

Currency Outlook

GBP – Even lower for even longer

The UK's structural weakness will put GBP under immense pressure. An ever cheaper currency is required to fund the current account deficit. We now see GBP-USD at 1.10 by the end of 2017 taking EUR-GBP to parity.

US Election

A populist Trump presidency would increase the risk of a global currency war, which has the potential to destabilize FX markets. A Clinton victory would have modest medium-term FX implications.

Keep calm and carry on

Despite the news flow the FX market remains very calm. This suggests that the market is entering a new, lower volatility regime – a positive development for the FX carry trade.



Play video with
David Bloom and Dominic Bunning

Summary

GBP – Even lower for even longer

(pg 3)

The UK has a very large current account deficit. This structural weakness will come under immense pressure because of the forthcoming major political and economic changes. An ever cheaper GBP is required to maintain the capital inflows necessary to fund the current account deficit. We now see GBP-USD at 1.10 by the end of 2017 taking EUR-GBP to parity.

UK Monetary Policy

(pg 16)

The Bank of England's August stimulus package won't prevent a sharp slowdown. We expect a further 15bp policy rate cut in November and GBP30bn more gilt purchases to be announced in February 2017.

US Election

(pg 18)

A populist Trump presidency increases the risk of a global currency war, which has the potential to destabilize FX markets. A Clinton victory would likely be risk-on initially but the medium-term FX implications would be modest.

Bank of Japan Watch

(pg 20)

The BoJ made only minor adjustments to policy in July. The BoJ is to review 'policy effectiveness' in September, when we now expect more bond/ETF buys, but no further rate cuts. We continue to see USD-JPY drifting towards 95 by year-end.

Keep calm and carry on

(pg 22)

Despite the news flow the FX market remains very calm. Our analysis suggests that the market is entering a new, lower volatility regime. This would be a positive development for the FX carry trade in general, and for high-yielding EM FX in particular.

Silver outlook

(pg 26)

After years of declines, silver prices made significant gains in H1. We believe silver prices may remain well-bid for the second half of the year and into 2017.

Dollar bloc

(pg 28)

An appreciating AUD is unwelcome news for the RBA. We suggest a possible strategy the RBA could consider to prompt AUD weakness.

Key events

Date	Event
17 Aug	Fed minutes from July's meeting
06 Sept	RBA rate announcement
07 Sept	BoC rate announcement
08 Sept	ECB rate announcement

Source: HSBC

Central Bank policy rate forecasts (%)

	Last	Q4 2016(f)	Q2 2017(f)
USD	0.25-0.50	0.25-0.50	0.50-0.75
EUR	0.00/-0.40	0.00/-0.40	0.00/-0.40
JPY	-0.10	-0.10	-0.10
GBP	0.25	0.10	0.10

Source: HSBC forecasts for Fed funds, Refi rate/ Deposit rate, Overnight Call rate and Base rate

Consensus forecasts for key currencies vs USD

	3 months	12 months
EUR	1.087	1.081
JPY	102.9	106.4
GBP	1.266	1.268
CAD	1.315	1.294
AUD	0.717	0.703
NZD	0.680	0.660

Source: Consensus Economics Foreign Exchange Forecasts May 2016

GBP – Even lower for even longer

- ▶ An ever cheaper GBP is needed to maintain the capital inflows required to fund the current account deficit
- ▶ GBP weakness to persist; we retain our 1.20 year-end forecast for Cable
- ▶ We now see GBP-USD at 1.10 by the end of 2017 taking EUR-GBP to parity

Lower GBP part of the solution

A broken adjustment mechanism

The UK has a very large current account (C/A) deficit. This structural weakness will come under immense pressure because of the forthcoming major political and economic changes. Many hope that the decline in GBP seen so far will be enough to cause the C/A deficit to correct substantially. In this piece we discuss the various channels through which this adjustment might work. We find that GBP will need to fall further, and remain weak for a long time, in order to create significant improvements to the UK's structural position.

A country needs capital inflows in order to fund a C/A deficit. To be clear, we are most definitely not arguing that the UK will suffer a true current account crisis. However, the UK's C/A deficit is now in focus and the market is likely to demand at least some adjustment. It is not plausible that a large enough adjustment will come via the trade channel with GBP at its current level. Therefore, it is clear to us that **a substantive and prolonged fall in GBP will be needed**. This will also help other, smaller, components of the C/A to cause a material improvement. A much weaker GBP will also have the beneficial effect of making UK assets cheaper to foreign investors and should help to stimulate capital inflows.

In our view, GBP is the main part of the adjustment mechanism but the adjustment is not over yet. We still see GBP-USD at 1.25 by the end of Q3 and 1.20 by year-end. However, we now see GBP weakness extending into 2017 and **we now forecast GBP-USD at 1.10 by end-2017**. This aligns with our economist's view that the Bank of England will ease even further, cutting rates by 15bp in November and expanding QE in February next year.

HSBC GBP forecasts

	Q3-16	Q4-16	Q1-17	Q2-17	Q3-17	Q4-17
GBP-USD	1.25	1.20	1.15	1.15	1.12	<u>1.10</u>
EUR-GBP	0.88	0.92	0.96	0.96	0.98	<u>1.00</u>

Source: HSBC

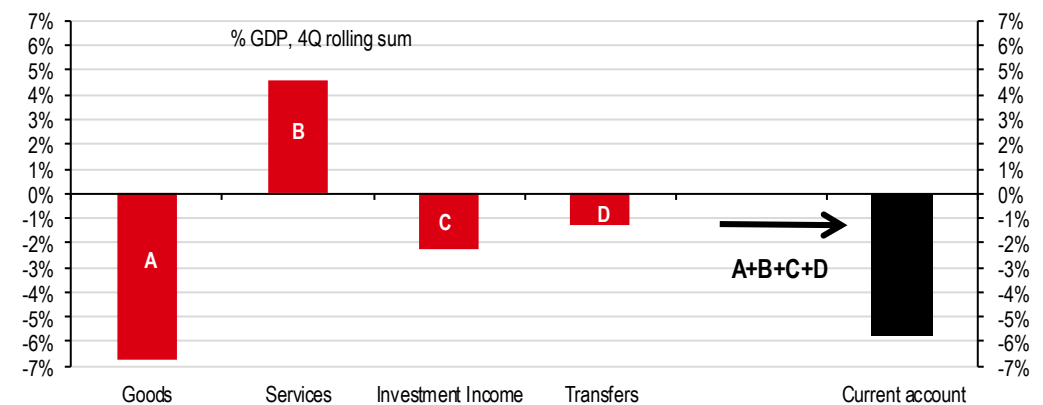
The UK's decision to leave the EU has put the focus of attention sharply on GBP's structural imbalances. With a current account deficit comparable to the size of the most vulnerable emerging market economies, and a political outlook plagued with uncertainty, the pressure is on GBP to weaken. The UK's structural weakness will come under immense pressure because of the major political and economic challenges ahead. In this report, we delve deeper into the various channels of the current account and financial account to see how exactly a weaker currency can help the rebalancing process. **Our conclusion is simple: GBP must weaken further and notably so.**

Section 1) Current account deficit: where's the adjustment?

The UK's current account deficit is large, persistent and, since the UK's vote to leave the EU, is an even bigger source of vulnerability for GBP. Economic theory tells us that the decline in GBP should help the current account to rebalance. We dissect the current account deficit to see where a weaker GBP could facilitate such an adjustment.

$$C/A = \text{Goods (A)} + \text{Services (B)} + \text{Investment Income (C)} + \text{Transfers (D)}$$

Chart 1. UK current account deficit and its components



Source: Bloomberg, HSBC

So how should a weaker GBP help?

A. Goods

A weaker GBP should make UK exports more competitive and lower import demand as import costs rise, but the evidence in the UK shows this pass through is limited. If there is an adjustment it is more likely to be driven by a sharp decline in domestic demand, which the Bank of England (BoE) is trying to soften.

B. Services

The UK is a net service exporter largely through financial services, but the outlook for these earnings looks uncertain if the UK's access to the EU single market changes.

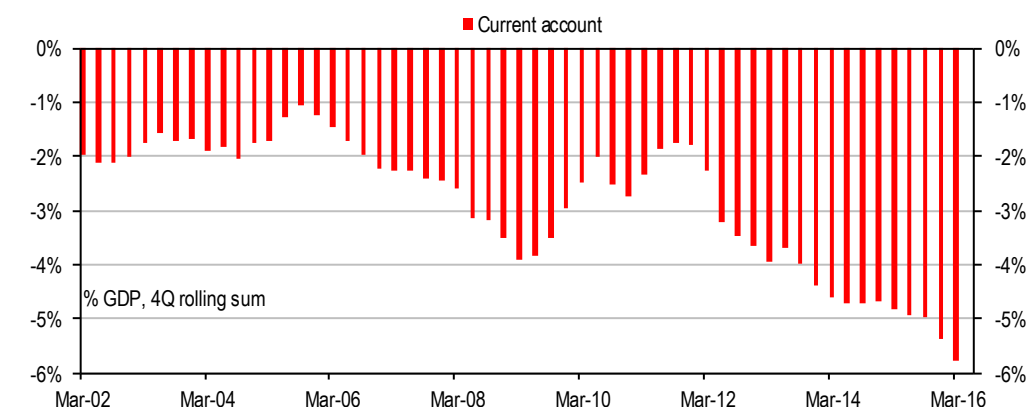
C. Investment income

Earnings on the UK's foreign investments should increase in GBP terms as the currency falls, and vice versa for foreign investors in the UK, but the relationship does not appear to be strong in practice.

D. Transfers

Payments into the EU may fall but other transfers are likely to be unaffected in this relatively minor component of the current account.

Chart 2a. The UK current account has widened over time



Source: HSBC, Bloomberg

Table 2b. Balance of Payments (BoP) summary

	% GDP	Explanation/Comments
Current account		
A. Goods	-6.8	Trade in goods has become relatively insensitive to FX
B. Services	+4.6	This is a risk – 40% of the surplus comes from the EU
C. Investment Income	-2.3	Lower GBP may offer help, but not as much as some expect
D. Transfers	-1.3	Improve 1% by not paying into the EU
C/A Balance	-5.8	
Financial account		
Portfolio Investment	+13.6	<div style="display: inline-block; vertical-align: middle;"> <div style="display: inline-block; vertical-align: middle;"> <div style="text-align: right;">+9.8 Debt</div> <div style="text-align: right;">+3.9 Equity</div> </div> <div style="font-size: 2em; vertical-align: middle; margin: 0 5px;">}</div> <div style="vertical-align: middle;">A volatile component</div> </div>
Direct Investment	+3.3	EU accounts for 15%
Other	-9.9	Seems to counter-balance the debt surplus
Financial Balance	+7.0	
Errors and Omissions	0.7	
Change in reserves	0.6	

Data as of Q1 2016, 4Q rolling sum. Source: HSBC, Bloomberg

A. Goods

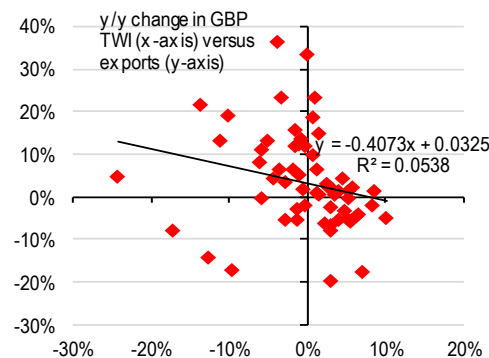
► Recessionary rebalancing most plausible option

Goods deficit:
GBP127bn
6.8% of GDP

A weaker currency, in theory, should make the UK more competitive, boosting exports while making imports more expensive, causing the trade deficit to narrow. In practice, it has not worked this way for the UK. Charts 3 and 4 show the relationship between exports, imports and annual changes in the GBP effective exchange rate (NEER). This shows there is no clear link between currency movements and trade flows for the UK. Even when we lag the trade flows across different time periods, no strong relationship emerges.

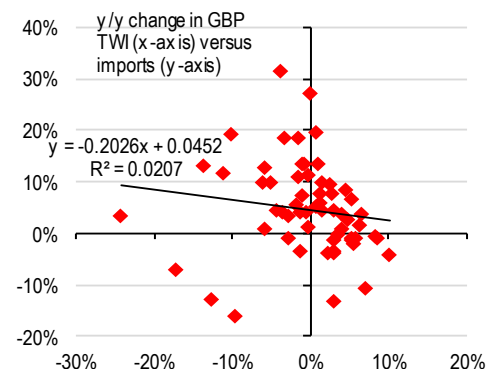
Other economies have experienced a similarly limited pass-through from currency weakness to trade. In Japan after the JPY weakened substantially in 2012 and 2013, exports did rise in local currency terms, but imports actually rose at a faster rate, as the cost of imports rose in JPY terms. So the trade balance did not improve in the first few years of the currency adjustment. The UK is also in a position where many of its exports include a significant import component, which would face this upward pressure. A weaker GBP is therefore less clearly beneficial from a trade rebalancing angle. In other words the classic textbook transmission mechanism from a weaker exchange rate to an improved trade position in goods seems to have broken down. This is the case not just in the UK but elsewhere as well.

Chart 3. No clear or consistent relationship between GBP and exports...



