P 1650–1600, with first important support at the four-year ma at 1750.

Bottom line

We view 2016 as a transitional year, characterized by rapid sector rotation, as investor sentiment seesaws in reaction to global economic, interest rate, and election uncertainty. Further weakness, should it develop, is likely in the later stages of a decline that began in H2/14, given most stocks have already had substantial declines over the past nine to 18 months. We expect a strong close to 2016, near mid-trend at 2265–2300, with 2017 mid-trend at 2450.

Themes & Sectors

- **Leadership:** Secular Growth, notably Technology, select Healthcare and Discretionary
- **Emerging/bottoming:** Select Financials notably Banks and Brokers
- **Peaking:** Bond Proxies – Reduce exposure on counter trend recoveries
- **Contrarian:** Cyclicals – Downtrends intact, but select stocks bottoming
- See sector trends, S&P 100 relative performance table and ideas on page 33

Secular and Cycle technical backdrop

While the secular backdrop for equities remains positive, history suggests (red arrows) the 10 year-rate of change for the Dow Industrials (in black) is at risk of contracting before another upside advance develops. However, the overlay below illustrates EAFE's 10-year rate of change (in blue) has already meaningfully declined toward zero, raising the question of whether it is potentially basing and will improve heading through 2016 and into 2017.

Secular backdrop is positive while…

…the 10-year ROC suggests risk of a correction/pause.

Perhaps, EAFEs have already declined sufficiently.

Exhibit 27: Dow Jones Industrials and 10-year rate of change – 115 years

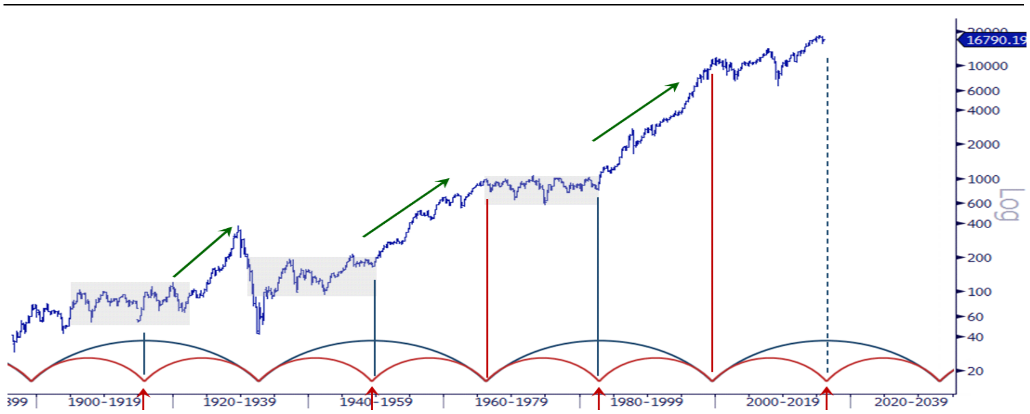
Source: Bloomberg, Updata, RBC Capital Markets

34- & 17-year cycles – Food for thought

Cycle theory can be a thought-provoking but inexact analysis, with a margin of error measured in quarters and years. Regardless, the 17-year cycle below is noteworthy as it has defined prior periods of expansion/contraction and suggests acceleration in H2/16.

Cycle theory suggests 2016 could be a transitional year into a more bullish 2017.

Exhibit 28: Dow Jones Industrial Average and the 34- and 17-year cycles



Source: Bloomberg, RBC Capital Markets

The current cycle – Frayed, but not broken

One of our key charts to track the current market cycle is featured below. Trend (panel 1) is fraying, while the S&P's relative performance trend to bonds (panel 3) remains positive, as does the S&P's A/D line. A more cautious outlook would be warranted, should the underlying trends begin to turn negative, notably a break of the August 2015 lows (panel 2). Note: support begins at the four-year ma near 1750, down to ~1650–1600.

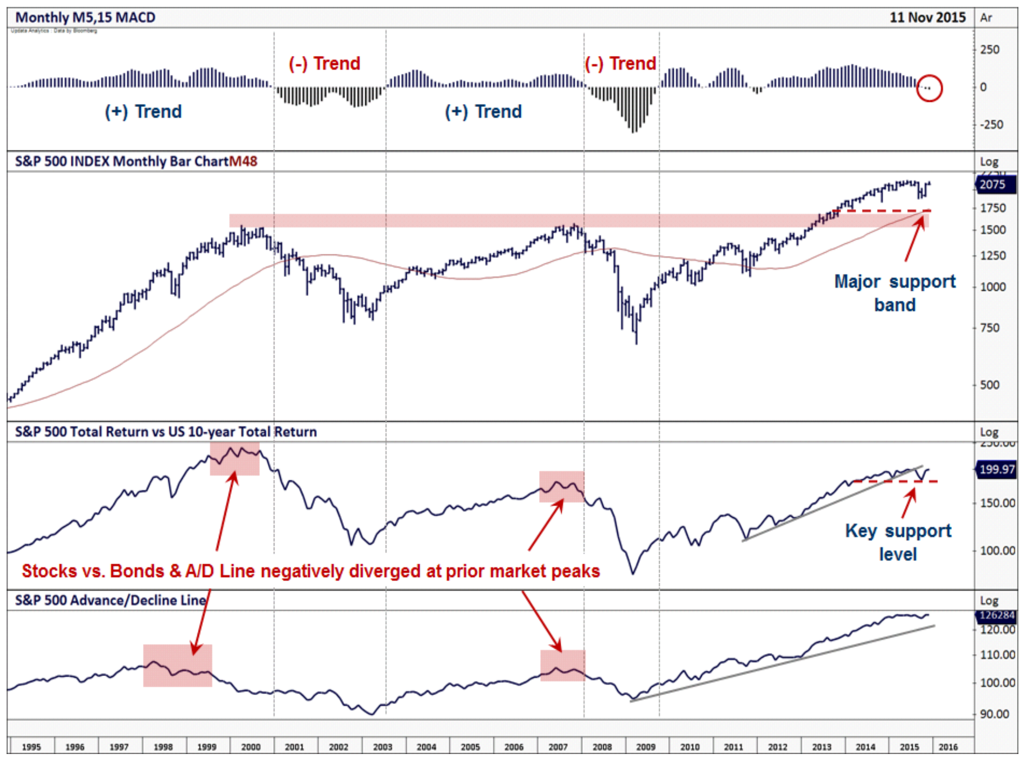
(-) Trend indicators fraying

(+) Higher lows still in place

(+) Stocks vs Bonds positive

(+) S&P A/D line still positive

Exhibit 29: S&P 500 trend momentum, price, stocks vs. bonds and advance-decline line



Source: Bloomberg, Updata, RBC Capital Markets

The Presidential cycle

With 2016 an election year, we are regularly asked for our interpretation of the cycle data. Year four (2016) of the Presidential cycle has an average return of ~7%, which is in line with the forward-rolling annual average for US indexes since 1900. We recommend investors view this data skeptically, given these averages are based on a very wide deviation of returns.

Presidential cycle averages widely vary – Use cautiously.

Year 4 (2016) of the Presidential Cycle is 'average'.

Exhibit 30: Presidential cycle returns

	Dow Industrials since 1900			S&P data post WWII		
Presidential term year	Democrat	Republican	Average	Democrat	Republican	Average
1	8.4%	3.9%	6.1%	15.3%	-1.8%	6.3%
2	2.4%	4.0%	3.2%	3.9%	7.4%	5.7%
3	21.4%	4.5%	12.4%	15.2%	17.0%	16.1%
4	4.2%	10.5%	7.5%	10.1%	2.6%	6.1%

Source: Bloomberg, RBC Capital Markets

Intermediate-term perspective

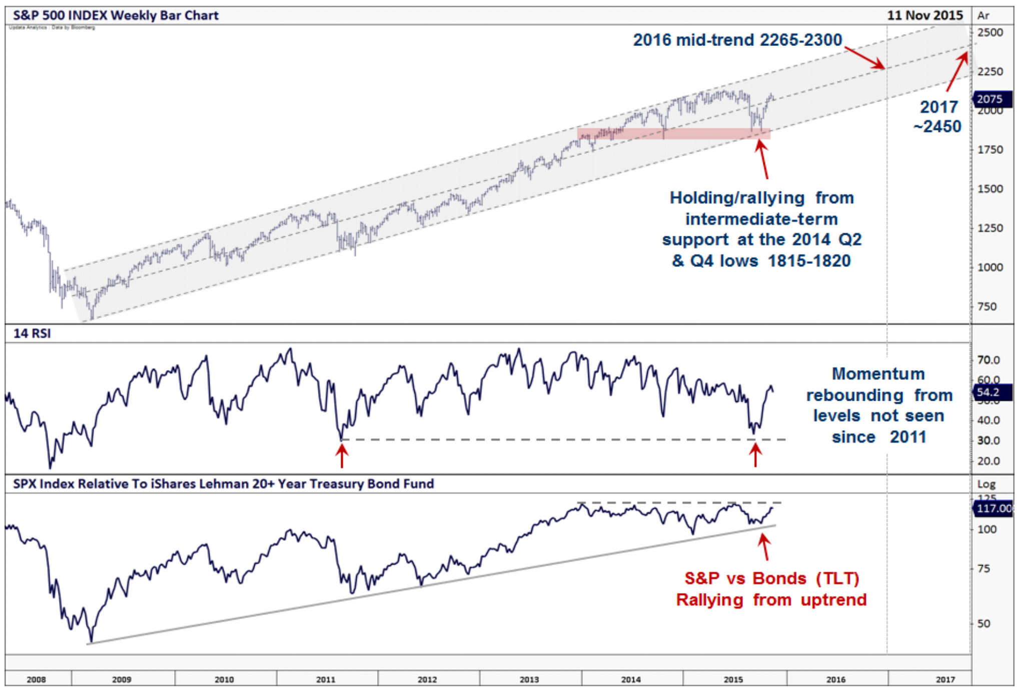
Beyond the likelihood of a short-term pullback, the S&P's long-term uptrend remains intact with a series of higher lows in place and weekly momentum indicators remain positive. More importantly, relative performance versus bonds (TLT) remains in an uptrend and would need to break below the Q3 lows to suggest that a more negative equity environment was developing.

Long-term uptrend
Intact with higher highs.

Weekly momentum remains positive after bottoming in late Q3.

S&P vs Bonds
Uptrend intact with the October 2015 lows key support.

Exhibit 31: S&P 500, weekly momentum indicator, S&P vs. TLT (Bond ETF)



Source: Bloomberg, Updata, RBC Capital Markets

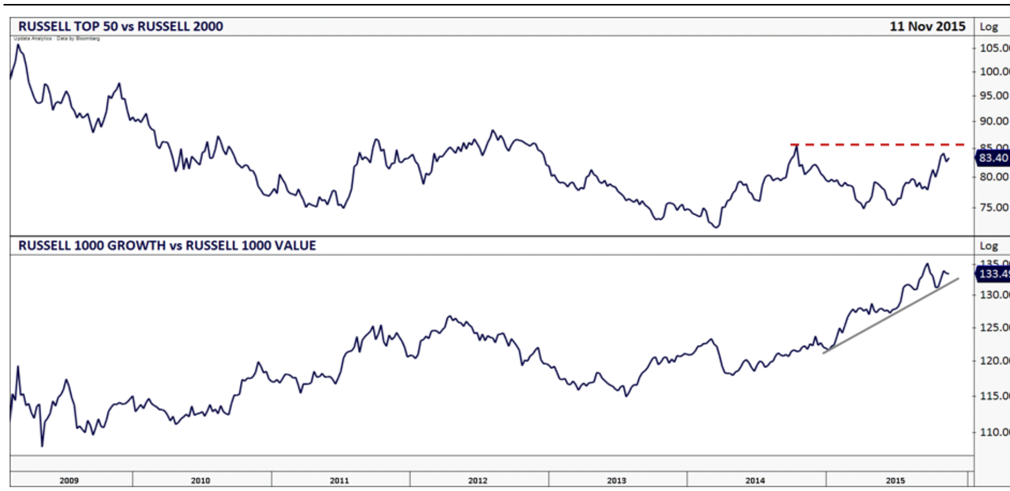
US equity Size and Style review

Size: Top-50 equity weights have outperformed small-caps through 2015, reflecting narrowing leadership. A break above the 2014 highs would be a net market negative.
Style: Growth versus Value uptrend is intact, with the October 2015 lows a key technical level.

Exhibit 32: Russell Top 50 vs. Russell 2000, Russell Growth vs. Value

Size: Mega vs. Small-caps – A rally above the 2014 high would signal a longer-term trend reversal.

Style: Growth vs. Value – October lows key level.



Source: Bloomberg, Updata, RBC Capital Markets

US sector rotation

The table below tracks incremental sector shifts for the S&P 500 & 400, highlighting the cummulative iintermediate-term, one- to two-quarter, relative performance shifts within each sector.

- **Leading:** Technology
- **Peaking:** Bond Proxies (Utilities, Telecos, Staples)
- **Counter trend rallies stalling:** Energy, Materials
- **Mixed:** Discretionary, Financials, Industrials
- **Becoming oversold:** Healthcare

Tracking market leadership from the bottom up, stock by stock, within each sector.

Exhibit 33: Percentage of S&P 500 & 400 stocks by sector with rising weekly relative trends

	DISCRETIONARY	STAPLES	ENERGY	FINANCIALS	HEALTHCARE	INDUSTRIALS	TECHNOLOGY	MATERIALS	TELCOS	UTILITIES
11/13/2015	36%	38%	52%	46%	15%	35%	64%	36%	33%	36%
11/06/2015	36%	51%	60%	40%	12%	39%	61%	41%	17%	49%
10/30/2015	35%	60%	57%	40%	12%	38%	58%	37%	17%	74%
10/23/2015	40%	74%	53%	47%	14%	35%	60%	41%	17%	83%
10/16/2015	44%	70%	45%	45%	25%	37%	60%	36%	33%	83%
10/09/2015	53%	68%	32%	44%	28%	44%	58%	34%	17%	66%
10/02/2015	53%	70%	25%	42%	35%	40%	53%	29%	50%	66%
09/25/2015	48%	72%	20%	41%	43%	44%	48%	31%	50%	68%
09/18/2015	48%	72%	17%	44%	59%	43%	45%	34%	67%	77%
09/11/2015	48%	72%	13%	48%	59%	41%	42%	32%	67%	79%
09/04/2015	48%	72%	12%	53%	55%	42%	40%	34%	67%	81%
08/28/2015	45%	75%	12%	58%	61%	40%	38%	27%	50%	79%
08/21/2015	44%	74%	10%	66%	66%	39%	36%	25%	33%	74%
08/14/2015	48%	68%	12%	64%	66%	35%	34%	19%	0%	64%
08/07/2015	53%	66%	12%	67%	72%	34%	32%	15%	17%	60%
07/31/2015	56%	66%	12%	62%	71%	34%	33%	17%	17%	40%
07/24/2015	54%	57%	12%	60%	66%	33%	39%	22%	33%	13%
07/17/2015	56%	51%	12%	60%	65%	34%	43%	32%	33%	9%
07/10/2015	56%	38%	12%	59%	65%	42%	47%	39%	33%	11%
07/03/2015	55%	30%	17%	56%	61%	46%	51%	44%	33%	9%
06/26/2015	52%	32%	22%	54%	61%	48%	51%	46%	50%	9%
06/19/2015	47%	32%	28%	51%	55%	48%	54%	44%	50%	17%
06/12/2015	40%	28%	47%	49%	54%	52%	54%	49%	50%	21%
06/05/2015	38%	34%	53%	44%	52%	52%	54%	44%	50%	19%
05/29/2015	33%	34%	68%	38%	46%	49%	51%	44%	67%	19%
05/22/2015	32%	30%	73%	34%	49%	47%	46%	42%	67%	21%
05/15/2015	34%	34%	85%	33%	55%	43%	45%	44%	50%	19%
05/08/2015	43%	32%	83%	34%	65%	43%	51%	41%	50%	15%
05/01/2015	56%	36%	78%	46%	71%	49%	54%	46%	50%	13%
04/24/2015	60%	45%	65%	51%	76%	52%	55%	42%	50%	11%
04/17/2015	67%	45%	60%	58%	72%	53%	56%	42%	50%	9%
04/10/2015	69%	45%	47%	62%	71%	57%	58%	41%	50%	4%
04/03/2015	69%	43%	42%	62%	73%	56%	61%	44%	67%	0%
03/27/2015	66%	40%	35%	54%	72%	52%	63%	51%	67%	0%
03/20/2015	64%	43%	40%	52%	67%	57%	65%	56%	67%	0%
03/13/2015	65%	45%	48%	46%	60%	60%	64%	63%	67%	0%
03/06/2015	64%	45%	53%	46%	54%	57%	62%	64%	83%	0%
02/27/2015	64%	51%	48%	53%	59%	52%	59%	66%	83%	13%
02/20/2015	63%	58%	38%	56%	63%	52%	56%	63%	50%	62%
02/13/2015	64%	72%	18%	51%	67%	44%	51%	58%	33%	79%
02/06/2015	63%	70%	10%	49%	78%	39%	49%	47%	33%	81%
01/30/2015	63%	70%	8%	50%	78%	41%	55%	46%	33%	81%

Source: Bloomberg, RBC Capital Markets

Equity Themes

(+) Secular Growth

(+) Banks and Brokers

(-) Bond proxies

(=/-) Cyclicals

Tracking relative performance shifts from the bottom up

The table below tracks the long-term relative performance 'trend' measured in quarters, which is a useful technical screen to identify longer-term leadership shifts within markets.

Exhibit 34: S&P 100 Long-term/monthly relative performance trend vs. S&P 500

EARLY OUTPERFORMANCE	ESTABLISHED OUTPERFORMANCE	MARKET PERFORMANCE	EARLY UNDERPERFORMANCE	ESTABLISHED UNDERPERFORMANCE
		FINANCIALS		
> BAC	* AIG	> C	ALL	AXP
> BK	JPM	> GS		BRK/B
> BLK	SPG	> WFC		COF
				MET
Banks/Brokers emerging				MS
				* USB
		UTILITIES		
			\ SO	EXC
		TELCOS		
		Bond proxy trends turning negative		\ T
				VZ
		STAPLES		
	MO	\ KO	\ CVS	\ CL
	COST	\ PM		PG
	MDLZ			WMT
	PEP			
	* WBA			
		HEALTH CARE		
	* AGN	> ABT	\ AMGN	BIIB
	* BMY	ABBV	\ CELG	* JNJ
	* LLY	- MDT	\ GILD	MRK
	* PFE	*Healthcare challenging long-term up trends*		
	* UNH			
		DISCRETIONARY		
GM	AMZN		\ TGT	F
	CMCSA			TWX
	CMCSK			* FOX
	HD			* FOXA
	* LOW	*Discretionary leadership remains very narrow and slowing*		
	MCD			
	NKE			
	PCLN			
	SBUX			
	DIS			
		TECHNOLOGY		
> GOOG	ACN	\ INTC	\ AAPL	IBM
- CSCO	> GOOGL	PYPL		* ORCL
TXN	FB			QCOM
	MA	*Technology leadership intact*		
	MSFT			
	V			
		INDUSTRIALS		
> MMM	* GD			CAT
BA	> GE			EMR
> UPS	* HON	*Industrials selectively improving*		* FDX
	LMT			* NSC
	RTN			UNP
				* UTX
		MATERIALS		
DOW				MON
> DD				
		ENERGY		
Chemicals lead Materials				APC
				* CVX
				* COP
			Energy downtrends intact	* DVN
				* XOM
				HAL
				KMI
				* OXY
				* SLB

Source: Bloomberg, RBC Capital Markets

Sector performance

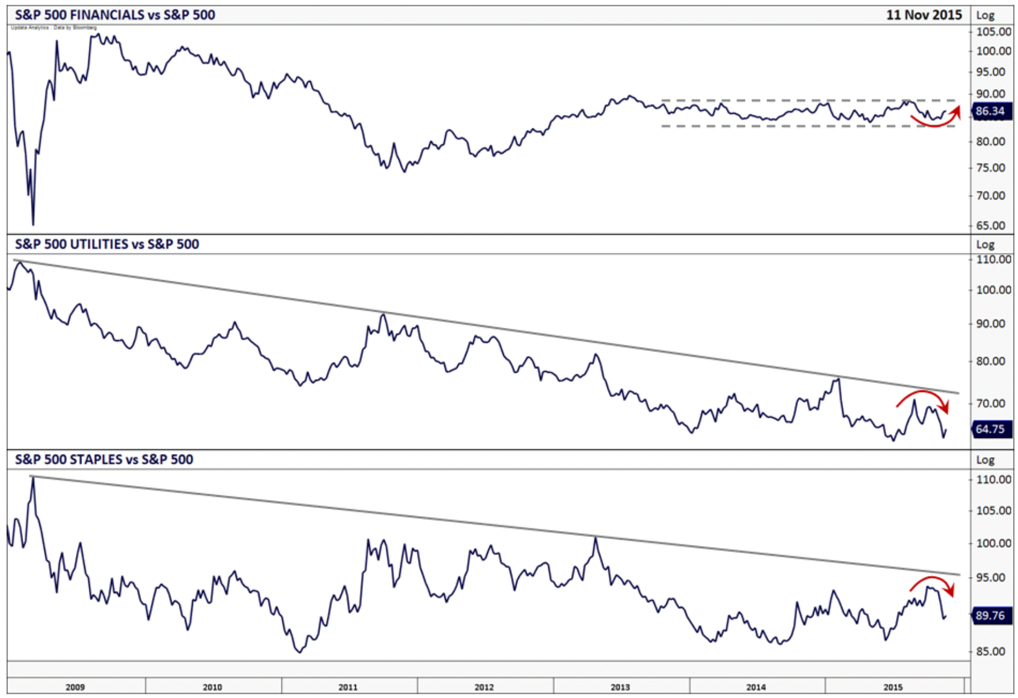
Financials, Utilities, Staples

Exhibit 35: S&P 500 sector **relative** performance vs. S&P 500

Financials
Emerging from the low end of 2-year trading range.

Utilities
Multi-year downtrend remains intact.

Staples
Multi-year downtrend intact & peaking near term.



Source: Bloomberg, Updata, RBC Capital Markets

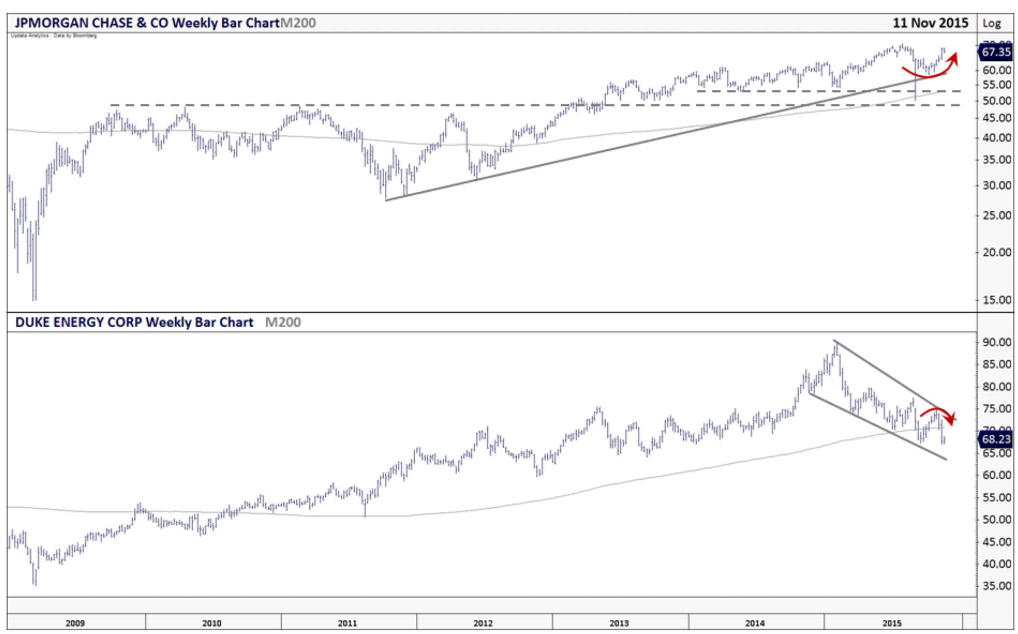
Banks/Brokers and Utilities contrasted

After lagging through 2014–2015, Banks and Brokers are reacclerating as bond proxies weaken.

Exhibit 36: JP Morgan (JPM) and Duke Energy (DUK)

JPM – Market barometer
New upside move developing.

DUK – Bond proxy
Downtrend intact and now below its rising 4-year ma.



Source: Bloomberg, Updata, RBC Capital Markets

Sector performance

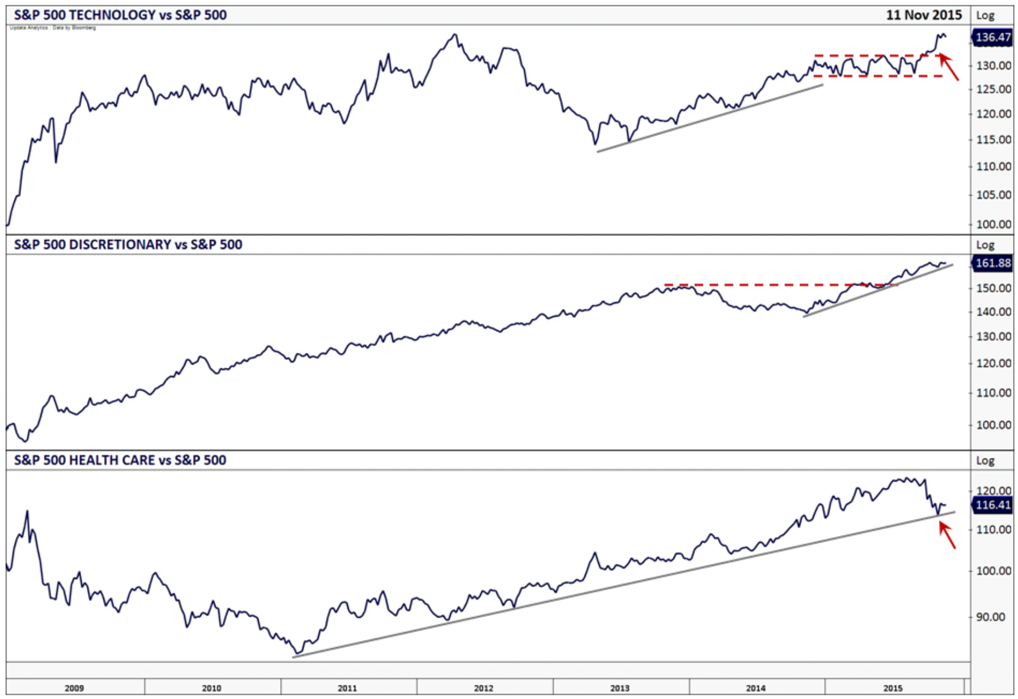
Technology, Discretionary and Healthcare

Exhibit 37: S&P 500 sector **relative** performance vs. S&P 500

Technology
Leadership underway after breaking out of a 12+ month consolidation.

Discretionary
Uptrend intact, but narrowing leadership.

Healthcare
Challenging multi-year uptrend.



Source: Bloomberg, Updata, RBC Capital Markets

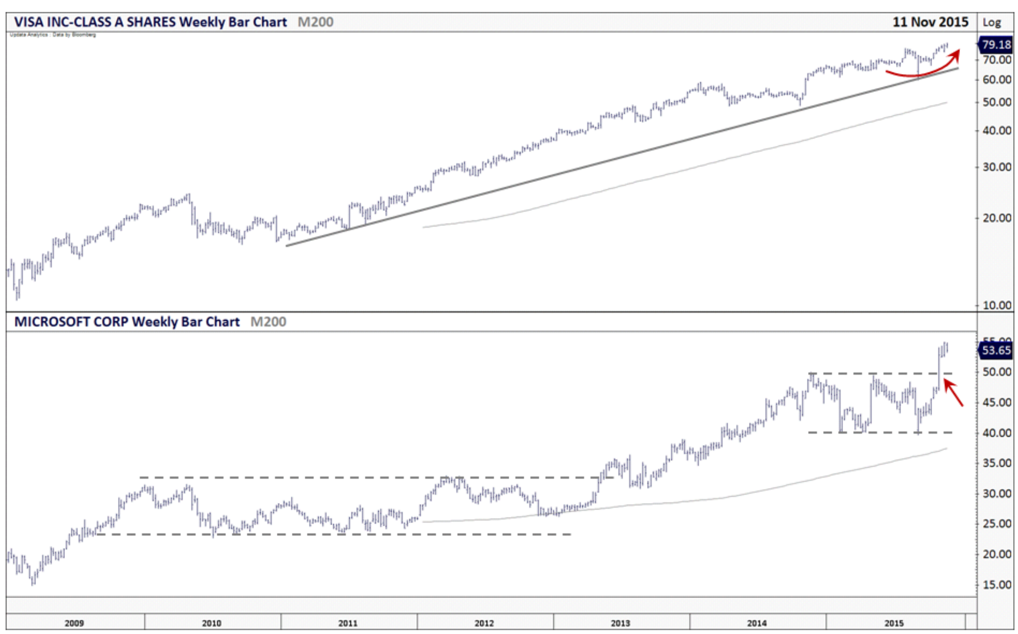
Growth Themes

Technology leads – Momentum proxies (V) intact with laggards (MSFT) emerging.

Exhibit 38: Visa (V) and Microsoft (MSFT)

V – Momentum proxy
Leadership intact.

MSFT
'Emerging' laggard after a 2015 consolidation.



Source: Bloomberg, Updata, RBC Capital Markets

Sector performance

Industrials, Materials and Energy

Exhibit 39: S&P 500 sector **relative** performance vs. S&P 500

Industrials
Noteworthy divergence from Materials and Energy below.

Materials
Downtrend intact.

Energy
Downtrend intact.

Source: Bloomberg, Updata, RBC Capital Markets

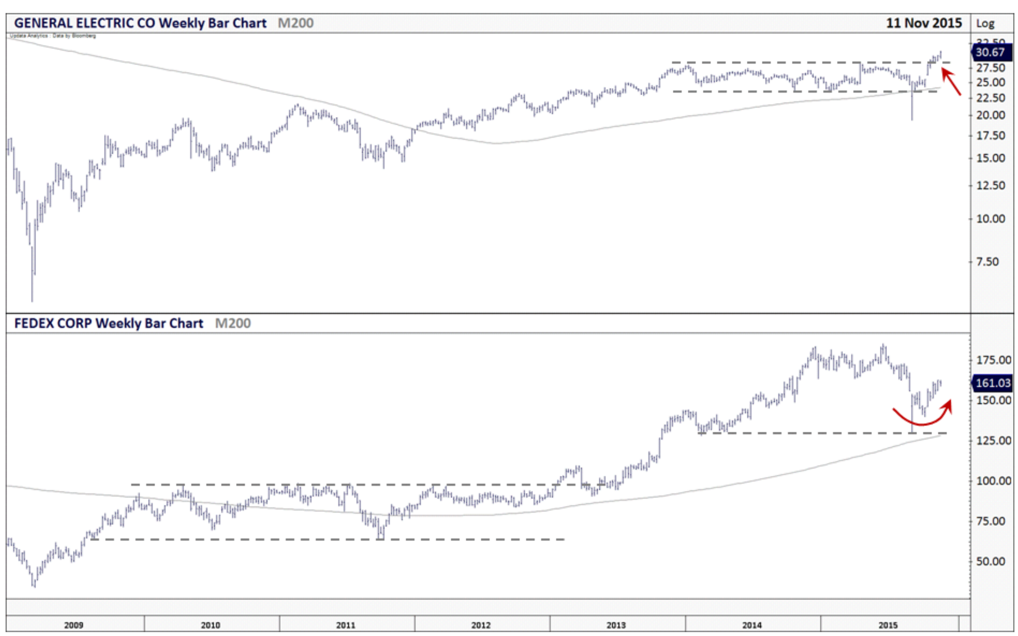
Cyclicals

Select Cyclicals improving, with GE accelerating while FDX rallies from its four-year ma.

Exhibit 40: General Electric (GE) and Federal Express (FDX)

GE – Emerging
Emerging/accelerating from its longer-term trend.

FDX – Economic barometer
Rebounding from long-term trend support.



Source: Bloomberg, Updata, RBC Capital Markets

USD: A long-term uptrend

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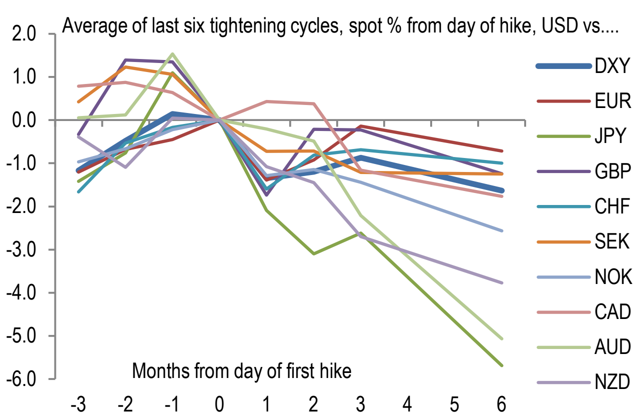
The US can sustain a stronger USD, and diverging monetary policy means we will get it.

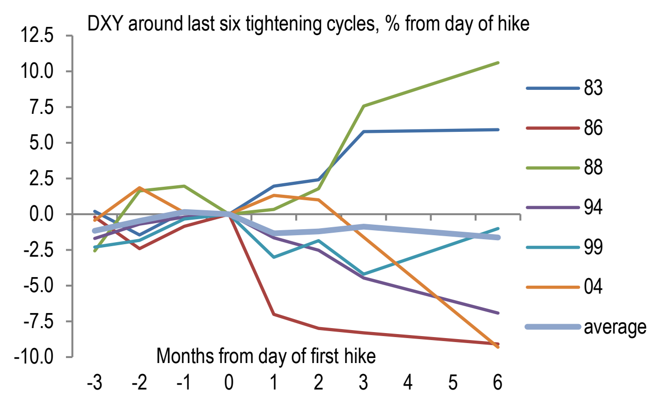
As the Fed prepares to raise rates for the first time in almost a decade, attention turns to what happens next. Having rallied into the first hike, does the USD keep going or is it 'buy the rumour, sell the fact'? Currency investors are split on this. Some argue the USD will sell off after the first hike, pointing to the USD's performance during the last tightening cycle (2004–2006) or the average of the last six tightening cycles; six months after the first hike, the USD was down 1–6% against every other currency in the G10 (Exhibit 41, left panel). A closer look at each of those cycles shows that there is no such thing as a 'standard' USD reaction (Exhibit 41, right panel; for more on this, please see *Total FX* from August 7, 2015). With the rest of the world easing, the US forward curve still flatter than our forecasts, and long USD positioning off the highs, we think there is room for the USD to rally further from here.

Exhibit 41: There is no 'standard' USD reaction to a Fed tightening cycle

Some argue USD weakens after the Fed starts tightening…



…But the average is misleading—there is no standard reaction to Fed hikes

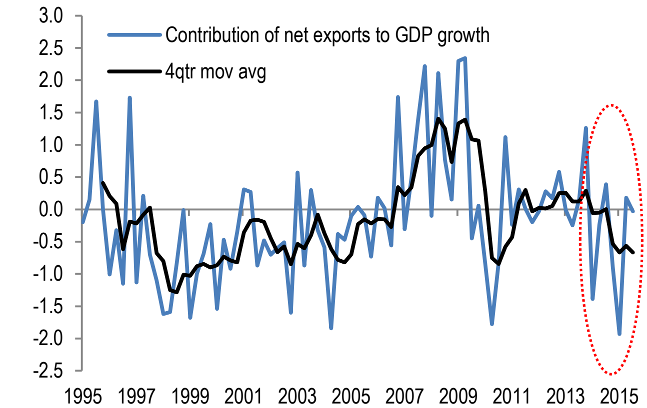


Source: Bloomberg, RBC Capital Markets

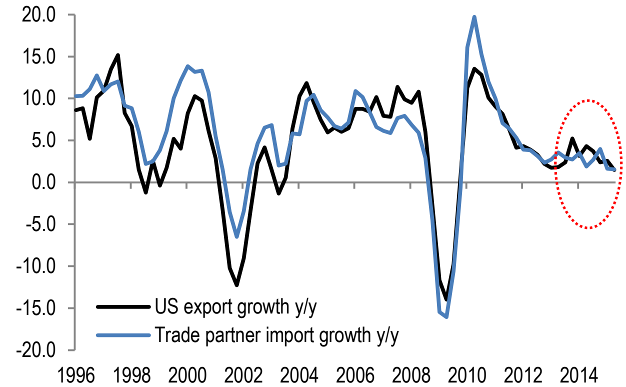
The second question to ask is will the USD be a victim of its own success, derailing both the US recovery and Fed's plans to tighten policy? The trough in nominal trade-weighted USD was back in mid-2011, but for the first three years, the uptrend was extremely gradual (+9% by mid-2014). In the last 16 months, it is up another 19%. But for all the fear, there is limited evidence to back this argument. The left panel of Exhibit 42 shows how in recent quarters, net exports have detracted from headline US growth. The FOMC has certainly mentioned the drag from net trade with more regularity. The strong USD has also been mentioned more frequently in Fed speeches and statements, but when we compare US export growth to trading partner import growth (Exhibit 42, right panel), we find the two line up very closely, i.e., the driver for weak US export growth seems more likely to be weak demand in the rest of the world (and in particular in the US's main trading partners). Put differently, there is little evidence that the US is losing market share in global exports as a result of a stronger USD. There is also very limited evidence that countries that have seen sharp currency depreciation (such as Japan and the euro area) have witnessed a meaningful boost to their exports. For all the talk of currency wars, currencies do not make good weapons.

Exhibit 42: US exports have been soft – but the culprit is weak external demand rather than a strong USD

Net exports have been a drag on US growth…



…But the evidence suggests strong USD is *not* to blame



Source: Haver, RBC Capital Markets

JPY selling by domestic private investors in Japan will be one of the unintended consequences of higher US rates.

Within the overarching theme of USD strength, we are particularly negative on JPY, targeting USD/JPY above 130 by mid-2016. USD/JPY positioning outside Japan has lightened considerably since last year. Within Japan, we think the reallocation of public-sector assets that is driving equity outflows has much further to run, leaving a steady stream of JPY selling in the background. Finally, we think Japanese private-sector investors will add to USD/JPY buying pressure, but the timing has more to do with Fed policy than the BoJ. The critical link is FX hedging and a likely wholesale reduction in hedges on the entire stock of Japanese US fixed-income holdings when the cost of hedging rises. Japanese life insurers, for example, hold around JPY30tn of foreign bonds (around one-tenth of Japan's total foreign bond holdings), so a 10% point change in the hedge ratio (a move that has often occurred within a single quarter) generates as much as JPY3tn of JPY selling—equivalent to around four years of underlying bond flow. We see that this JPY selling change in hedging behavior will generate one of the under-appreciated side effects of higher US rates.

The main downside risk to USD is an unexpected slowdown in the US economy that puts the Fed into reverse (either from an external shock or faster than expected transmission of policy tightening to the real economy). Upside risks include a faster pace of reserve liquidation by EM central banks (leading to selling of other G10 currencies versus the USD). The 2016 election is not expected to drive the currency, but one thing to watch would be any prospect for one-off tax reform. With over US$1tn of US corporate earnings parked overseas, reform could lead to meaningful repatriation and USD strength (for a similar effect, see the effect of the Homeland Investment Act in 2004, *Total FX* from July 8, 2011).

Canadian Economic and Financial Outlook: Oil impact lingers

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- The Canadian outlook for 2016 sees two conflicting forces at play. The first is an energy sector still licking its wounds from the approximate halving in prices over the past year and a half. The second is a long-disappointing non-energy sector that is tentatively showing signs of life, poised to benefit from firm US domestic demand and a weak Canadian dollar.
- The speed and magnitude of how these forces play out will dictate the path of monetary policy and the reaction in financial markets. Heading into 2016, the BoC really has no significant bias or pre-determined path for interest rates and has emphasized its commitment to a flexible approach to inflation targeting—the latter likely to lead to one or more new measures of core inflation being adopted.
- Growth is likely to be above-trend in 2016—our base case calls for annual GDP growth of 2.2%—and it will need to be to close the sizable output gap currently in place. Monetary authorities should get a little relief from easier fiscal policy, but stimulus is likely to be concentrated in the second half of the year.
- Assuming fiscal stimulus arrives, oil prices recover (our energy analysts are expecting WTI prices to average US$57/bbl in 2016 and US$65/bbl in 2017), the US expansion remains on track, and the FOMC begins a steady hiking program, the Bank of Canada should eventually turn toward the removal of monetary accommodation, lifting the target overnight rate by 50bp from 0.50% to 1.00%.
- In our base case, the Bank's initial rate move comes as 2016 draws to a close, but the nation's vulnerabilities should be more apparent than the promises of sustained, above-trend growth during the first half of the year. Through this period, we see room for Canadian government bonds to outperform their US counterparts and for Canada/US spreads to approach historical lows.
- A mild steepening of the government yield curve seems most likely during the first half of the year, with longer-term yields resisting some of the expected updraft in longer-term UST yields but still headed higher with an expected level of 2.6 per cent by year's end for the 10-year. Only once the prospect of BoC tightening begins later in the year should any meaningful curve flattening be evident, which would be consistent with the removal of economic slack.

Exhibit 43: RBC 2016 & 2017 Canadian economic & rates forecasts

Canada	2016				2017				Annual averages	
RBC Forecasts	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017
Real GDP (% q/q annualized)	**2.2**	**2.4**	**2.6**	**2.7**	**2.9**	**2.8**	**2.6**	**2.0**	**2.2**	**2.7**
Household consumption (% q/q annualized)	*2.8*	*2.7*	*2.1*	*2.1*					*2.5*	
Government spending (% q/q annualized)	*1.5*	*2.0*	*2.5*	*2.5*					*1.6*	
Business fixed investment (% q/q annualized)	*0.2*	*0.0*	*-0.1*	*2.8*					*0.0*	
Net Exports (ppt contribution)	*0.0*	*0.0*	*0.7*	*0.3*					*0.2*	
Headline CPI (% y/y)	2.2	2.0	2.1	2.2	2.0	1.9	1.9	1.9	2.1	1.9
Core CPI (% y/y)	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
BoC Overnight rate target (%)	0.50	0.50	0.50	1.00	1.25	1.50	1.75	2.00	...	...
GoC 10y Yield (%)	1.85	1.90	2.20	2.60	2.75	2.90	3.15	3.30	...	...

Source: RBC Economics, RBC Capital Markets

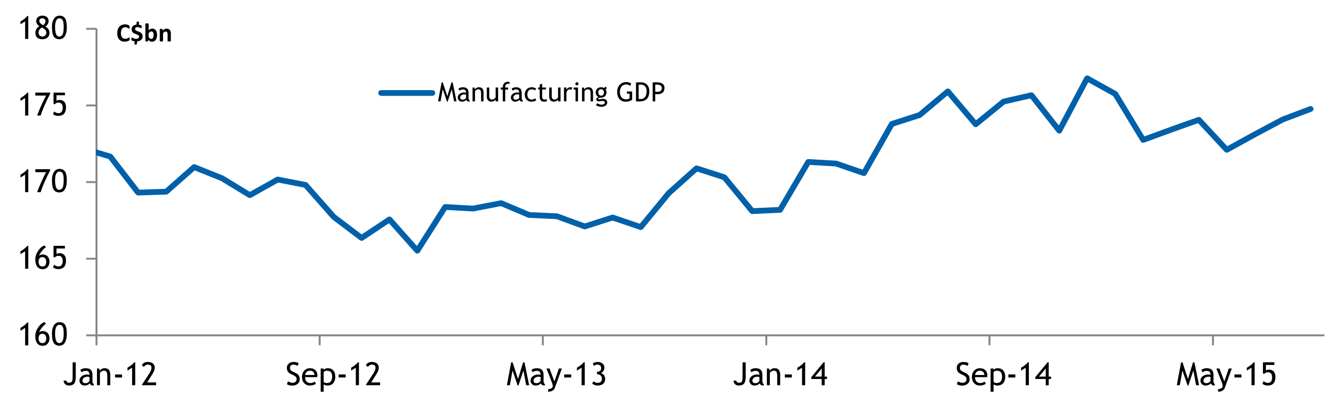
An oil hangover – though non-energy restraint notable

A tepid recovery in non-energy exports has amplified the negative effect from falling oil prices, thereby raising questions around demand dynamics as we head into 2016.

After a prolonged period of stability, the Bank of Canada took action in 2015 and cut rates by a cumulative 50bp in two 25bp increments—one in January and another in July. The first move was borne out of fears about an out-sized negative effect from falling oil prices—a fear ultimately proven justified. The latter move was borne out of frustration that the long-awaited improvement in non-energy exports had not only failed to show up but actually reversed course during the second quarter of the year.

A number of transitory factors hampered the central bank's ability to navigate these waters. These included negative weather effects, the west coast port strike in the US, and also domestic factors such as temporary disruptions in oil and motor vehicle production. As summer wore on and these effects waned, some life was restored to non-energy exports and the manufacturing sector more broadly (Exhibit 44).