Note: Exports based on BoP measure
Source: BoE, Bloomberg, HSBC

Chart 4. ...nor with imports



Note: Imports based on BoP measure
Source: BoE, Bloomberg, HSBC

Those economies which have seen current account rebalancing or improvements in recent years have generally done so more through the import channel than the export channel. Russia, Korea and Taiwan have all seen their trade surpluses improve following currency weakness in recent years but largely through weaker imports. In a world of slowing global growth, trying to boost your exports even through a weaker currency is a difficult task. It is easier to induce a contractionary narrowing of the deficit, by squeezing import growth.

However, the BoE does not appear to be willing to see domestic demand choked off. The loosening of policy in the funding for lending scheme as well as a rate cut and additional QE demonstrates this. Furthermore it also seems likely that the new Conservative party administration will loosen fiscal policy at the Autumn Statement in November. These measures may buoy domestic demand and limit the ability to rebalance the current account via the import channel. Indeed, our economists expect domestic consumption to remain relatively resilient. Of course this policy may not succeed, and a recessionary rebalancing could occur. In any case a recession-driven stabilisation of the current account deficit would be negative for GBP. **The bleak conclusion is either GBP has to do more of the work or a domestic demand rebalancing is needed, thereby causing GBP to fall.**

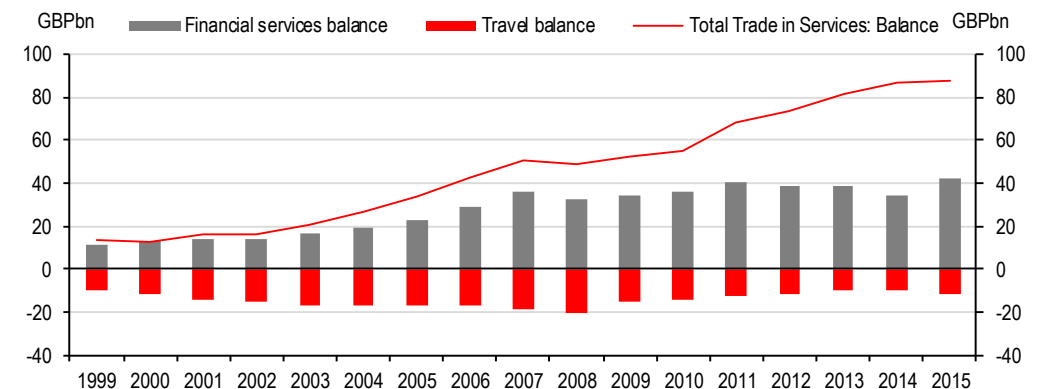
B. Services

► Risks to the surplus

Services surplus:
GBP85bn
4.6% of GDP

The UK has a substantial service sector surplus and the concern is that this may be under threat. The services trade surplus is dominated by financial and other business services exports. Specifically financial services exports accounted for around GBP50bn (nearly 3% of GDP) in 2015 whilst insurance service exports add an additional GBP13bn (0.7% of GDP). In net terms the financial services surplus is around GBP40bn annually, out of a total services surplus of around GBP90bn (Chart 5).

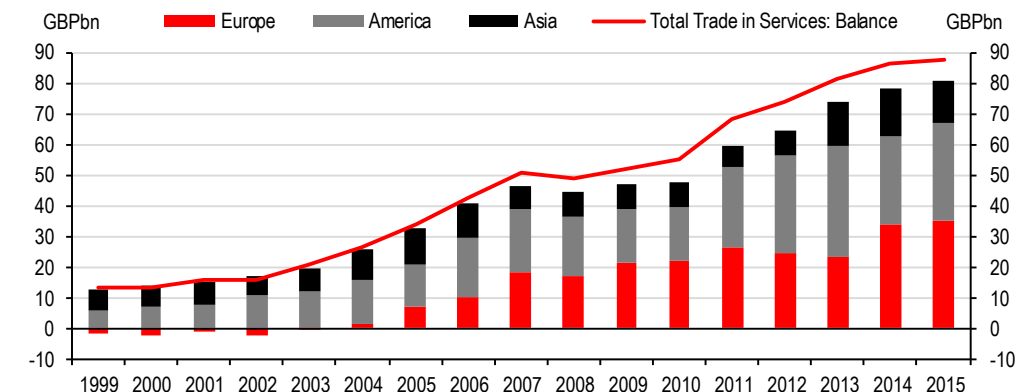
Chart 5. Financial services exports could face downward pressure post-Brexit



Source: ONS, Bloomberg, HSBC

Much of the recent debate around “Brexit” focuses on the UK’s ability to maintain its position as a leading financial services centre. There is currently significant uncertainty about the UK’s future relationship with Europe and how financial services exports will be affected. This may not be rectified by a cheaper currency as the challenge could be about actually accessing the market rather than the prices charged by UK firms versus their EU-based competitors. Europe as a whole accounts for around 40% of the services surplus (Chart 6). So, weaker ties with the continent are likely to create a downward risk for net services exports.

Chart 6. UK services exports to Europe are a large part of inflows



Source: ONS, Bloomberg, HSBC

One segment of the services balance which may benefit from a cheaper GBP is the tourism component. However, this is a relatively minor contributor to the overall services balance compared to financial services, with a net deficit of around USD10bn over the last few years. The adjustment through this channel is unlikely to be strong enough to create a significant rebalancing in the overall current account deficit.

C Income account

► Net liabilities, not GBP, the driver

Income deficit:
GBP42bn
2.3% of GDP

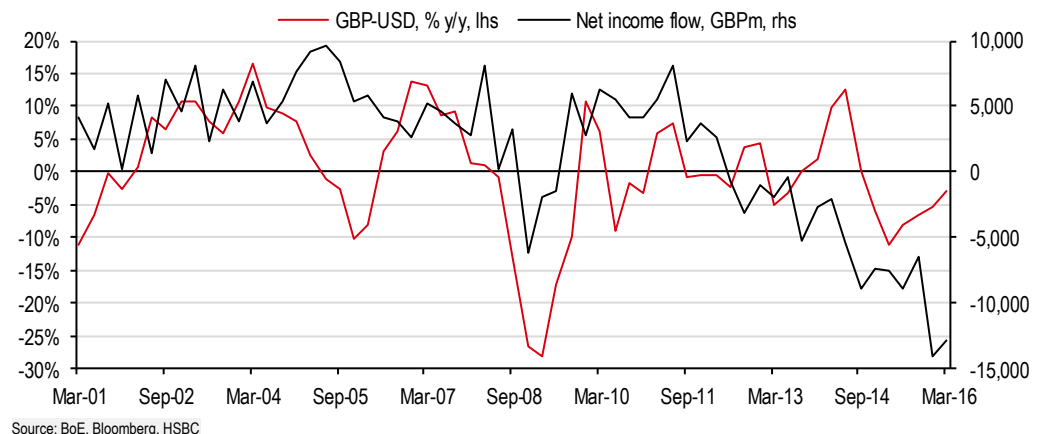
The income account refers to repatriated earnings on the UK's investments abroad, less those earnings on foreign investments in the UK that are sent abroad. This includes, for example, repatriation of earnings from foreign direct investment, equity dividend payments as well as bond coupon payments. It needs to be remembered that this is a flow concept and not the buying and selling of assets but rather the return on those existing assets. This used to be a surplus item but has shifted into a deficit in recent years (black line in Chart 7). Here a weaker GBP should boost income earned in foreign currency on overseas investments which will now be worth more in GBP terms than before.

In 2015, the UK's earnings on investment abroad was GBP136bn, and payments on investment in the UK were GBP172bn – a deficit of 36bn. If we simply assume that all the UK's earnings are in USD, the FX value of the earnings remains constant, and there is a 100% pass through, then the roughly 10% fall in GBP-USD since the referendum would mean an automatic rise in inward income to around GBP151bn from GBP136bn. So the overall income deficit might narrow by around GBP15bn to around GBP21bn – around 1.1% of GDP. This would be an improvement but would not make a substantive dent in the current 6.9% of GDP current account deficit. This scenario also assumes all other things being equal – which they never are – meaning that even this minor adjustment may not be a realistic outcome. That is because there is little sign that this kind of FX adjustment in the past has made a consistent and material difference.

However, we should spend some time exploring the income account in further detail considering the BoE has often emphasised that the fall in GBP will have a notable impact on this channel. For example, in the August inflation report the MPC states: "As UK residents hold more foreign currency assets than they have foreign currency liabilities, the depreciation will have increased the sterling value of the net international investment position. It will also therefore reduce the primary income deficit, which is the sterling value of income received by UK residents on foreign direct and portfolio investment relative to that paid abroad on domestic liabilities."

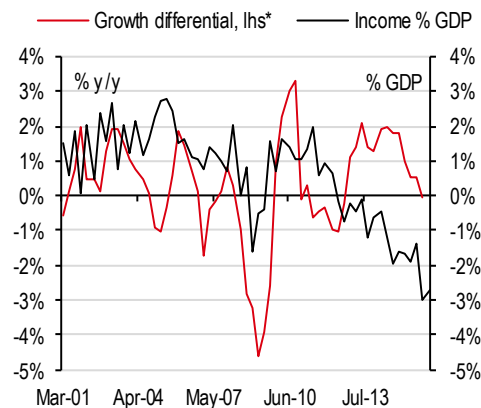
In practice we find little evidence of this. Chart 7 tracks annual movements in GBP-USD versus net income flows. A good example is 2005 when the large fall in GBP saw the net income balance improve. However, when GBP fell sharply post-2008 the income account actually deteriorated – both receipts and payments dropped. In general, there is no clear and consistent relationship between these flows and the currency. One thing is clear though – for this mechanism to work we believe GBP would need to fall substantially from here.

Chart 7. Income flows do not show a consistent sensitivity to GBP movements



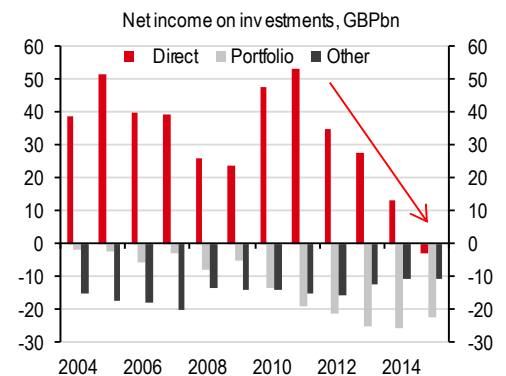
One issue worth looking at is why the income balance has turned from a surplus to a deficit (Chart 7). One suggestion is that the UK has grown at a faster rate than its peers, so investments in the UK have yielded stronger returns (see the [UK 2016 budget](#), section 2.12). This is open to debate: Tracking income flows versus the UK's growth differentials with the US and the Eurozone, for example, does not show a strong relationship (Chart 8). Historically, the income balance appeared to move in line with GDP growth. When the UK was growing robustly pre-crisis, there were consistent net income inflows. Growth has rebounded post-crisis but net income flows have not.

Chart 8. Income flows not clearly linked to GDP



*Real GDP growth differential between UK and 50/50 basket of US and Eurozone
Source: Bloomberg, HSBC

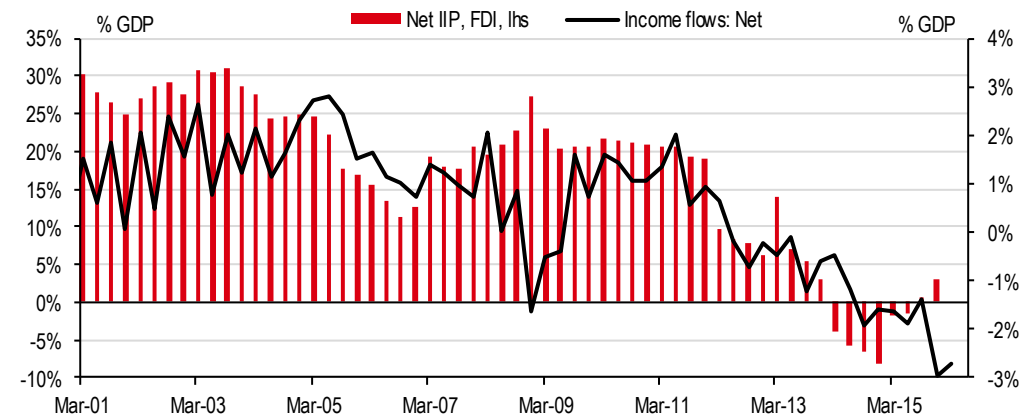
Chart 9. Big decline in net earnings on FDI



Source: ONS, Bloomberg, HSBC

Income flows appear to be much more closely linked to the underlying FDI position. The big drop in investment income has come through the earnings on FDI, which have fallen from a large net surplus in 2011 (Chart 9). Income on other forms of investment (such as portfolio investment) has been more stable, but remains in deficit territory. Meanwhile, the UK's net balance of FDI assets in the International Investment Position has also declined markedly in recent years, as the UK has imported capital. So in effect the UK now owns about the same amount of assets abroad through FDI as are owned by foreign investors in the UK. This has created a sizable adjustment on income flows, with a greater amount of payments being made to foreign owners of UK businesses (Chart 10).

Chart 10. Income flows appear to be linked to overall FDI stock



Source: ONS, Bloomberg, HSBC

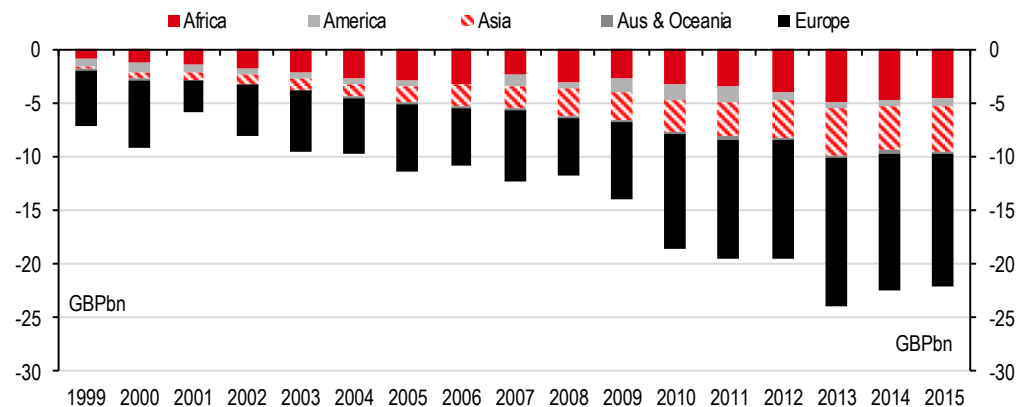
D Transfers

► Will help, but will not solve the problem

Transfers deficit:
GBP25bn
1.3% of GDP

Transfers are the smallest component of the C/A and are unlikely to be positively impacted by a weaker GBP. One possible positive impact on this deficit could be that leaving the EU lowers the UK's transfer payments to the continent. These account for around GBP11bn per year – around half of the deficit (Chart 11) for transfers as a whole. However, even if this were completely eliminated, it would reduce the UK's current account deficit by less than 1% of GDP.

Chart 11. Transfer outflows may reduce on leaving the EU, not thanks to a weaker GBP



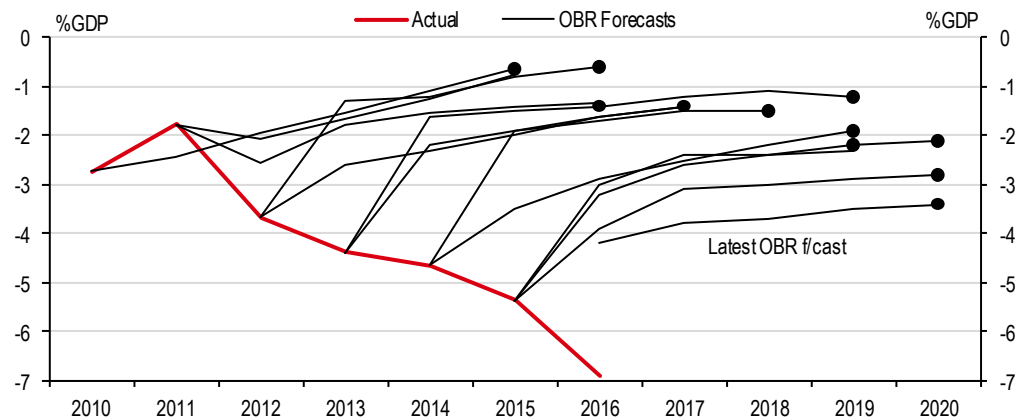
Source: ONS, Bloomberg, HSBC

Struggle to shrink the C/A deficit will continue

In conclusion, **we think it is unlikely that the fall in GBP we have seen so far will cause a significant adjustment in the UK's current account.** This will repeat a pattern seen in recent years, where forecasts by the OBR have looked for a narrowing of the deficit, only to see the actual shortfall widen significantly (Chart 12). In 2010, the OBR suggested that the C/A would be -0.7% of GDP in 2015 (-5.4% actual). In March 2014, it forecast a deficit of 1.7% GDP by this year. The latest data shows the deficit near 7%. The OBR's forecasts still look too optimistic even with GBP's depreciation.

The persistent gap (which is ultimately the difference between the UK's domestic savings and investment) means that the UK must import capital through the financial account. In the next section we examine how a cheaper GBP will impact this investment. We believe that a bigger fall in GBP is still needed to entice foreign capital to continue to fund the current account deficit.

Chart 12. OBR have looked for a narrowing of the deficit



Note: C/A actual data are annual averages, except for 2016 where we only have Q1 data

Source: HSBC, OBR, Bloomberg

Section 2) The Financial Account

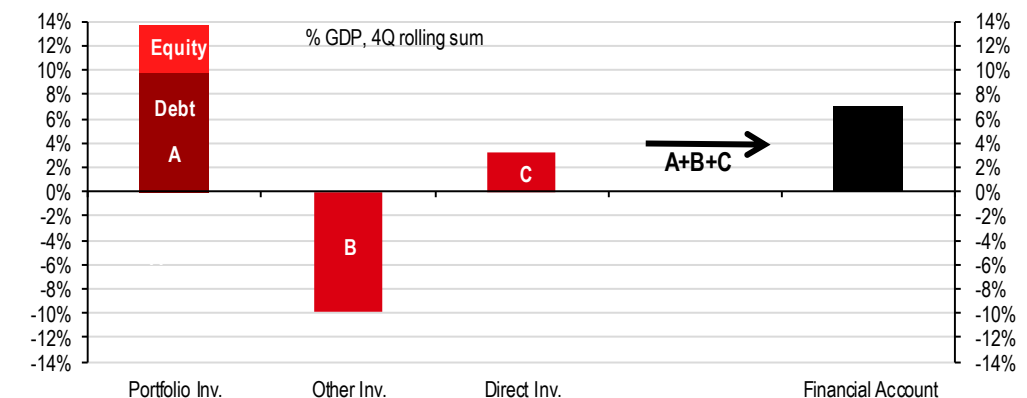
A current account deficit is financed by a net inflow from the financial account

Here we look at the elements that go into financing the current account deficit. Chart 13 shows the breakdown of the UK's financial account. Portfolio investment – marked A in chart 13 – is the bulk of the inflow made up mostly of debt inflows (9.8% of GDP) and equity (3.9% of GDP). Foreign direct investment (FDI) meanwhile has been a more modest but consistent surplus, while other investment flows have been in a large deficit. The black column in the chart, the net surplus, is largely equal to the current account deficit. As one would expect, the financial account **surplus** matches the current account **deficit** – this is what makes the balance of payments **balance**.

The big question is whether the financial account will continue to fund the current account deficit at the current price or whether GBP will need to adjust further in order to make financial investments in the UK more attractive. We believe that a further adjustment is needed.

$$\text{Financial account} = \text{Portfolio Inv (A)} + \text{Other Inv (B)} + \text{Direct Inv (C)}$$

Chart 13. UK Financial accounts and its components



Definition change:
What we now call the financial account used to broadly be called the "capital account".

The term "capital account" is used with a tighter definition by the IMF whilst the vast majority of the transactions are now recorded in the financial account.

So how should a weaker GBP help?

A. Portfolio Investment

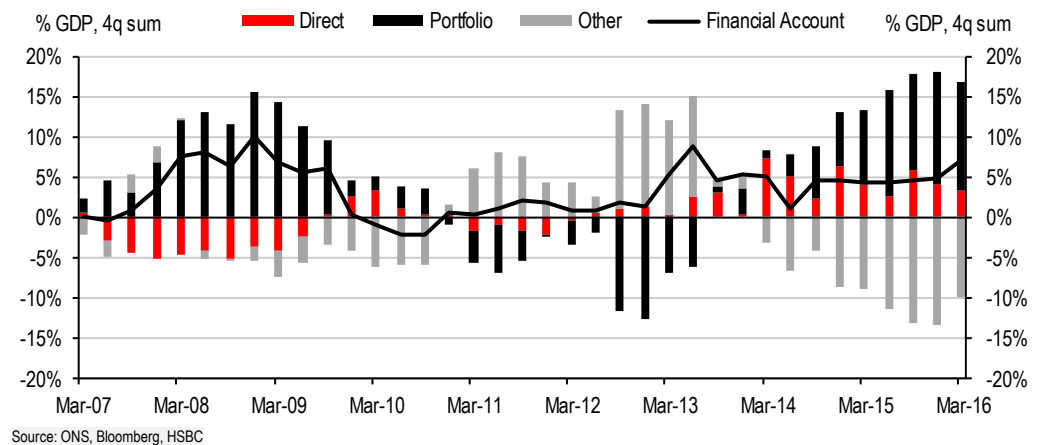
Portfolio flows are the bulk of the inflows and they are largely dominated by debt flows. Net equity inflows account for under half of the debt inflows. Historically these flows have moved somewhat in line with the UK's cyclical performance and interest rate differentials. Here a weaker currency could attract money into the equity market but may be offset by bond outflows due to both QE and higher inflation.

B. Other Investment

Other investments are mainly in the form of FX deposits and FX loans. These can sometimes be a form of hedging portfolio positions. The closeness of the inverse relationship in these components suggests that even if portfolio inflows drop, other investment outflows – the hedges of these portfolio positions in other words – may also decline.

C. Direct Investment

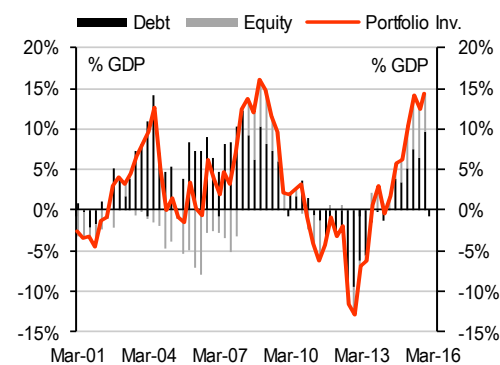
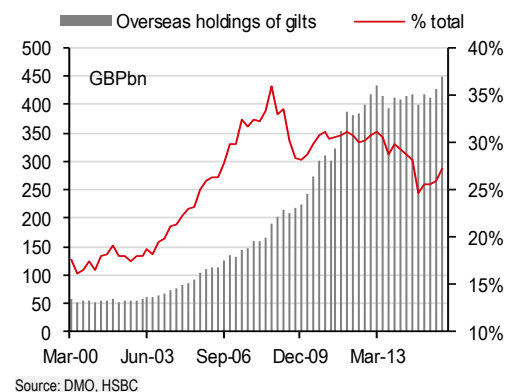
There is a risk further out that the UK's uncertain relationship with the EU will weigh on FDI inflows. In terms of net FDI, in 2014 (the latest available regional breakdown) the UK received around 15% of its inflows from the EU and a further 8% from the European Free Trade Area. But other sources of inflows may also be at risk due to the uncertainty surrounding the UK's relationship with the EU.

Chart 14. UK financial account has relied on portfolio inflows in recent years**A. Portfolio accounts**► **Weaker GBP may be needed to make UK assets more attractive**

Portfolio surplus:
GBP257bn
14% of GDP

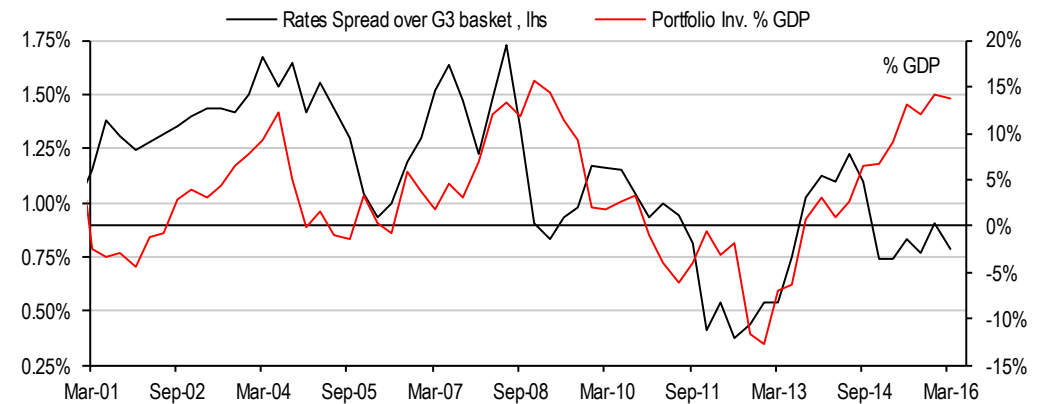
Portfolio inflows into UK debt market

Given portfolio flows are the bulk of the inflows it is worth looking at them in more detail (chart 14). Here we see they are largely dominated by debt flows, with significant inflows into the UK debt market since 2014 (Chart 15). This also tallies with foreign ownership data of gilts provided by the Debt Management Office (DMO), which shows that foreign holdings of UK government debt were at an all-time high in absolute terms as of Q4 2015, even if not as a percentage of total debt (Chart 16).

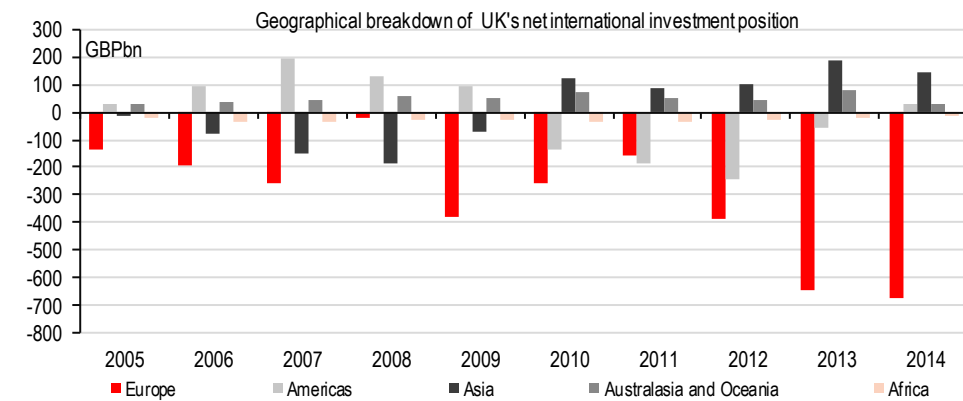
Chart 15. Portfolio flows boosted by debt inflows**Chart 16. Foreign holding of gilts at all-time high**

Historically these flows have moved somewhat in line with the UK's cyclical performance and interest rate differentials (Chart 17). This relationship has broken down in the last few years. This may be due to the global environment of low (and even negative) interest rates and the profusion of Quantitative Easing programmes. Whatever the reason, we believe portfolio flows could be undermined by the latest developments in UK politics.