Exhibit 44: Manufacturing sector has rebounded in H2/15



Source: Bloomberg, Haver Analytics, Bank of Canada, RBC Economics, RBC Capital Markets

Nevertheless, by virtually any measure, these segments of the economy have failed to live up to the expectations of past recoveries, and the questions for policymakers include:

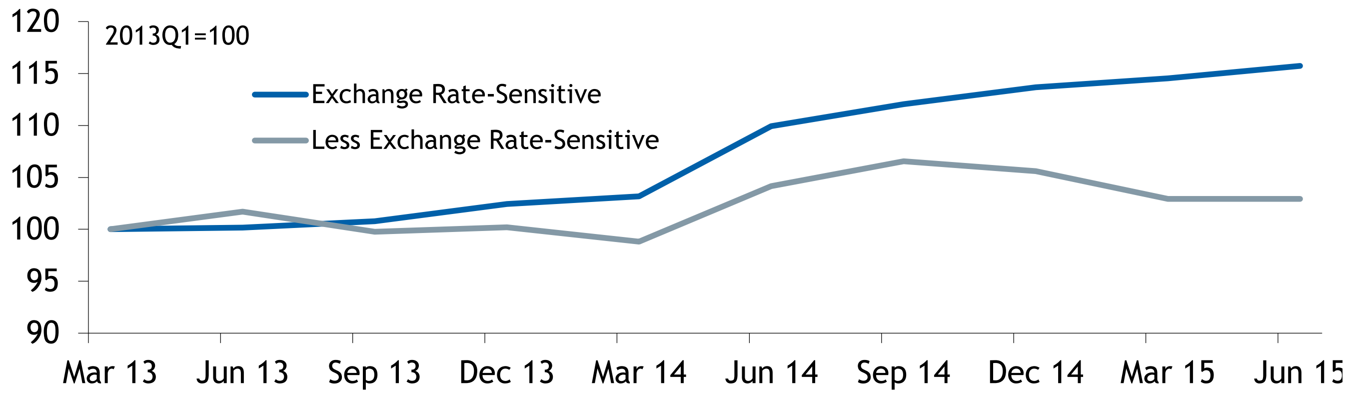
1. Will the demand show up at all?
2. Will it show up much later than normal?
3. Will it show up in an incomplete fashion?

Currency movements may be having a later and weaker effect than in past cycles.

On the first score, there is reason for hope that the system is not completely broken and that demand will, indeed, appear. Non-energy goods are some 1.2% above year-ago levels, and on a disaggregate basis, the goods that should lead to recovery—those which are exchange-rate sensitive and also typically more sensitive to US recovery—are showing signs that they are working as they should (Exhibit 45).[2]

[2] See A. Binette, D. de Munnik and J. Melanson. *An Update – Canadian Non-Energy Exports: Past Performance and Future Prospects*. Bank of Canada Discussion Paper 2015-10.

Exhibit 45: CAD-sensitive exports have outperformed since 2013

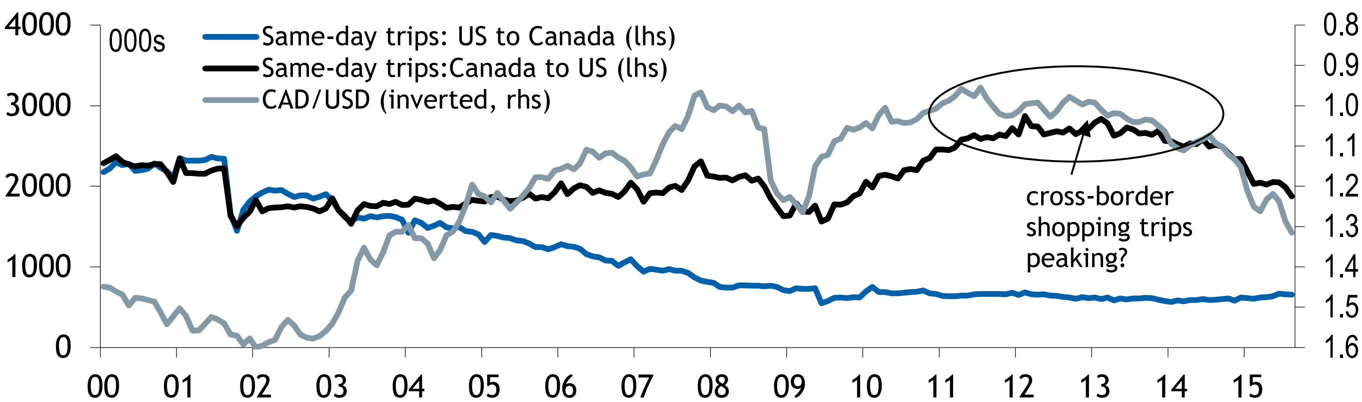


Source: Haver Analytics, Bank of Canada, RBC Capital Markets

As to whether demand might show up later or in a less complete fashion than normal, there is at least some case to be made that currency movements are having a later and weaker effect than in past cycles.

Tentative evidence of a less complete and possibly longer feed-through to export activity would also be consistent with the global experience with respect to declining exchange feed-through to prices themselves. In Canada, the exchange rate effect to headline prices has been estimated at 0.9–1.1pp and to core prices at 0.5–0.7pp. Whereas in some cases, the eventual price effect has had a rather typical (and notable) activity response; in other sectors, it has proven woefully shy (Exhibit 46).

Exhibit 46: Less same-day trips from Canada to the US as CAD weakens



Source: Bloomberg, Haver Analytics, Bank of Canada, RBC Capital Markets

If we can characterize the non-energy export underperformance, then it would appear to have some roots in the more mature manufacturing sectors, and some of that underperformance has ties to the heightened competitiveness of EM exporters (Exhibit 47 and Exhibit 48).

Exhibit 47: Manufacturing performance and CAD

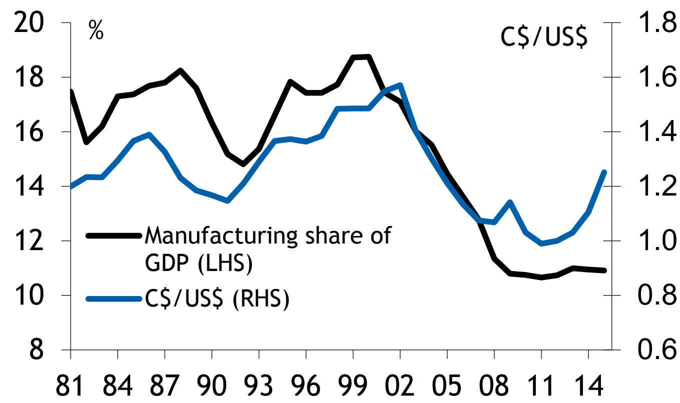
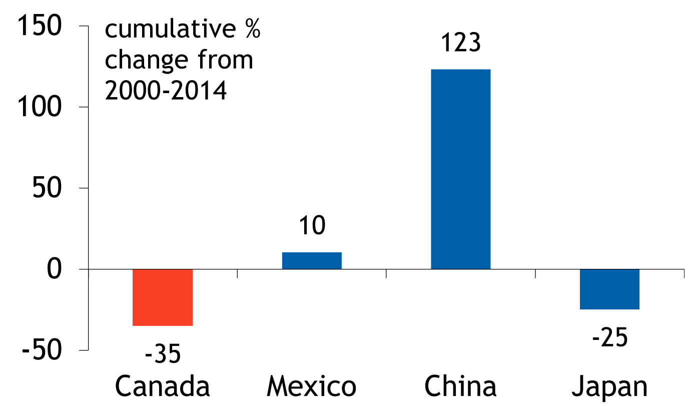


Exhibit 48: Effect of EM competitiveness



Source: Bloomberg, Haver Analytics, RBC Capital Markets

Capital spending's 800lb gorilla: energy

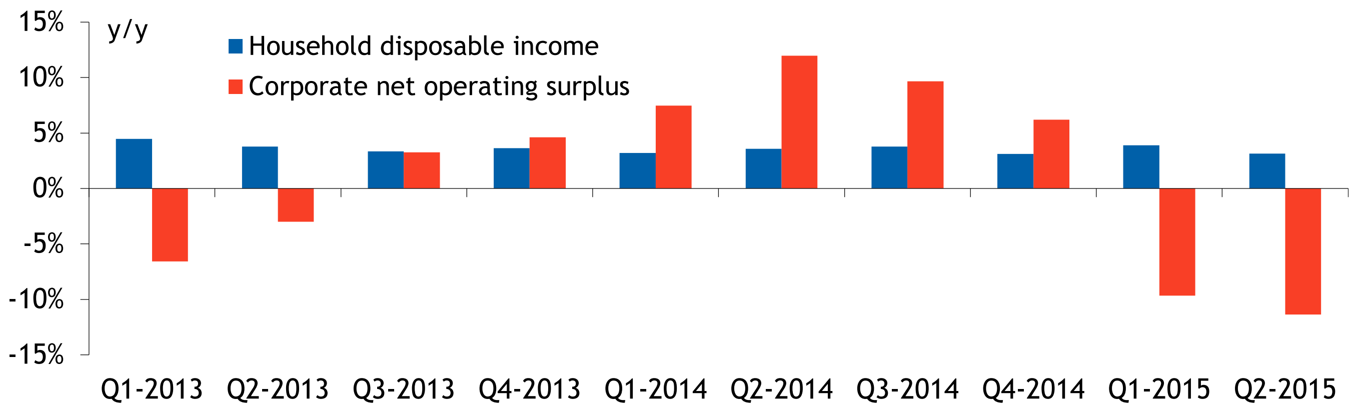
Capital spending and a terms of trade shock—not oil output itself—have been the main challenges to economic growth in 2015. Capital expenditures remain a risk in 2016, albeit to a more moderate degree.

Much has been written about the negative effect of weaker energy prices on the Canadian economy over the past year, and experience alone has helped to put the picture into more focus. To this point, oil output itself is not the issue; indeed, the volume of output is currently 6.9% above year-ago levels, and our energy analysts believe that we will see close to 7% annualized growth in output through 2020 from existing projects coming on stream, even in the wake of the shelving of a number of other projects.

Rather, the GDP hit has been felt early—and hard—through the capital spending channel. Business fixed investment shaved an average of 2pp off growth alone in H1/15, tied directly to the estimated 40% decline in energy capex. With the BoC estimating a further decline of 20%, we run the risk of a milder echo of the front-end loaded GDP effect from this channel next year.

Weaker energy prices also have had a pronounced effect on incomes in Canada through the terms of trade channel. Directly, this has shown up in an approximate C$30bn shaving of the nation's annual nominal energy trade balance—helping to drag the current account deficit to 3.5% of GDP from 1.8% a year earlier. It has been reflected most heavily in Canada's corporate profitability and in provincial government finances (Alberta, and Newfoundland & Labrador were most affected), with less of a direct effect on households (Exhibit 49).

Exhibit 49: Corporate sector was hit harder than households in H1/15



Source: Haver Analytics, Bank of Canada, RBC Economics, RBC Capital Markets

Meanwhile, the Canadian consumer has been buffered by a resilient housing market.

On the household side, the wealth effect from deteriorating profitability and weaker equity performance—the energy sector has fallen 19.1% in the first 10 months of 2015, while the aggregate S&P/TSX has fallen 7.5%—has been mitigated by still-rising house prices. There has been sufficient growth in aggregate employment and relatively firm wage inflation in other sectors to keep real disposable income growth supported (up 2% y/y) and household consumption (2%) growing at an above-trend pace. The savings rate has been relatively stable, drifting down marginally in the past year to stand at 4%, and consumption has been notably strong for interest rate-sensitive durable goods, with motor vehicle sales in the most recent two months hitting a historical peak of 2mn units at an annual pace.

Will fiscal policy be the knight in shining armour?

Post-election fiscal stimulus is likely to have more of a growth effect in H2/16.

The election of a new federal government in October promises an easier fiscal stance, but with questions raised about the timing—if not the magnitude—of the stimulus. The incoming Liberals, who enjoy a majority in the House of Commons, have pledged to run deficits in the order of C$10bn (roughly 1/2% of GDP) over the next two fiscal years before gradually returning the budget to a balanced position.

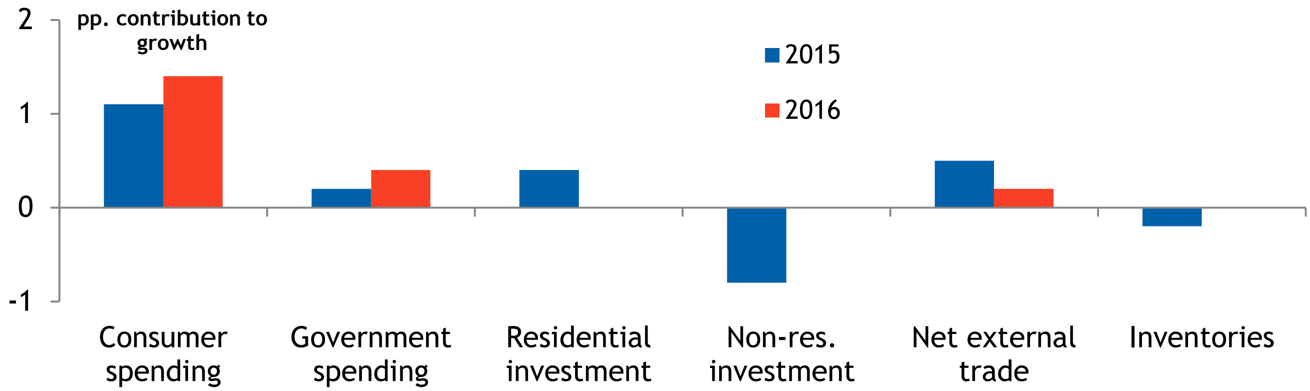
The bulk of the stimulus is to come from infrastructure spending—estimated to be slightly more than C$5bn next year—and the necessity to co-ordinate the plan with other levels of government suggests more of an effect on growth in H2/16 rather than H1. Some relatively significant changes in personal income taxes are deemed to be revenue-neutral and will have an uncertain effect overall (alongside other changes in benefits such as child care disbursements), at least until more details are spelled out in the next full budget that is expected in Q1/16.

Adding it all up: the pace and composition of growth

Improving non-energy exports, household consumption, and government spending are expected to drive above-trend growth in 2016.

The combination of steadily improving non-energy exports, mixed capital-spending trends (still soft on the energy side and moderate gains ex-energy), steady household consumption, and firmer government spending yields expected annual GDP growth of 2.2% in 2016. Exhibit 50 shows the explicit contribution for each of these categories.

Exhibit 50: Strong consumer spending and net trade should continue to drive growth in 2016



Source: Haver Analytics, RBC Economics, RBC Capital Markets

The above-trend pace, if achieved, would serve to drag the unemployment rate below its current level of 7.0% to 6.5% by Q4/16 and on track to close the output gap near the BoC's current estimate of "mid-2017". Core inflation, which has held persistently above the central bank's current 2% target for more than a year, is likely to remain sticky if we are correct in our assumption of a weaker Canadian dollar in early 2016, though we also believe that any such strength will have little influence on monetary policy.

The lack of any responsiveness by the BoC to above-target core inflation says less about the central bank's commitment to inflation targeting itself than to: 1) its interpretation of "core" inflation and 2) flexibility in interpreting the targeting framework in a small, open, commodity-reliant economy. With the BoC's five-year inflation agreement with the Department of Finance up for renewal next year, we look for alternate measures of core inflation beyond the current CPIX8 metric to be adopted (along the line of recent research, favouring trimmed-mean, weighted-median, and common-component calculations).[3]

We look for alternate measures of core inflation to be adopted next year, with flexibility around deviations from target.

However, beyond any new core inflation definition, we look for flexibility in interpreting core inflation movements away from target, particularly when that deviation reflects the effect of exchange-rate movements tied to terms-of-trade driven fluctuations in the exchange rate. To date, the Bank has chosen to define core inflation adjusted in this manner as "underlying inflation." While there may be some frustration over the imprecision of this estimate as opposed to a more rigid inflation guideline, it can communicate a policy stance that takes into consideration the income shock from terms of trade movements that might alternatively be handled under a framework that more broadly targets nominal incomes directly.

More on inflation and BoC outlook

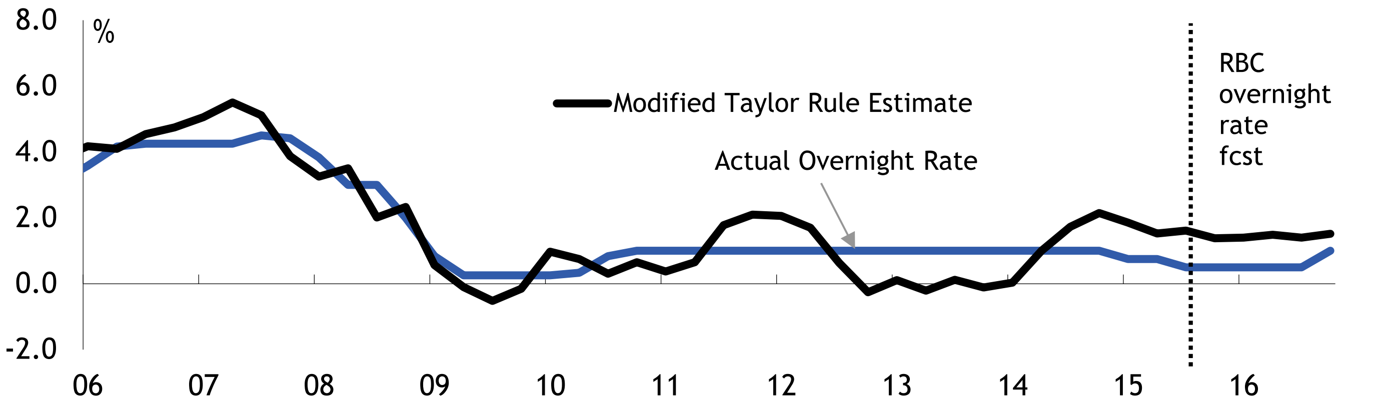
We expect two 25bp rate hikes in Q4/16.

While we may enter 2016 with elevated and "sticky" core inflation, we also envision a push higher in headline inflation from its current, low level of 1%. The expected drift higher reflects the combined effect of exchange-rate related import price inflation and higher energy prices reflecting an assumed average price for oil (WTI) of US$57/bbl. Headline inflation and core inflation are expected to converge around the BoC's 2% "sweet spot" during Q1/17 just after we see the Bank of Canada beginning its own tightening cycle—around a full year after the Federal Reserve's own expected lift-off.

[3] See M. Khan, L. Morel and P. Sabourin. *A Comprehensive Evaluation of Measures of Core Inflation for Canada*. Bank of Canada Discussion Paper 2015-12.

With two 25bp hikes in the target overnight rate in Q4/16 to bring it to 1.00%, monetary policy remains in a decidedly easy posture throughout the year, as suggested by the Taylor rule estimate (Exhibit 51) Such an easy posture suggests that the interest-rate sensitive sectors of the economy will be underpinned and also points to higher inflation expectations and further over valuation of Canada's housing market.

Exhibit 51: Taylor rule estimate (using 0% real rate) suggests policy to remain accommodative through 2016



Source: Bloomberg, Haver Analytics, Bank of Canada, RBC Economics, RBC Capital Markets

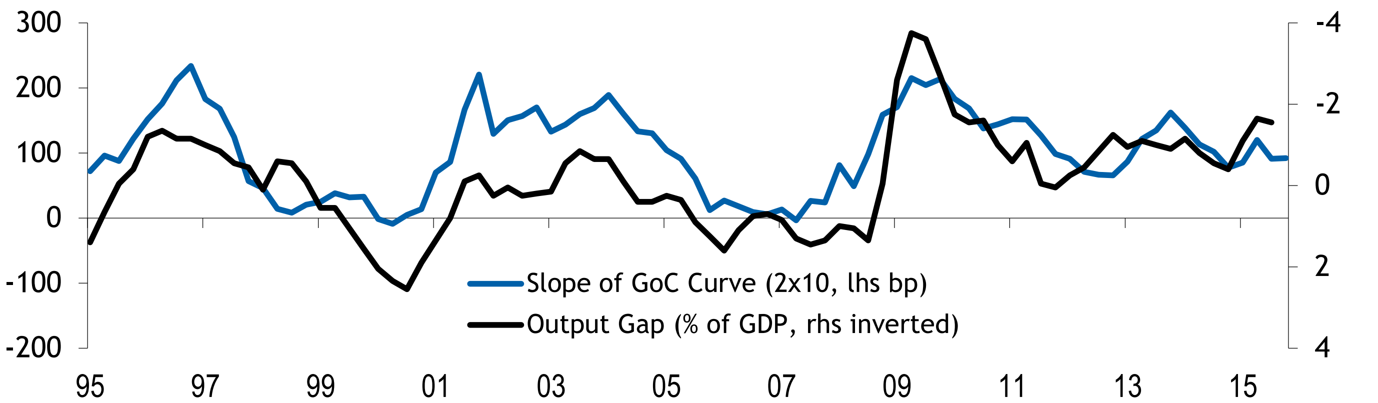
Canada's yield curve and cross-market considerations

Interest rate dynamics point toward a steeper BoC curve relative to Treasuries as 2016 gets underway, along with narrower short-end Canada-US spreads.

We see three important—and sometimes conflicting—factors at work in terms of the movement in GoC yields in 2016: 1) a still-considerable output gap and persistent growth risks emanating from the energy sector in early 2016, 2) improving domestic fundamentals as the year progresses and as the lagged effect of a weaker Canadian dollar, firmer oil prices, and easier fiscal policy takes hold, and 3) pressure from an earlier Fed tightening cycle and rising term premia in the US.

Some of the curve and cross-market implications to kick off 2016 seem relatively straightforward. A cautious BoC to start the year, contrasted with a more aggressive Federal Reserve, should see steepening in the BoC curve relative to Treasuries (one could argue that any steepening would also make sense, from a fundamental sense domestically based on the historical relationship between Canada's yield curve and its output gap, see Exhibit 52), and we believe as well that Canada-US spreads in the shorter end and belly of the curve will re-visit the lows established in 2015 (expected to reach -90bp in H1/16).

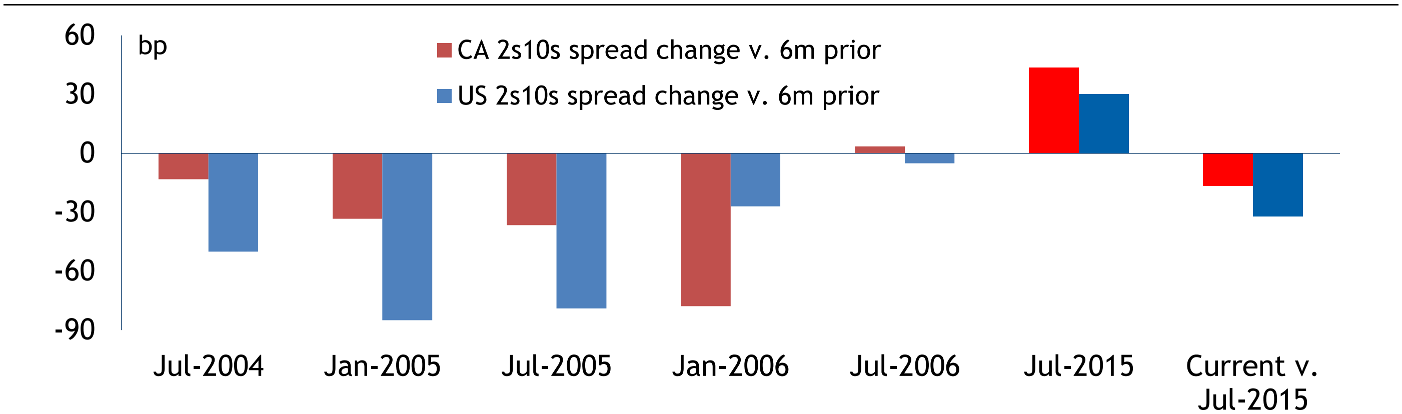
Exhibit 52: Yield curve steepens as output gap widens



Source: Bloomberg, Haver Analytics, Bank of Canada, RBC Capital Markets

Some of the other implications are not quite as straightforward and depend on the speed and magnitude of how the Canadian and US economies develop. Our base forecast for the US calls for hikes at the December 2015 meeting and in each quarter of 2016. Based on the Fed's last hiking cycle (begun in mid-2004), Canadian bonds, while being pulled higher, should outperform Treasuries at the onset before giving back gains as the BoC delivers its own hikes. The magnitude of outperformance is likely to be less than in previous cycles (outside of the 2-year sector), given that the current spread between Canadian and US yields already reflects a Fed that hikes earlier and/or more aggressively than the BoC (CA/US 5y spread at -70bp and CA/US 10y spread at -62bp). The CA/US 10y spread should reach -80bp in the second quarter, before closing to finish the year at -45bp (Canada 10y at 2.60%).

Exhibit 53: Following the 2004 Fed hiking cycle, CA 2s10s curve should steepen relative to US at beginning, then flatten



Source: Bloomberg, Haver Analytics, Bank of Canada, RBC Economics, RBC Capital Markets

Commodity values and interest rate differentials will remain key catalysts for CAD direction in 2016. We look for USD/CAD to peak at 1.38 in Q2.

The Canadian dollar: A year of two halves?

The Canadian dollar has been the fourth worst-performing G10 currency this year, falling 12.5% versus the US dollar through November 12. Only NZD (-16.0%), NOK (-14.0%), and AUD (-12.8%) have fared worse (Exhibit 54). On a trade-weighted basis, the Canadian dollar has in fact been the worst-performing G10 currency (Exhibit 55).

Exhibit 54: Ranked G10 currency performance vs USD (2015 to November 12th)

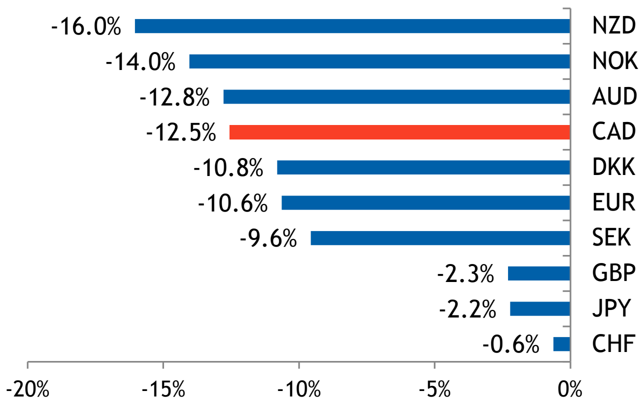
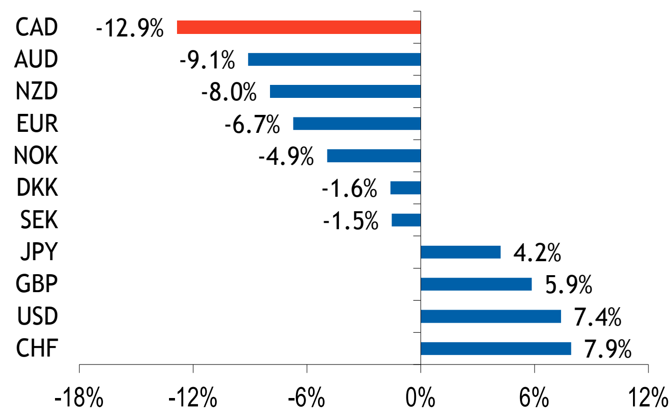


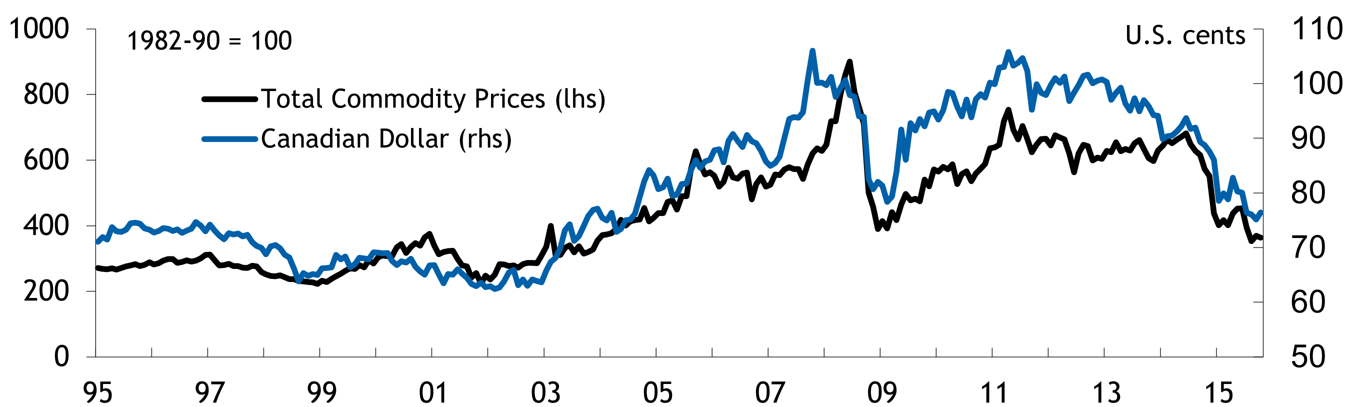
Exhibit 55: Ranked G10 TWI currency performance (2015 to November 12th)



Source: Bloomberg, Haver Analytics, RBC Capital Markets

Aside from their poor performance, these four currencies have another key factor in common: commodities. In the Canadian dollar's case, the historical link to commodities is strong—and with 60% of the nation's commodity production tied to energy—crude oil is particularly relevant (Exhibit 56). Energy price developments form the basis of our 2016 FX outlook, with the 2015 headwinds from this source still in place as 2016 begins.

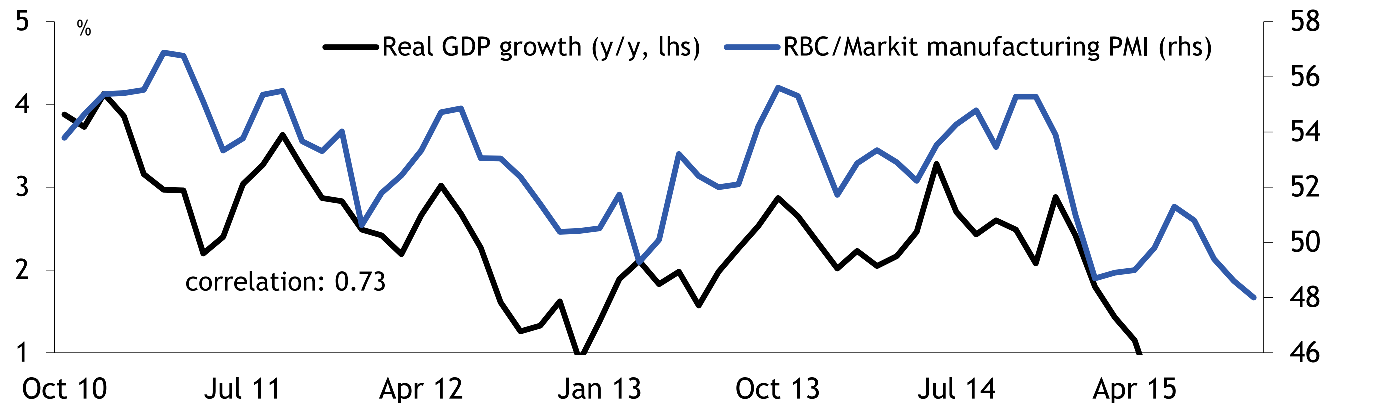
Exhibit 56: CAD has a strong link with commodity prices



Source: Bloomberg, Haver Analytics, Bank of Canada, RBC Capital Markets

The near-term growth challenges, which underpin both our rates and currency outlook, are reflected in the current weakness in the RBC/Markit manufacturing PMI, with the October reading of 48.0 marking the fourth, consecutive, monthly decline and a record low for the index since inception in October 2010. The trend suggests that there is more work left to be done on the currency front (Exhibit 57).

Exhibit 57: RBC/Markit PMI correlates well with real GDP growth



Source: Haver Analytics, Bank of Canada, RBC Economics, RBC Capital Markets

Interest rate dynamics are expected to lend support to USD/CAD through H1/16, as unchanged monetary policy in Canada plays against the prospect of a Fed rate hike. With the two-year CA/US rate spread expected to narrow from the current level of -23bp to -70bp in Q2/16, we forecast USD/CAD to reach a peak of 1.38 over this horizon.

Valuations point to mild CAD undervaluation, while the current account deficit presents some risk for CAD in 2016.

There are two other aspects to consider with respect to the Canadian dollar: current valuations and the effect of trade and capital flows. On the first issue, our *RBC-POLAR* model shows that CAD is 1.4% undervalued against the USD—which compares to a broad OECD PPP undervaluation of 5.5%. Our approach is the average of the misalignment of the Bank of International Settlements' narrow, trade-weighted, real, effective exchange rate vis-à-vis 1) its historical average, 2) a fitted value against a range of fundamentals, and 3) the gap between the structural and the medium-term fitted value of the current account balance.

With respect to trade and capital flows, Canada's current account balance remains large from a historical perspective and relative to other G10 countries at 3.5% of GDP as of Q2/15, though the nation's net international investment position is in relatively good shape (11.7% of GDP on a market-value basis and -15.8% on a book-value basis), and our forecast—predicated on higher energy prices—has the current account deficit gradually improving to 2.3% of GDP by Q4/16. To date, the current account deficit has been primarily financed through foreign purchases of Canadian bonds, which continue to run near C$60bn or 3% of GDP on a trailing 12-month basis. The inflow may be at risk if Canadian yield spreads collapse further against the US or if central bank diversification demand or reserve accumulation slows.

A rebound in oil prices and an improved domestic growth profile should allow USD/CAD to moderate to 1.33 at the end of 2016.

Some respite for the Canadian dollar is anticipated during H2/16, led in part by an expected rebound in commodity prices. As noted, our energy analysts are looking for WTI prices to average US$57/bbl in 2016, but the pattern throughout the year is also notable: a gradual strengthening seeing prices average an expected US$59.50/bbl during H2/16. Canada's own growth profile should also prove a supporting factor—RBC Economics is looking for real GDP to improve to 2.7% q/q in Q4 from 2.2% q/q in Q1. Anticipation of the first BoC rate hike—pegged for Q4/16—should support a gradual move lower in USD/CAD to 1.33 by year's end.

Risks to our outlook

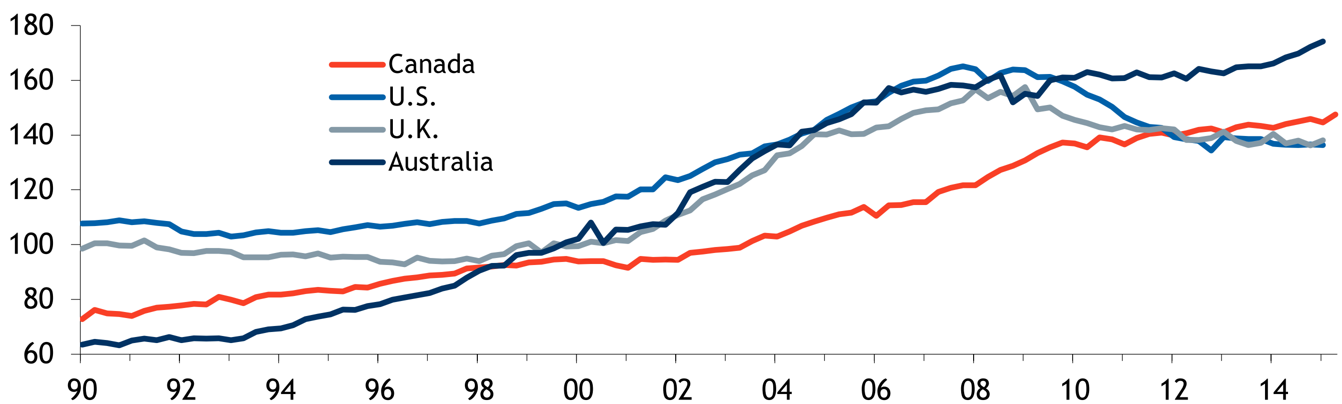
Key risks to our outlook and forecasts revolve around a projected recovery in oil prices, high levels of household debt and stretched housing valuations. Weaker global growth outside North America would also present some challenges to domestic growth.

Broadly speaking, our base-case outlook reflects a belief that Canada's economy will recover in 2016 from the considerable blow taken from the plunge in oil prices since late 2014. Part of the belief is tied to a gradual recovery in oil prices themselves (assumed US$57/bbl in 2016 and US$65/bbl in 2017). Significantly lower prices would—at a minimum—cause an easier stance by the Bank of Canada, with the central bank assuming that the nation's output gap widens by about 1/4% of GDP for each US$10/bbl reduction in the assumed price of oil.[4]

Beyond the price of oil itself, there remain risks in the ongoing adjustment process to the past decline (see a recent *Macro Musings* for implications on regional employment trends) and another set of risks associated with influences from abroad and the effect on specific sectors—specifically those looking somewhat "long in the tooth" in terms of their contribution to growth in a recovery that is now 24 quarters in length.

Housing and household debt are most cited when it comes to excesses built up during the recovery and expansion. Household debt relative to income remains at historical highs, and housing valuations are stretched relative to rents and incomes (Exhibit 58). However, as we have outlined in the past, for these vulnerabilities to be translated into a significant hit to growth and inflation, there needs to be a trigger in the form of much higher interest rates or sharp deterioration in household incomes and employment—neither is reflected in our outlook. In its analyses of past real house price declines (outside of the most recent recession), RBC Economics has found that policy rates rose by a minimum of 125bp and an average of some 300bp in the 12 months prior to the peak.

Exhibit 58: Canada household debt-to-income ratio hits new highs



Source: Statistics Canada, Federal Reserve Board, Bureau of Economic Analysis, Australian Bureau of Statistics, Office for National Statistics, RBC;

Nevertheless, it would be foolish to downplay the risks around these areas of vulnerabilities and from other excesses built up during an extended period of easy monetary policy, including the rapid growth of interest-rate sensitive sectors in terms of both output and employment (Exhibit 59 and Exhibit 60). Specifically for housing, we would be even more concerned if prices were to fail to stabilize or if some macro-prudential measures were not adopted. At the least, these risks may become more acute in 2017 if the North American hiking cycle begins to look more like a "typical" one in duration and magnitude.

[4] See the BoC's *Monetary Policy Report* – January 2015 for details. The assumption for the WTI oil price in the *Monetary Policy Report* – October 2015 was US$45/bbl.

Exhibit 59: Output in interest rate sensitive sectors has grown rapidly

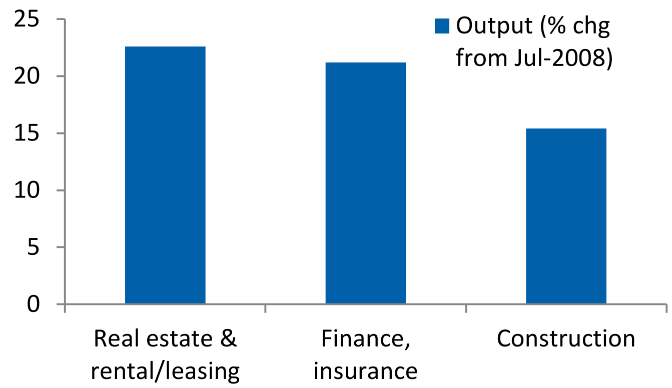
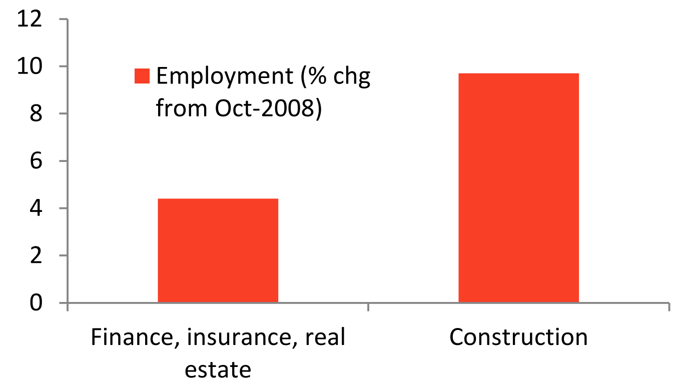


Exhibit 60: Same story for employment

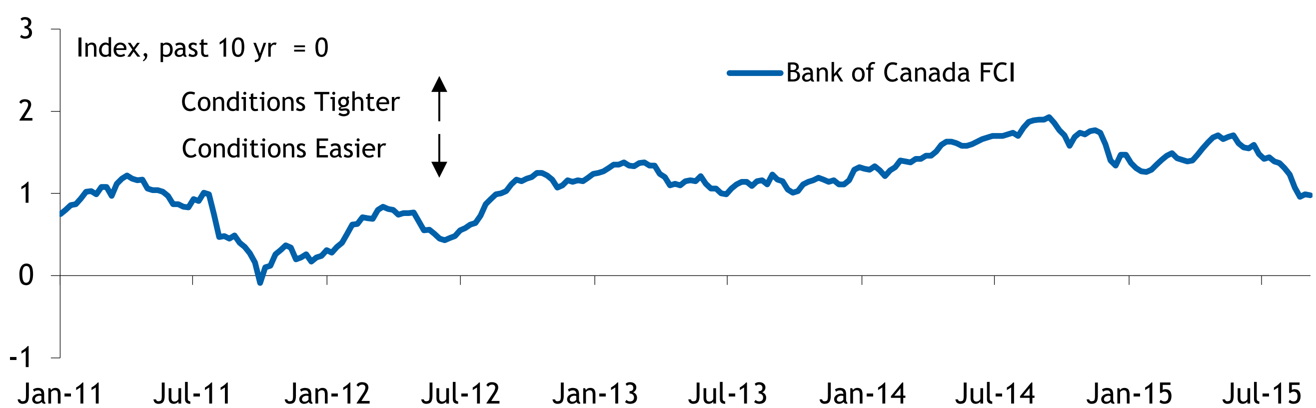


Source: Bloomberg, Haver Analytics, RBC Capital Markets

Strong US domestic demand accompanied by a weaker CAD may boost competitiveness that could help a number of export industries hit their stride.

Other risks surround the potential for weaker global growth outside North America and the potential spillover effect to both commodity prices and broader financial conditions. To date, these have been relatively well contained and our base case assumes that global growth comes in at or slightly above potential for 2016 (Exhibit 61).

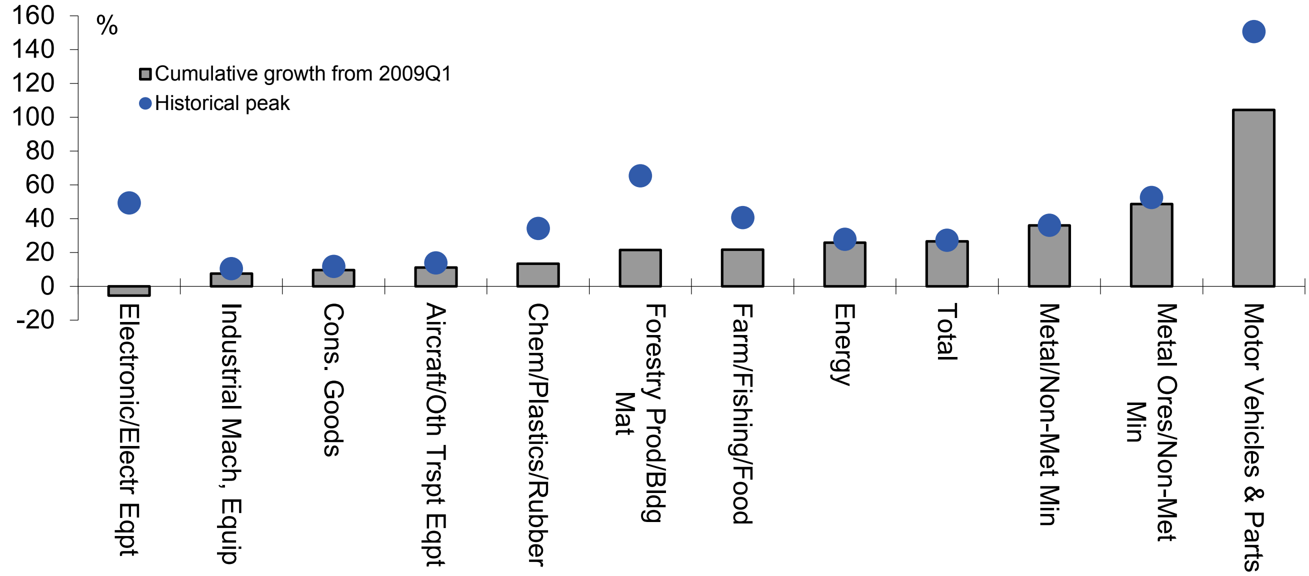
Exhibit 61: Financial conditions have eased in recent months



Source: Haver Analytics, Bank of Canada, RBC Capital Markets

Finally, it should be noted that not all of Canada's risks are skewed to the downside. Notably, the potential strength of domestic demand in the US and the boost to competitiveness seen through a weaker Canadian dollar have the potential to help a number of export industries that have yet to "hit their stride" during the recovery period (Exhibit 62).

Exhibit 62: Some non-energy sectors yet to reach pre-recession export peak



Source: Bloomberg, Haver Analytics, Bank of Canada, RBC Economics, RBC Capital Markets

Euro Economics: Euro area: Stable growth, hidden risks

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- The euro area recovery is expected to become increasingly inward-looking over the coming years, with private consumption forecasted to remain the dominant source of support. In part, this still reflects potentially transitory factors, but we consider that long-standing headwinds on domestic demand are also continuing to recede.
- The transition to a more self-sustaining recovery still requires a more visible contribution from investment. While the conditions for such a rebound are falling into place, we still see the risks as tilted to the downside, particularly against a weaker external picture.
- Moreover, despite its consistency, the subdued pace of the overall recovery is unlikely to generate significant domestic inflationary pressures. With growing risks to its mandate, we expect the ECB will step up both conventional and unconventional support, with the additional level of accommodation set to remain in place over the forecast horizon.

Resilient, widespread and…slow

Three particular adjectives may serve to summarise the current state of the euro area recovery: *resilient*, *widespread*, and *slow*. The temptation is often to focus solely on the latter, more discouraging, aspect of the cycle, and indeed, its sluggish nature is difficult to ignore: the currency block as a whole is only forecasted to return to its pre-crisis peak level of GDP at the end of this year—a milestone that many other advanced economies have long since surpassed.

Notwithstanding its slow pace, however, the cyclical recovery remains intact, with momentum appearing remarkably unfettered over what has been an undeniably tumultuous period. 10 consecutive quarters of growth have now been registered since 2013, and the expansion is now broadening out beyond the four largest economies of the region. It is this consistency that remains a feature over our forecast horizon: we consider that many of the virtuous tailwinds that have propped up activity over the last year remain in force, while at the same time some long-standing *headwinds* on domestic demand continue to recede.

The ingredients for a truly self-sustaining recovery, however, are not yet fully in place. For economic growth to graduate from a mere 'cyclical' upswing to a more entrenched 'structural' trend, a more visible contribution from investment is needed. While we see scope for such a rebound over the coming year, the risks—particularly against a more febrile external demand environment—remain tilted to the downside.