A difficult political situation and the potential for fiscal slippage could see a reversal in sentiment for UK debt holdings in particular. The sovereign downgrades in the aftermath of the referendum result are a further sign of this sentiment shift. Other countries with large current account deficits (and political challenges) offer much higher yields. If rates remain low then **GBP may need to become even cheaper to make UK portfolio investments look attractive.**

Chart 17. Portfolio inflows despite declining rate differentials highlights reversal potential

Equally important is from where, geographically, the UK is attracting its capital. According to the UK Balance of Payments Pink Book (released 29 July 2016), “the UK has held a net liability position for some time with the rest of the world. However, the net IIP with individual continents are a mixture of net liability and net asset positions. The UK has consistently held a net liability position with Europe. This liability position has significantly increased in recent years, reaching GBP679 billion in 2014” (Chart 18). To us this is quite a shocking statistic. That is, the UK current account deficit is largely funded by capital from the very countries with whom we are on the verge of now fundamentally altering our long-standing rules and regulations. This must put these capital inflows at risk and in order to entice others into buying assets in the UK we will need to lower the price of those assets or alternatively have a much weaker currency.

Chart 18. The UK has a huge liability position with Europe

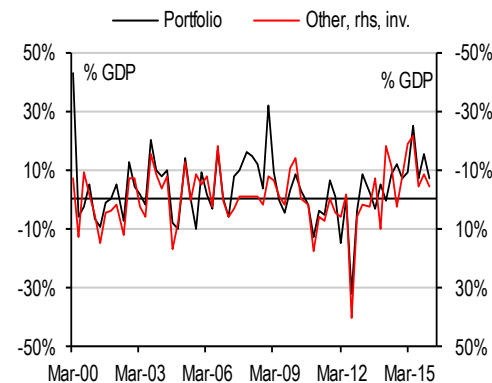
B. Other Investment

- This matches the portfolio inflows meaning the flows may be hedged

Other investment deficit:
GBP186bn
10% of GDP

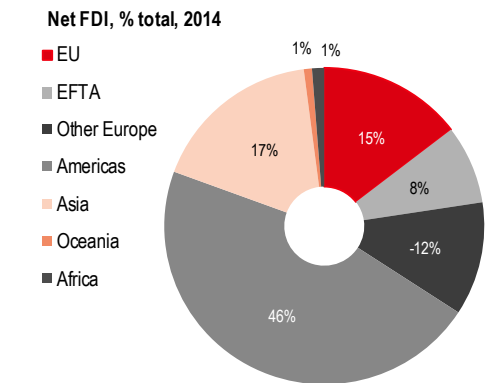
The “other investment” component of the financial account has been recording outflows in recent years. Interestingly the scale of these outflows closely matches portfolio inflows. Chart 19 shows the two series, with the other investment flows inverted on the right-hand axis. So other investment flows have basically offset portfolio inflows. Other investments are mainly in the form of FX deposits and FX loans. These can sometimes be a form of hedging portfolio positions – for example funding an inward GBP bond purchases through the use of an FX swap. While not all portfolio flows will be hedged in such a manner, the closeness of the inverse relationship in these components suggests that even if portfolio inflows drop, this could be partly offset by a decline in other investment outflows – the hedges of these portfolio positions in other words.

Chart 19. Other investment flows offset portfolio flows – suggesting FX hedging is prevalent



Source: ONS, Bloomberg, HSBC

Chart 20. EU and EFTA a significant net contributor to UK FDI



Note: EFTA = European Free Trade Area
Source: Bloomberg, HSBC

C. Direct Investment

- This leaves us with Foreign Direct Investment

Direct investment surplus:
GBP61bn
3% of GDP

Under the current account section we looked at the returns or flows on these assets in the income accounts. In the financial accounts we are now looking at the buying and selling of assets, **not** the return on existing assets. The latest news flow suggests increased demand for foreign companies to buy into UK corporates, especially those with large foreign currency earnings, thus taking advantage of the cheaper GBP both in terms of the asset price and the future earnings. But **there is a risk further out that the UK's uncertain relationship with the EU will weigh on FDI inflows**. In terms of net FDI, in 2014 the UK received around 15% of GDP of its inflows from the EU and a further 8% from the European Free Trade Area (Chart 20). This could decline given the uncertainty now surrounding the UK's relationship with the EU.

But other sources of inflows may also be at risk. One of the UK's selling points to non-EU countries is that it offers direct access to the EU single market of over 500m consumers and a combined GDP of over USD16trn or roughly USD13trn excluding the UK. This compares to the UK's 65m consumers and ~USD2.8trn GDP. As there is now considerable uncertainty about the UK's access to the single market those inflows could dry up.

A cheaper GBP can act as an offset to this uncertainty. The underlying assets' lower price to prospective foreign buyers may make up for some of this lack of clarity over the UK's future position in terms of its foreign trading relationships. But we would suggest that **the fall in GBP will need to be even greater than we have already seen** before it offsets the vast scale of the UK's economic unprecedented and unclear outlook.

Conclusion: weaker GBP needed for structural adjustment

We have considered the various different channels through which a weaker GBP may cause an adjustment in the UK's external imbalances. We struggle to believe that the fall in the currency seen so far will create a significant narrowing of the current account deficit. This means foreign investors would need to keep financing the deficit. But the UK's decision to leave the EU may put some of these flows at risk. There are a number of potential policy implications of this (see Simon Wells: [The UK's persistent current account deficit](#), 21 May 2015, and Stephen King: [Brexit BoP Blues](#), 11 July 2016). But **the clearest outcome in our view is that GBP needs to weaken further to make UK assets attractive enough to foreign investors**, given the massive uncertainty.

The sharp fall in GBP so far has simply been the market reacting to the UK's vote to leave the EU. From here there should be an ongoing grind lower in GBP as the recent weakness is not enough to rebalance the UK economy. We see GBP-USD at 1.20 by the end of the year, and EUR-GBP at 0.92. However, this downward pressure on GBP will remain for a protracted period of time. After all, the forthcoming political and economic challenges will keep the UK's current account under immense pressure into next year too. As such we now forecast GBP-USD at 1.10 by the end of 2017.

UK Monetary Policy

- ▶ The BoE's stimulus package exceeded expectations
- ▶ Yet this is unlikely to prevent a sharp slowdown
- ▶ We expect a 15bp policy rate cut in November and GBP30bn more gilt purchases to be announced in February 2017

More easing to come

Simon Wells
Economist
HSBC Bank plc
simon.wells@hsbc.com
+44 20 7991 6718

Liz Martins
Economist
HSBC Bank plc
liz.martins@hsbc.com
+44 20 7991 2170

The four-part package

On 4 August, the UK's MPC unveiled a series of stimulus measures (see ['UK MPC Announcement, Minutes and Inflation Report'](#)). These were:

- ▶ 25bp rate reduction and a hint of a further cut in 2016
- ▶ A Term Funding Scheme (TFS), with up to GBP100bn available, that aims to ensure lower policy rates are passed on to businesses and households
- ▶ GBP60bn of additional gilt purchases, to be conducted over six months
- ▶ GBP10bn of corporate bond purchases, to be conducted over 18 months

Big package, small macro impact

The BoE's big stimulus package, announced on 4 August, exceeded expectations. Despite the fanfare, a 25bp rate cut and more QE can't be expected to have a huge macroeconomic impact, even though it is supported by a new funding scheme to help mitigate any adverse impact on the banking system. Yields were already very low and in the face of high economic uncertainty, households and businesses are unlikely to borrow heavily to support spending. Also, many of the channels through which QE worked in 2009 may be much weaker now.

We have learned more about the MPC's reaction function. Most MPC members expect to cut rates further and there are strong indications that some members were keen to ease further in August. Yet negative UK policy rates seem unlikely in the near future. At the Inflation Report press conference, the Governor re-iterated that he is "not a fan" of negative interest rates and is aware of their possible adverse implications. The MPC currently judges that the lower bound is "close to, but a little above, zero", and most members expected a further cut before the end of the year.

The TFS is designed to prevent low interest rates leading to, or amplifying, any contraction in bank lending. Given that the TFS allows banks to obtain funds at the Bank Rate (ie 25bps or lower if rates are cut again) and therefore more cheaply than other wholesale funding options, it should be attractive to them. But there may eventually be limits to how much commercial banks want to borrow from the BoE and limits to how much the BoE is willing to lend. So it is unlikely to offset fully the impact of lower rates on banks' net interest margins.

QE: There's no time like the first time, no matter how big the package

The macroeconomic impact of QE is also questionable. Many of the channels through which QE worked in 2009 may be much weaker now. Even the MPC itself admits that the initial round of QE had the strongest impact on financial markets. Below, we review some of the channels through which QE affects the real economy.

Portfolio rebalancing channel: investors sell gilts to buy riskier assets, such as equities and corporate bonds. From this perspective, the additional QE should be good news for risky asset prices. But as elevated uncertainty is the biggest problem facing the economy, it may be that investors are reluctant to take much more risk.

Currency channel: where the portfolio rebalancing effect might be more impactful is if foreign gilt holders sell their sterling holdings, pushing the pound lower. However, as the Eurozone has shown, a weaker currency does not necessarily guarantee a return to robust growth and inflation rates. Even so, the exchange rate channel seems to be the best hope for a meaningful QE impact.

Signalling channel: QE helps policymakers signal that rates will stay low. This impact may be very small in the current environment as the UK yield curve was already flat, and any expectation of rate hikes had all but disappeared.

Liquidity/risk premia channel: this was relevant in 2009, when the UK was in the midst of a credit crunch and the ten-year yield stood at 3.5%. Currently, yields on both sovereign and corporate debt are close to all-time lows. Liquidity is not the issue.

Confidence channel: consumer and business confidence have dropped sharply since the referendum, suggesting a swift action by the BoE could provide a much-needed lift. But the BoE is still forecasting a sharp slowdown and rise in unemployment, limiting the size of any confidence boost.

We expect a 15bp rate cut in November and GBP30bn of QE in February 2017

We now expect a 15bp rate cut in November, taking Bank Rate to 10bps. We also forecast another GBP30bn of gilt purchases to be announced in February, when the current six-month buying programme ends. The bigger call is on QE. A majority of the MPC seems unconcerned about increasing the size of the BoE's balance sheet and holding riskier assets. And they also seem inclined to do more to stabilise output than meet the inflation target. This suggests more QE could well be on the horizon. Given that we forecast the UK economy to stagnate, we therefore assume another GBP30bn of gilt purchases will be announced in February, when the current six-month buying programme is due to end.

US Election

- ▶ A populist Trump presidency would increase the risk of a global currency war, which has the potential to destabilize FX markets
- ▶ Were Trump to toe a more mainstream line, we would still likely see a gradually weaker USD, a stronger EUR, and mixed EM FX moves
- ▶ A Clinton victory would likely be risk-on initially but the medium-term FX implications would be modest

Clinton continuation, Trump tensions

A Clinton presidency would extend the FX indifference to politics

For many years, the FX market has become used to largely ignoring US political developments. Congressional gridlock, budget stand-offs, and debt ceiling debates have failed to get traction in an FX market more typically focused on monetary policy. This general indifference would likely continue under a Clinton presidency, in our view, especially if the new president faces a “gridlock” scenario with Republicans still in charge of the Congress. After all, this would simply represent a continuation of the status quo, where little legislation is passed.

Even if Clinton were to be president with a Democratic-controlled Congress, our second scenario, the currency implications would be modest. In either case, the initial reaction may be for risk-on currencies to rally on relief that the uncertainty of a Trump presidency had been avoided. The MXN would be especially reassured, in our view. The “bigger government” our economists envisage under a Democratic clean sweep could see the USD gain somewhat. Temporarily stronger US economic growth facilitated by a creep higher in budget deficits could prompt a less dovish Fed and may also be bullish for gold, especially if it pushes up inflation. But ultimately, the checks and balances in the US political system would ensure that sweeping changes to policy would still be few. Policy progress, in the face of likely delaying tactics by the opposition, would be slow. For the currency market, Clinton represents continuation.

Trump provides the test

The greater challenge for the FX market comes from the uncertainty that a Trump presidency could create. The scenarios we consider involve either a populist Trump administration that seeks to enact the policy suggestions made before the election, or a mainstream conservative delivering watered-down versions.

Impact on FX of four US election policy scenarios

	Status quo/gridlock	Bigger government	Mainstream conservative	Populist overhaul
G10 FX	Little FX impact in G10	Sell USD rally Modest JPY weakness	USD weaker EUR and JPY stronger	Currency war, USD, JPY lower EUR outperforms
EM FX	MXN outperforms EM FX modestly stronger	MXN higher EM FX stronger	Mixed outlook Some “risk-on” EM FX lower INR, PHP and IDR outperform	Negative EM FX MXN and CNY a focus
Gold	Modestly higher	Gold higher	Modest negative	Outright bullish
Source: HSBC				

The difficulty for the market of a Trump victory is to know which version would follow in the subsequent years. Therefore, the initial reaction would likely be one of heightened uncertainty and an associated risk-off mood. The MXN would likely be at the forefront of the selling given the adverse economic implications for Mexico of a number of Trump's potential policies, and also because it has the highest correlation to global risk-on/risk-off sentiment. Perceived safe havens such as the JPY and gold would likely benefit.

A populist Trump would see a weaker USD...

If developments after the result pointed to a populist presidency, global FX could quickly descend into a fresh and intense currency war. The new president would likely view a weaker USD, alongside higher trade barriers, as helpful in his fight to rein in America's trade imbalance. A presidential push towards a trade war can happen without the co-operation of Congress, so this can have an immediate bearing on the FX market. This is in contrast to any Trump plans on the fiscal front, for example, which would face potential bottlenecks in Congress. In any event, the potential drift towards recession and a more isolationist stance would likely encourage foreigners to sell US assets. We would not expect the USD to enjoy a "safe-haven" bid given the US-centric origins of the crisis and the forecast slump in US activity.

...and the resumption of an even more intense currency war

Other countries would likely respond in kind to USD weakness and tariff hikes. Japan might begin fully-fledged "helicopter money" to prevent JPY strength against a falling USD. This could create knock-on weakness in Asian FX and market fears of a swifter depreciation of the CNY. EM FX in general would likely be on the retreat in this risk-off environment, with the MXN leading the charge lower. Unwanted EUR appreciation could be another side effect, the extent constrained by ECB easing and rising eurosceptic political stress within the EU. The Swiss central bank would likely be active again in curtailing CHF appreciation. Gold would be the likely refuge, unencumbered by the threat of intervention or policy changes.

A "mainstream conservative" Trump presidency would be directionally similar for FX move but not as destabilising

The prospect of such a scenario is what would likely foster the initial risk-off move following a Trump victory. But if his policy actions point to a mainstream presidency rather than a more populist one, some of the initial weakness in risk appetite might reverse even if it would remain an uneasy environment. Our economists believe this less onerous scenario would still involve some frictions in trade relations and tensions regarding immigration – neither would be conducive to risk appetite. The MXN and CNY would still be particular points of focus for the FX market given Mexico and China might be at the forefront of the initial trade war. The USD could benefit early on if the "smaller government" strategy helped to support GDP growth and reenergize Fed hawks, but we would sell into such a rally. The adverse impact of even a modest trade war and constraints on labor supply would take their toll on the economy and, by extension, the USD. But at least the descent into a major global trade and currency war would be avoided.

Uncertainty prevails

Considering the FX implications of the US elections has many moving parts. Apart from being uncertain as to the result, we have little clarity on what the actual policy agenda of a given president might be after the election, and whether he or she can succeed in transforming it into law. Our strategy across the scenarios hinges on the implications for risk appetite, a presumption that the USD will not enjoy "safe-haven" allure, and an understanding of where the flipside to USD developments will be most evident.

Bank of Japan Watch

- ▶ The BoJ largely left policy on hold, but raised its ETF purchases by JPY2.7trn
- ▶ The BoJ to review 'policy effectiveness' in September, when we now expect more bond/ETF buys, but no further rate cuts
- ▶ We continue to see USD-JPY drifting towards 95 by year-end

Hold your horses

Frederic Neumann
Co-head of Asian Economics
Research
The Hongkong and Shanghai
Banking Corporation Limited
fredericneumann@hsbc.com.hk
+852 2822 4556

Joseph Incalcaterra
Asia Economist
The Hongkong and Shanghai
Banking Corporation Limited
joseph.f.incalcaterra@hsbc.com.hk
+852 2822 4687

There's always tomorrow. In a nutshell: officials kept the annual base money increase target of JPY80trn, left the marginal deposit rate unchanged at -0.1%, but raised their ETF purchases by JPY2.7trn. A few extra goodies: the BoJ will establish a new facility to lend JGBs to banks and officials doubled the USD lending programme for overseas investment to USD24bn.

Importantly, the BoJ said it will review the effectiveness of its policies at its upcoming meeting on 21 September. This may raise hopes for something punchier. But we counsel caution: to us, July's decision suggests that the BoJ has reached the limits of its current policy framework. A significant increase in JGB purchases is difficult given that the central bank, by its own admission, may run into trouble at some stage obtaining enough bonds to keep the programme going. We still forecast a marginal increase by JPY10trn, now at the September meeting, but that may need to involve a widening of purchases to include FILP bonds (which would also neatly fit into the new fiscal stimulus programme).

Another cut in the marginal deposit rate also appears unlikely given the squeeze such a move would exert on banks' profits and risk appetite. The fact that the BoJ introduced a JGB lending programme suggests to us that the central bank now wants to cushion banks from the impact of a negative deposit rate. We now expect the marginal deposit rate to stay at -0.1% for the time being.

The BoJ, by contrast, has still some scope to increase ETF purchases, even if it is not entirely clear how the policy impacts inflation expectations and economic growth. We therefore forecast another JPY3trn increase in ETF buys in September.

The BoJ's relative inaction raises questions about its ability to ease further under the current monetary framework. This supports our call that USD-JPY will drift to 95 by year-end.

Economics Implications

Those hoping for rotor blades to start twirling over Tokyo will be disappointed. Helicopter money was always unlikely in July. Sure, it may (will) come eventually, but there are plenty of legal and institutional issues to sort out first. Even in September the helicopters will likely stay grounded.

There are a few ways to think about this. First, the government is devising a major fiscal stimulus programme. According to *FT*, the headline number is JPY28.1trn, with about JPY7trn "fresh water" of extra fiscal spending. This sizeable package is presumably one reason the BoJ held back on expanding its bond purchase programme: better wait until the exact figures (including funding for the fiscal splurge) are outlined, and only then announce further JGB purchases accordingly.

Table 1: BoJ, HSBC and consensus inflation forecasts

	CPI ex fresh food (Ex VAT effect, avg. % y-o-y)				Headline CPI (avg. %y-o-y)		
	BoJ Apr '16 forecasts	BoJ Jul '16 forecasts	JCER (Consensus)	HSBC	Official forecasts	HSBC	HSBC*
FY 16	0.5	0.1	0.0	-0.1	0.4	-0.1	-0.1
FY 17	1.7	1.7	0.7	0.3	1.4	0.3	0.3
FY 18	1.9	1.9	0.9	0.8	n/a	0.7	0.7

* Excluding VAT effect

Source: Bank of Japan, Japan Center for Economic Research, HSBC. NB: JCER ESP forecasts as of July 2016.

Second, the high frequency data of late hasn't been too alarming, giving the BoJ a little more time to assess things. True, inflation has eased through June, but officials continue to believe that it will trend up again over the second half of the year. In fact, the BoJ didn't change its CPI forecasts at July's meeting (table 1). That, of course, doesn't mean that the BoJ will continue to sit on its hands. More easing seems likely, not least because according to our forecast, the 2% inflation target is still well out of reach. But those helicopters won't be taking off any time soon.

FX Implications: USD-JPY lower

With the BoJ unwilling to deliver and Japanese authorities seemingly reluctant to intervene in the FX market, the market will question the central bank's resolve for a weaker JPY. Rhetoric alone is unlikely to suffice. Despite repeated remarks about their concerns over the strength of the currency, neither the central bank nor the government has taken assertive action. The BoJ failed to foster JPY weakness following its introduction of negative interest rates and has consistently under-delivered in its last three meetings. So it is becoming increasingly apparent that the BoJ is running out of policy tools to weaken the currency. At a time when the Fed also appears unwilling to hike, **the BoJ's inaction will see USD-JPY move lower.**

The BoJ's unwillingness to deliver runs contrary to the view that risk appetite will be supported by increasingly loose policy. With a lack of additional stimulus globally, **the JPY safe-haven allure may entice investors once again.** We have been looking for USD-JPY to move lower through the rest of the year, given the inability of the authorities to deliver significant policy looseness. We see USD-JPY at 95 by the end of 2016.

For EM currencies, the lack of delivery by the BoJ and resultant JPY strength will be most profound for North Asian currencies – particularly the KRW and the TWD. Given that Korea and Taiwan are fierce export competitors with Japan, the BoJ's decision not to ease monetary policy should alleviate some concerns that these central banks would actively aim to competitively weaken their currencies.

For gold, the decision is only modestly bullish at best. The positive JPY-gold relationship is strongest – and most positive for gold – when the JPY is bought as a safe haven currency. Safe haven demand generally boosts both the JPY and gold simultaneously. Since anticipated JPY strength here is more about disappointment vis-à-vis the BoJ's actions, and not safe haven buying, we expect the commensurate positive impact on gold may be muted.

Keep calm and carry on

- ▶ Despite the news flow the FX market remains very calm
- ▶ Our analysis suggests we are in a new vol regime
- ▶ This is positive for carry

A new FX vol regime

Volatility regimes

Volatility appears to move through different regimes. In other words, there are prolonged periods of time where the market is either insensitive to events, or hypersensitive to events. It appears that the market is entering a new, lower volatility regime. **This would be a positive development for the FX carry trade in general, and for high-yielding EM FX in particular.**

What causes the market to move from one regime to another is unclear. Some suggest that these regimes are related to positioning, others believe that confidence in the ability of central banks to come to the rescue is the key, whilst many believe that these regimes are simply an emergent property of the market.

Regardless of what the root cause is, in this piece we demonstrate the different volatility regimes the FX market has moved through over the last two years.

Regime change

The summer of 2014 was a very quiet time for many different asset classes. This caused the market to bake in expectations of future subdued volatility. This period of calm was followed by a prolonged period of higher volatility: Throughout 2015 the market was expecting volatility to be higher than usual.

The current snapshot tells a more balanced story. It appears that the market now expects the majority of G10 FX rates to be less volatile than usual in the near future. This relaxed outlook is rather surprising given the dramatic news flow recently.

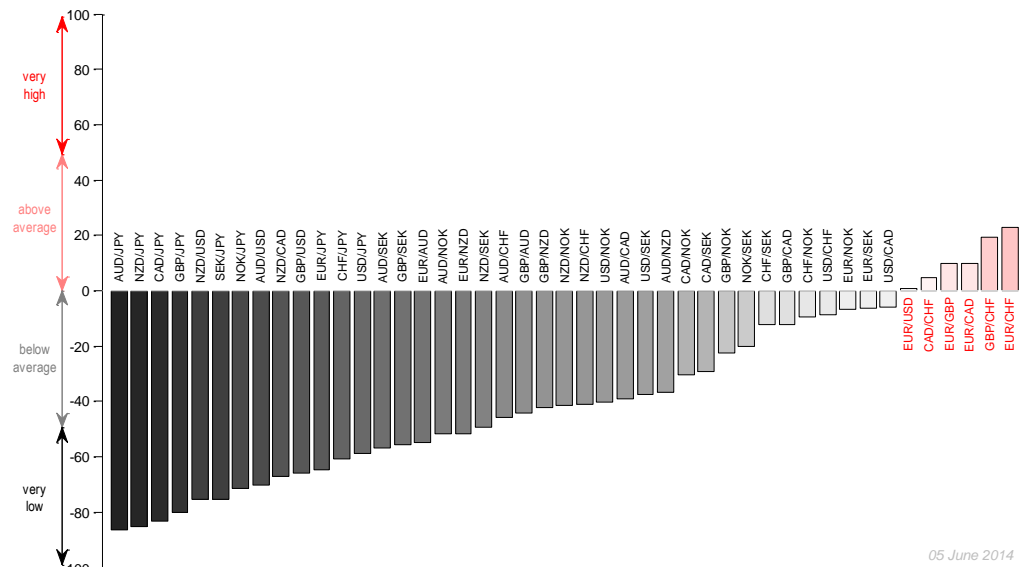
Tracking G10 FX Vol

We use the 'Volatility Scores' from our [FX Volametrics](#) publication to track the general behaviour of FX vol. These allow us to measure whether the market is expecting future volatility to be higher or lower than usual. In this piece we show snapshots of the 1-month Volatility Scores for G10 FX every six months from June 2014 until today.

Summer 2014 – the low vol conundrum

We start our analysis in the middle of 2014. At this time the market was puzzled by a low volatility conundrum. Volatility was close to all-time lows in many asset classes and many regions. This low volatility environment was a source of great consternation and worry at the time: many were bemoaning the lack of volatility and were genuinely worried that they would never see volatile markets ever again¹.

Chart 1. 1M ATM Volatility Scores, 5 June 2014



Source: HSBC, Bloomberg

As a result of this attitude, it was not only realised vol low that was low but implied vols were also low, **even when compared to realised vol**. In Chart 1 we show the HSBC 1M ATM Volatility Scores from June 2014. These are calculated by comparing implied vol to the distribution of realised vol. Implied vol encapsulates the market's expectations about the future; comparing implied to realised in this way allows us to measure whether the market expects future volatility to be higher or lower than usual.

If the implied vol for a currency pair is high when compared to realised, then our Volatility Score will be positive (up to a maximum of 100). Alternatively, if the implied vol for a currency pair is low compared to realised, then our Volatility Score will be negative (with a minimum possible value of -100).