Exhibit 63: A summary of key euro area macroeconomic forecasts

	2015	2016				2017				2015	2016	2017
RBC growth forecast	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**annual averages**		
Real GDP Q/Q	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	…	…	…
Real GDP Y/Y	1.5	1.5	1.5	1.7	1.9	1.9	1.9	1.8	1.7	1.5	1.7	1.8
Private consumption	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	1.8	1.6	1.5
Government consumption	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	1.3	1.1	0.9
Gross capital fixed formation	0.6	0.8	0.9	0.9	0.9	0.7	0.7	0.7	0.7	2.0	2.8	3.2
Net exports (contribution)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2
ECB (Oct-15)	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	1.4	1.7	1.8
HICP inflation (average, % y/y)												
RBC (Nov-15)	0.4	0.9	0.8	1.1	1.3	1.4	1.4	1.5	1.5	0.1	1.0	1.5
ECB (Sep-15)	0.4	1.1	0.8	1.2	1.5	1.6	1.6	1.7	1.7	0.1	1.1	1.7
ECB main refinancing rate (%, end of period)												
RBC (Sep-15)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05			

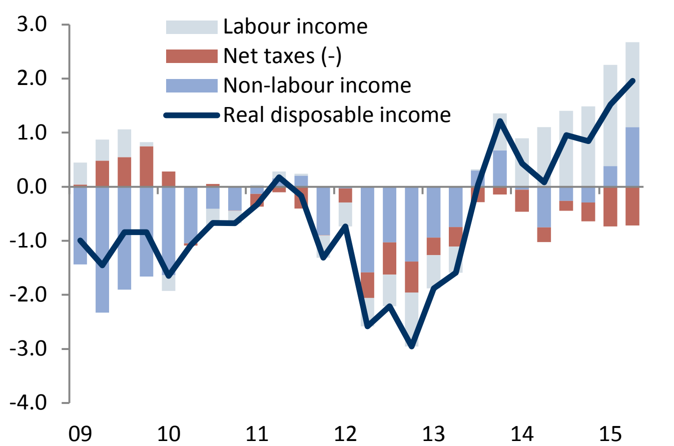
Source: ECB, Haver, RBC Capital Markets estimates

The recovery has turned inward

The growth impulse in the euro area has turned decidedly inward-looking over the recent cycle, with private consumption leading the charge. A number of features relevant to the consumer backdrop suggest a departure from this pattern of growth is unlikely to emerge over the immediate forecast horizon.

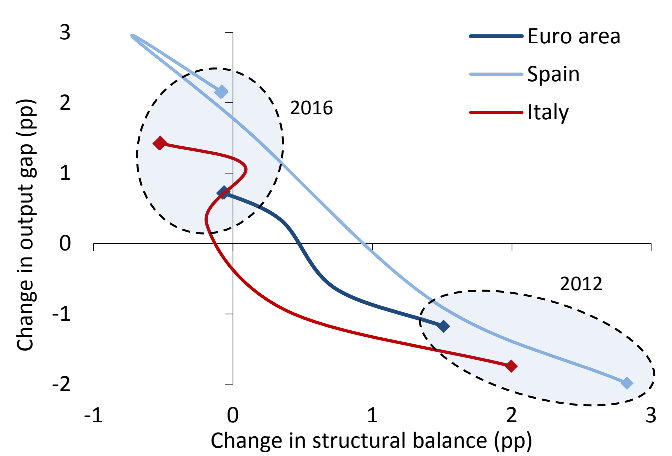
- For starters, **the rebound in real disposable income is set to continue**. A persistent low-price environment should be one source of support for household spending, but it is far from the only factor. Labour market dynamics across the region are continuing to improve, with aggregate employment growing steadily since reaching its inflexion point in 2013; we expect it will expand at a rate of close to 1.0% y/y over our forecast horizon. Nominal wage and non-wage income has also risen in recent quarters, with the latter in part due to the recovery in both house and broader financial asset prices (Exhibit 64).
- **The effects of the deleveraging cycle are also set to be less acute.** Measures of household indebtedness have stabilised in the euro area and in some cases declined (at 95%, the debt-to-income ratio is back to 2009 levels). Even though this reflects a mainly 'passive' rather than 'active' deleveraging process (i.e., the legacy of non-performing loans remains high in several countries), the gradual improvement in balance sheets is already enabling real private consumption—including in the highly indebted periphery economies—to keep pace with the broader domestic recovery.
- **There is also scope for a reduction in the household savings rate.** In part, this should stem from a decline in precautionary savings, as signalled by rebounding measures of consumer confidence. The prolonged low-interest rate environment may itself also have a discouraging effect on savings, to the benefit of durables consumption, which is already being supported by the gradual normalisation of credit conditions.

Exhibit 64: Real gross disposable income growth, y/y (%)



Source: Haver, RBC Capital Markets

Exhibit 65: Fiscal effort (horizontal) vs. cyclical position (vertical)



Source: Haver, European Commission, RBC Capital Markets

While all this suggests to us that *private* consumption will continue to form the bulwark of the recovery, we argue that the *public-sector* side of the consumption equation is equally important. The euro area as a whole has in fact already moved to a broadly neutral fiscal stance this year (as measured by the change in the structural budget balance), following the deeply pro-cyclical consolidation effort in previous years. This neutral stance is expected to persist over 2016 and 2017, including in most periphery economies (Exhibit 65). In contrast to previous years, there is even the potential for small positive impulse from public consumption, as a result of the response to the recent migration in the region (although this effect is invariably more difficult to predict, and will likely differ across member states).

External headwinds not decisive for growth

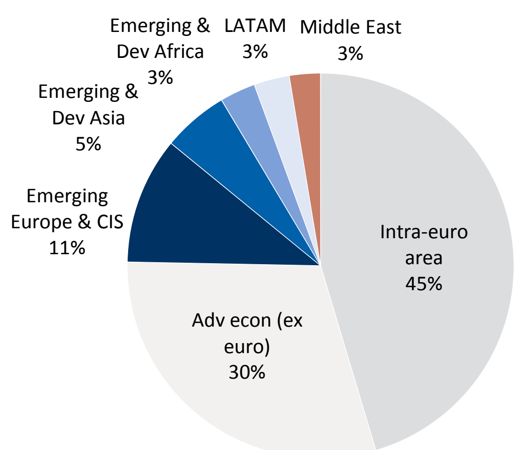
This 'reorientation' of demand in the euro area is important in the context of a slowing external picture. As with other advanced economies, the euro area's export potential is now somewhat less assured than it was just a few months ago, owing to the revised outlook for several key emerging market economies.

Nevertheless, as we argued in previous analysis (see *European Directions: How much EM is in European markets?*), the immediate repercussions of a slowdown in emerging markets should not be overblown. Direct exposures via trade or financial linkages are rather limited, even if these have grown over the last decade. Merchandise exports to emerging and developing Asia, for example, are only about 5% of the total, while cross-border banking exposures are similarly limited (Exhibit 66). In both cases, we continue to emphasise that linkages with other advanced economies, such as the US, are far more important, and are already helping to offset some of the EM demand weakness, with exports rising approximately 2.3% y/y in real terms over 2015 thus far (Exhibit 67).

It is, however, the indirect spillovers—including those stemming from exchange rate dynamics and weaker demand for commodities—that continue to pose risks to the near-term outlook. Indeed, the turmoil in certain regions has already prompted a visible tightening in financial conditions in the euro area, and a prolonged weakness abroad could delay the progression into a more balanced recovery profile.

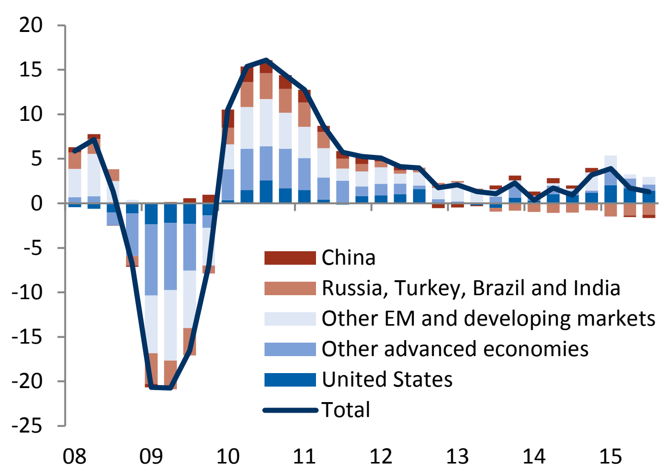
Against this backdrop, we forecast only a marginally positive contribution from net trade over our forecast horizon. This is despite what is fundamentally still a subdued exchange rate (in trade-weighted terms) and a buoyant recovery in the US; the windfall from these positive factors is likely to be offset by rising import growth, particularly in the periphery economies where the import propensity of domestic demand is traditionally high.

Exhibit 66: Euro area exports by regional destination (% of total exports)



Latest data for Q2/15, calculations based on 12mma. Source: Haver, IMF, RBC Capital Markets

Exhibit 67: Regional contributions (pp) to total euro area real export growth (y/y, %)

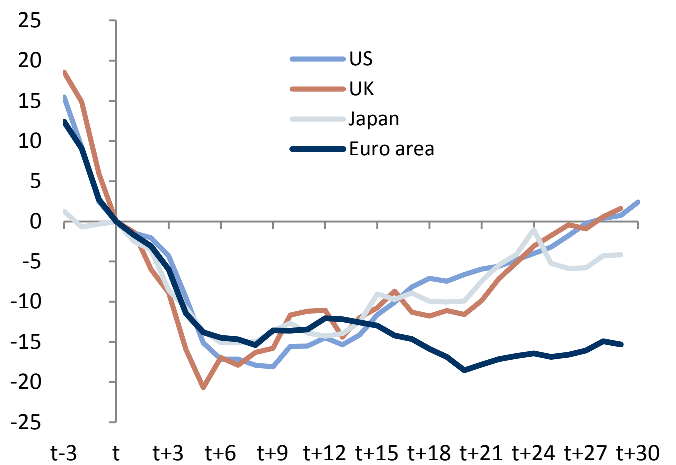


Source: Haver, ECB, RBC Capital Markets

Investment: ever the laggard

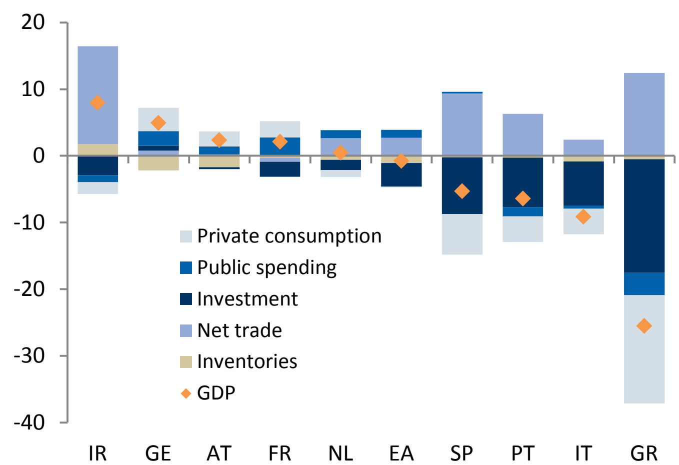
Weak investment has been a defining feature of the euro area recovery. Part of this is to be expected, given the nature of the crisis and the resulting shock to normal bank lending channels. However, overall investment has lagged well behind even other advanced economies where such activity has been similarly restrained. As Exhibit 68 shows, even seven years on, investment is still some 15% below its pre-crisis peak, and this has in turn scythed approximately 3.5pp from overall output growth since 2008.

Exhibit 68: Evolution of gross fixed capital formation (index, t = pre-crisis peak level of real GDP)



Latest data for Q2/15.
Source: Haver, RBC Capital Markets

Exhibit 69: Contributions (pp) to overall real GDP growth (%) since Q1/08



Latest data for Q2/15.
Source: Haver, RBC Capital Markets

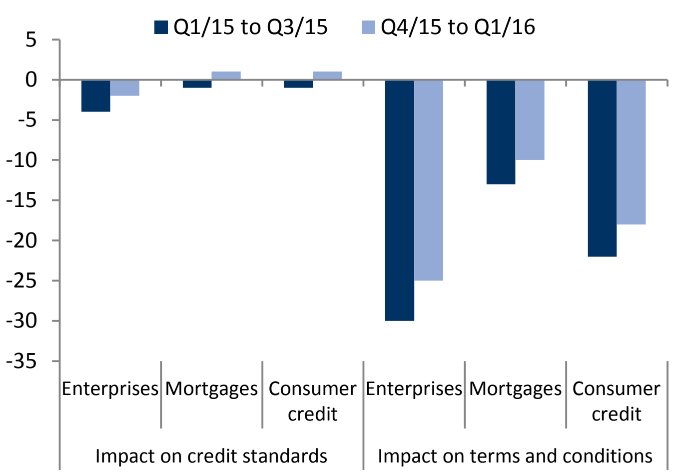
At a country level, a similar picture emerges, with weak investment growth a feature across both 'core' and 'periphery' regions (Exhibit 69). This in turn suggests that the crisis-related ills most commonly associated with the vulnerable periphery (i.e., the high corporate debt overhang, fragmented financial conditions, and fiscal retrenchment) are only part of the story behind the sluggish investment cycle. Other factors, including the persistent policy uncertainty, the weak level of aggregate demand, and more entrenched structural deficiencies continue to plague the investment outlook.

Looking ahead to our forecast horizon, we incorporate some expectation that investment will resurface more visibly:

- As with the household sector, the drag from the deleveraging process facing non-financial corporations is expected to be less severe; the NFC debt-to-GDP ratio certainly remains elevated at around 145%, but it has stabilised, while the debt-to-equity ratio has actually declined back down to its mid-2008 level.
- Similarly, the low-price environment and recovering domestic picture has already supported profit margins, which enables 'internal funds' to be used as an avenue for investment. This will be the case even as normal bank-lending channels continue to improve, and here, we are optimistic about the continued unwind of ECB interventions; as the latest *Bank Lending Survey* attests, the asset purchase programmes in particular have already had a positive effect on both loan standards and lending conditions for NFCs, with that effect expected to extend into the new year (Exhibit 70).
- Finally, measures of capacity utilisation and capacity constraints are also on the rise. While these do not show any marked acceleration (and still sit close to their long-run averages), they have risen steadily over the last year. Overall, such indicators point to pressures from pent-up demand and the need to reconstitute depreciating assets.

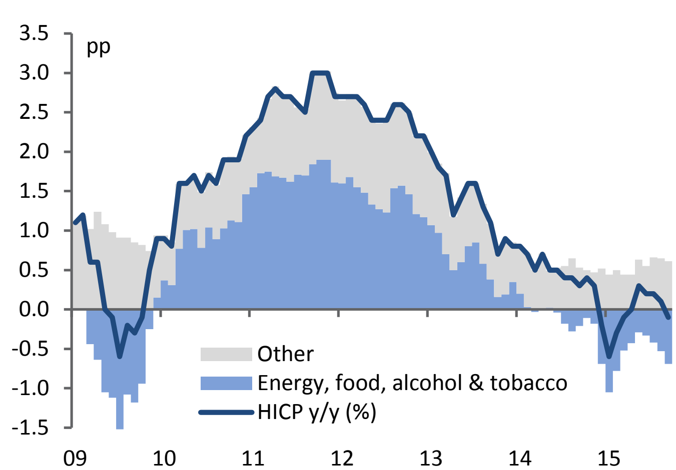
To be sure, this more benign outlook applies mainly to equipment investment, given the still ongoing post-crisis adjustment process in the construction sector. There are also still risks at a country level; in Germany, for example, investment tends to be highly correlated with export growth, and as such, a cyclical rebound depends crucially on the global demand outlook as well. Therefore, while we expect a more visible contribution to growth from this expenditure component over our forecast horizon, we consider that it represents a key source of downside risk to our overall projections. Moreover, if the weakness in investment persists for longer than expected (e.g., due to further adverse political shocks), this would increase the risk of hysteresis effects taking hold, which in turn would dampen the outlook for longer-term potential growth as well.

Exhibit 70: Reported effect of ECB asset purchases on loan standards and conditions (negative indicates net easing)



Source: ECB Bank Lending Survey, RBC Capital Markets

Exhibit 71: Component contributions (pp) to annual growth rate of HICP inflation (%)



Source: ECB, RBC Capital Markets

Monetary policy: more to come

Our forecast assumes a more activist central bank. This is borne *not* out of direct concerns over the domestic growth outlook, but rather as a result of what we perceive to be a growing downside risks to the ECB's capacity to meet its primary mandate of price stability.

In the very near term, fluctuations in the headline rate should continue to reflect energy price dynamics, as has been the case for much of the recent cycle (Exhibit 71). Here, we expect that base effects from *previous* oil price declines will become particularly pronounced over the turn of the year (potentially adding +0.5pp to the headline rate). Beyond that, however, the pace at which the output gap is narrowing in the euro area looks insufficient to generate much by way of meaningful domestic inflationary momentum. Indications of pipeline price pressures are, for the moment, rather limited; producer price inflation for domestic non-energy and food aggregates has declined steadily since the start of the year. Similarly, more timely survey data for both input and output prices suggest limited pressures outside of the more robust services sector. Growth in unit labour costs has also eased, as productivity growth has picked up while compensation growth has remained largely static. Altogether, these factors underpin our forecast of only a gradual rise in core HICP inflation over the coming years, which should leave the headline at 1.5% by the end of our forecast horizon.

At face value, 'waiting and seeing' might seem like an option for the ECB, but we argue time is not on their side. Even though we have consistently argued *against* the perceived likelihood of outright deflation in the euro area, there are still dangers associated with a prolonged period of low-but-positive inflation as well. This is not least as it hampers the internal competitiveness and deleveraging adjustment process that is now underway. Moreover, the longer the low-inflation environment persists, the greater the risk that inflation expectations become unhinged to the downside. Finally, and perhaps what serves as the biggest counterweight to the more hawkish members of the Governing Council, there is a risk that deferring action now may ultimately require *more* action further down the line. This is particularly the case in the context of any further shocks to activity.

Our forecast horizon, therefore, includes an expectation that the deposit rate will be reduced further to -0.40%. We also look for an extension of the ECB's asset purchase programmes such that they continue for at least six months beyond September 2016 and possibly on a rolling basis thereafter.

Euro Rates: Past the turning point already – 2016 should be 2015 rerun

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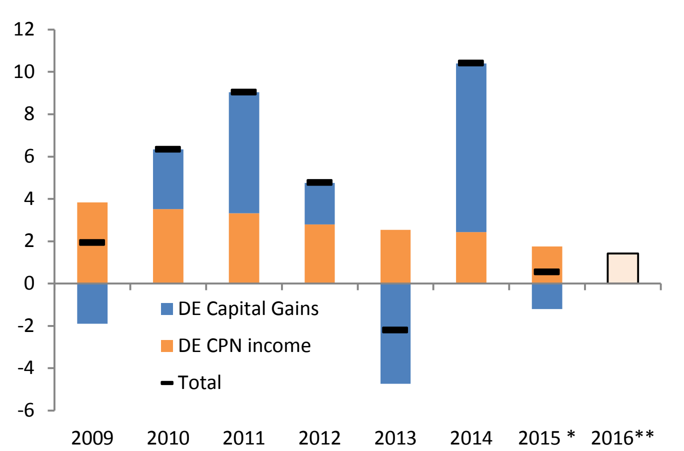
- **2015 was a poor year for European fixed income markets with particularly core risk free rates markets delivering minimal returns. We argue that 2016 will not be much different. The odds of a positive total return are slim currently.**
- **We argue again that 'duration shorts and credit longs' should make the year. This is true for the European sovereign bonds, but this time around also for the credit market. We like Southern European credit names in short maturities, in particular.**
- **ECB QE, a weak EUR and an ongoing economic recovery story at home and in the US & UK should also re-widen the b/e rates. We like paying EUR 5f5y IL swaps against the expectation of a return to at least the ECB's 2% target.**
- **If more monetary easing is coming, the QE element should make cash assets even richer than they are at present. So far, ASW spreads remain orderly, but we expect that especially the ultra-long segment of the curve can richen substantially.**

Little room left for price appreciation at very low yield levels

On these pages last year, we argued that (core) European sovereign bond markets would face difficulties delivering a positive total return and are thus rather unattractive in a EUR portfolio. This was despite our expectations for the ECB's QE programme to be launched and we recommended sovereign spread exposure and peripheral bonds are preferred over Bunds and other AAA products in order to increase the chances of a positive return. In the end – at least so far—even Bunds managed to eke out a positive P/L, but just about.

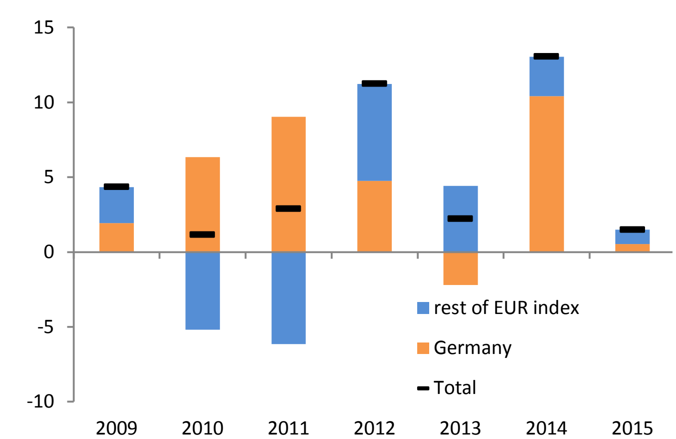
The arguments advanced at the time are as valid today. They are, in part, rooted in the analysis of the economic situation (where we expect an ongoing economic recovery as explained on page 59), but even more so in the analysis of return compositions and reasonable expectations for bond market developments going forward.

Exhibit 72: Total return contribution in iBoxx sovereign – Germany index (in %)



Source: Bloomberg, RBC Capital Markets * YTD; ** RBC estimates

Exhibit 73: Total return contribution of iBoxx EUR sovereign index by geography (in %)



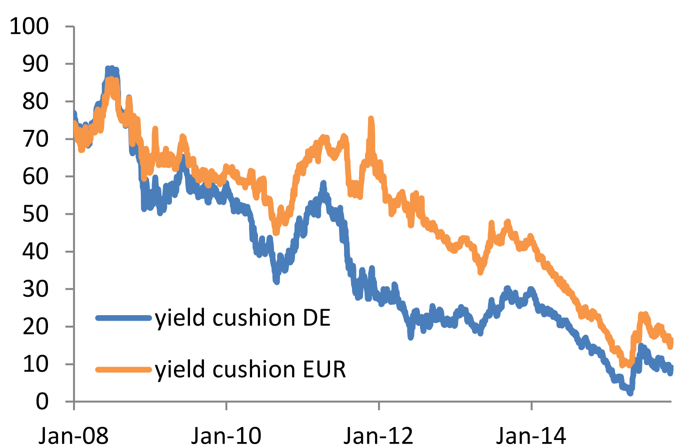
Source: Bloomberg, RBC Capital Markets

Exhibit 72 illustrates this argument. It shows the distribution of returns split into the "coupon income" (a.k.a., yield) and the "capital gains" since 2009 for the iBoxx sovereign Germany index (as a proxy for "core" European fixed income). The orange bars represent the coupon/yield income, the blue bars the capital gains. As can be seen, in all but 2013, the total return was positive – often driven by both components, but particularly in the early years strongly supported by the healthy “fixed” income of coupons/yield. Even in 2009 and 2015 (ytd), the negative contribution from rising yields was offset by the “fixed” component of the yield income. Yet, at current yield levels, the cushion against adverse price developments is very small indeed.

We stressed also over the last years that spread products offer the superior risk/reward. Indeed, over the past four years, investors would have fared better with peripheral risk (at the very least) mixed into the asset allocation as Exhibit 73 shows. The blue bars in this chart represent the return that was not generated by the iBoxx Germany index when evaluating the entire EUR sovereign index. As can be seen, they generated a good return contribution in all of the previous four years and, indeed, in 2013 saved investors in the broader index from the fate of negative returns due to the healthy spread compression that took place.

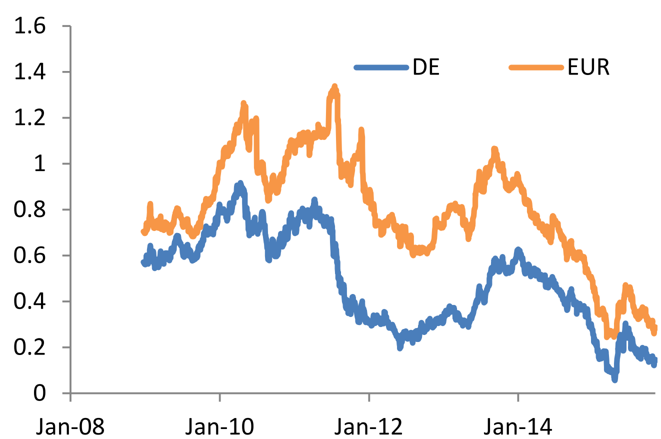
Looking ahead, however, in both cases the margin for error in 2016 will be small. Exhibit 74 calculates the “cushion” that the current yield income, i.e., the yield income currently available divided through the duration of the index. This shows how little space for adverse movement in the market there is before investors are turning into negative return territory. It currently stands at a mere 9bp and 18bp for the iBoxx sovereign Germany and EUR index, respectively. In other words, a mere 10bp yield increase in the German index and about double that movement in the EUR index makes investors start to lose money. Needless to say, this is very close to the all-time low seen earlier this year. Furthermore, the market swings have not come down anywhere close to making up for this lack of yield income available. Exhibit 75 shows our measure of “cushion” relative to the 1y volatility, i.e., a measure of prospective return relative to the risk in terms of price swings. This is different, for instance, from early 2014 where yield levels also were low on a (then prevailing) historical basis. Yet, back then, market swings came down substantially too, leaving the prospective return-versus-risk measures actually looking attractive.

Exhibit 74: Yield Cushion is close to the all-time lows – no margin for adverse yield moves before investors start losing money



Source: Bloomberg, RBC Capital Markets' * YTD; ** RBC estimates

Exhibit 75: ‘Index Yield cushion’ over 1y annualised volatility of daily returns – not a lot of return for the risk one takes



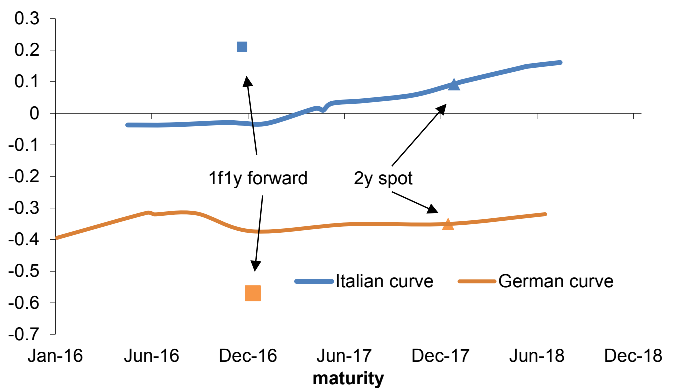
Source: Bloomberg, RBC Capital Markets, Measure is calculated as (YTM/Mod Dur)/(1y High- 1y Low)

So where does the performance come from?

Key Theme 1:
Short duration – long spreads

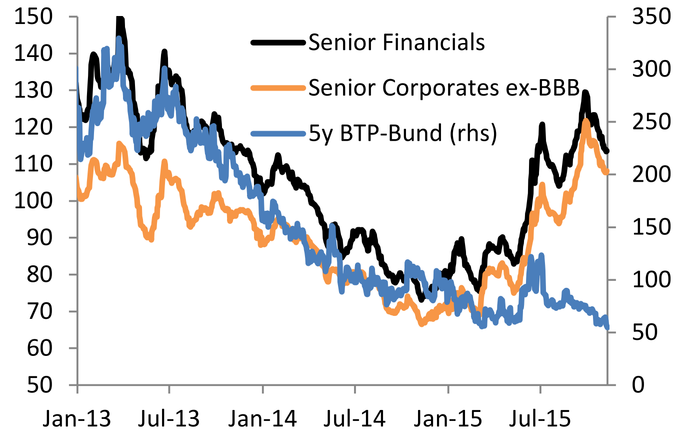
Against that backdrop, we argue again that duration risk should be kept to a minimum and if in doubt, we would even be on the short side. We do not see a strong case for big short positions in the European markets where the economic recovery lags behind other jurisdictions, the ECB keeps easing policy and actual inflation developments should remain feeble. Yet, mainly driven by the US (and UK) markets, we also expect Bund yields to rise somewhat. Our forecasts on page 130 display our full set of expectations; to zoom in, our Dec16 10y Bund yield forecasts stands at 1%, which is just marginally higher than the forwards currently suggest (Exhibit 76). Not enough to warrant a large duration short, but surely sufficient to be wary and seek risks elsewhere. In short, we expect core European bond markets to again deliver a close to zero or even negative return in 2016 and are thus looking for exposure elsewhere.

Exhibit 76: Spot and Forward rates – Southern European risk remains attractive



Source: Bloomberg, RBC Capital Markets

Exhibit 77: Credit and sovereign spreads decoupled – credit should deliver good portfolio contributions in 2016



Source: Bloomberg, RBC Capital Markets

As was the case in the previous years, we expect that the spread products in the European fixed income space will do considerably better than the core market. As an example, a 10y BTP still carries some 14bp better until the end of 2016 than a comparable German Bund. At the short end of the curve, the pick-up is even more impressive where a 2y BTP carries more than 40bp better than the Schatz.

Year ahead trade 1:
Long EUR peripheral credit at the short end of the curve

Even more interesting than the sovereign market alone, we think, is the credit market. Exhibit 77 shows the sovereign spreads alongside the senior corporate and financials. As can be seen, a substantial dislocation opened up over the course of the autumn, which we put at the doorsteps of two developments: first, the ECB's QE programme that is underpinning the cash sovereigns and, second, the fact that issuers of corporate credit paper in Europe are heavily skewed by being the internationally exposed corporates. Thus, the credit market is much more exposed to the EM wobbles than the European economy more generally, as we explained earlier this year in a *European Directions* edition. Yet we reckon that owning those elevated spread levels will pay out in an environment where the underlying market remains depressed and cannot deliver the returns that investors seek.

Key Theme 2: Rekindling inflation expectations

We thus think the mantra that prevailed over 2015 – "short duration, long spread" – is just as applicable in 2016 as it was this year. As an example trade, we thus include a long peripheral credit trade – long ENEL 4.875 Feb18 – in our trade table on page 61. Even though our chosen bond is already on the ECB's purchase list, we would expect this theme to work exceptionally well if the ECB opted to broaden out into the credit space. This is currently not our base case, but is a non-zero probability event.

Year ahead trade 2:
Wider EUR b/e – pay EUR 5f5y IL swaps

A second trading theme that we see developing in 2016 are b/e inflation wideners. While it is too early to see actual inflation coming back in earnest, we think that the supportive ECB and a weaker EUR, coupled with an ongoing economic recovery in Europe and the US, should support expectations for medium inflation to, at least, return towards the ECB's target. This argues for wider b/e inflation and inflation swap rates. We already argued earlier this year that the low real yield level, the flat curve and the low inflation expectations can only co-exist in a very downbeat economic picture – one we called "as good as it gets" in a special edition of Global Directions. We reckon the current market pricing can only be fulfilled if the economy falters again (unlikely); if central banks are overly aggressive in their tightening zeal (improbably); or if all Western economies are trapped in a low inflation world, despite the ongoing recovery, tight labour markets in the US, UK and Northern Europe and an extremely accommodating monetary policy set-up. We think none of these expectations appears credible to us.

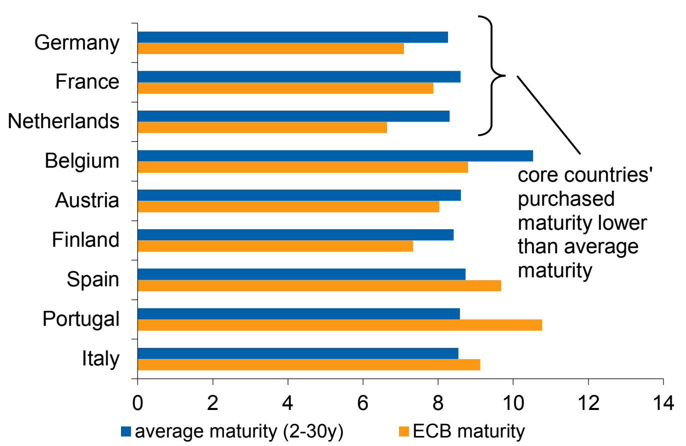
Key Theme 3: Further richening of EUR cash bonds

We thus expect that the low inflation expectations are bound to change to some degree over the course of 2016. This we think will be true in spot, but even more in the forward space. True, we have seen some widening already of late, but we expect that there is easily a 20-25bp in the EUR 5f5y IL swap possible. We thus add a respective EUR IL swap payer position to our list of Key Trades on page 60.

Year ahead trade 3: Buy 30y Bund ASW

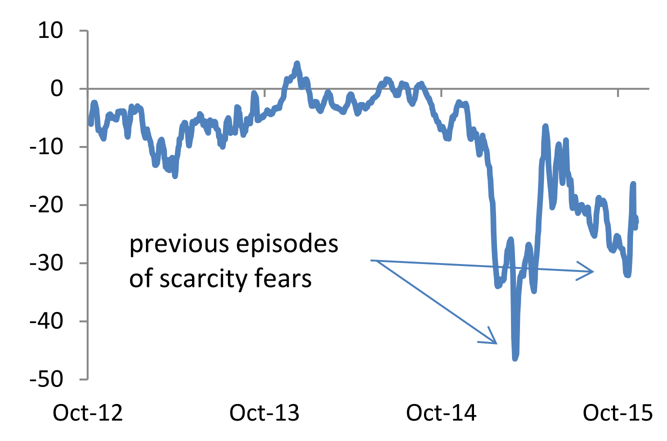
Lastly, in the fixed income world, we suggest trade set-ups that benefit from "more QE" in the euro area. As we elaborated on page 57, we expect a combination of deposit rate reductions and "more QE" to materialise already in the December meeting this year. For now, we expect that there will be more purchases of the same securities rather than a change in the composition. What this means, in a nutshell, is more purchases of cash assets rather than derivatives. While there has been a lot of volatility recently, we still suggest that this equates to wider ASW spreads, particularly for those assets that are in short supply, such as Bunds. We also argue that due to the current maturity mix of the "core" issuers' NCB portfolios relative to the market (see Exhibit 7), we would expect more purchases of long-dated securities rather than short-dated ones. We thus recommend being long 30y Bund ASW spreads at current levels and enter a trade in our Key Trade table on page 61.

Exhibit 78: Average maturity purchased in ECB's PSPP and outstanding in the market (in years)



Source: ECB, Bloomberg, RBC Capital Markets

Exhibit 79: 30y Bund ASW spread – tight but might tighten further (in bp)



Source: Bloomberg, RBC Capital Markets

Exhibit 80: Key Trades 2016 - EUR

Trade	Entry date	Entry level	Current	Target	Stop loss	3mth carry	P&L[1]	Status
Buy EUR short end credit ENEL 4.875 Feb18	18-Nov-15	39 bps	39 bps	0bp	50bp	+8.5bp	-	Open
Wider EUR b/e Pay EUR 5f5y IL swap	18-Nov-15	1.73%	1.73%	2%	1.65%	-	-	Open
EUR 30y ASW wideners Buy DBR 2.5 Aug46 ASW	18-Nov-15	-16 bps	-16 bps	-30bp	+5bp	-	-	Open

[1]accounting for cost of carry and transaction costs

Source: RBC Capital Markets

EUR: Undervalued but will stay that way

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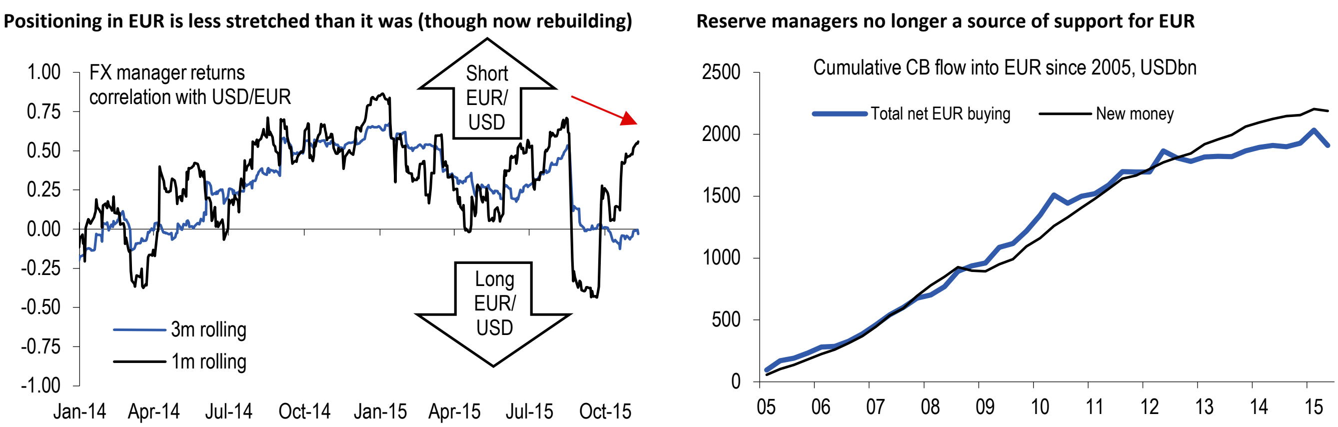
Slow recovery and low inflation mean easy policy and cyclically weak currency.

After a sharp leg down in January 2015, EUR/USD spent most of the year in a 1.05–1.15 range, narrowing for many months to 1.08–1.15. Heading into 2016, we think it is ready for another leg down. Part of that comes from a stronger USD, but there is also independent EUR weakness.

EUR is being hit by opposing forces. It still trades as a risk off proxy (see *Total FX*, 7 August 2015), so when risk aversion rises (equities sell off and investors lighten their positions), EUR rallies. That has much more to do with positioning and hedging behaviour than a permanent change in EUR's fundamentals (see *Total FX*, 28 August 2015), but it is an important feature of EUR price action for now. Pushing EUR lower is the prospect of further easing from the ECB (we look for a 20bp deposit rate cut and an extension to QE in December), coupled with room to rebuild EUR shorts after the August–October clear-out (Exhibit 81, left panel). There are two other downside risks to EUR next year: 1) EUR has the most to lose from EM reserve liquidation. In the years when EM central banks were rapidly accumulating reserves, reserve recycling (selling USD to buy other reserve currencies) was a big source of support for EUR/USD. As reserve accumulation slowed, that source of support dried up (see Exhibit 81, right panel and *Total FX*, 20 July 2012, 5 October 2012, 10 May 2013). As that process goes into reverse, central banks need to sell EUR (and other G10 currencies) against USD in order to maintain the currency weights in their portfolios. The faster the pace of reserve drawdown, the more EUR/USD selling that would imply. This is something to watch if EM central banks step up their pace of intervention.

Exhibit 81: The summer selloff made room for a rebuild of EUR shorts; reserve managers no longer there to support



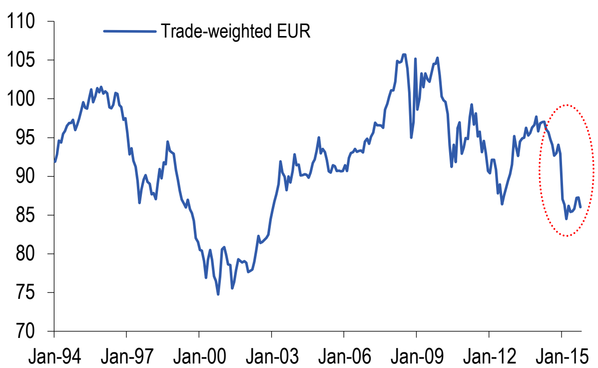
Source: Bloomberg, RBC Capital Markets

2) EUR hedges could rise as the cost of hedging turns increasingly negative. Over the last year, there has been increased interest by international holders of euro area assets to hedge the currency exposure, particularly from those piling into the long European equities 'QE trade' (see *Total FX*, 27 March 2015). But the stock of euro area liabilities to the rest of the world is enormous (just under EUR 10tn), and small changes in the average hedge ratio can generate sizeable EUR selling flow. The divergence in monetary policy will mean that US investors are increasingly paid to hedge out their EUR exposure, which may swing the balance in favour of hedging for those still unhedged.

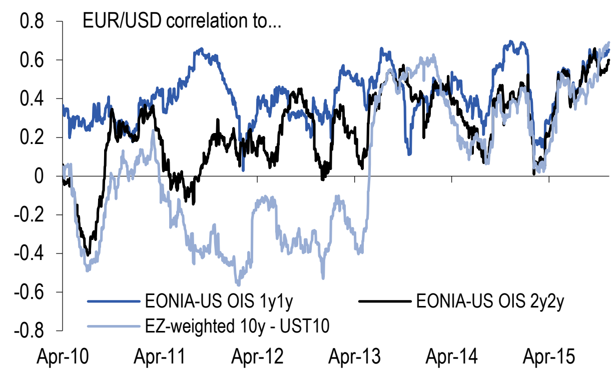
Finally, it is worth mentioning political risks, which have taken a backseat for EUR. Spain goes to the polls in December, but with support for Podemos having fallen through 2015, the Spanish election has slipped off the radar for EUR. The results of the last Greek election mean Greece has done the same. The transmission mechanism from Greece to EUR/other markets was the threat of a badly managed EUR exit. But Eurosceptic Syriza rebels splintered from the government and failed to make it into Parliament in September's election. Now that the threat of a EUR exit has dropped substantially, so has Greece from the headlines. There are still political risks to keep in mind (rising tensions between the new Catalan government and the Spanish one; Portugal's inconclusive election and the fall of its minority government), but they have to worsen substantially before they become relevant for EUR. In fact, EUR is very much back to being a conventional rate differential story (Exhibit 82 below). The outlook for ongoing divergence between the euro area and the US means that we are looking for EUR/USD to hit parity in the next three to six months and for EUR to stay cyclically weak for the rest of 2016.

Exhibit 82: EUR has fallen sharply but we think it can make new cycle lows

EUR has fallen sharply over last 18 months but is not historically stretched



Rate differentials have turned into the key driver for EUR/USD



Source: Bloomberg, RBC Capital Markets

UK Economics: Rates to go up before inflation returns to the 2% target

Sam Hill, CFA (Senior UK Economist); +44-20-7029-0092, sam.hill@rbccm.com

- **2016 is expected to produce another year of headline GDP growth above 2% but with a heavy dependence on the domestic private consumer.**
- **Inflation is set to pick up early in 2016, but struggle to return to target until 2017, leaving a dovish bias to our forecast that the first Bank Rate hike comes in May 2016.**
- **Even if the UK referendum on EU membership becomes a 2017 event, the possibility of 'Brexit' is likely to constrain business confidence at the aggregate level in 2016.**

Spare capacity: dwindling

As the UK economy heads into 2016, it is possible to construct a good case for saying that the Bank Rate should have already increased from its historic low of 0.5%. Indeed one survey-based measure of where output is relative to potential, suggests the UK is already c.2% above neutral (Exhibit 83), even if other measures are generally closer to neutral.

Household balance sheets: improved

Household incomes are growing again, and data collected on the Bank of England's behalf show that this sector can afford to absorb at least the first couple of 25bp hikes (Exhibit 84).

Consumer confidence: elevated

Consumer confidence remains elevated too. This buoyancy looks, in no small part, to be due not just to some nominal wage growth, but also to the real terms boost provided by falling prices on some essential items of household spending. By way of illustration, Exhibit 85 shows an income tracker, after taxes and spending on essentials such as food, energy and shelter.

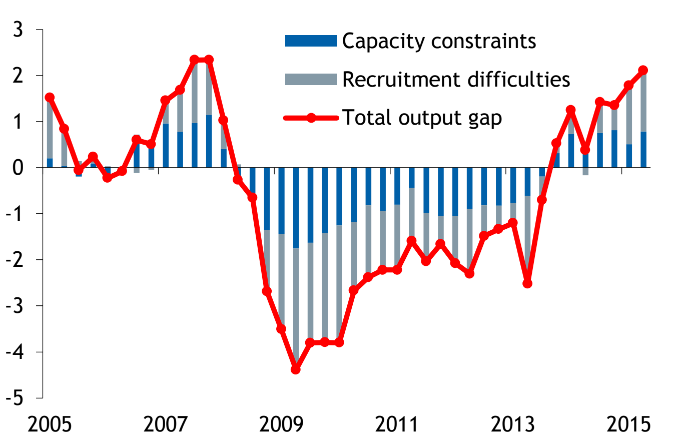
Labour market: tightening

The long-awaited revival in average earnings seen in 2015 sends its own important signal. Private sector wages are now up over 3% 3m/y overall. This is not too surprising now that the unemployment rate, at 5.3%, is somewhere close to medium-term equilibrium even though there are now some tentative signs that employment growth is moderating (Exhibit 86).

Inflation: set to jump soon

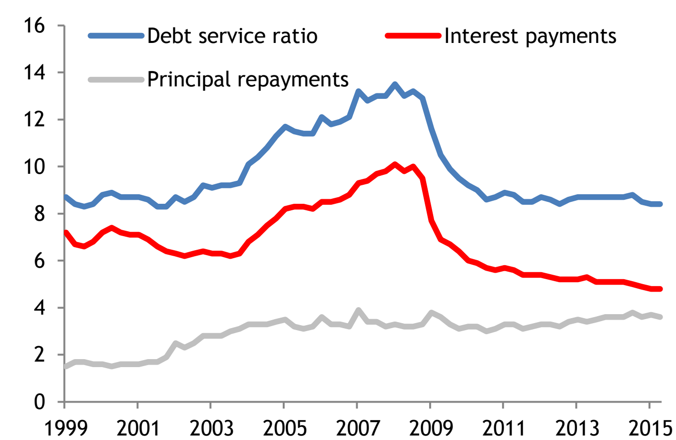
What's more, in the near term, inflation is almost bound to jump as well – anticipated base effects related to the oil price reveal underlying inflation is already much closer to 1% Y/Y than zero. RBC forecasts that CPI will bounce to about 1% Y/Y by Q1/16 (Exhibit 89). This is slightly above the Bank's forecast of more like three-quarters of a percent inflation early in the new year, but its forecast incorporates yet-to-be-announced retail gas price cuts.

Exhibit 83: Survey-based output gap estimate, % of GDP, (based on OBR methodology for 'aggregate composite' approach)



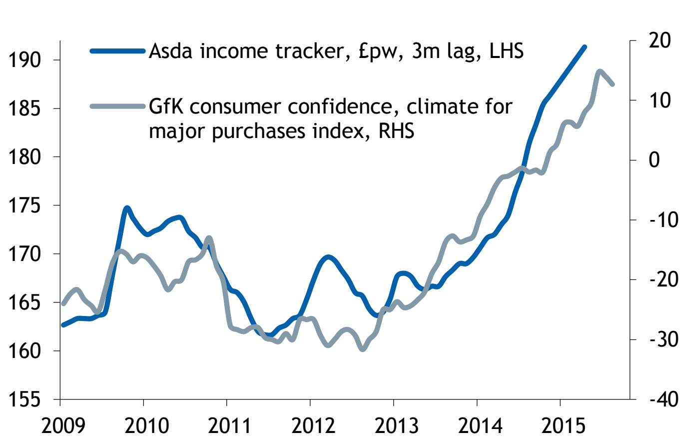
Sources: Haver, OBR, RBC Capital Markets' calculations

Exhibit 84: Household debt service ratio and its components, % of post-tax income



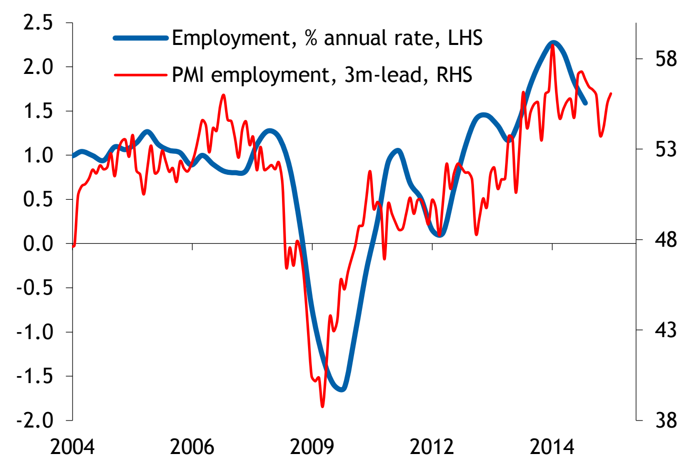
Sources: Bank of England, NMG Consulting, RBC Capital Markets

Exhibit 85: Asda income tracker and GfK consumer confidence



Sources: Haver, RBC Capital Markets

Exhibit 86: Employment growth and employment PMI index



Sources: Haver, RBC Capital Markets

House prices: growing

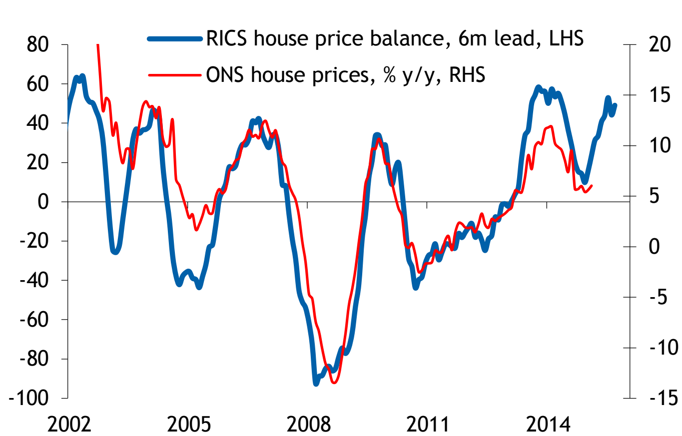
In the housing market, the prospects for growth in 2016 look exciting for property owners (Exhibit 87) and the level of household sector indebtedness has started to emerge as a theme again, with net mortgage lending being behind at least part of the appreciation of the value of the housing stock.

Bank Rate: RBC forecast May 2016 hike

So, in many respects it seems difficult to reconcile these economic fundamentals with market-implied pricing for the first 25bp Bank Rate hike not coming until Q4/16 (Exhibit 88). RBC forecasts that the first hike will be in May 2016, followed by a further move in November, leaving Bank Rate at 1% at the end of the year. We do acknowledge though that the risks still seem skewed to the first move in rates coming later than May rather than earlier in 2016.

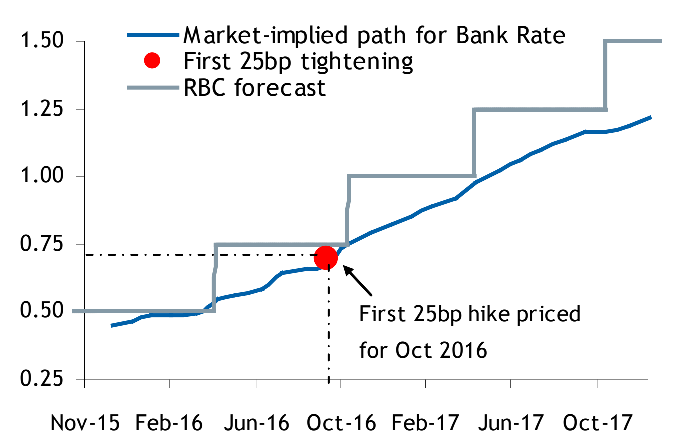
Exploring the nature of the outlook, summarised by the forecasts in Exhibit 89, reveals that there are indeed a number of reasons to be cautious about the course the MPC will plot despite a central case outlook for continued economic expansion above 2% in real terms.

Exhibit 87: RICS house prices, net, & ONS house prices, % y/y



Sources: Haver, RBC Capital Markets

Exhibit 88: UK interest rate expectations, %



Sources: Haver, RBC Capital Markets

Exhibit 89: RBC UK economics forecasts

United Kingdom	2015	2016				2017				2015	2016	2017
RBC forecasts	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	annual averages		
Real GDP Q/Q	**0.5**	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.6	…	…	…
Real GDP Y/Y	2.1	2.4	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.3	2.3
Private consumption	*0.7*	*0.75*	*0.75*	*0.7*	*0.65*	*0.7*	*0.8*	*0.7*	*0.8*	3.0	2.9	3.0
Government consumption	*0*	*0*	*0.1*	*0*	*0.1*	*0*	*-0.25*	*-0.25*	*-0.25*	1.7	0.2	-0.7
Gross capital fixed formation	*0.7*	*1*	*0.5*	*0.3*	*0.5*	*0.5*	*0.5*	*1*	*1*	3.5	2.3	3.0
Net exports (contribution)	*0.0*	*-0.1*	*-0.1*	*0.1*	*0.0*	*0.1*	*-0.1*	*0.1*	*-0.1*	0.6	0.2	0.0
BoE (Nov-15)	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.6	2.7	2.5	2.7
CPI inflation (average, % y/y)												
RBC (Nov-15)	0.1	1.0	1.1	1.0	1.3	1.4	1.6	2.0	2.0	0.1	1.1	1.8
BoE (Nov-15)	0.1	0.7	0.8	0.9	1.3	1.5	1.7	1.8	2.1	0.1	0.9	1.8
Bank Rate (%, end of period)												
RBC (Nov-15)	0.5	0.50	0.75	0.75	1.00	1.00	1.25	1.25	1.50			

Sources: RBC Capital Markets' forecasts, Bank of England

2016 GDP: RBC forecast 2.3% growth

In 2016, RBC looks for real GDP growth of 2.3%, following 2.4% in 2015. This view is underpinned by the expectation that nominal wage growth grows by over 3% due to tighter labour market conditions that have already started to drive wages. Real wage growth should look healthy too as inflation struggles to meaningfully beat 1% throughout much of the year. Low interest rates will also serve to bolster consumption growth at the expense of savings.

Consumption: the main driver of growth

This outlook unsurprisingly sees the bulk of anticipated growth coming from the private consumer, as detailed in the forecast table, Exhibit 89. For the other expenditure components of GDP, prospects look more mixed at best in some cases.

Government: pressing ahead with fiscal consolidation

Fiscal consolidation is set to limit real terms government consumption growth to almost zero in 2016, based on the new government's Summer Budget profile (2017 being the year where there is more of a drag on GDP from public consumption). The planned reduction in the structural deficit of 1.2 percentage points of GDP in 2016-17 is relatively large. However, the Summer Budget took steps to ameliorate the macroeconomic consequences.

Investment: "Brexit" constrained?

Investment spending ought to be underpinned by the continuation of low interest rates, but business confidence could be constrained by the UK's referendum on EU membership. The vote itself may or may not take place in 2016 (if not it will be 2017) but in any case the coming year should see the political renegotiation of membership terms that is to precede the vote. See page 68 for more details on the EU referendum.

See "Brexit" annex

A vote which raises the possibility of materially different terms of UK access to the Single Market means we think it is prudent to use a conservative estimate for 2016 capital formation; a number of firms' longer-term strategies will be sensitive to the outcome of the referendum.

Trade: headwinds remain

The net trade GDP growth contribution in 2016 will once again struggle to be much above zero. Imports will be supported by rising domestic incomes and a strong exchange rate. But that will be a headwind for UK exports. Also, it is now more likely that gloomier growth forecasts in emerging markets become more of a barrier for the flat-lining index of external demand for UK exports (Exhibit 90) where the euro area's woes have been the major issue previously.

Verdict: Sources of growth are not well diversified

In summary, although the outlook on the headline growth rate is healthy, the composition looks heavily dependent on the consumer. That concentrated nature of growth, both in terms of the reliance on the consumer from the expenditure point of view, and on a few elements of the services sector from the output perspective, continues to point to the conclusion that the MPC will be cautious with interest rates.

Exchange rate: a drag on inflation

On inflation, the MPC remains far from convinced that there is much by way of excess medium-term pressure to respond to for the time being. The possibility of the lagged pass-through from exchange rate appreciation into import prices is notable amongst the reasons for its current reticence to give guidance of an imminent monetary tightening.

Productivity: watch the MPC's tone carefully

Rather than Sterling, it is the tentative signs of productivity gains emerging which strike us as a risk to the MPC's inflation assessment. For example, consider that output growth continues at the same time employment growth eases (Exhibit 91). This is backed up by the recent official productivity data - the best since Q2/11. In future, look for the MPC to place more emphasis on pay rises being of limited consequence for inflation if accompanied by productivity gains.

MPC: caution the watchword with below-target inflation

Our central case that Bank Rate will start to go up in May 2016 comes with a skew in the risk assessment. The concentrated nature of growth in the economy presents obvious vulnerabilities. The external growth picture seems biased to deteriorate further rather than improve. Also, for now, it seems likely that the MPC will continue to be circumspect about the disinflationary impact of past exchange rate appreciation.

Financial policy: Buy-to-let mortgage restrictions possible

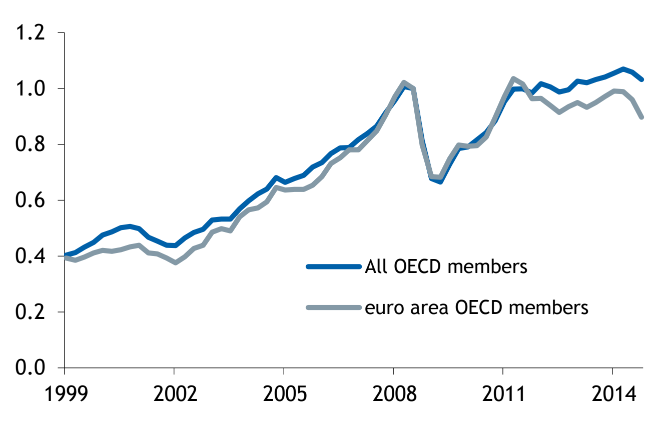
What's more, the Financial Policy Committee exists to be the first line of defense against financial stability risks. So, whereas in previous cycles the resurgence in the mortgage and housing markets would have more readily manifested itself in higher policy rates, on this occasion it looks likely that 2016 will see the FPC impose restrictions on bank lending in the buy-to-let mortgage market, where the share of new lending has surpassed pre-crisis rate.

UK in context: MPC unlikely to move before the Fed

In a world of post-crisis ZIRP and near-ZIRP, the Bank's 0.5% policy rate is relatively high. As it is the past exchange rate move which has been highlighted as the persistent drag on the MPC's inflation forecast, it will view a premature Bank Rate hike which further widens the rate differential between it and other major central banks with caution.

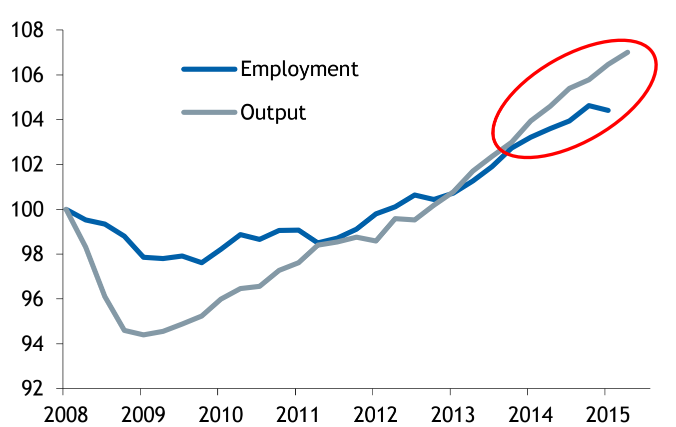
The anticipation of rate hikes in the US, therefore, strikes us as an important component of the analysis for the Bank. Should the Fed start putting rates up soon, in line with RBC forecasts, it will limit the risk of a rate hike in the UK to result in further exchange rate appreciation. For this reason, any delay to our anticipated path for fed funds is likely to delay the MPC too.

Exhibit 90: External demand index for UK exports, Q3 2008 = 1



Sources: OBR, OECD, Haver, RBC Capital Markets

Exhibit 91: UK employment and output levels, Q2 2008 = 100



Sources: Haver, RBC Capital Markets

Referendum on UK's EU membership before end of 2017

'Remain' side leads 54% to 46% in the polls currently

The UK will try to renegotiate the terms of its membership before the vote

Access to the Single Market is an important economic consideration…

…but this is a complex assessment involving a number of unknowns

Annex: 'Brexit' referendum overview

2016 is set to be a pivotal year for the UK's relationship with the European Union (EU). There will be a referendum on the UK's membership of the EU before the end of 2017. Even if that vote does not take place in 2016, the coming year is expected to see the UK government renegotiating the terms of UK membership, a precursor to the question being put to the British people. When it comes, they will be asked: *"Should the United Kingdom remain a member of the European Union or leave the European Union?"*

The current "poll of polls" shows the "remain" side leading 54% to 46%, but historical data are scarce as this wording was only determined in September 2015. Crucially, these data are from polls conducted in advance of the renegotiation of the UK's membership terms.

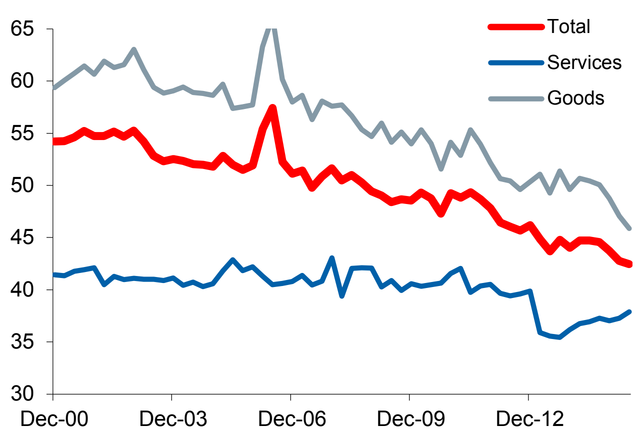
Prime Minister Cameron intends to campaign on the "remain" side on the basis that he expects to secure a renegotiated membership, which he believes will be in the UK's interests. In summary, he is seeking to secure the following from the renegotiation:

- **Single Market protections:** Secure safeguards to ensure that integration between euro-area countries does not result in discrimination for non-euro area countries.
- **Competitiveness:** Cut the regulatory burden on businesses.
- **Sovereignty:** Explicit exemption for UK from "ever closer union" objective of the EU.
- **Immigration:** Restrict access to in-work benefits for migrants.

The significance of EU membership to the UK economy relates primarily to the access to the Single Market, which allows for "four freedoms": free movement of goods, services, labour and capital. It provides a framework for the removal of tariff and non-tariff trade barriers between members, but also brings with it a number of regulatory compliance costs.

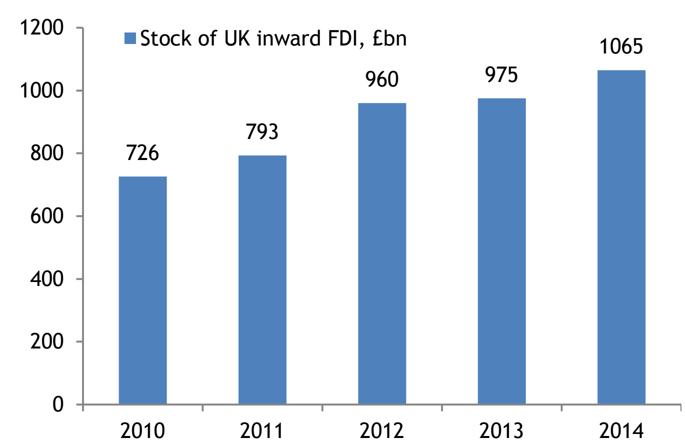
The economic impact of a vote to leave the EU will involve a complex economic assessment, and necessarily involve making judgments on a number of unknowns. On the one hand, there are potential efficiencies from a reduced regulatory burden and the flexibility to make trade deals bilaterally independently of the EU. On the other, there would be uncertainty about the UK maintaining Single Market access to where almost half its exports go (Exhibit 92), and about the benefits from strong levels of foreign direct investment (Exhibit 93). This currently benefits from overseas firms using the UK as a base to access the EU Single Market.

Exhibit 92: UK exports to the EU as a share of total exports, %



Sources: Haver, RBC Capital Markets

Exhibit 93: Stock of UK inward FDI, £bn



Sources: Haver, RBC Capital Markets

UK Rates Outlook: 2016 – The year for the bears?

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- The dichotomy between domestic strength versus external weakness will continue to haunt the BoE over the coming year. We expect the MPC to err on the side of caution, demonstrating greater tolerance of medium-term inflation, and embark upon rate hikes only when there is enough evidence of inflationary pressure. We look for modestly higher 10y yields driven by a rise in breakeven rates.
- The short end is already pricing a guarded central bank approach towards tighter monetary policy. The 2–3y sector is particularly flat, which we expect to come under steepening pressure as term premia are restored.
- Rising regulatory demand amidst a drop in net supply should keep the long end of the curve better supported, particularly in linkers. The effect of Solvency II should gradually wane in 2016, reversing some of the excessive cheapening in 30y spreads vs. 10y.

Dilemma on strong domestics vs. weak externals to keep the MPC 'behind the curve'

If in doubt, the MPC is likely to be cautious on monetary policy as inflationary pressures remain subdued.

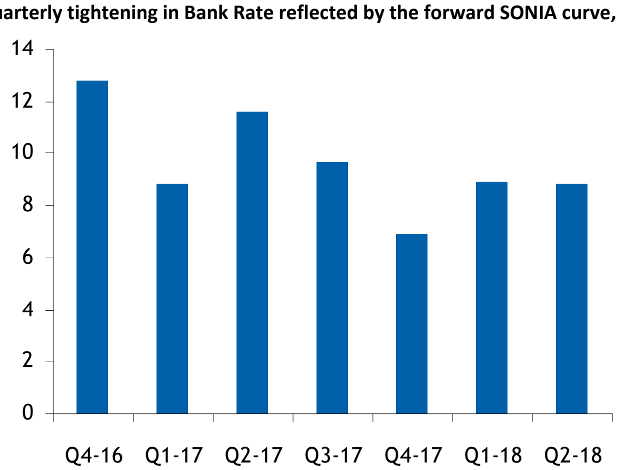
Uncertainty around the EU referendum could also delay rate increases.

The year gone by has been another disappointing one for the rates market. Most investors entered the year with a bearish stance, anticipating monetary policy tightening in the US and the UK. However, here we are with 10y Gilt yields only 20bp higher year to date (mostly seen since early November) and the total return on the All Stocks Gilt Index close to flat. As discussed in the UK economics section above, there has been a case for saying that Bank Rate should already have increased, given the strength in the domestic economy. But equally, there have been plenty of external headwinds that have kept the near term inflationary pressure subdued, giving sufficient headroom to the MPC before it embarks upon the route of tighter monetary policy.

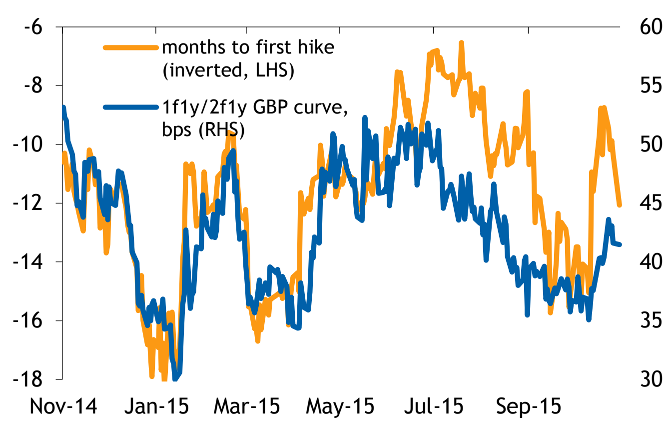
This dichotomy is set to persist over the coming year and we believe the BoE will be happy to remain behind the curve, exhibiting greater tolerance to medium-term inflation. This view is based not only on the back of downside risks to our inflation profile, but also on the uncertainty attached to the outcome of the UK's referendum on EU membership, which is likely to weigh on investor confidence. Our own forecast is for the first hike to come in May 2016, with the next move seen only in November 2016, but we acknowledge the risks to a later move.

Exhibit 94: Money market curve pricing very gentle pace of tightening as term premia have compressed

Quarterly tightening in Bank Rate reflected by the forward SONIA curve, bp



Forward GBP curve too flat versus the timing of first rate hike



Source: Bloomberg, RBC Capital Markets

Market pricing is already reflecting that guarded approach to hiking rates as the forward curve is at historical flat levels.

…but how much is already in the price?

Having said that, the OIS curve is now discounting the first rate hike in Q4/16, with c. 35bp/annum additional tightening thereafter (Exhibit 94a). With one member of the MPC (Ian McCafferty) already voting for rate hikes and another member (Kristin Forbes) on the cusp of joining the clan (judging from her recent speeches, as she has been highlighting the risks of inflation overshooting the target over the policy horizon), we believe the current pricing reflects an extremely gradual and limited pace of hiking cycle consistent with a very dovish outlook on policy. Additionally, although the 1-2y part of the curve has started steepening of late, the 2-3y part remains relatively flat. Therefore, we look for the front end (preferably the 2-3y segment) to come under modest steepening pressure over next year as term premia are restored and pick-up in inflation leads to an adjustment in market expectations on the speed of rate hikes compared to the current benign pricing. The 1f1y/2f1y swap curve is now towards its lows since June 2013, when the market was pricing the first rate hike in about 18 months' time. As Exhibit 94b suggests, the curve has also recently demonstrated a very good correlation with the timing of first hike and currently appears a bit too flat on that measure. The trade enables us to express our view that rate hikes in the UK are some way off, but given how little is priced in, will perform well if rates come under modest pressure while offering a slightly positive carry.

<u>Year ahead trade 1:</u> GBP 1f1y/ 2f1y curve steepener.

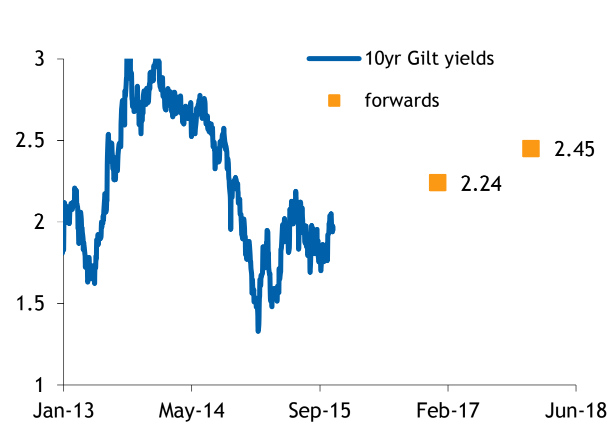
Modestly higher yields in 2016 driven by rising inflation expectations

We expect a gentle rise in yields next year, driven by higher breakevens, while real rates should remain relatively low on unsynchronized global recovery.

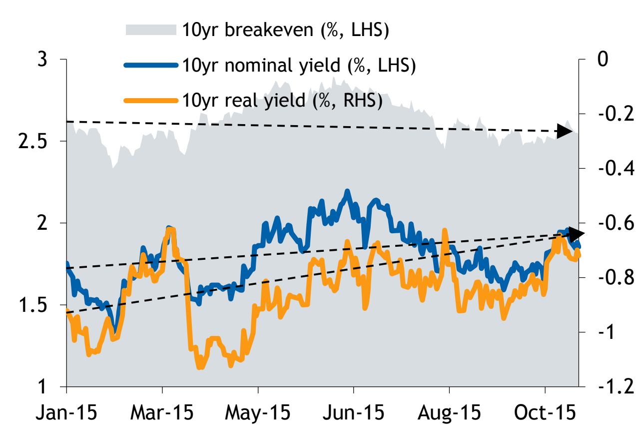
Similarly, as Exhibit 95a shows, YE2016 10-year Gilt yields are only c. 30bp higher compared to the spot yields. Exhibit 95b illustrates the breakdown of the move in nominal yields this year into their real yield and breakeven components. As can be seen, the rally in nominal yields was driven by a fall in inflation expectations, while real yields actually rose over the year, perhaps underpinned by a rise in growth expectations. As we enter next year, we expect the dynamics of the sell-off to shift somewhat – i.e., we anticipate a modest rise in nominal yields to be predominantly driven by a rise in inflation expectations, with real yields anticipated to remain relatively subdued due to an unsynchronized global recovery and a slow pace of rate increases. We look for 10y Gilt yields close to 2.50% by the end of 2016. Easier monetary policy from some central banks (for instance, we expect the ECB to announce further measures in December), continued rise in domestic wages, as well as oil price base effects, should all help inflation expectations to bounce back, taking intermediate

Exhibit 95: Forward yields too low, expect rise in inflation expectations to drive yields modestly higher in 2016

10y Gilt yields and 1y, 2y forwards, %



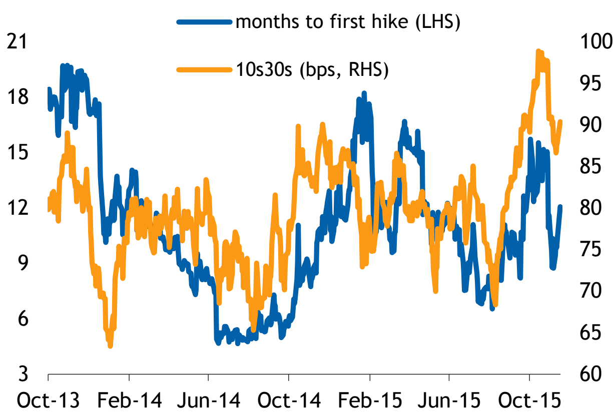
Rise in nominal yields in 2015 driven by higher real yields while BEIs fell



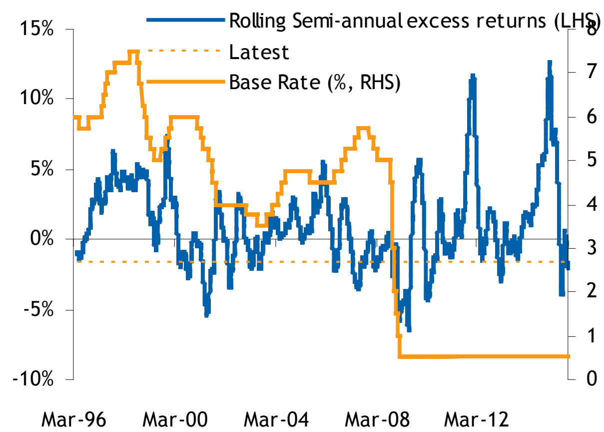
Source: Bloomberg, RBC Capital Markets

Exhibit 96: Long-dated Gilts at historical cheap levels versus various metrics

10s30s Gilt curve vs. front-end rate expectations



30-day rolling semi-annual excess returns of long Gilts vs. mediums



Source: Bloomberg, RBC Capital Markets

forward yields higher. We thus expect the move higher in yields to be driven by the 10y sector rather than the front end as we believe the MPC will only start hiking rates once there is enough evidence of inflation picking up, and the hikes thereafter will be gradual enough to ensure that the recovery in place is not derailed. Such an environment should be met with a steeper 2y vs. 10y term structure.

Long end to outperform in the sell-off, led by real yields

Long-end of the Gilt curve looks cheap across various metrics.

The long end of the UK curve has been under significant pressure since mid-August and now looks too steep versus the base rate expectations (Exhibit 96a). Also as Exhibit 96b suggests, the rolling semi-annual excess return of the long end versus the medium-dated Gilts is now close to all-time lows. We see scope of flattening pressure on the curve, not only on a directional move in a rising base rate environment, but also on the back of a number of structural factors we have highlighted in the past. Although insurance companies have been reducing their Gilt exposure, that reduction has been more than offset by demand from pension funds, which is now running at all-time highs (Exhibit 97a). This demand is likely to persist against the backdrop of maturing DB schemes (as more DB schemes are closing to new members and new contributions), which should lead to more hedging as liabilities are fully known (Exhibit 97b). The rise in the bulk transfer deals should also engender greater demand for long-dated fixed income assets.

Firm structural demand and declining supply should support longs in a rising rates environment.

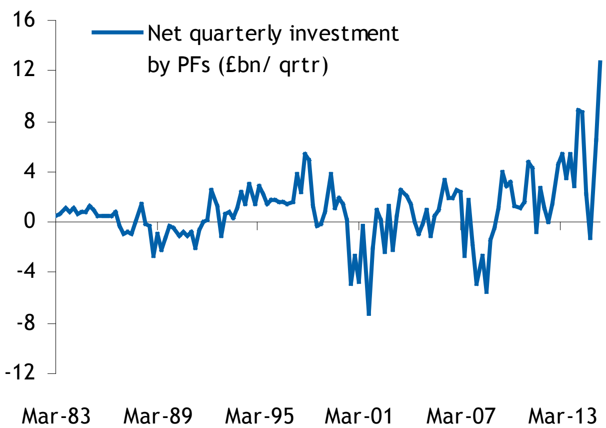
Expect real yields to outperform on dearth of real duration supply.

On the supply side, the Gilt market is gradually moving towards having net positive cash inflow over the coming years as coupons and redemptions more than offset the total supply, which is also declining gradually as a result of the government's fiscal tightening. Exhibit 98a demonstrates this effect – the supply estimates are judged as per the OBR's latest estimates on the illustrative gross financing requirements. This makes the net supply/demand dynamics quite favorable for the Gilt market, particularly for the long end where the natural regulatory demand exists. Admittedly, so far this year, the government has been running slightly short of the borrowing target (c. £5bn at this stage). However, central government receipts have been holding up pretty well and government expenditure is being constrained too, implying little chance of large revisions in Gilt issuance down the line. Any potential increase in the government's financing requirement for this fiscal year is likely to be accommodated by an increase in T-bill sales, in our opinion. Additionally, so far the current government has been biased to a faster pace of privatizations, which if maintained, would pose downside bias to the issuance schedule down the line. The outcome of the consultation on Pension Tax Relief possibly next year (where a single flat rate of pension tax relief seems

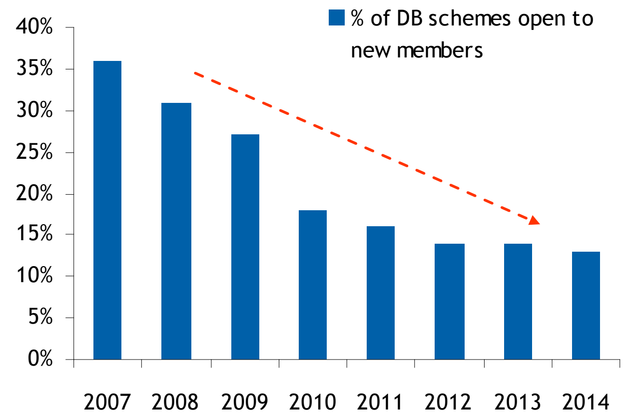
<u>Year ahead trade 2:</u> 10s30s Gilt curve flattener.

Exhibit 97: PF asset allocation trends favour long-dated Gilts

Pension fund demand for Gilts running at all time highs



DB schemes are maturing as more of them are closing to new members



Source: ONS, Purple Book, RBC Capital Markets

likely) could also reduce the government's cash requirement in subsequent years. The BoE's latest decision to continue re-investing maturing APF principal will also exert downward pressure to net supply.

Year ahead trade 3: Long 30y UK breakevens.

A combination of these factors should see the long-end yields outperform in a gradually rising rate environment. We expect the move to be led by real yields as a) PF liabilities are inflation linked and thus there is natural demand for IL stock; b) the market is set to face scarcity of real duration supply over the next two years, as the stock of IL Gilts in market hands is starting to plateau on the back of IL redemptions (Exhibit 98b); and c) IL Gilts have underperformed considerably versus the nominal counterpart of late, with the regression weighted 30y real yields are now close to their six-month highs (Exhibit 99a).

Regulations have been important drivers of swap spreads but Solvency II effect should wane in 2016

30y spreads are at cheapest levels since 2009 while 5-10y spreads have remained relatively stable.

Long dated swap spreads have come under intense pressure this year (cheapest since 2009), particularly since September, while the shorter-dated spreads have remained relatively stable (Exhibit 99b), albeit having started cheapening recently following the move in US spreads. While a broader market rally, increased long end issuance pressure as well as deterioration in the equities-to-Gilts switch ratio are partly to blame for the pressure on long-end spreads, we believe the key reason behind this cheapening is the regulations on insurance companies in the form of Solvency II Directive (to be implemented from January 2016).

Solvency II-related switching likely the key factor but insurance companies have been net sellers of Gilts since 2011.

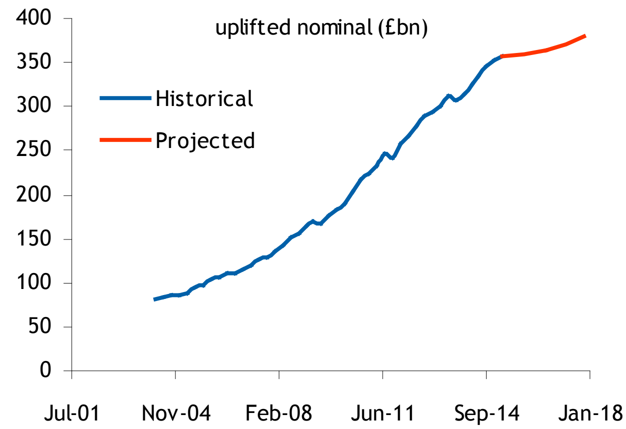
Under Solvency II, insurance companies will have to discount their liabilities using the swap curve (instead of Gilts), which will leave holders of Gilts subject to swap spread risk. The Prudential Regulatory Authority (PRA) has explicitly stated that "*the discounting of liabilities with the 'relevant risk-free rate term structure' derived from interest rate swaps may give rise to a risk that the spread between sovereign bond yields and the relevant risk-free rate changes ('gilt-swap spread risk').*" According to the PRA, such risks should be included in firms' internal models and they would need to hold additional capital against a 1-in-200 year move in swap spreads. Ahead of the implementation of Solvency II into next year, we believe switching activity out of Gilts into swaps, particularly in H2, has led to the sharp underperformance in 30y spreads.

Exhibit 98: Net supply in Gilts set to decline over the coming years, particularly in index-linked Gilts

Net supply in Gilts will fall dramatically over the coming years

	Gilt issuance, £bn	Redemptions, £bn	Coupons (conv+IL), £bn	Net supply, £bn
2016-17	120	70	43	7
2017-18	105	79	41	-15
2018-19	70	67	38	-35
2019-20	80	93	36	-49
2020-21	60	64	35	-39

Stock of IL Gilts in markets' hands (uplifted nominal, £bn)



Source: OBR, DMO, Bloomberg, RBC Capital Markets estimates

Structural demand for long-end Gilts not seen diminishing; pension funds remain record buyers and supply is declining.

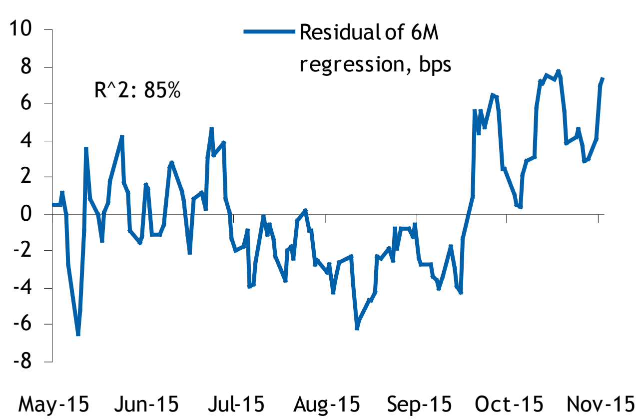
However, as we head into next year, much of this switch activity should already be behind us. Additionally, as Exhibit 100a suggests, insurance companies have been reducing their Gilt exposure since 2011 and recent disinvestments have accelerated only at a modest pace (as per the latest ONS data), and this has not been a deterrent to the net positive demand for long-dated Gilts (as pension funds have been increasing their exposure). Moreover, as already highlighted, we see net supply dynamics over the coming years also favouring long-end cash on a relative basis.

Rise in repo margins another driver, but its impact should be felt across the curve.

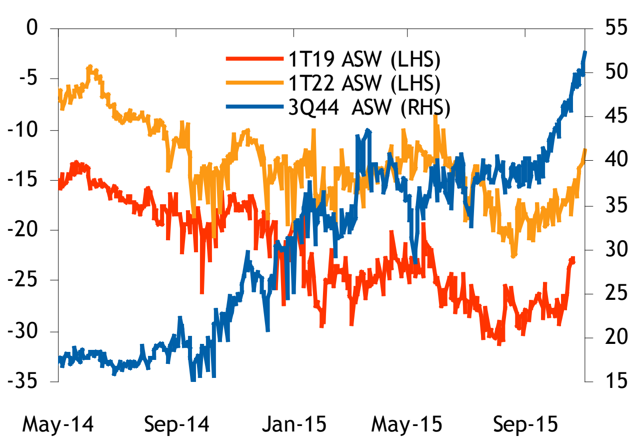
Another driver behind the cheapening in spreads that is being talked about is rising pressure on repo margins in Gilts, which has made funding bond positions more expensive (Exhibit 100b). While there appears to be a good correlation between rising repo cost and cheapening in 30y spreads, we argue that the effect of this should be felt across the curve, also affecting 10y spreads and not just the long-end of the curve.

Exhibit 99: Long linkers have cheapened versus nominals; long Gilts have cheapened on asset swap

30y real yields cheap vs. nominals with residual at 6M highs



5-10y swap spreads were broadly stable in 2015 while 30y spreads cheapened dramatically



Source: Bloomberg, RBC Capital Markets

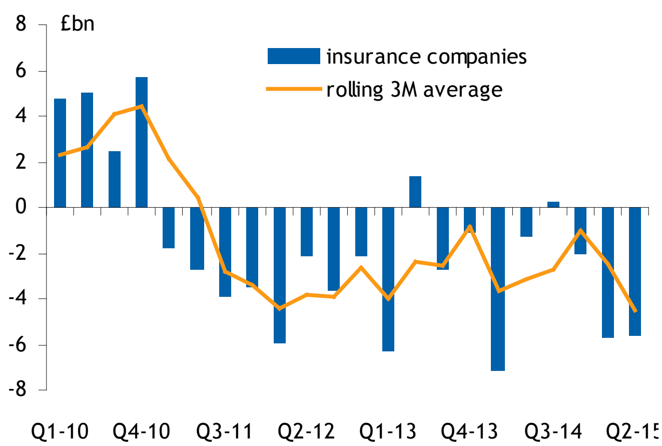
EU referendum risks should have bigger impact on 10y spreads.

<u>Year ahead trade 4:</u> Buy 30y on ASW vs. the 10y.

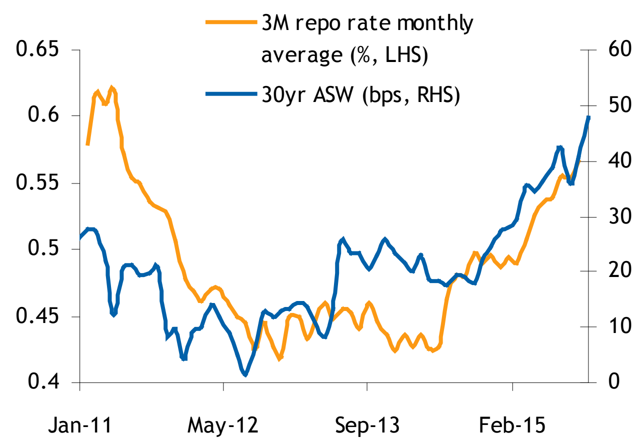
Over the next year, we believe several factors that have been behind cheapening in long-end spreads are likely to wane and we like fading further cheapening in 30y spreads versus the 10y spreads. The box spread is at its steepest level since early 2009 and offers good risk/ reward, in our opinion. Although lessons from the Scottish referendum and the general election suggest that markets react to any political event only very close to the time, renegotiations around UK's future in the EU and the associated uncertainty could have a damaging impact on investor confidence. This is likely to predominantly affect foreign investors' appetite for sterling assets and hence makes the 10y sector vulnerable on a relative basis.

Exhibit 100: Investment trends by insurance companies; rise in Gilt repo rates on increasing regulations

Insurance companies have been net seller of Gilts since 2011



Rise in repo rates and cheapening in 30y ASW



Source: ONS, BoE, Bloomberg, RBC Capital Markets

Exhibit 101: Key UK year-ahead trades

Trade	Entry date	Entry level	Current	Target	Stop loss	3mth carry	P&L[1]	Status
Short-end curve steepener Pay GBP 2f1y vs. 1f1y	18-Nov-15	37 bps	37 bps	75bp	24bp	+0.25bp	-	Open
Long-end curve flattener Buy UKT 3.5% 2045 vs. UKT 2% 2025	18-Nov-15	71 bps	71 bps	40bp	80bp	-2bp	-	Open
Wider UK breakevens 30yr BEI widener	18-Nov-15	332 bps	332 bps	365bp	320bp	-2bp	-	Open
10s30s ASW box flattener Buy 3H45 on ASW vs. 2s25	18-Nov-15	63 bps	63 bps	40bp	70bp	-	-	Open

[1]accounting for cost of carry and transaction costs

Source: ONS, BoE, Bloomberg, RBC Capital Markets

GBP: Positive outlook, but with growing risks

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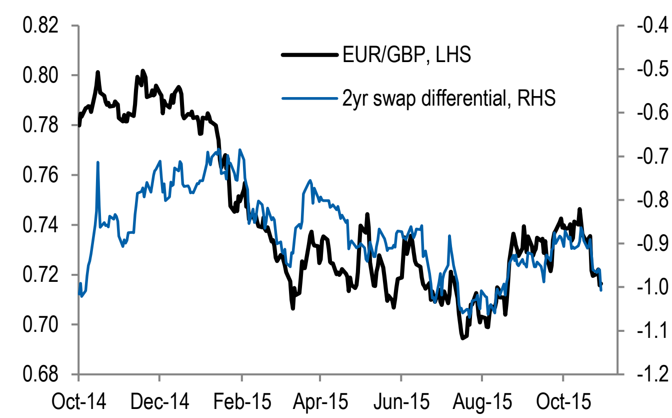
Conventional monetary policy expectations to drive GBP higher against almost all G10 currencies into 2016

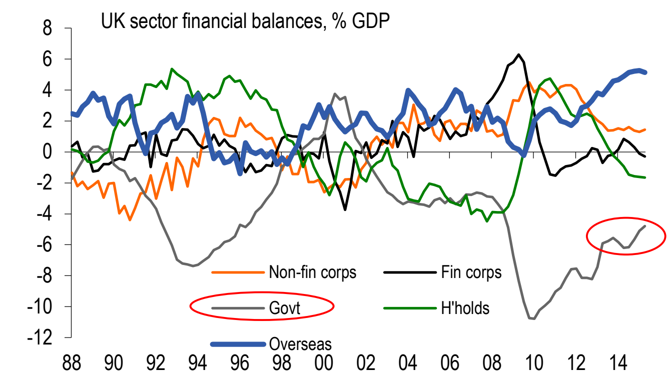
We remain constructive for GBP, largely on the back of conventional policy expectations, but recognise there are a number of downside risks that may rise up the agenda in 2016. As markets move to fully price in the start of Fed normalisation and a somewhat steeper path thereafter, a major side effect should be higher rate expectations in the UK. GBP outperformance on the crosses, therefore, remains a theme in our forecasts, with EUR/GBP expected to break back below 0.70 in the early part of 2016 and GBP outperforming all other G10 currencies, with the exception of USD, during that time horizon.

Exhibit 102: GBP a positive rates story, but with growing risks

GBP is a vanilla (positive) rates story



Imbalances are a negative risk…



Source: RBC Capital Markets, Bloomberg

Further into 2016, there are two key risks for GBP: the UK's unsustainable current account deficit and the EU referendum, promised for end-2017 at the latest. We think both are manageable, however, and the current account may actually strengthen the case for GBP outperformance. We have argued for some time that the UK's external deficit is largely a public sector phenomenon and this is still true, but it is becoming less so as the household sector slips into deficit. Looked at in terms of its domestic imbalance counterparts (see Exhibit 102), the bulk of the current account deficit is still explained by the budget deficit and so long as the government's strategy to reduce the deficit remains credible, the deficit should remain fundable.