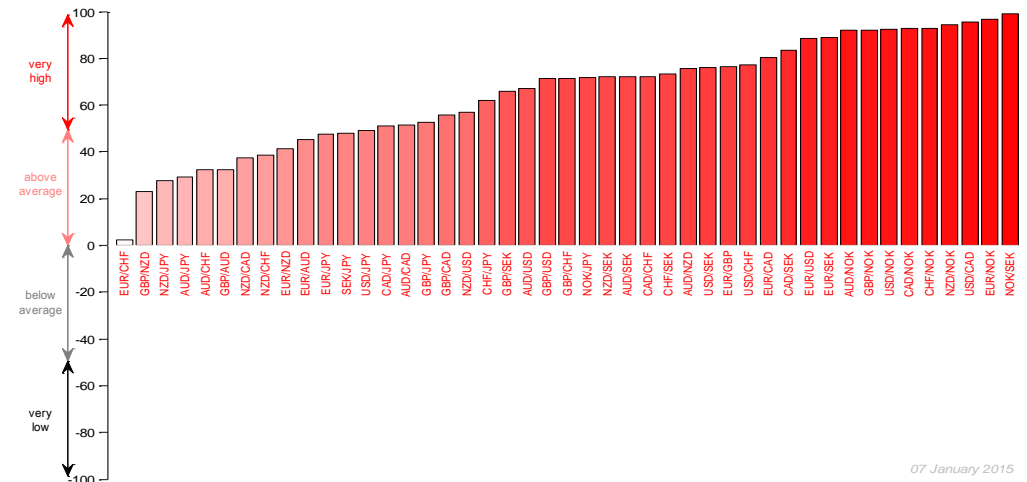
Chart 1 shows that the majority of G10 currency pairs had negative Volatility Scores at this time. In other words, not only was realised volatility very low at that time but also the outlook being priced into the options market was that realised volatility would continue to be lower than usual.

This sanguine outlook stands in stark contrast to the equivalent charts we see as time marches on. During 2015, FX markets were far more volatile than during the quiet summer of 2014; this was particularly true for EM FX. On the following page we show the progression of our Volatility Scores in 6-month intervals. The outlook being priced into implied vols throughout 2015 was that realised volatility would remain higher than usual (Charts 2, 3, and 4).

¹ Given the extreme price moves in many asset classes which we have experienced during 2015 and early 2016, this now seems almost unbelievable.

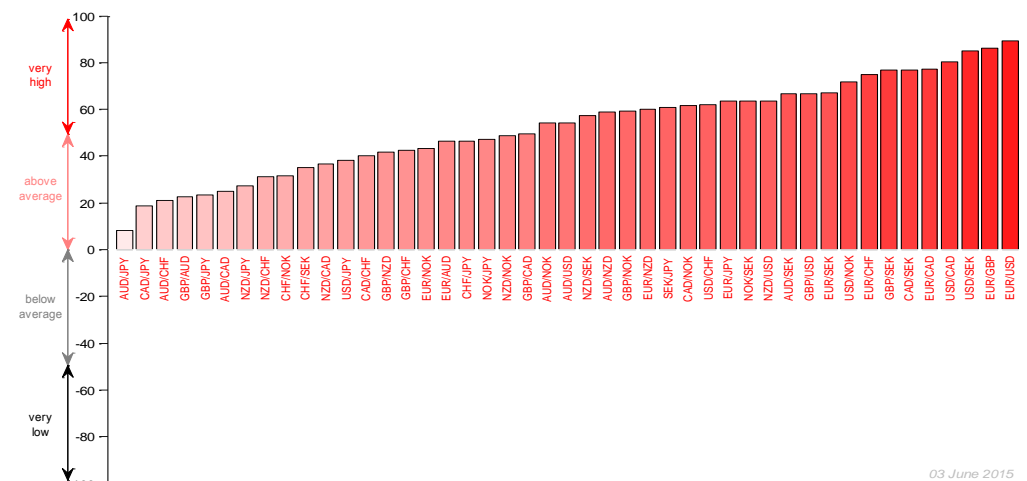
2015 – vol returns

Chart 2. 1M ATM Volatility Scores, 7 Jan 2015



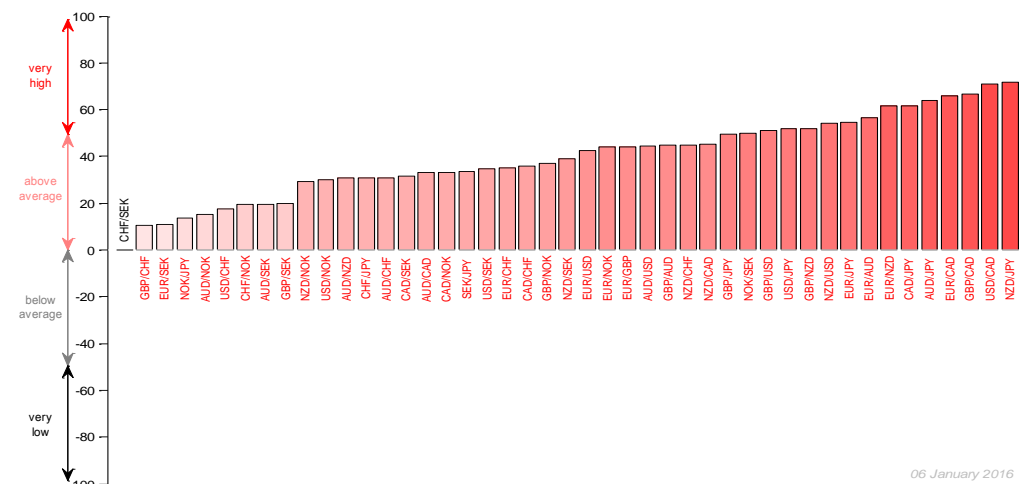
Source: HSBC, Bloomberg

Chart 3. 1M ATM Volatility Scores, 3 June 2015



Source: HSBC, Bloomberg

Chart 4. 1M ATM Volatility Scores, 6 Jan 2016

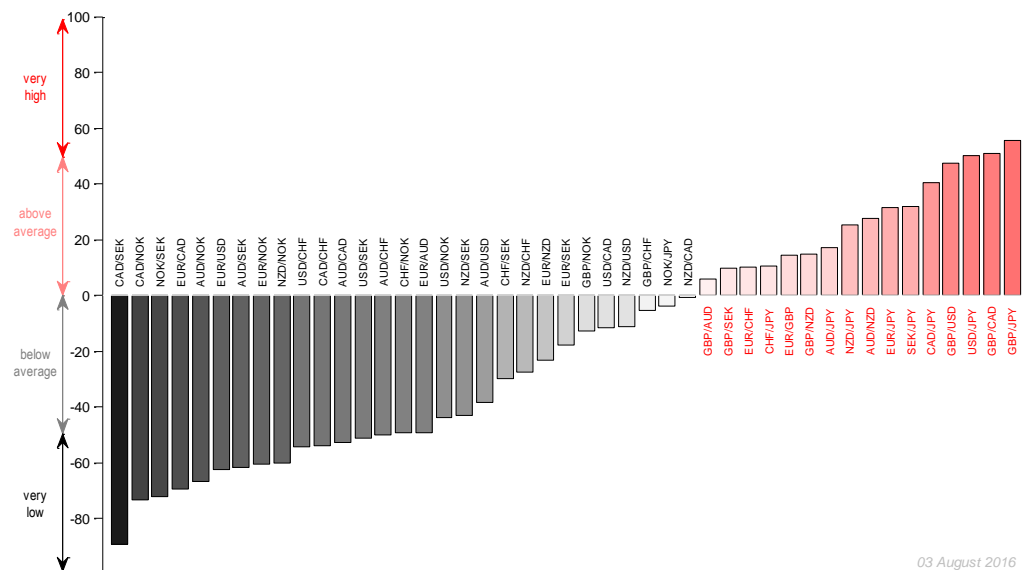


Source: HSBC, Bloomberg

What is the picture today?

The HSBC Volatility Scores today are much more balanced: in fact, there are more low scores than there are high scores (Chart 5). This is astonishing in light of recent events – in quick succession we saw (i) the UK vote to leave the EU; (ii) an attempted coup in Turkey; and (iii) the BoJ massively disappoint market expectations of so-called ‘helicopter money’. Any one of these events had the potential to lead to a significant risk-off period. However, the market has mostly shrugged off this news.

Chart 5. 1M ATM Volatility Scores, 3 August 2016



Source: HSBC, Bloomberg

03 August 2016

This surprisingly relaxed outlook suggests that we are entering a new volatility regime. Implied volatility is low despite what should have been significant shocks to the market. Implied volatility is low even though the outlook is filled with plausible risks. This suggests that it is likely to take a serious shock now in order to make the market run for cover.

Market implications

A low volatility environment would be positive for risk-seeking, yield-hunting trading strategies. In FX, this means carry; therefore, **we expect carry to perform well in the coming months**. And in today's FX market, carry means long-EM.

Carry trades follow a natural cycle whereby good carry returns contain the seeds of their own destruction: When carry performs well traders increase carry exposure. Eventually positions become so large that the strategy becomes unstable – at which point a carry unwind becomes quite likely.

However, carry trade positions are far from this point at the moment. Given the dramatic moves seen in EM over 2015 there still is reluctance amongst many market participants to enter into long-EM FX exposure. So enjoy this positive time for carry whilst it lasts.

Silver outlook

- ▶ We expect silver to stay well-bid after the H1 rally, buoyed by gold, risk-off sentiment, and elevated geopolitical concerns
- ▶ Investor demand surged this year but may now moderate; meanwhile, supply is limited and physical demand rising
- ▶ We forecast a 213moz deficit for 2016; and raise our average price forecast to USD18/oz for 2016

Shooting star still shines

James Steel
Chief Precious Metals Analyst
HSBC Securities (USA) Inc
james.steel@us.hsbc.com
+1 212 525 3117

After years of declines, silver prices made significant gains in H1, boosted by robust investment demand based on strength in gold, risk-off investor appetite, and geopolitical risks. We believe silver prices may remain well-bid for the second half of the year (we see a price range of USD16.00-21.50/oz) and into 2017. We base this on solid fundamentals, as mine supply is likely to contract while industrial and jewelry demand should increase. Our expectation of gold strength is supportive, as are an accommodative Fed policy, negative interest rates, and geopolitical risks. Investment demand, which has been strong this year, may cool but should remain positive.

Tighter supply is price supportive: After steady production increases for more than a decade, mine supply looks set to decline this year and in 2017. Higher prices may contribute to increased scrap supply, but near-term available material may be limited. Tighter supply is a key factor in our mildly bullish outlook for silver.

Strong investor demand should stabilize, while physical demand should grow: The robust pace of build-ups in ETF holdings to record highs and net long positions on the Comex are unlikely to last. High gross long positions on the Comex could trigger liquidation and curb prices. HSBC's modestly positive global economic forecasts imply a mild recovery in industrial demand; jewelry offtake has been improving and price sensitive coin and bar demand is strong, but may cool later this year and in 2017.

Bullish on gold: We expect gold prices to average USD1,275/oz in 2016 (please see [Gold Outlook: No cracks in the gold ceiling](#), (5 July 2016)). We also anticipate that oil and other commodity strength will be supportive for all the bullion markets.

HSBC silver price forecasts (USD/oz)

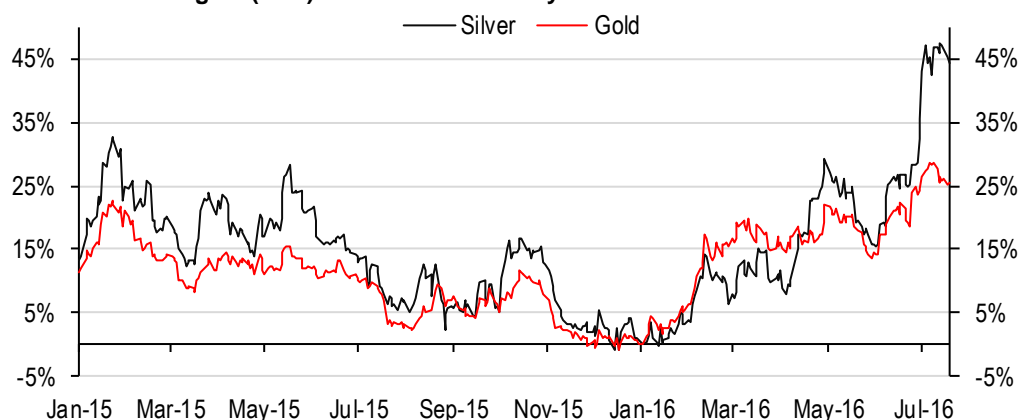
	2016e		2017e		2018e		Long term	
	Old	New	Old	New	Old	New	Old	New
Silver	15.90	18.00	18.00	19.25	–	18.25	20.50	20.50

* Long term = five years
Source: HSBC

Not over yet

Silver, like its sister metal gold, has rallied strongly this year, climbing more than 40% year to date after dropping to a five-year low of USD13.60/oz in mid-December. It has also notably outperformed gold (see chart 2). In December, we highlighted a range of reasons to be bullish on silver in 2016, including tighter supply and demand fundamentals, expectations for a strong EUR-USD and gold prices, as well as a broad recovery in commodity prices, notably oil, and ongoing easy global monetary policy. We anticipated a revival in ETF demand, a rebuilding of net long positions on the Comex, and better coin and small bar sales to rally prices. We attributed some of silver's decline to a weakening in its traditional correlations with other assets, with the notable exception of gold. We stated that these relationships were likely to stabilize going forward and revert to their traditional correlations, arguing for higher prices (see [Silver Outlook: Glimmer not grimmer in 2016](#) (7 December 2015)).

1. Gold vs silver gain (loss) indexed to 1 January 2016



Heightened demand for perceived safe-haven assets is supportive

We continue to believe that many of these factors will continue to support silver. We add another reason for strength in the months ahead: heightened demand for perceived safe-haven assets following the UK's vote to leave the EU and other geopolitical risks. Additionally, ongoing accommodative global monetary policies and negative interest rates provide a supportive backdrop for silver prices.