We still see the current account as a risk to a positive GBP outlook rather than a reason to be bearish

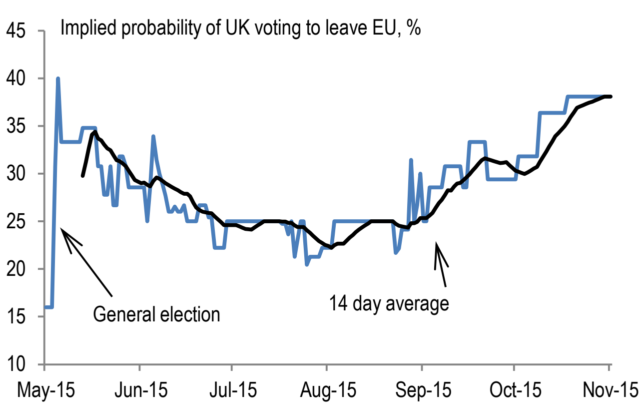
In recent quarters, however, the domestic private sector – notable households – has also started to slip into deficit. Although the household deficit is still historically small for this stage of the economic cycle, as it grows, the policy prescription is slowly shifting to tighter monetary *and* fiscal policy rather than fiscal policy alone. Higher policy rates (in-line with our expectations) should allow the external deficit to be resolved in a constructive manner that does not "require" a weaker currency as part of the adjustment process, but we also have to recognise that the downside risks for the currency are growing, should the MPC not deliver tighter policy.

As to the rising risk of UK EU exit, on the face of it, there are reasons to think GBP should carry a rising risk premium as the referendum draws closer. The most recent YouGov poll showed a small (2pt) balance in favour of voting yes to leaving the EU after a year of clear majorities to stay in. Meanwhile, the probability of UK exit implied by quoted betting odds has risen to a post-election high of 38%, and it is not unreasonable to think the risk premium embedded in UK assets may have increased somewhat over the same period (Exhibit 103). Estimates of the magnitude of the economic shock that would be associated with UK exit vary widely, though most agree the short-term impact would be weaker activity and directionally, it is hard to see this as anything but negative for the currency. How the probability of UK exit evolves therefore should matter more as the referendum draws closer (end-2017 at the latest).

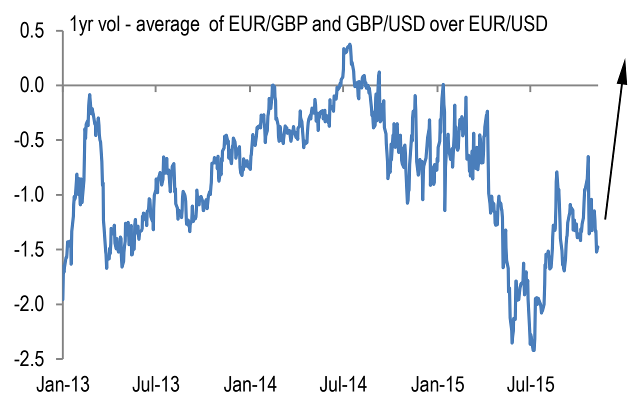
In the longer term, according to the polls, the balance of UK opinion has almost always been in favour of staying in. Periods where the balance has shifted in favour of exit have typically been brief and generally associated with a particular EU issue (previously the worst of the peripheral crisis and currently, most likely, the migrant crisis). The balance of opinion still is in favour of remaining in the EU when pollsters add a qualification that the government recommends voting to stay (which it very likely will). Given this, and the significant repricing of exit risk that appears to have already taken place, we think it is appropriate to treat a further rise in the implied UK exit risk as a tail risk rather than something to incorporate in our central view. We maintain a moderately constructive long-term view on GBP, though we are mindful that the risks around this view are unusually large, something that may not be fully reflected in market pricing (Exhibit 103, second panel).

Exhibit 103: Exit risk premium should be rising

…as is EU exit risk



GBP vol premium should rise



Source: RBC Capital Markets, Bloomberg

Australia: One foot in EM/China, the other in DM favours a steeper curve

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- Another year of sub-trend activity beckons in 2016, with domestic demand to ease further as dwelling activity peaks while the adjustment lower in mining capex and the terms of trade continue. In part, the latter captures a similar dynamic in the maturing Chinese economy with some lurking risks. Net exports will underpin AU growth as LNG exports increasingly come on stream, although national income growth should remain modest.
- Core inflation is set to remain comfortably in the lower half of the RBA's 2–3% target range despite a weaker currency, as wage and/or unit labour costs stay sluggish. We expect the unemployment rate to remain sticky in an elevated 6.00–6.25% range for much of 2016.
- There is scope for the RBA to cut further, but the hurdle is high, and the RBA's reluctance is clear. Risk reward favours a terminal cash rate of 1.50%. This should anchor the front end in H1 while the AU long end faces a number of challenges including likely higher UST yields. We favour a steeper curve.
- There are a number of noteworthy events in 2016 that could affect markets—the first Commonwealth Budget of the new Turnbull government, a Federal election, and a change of the RBA's Governor.

A familiar story with sub-trend growth to continue in 2016

Another year of subpar growth beckons as domestic demand stays subdued.

Australia moves into the end of 2015 with growth continuing to underwhelm amid another year of sub-par activity as the economy continues to adjust to two key factors: the ongoing decline in mining capex and the continued adjustment lower in commodity prices and terms of trade. The rotation of growth away from mining-driven capex to the non-resource economy continues, but the pace and breadth remains disappointing with early signs that the residential construction upswing is likely to peak in early 2016. Headline growth is running around 2.0–2.5%, with an even more subdued pace of domestic demand, incomes, and nominal growth.

National income growth will remain tepid but should trough in 2016.

We expect GDP of 2.5% in 2016, slightly firmer than 2015, with a further weakening in domestic demand as residential construction peaks in Q1/16, consumption remains below its long-run trend, as incomes stay sluggish and mining capex continues to drag on activity. Output, however, should be supported by a further strengthening in net exports as LNG exports begin to come on stream more fully. Nevertheless, in a familiar theme of the last few years, measures of national income and nominal GDP will continue to fall well short of the traditional output measures, underscoring the soft underbelly of growth.

Exhibit 104: Macro & key rate forecasts

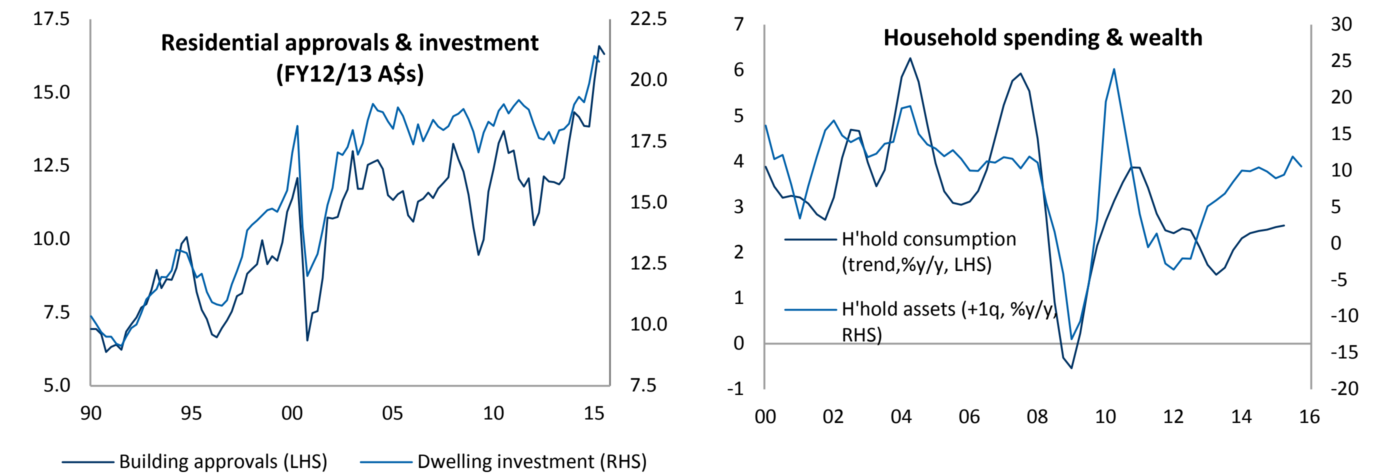
RBC forecasts	Q1-16	Q2-16	Q3-16	Q4-16	Q1-17	Q2-17	Q3-17	Q4-17	2016	2017
									annual averages	
Real GDP (% q/q)	0.6	0.7	0.7	0.8	0.9	0.7	0.7	0.7	2.3	3.1
Household consumption (% q/q)	*0.6*	*0.7*	*0.7*	*0.7*	*0.7*	*0.8*	*0.8*	*0.8*	*2.5*	*2.9*
Government spending (% q/q)	*-0.5*	*-0.3*	*-0.3*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*-1.1*	*0.0*
Business fixed investment (% q/q)	*-2.5*	*-1.7*	*-1.5*	*-1.3*	*-0.8*	*-0.8*	*-0.6*	*-0.6*	*-8.6*	*-4.0*
Net Exports (ppt contribution)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.5*	*0.6*	*2.2*	*2.4*
Headline CPI (% y/y)	2.6	2.7	2.8	2.6	2.6	2.6	2.7	2.8	2.6	2.8
Core CPI (% y/y)	2.0	2.1	2.4	2.4	2.4	2.4	2.5	2.5	2.4	2.7
RBA cash rate target (%)	1.75	1.50	1.50	1.50	1.50	1.50	1.75	2.00	…	…
ACGB 10y Yield (%)	3.10	3.10	3.25	3.50	3.90	4.15	4.55	4.85	…	…

Source: Haver, RBC Capital Markets

Residential construction is set to peak in H1/16 with broader implications for confidence, consumption and employment.

A strong residential construction upswing continues, with this sector the bright spot in activity and underpinned by historically low mortgage rates, firm population growth, a lower currency, and an ongoing shortfall in housing stock. Construction has been concentrated in multi-story and apartment complexes amid an increasing shift to higher-density urban dwellings, with building approvals for this segment near a historically high 50% of total approvals. A peak in lending for the construction of dwelling in late 2014 and a peak in total building approvals in Q1/15 point to a downturn in residential construction activity by early 2016, with pockets of oversupply already emerging in inner city Melbourne and Brisbane. Coupled with some easing in population growth and the effect of tighter macro prudential measures, moderation in the suite of housing-related indicators in Q4/15 is likely to continue in 2016. We expect dwelling investment to rise by 3% in 2016 following a 9% gain in 2015, with the risks balanced assuming further easing from the RBA.

Exhibit 105: Housing likely to be less supportive of activity in 2016



Source: Haver, RBC Capital Markets

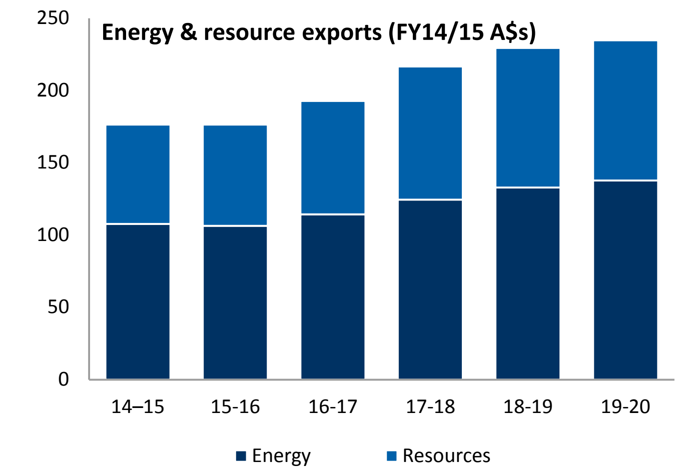
The buoyant housing story of the last couple of years has kept the risks to our household consumption forecasts largely balanced, although our core theme during this period has been for below-trend expenditure, given weak wages growth, patchy confidence, and an elevated unemployment rate. In part, this largely reflects the ongoing adjustment lower in the terms of trade and weak national income picture. Some run down in the household savings rate appears consistent with this. We see little change to the consumption narrative in 2016. While we expect a modest decline in the terms of trade next year (-3% compared with -9% in 2015), the outlook for housing will likely be less supportive for the consumer. We are mindful of the disproportionate effect that housing market developments appear to have on consumer confidence. Two additional structural headwinds for households persist 1) a historically high level of household debt and 2) structurally weaker wages growth amid a need to be more internally competitive, especially compared to AU’s major trading partners. Our forecast for household consumption remains stuck at 2.5% in 2016, which would be a similar pace to 2015.

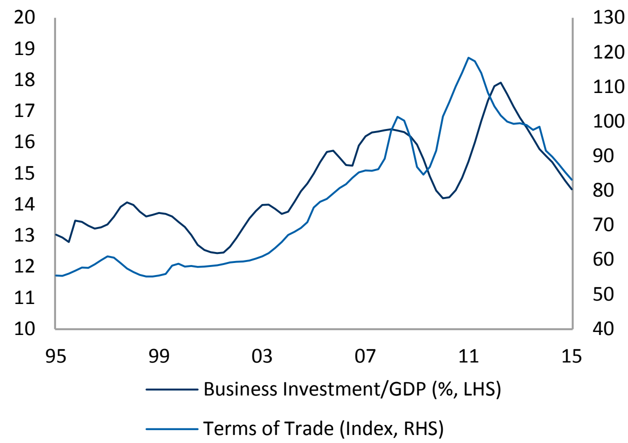
Are there any bright spots? Exports leading the way

Can the new Prime Minster & Cabinet shift business confidence higher on a sustained basis?

Total business investment will remain a drag on activity as the mining capex downturn continues. After peaking at near 7% of GDP, mining capex is currently around 4% and moving closer toward its long-run average of just under 2%. Further adjustment will reflect the completion of projects, with all key forward indicators confirming virtually no new significant mining spending in the pipeline. This is neither unexpected nor surprising and has long been our base-case view. The drag on growth is tempered by our assumption of a modest pickup in non-mining capex including increased infrastructure spending. There are tentative signs in the leading indicators (non-residential approvals and work yet to be done concentrated in roads and rail) and are consistent with firmer business conditions and confidence. While it remains early days, a renewed focus on the economy and need for increased competitiveness and other reform under the new Prime Minster, Treasurer, and revamped Cabinet should be more supportive of business confidence and expenditure. We expect business investment to fall by ~9% in 2016 marking the fourth consecutive year of decline. The risk still remains skewed to the downside, given the tepid domestic demand environment and ongoing uncertainty over global growth.

Exhibit 106: LNG exports start to step up in 2016 and 2017





Source: Haver, Department of Industry, RBC Capital Markets

LNG exports increasingly to contribute to income. A more modest decline in the terms of trade is likely in 2016.

Net exports will remain the key contributor to growth with further gains assisted by LNG exports coming on stream. Two key plants (GLNG and APLNG) recently started to export, with the mighty Gorgon project on track to begin exporting in Q1/16, and Wheatstone, Prelude, and Ichthys are scheduled for late 2016 and more so in 2017. By the estimates of our energy analysts, AU will be the largest supplier of global LNG by 2018. Pre-negotiated volumes of these long-term contracts are expected to be honoured, but prices are not set and will largely track the fortunes of oil. We note that a large portion of revenue will be repatriated offshore, given the global structure of these oil & gas companies. Nevertheless, the new and additional income stream is welcome and should help stabilize national income growth despite another likely decline in the terms of trade. Nevertheless, such a fall should be more modest in 2016 (RBC -3%) compared with 2015 (-9%), although we remind investors that the demand and supply dynamics for key bulk commodities, especially iron ore, remain challenging. Our bulk analysts continue to look for further considerable global iron ore supply in 2016 of 90mn tons following 105mn in 2015.

A number of trade agreements bode well longer term, with increased near-term export competitiveness continuing.

Export services should also continue to garner support from the more competitive currency, which we expect to edge modestly lower over the next 12 months (0.65 by YE2016). The effect of 25% depreciation in the currency over the last 18 months is evident in the sharp improvement in the tourism trade balance and education exports. Nevertheless, we caution that they remain modest in net terms compared with the bulk commodities that dominate the exports profile. In part, this continues to explain persistently large monthly trade deficits. Longer term, the recent signing of the TPP and a number of free-trade agreements, with the Chinese-Australian agreement likely to be ratified before year end, bode well for services export potential.

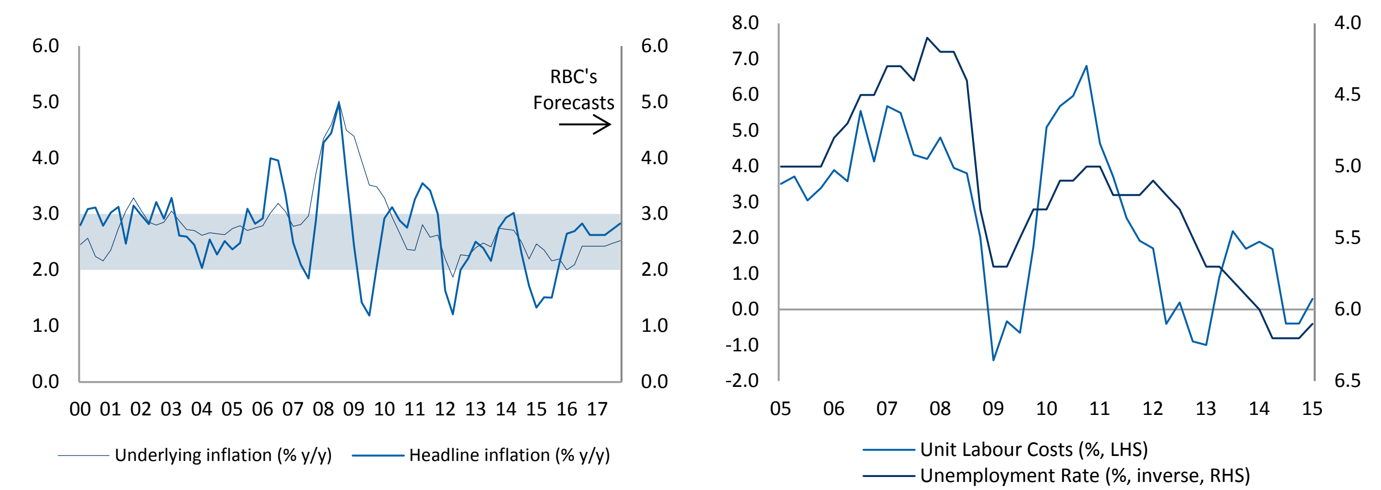
Finally, there is likely to be some fiscal slippage in the near term, and we note that discussion has stepped up over the need for greater infrastructure spending, which is an emerging global theme that could garner some momentum. This could lend some support to near-term activity, although at this juncture, and ahead of MYEFO in December and the 2016–17 Commonwealth Budget, we expect new Treasurer Morrison to signal a commitment to medium-term fiscal consolidation.

Core inflation to stay closer to the bottom of the target range

Weak growth in unit labour costs suggests little change in core inflation in 2016.

Continued tepid domestic demand and an elevated unemployment rate suggest that core inflation is set to remain comfortably in the bottom half of the RBA's 2–3% target range, even assuming some pickup in tradeable inflation. Indeed, we remain surprised by the lack of pickup in this component of inflation given the depreciation of the currency. A persistent squeeze on margins and profits is not sustainable. Nevertheless, we are mindful of the more important driver of inflation—wages and unit labour costs, which remain particularly benign and the latter in negative territory in annual terms for much of the last 12 months. In part, this reflects ongoing labour market slack, with the unemployment rate stable but elevated at 6.00–6.25% but, more importantly, a continued and necessary structural adjustment to increase competitiveness. By international and major trading partner standards, AU remains a high-cost nation. This also appears to be keeping the unemployment rate lower than would normally be associated with persistent subpar activity. We expect it to remain sticky over the next few quarters, with some upside risk to our forecast for 6.25% by mid-2016 and 6% by YE2016. Consistent with the tepid wages narrative, there appears to be rotation in employment underway, with job creation heavily concentrated in services (health, education, and retail) amid continued shedding in (higher-paying) mining and ancillary jobs, with some paring back in construction employment emerging as well.

Exhibit 107: Core inflation to stay close to 2.25% in 2016



Source: Haver, RBC Capital Markets

Accordingly, we expect core inflation to end 2016 at 2.25%, which would be similar to its current pace. The risks are balanced, but increasingly, we wonder whether the outlook for inflation is, in part, a function of the general global disinflationary backdrop, which persists even in those economies with reasonable momentum, strong labour markets, and declining slack.

Scope for the RBA to cut further, albeit reluctantly

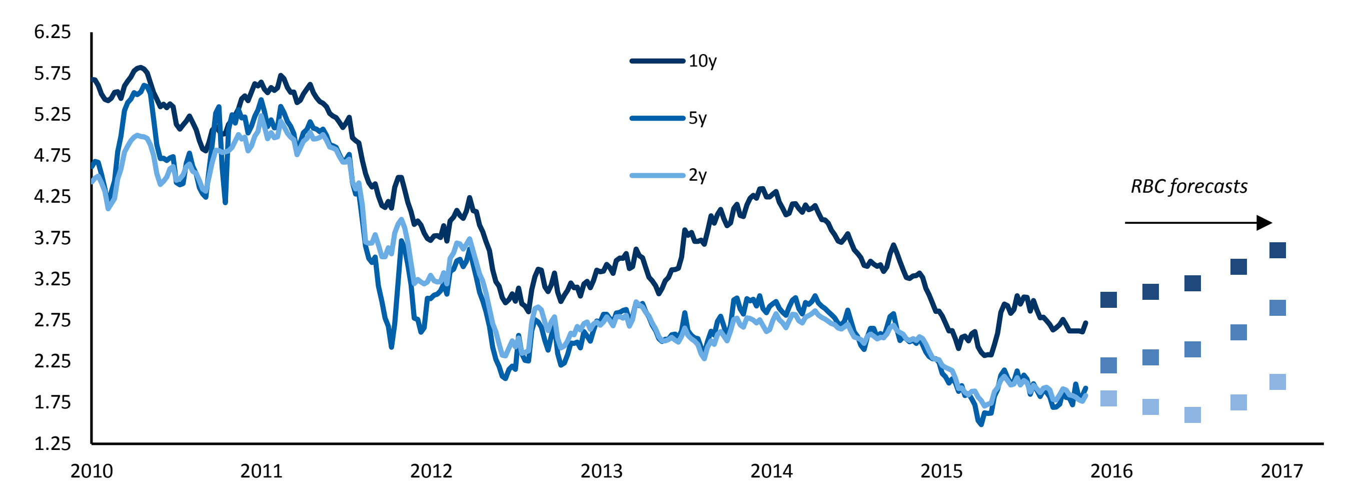
Further rate cuts likely in 2016 as this long and protracted easing cycle continues.

After lowering the cash rate twice in H1/15, the RBA maintains an uncomfortable easing bias and clear reluctance to move below the current 2%. However, this has been the case for much of the last couple of years. The key drivers of this current easing cycle—capex drag, lower terms of trade, and weak national income—remain intact and reverberate through a number of channels. Australia needs both a lower cash rate and lower currency, but we maintain that the hurdle to cut further remains high. To our mind, three key developments are necessary. Firstly, the underlying growth pulse needs to weaken further, especially across the rate-sensitive sectors—housing, lending, and consumption—and underpin some moderation in the pace of employment. Maintenance of the current sluggish pace of activity is, on its own, unlikely to be enough. Secondly, global central banks will need to be moving in the direction of more rather than less accommodation. And thirdly, the currency will need to prove resilient. All three are underway to varying degrees, but the RBA will need to see these trends continue and possibly intensify. We have cautioned previously that this is likely to be a long, drawn out easing cycle, which will frustrate at times. We maintain a 1.50% terminal cash rate in 2016 with the next cut in Q1 and mid-2016, and some risk that these moves are delayed. We are also mindful of a number of unusual factors next year that may well influence the policy debate, including the new treasurer's first budget in May, an election due around September, which could happen earlier and the end of Governor Stevens' term in September.

Cyclical support, structural headwinds point to a steeper curve

We expect the front end to remain reasonably well anchored and find support in the months ahead when two years trade close to 2% or above. Two-year yields are likely to oscillate around current cash into 2016, as the RBA debates ebbs and flows, as has been the case over the last six months. We expect two-year yields to trade around 1.75% for much of 2016, as a lower cash rate is eventually delivered but is likely to be on a modest upward trajectory by H2, and we target 2% by YE2016. We prefer to buy and/or receive the front end either outright or against another market in H1, although we also like taking advantage of tactical opportunities to sell when the market is fully priced for our base case and have done so on a number of occasions throughout 2015.

Exhibit 108: Front end will remain anchored, 10-year yields moving higher in 2016



Source: Haver, RBC Capital Markets

Curve bias steeper as higher UST yields and less favourable demand and supply dynamics for long end AU unfold.

We continue to favour a steeper medium-term cash curve. In part, this reflects our RBA view and some increased regulatory demand for ACGBs (with ADI balance sheet HQLA already heavily skewed toward semis). It also reflects our expectations for higher UST yields, although we also think that there may be some independent factors weighing on the AU long end with the demand/supply dynamics less favourable. Supply of ACGBs remains at a near-record level and is unlikely to change materially in the next 12–18 months with issuance concentrated in the long end. A maturing in demand from official money, declining yield pickup, and a less robust AAA stable rating suggest that offshore demand (which accounts for around two-thirds of outstanding ACGBs) is unlikely to be as strong as recent years. Expectations of higher global yields in 2016 and better investment opportunities are broadly consistent with this. Indeed, the shift in global capital is already occurring.

In part, our expectations for limited contraction in the benchmark 10y AU-US spread reflect these increased challenges for AU. Despite the likely divergence in central banking policy, we do not expect this spread to test new lows and think that it will remain largely contained in a 40–75bp range for much of 2016. Rather, it is the AUD/USD that may well be a better barometer of such challenges and policy divergence, although this will be less apparent on a TWI basis.

New Zealand: Headwinds to persist as growth slips further in 2016

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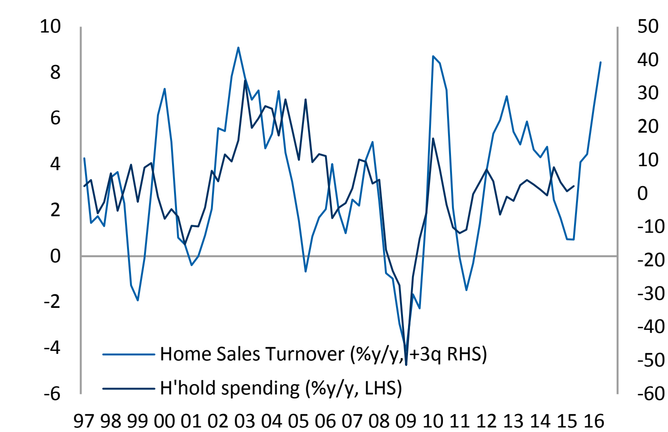
- Growth is likely to decelerate further in 2016 as the economy adjusts to weaker terms of trade. Looser financial conditions will provide some offset.
- Disinflationary forces persist and will likely see headline CPI undershooting RBNZ forecasts again by YE2016.
- We see the OCR entering 2016 at 2.50% and staying there, though risks are skewed to the downside.

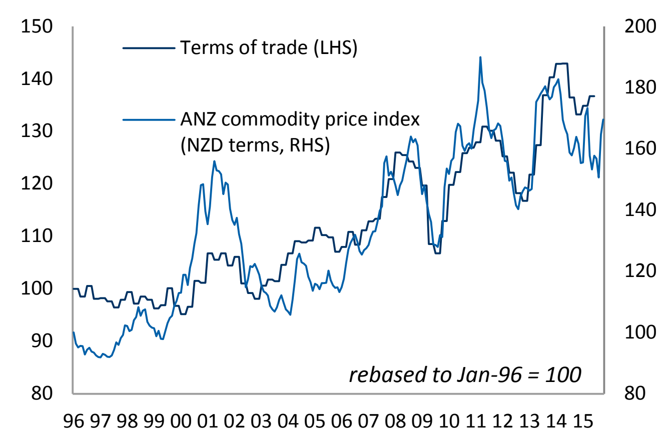
Growth to slow further in 2016

Decline in terms of trade through 2015 to provide significant headwinds.

The decline in the terms of trade through 2014–15 and the respondent loosening in financial conditions as facilitated by the RBNZ will be key determinants of the economy's directions through 2016. On the former, survey data suggest a sharp response by the private sector with regard to capital spending and hiring plans. Official labour market data have been suitably weak, and we expect the early 2016 data on private non-residential investment to carry a similar tone. Looser financial conditions will assist growth in trade-exposed and interest rate-sensitive sectors, though the decline in the exchange rate should not be overstated; it is down less than 10% since the start of 2015 on a trade-weighted basis. Moreover the uplift from looser financial conditions will be curtailed by 1) the imposition of more regulation on residential property lending and 2) the declining share that goods-producing industries represent in the economy. Nonetheless, notwithstanding the recent tightening in lending regulation concentrated on Auckland, there are reasons to think the wealth effects from a resurgent housing market will help provide offset to weaker household income in terms of consumption, and the weaker exchange rate looks to be encouraging an improvement in net tourism flows.

Exhibit 109: Tailwinds of housing market to help household spending, though weaker terms of trade working in opposite direction





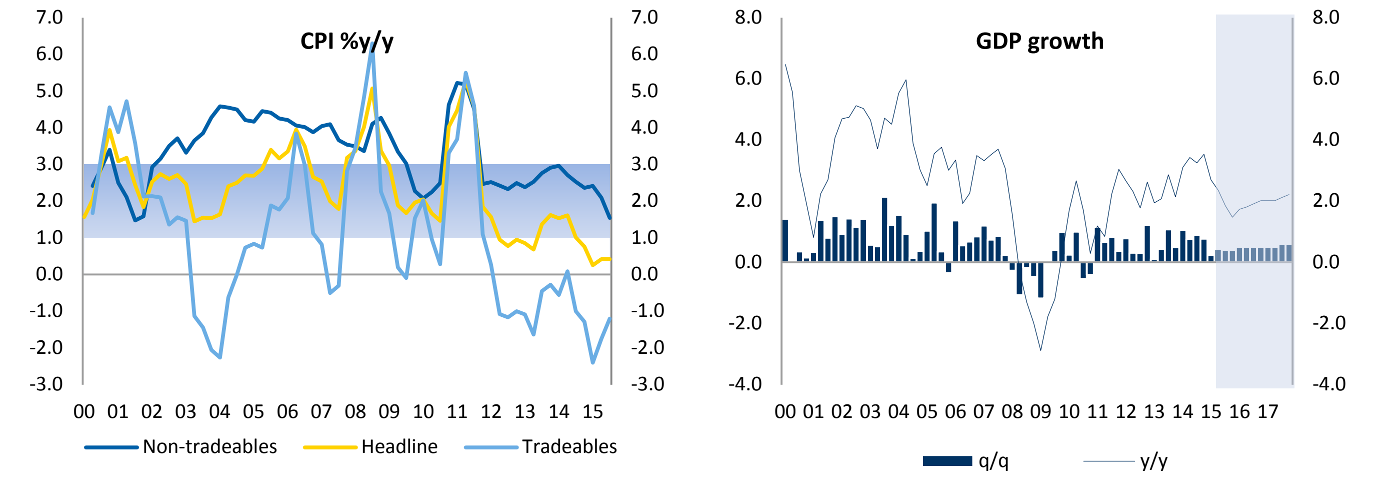
Source: Haver, RBC Capital Markets

Spare capacity to grow as growth remains below potential.

We see the above scenario resulting in output growth of just under 2% for 2016, which would be a shade weaker than what we expect 2015 growth will turn out to be (2.1%). While supply-side growth is likely to slow as net migration moderates and the participation rate steadies, there can be little doubt that this rate of growth will push the output gap wider. A shift to ~2% growth has been enough to push the unemployment rate steadily higher in recent quarters, and though we expect the pace of the increase to moderate, its direction will likely remain upward.

Underlying inflationary pressures are likely to remain modest through 2016. The economy was unable to generate much wage pressure even with a declining unemployment rate, so it is difficult to see how labour costs provide anything other than a flat or disinflationary pulse through the year. The rise in headline CPI that we expect reflects the lower NZD pushing prices of tradeables higher. Still, we expect that headline CPI will only finish the year at 1.5%, and that as exchange rate effects wash out, the rate of headline inflation will remain in the bottom half of the RBNZ's 1–3% target zone having undershot the target since Q3/14.

Exhibit 110: Inflation to undershoot again by YE2016 as growth remains below potential



Source: Haver, RBC Capital Markets

RBNZ may need to see inflation undershoots occurring before thinking about moving below 2.50%.

We expect that the RBNZ will lower the OCR to 2.50% at its December 2015 MPS, in sympathy with the above scenario. Our base case for 2016, however, is that it remains on hold at 2.50% for the year. The likelihood that inflation undershoots RBNZ forecasts skews risks to a lower OCR. Yet this has not been a sufficient condition for easing in recent times; conversely, Governor Wheeler has shown a reluctance to ease despite continual overestimation of inflation. Of note, Wheeler in July described some analysts' forecasts for "large declines" from a 3.25% OCR at the time as being only consistent with the economy moving to recession. Recent research has estimated a neutral 3mn bill rate of 4.5%, which is higher than most private-sector estimates (we see 3.50–4.00%). Finally, a recent publication suggested satisfaction with its policy-setting framework, leading us to expect that the RBNZ will remain at the more conservative end of the policy spectrum.

Exhibit 111: Macro & key rate forecasts

RBC forecasts	Q1-16	Q2-16	Q3-16	Q4-16	Q1-17	Q2-17	Q3-17	Q4-17	2016	2017
									annual averages	
Real GDP (% q/q)	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	1.9	2.1
Headline CPI (% y/y)	1.1	1.0	1.2	1.5	1.6	1.6	1.6	1.7	1.2	1.3
RBNZ overnight cash rate target (%)	2.50	2.50	2.50	2.50	2.50	2.50	2.75	3.00	…	…
10y swap yield (%)	4.00	4.10	4.25	4.50	4.90	5.15	5.70	6.00	…	…

Source: Haver, RBC Capital Markets

AUD & NZD: Is the worst over yet?

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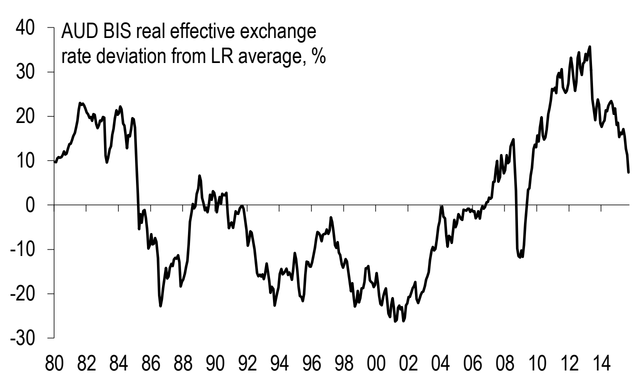
We target further losses for both AUD and NZD, though the pace of decline should slow.

AUD (down 14% vs USD) and NZD (down 16%) are the worst-performing G10 currencies year to date in 2015. With the AUD TWI down around 23% from the peak and the NZD TWI down 12%, can we yet say the worst is over and start to take a more constructive view? On balance, we think probably not, though the pace of underperformance, beyond general USD strength, should slow significantly in 2016. We target 0.65 and 0.63 as the respective lows in AUD and NZD, implying a slow drift down in the AUD/NZD cross. AUD and NZD weakness has reflected a 'perfect storm' of weaker external demand as Chinese growth has slowed, a (related) plunge in their respective terms of trade, and (again related) negative domestic policy dynamic.

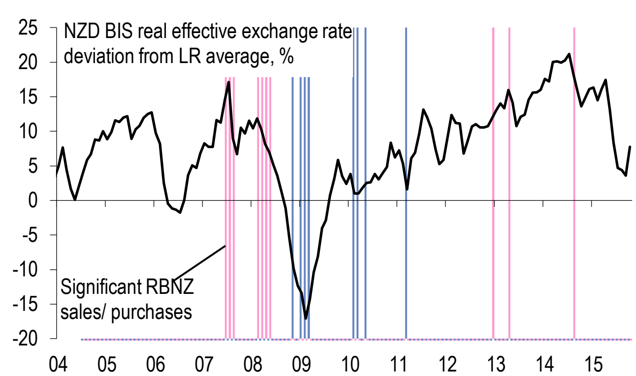
Looking forward, the latter factor is likely to remain a negative for both currencies, particularly in H1/16. RBA and RBNZ have both gone out of their way to suggest the hurdle is high for further reductions in policy rates, but in both cases, we think the hurdle will be cleared in early 2016. In the RBA's case, our economists remain of the view that this easing cycle is not about inflation (as is the case with some other central banks) but rather activity. Given the ongoing adjustment lower in mining capex, the terms of trade, and national income, they do not share the RBA's optimism on growth and so expect rates to fall in Q1, and again in Q2—beyond what is currently discounted by the forward curve. Although our expectations for Chinese growth are no worse than consensus, we think further easing—including a weaker CNY—will be needed for growth to meet expectations, and this has negative implications for AUD also (see below).

Exhibit 112: AUD and NZD still overvalued relative to historic averages

Real exchange rate still not back to 'normal'



NZD still overvalued



Source: Bloomberg, RBC Capital Markets

RBNZ Governor Wheeler has also repeatedly said that further easing would be dependent on incoming data and is not a foregone conclusion. Our economists think RBNZ's reluctance to ease will fade quickly enough for it to cut relatively soon. Inflation continues to undershoot the target with domestic pressures remaining limited at best. The RBNZ sees headline inflation returning to "well within the target range by early 2016," but our forecasts have headline inflation only at 1.5% by YE2016. As the RBNZ notes, "concerns remain about the prospects for slower growth in China and East Asia especially." Meanwhile, after the October rebound (almost 7% from the September low), the NZD TWI is already creeping back onto the policy agenda with RBNZ noting it "…could, if sustained, dampen the tradables sector activity and medium term inflation. This would require a lower interest rate path than would otherwise be the case."

A significant El Nino event would be negative for AUD and NZD, particularly relative to CAD.

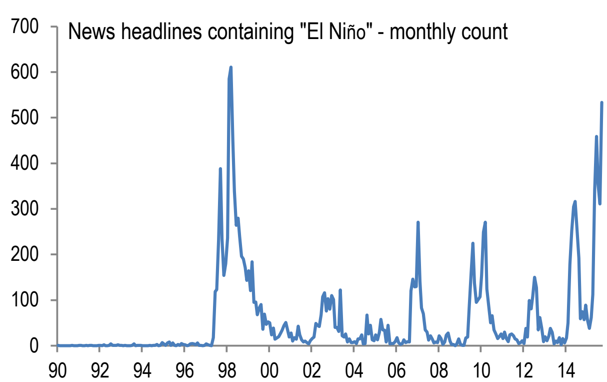
Beyond the domestic policy dynamics, two exogenous factors also pose downside risks to AUD and NZD. Firstly, although difficult to predict in both timing and magnitude, the risk of a significant El Nino event has risen to the point where many forecasters put the probability at 90% or higher. Historical experience and academic research on the economic effect of El Nino both suggest that the risk is to the downside for southern-hemisphere commodity producers (AU and NZ), particularly relative to northern-hemisphere producers (CA) that typically benefit from positive terms of trade shock but suffer little or no disruption to production. We looked at this issue in much greater detail in *Total FX*, May 15, 2015.

AUD weakness is the key G10 spill over from a falling CNY.

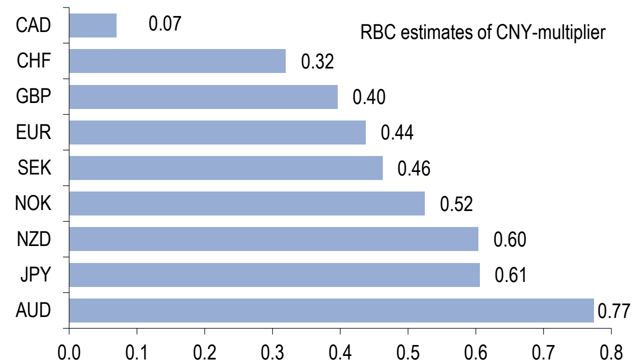
Secondly, AUD and NZD (together with JPY) are both relative losers from the spillover effects of CNY weakness. Exhibit 113 (second panel) shows our estimates of G10 CNY multipliers. For a 1% move in CNY against the currency concerned, the chart shows how much the currency would have to move against the USD to keep the overall exchange rate stable in effective terms. The multipliers are a direct reflection of the importance of China and the US in each country's external trade (exports plus imports). In Australia's case, for example, China is now so dominant a trading partner (26% of total trade—double the proportion of 10 years ago) that AUD/USD 'needs' to fall 0.77% for every 1% rise in USD/CNY to keep the overall exchange rate stable. Clearly, this is an oversimplification of the real world as we focus only on bilateral trade with the US and China, ignoring third-country effects. Nonetheless, the multipliers are a useful starting point in looking at what the spillover from CNY to other currencies might be and suggest that AUD and NZD weakness against other G10 currencies would be a likely consequence of the further rally in USD/CNY (to 6.95 in 2016) that we expect.

Exhibit 113: Two downside risks for AUD and NZD

El Nino risk is growing and is negative for AUD



CNY weakness has greatest implications for AUD



Source: Bloomberg, RBC Capital Markets

Commodity Strategy: Oil from end to end

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- **Geopolitics are not priced into the market at the moment, but given the numerous armed conflicts across the Middle East, the proliferation of ISIS, and high levels of economic pain among OPEC producers, there is a lot to watch as we approach an eventual rebalancing in the oil market.**
- **While demand remains an important factor, we see global supply bearing the brunt of that rebalance. We now expect WTI and Brent to average $58/bbl and $62/bbl respectively, with the mid-sixties likely proving a near-term cap for prices before an eventual push toward a longer-run equilibrium price.**
- **Commodity investor interest meanwhile has shifted year-on-year, with exchange-traded products arguably seeing more activity than other products, even index.**

Geopolitics: What does winning look like?

Amid the current oversupply, it is hard to argue that geopolitics are in any way priced into the oil market. However, the reality is that the Middle East has perhaps never looked worse; there are four active centers of fighting in addition to the continued Arab-Israeli conflict. With a rebalancing in the offing, the question remains, what risks are not yet priced in and given sustained low prices, who in OPEC has borne the burden of pain?

OPEC: The spectrum of pain

The market share strategy has not been pain free.

For OPEC, the decision to force the burden of adjustment onto other producers has not been pain free. As we have noted before, there is a wide spectrum of pain for these 12 sovereign producers between two extremes. At one end are the smaller, richer Gulf States such as UAE, Kuwait, and Qatar; they are perhaps the best positioned to ride out a 'lower for longer' storm. In fact, some of these governments felt secure enough to use the drop in oil prices as a catalyst to get their fiscal houses in better order by scaling back expensive subsidies. At the

Exhibit 114: OPEC Watch List – Relative risk scale

	Oil production (mb/d)		Geopolitical risk		
Country	2014	Last month	Change over past year	Risk for the next year	Comment
Saudi Arabia	9.67	10.38	3	6	Budget pressures continue to mount amid rising tensions.
Iraq	3.26	4.30	9	10	How long can oil remain immune from rising instability?
Kuwait	2.87	2.82	1	2	Small population, a lot of money, shock absorbers available.
Iran	2.79	2.70	6	3	Turn-around story of the year, has seen a reversal of fortune y/y.
UAE	2.77	2.97	1	2	Flush with cash and few citizens, UAE sits in the sweet spot.
Venezuela	2.46	2.50	7	9	Plenty of risk going into the December polls.
Nigeria	2.04	2.02	9	8	Elections bought time but December's amnesty decision is critical.
Angola	1.65	1.81	5	5	Once caught in a 27 year civil war, it's now a more stable member.
Algeria	1.12	1.10	5	7	A looming leadership transition looks to be a major risk.
Qatar	0.71	0.64	1	2	Reliant on LNG, Qatar's challenge will emerge later this decade.
Ecuador	0.56	0.54	5	6	Protests proliferating despite President's electoral track record.
Libya	0.45	0.43	10	10	Peace talks and efforts to restart exports have not borne fruit.
Scale:			*High -> Low*	*High -> Low*	

Source: Bloomberg (production data), RBC Capital Markets

Pain among OPEC producers could cause an involuntary outage.

other end spectrum, are the poorer, politically volatile producers such as Libya, Iraq, Venezuela, Nigeria, and Algeria. These countries were facing substantial political and security challenges prior to the price decline, and we continue to believe that these 'fragile five' OPEC members are at the greatest risk for significant instability and production problems in this price environment. Ironically, however, such an involuntary outage in any one of these countries could perhaps be the quickest path to materially higher prices next year.

Nigeria: One of the 'fragile five'

Nigeria looks particularly vulnerable.

Among the 'fragile five,' Nigeria is especially key to watch given its influential status for benchmark prices currently (*Oil Markets in Focus: A race to the bottom?*). Historically, Nigeria has experienced significant supply disruptions with armed militants occupying energy facilities, sabotaging pipelines, and kidnapping oil company personnel. The Movement for the Emancipation of the Niger Delta (MEND) shut in up to one-third of Nigerian production at times between 2005 and 2009. The expensive amnesty deal that facilitated the return of those barrels is up for renewal in December, and it is unclear whether President Buhari — an ex-general with strong anti-corruption credentials — is inclined or has the finances to do so. The Nigerian president, who is currently also serving as the oil minister, has already banned over 100 tankers from accessing Nigerian waters after accusing them of participating in the crude theft trade and orchestrated the arrest of several high-profile energy officials, including the former oil Minister Diezani Alison-Madueke and the Atlantic Energy Chairman, Olajide Omokore. If Buhari's pledge to clean the house extends to the former MEND militant leaders who remain heavily involved in the crude theft, it could lead to a return to the type of militancy that previously put so much of production at risk.

Saudi Arabia: In the red

While the kingdom still has bandwidth to cope, all may not necessarily be well.

In terms of OPEC's official strategy, Saudi Arabia remains firmly in the driver's seat and is the only one that can really cause a calculated course correction. In our view, the Kingdom still sits somewhere in the middle of the spectrum of pain; it is not nearly as comfortable as the rest of its GCC neighbors, but it is not yet on life support like some of the 'fragile five'. That said, the economic costs of the market share strategy continue to mount.

The new leadership has only been able to sustain high levels of social spending and pursue expensive foreign policy initiatives through drawing down its ample reserves and by resorting to borrowing. After years of running surpluses, the IMF has warned that the country's deficit

Exhibit 115: Key Saudi figures

Source: Wikimedia, RBC Capital Markets

will exceed 20% of GDP in 2015; likewise, its FX reserves have slipped from $745.8 billion in August 2014 to $646.9 billion in September 2015. In addition to resorting to domestic borrowing for the first time since 2007, the Kingdom has also withdrawn around $70 billion from overseas asset managers. In late October, the S&P downgraded Saudi Arabia's foreign and local currency sovereign credit ratings from 'AA-/A-1+' to 'A+/A-1' with a negative outlook citing a "pronounced negative swing" in the country's fiscal balance and warned that further ratings cuts could be looming if the country cannot make the necessary adjustments.

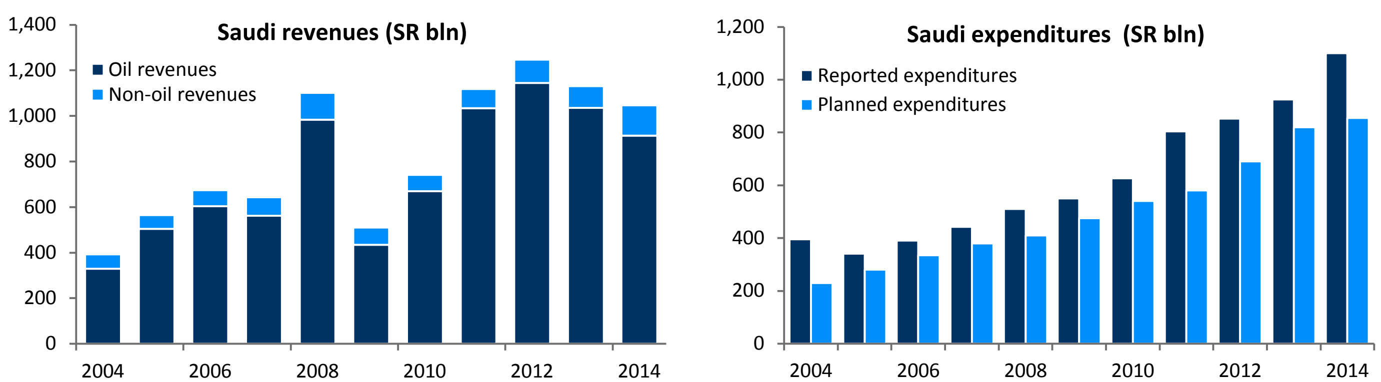
MBS' rise to power has been meteoric.

At the same time, a series of reports by leading Saudi experts has detailed growing divisions within the royal family over the economic and foreign policies pursued by the purportedly ailing King Salman and his powerful young son, Deputy Crown Prince Mohammad bin Salman (MBS). In perhaps the most dramatic development, a grandson of Ibn Saud, the founder, has penned several letters calling for the King, the Crown Prince, and the Deputy Crown Prince to be removed for initiating a reckless war in Yemen and putting the country on a path to fiscal ruin, all while presiding over a sharp selloff in oil prices.[5] The anonymous prince wrote, "We will not be able to stop the draining of money, the political adolescence, and the military risks unless we change the methods of decision making."[6] We note that a Saudi royal shake-up would not be without precedence. In 1964, King Saud was removed in a palace coup after losing the support of the senior princes and clerics. His successor, Faisal, was assassinated by his nephew in 1975.

Changes in leadership would likely mean a shift in policy.

If this is only a momentary malaise and King Salman proves resilient, then policy continuity would seemingly prove to be the order of the day. Senior ministers continue to stress publicly that the country's ample FX reserves, its ability to borrow, and planned spending cuts provide sufficient runway to deal with the oil price decline; likewise, they maintain that the oil rebalancing is already occurring going into 2016. However, if there were a sudden switch at the top, then change would appear quite likely in light of the policy divisions that have surfaced in recent months. Given the overarching importance of oil to the Saudi state, we believe the current oil strategy would likely be subject to at least heightened scrutiny and potentially a reversal under a new regime. Depending on his path to power, a new monarch might feel the need to generate additional revenue quickly to fund popular infrastructure projects and social welfare programs, as well as boost the overall mood of the populace and the private sector, which depends heavily on government largesse. Market share therefore might take a back seat to maintaining public support in a power-shift scenario.

Exhibit 116: Saudi revenues versus expenditures



Source: Saudi Ministry of Finance, RBC Capital Markets

[5] Hugh Miles, "Saudi royals calls for regime change in Riyadh," *The Guardian*, September 28, 2015. Bel Trew, "Saudi princes urge palace coup against ailing king," *The Times*, September 30, 2015. Stig Stenslie, "Saudi palace intrigues, Yemeni sufferings," *NOREF*, October 2015.

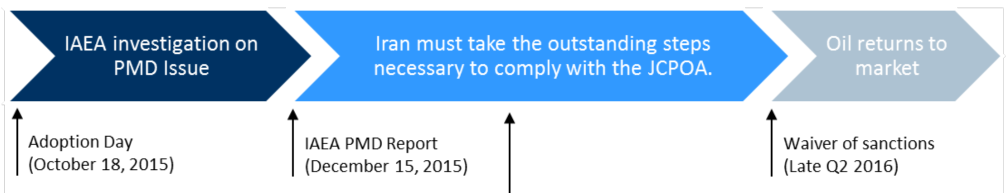
[6] Rori Donaghy, "Senior Saudi Royal Urges Leadership Change for Fear of Monarchy Collapse," *Middle East Eye*, September 22, 2015.3 Saudi-US Investment Forum, DC, September 4, 2015.

Iran: Welcome back

Compared to its OPEC counterparts, Iran is perhaps best positioned next year on a relative basis.

If there is one OPEC country that looks poised for a brighter future heading into 2016, it is Iran. With the formal adoption of the Joint Comprehensive Plan of Action, Iran will now commence the work necessary in order to render its nuclear facilities unable to produce fissile material for a nuclear weapon and to ensure that the country will remain at least one year away from breakout capability for at least a decade. Assuming that Iran fully abides by its nuclear commitments—a process that leading proliferation experts say should take between six to nine months—the country will secure relief from crippling sanctions in late Q2/16, in our view. Among the benefits, Iran will be able to reconnect to the SWIFT payments system, import critical technology for the manufacturing sector, access billions in hard currency in overseas accounts, and eventually bring 375–500 kb/d of sanctions-restricted oil barrels back onto the market. In addition, the stage will be set for a potential revival of investment in the country. While the Iranian Oil Minister called for OPEC to curb production to boost prices to $70/bbl or $80/bbl recently, uncertainty over the eventual size of the Iranian exports could complicate efforts to forge a consensus on a cut if the cartel were even actually prepared to abandon the market share strategy and return to defending a floor.

Exhibit 117: Likely Iran nuclear deal compliance timeline



Key ongoing steps necessary to comply with JCPOA
Allow enhanced inspections by the International Atomic Energy Agency (IAEA).
Resolve the agency's remaining concerns about the possible military dimension (PMD) of its nuclear program.
Curb its centrifuge stockpile by two-thirds and reduce its low grade uranium stockpile by 98%.
Only operate around 5k older-generation devices and cap enrichment level at 3.67%.
Limit enrichment activities to the Natanz site, repurpose the Fordow facility for R&D only, and reconfigure the Arak heavy water reactor.

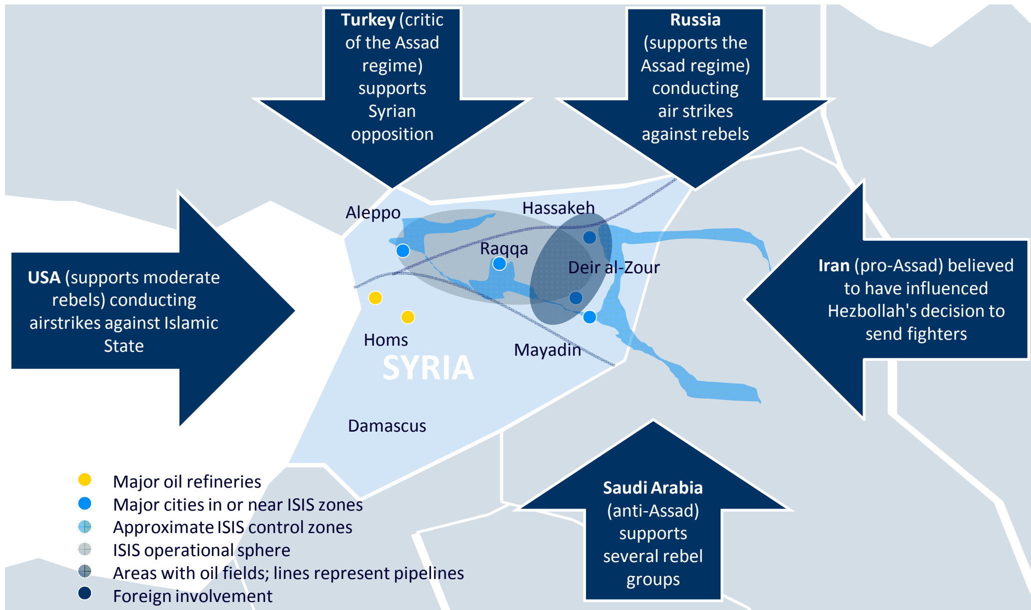
Note: All dates are estimates; 'Waiver of sanctions' date determines the earliest possible return of Iranian crude to the market. This date is the RBC Commodity Strategy estimate. Some ongoing steps are underway.
Source: Harvard Belfer Center, Government sources, News Sources, RBC Capital Markets.

ISIS and Oil: Hazards of complacency

ISIS in particular is a key risk.

Finally, amid the current oil glut, the market seems to have written off the risk of a terrorism-related outage despite the group's proximity to major energy facilities. With ISIS expanding its footprint despite more than a year of US-led airstrikes and unprecedented levels of regional unrest—including four active wars—we believe that the group represents a significant, underappreciated risk for oil. Oil has been central to the ISIS governing strategy, with the group reportedly earning an estimated $8–10 million per month from the sale of oil from fields that it controls in eastern Syria and northern Iraq. When unable to wrest control of an important energy facility, or in cases where it would like to deprive opponents access to a facility, ISIS has resorted to outright sabotage. For example, the original Kirkuk-Ceyhan pipeline has been offline for over a year, and the Baiji refinery was rendered non-operational by repeated ISIS attacks in northern Iraq. Even southern Iraq does not seem to be entirely out of ISIS' reach. While the southern Iraqi facilities (which account for around 3 mb/d of the country's oil exports) are hundreds of miles away from the ISIS stronghold in Anbar province, the group has carried out attacks in that part of the country on prior occasions as well.

Exhibit 118: Foreign involvement in Syria and map of ISIS territories



Source: Institute for the Study of War, News Sources, RBC Capital Markets

Outside of Iraq and Syria, Libya's energy assets around the Sirte basin have been targeted recently by local ISIS offshoots. Saudi Arabia should also warrant close watching as security officials have arrested hundreds of suspected ISIS members in recent months within the country, and there have been several major mosque bombings in the oil-rich eastern provinces. Moreover, the deadly 2013 siege at Algeria's Amenas gas facility and the near miss at Saudi Arabia's Abqaiq facility in 2006 should serve as a stark reminder that determined extremists can penetrate sites that are widely judged as secure. While such an attack does not seem to be part of the group's immediate playbook, our concern is that it may not be beyond their capabilities. Given ISIS' proliferation through the Middle East and Africa, such a risk remains on our minds, even if it is not our base case.

Oil Fundamentals: When will it get better?

We remain constructive on oil fundamentals in 2016 and see the early stages of the market-rebalancing act continuing to take place. We expect WTI and Brent prices to average \$58/bbl and \$62/bbl, respectively, in 2016. While strong demand remains important, supply is what got us into this low price environment, and supply will have to be what digs us out.

Staying constructive

2016 oil balances look more constructive Y/Y.

We remain constructive on oil heading into 2016, when we expect prices for WTI to average \$58/bbl and for Brent to average \$62/bbl. While demand has been firing on all cylinders this year, this market remains one that is primarily driven by supply dynamics. Thus, its resiliency and elevated global inventory levels point to a protracted recovery. Firm demand certainly helps, but falling production will be what ultimately rebalances the oil market. We believe that we are in the early stages of such a rebalancing act, given that US production, while extremely resilient since the plunge in prices, has now fallen considerably from the highs seen earlier in 2015. This will remain a key theme in 2016.

WTI in the mid-sixties

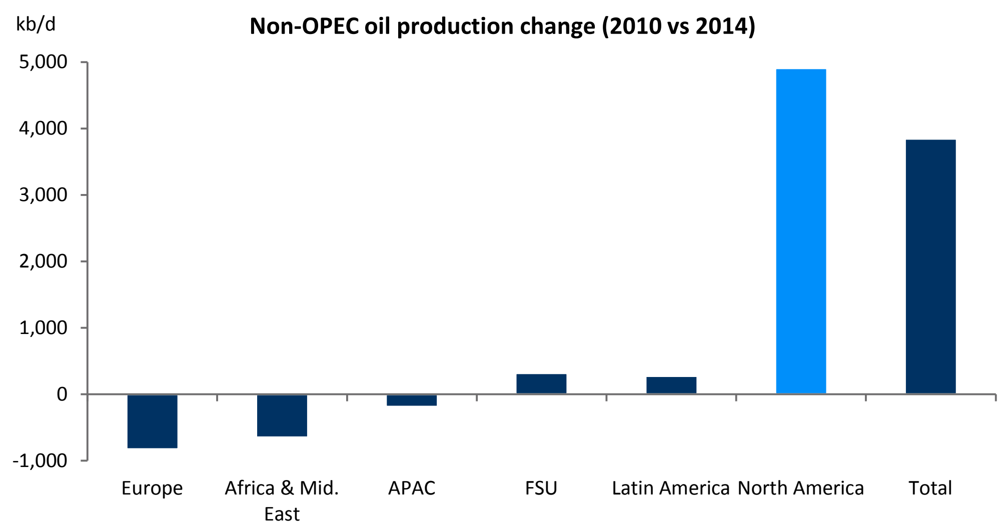
As we have often suggested, it is not our base case that the US or OPEC will take the market back to a state of equilibrium. The rebalancing act kicked off by the US can only take prices so far, and alone it will not propel WTI back to a long-term equilibrium price of around $75/bbl. In fact, we see the low to mid-$60/bbl range as a near-term cap for prices. We maintain the view that US production will be increasingly elastic near those levels, and that an influx of pent up producer hedging will also likely help cap oil prices near the $65/bbl level over the next 12 months.

We expect non-OPEC to bear the burden of rebalancing the market.

Given the elasticity of US production, we expect the rest of the non-OPEC countries to bear the brunt of pushing a rebalance in the oil market beyond the $65/bbl level. However, to date, non-OPEC producers outside of the US have fared better than many would have expected given the low price environment. Countries like Russia and Brazil have been able to weather the storm thanks to a number of levers that have materialized, including changes to local tax structures and loan deals struck with China. Non-OPEC has outperformed expectations to date, but we ultimately see production waning in that portion of the world, led by regions like Mexico and former Soviet Union countries.

All eyes have been on US production in recent years, which masked the fact that production growth in the rest of the non-OPEC countries has been flat on net over the last five years. It is key to note that this took place during a period when Brent prices averaged more than $100/bbl. Given that the overwhelming majority of the world had a difficult time growing production in a $100/bbl price environment, the battle has only become more difficult in the current low price environment.

Exhibit 119: Change in non-OPEC oil production



Source: IEA, EIA, Company and government reports, RBC Capital Markets

Medium- to long-term constructive

Global decline rates mean that we need 4.5–6.0 mb/d of new production each year to keep production flat Y/Y.

One of the key reasons why we remain medium to long-term constructive on oil is that annualized global decline rates of around 5–7% suggest that the market needs an additional 4.5–6.0 mb/d of new production every single year just to keep production flat. Again, it is difficult to see where that growth will come from in the current price environment, pointing to a more constructive balance in the future.

The incremental replacement barrel coming online has a steeper and steeper decline rate.

Furthermore, headlines of a significant reduction in industry capital expenditures have been a consistent high-level theme over the past year. Aggregate decline rates become steeper as future projects (such as deep-water and Canadian oil sands) are put on hold; in fact, sidelining these projects in particular is notable given that these projects are high cost, but more importantly, they have shallow decline rates. With such capital-intensive projects sidelined due to poor economics, the incremental replacement barrel coming online has a steeper and steeper decline rate. In other words, the treadmill of replenishing production becomes increasingly steeper the longer prices remain low.

Supply will have to dig us out, but demand is still a factor

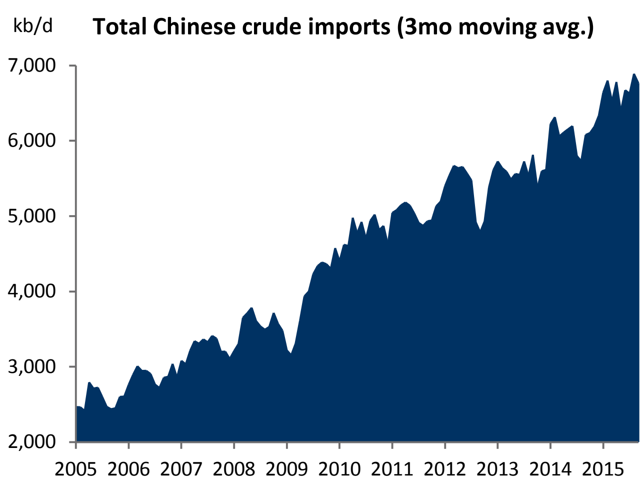
Emerging Markets demand will remain strong...

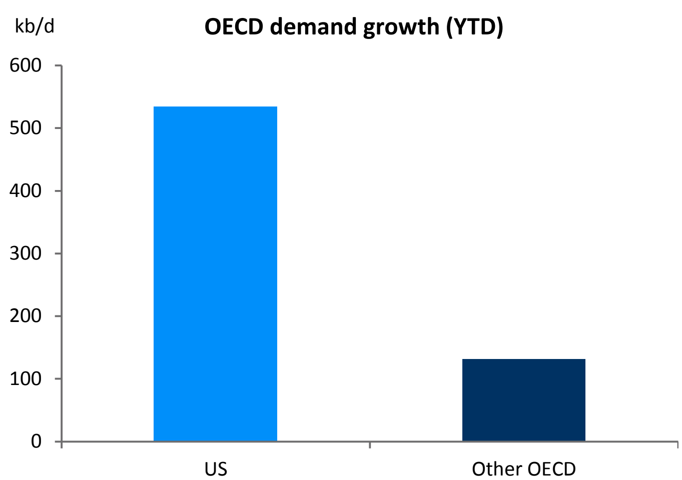
As previously noted, today's oil market is a supply-driven story; that is what will ultimately have to rebalance the market back toward a long-term equilibrium level. However, this year's strong demand cannot be ignored. In fact, emerging market countries have singlehandedly carried global oil demand growth since the recession, and it should be no surprise that such growth will remain important. To that end, we expect the macro headwinds in China to have a fairly limited effect on physical Chinese oil demand next year. Even in the event that true demand slows markedly, it is imperative to note that stockpiling into the country's Strategic Petroleum Reserves (SPR) is a national energy security issue—one that is uncorrelated to the broader economy—and thus likely to persist. Additionally, India only just started its SPR program this year with a similar goal of holding enough crude to cover 90 days of imports. This story will be a key theme over the next decade. Overall, we expect China and India to continue to pull barrels off the market at a robust rate over the coming years.

…but OECD demand may not be such a strong driver next year.

Strong emerging markets demand growth has occurred alongside renewed demand growth from OECD countries, a region where demand had been anemic since the recession, this year as well. While OECD countries have shown strength this year, we find it difficult to picture significant incremental growth stemming from this group of countries in 2016; in fact, we expect 2016 OECD demand to be largely flat on a year-over-year basis. While there are some pockets of growth currently originating from Western Europe and OECD Asia, the overwhelming amount of the growth is coming from the US. Other developed nations have not fully benefited from the halving of oil prices thanks to the stronger USD. Overall, while emerging markets demand will likely continue, in our view, the absence of such significant OECD year-over-year demand growth means supply will still likely have to shoulder the burden of a market rebalancing.

Exhibit 120: Demand is still an important factor, albeit not the be-all and end-all





Source: Chinese Customs, NBS, IEA, EIA, company and government sources, RBC Capital Markets

Investor Positioning: Where is the action?

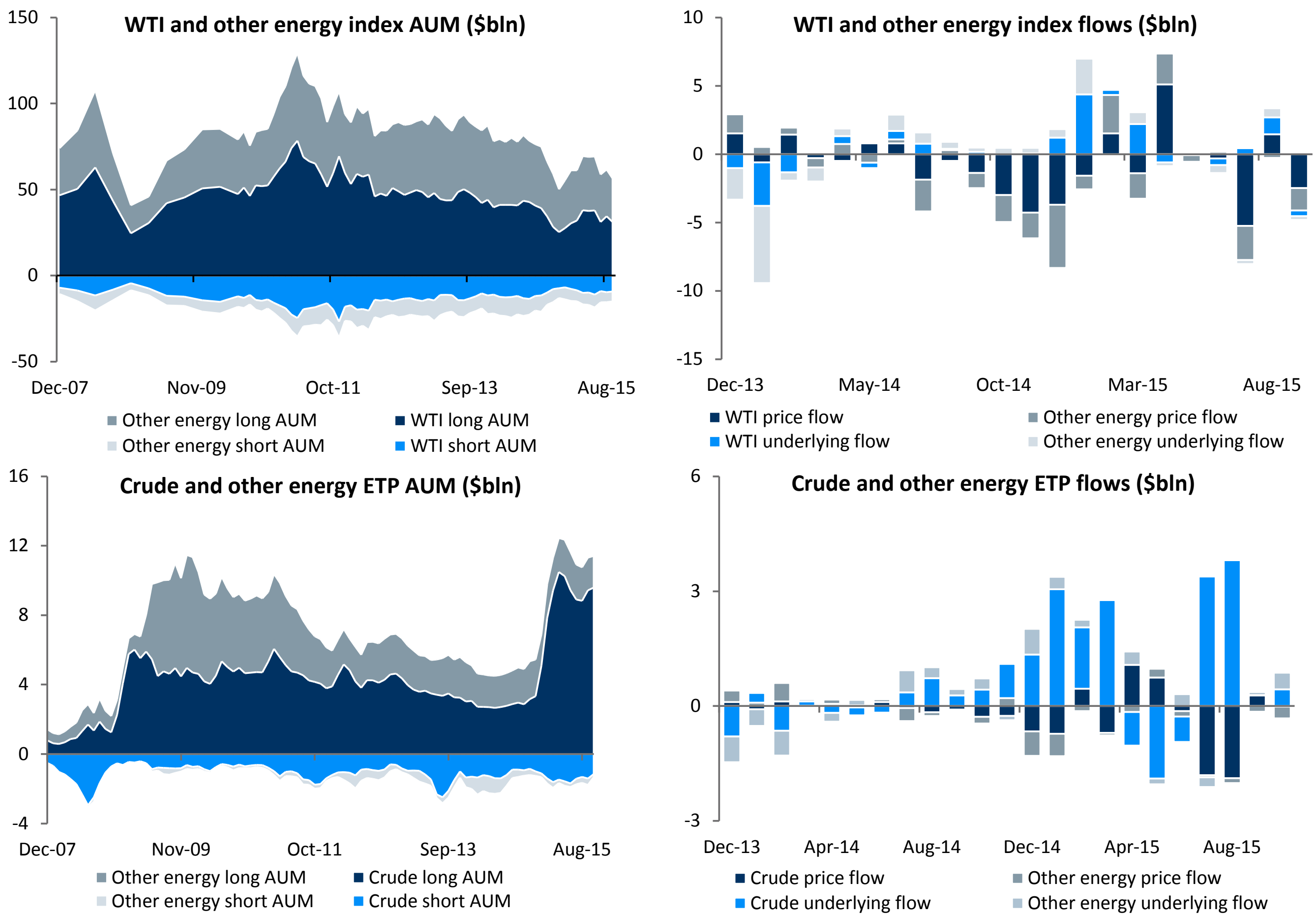
We have seen the broader allocation to commodities shrink as the poor performance of commodity beta has dragged on AUM across the board, and oil is by no means an exception; in fact, it is one of the primary catalysts of the broader commodity downturn. What has been interesting, however, is a shift of activity from index to exchange-traded products.

Index investors quiet as action occurs in the exchange-traded product (ETP) space

While index remains the biggest portion of AUM, flow activity has shifted.

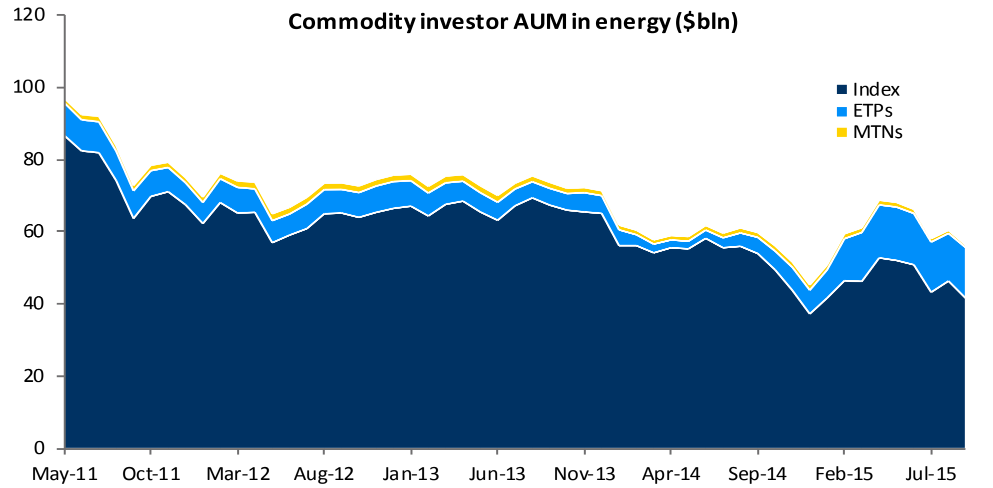
Traditionally, the largest portion of commodity investor positioning in energy was dominated by index investment. However, given the poor performance of commodity beta on the back of a strong dollar, weak inflation expectations, and a lack of diversification benefits, there has been marked decline in energy-linked index AUM, as crude has not escaped the larger commodity-negative environment. On top of that, flows into and out of crude-linked index holdings have been dominated by price moves, which themselves have been net negative over the past two years. This has left index investors on the sidelines, with rarely a notable underlying flow. On the other hand, in the ETP space, there has been the opposite move. Energy ETP AUM has increased markedly, and underlying inflows have been very strong. While total ETP AUM still pares in comparison to index AUM, the contrast between index flows and ETP flows in energy, and specifically crude-linked products, is stark indeed.

Exhibit 121: Long/short investment in energy (left), Price and underlying flows in energy (right); Index (top) vs ETP (bottom)



Notes: The CFTC breaks out WTI index AUM, not Brent; other includes non-WTI energy. Oil ETP includes WTI and Brent; other energy includes non-crude energy. Source: CFTC, Bloomberg, RBC Capital Markets

Exhibit 122: Total commodity investor net long in energy



Note: Represents net position of pure energy-linked products. Ignores basket-linked products, which may contain energy-linked AUM.
Source: CFTC, ETP issues, Bloomberg, MTN-I Global, RBC Capital Markets

Overall, while the most active center of interest seems to have shifted from index investment toward the exchange-traded space, index by far remains the dominant portion of purely energy-linked AUM, the majority of which is linked to crude contracts. While 2015 looks directionally better than the latter half of 2014, we anticipate improvement in 2016, as a turn in fundamentals and still-high geopolitical risk bring interest back into the space.

Conclusion

Global oil markets have experienced unprecedented change over the past year and a half as a glut in crude supply has hung over the market. This oversupply has helped to insulate the market from geopolitical risks, which are arguably near a historical high with four active wars and the continuing Arab-Israeli conflict. As we enter into 2016, we anticipate a rebalancing in supply and demand fundamentals pushing prices back into the low sixties. As the market moves into a situation of more constructive fundamentals, we continue to watch geopolitical risk, tracking when and where it reenters market psychology in any real size. While strong demand will likely remain a consistent theme, since supply got us into this mess, supply will have to get us out; we see that story continuing to unfold though 2016.

Exhibit 123: Geopolitics: OPEC Watch List – Relative risk scale

	Oil production (mb/d)		Geopolitical risk		
Country	2014	Last month	Change over past year	Risk for the next year	Comment
Saudi Arabia	9.67	10.38	3	6	Budget pressures continue to mount amid rising tensions.
Iraq	3.26	4.30	9	10	How long can oil remain immune from rising instability?
Kuwait	2.87	2.82	1	2	Small population, a lot of money, shock absorbers available.
Iran	2.79	2.70	6	3	Turn-around story of the year, has seen a reversal of fortune y/y.
UAE	2.77	2.97	1	2	Flush with cash and few citizens, UAE sits in the sweet spot.
Venezuela	2.46	2.50	7	9	Plenty of risk going into the December polls.
Nigeria	2.04	2.02	9	8	Elections bought time but December's amnesty decision is critical.
Angola	1.65	1.81	5	5	Once caught in a 27 year civil war, it's now a more stable member.
Algeria	1.12	1.10	5	7	A looming leadership transition looks to be a major risk.
Qatar	0.71	0.64	1	2	Reliant on LNG, Qatar's challenge will emerge later this decade.
Ecuador	0.56	0.54	5	6	Protests proliferating despite President's electoral track record.
Libya	0.45	0.43	10	10	Peace talks and efforts to restart exports have not borne fruit.
Scale:			*High -> Low*	*High -> Low*	

Source: Bloomberg (production data), RBC Capital Markets

Exhibit 124: Fundamentals: Global Supply & Demand Balance

Global Supply & Demand Balance	2014					2015					2016				
(mb/d)	Q1	Q2	Q3	Q4	y/y	Q1	Q2	Q3	Q4	y/y	Q1	Q2	Q3	Q4	y/y
Demand															
OECD	45.8	44.7	45.8	46.3	**-0.4**	46.5	45.3	*46.6*	*46.7*	***0.6***	*46.7*	*45.5*	*46.5*	*46.7*	***0.1***
Non-OECD	45.7	47.1	47.4	47.7	**1.3**	46.9	48.7	*48.2*	*48.1*	***1.0***	*48.0*	*49.8*	*49.3*	*49.3*	***1.1***
Total Demand	**91.5**	**91.8**	**93.2**	**94.0**	**1.0**	**93.4**	**94.0**	***94.9***	***94.8***	***1.7***	***94.7***	***95.3***	***95.8***	***96.0***	***1.2***
Supply															
OPEC Crude	29.9	29.8	30.3	30.4	**-0.3**	30.1	31.3	*31.4*	*30.8*	***0.8***	*30.9*	*31.4*	*31.6*	*31.3*	***0.3***
OPEC Other Liquids	6.3	6.3	6.4	6.5	**0.2**	6.5	6.5	*6.6*	*6.6*	***0.1***	*6.6*	*6.6*	*6.7*	*6.7*	***0.1***
Non-OPEC Crude & Biofuels & Proc Gain	55.9	56.7	57.2	58.3	**2.4**	58.1	58.2	*58.7*	*58.3*	***1.3***	*57.8*	*57.7*	*57.7*	*57.6*	***-0.6***
Total Supply	92.1	92.8	94.0	95.2	**2.3**	94.7	96.0	*96.6*	*95.7*	***2.2***	*95.3*	*95.7*	*95.9*	*95.6*	***-0.1***
Stock Change	0.7	1.0	0.8	1.2		1.3	2.0	*1.8*	*0.9*		*0.7*	*0.4*	*0.1*	*-0.3*	
Call on OPEC	29.3	28.8	29.6	29.2	**-1.6**	28.9	29.3	*29.6*	*30.0*	***0.2***	*30.2*	*31.0*	*31.5*	*31.6*	***1.6***
Price Forecast ($/bbl)					**2014 avg**					**2015 avg**					**2016 avg**
WTI	$98.61	$102.99	$97.25	$73.20	**$92.91**	$48.57	$57.95	$46.50	*$47*	***$50***	*$48*	*$56*	*$63*	*$65*	***$58***
Brent	$107.87	$109.76	$103.46	$77.07	**$99.45**	$55.13	$63.50	$51.30	*$50*	***$55***	*$51*	*$59*	*$67*	*$69*	***$62***
WTI-Brent Spread	-$9.26	-$6.77	-$6.21	-$3.87	**-$6.54**	-$6.56	-$5.55	-$4.80	*-$3*	***-$5***	*-$3*	*-$3*	*-$4*	*-$4*	***-$4***

Source: Petro-Logistics SA, IEA, EIA, company and government sources, RBC Capital Markets

Exhibit 125: Energy Investor Positioning

Energy	Monthly						Annual		
$bln	Sep-15	Aug-15	Jul-15	Jun-15	May-15	Apr-15	2015 YTD	2014	2013
Energy AUM	**56.4**	**60.4**	**58.1**	**66.3**	**68.2**	**68.8**	**61.1**	**57.8**	**73.4**
Index	41.6	46.4	43.3	50.9	52.1	52.8	46.8	52.7	66.4
ETPs	14.0	13.2	13.9	14.2	14.8	14.7	13.2	3.8	5.3
MTNs	0.74	0.86	0.98	1.15	1.29	1.31	1.10	1.33	1.70
Energy flows	**-3.9**	**2.3**	**-8.1**	**-1.9**	**-0.7**	**7.7**	**12.3**	**-25.3**	**-4.2**
Index	-4.8	3.1	-7.6	-1.2	-0.7	6.5	4.3	-27.8	-1.4
ETPs	1.0	-0.7	-0.3	-0.5	0.0	1.2	8.1	2.5	-2.7
MTNs	-0.12	-0.11	-0.17	-0.14	-0.02	-0.01	-0.08	0.01	-0.03

Source: CFTC, Bloomberg, MTN-I Global, RBC Capital Markets

Global EM FX: U-turn in 2016, Asia to lag

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- We believe growth will improve somewhat in LatAm.
- According to our models, all currencies are now undervalued.
- Nevertheless, Brazil will likely continue to face headwinds, while the outlook for Mexico may improve.
- Otherwise, hawkish central banks in Chile and Colombia may anchor inflation in both.

Latin America – Blowing with the wind

Back in January, our FX valuation model, RBC-POLAR, showed all currencies in the region either at fair value or overvalued.

In 2015, LatAm economies continued to adjust to three external drivers: lower global growth, an eventual Fed hike, and a recurring need of external financing to support growth. Back in January, our FX valuation model, RBC-POLAR, showed all currencies in the region either at fair value or overvalued. All are now undervalued. With the exception of Brazil, we believe the most significant part of the adjustment is now behind us for most currencies. In 2016, we believe that Brazil will continue to underperform the region. We expect Mexico to begin a long overdue period of benign macro recovery backed by strong growth and still subdued inflation.

Exhibit 126: Total returns since 2013, 2015, and RBC-POLAR

	Total Return since		RBC-POLAR	
	Jan-13	Jan-15	Dec-12	Oct-15
BRL	-27.8	-20.4	5.4%	-4.7%
MXN	-15.4	-7.3	-0.2%	-13.8%
CLP	-22.3	-8.3	3.7%	-9.5%
COP	-30.1	-12.3	4.8%	-19.1%

Source: Bloomberg, RBC Capital Markets estimates

Between 2015 and 2016, the outlook for the United States will be one of gradual increase in GDP growth and a meaningful pick up in headline inflation. In 2015, GDP growth across LatAm underperformed the US. This was likely the backdrop for poor performance LatAm currencies. Nevertheless, once extracting FX performance, equity and bond markets in Mexico and Argentina outperformed the region year to date. For 2016, the growth outlook will likely diverge within the region. We expect Mexico and Colombia to outperform the US but Chile, Argentina, and Brazil to underperform.

Exhibit 127: Consensus growth and inflation for 2015, 2016

		Growth (y/y)		Inflation (y/y)	
		2015	2016	2015	2016
US	**Current**	2.50	2.60	0.20	1.90
	Jan-15	3.00	2.80	1.50	2.20
Euro zone	**Current**	1.50	1.60	0.10	1.10
	Jan-15	1.10	1.50	0.60	1.30
Japan	**Current**	0.7	1.2	0.8	1.0
	Jan-15	1.0	1.4	1.5	1.5
Brazil	**Current**	-2.75	-0.90	8.80	6.50
	Jan-15	0.85	2.00	6.40	5.85
Mexico	**Current**	2.30	2.80	2.80	3.40
	Jan-15	3.40	3.74	3.60	3.50
Chile	**Current**	2.20	2.50	4.40	3.90
	Jan-15	2.80	0.00	3.30	3.00

Source: Bloomberg, RBC Capital Markets

According to Bloomberg data, LatAm GDP in USD is the smallest out of all three regions, at US$5.9tn. This stands against US$8tn for EMEA and US$17tn for non-Japan Asia. The entire region is equal to half of the combined GDP of just China and India. Nevertheless, while China and India are very large economies, foreign investor access to local capital markets is extremely limited. Moreover, persisting current account deficits in LatAm also translated into substantial foreign capital inflows over the past five to six years. BIS international claims data show that international claims stand at about 40–70% of FX reserves across the region. These data include bonded debt.

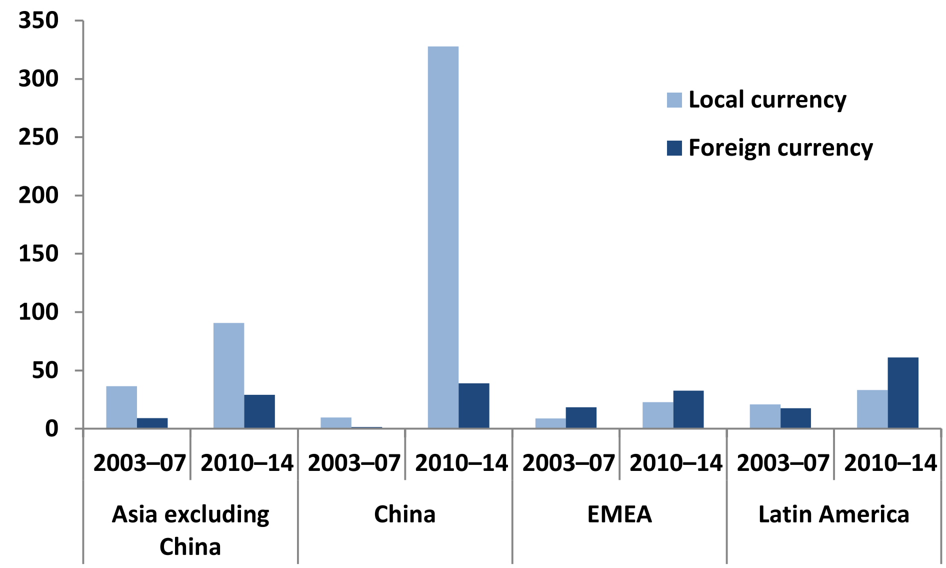
Exhibit 128: Total international claims, FX reserves – (USD mn)

	International Claims			FX Reserves			Ratio		
	Dec-09	Dec-11	Jun-15	Dec-09	Dec-11	Jun-15	Dec-09	Dec-11	Jun-15
Argentina	17,087	20,893	13,702	48,123	46,376	33,833	36%	45%	40%
Brazil	141,569	177,053	168,547	239,054	352,012	372,168	59%	50%	45%
Chile	39,594	53,202	66,666	25,373	41,979	38,179	156%	127%	175%
Colombia	8,007	15,540	21,382	25,365	32,302	46,958	32%	48%	46%
Mexico	86,096	111,589	128,995	90,931	142,476	192,403	95%	78%	67%
Venezuela	7,365	7,411	9,362	35,000	29,889	16,180	21%	25%	58%

Source: Bank for International Settlements, Bloomberg, RBC Capital Markets estimates

LatAm has been a prominent issuer of USD corporate debt. In 2016, we will be particularly focused on Brazil's Petrobras and Venezuela's PDVSA. In the former, the 5y CDS widened 275bp a year ago to as high of 1,430bp in September. PDVSA's widened from 2,000bp to 8,000bp. For Mexico's PEMEX, the CDS widened from 100bp to as high as 308bp. In Argentina, a new president may finally end the standing stalemate against holdouts from the 2004 debt exchange.

Exhibit 129: Bond issuance by region – (USD bn)



Bloomberg, RBC Capital Markets calculations

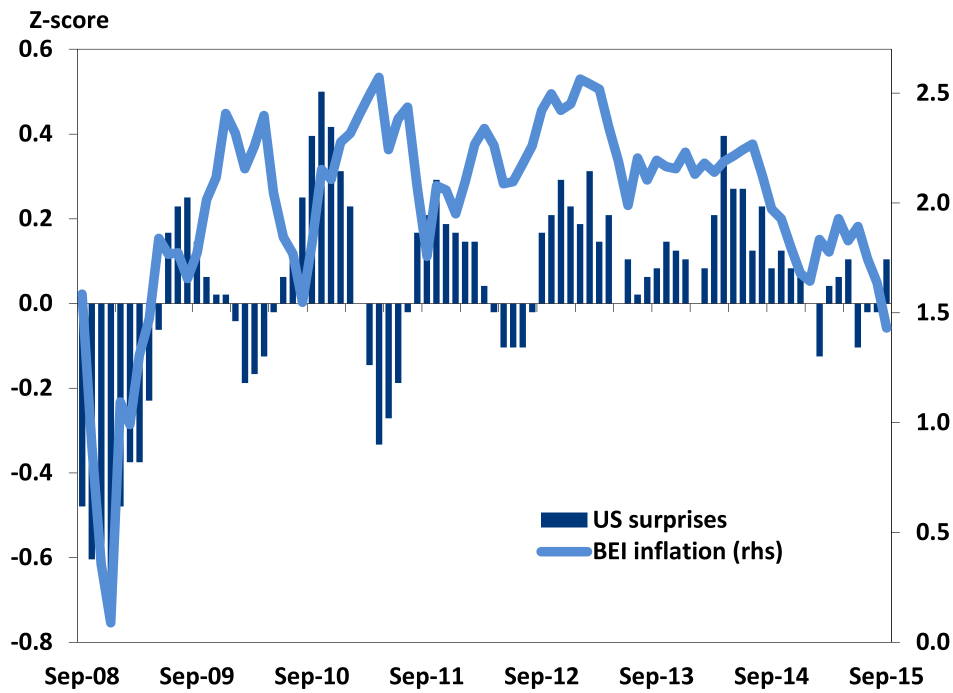
LatAm has been the single-largest region in terms of absolute USD issuance.

A recent report by the IMF collected data across EM corporate debt. It singles out China as the main single driver in this market. Nevertheless, LatAm has been the single-largest region in terms of absolute USD issuance. Between 2010 and 2014, LatAm foreign currency bond issuance was twice the size of EMEA. Meanwhile, China's corporations turned to domestic market issuance on significant scale. LatAm corporate USD servicing, therefore, markedly increased while it remained relatively subdued in other regions. This topic will remain very relevant, because despite all the widening observed this year, the overall distress has not been nearly the same as in 2009. EM corporate spreads widened on average less than one-third of the widening observed in 2008. For Asia, market stress has been negligible. The backdrop remains benign in Asia, because growth in that region still outperforms most of the other economies in the globe.

Mexico: there is a light at the end of the tunnel

According to the latest *World Economic Outlook*, global growth continued to underperform expectations in 2015. IMF staff has revised its 2015 forecast 0.2pp lower since the last update in July 2015. Nevertheless, despite the fact that euro zone growth outlook has been revised upward in 2015 and US growth was revised downward to 2.6%, US growth remains well above those of Europe and Japan, which stand at 1.6% and 0.6%, respectively. This year, Mexico growth may reach a robust 2.3% and perhaps 2.8% in 2016.

Exhibit 130: US data surprises index, US breakeven inflation rate



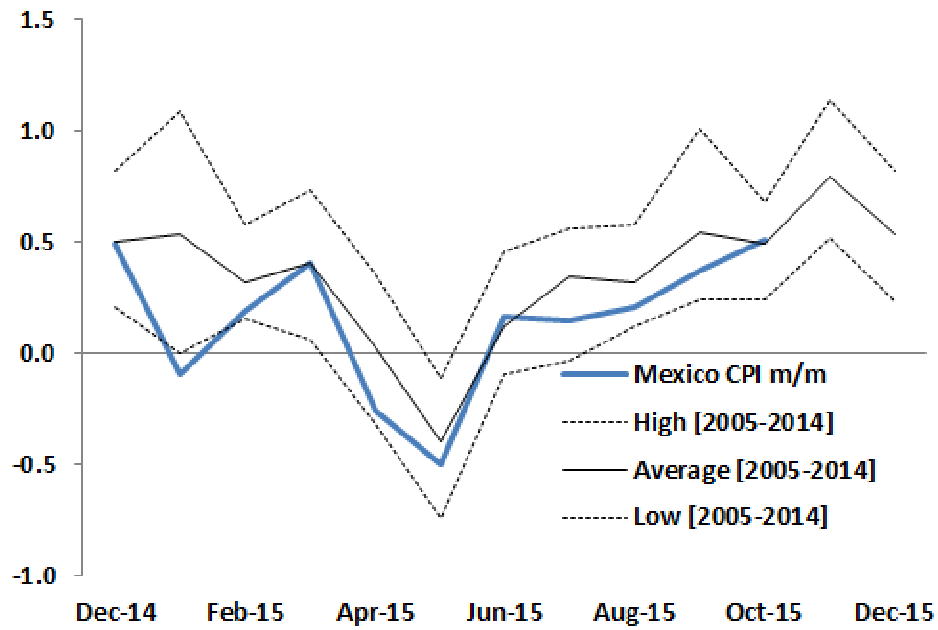
Bloomberg, RBC Capital Markets calculations

We believe attractive RBC-POLAR valuation and low inflation may trigger MXN outperformance against the region.

More importantly, since July, IMF staff has revised 2015 US growth upward by 0.1pp. US data surprises finally started to show upside momentum in September. We follow a surprises index where deviations from consensus are scored -1/0/+1 according to actual data spreads over consensus. Spreads below/above half a standard deviation are denoted -1/+1. September data show the first upside surprise since May.