That said, we expect the pace of gains to moderate for the rest of 2016. In 2017, silver may be vulnerable to periodic pullbacks. Like gold, silver is inversely correlated to the USD, and USD strength may restrain rallies. Also, investment demand may moderate after this year's rapid recovery in silver ETFs and long Comex positions. Further price rallies may begin to temper coin and bar demand. Industrial demand should be higher, but the increase should be modest.

2. Silver prices

	Price (USD/oz)	Date
4Q 2015 average	14.75	
1Q 2016 average	14.88	
2Q 2016 average	16.81	
3Q 2016 average	20.01	
2016 YTD low	13.78	12-Jan-16
2016 YTD high	20.36	13-Jul-16
Nominal all-time high	49.51	28-Apr-11

Source: Bloomberg

Dollar bloc

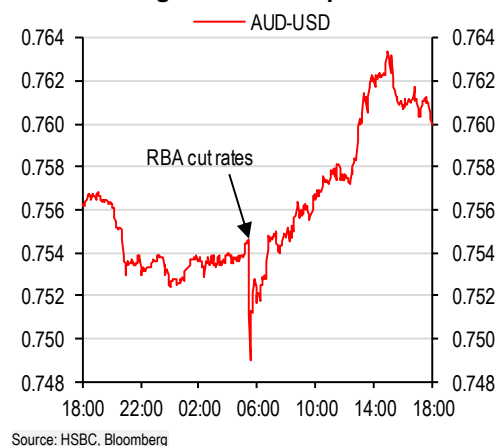
Be wary of the unexpected

The Reserve Bank of Australia cut rates to a record low of 1.5% on 2 August. The RBA's rate cut is an attempt to pull inflation back to its 2-3% target. As far as the currency is concerned, July's RBA minutes highlighted the belief that "an appreciating exchange rate could complicate the necessary economic adjustments". In other words the AUD is an important variable in the RBA's inflation fighting criteria. On the rate announcement AUD-USD initially dropped 0.7%, yet this move reversed quickly and the AUD ended up for the day (chart 1). This outcome must have been disappointing for the RBA. Perhaps the reason for such price action is the rate cut was fully priced in and the market was hoping for more. For this meeting twenty out of twenty-five economists surveyed on Bloomberg were expecting the rate cut.

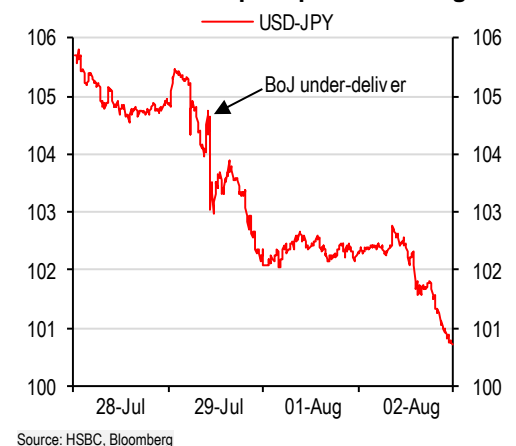
The reaction function of the AUD shows that when a central bank cuts rates as expected and does not over deliver, the currency appreciates. This was also shown in the case of the RBNZ, where a 25bp cut as expected saw the NZD strengthen. We have seen similar market reactions recently when other central banks have either under or over delivered. In the case of the Bank of Japan, its monetary base target and policy rate were left unchanged on 29 July. Just under half of economists surveyed expected an expansion of the monetary base target, and exactly half of economists expected a rate cut. The BoJ's failure to over deliver created substantive JPY strength (chart 2). In the case of the Bank of England, MPC members delivered by cutting rates and delivering further QE, causing GBP to fall. Delivering more than expected can produce a sizeable market reaction.

An appreciating AUD is unwelcome news for the RBA. Given the RBA will not deliver QE and intervention is a far off proposition, what strategy could they use to prompt AUD weakness? The answer takes us back to the RBA meeting on 3 May when they surprised the market with a 25bp rate cut. This saw AUD fall from 0.76 to around 0.71 by month end. At the time of writing only 26% of economists surveyed on Bloomberg are expecting an additional rate cut this year. HSBC does not expect further easing in 2016. The question is: how could the RBA counter an unwanted appreciation of the currency that would further undermine their inflation target? Doing the unexpected seems to have a pronounced impact on the currency. This makes us wary of them perhaps doing the unexpected again.

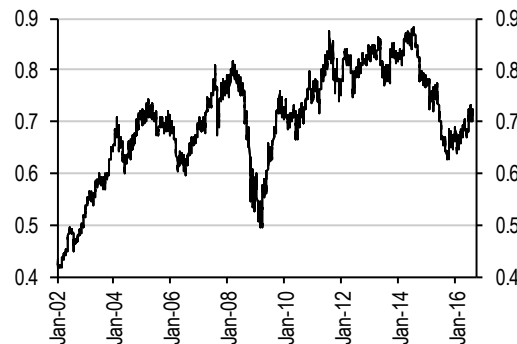
1. AUD strengthens after expected rate cut



2. A lacklustre BoJ prompts JPY strength



NZD-USD

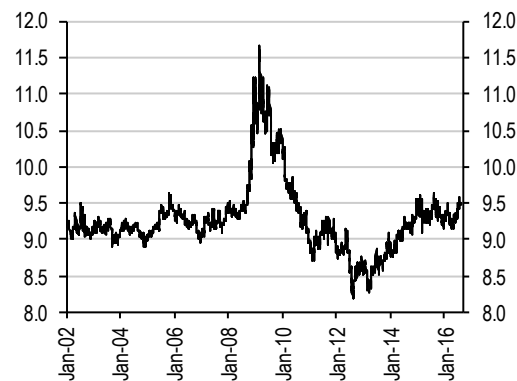


Source: HSBC, Bloomberg

New Zealand: Cuts to continue

- ▶ The RBNZ cut rates to 2% on 10 August. While growth in New Zealand is strong, it is not generating enough price pressures to lift inflation back to the RBNZ's 'near 2%' target. On the last print, CPI inflation was 0.4% YoY.
- ▶ The NZD has not helped to improve inflation, rising 11% from February to August versus the USD. The RBNZ has explicitly stated that a higher NZD "makes it difficult for the Bank to meet its inflation objective". With low inflation and a strong NZD, the key question remains: how much further might the RBNZ need to go?
- ▶ We expect a further 25bp rate cut to 1.75% in November's meeting. This is currently around 50% priced in to the rates market, based on New Zealand OIS. If the RBNZ does cut in November the NZD may moderately weaken. **We retain our year end forecast of 0.68.**

EUR-SEK



Source: HSBC, Bloomberg

Sweden: SEK to benefit from risk-on markets

- ▶ The Riksbank reiterated its dovishness in its July policy meeting minutes, stating they do not intend to raise interest rates until 2H 2017. The central bank noted that rate rises will be at a slower pace than previously assessed, and monetary policy will continue to be very expansionary.
- ▶ However, we maintain our view that EUR-SEK will decline based in part on the idea that at some stage the monetary policy framework in Sweden will be changed, resulting in a more hawkish Riksbank that should drive EUR-SEK lower towards our year end view of 9.00.
- ▶ Swedish real GDP growth remains among the strongest in Europe even though it has declined to 3.1% YoY in Q2 from 4% YoY in Q1. While external risks have grown since Brexit, a risk-on mood in markets has prevailed, in turn providing support to the SEK despite the UK related uncertainty.

USD-CAD



Source: HSBC, Bloomberg

Canada: Disappointing data won't stop the CAD

- ▶ A risk-on mood and a recovery in oil from the July lows should support the CAD in the near-term, despite some economic disappointments in early August that sent USD-CAD to 1.32. The CAD continues to track the movements in the oil market closely, and as such has recovered its lost ground derived from the early August weak economic data.
- ▶ We retain our bullish outlook on the currency and believe the government's use of fiscal policy as a counter-cyclical tool to reflate the economy will see the CAD strengthen. Fiscal stimulus of CAD12bn – which is expected to add 0.5ppts to GDP growth – will be CAD supportive, we expect.
- ▶ Recent economic data suggest H2 2016 may be disappointing, with continued weakness in job and wage growth, while export growth declined for a fifth straight month. This could potentially increase the chances for an interest rate cut in Q4 2016, but we believe the central bank will continue to monitor the fiscal stimulus, and its ability to buoy growth. We still believe a rate cut would temper CAD strength but would not reverse it. We look for USD-CAD to finish the year at 1.25.

Asia – regional overview

Asian currencies have continued to perform strongly, buoyed by accommodating monetary policies in major economies, as well as stability in China's economic data and the RMB. USD-CNY tested but failed to break above 6.70 in mid-July. Thereafter, the pair fell notably, tracking the broader USD index. We believe this overall stability of the RMB reflects two things. First, more balanced FX demand and supply in the onshore market – we are starting to see the resumption of foreign bond inflows. The second factor comes down to the PBoC's influence – it is possible the authorities went into 'market stabilisation mode' in the latter part of July. We expect this stability to hold for the time being, especially considering the upcoming political event calendar – the G20 meeting at Hangzhou on 4-5 September and the official inclusion of RMB in the IMF's SDR basket from 1 October.

Many Asian currencies enjoyed positive domestic news flows in recent weeks. Lower-yielding, current account surplus currencies in the region – KRW, TWD and THB – outperformed over the past month, contrasting the higher yielding ones – notably the IDR.

As we discussed in [Asian FX: Sharing the burden](#), 30 June 2016, the current account surplus currencies are increasingly finding difficulty recycling their growing excess savings into external assets. Hence, their currencies appreciated strongly when those domestic surpluses were compounded with foreign capital inflows as well. Both the KRW and TWD have seen strong foreign equity inflows after the Brexit vote. An unexpected ratings upgrade by the S&P (to AA) on 8 August has raised the positivity around the KRW. The S&P cited improved external metrics and relatively robust growth among high-income peers, among other reasons, for the upgrade on the Korean sovereign.

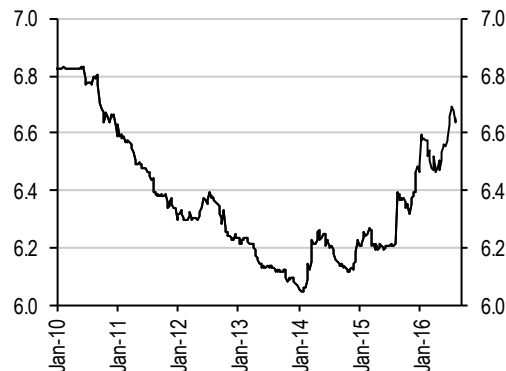
Thailand's draft constitution was approved by a majority vote in the 7 August referendum, paving the way for a possible early election in H2 2017. The THB appears to have taken the outcome positively. In our view, the prospect of continuity for the military government's long-term infrastructure plans should bode well for FDI inflows. This, alongside the recent resumption of foreign portfolio inflows after a two-year hiatus and a tourism-driven large current account surplus, will continue to support the THB. Measures by the Bank of Thailand – a dovish monetary policy bias, rhetoric against THB strength and liberalisation of locals' foreign investments – are unlikely to offset the broader global trends.

The INR is thus far seeing one of its better quarters in a year. The currency has been supported by the recent passing of the Good and Services Tax (GST) bill, a widely anticipated reform since Modi came into power in May 2014. By unifying all indirect taxes into one, the GST will provide a much simpler framework than the current system. Over the longer term, that should serve as an incentive for FDI inflows. Meanwhile, equity portfolio inflows have risen on positive sentiment around reforms and growth. That said, we believe the central bank will continue its prudent policy of leaning against such volatile flows, thereby moderating significant downward pressure on USD-INR.

In Indonesia, the recent appointment of former World Bank official Sri Mulyani Indrawati as the new Finance Minister raised optimism around the government's fiscal policies and the tax amnesty programme (see [IDR: Tax Amnesty: Fourth time's the charm](#), 28 June 2016). Despite the surge in foreign portfolio inflows, USD-IDR has been surprisingly stable. Bank Indonesia has signalled that it will be accumulating FX reserves, rather than allow the IDR to appreciate significantly. We believe this will in fact improve the IDR's risk profile and makes us more confident of its medium-term outlook.

Asia at a glance

USD-CNY



Source: HSBC, Bloomberg

China (CNY): Striving for equilibrium

- ▶ The RMB remains in the midst of a transition from a highly managed FX regime to more of a floating one. In our view, the 'Chinese way' shows a preference for the middle path, avoiding extremes such as a one-off devaluation and/or a re-pegging of the RMB to the USD.
- ▶ The RMB is becoming increasingly sensitive to the movements in major currencies and the PBoC's increased transparency has allowed it to implement the new credible fixing mechanism which should introduce greater two-way currency volatility over time.
- ▶ We expect further depreciation by the RMB this year and forecast USD-RMB at 6.90 by year-end. Domestically, we are wary of the slowdown in private sector capex and the cooling housing market. Should concerns about China's growth rise again, the market may expect more monetary policy easing by the PBoC. Interest rates cuts would weigh on the RMB.