We believe attractive RBC-POLAR valuation and low inflation may trigger MXN outperformance against the region. A key driver will likely be subdued inflation and tight fiscal policy. Low oil prices have been driving the Hacienda to find alternative sources of revenues. Meanwhile, Governor Carstens has been lending a hand with extra dovish statements. We believe Banxico may even postpone the first hike well into next year. This is the backdrop behind our forecast for a weak peso early into 2016 and appreciation thereafter.

Exhibit 131: Mexico's inflation seasonality (m/m %)



Source: Bloomberg, RBC Capital Markets

We have recently found that the two main drivers for the peso are the S&P and the BRL. We believe that the weak BRL may keep the peso weak early in 2016. This is because we believe that additional deterioration in the fiscal outlook in Brazil may trigger credit downgrades there, which would have some contagion effect on Mexico. Meanwhile, later in the year, we think a benign story behind US activity may pull the S&P higher and the peso with it.

Exhibit 132: Coefficient of determination, and 5Y, and 3M correlations

Independent Variable	R^2	5Y Correlation	3M Correlation
Mexican crude oil price basket	0.08	-0.28	-0.30
S&P 500	0.38	-0.61	-0.59
USD/BRL	0.33	0.58	0.59
EUR/USD	0.18	-0.43	0.26
MX-US rate differentials*	0.06	0.24	0.48

*2Y swap rates

Source: Bloomberg, RBC Capital Markets estimates

Brazil: no light at the end of the tunnel

We believe both labor and capital markets in Brazil remain disjointed; therefore, we forecast USD/BRL to drift quickly back and well above 4.00 in the near future.

We believe both labor and capital markets in Brazil remain disjointed; therefore, we forecast USD/BRL to drift quickly back and well above 4.00 in the near future. The labor market is distorted by heavy indexation and layoffs. Meanwhile, the main drag on investment spending remains the wide margin between interest rates set by the central bank (Selic) and the rate prevailing in the sovereign-controlled financial system (TJLP). The spread between Selic and TJLP was 225bp in 2013 and now stands at 725bp. BNDES balance sheet has increased significantly in the meantime. This implies that BCB may need to keep both rates high for longer unless the TJLP is adjusted significantly higher. This is because the largest firms have not yet taken in the brunt of the effect from higher rates.

Exhibit 133: Social security transfers

	Unemployment insurance	Payroll Tax Benefits	Employment Continuity subsidies	Pension Payments	Other	Bolsa Familia	Total
2003	5.1	7.9	2.3	19.2	1.0	3.6	39.1
2004	5.0	8.9	2.5	20.0	1.0	6.6	44.0
2005	5.6	9.7	2.7	20.8	1.0	8.7	48.5
2006	6.1	11.1	2.9	21.3	1.0	11.0	53.4
2007	6.5	13.9	3.0	21.9	1.0	11.0	57.3
2008	7.2	14.9	3.2	22.4	1.0	10.6	59.3
2009	7.8	16.0	3.1	23.2	0.9	12.4	63.4
2010	8.1	17.9	3.6	23.9	1.0	12.8	67.3
2011	8.5	19.1	3.8	24.8	1.0	13.2	70.4
2012	8.8	19.8	3.9	25.6	1.0	13.8	72.9
2013	9.1	21.3	4.1	26.5	1.0	14.1	76.1
2014	9.3	22.4	4.2	27.4	1.0	14.0	78.3
Annualized change	5.1%	9.1%	5.1%	3.0%	0.0%	12.0%	6.0%

Source: Labor Ministry, RBC Capital Markets

Since 2003, social security spending has increased by an annualized 6%. Pension payments remain the largest segment of public spending on social transfers, but it may only start increasing in about two to three years due to demographics. The immediate, main concerns are Bolsa Familia and Payroll Tax Benefits. In the past 12 years, both have increased 3–6% above inflation. These two social transfer categories have been associated with a drag in productivity growth. The government will likely be required to change indexation or risk a combination of recession well into 2017 accompanied by sticky 6–8% inflation.

We believe, next year, Brazil may seek to monetize some of the local debt. This would take place through neutral monetary policy and higher inflation. Over one-third of the local debt is either issued in fixed coupons (NTN-F) or floaters (LFT). Assuming inflation increases above expectations with no monetary policy reaction, it would take a toll on this segment of the local bond market and push investors to buy and hold inflation-linked bonds (NTN-B).

Meanwhile, high inflation is keeping the BRL at just about fair value despite -28% total returns since 2013 and -20% total returns year to date. In the absence of inflation convergence, we believe the BRL should overshoot fair value by about 15–20% next year. This outlook would mean 4.80 at some point in the early part of 2016. We feel comfortable with this forecast even if the Fed were to postpone its lift-off. Our key focus will likely be USD redemptions among Brazilian firms. We believe these redemptions may require the BCB to provide USD cash rather than USD swaps.

Colombia: the peace dividend

President Santos has set a deadline to finalize the peace agreement with FARC by March 2016. This deadline is adding a significant amount of uncertainty, because it implies bold steps from both sides including potential amnesty of senior leaders of what still is largely considered to be a terrorist organization. We do not expect the peace dividends to trigger nearly as much inflows as 10 years ago during the Uribe administration.

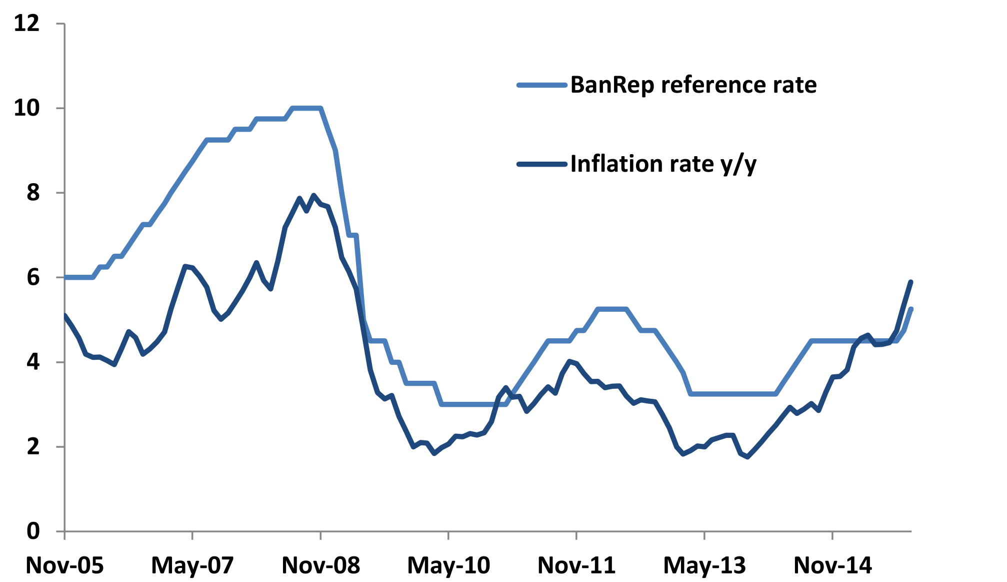
Focus going forward will likely be fiscal adjustment. The oil shock should allow the government to seek a very gradual fiscal adjustment for the next five years. The structural fiscal balance stands now at -2.2% of GDP against an expected bottom by consensus at -3.6% of GDP in 2016 for the total balance. The total and structural balances may only converge in 2020.

The central bank is clearly signaling that recent inflation jumps should be associated with inflation pass-through, aiming to anchor the peso with higher rates; therefore, we believe the peso will start appreciating from mid-year 2016.

Going into 2016, a local consultancy estimated that Brent prices at US$45bbl and USD/COP at 3,100 might cause government revenues to be lower by 50bp of GDP compared to an alternative scenario of US$55bbl and 2,800 USD/COP. Our concern is that oil prices will be closer to US$45bbl and the peso closer to 2,800; therefore, we expect the peso will drift back above 3,000 in 2016.

BanRep has taken the market by surprise with a 50bp hike in October. This followed a 25bp hike in September, bringing the reference rate from 4.50% in August to 5.25% now. Headline inflation increased from 2.9% Y/Y in September last year to 5.4% Y/Y now. The central bank is clearly signaling that recent inflation jumps should be associated with inflation pass-through, aiming to anchor the peso with higher rates; therefore, we believe the peso will start appreciating from mid-year 2016.

Exhibit 134: Colombia: Inflation Y/Y, BanRep reference rate



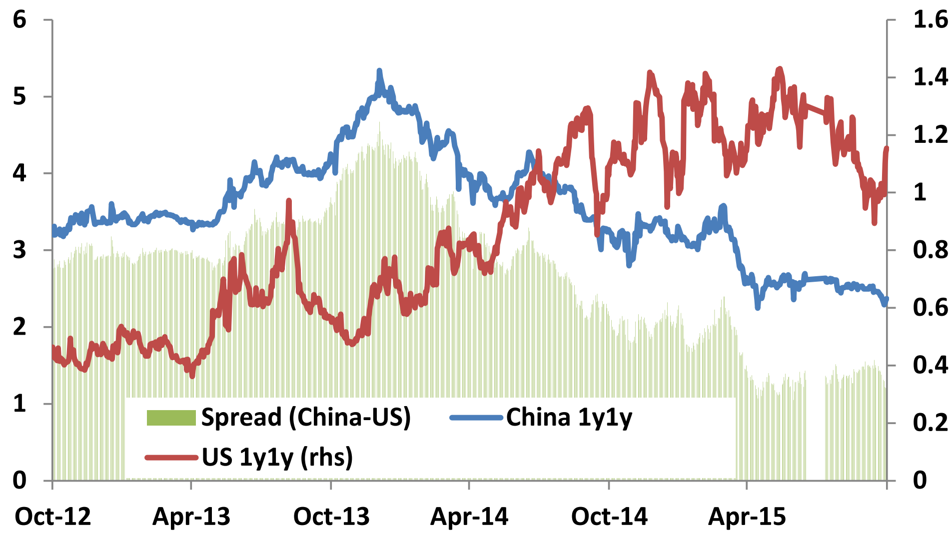
Source: Bloomberg, RBC Capital Markets

Chile: tightening but how much

According to RBC-POLAR, the CLP is 7.1% undervalued. We believe it may remain close to 700 well into the beginning of 2016. BCCh hesitation as well as negative real interest rates will keep the peso unattractive. Nevertheless, a tightening bias should be sufficient to hold the peso from overshooting above recent highs. We forecast a peak at 720 in March 2016.

Going forward, we will be mostly paying attention to China, because activity remains weak and commodity demand should stay lackluster. Declining interest rates spread between China and the US should push USD/CNY higher. Against US swaps, local China rates were as wide as 480bp in early 2014, but now, this spread stands at 150bp. Spread compression will likely continue to push toward USD demand by local firms in China. This will be a result of local firms seeking to close claims abroad and switching to domestic funding as a result of narrowing in China's local rates. We estimate that this will result in a potential capital outflow out of China at about US$350bn.

Exhibit 135: Forward rates – China vs. US



Source: Bloomberg, RBC Capital Markets

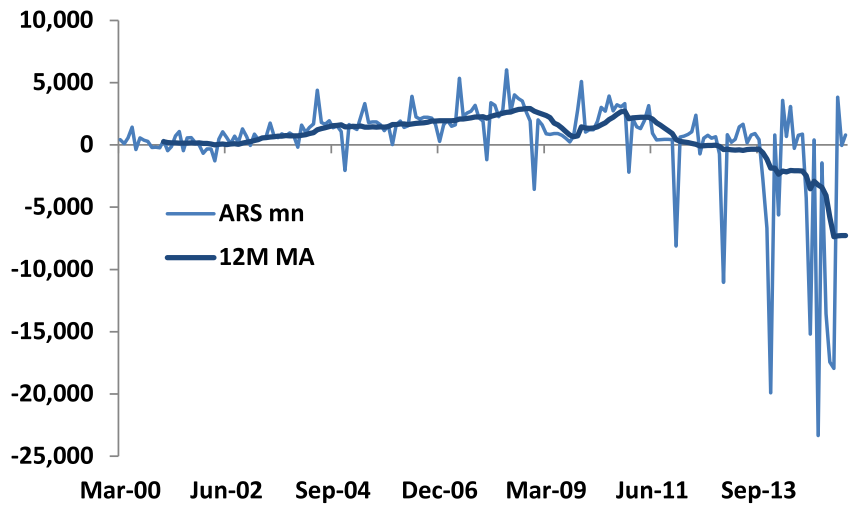
The combination of lower domestic demand for commodities and potential outflow from China may also keep the Chilean peso weak through negative sentiment. Total Chilean copper production remains near all-time highs. Nevertheless, copper prices have reached lows unseen since the 2009 financial crisis. Negative dynamics in Chilean trade balance shall remain a factor keeping the peso weak until Q2/16.

Argentina: an FX regime resolution

On November 22, Peronism and in particular Kirchnerism may end after 12 years. More importantly, there is a real chance that the opposition candidate Mauricio Macri may win the second round of the presidential elections, following a surprising result in the first round.

We do not expect any FX regime change before January. The new president will take office two weeks after the second round. The current regime has two layers, with the official rate at 9.56 against the 'blue chip' market, now at 15.53. Meanwhile, Macri is likely to increase the chance of a meaningful discussion to solve holdout debt owners. Since the first round, the 2033 sovereign bond rallied nine points. Some of the rally may have been associated, however, with a sharp improvement and/or decline in risk aversion observed in recent weeks.

Exhibit 136: Fiscal deficit (ARS mn, 12-month moving average)



Source: Bloomberg, RBC Capital Markets

The main thing to watch will be whether the new government reins in on fiscal accounts. Despite BCRA debt monetization and high inflation, the fiscal deficit has deteriorated significantly since the middle of 2013. This is likely a side effect of lower exports. Soy bean prices declined 40% over the past two years. The new administration will need to implement a tight policy mix.

- EMEA economies may diverge in 2016.
- We expect growth to improve in most of the region; Russia may see the most upside.
- Turkey and South Africa politics will remain our highest concern in the region.

EMEA – Buying into diversity

The EMEA region is peppered with strong and weak fundamental themes. The region encompasses some of the more concerning and burning geopolitical risks into 2016. It is also at the core of the commodity prices saga. Last but by no means least, Poland, Czech, and Hungary provide exposure to the ongoing recovery across the euro area. According to RBC-POLAR the RUB, TRY, and ZAR are the most attractive currencies from a valuation perspective. The ILS remains the only overvalued currency in the region.

Exhibit 137: Total returns since 2013, 2015, and RBC-POLAR

	Total Return since		RBC-POLAR	
	Jan-13	Jan-15	Dec-12	Oct-15
RUB	-36.5	3.6	13.2%	-10.5%
TRY	-18.6	-9.6	6.1%	-14.2%
ZAR	-29.0	-10.2	-6.7%	-22.6%
PLN	-14.9	-6.2	1.8%	-3.6%
CZK	-22.4	-6.7	6.2%	-5.3%
HUF	-17.6	-6.4	6.4%	-6.4%
ILS	-2.2	1.6	0.3%	4.6%

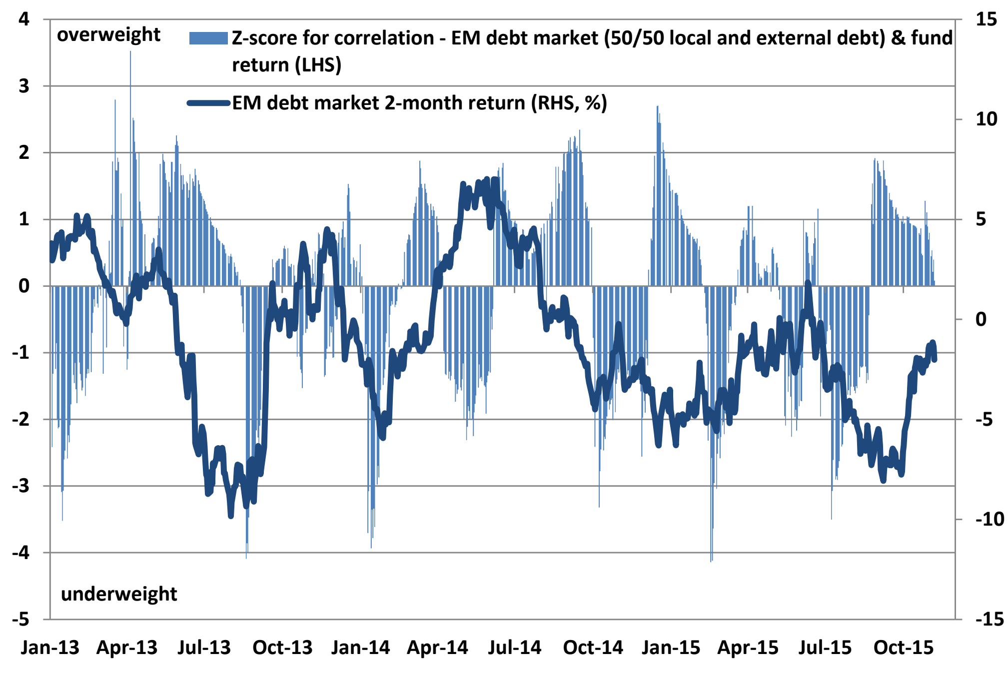
Source: Bloomberg, RBC Capital Markets estimates

In our view, TRY and ZAR will likely overshoot by an additional 10pp weaker, because of the Fed hike and looming external imbalances.

In our view, TRY and ZAR will likely overshoot by an additional 10pp weaker, because of the Fed hike and looming external imbalances. Meanwhile, we are quite bearish on the ILS, because we believe the market is pricing unwarranted BoI dovishness. We maintain a bullish stance on the RUB, HUF, CZK, and PLN.

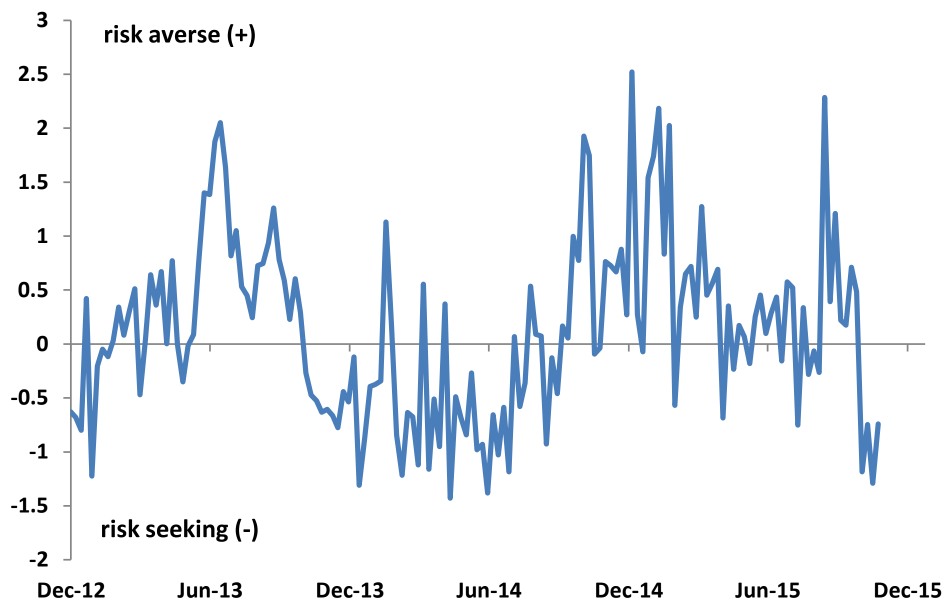
Our two main concerns in the EMEA region are ZAR and TRY. Both appear to be already undervalued but are highly sensitive to risk aversion swings, because current account deficits remain wide. Risk aversion was near the lows for the past three to four years. We estimate risk aversion as the z-score of cross-asset implied volatility, credit spreads, and equity-bond excess returns. Positioning in EM fixed income has, therefore, turned more positive since September. A turn in the Fed's stance to leave rates unchanged in September increased EM fixed-income NAV correlations to the main EM bond indices. We have witnessed even higher z-scores into the higher than expected payroll data release for October.

Exhibit 138: Pain positioning



Source: Bloomberg, RBC Capital Markets estimates

Exhibit 139: Risk aversion



Source: Bloomberg, RBC Capital Markets estimates

The flip side of the current account deficit is a capital account surplus. We collected BIS short-term international claims data for all EM. The largest USD accumulation over the past six years has been in Asia; nevertheless, Asia economies have also accumulated vast amounts of foreign exchange that may cushion potential outflows. China's short-term international claims are the highest and three times larger than in 2009. However, the stock of FX reserves increased 50% in China, while in Turkey reserves only increased by 20%.

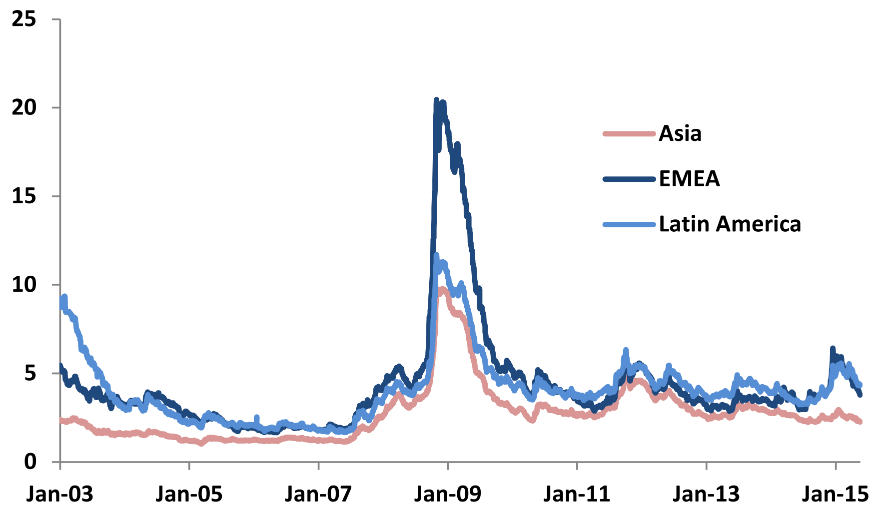
Exhibit 140: Total international claims, FX reserves – (USD mn)

	International Claims			FX Reserves			Ratio		
	Dec-09	Dec-11	Jun-15	Dec-09	Dec-11	Jun-15	Dec-09	Dec-11	Jun-15
Czech Republic	38,994	41,527	32,229	41,600	40,300	57,100	94%	103%	56%
Hungary	95,275	69,504	29,483	44,074	48,681	38,615	216%	143%	76%
Israel	10,264	15,771	16,711	60,600	74,900	88,200	17%	21%	19%
Poland	126,703	133,620	118,294	79,591	97,866	104,061	159%	137%	114%
Russia	135,620	143,629	102,413	437,700	497,400	362,000	31%	29%	28%
South Africa	28,465	32,904	35,048	39,710	48,860	46,830	72%	67%	75%
Turkey	87,377	114,630	783,584	70,716	78,458	100,748	124%	146%	778%

Source: Bloomberg, Bank for International Settlements, RBC Capital Markets estimates

Meanwhile, we are more constructive about Russia, Poland, and Hungary. Hungary and Russia look particularly exciting, because they are undervalued but run large current account surpluses. These surpluses have, over the years, reduced external debt-servicing requirements. Russia now runs one of the lower ratios of short-term claims over FX reserves compared to all major EM (Exhibit 140). Hungary managed to slash external vulnerabilities by over half.

Exhibit 141: EM – Corporate spreads (pp)



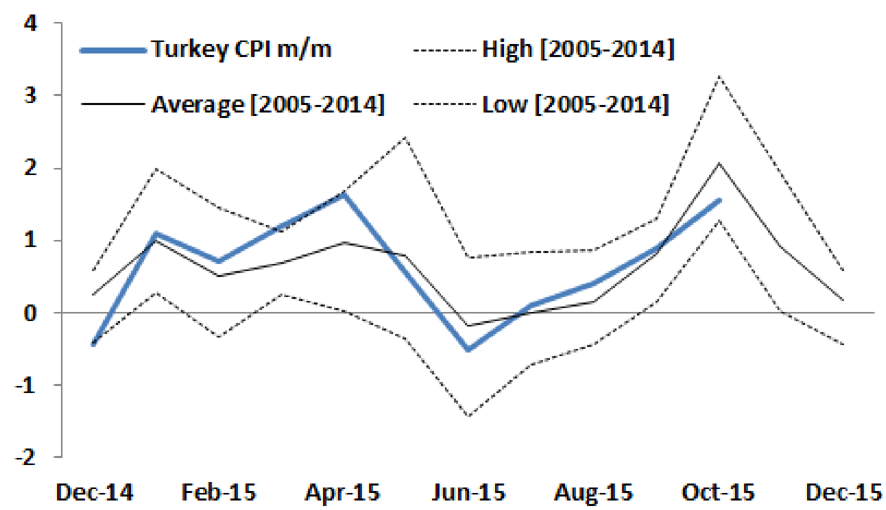
Source: IMF, RBC Capital Markets

Turkey: disappointing politics

An AKP victory would likely support the TRY for a few weeks, but we still believe USD/TRY will drift back well above 3.00. Following a long hiatus since the summer, another parliamentary round of elections provided clear support for the AKP to form a majority government. The incumbent party secured 317 seats in the National Assembly, led by PM Ahmet Davutoglu. The main near-term risk will likely be geopolitical. Some independent observers worry that the main trigger to a vote swing has been a deadly terrorist attack three weeks ago, which may have originated out of the Islamic State in Syria. Nevertheless, the pro-Kurd HDP party still managed to cross the 10% support threshold that guarantees parliamentary representation.

Low risk aversion and positioning pushed USD/TRY significantly lower. We believe that fundamentals remain a concern. Most inflation releases so far this year have been higher than what seasonality would have dictated. This is despite a sharp decline in commodity prices against last year. This may mean an imminent increase in headline inflation in early 2016. The inflation fighting debate may resurface again soon. President Erdogan's decision to call for another round of elections has paid off; nevertheless, there is no super-majority required to change the legislation toward a transition away from a parliamentary regime to a presidential regime. The eternal debate between Erdogan and Governor Basci on reducing real interest rates will likely resurface sooner rather than later.

Exhibit 142: Turkey's inflation seasonality (m/m %)



Source: Bloomberg, RBC Capital Markets estimates

Our main concern is that the lira has not been deep enough in undervaluation territory to support a change in external imbalances.

Our main concern is that the lira has not been deep enough in undervaluation territory to support a change in external imbalances. The current account deficit has improved somewhat in recent years but remains wide. External liability ratios to FX reserves are, therefore, among the worse across EM (Exhibit 140). The banking system runs a large amount of external claims, because interest rate differentials are wide. Local banks and corporations have been financing spending in foreign currencies, but the lira total return since 2013 stands at -19% and year to date at -10%.

After the South African rand, the TRY is the most undervalued currency in EMEA. It may, however, undershoot by an additional 10pp and still remain within valuation ranges observed in the past 10–15 years. We, therefore, forecast it to reach 3.40 between June and September 2016.

Russia: still disappointing growth, otherwise exciting

We expect future rate decisions to be a function of USD/RUB remaining below 65 and Y/Y inflation showing a sustainable decline in line with market expectations. In an address to the State Duma on October 21, CBR Governor Nabiullina attributed the decision to remain on hold in September to "primarily […] August's oil market volatilities, which triggered ruble fluctuations." With USD/RUB at 65 or higher leading up to that meeting, we believe CBR is not comfortable cutting unless USD/RUB stabilizes below 65. This stabilization will partly depend on higher oil prices.

The second precondition for CBR to cut rates is for inflation to show a marked decline. Recent CPI was 15.6% Y/Y, which was slightly below consensus and September's reading of 15.7% Y/Y. CBR expects inflation to reach 12–13% by YE2015, while consensus expects 13%. If the November and weekly readings show a decline to this range, then we would believe that the CBR is more likely to cut.

Exhibit 143: Consensus growth and inflation for 2015, 2016

		Growth (y/y)		Inflation (y/y)	
		2015	2016	2015	2016
US	**Current**	2.50	2.60	0.20	1.90
	Jan-15	3.00	2.80	1.50	2.20
Euro zone	**Current**	1.50	1.60	0.10	1.10
	Jan-15	1.10	1.50	0.60	1.30
Japan	**Current**	0.7	1.2	0.8	1.0
	Jan-15	1.0	1.4	1.5	1.5
Russia	**Current**	-3.90	0.20	15.45	7.95
	Jan-15	-1.75	0.80	8.95	6.00
Poland	**Current**	3.50	3.50	-0.80	1.25
	Jan-15	3.30	3.50	0.75	1.90
Turkey	**Current**	2.80	3.00	7.50	7.45
	Jan-15	3.50	3.70	7.00	6.50
South Africa	**Current**	1.45	1.80	4.70	6.10
	Jan-15	2.40	2.73	5.30	5.60

Source: Bloomberg, RBC Capital Markets

We maintain our view for gradual RUB appreciation against USD as Russia's fundamentals improve.

We believe the current status quo of tight monetary policy and a lack of domestic demand may support this decline in inflation. Financing remains a constraint, while real wages Y/Y have continued to deteriorate (-9.7% Y/Y). Both of these should keep consumer confidence and consumption low, thereby mitigating inflationary pressures from ruble weakness.

However, this status quo comes at the expense of stimulating growth. Q2 GDP was -4.6% Y/Y, and consensus is forecasting -3.9% Y/Y for 2015. IP Y/Y remains negative at -3.7% (September), and retail sales have further contracted by 10.4% Y/Y in September (consensus -9.1%). Given the lack of signs of a pickup in domestic demand, it is worrisome that external demand is not encouraging either. The trade balance has continued to deteriorate to a level unseen since 2009. In August, Russia's exports and imports contracted 39% Y/Y and 34% Y/Y, respectively. This is despite persistent ruble weakness.

We maintain our view for gradual RUB appreciation against USD, as Russia's fundamentals improve. Market consensus is forecasting real GDP growth to turn positive in H2/16 and inflation to reach ~8% Y/Y by the end of 2016.

Poland: Solid but politics

Uncertainty still looms after parliamentary elections on October 25. First, it is not clear how negative the implications are for the banking industry. PiS has supported a new tax on banks assets starting in 2016 and for banks to incur most of the costs of converting CHF loans (see here for more details). Given that ~65% of bank assets are foreign owned, any stress to the financial sector may cause investors to buy FX and sell zloty, thereby causing downward pressure on the zloty. Already in Q2, FDI turned negative after five consecutive positive readings. This may have been a result of Poland's presidential elections back in May and investor expectations of an imminent Fed hike in Q2.

The second uncertainty revolves around the MPC composition and its independency. In turn, this may have significant implications on the monetary policy stance. In 2016, nine out of 10 members will be replaced. Most of these replacements will take place in early 2016, and Governor Belka's term ends in June. Given PiS has stated that it supports replacing departing

We believe Poland's fundamentals will help support the zloty against the euro despite some uncertainty after parliamentary elections on October 25. We expect EUR/PLN to trend lower to 4.00 by YE2016.

members with members who are dovish, this may weaken the zloty and make investors question the independence of the central bank.

We expect recent zloty weakness to help increase inflationary pressures despite some deterioration in consumer 12-month inflation expectations from 0.23% Y/Y in September to 0.20% Y/Y in October. As the unemployment rate continues to decline, this may help support domestic demand and in turn inflation. The unemployment rate has declined to 9.7% from a peak of 12% in February. In the face of unresolved questions, we still believe that Poland's fundamentals will help support the zloty against the euro. This should help EUR/PLN to trend lower to 4.00 by YE2016.

Market consensus is forecasting 3.5% Y/Y real GDP growth for both 2015 and 2016. This is well above those of the Eurozone (1.5%, 1.6%), Hungary (2.9%, 2.4%), and Czech Republic (3.8%, 2.7%). Although inflation forecasts have been revised lower, market consensus still expects headline inflation gradually to increase.

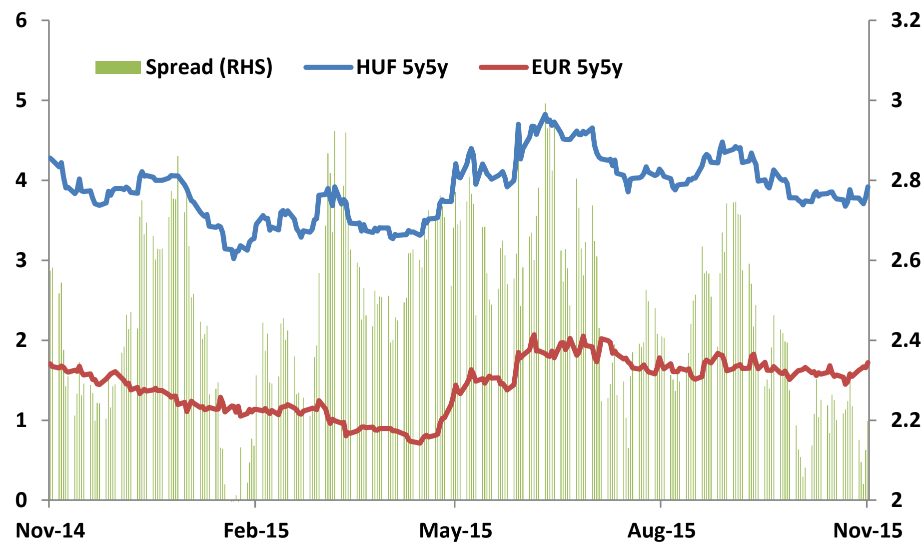
Hungary: Euro zone tailwinds

Although we expect no cut in the short term, we expect NBH to maintain a cautionary and dovish stance given that 1) headline inflation has continued to deviate from market consensus, 2) growth expectations have deteriorated, and 3) the probability of ECB extending QE has increased.

Growth expectations for 2016 have slightly deteriorated from 2.50% to 2.40% from September to October. Given that Hungary's exports of goods and services stood at 94% of GDP at the end of June and contributed 2 pp to Q2 growth of 2.7% Y/Y, downside risks to exports may have a negative effect on growth expectations. This may materialize if the recovery in activity and a rotation to domestic demand in the euro area lose momentum. A total of 53% of Hungary's exports went to the euro area in 2014.

In the next 12 months, we remain bullish on the forint against the euro. We forecast EUR/HUF to reach 300 by the end of Q3/16. Hungary's fundamentals will remain robust, especially against those of the euro area. Market consensus for real GDP growth is 2.40% Y/Y for Hungary against 1.60% Y/Y for the euro area. As of June 2015, 1Y international claims as a percentage of FX reserves have slightly declined, now at 27.5% compared to 28.1% in December. Additionally, NBH recently announced that it will begin a GSP lending program in January 2016 to boost bank lending. This may support leverage pick up and additional flattening in the local yield curve. Since June, 5y5y spread over euro swap has contracted 85bp.

Exhibit 144: HUF & EUR local swap rates 5y5y, spread (HUF 5y5y – EUR 5y5y)



Source: Bloomberg, RBC Capital Markets

Czech: Peg in check

We expect CNB to remain committed to its EUR/CZK floor of 27.00 well into 2016. In its recent statement from September 24, CNB reiterated that it "would not discontinue the use of the exchange rate before the second half of 2016." We believe this will be the case due to persistently low inflation; however, market consensus does not expect inflation to reach CNB's inflation target of 2.0% at any point in 2016. It is forecasting 1.80% Y/Y by YE2016.

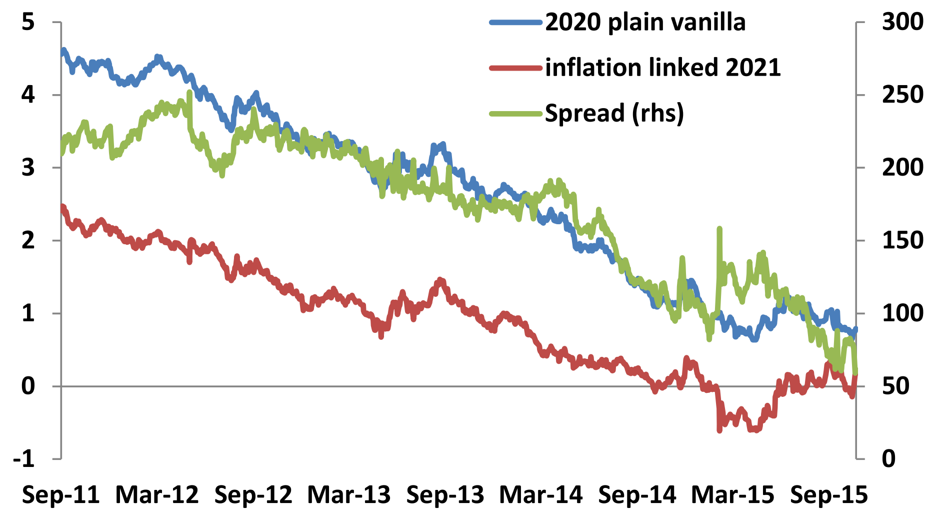
Moreover, persistently low inflation in Germany and the euro area may add to deflationary pressures in Czech Republic. Based on imports from January through August, 26% and 50% of Czech Republic's imports came from Germany and the euro area, respectively. This means that deflationary pressures in the Eurozone may have spillover effects on Czech inflation. Market consensus has revised lower its headline inflation forecasts for 2016 for both Germany and the euro area. For Germany, it has been revised to 1.40% Y/Y in October from 1.60% Y/Y in September. For the euro area, it has been revised to 1.10% Y/Y in October from 1.30% Y/Y in September.

In addition to potential spillover effects from neighboring countries, EUR/CZK has remained close to the floor of 27.0 since July. If ECB does extend QE in December, then this may cause EUR/CZK to test the floor and cause downward pressure on EUR/CZK. In turn, this is likely disinflationary. If deflationary effects increase on the back of these factors, then we expect CNB to push off its exit from the EUR/CZK floor. In the long term, we expect robust fundamentals in Czech Republic to keep EUR/CZK at 27. Market consensus forecasts real GDP at 2.7% Y/Y in 2016. This is compared to 1.6% Y/Y for the euro area.

Israel: turning sour

The key driver will be a Fed rate hike decision in December. At the moment, the market has less than 60% probability of a rate hike in the United States before the end of 2015. We believe this probability will likely increase at least an additional 10pp before the Fed takes the decision on December 16. In Israel, 2y swaps are just 25bp against 90bp in the US. Once the first rate hike materializes in the US, we believe the shekel will quickly rise above 4.00.

Exhibit 145: Breakeven inflation



Source: Bloomberg, RBC Capital Markets

Most believe the BoI will remain über dovish, because growth is weak and inflation remains exceptionally low. Moreover, geopolitical risk remains high, which may depress business and consumer sentiment. If the Fed were to hike, then USD might strengthen against the ILS. We, therefore, forecast USD/ILS will close 2015 at 4.20.

We, therefore, believe that a weaker shekel will likely drive inflation expectations higher. The breakeven inflation between plain vanilla 2020 and the corresponding inflation-linked bond reached all-time lows at just about 60bp. We believe it is highly unlikely that inflation will average just 60bp for five years. Israel has plenty of infrastructure bottlenecks that should raise inflation in the medium term. A recent rainstorm shut down the power grid across the country. Moreover, consensus growth stands at 2.6% for 2015 and 3.3% for 2016. Headline inflation may, therefore, rise from -0.3% this year to 1.1% in 2016.

A weaker shekel, stable to stronger growth, and higher headline inflation may, therefore, trigger rate hikes. While consensus has the reference rate at 0.7% by YE2016, the market is significantly more dovish. The 1y MAKAM T-bill is barely 8bp, and the 1Y ILS swap rate is 8bp. The market is pricing a combination of two monetary policy scenarios. First, that BoI follows the European central banks with negative interest rates and possibly some sort of interest rate twist. Second, inflation may eventually trigger a rate hike cycle but only between the end of 2016 and 2017.

- We have a bullish bias for USD/Asia. That said, there are appealing relative value opportunities within the region in 2016.
- There are four key thematic sources of divergence within the Asian region: 1) Monetary policy divergence, 2) structural reform, 3) political risk, and 4) the vulnerability to Fed tightening.
- Taking all of these factors into account, we are overweight RMB, INR, and PHP; neutral IDR and KRW; and bearish SGD, THB, and TWD. Finally, it is too early to call a bottom in MYR, but we will look for opportunities to enter strategic longs by mid-2016 on key crosses.

Asia – Bullish USD/Asia, but many RV opportunities

There are four key thematic sources of divergence within the Asian region:

1. **Monetary policy divergence**

   Different domestic growth and inflation trajectories, overlaid with differing leverage dynamics, mean that there is more room for accommodation in some economies, relative to others. However, benign inflation, together with residual uncertainties on global growth prospects, means subdued growth for the region as a whole. China and Singapore have much more scope to ease monetary policy relative to India, Indonesia, Malaysia, Korea, Philippines, Thailand, and Vietnam for instance

2. **Structural Reform**

   The willingness, capacity, likely success of reforms, and ability to present a coherent narrative. All economies in the region are reliant on restructuring and productivity gains to drive the next phase of growth. China, India, and Indonesia are obvious candidates, but other economies are often overlooked: Singapore (productivity), Malaysia (labor market and education), and Philippines (simplify regulations to encourage private and public investment) are just some examples.

3. **Politics**

   Various elections within the region may interfere with reform progress in China, India, Taiwan, and Thailand

4. **Vulnerability to Fed tightening**

   External debt metrics and current account funding dynamics leave MYR and IDR as the most vulnerable; KRW and TWD are also vulnerable in the event JPY and RMB are no longer anchors. Relatively stronger external debt metrics and reserve adequacy suggest that RMB, INR, and PHP should be relative outperformers.

We have a bullish bias for USD/Asia. That said, there are appealing relative value opportunities within the region in 2016. We are overweight RMB, INR, and PHP. We are neutral IDR and KRW. We are bearish SGD, THB, and TWD. Finally, it is too early to call a bottom in MYR, but we will look for opportunities to enter strategic longs by mid-2016 on key crosses.

China

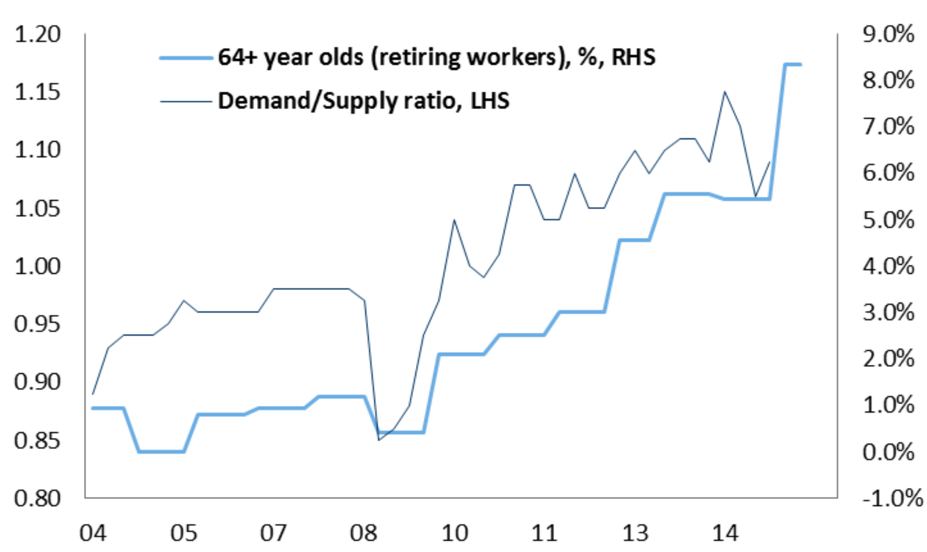
RMB: USD/RMB appreciation; RMB to outperform Asian FX

Growth slowing on all fronts – watch out for downside risk to consumption

Growth in China remains challenged by structural headwinds from continued deleveraging and unfavorable demographics. In addition to this, China is facing an intensifying cyclical slowdown. Investment, especially real estate, remains a major drag on top-line growth, amid oversupply, high real interest rates, a backdrop of extended leverage, and the structural shift to reduce the investment share of growth from 46% to ~35% over the next five to 10 years. The investment slowdown is set to fall from an average of 9.5% in the past five years to 4.6% over the next five years. Exports remain under pressure thanks to an overvalued exchange rate and weak external demand.

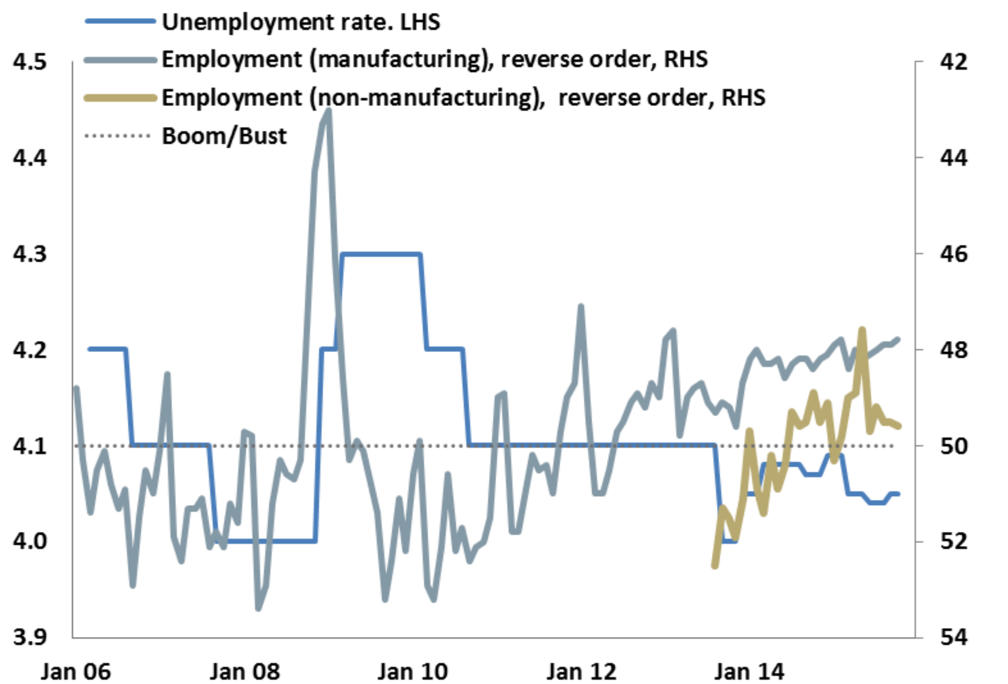
Consensus expects that consumption will pick up the slack and be the main driver of growth, but we see downside risk to this. In particular, the labor market is still adjusting to the demographic shift (an aging population and smaller working-age population), higher wages, and low productivity. The government's chief priority is to ensure that the registered urban unemployment rate does not rise above 4.5%. The unemployment rate of 4.05% in September 2015 is low, but we think it is artificially low due to older workers, with the highest unemployment rate, retiring from the workforce. The size of the 64+ year-old cohort has accelerated in recent years to 8.4% of the population (Exhibit 146). Leading indicators point to upside risk to the unemployment rate; employment is contracting in both the manufacturing and services sectors (Exhibit 147). By the end of 2016, we expect the benchmark one-year lending rate to be at 4.10% (-25bp) and the RRR (for major banks) to be at 15.5% (-200bp). The risk is that the one-year lending could be cut by an additional 25bp and some of the easing is brought forward into the end of 2015. USD/RMB interest rate and growth differentials will continue to widen.

Exhibit 146: Older workers exiting flattens unemployment rate



Source: RBC Capital Markets, National Bureau of Statistics

Exhibit 147: Employment contraction



Source: National Bureau of Statistics, Caixin, RBC Capital Markets

Risk of widening Chinese political risk premium

Though it is not an imminent risk, we think political risk in China will increase as we approach the leadership transition in 2017. Of the seven men who now comprise the Communist Party's Politburo Standing Committee, the apex political body in China, four members are considered 'princelings', led by President Xi. When the new leadership is chosen in 2017, only 14 members of the Politburo will be eligible to continue on the basis of the tacit retirement age of 68.

Of those 14 members continuing in 2017, only two members are seen as having close ties with President Xi. The rest have allegiance with the Youth League or Shanghai Gang factions. In particular, the Standing Committee currently has a majority of princelings. In 2017, five members will retire, leaving President Xi (Princeling) and Premier Li (Youth League). Those five members are three princelings and two Shanghai Gang. Based on biographical and factional analysis, their likely replacements will be three Youth League and two Shanghai Gang, leaving President Xi's princelings in the minority in the Standing Committee.

The risk is that President Xi will be preoccupied with consolidating his power base, which may see limited room to push his reform agenda beyond 2017. 2016 will be another crucial year for the president to strengthen his authority. In many ways, the corruption drive has been part of this strategy, appointing his supporters to key positions.

Structural reform is the key, RMB, and the SDR

Intensifying downside risks to growth, disinflationary pressure against a backdrop of high leverage, and the need to reduce vulnerabilities tied to rapid credit and investment growth reinforce our view that USD/RMB needs to enter a period of sustained appreciation.

President Xi has reiterated his desire to double GDP between 2010 and 2020, targeting 6.5% minimum growth for the next five years. This is in line with consensus and our view, but it leaves little wiggle room for growth to slow from the current 6.9%Y/Y pace. Thus, successful

Irrespective of the SDR decision, the end-game is the same: higher USD/RMB.

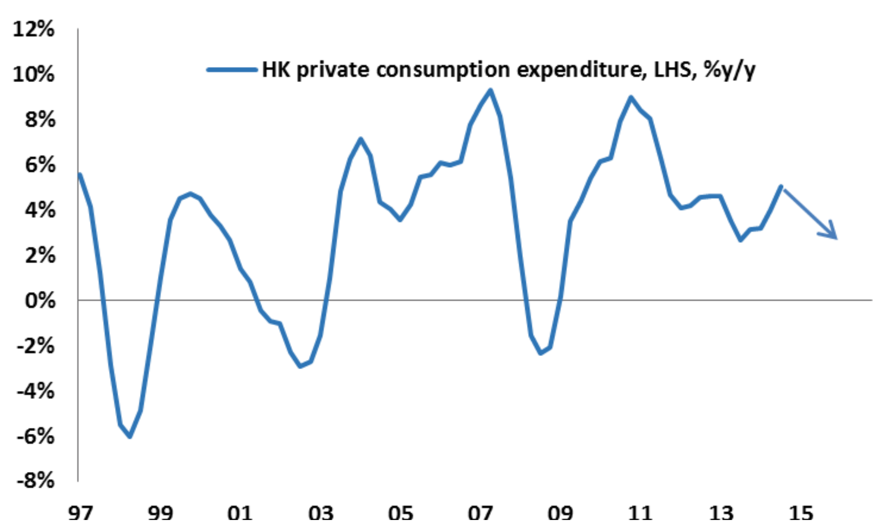
implementation of structural reform is absolutely critical, particularly in SOEs and Hukou. Exchange-rate reform is also important. Recent, at times heavy, FX intervention is disappointing in this regard. Quite apart from sending mixed signals in light of the August 11 devaluation, it also contradicts China's reported pledge (to the US Treasury in June) to intervene in FX markets "only when it's necessitated by disorderly market conditions," and thus opening up a growing credibility gap. We also think this could complicate China's entry into the SDR basket. Though we have long expected China to be given a green light, we now think recent intervention may threaten passage of the SDR vote since it flies in the face of a 'market-determined' exchange rate. Irrespective of the SDR decision, the end game is the same: Higher USD/RMB. There are two scenarios: 1) China can keep intervening to limit USD/RMB upside, but SDR entry would be unlikely, in our view, thereby resulting in a negative RMB reaction, or 2) China will desist from intervening, removing a key obstacle to further USD/RMB appreciation, and SDR entry would be likely. We do not think that SDR status will send USD/RMB sharply lower by ushering in 'trillions' of reserve inflows; central banks have been accumulating RMB reserves for years, and China has entered an era of sustained capital outflows. The actual potential inflows linked to SDR status may only offset a portion of those outflows. Inclusion in the IMF's SDR basket next year should help RMB outperform within the region, however.

Hong Kong

HKD: Status quo for Hong Kong's currency board system

Every monetary system has costs and benefits. The HK government has frequently reiterated its commitment to the HKD peg and exchange rate stability, given HK's status as an open, export-oriented economy and global financial center. We do not expect an imminent shift in policy, but on the basis of the political and economic climate, an RMB peg seems the most likely monetary regime if the HK government were to change the USD/HKD peg. This can only happen if the RMB is fully convertible and internationalized and if the HK government is satisfied that operating under China's monetary policy is appropriate. Faster financial market reform in China and convergence of the HK and Chinese business cycles bring forward the risk of an eventual shift in the HKD peg toward an RMB anchor. Meanwhile, China has stated 2020 as the expected target for RMB convertibility on the capital account. An inflexible exchange rate, higher US rates, and slowing Chinese economic growth make for a toxic mix, thereby placing sustained downward pressure on HK economic growth as HK's property and retail sectors weaken (Exhibit 148).

Exhibit 148: Intensifying pressure on HK domestic demand growth



Source: RBC Capital Markets, Census and Statistics Department HK

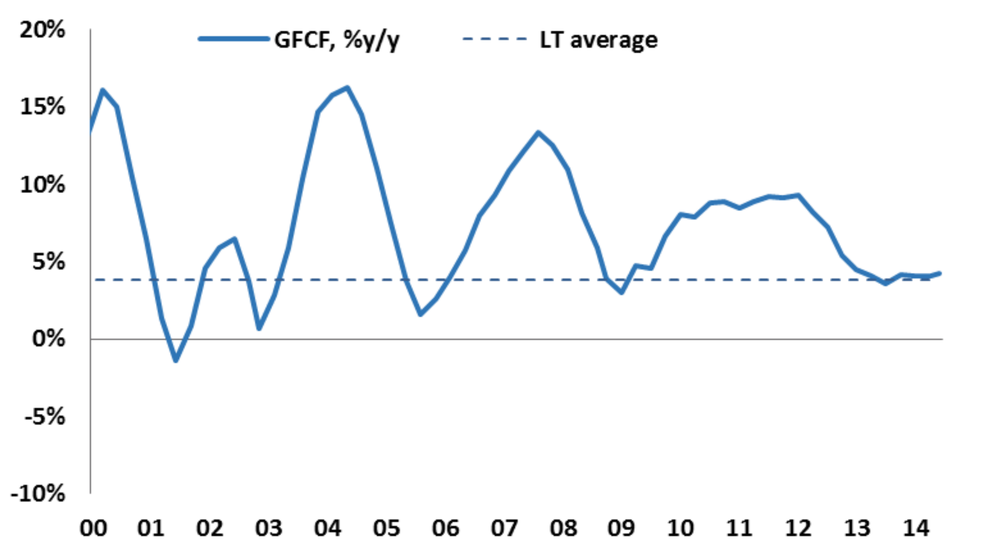
Indonesia

IDR: Neutral; Much rests on Jokowi's shoulders

For 2016, we will be monitoring developments in local politics and whether President Widodo is able to move forward with key infrastructure projects as the keys to our IDR outlook.

President Widodo continues to struggle within Parliament, not least because of his coalition's lack of a majority and underperforming ministers, despite a cabinet reshuffle. This is preventing meaningful progress with reforms and infrastructure spending, but he has bought himself some time with stimulus plans. There is an expectation that infrastructure spending will pick up in H2, and we will be monitoring this closely. There have been signs of public spending on infrastructure gaining more momentum, but the 21% spending on the capital budget as of September is still not fast enough. We will be monitoring developments in local politics and whether the President is able to move forward with key infrastructure projects as the keys to our IDR outlook. External debt and current account metrics leave IDR exposed to higher US rates and a stronger USD. Ironically, if the government is able to accelerate investment growth, the current account deficit will likely widen. Indonesia has the highest share of foreign holdings government bonds in the region (39.63% in June 2015). This would not be a problem if there were a commensurate pickup in FDI and portfolio inflows. Again, much rests on Jokowi's shoulders and his ability to deliver in a timely manner.

Exhibit 149: Gross fixed capital formation (Y/Y) vs. LT average



Source: MOFCOM, RBC Capital Markets

India

INR: Outperformer, but a sharp decline in the Modi factor is a key risk

We expect INR to be one of the outperformers in the region, on the back of India being best positioned in Asia to benefit from lower oil prices and its relative insulation from China's economic growth slowdown (from a trade perspective).

We expect INR to be one of the outperformers in the region. India is among the better positioned in Asia to benefit from lower oil prices and is also relatively insulated from China's economic growth slowdown (from a trade perspective), with exports to China accounting for just ~5% of India's total exports in 2014. We think the bigger issue for INR watchers is the progress of structural reforms. Reforms on tax, labor, and land are all crucial if India is to attract FDI and remove key obstacles to doing business in India (Exhibit 150). All three reform bills have run into difficulty since August due to the BJP's minority in the Upper House. RBI is doing its part to help, announcing a range of measures to liberalize financial markets. For example, it increased the US$30bn limit for foreign investment in government bonds by US$18bn (by March 2018 in stages; currently fully utilized and up to 5% of outstanding). In the meantime, the coming *Pay Commission Report*, where employee salaries are linked to performance, could help in lifting domestic demand and productivity meaningfully.

The odds of further cuts in 2016 will be contingent on CPI inflation undershooting. The RBI mandate is to bring CPI inflation to 4% +/-2%pp by March 2018. The March 2017 target is set at 5%. Having frontloaded monetary policy with a 50bp rate cut to 6.75% on September 29, we expect the RBI to be on hold for the foreseeable future, but the risk is toward another 25bp cut.

The risk to our overweight INR view is that support for Modi's BJP slips meaningfully. Key losses in Delhi and Bihar this year are concerning in this regard. The BJP will have to do very well in the state elections between now and through 2017 to maintain reform momentum (and sentiment).

Exhibit 150: Historical difficulty in doing business in India

	Ease of Doing Business Ranking - World Bank
Singapore	1
HK	2
Malaysia	18
Taiwan	19
Thailand	26
Vietnam	78
China	90
Philippines	95
Indonesia	114
India	**142/189**

Source: MOFCOM, RBC Capital Markets

Malaysia

MYR: Too early to call a bottom, but looking to short SGD/MYR

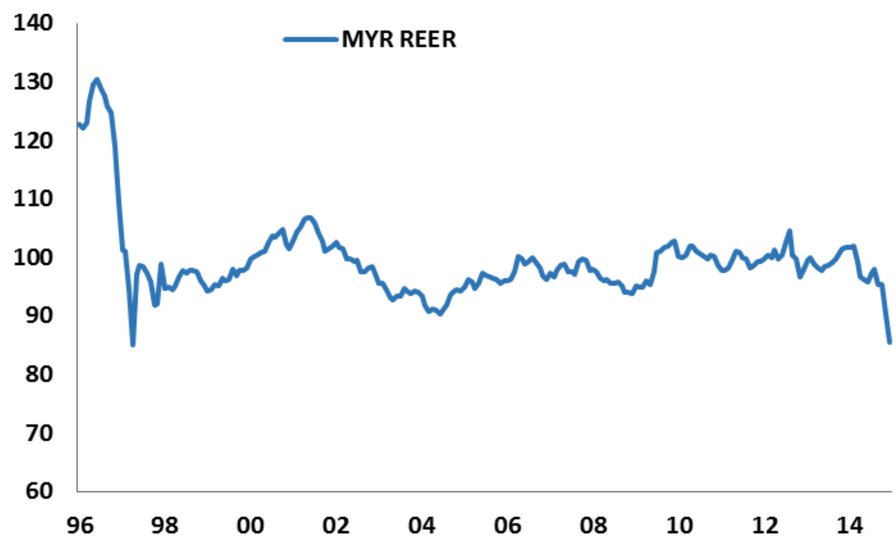
It is too early to call a bottom in MYR, but we will look for opportunities to enter strategic longs.

A slide in oil prices was compounded by concerns over domestic political instability and corporate governance in July due to reports the debt ridden 1MDB had allegedly deposited ~US$700mn into PM Najib's bank account. PM Najib continues to deny any wrongdoing. MYR is the worst-performing Asian currency by a wide margin (-18.9% YTD), trading through 3.80 (the level at which the USD peg ended in July 2005) to levels last seen in the Asian Crisis (Exhibit 151). Investor sentiment has been eroded along with Malaysia's FX reserves (-US$11bn to a six-year low) and current account surplus (from 4.4% of GDP in December 2014 to 2.7% in June 2015).

We think a lot of bad news has been discounted for MYR. In particular, there is scope for the political risk premium to fall. PM Najib is unlikely to resign or be unseated. Despite falling approval ratings, PM Najib has managed to centralize power and faces little resistance in parliament. Meantime, we think the marginal effect of former PM Mahathir in undermining Najib is diminishing after months of ineffectual opposition, while fiscal consolidation is expected to continue (2015: 3.2% of GDP and 2016: 3.1%).

Malaysia remains committed to becoming a developed nation by 2020 with its New Economic Model of reforms. Reforms include private sector-driven growth, accelerated implementation of productivity-boosting reforms, and initiatives to move the Malaysian economy up the value chain in both manufacturing and services industries. It may be too early to call a bottom in MYR on some crosses, but the starting point of relative undervaluation, a potential decline in the political risk premium, narrower credit spreads, and signs of timely structural reforms should see MYR clawing back on key crosses such as SGD/MYR in 2016. Some risks to this outlook include the continued erosion of its external liquidity, which could see downgrades from credit ratings agencies and increase MYR's exposure to the normalization of US monetary policy even further. Regressive policy steps (e.g., capital controls) would also undermine MYR's ability to correct undervaluation.

Exhibit 151: MYR real effective exchange rate at Asian Crisis lows



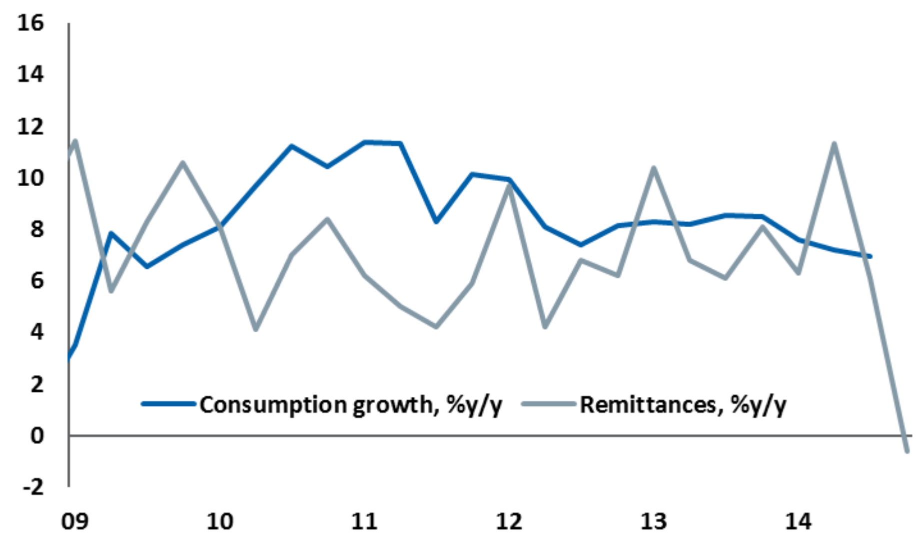
Source: Bank of International Settlements, RBC Capital Markets

Philippines

PHP: Outperformer, but keep an eye on OFW remittances

PHP sentiment remains positive and for good reason: strong consumption-driven growth, high-capacity utilization, low external financing risks, underscored by a string of upgrades to the country's long-term debt ratings and outlooks in the past two years (Moody's: Upgrade from Baa3 to Baa2 stable in December 2014; S&P: Upgrade from BBB- to BBB stable in May 2014; Fitch, Outlook change from Stable to Positive in September 2015). Political risk has decreased with Roxas emerging as a frontrunner in the (May 9) 2016 elections based on the results of the latest poll of Social Weather Stations (SWS) conducted in early September. President Aquino's support of policy continuity in the event of a Roxas win would be highly likely. A risk to this outlook is that overseas foreign workers' remittances contracted for the first time since 2003 in August by 0.6% Y/Y. If sustained, this would represent downside risk to the current account surplus, consumption growth, and expectations of a BSP rate hike in 2016 (Exhibit 152).

Exhibit 152: Overseas foreign workers' remittances growth at record low



Source: Bank of International Settlements, RBC Capital Markets

South Korea

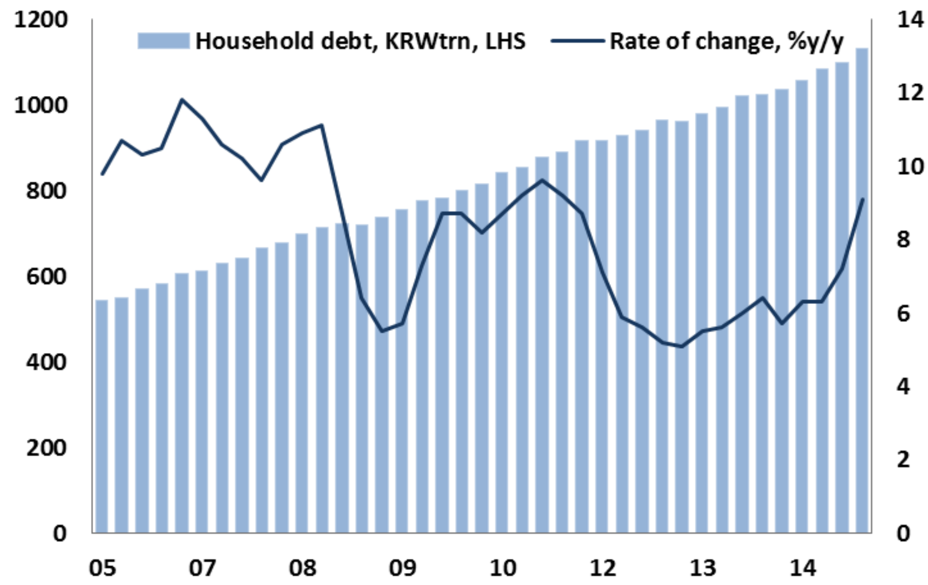
KRW: Neutral; KRW has the most to lose from USD/JPY and USD/RMB gains

KRW is one of the biggest potential losers from continued appreciation in USD/JPY and USD/RMB weakness.

With growth and inflation basing, expansionary budget and ending of MERS, we think the BoK will likely remain on hold for the rest of 2015 and 2016. Furthermore, with BoK paying greater attention to financial stability risks from high household debt (85.22% of GDP in Q2/14), we see little urgency for the Bank to ease again (Exhibit 153). Preliminary Q3 GDP growth increased from 2.2% to 2.4%, and core CPI inflation remained at 2.1%. BoK Governor Lee said growth is still likely to hit the Bank's 2.8% target this year, and though inflation remains low and well below the BoK's target band of 2.5% to 3.5%, the target will be revised shortly, likely in December.

But KRW is one of the bigger potential losers from continued appreciation in USD/JPY and USD/RMB weakness, which we expect. South Korea has the highest export correlation and lowest export complementarity with Japan and China. The KRW short-covering subsequent to the spike in USD/KRW above 1,200 in September leaves positioning much better balanced, and we expect the groundwork has been laid for resumption to the topside (in USD/KRW). Positioning, proxied by equity inflows, was saturated (toward longs) from April, and record outflows into September helped explain the spike in USD/KRW. Short covering through October has left the market flat, thereby clearing the way for another leg higher, in our view.

Exhibit 153: Household debt growth to stay in BoK's hand



Source: Bank of Korea, RBC Capital Markets

Singapore

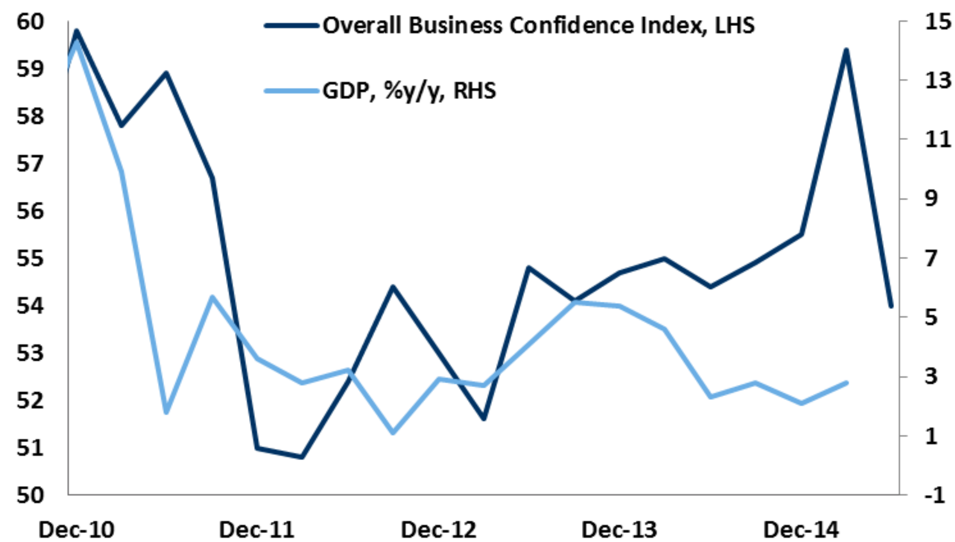
SGD: Underperformer; MAS in reactive mode

An overvalued exchange rate and a central bank that is low and reactive to downside risks leaves us comfortable with an underweight SGD view.

We continue to think there are downside risks to MAS's forecasts that core CPI inflation will rise over the course of 2016 from 0.5% to 2.0% and headline inflation to range of -0.5% to 0.5%. Likewise, its forecast for GDP growth to expand from 1.4% to 2.0–2.5% in 2015 and 2016 seems optimistic given the slowdown in China, Malaysia, and the EU, its top-three trading partners (representing a combined 32% of total trade). The SBF/DP SME business confidence index, a six-month leading indicator, hit a three-year low of 51.6 in Q4 and underscores our concerns. SBF and DP noted that there has been "a significant decline" in the outlook of three of Singapore's major industries—Commerce and Trading, Construction and Engineering, and Manufacturing. The decline has outweighed the slight increase in optimism among the Retail and F&B, Business Services, and Transport and Storage sectors (Exhibit 154). A policy of modest and gradual appreciation in the S$NEER (which we estimate at +0.5% per annum) seems inappropriate against this backdrop.

An overvalued exchange rate and a central bank that is slow and reactive to downside risks leave us comfortable with an underweight SGD view. The combination of low implied volatility and low yield renders SGD as a very attractive funding currency for high-yielding Asian FX, and we expect SGD underperformance to become more entrenched in the longer term, particularly if the Fed begins its tightening cycle in December, as our US Strategists expect. With the next MAS meeting in April 2016, the door remains open to an inter-meeting easing.

Exhibit 154: Singapore GDP growth – looking precarious



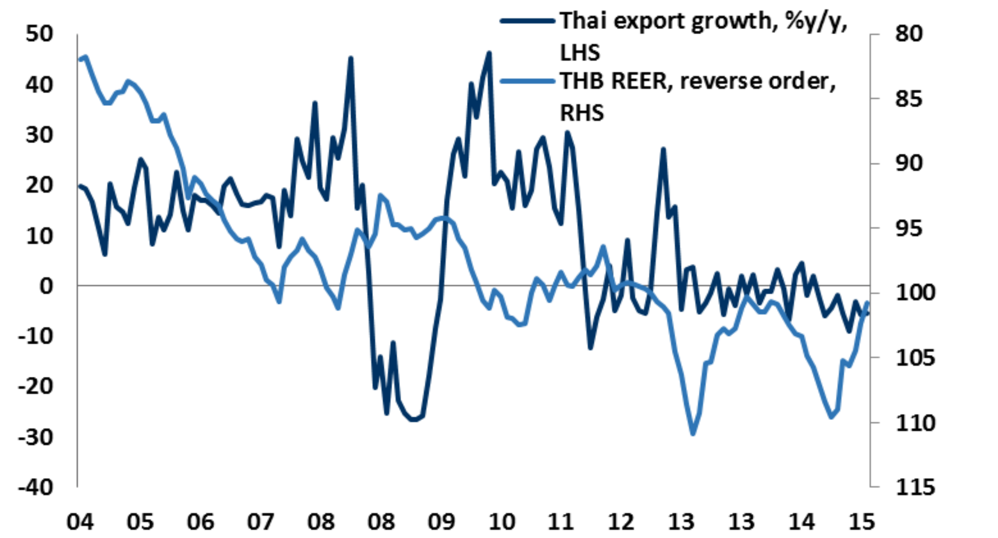
Source: Singapore Ministry of Trade and Industry, Singapore Business Federation/DP Info, RBC Capital Markets

Thailand

THB: Underperformer; few positives

Weak private-sector demand, high household indebtedness, persistent slack in the economy (capacity utilization: 58.8% in September 2015, long-term average: 64.4%), weakness in key export markets (China, Japan, and EU), and delayed elections (which had been scheduled for mid-late 2016 and now likely in 2017) make for a difficult year for the THB. The BoT cut the benchmark repo rate by 50bp this year to a five-year low of 1.5% (in March and April). The weak fundamentals leave the door open for further rate cuts, but we think the BoT would prefer more THB weakness (Exhibit 155). The Bank already announced a series of capital account liberalization measures in April, easing outward investment rules for local residents, and it may announce more. Exports account for over 60% of GDP, and annual export growth has contracted every month since January.

Exhibit 155: BoT to tolerate more THB weakness



Source: Bank of Thailand, Bank of International Settlements, RBC Capital Markets

Taiwan

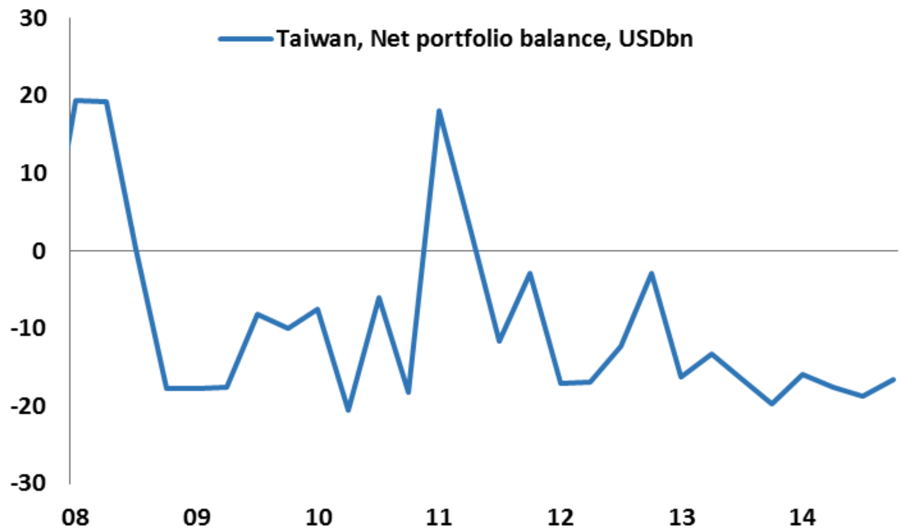
TWD: Underperformer; China growth taking its toll

Relative outperformance of the TWD in 2015 seems unsustainable in 2016, particularly if our forecasts for USD/JPY (132) and USD/RMB (6.95) materialize.

Real GDP growth contracted in Q3/15 for the first time since Q3/09 (-1.01%Y/Y). China's economic slowdown and structural transformation are taking their toll. China is Taiwan's largest export destination and second-largest source of imports, representing over 20% of total trade. CPI inflation has been negative for much of 2015 and remains subdued (0.28%Y/Y in September 2015). As a result, CBC cut its benchmark interest rate by 12.5bp to 1.75% on 24 September—the first cut since 2009. We expect lower local rates and higher US rates will encourage even more capital outflows (Exhibit 156). Thus, relative outperformance of the TWD in 2015 seems unsustainable in 2016, particularly if our forecasts for USD/JPY (132) and USD/RMB (6.95) materialize.

The political risk premium could also increase. The Presidential and Legislative Yuan elections are scheduled for 16 January 2016. The Opposition Democratic Progressive Party (DPP) candidate Tsai Ingwen has been a consistent leader in the polls to become Taiwan's next president based on the results of polls commissioned by Taiwan Thinktank and conducted by Trend Survey and Research in late October. Policy continuity is not assured, and strained relations between Taiwan and China is a key downside risk not yet discounted.

Exhibit 156: Sustained deficit in the portfolio balance



Source: Central Bank of the Republic of China, RBC Capital Markets

Forecast Tables

Economics

Exhibit 157: RBC Economic forecasts for the United States

United States	2016				2017				Annual averages	
RBC Forecasts	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017
Real GDP (% q/q annualized)	**2.5**	**3.2**	**3.2**	**2.9**	**2.7**	**3.3**	**3.3**	**3.0**	**2.9**	**3.0**
Household consumption (% q/q annualized)	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.7*	*2.8*	*2.7*
Government spending (% q/q annualized)	*3.0*	*3.5*	*3.5*	*2.0*	*1.5*	*1.5*	*1.5*	*1.5*	*2.8*	*2.0*
Business fixed investment (% q/q annualized)	*2.5*	*5.0*	*5.0*	*4.5*	*6.0*	*6.0*	*6.0*	*6.0*	*3.7*	*5.5*
Net Exports (ppt contribution)	*-0.4*	*0.0*	*0.0*	*0.0*	*-0.1*	*-0.1*	*-0.1*	*-0.1*	*-0.1*	*-0.1*
Headline CPI (% y/y)	1.8	1.9	2.2	2.4	2.3	2.2	2.1	2.1	2.1	2.2
Core CPI (% y/y)	2.3	2.2	2.5	2.5	2.4	2.3	2.2	2.2	2.4	2.3
Fed IOER (%)	0.75	1.00	1.25	1.50	2.00	2.50	3.00	3.50	...	...
UST 10y Yield (%)	2.60	2.70	2.85	3.05	3.40	3.65	3.95	4.15	...	...

Exhibit 158: RBC Economic forecasts for Canada

Canada	2016				2017				Annual averages	
RBC Forecasts	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017
Real GDP (% q/q annualized)	**2.2**	**2.4**	**2.6**	**2.7**	**2.9**	**2.8**	**2.6**	**2.0**	**2.2**	**2.7**
Household consumption (% q/q annualized)	*2.8*	*2.7*	*2.1*	*2.1*					*2.5*	
Government spending (% q/q annualized)	*1.5*	*2.0*	*2.5*	*2.5*					*1.6*	
Business fixed investment (% q/q annualized)	*0.2*	*0.0*	*-0.1*	*2.8*					*0.0*	
Net Exports (ppt contribution)	*0.0*	*0.0*	*0.7*	*0.3*					*0.2*	
Headline CPI (% y/y)	2.2	2.0	2.1	2.2	2.0	1.9	1.9	1.9	2.1	1.9
Core CPI (% y/y)	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
BoC Overnight rate target (%)	0.50	0.50	0.50	1.00	1.25	1.50	1.75	2.00	...	...
GoC 10y Yield (%)	1.85	1.90	2.20	2.60	2.75	2.90	3.15	3.30	...	...

Exhibit 159: RBC Economic forecasts for the Euro Area

Euro Area	2016				2017				Annual averages	
RBC Forecasts	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2016	2017
Real GDP (% q/q)	**0.4**	**0.4**	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.4**	**...**	**...**
Real GDP (% y/y)	*1.5*	*1.5*	*1.7*	*1.9*	*1.9*	*1.9*	*1.8*	*1.7*	*1.7*	*1.8*
Private consumption	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	*0.3*	*0.3*	*0.3*	*1.6*	*1.5*
Government consumption	*0.3*	*0.2*	*0.3*	*0.3*	*0.2*	*0.2*	*0.2*	*0.2*	*1.1*	*0.9*
Gross capital fixed formation	*0.8*	*0.9*	*0.9*	*0.9*	*0.7*	*0.7*	*0.7*	*0.7*	*2.8*	*3.2*
Net exports (contribution)	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.1*	*0.1*	*0.1*	*0.0*	*0.2*
ECB (Nov-15)	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	1.7	1.8
HICP inflation (average, % y/y)										
RBC (Nov-15)	0.9	0.8	1.1	1.3	1.4	1.4	1.5	1.5	*1.0*	*1.5*
ECB (Nov-15)	1.1	0.8	1.2	1.5	1.6	1.6	1.7	1.7	1.1	1.7
ECB main refinancing rate (%, end of period)										
RBC (Nov-15)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		

Exhibit 160: RBC Economic forecasts for United Kingdom

United Kingdom	2016				2017				Annual averages	
RBC Forecasts	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**2016**	**2017**
Real GDP (% q/q)	**0.6**	**0.5**	**0.6**	**0.5**	**0.6**	**0.5**	**0.6**	**0.6**	**…**	**…**
Real GDP (% y/y)	*2.4*	*2.2*	*2.2*	*2.2*	*2.2*	*2.2*	*2.3*	*2.3*	*2.3*	*2.3*
Private consumption	*0.8*	*0.8*	*0.7*	*0.7*	*0.7*	*0.8*	*0.7*	*0.8*	*2.9*	*3.0*
Government consumption	*0.0*	*0.1*	*0.0*	*0.1*	*0.0*	*-0.3*	*-0.3*	*-0.3*	*0.2*	*-0.7*
Gross capital fixed formation	*1.0*	*0.5*	*0.3*	*0.5*	*0.5*	*0.5*	*1.0*	*1.0*	*2.3*	*3.0*
Net exports (contribution)	*-0.1*	*-0.1*	*0.1*	*0.0*	*0.1*	*-0.1*	*0.1*	*-0.1*	*0.2*	*0.0*
BoE (Nov-15)	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.6	2.5	2.7
CPI inflation (average, % y/y)										
RBC (Nov-15)	1.0	1.1	1.0	1.3	1.4	1.6	2.0	2.0	*1.1*	*1.8*
BoE (Nov-15)	0.7	0.8	0.9	1.3	1.5	1.7	1.8	2.1	0.9	1.8
Bank Rate (%, end of period)										
RBC (Nov-15)	0.50	0.75	0.75	1.00	1.00	1.25	1.25	1.50		

Exhibit 161: RBC Economic forecasts for Australia

Australia	2016				2017				Annual averages	
RBC Forecasts	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**2016**	**2017**
Real GDP (% q/q)	**0.6**	**0.7**	**0.7**	**0.8**	**0.9**	**0.7**	**0.7**	**0.7**	**2.3**	**3.1**
Household consumption (% q/q)	*0.6*	*0.7*	*0.7*	*0.7*	*0.7*	*0.8*	*0.8*	*0.8*	*2.5*	*2.9*
Government spending (% q/q)	*-0.5*	*-0.3*	*-0.3*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*-1.1*	*0.0*
Business fixed investment (% q/q)	*-2.5*	*-1.7*	*-1.5*	*-1.3*	*-0.8*	*-0.8*	*-0.6*	*-0.6*	*-8.6*	*-4.0*
Net Exports (ppt contribution)	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.5*	*0.6*	*2.2*	*2.4*
Headline CPI (% y/y)	2.6	2.7	2.8	2.6	2.6	2.6	2.7	2.8	2.6	2.8
Core CPI (% y/y)	2.0	2.1	2.4	2.4	2.4	2.4	2.5	2.5	2.4	2.7
RBA Cash rate target (%)	1.75	1.50	1.50	1.50	1.50	1.50	1.75	2.00	…	…
ACGB 10y yield (%)	3.10	3.10	3.25	3.50	3.90	4.15	4.55	4.85	…	…

Exhibit 162: RBC Economic forecasts for New Zealand

New Zealand	2016				2017				Annual averages	
RBC Forecasts	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**2016**	**2017**
Real GDP (% q/q)	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.6**	**0.6**	**1.9**	**2.1**
Headline CPI (% y/y)	*1.1*	*1.0*	*1.2*	*1.5*	*1.6*	*1.6*	*1.6*	*1.7*	*1.2*	*1.3*
RBNZ OCR target(%)	*2.50*	*2.50*	*2.50*	*2.50*	*2.50*	*2.50*	*2.75*	*3.00*	*…*	*…*
NZD 10y swap rate (%)	*4.00*	*4.10*	*4.25*	*4.50*	*4.90*	*5.15*	*5.70*	*6.00*	*…*	*…*

Source: RBC Capital Markets

Rates

Exhibit 163: RBC forecasts for US Rates

US Treasury Forecasts		2016				2017			
%	Spot	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2yr	0.89	1.30	1.50	1.70	2.00	2.55	3.05	3.45	3.80
5yr	1.67	2.05	2.15	2.30	2.55	3.00	3.35	3.75	4.00
10yr	2.25	2.60	2.70	2.85	3.05	3.40	3.65	3.95	4.15
30yr	3.01	3.30	3.35	3.45	3.55	3.70	3.85	4.15	4.25
(bps)									
2s5s	78	75	65	60	55	45	30	30	20
5s10s	58	55	55	55	50	40	30	20	15
10s30s	76	70	65	60	50	30	20	20	10
5s30s	134	125	120	115	100	70	50	40	25
2s5s10s	20	20	10	5	5	5	0	10	5
5s10s30s	-18	-15	-10	-5	0	10	10	0	5

Exhibit 164: RBC forecasts for Canadian Rates

CAD Rate Forecasts		2016				2017			
%	Spot	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2yr	0.62	0.70	0.80	1.00	1.60	1.95	2.25	2.45	2.65
5yr	0.94	1.15	1.25	1.50	2.10	2.40	2.60	2.80	2.95
10yr	1.62	1.85	1.90	2.20	2.60	2.75	2.90	3.15	3.30
30yr	2.32	2.55	2.60	2.75	3.05	3.20	3.35	3.65	3.75
(bps)									
2s5s	32	45	45	50	50	45	35	35	30
5s10s	68	70	65	70	50	35	30	35	35
10s30s	70	70	70	55	45	45	45	50	45
5s30s	138	140	135	125	95	80	75	85	80
10y CA-US	-68	-75	-80	-65	-45	-65	-75	-80	-85

Exhibit 165: RBC forecasts for German Rates

German Bund Forecasts		2016				2017			
%	Spot	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2yr	0	-0.40	-0.40	-0.35	-0.35	-0.35	-0.35	-0.35	-0.35
5yr	0.12	-0.15	-0.10	-0.05	-0.05	0.00	0.10	0.20	0.40
10yr	0.75	0.65	0.75	0.90	1.00	1.25	1.40	1.55	1.70
30yr	1.62	1.40	1.45	1.55	1.70	1.85	2.00	2.10	2.20
(bps)									
2s5s	12	25	30	30	30	35	45	55	75
5s10s	63	80	85	95	105	125	130	135	130
10s30s	87	75	70	65	70	60	60	55	50
5s30s	150	155	155	160	175	185	190	190	180
5y US-Bu	1.55	2.20	2.25	2.35	2.6	3	3.25	3.55	3.6
10y US-Bu	1.5	1.95	1.95	1.95	2.05	2.15	2.25	2.4	2.45

Exhibit 166: RBC forecasts for UK Rates

UK Gilt Forecasts		2016				2017			
%	Spot	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2yr	0.57	0.80	0.95	1.10	1.30	1.30	1.50	1.90	2.10
5yr	1.36	1.50	1.70	1.95	2.10	2.20	2.40	2.50	2.60
10yr	2.01	2.10	2.30	2.45	2.60	2.75	2.95	3.15	3.40
30yr	2.74	2.70	2.80	2.90	3.00	3.10	3.25	3.45	3.55
(bps)									
2s5s	79	70	75	85	80	90	90	60	50
5s10s	65	60	60	50	50	55	55	65	80
10s30s	73	60	50	45	40	35	30	30	15
5s30s	138	120	110	95	90	90	85	95	95
5y UK-Bu	124	165	180	200	215	220	230	230	220
10y UK-Bu	126	145	155	155	160	150	155	160	170
5y UK-US	-31	-55	-45	-35	-45	-80	-95	-125	-140
10y UK-US	-24	-50	-40	-40	-45	-65	-70	-80	-75

Exhibit 167: RBC forecasts for Australian Rates

AU Rate Forecasts		2016				2017			
%	Spot	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2yr	2.31	2.30	2.40	2.40	2.60	2.60	2.70	2.75	2.75
5yr	2.47	2.60	2.80	3.00	3.25	3.40	3.60	3.70	3.80
10yr	3.03	3.40	3.70	3.90	4.00	4.15	4.30	4.35	4.50
(bps)									
2s5s	16	30	40	60	65	80	90	95	105
5s10s	56	80	90	90	75	75	70	65	70
10y AU-US	75.97	80	100	105	95	75	65	40	35

Exhibit 168: RBC forecasts for New Zealand Swap Rates

NZD Swap Forecasts		2016				2017			
%	Spot	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
2yr	3.85	3.75	3.75	3.90	3.90	4.00	4.25	4.25	4.25
5yr	4.08	4.20	4.30	4.50	4.50	4.60	4.80	4.90	5.00
10yr	4.31	4.70	4.90	5.00	5.00	5.10	5.30	5.40	5.60
(bps)									
2s5s	23	45	55	60	60	60	55	65	75
5s10s	22.5	50	60	50	50	50	50	50	60
10y NZ-US	201	210	220	215	195	170	165	145	145

Source: RBC Capital Markets

FX Forecasts

FX Forecasts		2016				Annual averages
	Spot	Q1	Q2	Q3	Q4	2016
G10						
EUR/USD	1.07	1.03	1.00	1.00	1.02	1.01
USD/JPY	123	128	132	130	128	130
GBP/USD	1.52	1.51	1.47	1.45	1.48	1.48
USD/CHF	1.02	1.08	1.12	1.13	1.12	1.11
USD/CAD	1.33	1.36	1.38	1.36	1.33	1.36
AUD/USD	0.71	0.67	0.65	0.65	0.65	0.66
NZD/USD	0.65	0.64	0.63	0.63	0.63	0.63
EEMEA						
USD/ZAR	14.17	14.75	15.00	15.50	14.50	14.94
USD/TRY	2.87	3.25	3.35	3.40	3.10	3.28
EUR/PLN	4.25	4.20	4.10	4.05	4.00	4.09
EUR/HUF	311	310	305	300	295	303
USD/RUB	65	63	61	61	61	62
USD/ILS	3.90	4.30	4.50	4.50	4.30	4.40
EUR/CZK	27.02	27.15	27.00	27.00	27.00	27.04
LatAm						
USD/MXN	16.75	16.50	15.80	15.50	16.00	15.95
USD/BRL	3.77	4.80	4.70	4.40	4.30	4.55
USD/CLP	714	720	700	680	680	695

FX Forecasts		2016				Annual averages
	Spot	Q1	Q2	Q3	Q4	2016
G10 Cross						
EUR/CAD	1.43	1.36	1.38	1.36	1.33	1.36
EUR/JPY	132	132	132	130	131	131
EUR/GBP	0.70	0.68	0.68	0.69	0.69	0.69
EUR/CHF	1.08	1.11	1.12	1.13	1.14	1.13
EUR/NOK	9.2276	9.40	9.20	9.10	9.00	9.18
EUR/SEK	9.30	9.60	9.50	9.40	9.30	9.45
NOK/SEK	1.01	1.02	1.03	1.03	1.03	1.03
Asia EM						
USD/CNY	6.38	6.70	6.80	6.90	6.95	6.84
USD/INR	66.3	67.0	68.5	69.5	71.0	69.0
USD/IDR	13819	14600	14900	15200	15600	15075
USD/MYR	4.39	4.50	4.60	4.70	4.80	4.65
USD/SGD	1.42	1.48	1.53	1.57	1.60	1.55
USD/KRW	1172	1210	1240	1270	1310	1258
USD/TWD	33	34	35	36	37	36
USD/COP	3100	3100	3000	2950	2900	2988
USD/ARS	9.64	10.50	11.00	11.50	12.00	11.25

Source: RBC Capital Markets

Commodity Forecasts

Commodity	2016				Annual averages
$	Q1	Q2	Q3	Q4	2016
Energy					
Brent	$51.00	$59.00	$67.00	$69.00	$62.00
WTI	$48.00	$56.00	$63.00	$65.00	$58.00

Source: RBC Capital Markets

Companies Mentioned

Duke Energy Corporation (NYSE: DUK; USD68.49)

FedEx Corporation (NYSE: FDX; USD163.35)

General Electric Company (NYSE: GE; USD30.28)

JPMorgan Chase & Co. (NYSE: JPM; USD67.66)

Microsoft Corporation (NASDAQ: MSFT; USD53.94)

Visa Inc. (NYSE: V; USD80.15)

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