USD-CNH



Source: HSBC, Bloomberg

China (CNH): A sense of stability, for now

- ▶ USD-RMB has remained relatively stable of late, unable to make a sustained break above 6.70. There are two main reasons for this. First, we are approaching a sense of supply and demand equilibrium. The FX flow picture lately supports this view: exporters are offering foreign currencies again, corporates' repayment of external debt is slowing, and domestic 'hot money' outflows have eased.
- ▶ The second factor is the PBoC's influence. Although China's FX reserves dropped only USD4bn in July, it is possible this number masked an 'ease then squeeze' strategy. A policy attempt to let USD-CNY test 6.70 in early July could have threatened renewed FX outflows, requiring authorities to stabilise the market in the latter half of July.
- ▶ The evidence so far suggests that USD-RMB is likely to be fairly stable for the time being, especially considering the upcoming political event calendar. There is the G20 meeting at Hangzhou on 4-5 September and the official inclusion of RMB in the IMF's SDR basket from 1 October.

USD-INR



Source: HSBC, Bloomberg

India: GST bill passed

- ▶ It has been a long wait, but the passing of the Good and Services Tax (GST) should be supportive for the INR in the near-term. Since Prime Minister Modi was elected to power in May 2014, expectations have been high that his government would succeed in delivering important reforms – the GST was among the most widely anticipated.
- ▶ By unifying all indirect taxes into one, the GST will provide a much simpler framework than the current system. This could provide a big incentive for further FDI over time.
- ▶ With India's government bond yields also offering attractive yields there is an obvious attraction to the INR in this current environment. That said, we cannot lose sight of how the RBI's FX policy will evolve should fresh capital inflows materialise. We expect the central bank will continue its current policy of smoothing portfolio inflows, thereby building FX reserves and deflecting significant downward pressure on USD-INR spot.

USD-KRW

Source: HSBC, Bloomberg

Korea: S&P gives the KRW a boost

- ▶ The KRW has been Asia's best performer since the UK's 'Brexit' vote. Stronger global risk appetite and a positive rating upgrade by the S&P has supported the currency. The S&P unexpectedly raised the sovereign's credit rating to AA, from AA- on 8 August.
- ▶ Among many other reasons, S&P cited strong external metrics for the upgrade. It mentioned the decline in banking sector external liabilities over the years and the persistent current account surplus. It also said that Korea's exports have been resilient despite the real effective appreciation of the KRW. We concur with all these points.
- ▶ Furthermore, recent data also showed that in H1 2016, Korea's current account surplus totalled USD50bn. Interestingly, the data also showed a resumption of foreign capital inflows in recent months – not just in portfolio investment, but also FDI inflows. Asia's current account surplus currencies are finding it increasingly difficult to generate local capital outflows to recycle their excess domestic savings as well as foreign capital inflows.

USD-THB

Source: HSBC, Bloomberg

Thailand: draft constitution approved

- ▶ Thailand's draft constitution was approved by a majority vote in the 7 August referendum, paving the way for an election possibly as early as in H2 2017. The THB appears to have taken the outcome positively.
- ▶ Meanwhile, the Thai central bank attempted to jawbone the THB weaker in the latest monetary policy meeting. In the press release accompanying the policy decision, the phrase about THB's appreciation being non-conducive to the ongoing economic recovery was included.
- ▶ Even if the BoT cuts interest rates in the coming months, continues to build FX reserves and announces new measures to encourage private sector foreign asset accumulation – all these could at best stabilize the exchange rate. The BoT alone cannot counter the fundamental and global trends that are driving THB appreciation against the USD. Thailand is on track to have a record large current account surplus this year, which could remain sizeable next year.

USD-IDR

Source: HSBC, Bloomberg

Indonesia: More positive news

- ▶ In the current environment of low inflation and accommodative monetary policy by the G4 central banks, higher-yielding currencies should outperform. In this context, the IDR stands out within Asia.
- ▶ Besides its attractive carry, positive news-flow also continues to support the IDR – for example, the recent appointment of former World Bank official Sri Mulyani as the new Finance Minister has raised optimism around the tax amnesty programme (see [IDR: Tax Amnesty: Fourth time's the charm](#), 28 June 2016).
- ▶ Although Bank Indonesia has signalled that it will be accumulating FX reserves, rather than allow the IDR to appreciate significantly on the back of tax-amnesty related inflows, that will in fact improve the IDR's risk profile and makes us more confident of its medium-term outlook.

Latin America – regional overview

Global drivers lift local mood

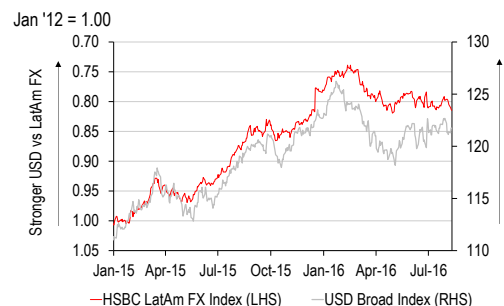
With the Fed now seemingly on pause for some time and the BOJ and ECB still in easing mode – along with other G10 central banks – investors appear to be gaining optimism for emerging market assets (see [EM FX Roadmap](#), 26 July). LatAm currencies have seen gains in recent weeks, with most USD crosses re-approaching the lower end of multi-month ranges. While enthusiasm for LatAm currencies is building, we still sense some caution attached to that outlook, with investors reluctant to put too much capital to work in an uncertain global environment. This may limit the near-term upside potential for LatAm currencies, as might the central banks of Brazil and Argentina's buying of USDs.

Brazil's central bank continues to buy around USD500m per day in its quest to unwind its approximate USD50bn in outstanding short USD forward positions. While these flows are easily accommodated within normal daily liquidity, sustained USD purchases of this nature over a longer period may have a limiting effect on the BRL's upside. The global search for yield appears to be trumping all else in the short term, but we would caution that much good news is priced into Brazilian markets on the political and fiscal front, leaving room some price give-back on any stumbles.

Elsewhere we remain positively biased towards the MXN, where we believe an overly-sold currency can benefit most from a supportive risk-on environment. USD-MXN has tended to be the most correlated FX pair to our risk-on/risk-off (RORO) index. The PEN will also likely see support, not just from the external backdrop but also from domestic activity improvements and a more positive political climate.

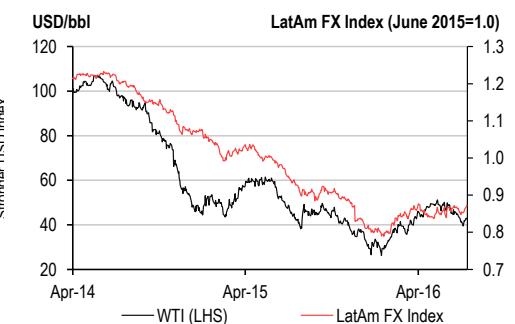
There remain some domestic concerns, however, that could see LatAm currencies suffer more than most in the EM space should global sentiment turn sour. Relatively high inflation, low growth and the persistence of stubborn twin fiscal deficits make the domestic economic backdrops less palatable than EM current account surplus countries. A now-heavier reliance on portfolio investment flows would further expose these fragilities on any downturn.

Broad USD moves drive USD-LatAm



Source: Bloomberg, HSBC

Oil remains a key focus for LatAm FX also



Source: Bloomberg, HSBC

Latin America at a glance

USD-BRL

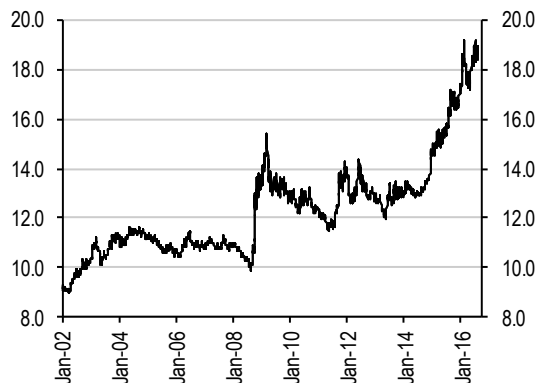


Source: HSBC, Bloomberg

Brazil: global optimism dominates local risks

- ▶ Unwinding of latent long USD positions, high domestic yields, optimism on the political front and a supportive global backdrop are combining to keep the BRL supported.
- ▶ As long as a risk-on backdrop persists, BRL support is likely to continue, though there are domestic risks worth bearing in mind, including an ongoing deep recession, rising unemployment and some political uncertainty. Politics will remain a risk until the impeachment process is finalised, but also in terms of possible watering down of expected fiscal measures.
- ▶ The central bank continues to unwind its large stock of outstanding short USD positions (buying USDs via reverse swaps). With around USD50bn worth of swaps still to unwind the process will take many months and notwithstanding other factors may limit BRL gains during this period.

USD-MXN

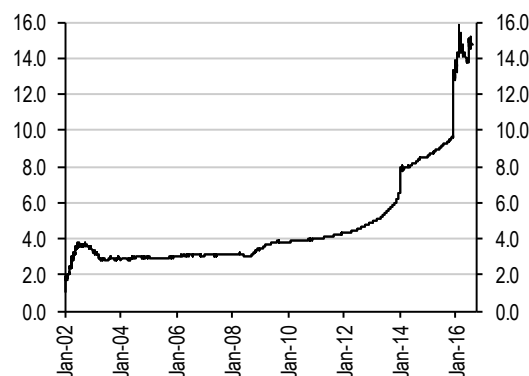


Source: HSBC, Bloomberg

Mexico: MXN finding some traction

- ▶ Following the Central Bank of Mexico's surprise 50bp hike in June and improving global risk-on sentiment, the MXN has finally found better traction in mid-August.
- ▶ While growth forecasts continue to diminish (latest survey sees 2016 consensus GDP growth at 2.3%, down from 2.4% previously), a relatively cheap MXN on a valuation basis suggests some room for appreciation despite the weaker domestic growth backdrop.
- ▶ We expect global drivers to continue to dominate USD-MXN price action with a low-for-longer G3 monetary policy backdrop favouring risk-on currencies like the MXN.
- ▶ We expect the MXN to strengthen further in 2H given the currency's undervaluation and potential for intervention on any USD-MXN moves through 19.00. We forecast USD-MXN to end the year at 17.50.

USD-ARS



Source: HSBC, Bloomberg

Argentina: ARS needs to weaken to stay competitive

- ▶ USD-ARS looks set to trade within a relatively wide band with intervention at the extremes to counter transitory shocks, as the central bank seeks to switch gradually to an inflation-targeting regime.
- ▶ Portfolio flows are presently keeping the ARS supported, while negative real yields and real appreciation of the ARS argue for further nominal currency weakness in the months ahead.
- ▶ BRL strength has helped to ease the ARS's strength on a trade-weighted basis, but this is likely only temporary breathing room. Given very high inflation there will still be a need for nominal ARS weakness, especially given the need to stimulate the economy via trade.
- ▶ We need to monitor what portfolio flows may be coming in as a result of the tax amnesty bill in the coming months, but there is little incentive for domestic investors to bring funds home and on balance we expect the ARS to weaken in the months ahead.

CEEMEA – regional overview

Positive external sentiment, the prospect of extremely low developed market rates continuing for the foreseeable future and an ongoing hunt for yield continue to provide ample support for CEEMEA currencies. This is despite the fact that domestic backdrops remain quite challenging in the medium term for many of the currencies in this region. But for the time being, global sentiment is beating local sentiment. This appears likely to continue through the summer months, barring an unexpected shock event, especially if FX is moving into a new lower-volatility regime, as we point out on page 22. These periods tend to be very positive for higher yielding currencies and EM more generally. Even when we have seen various local shocks in recent months – the attempted coup in Turkey being the most notable for this region – the negative follow through has been extremely limited, suggesting that investor sentiment towards CEEMEA FX remains biased to buying into such weakness.

Turkey has been the most in focus currency in CEEMEA, following the attempted coup on 15 July. The initial impact was very negative for the TRY as worries about the political outlook spiked, and USD-TRY spiked higher with them. However, the situation seems to have calmed somewhat for now, with the main political parties appearing fairly united in the aftermath of the event. For the TRY, we have outlined four key channels through which politics may cause currency weakness: foreign portfolio flows, households' FX deposits, corporate and bank FX liabilities, and the current account. The latest data for the former two channels shows limited sign of aggressive outflows. As such we are maintaining a neutral bias on the TRY with a forecast of 3.00 for the end of the year.

Politics have also been in focus in **South Africa**, with the ruling ANC party coming under pressure in the recent municipal elections. Support for the ANC fell to 54% from 62% in 2011, with large losses in particular coming from the large urban centres. The question will be how the ANC reacts from a policy perspective. There is a contrast of opinion as to whether the result could lead to a more populist policy stance or if the government is actually incentivised to push stronger reforms in light of the result. If the former, then it may create potential negative risks from rating agencies, regarding the fiscal position in the future. However, with no ratings reviews due until Q4 this risk is likely to remain under the radar for now, and the combination of recently improving domestic data, high yields and prudent monetary policy will likely mean the ZAR should remain on the front foot in light of the positive external backdrop.

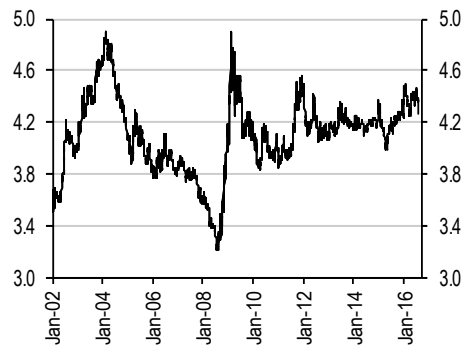
The RUB underperformed recently, partly as oil prices softened, but also in response to some authorities' comments around the currency's prior appreciation and the appropriate level for the RUB. We have highlighted that there is a rising risk of FX intervention with USD-RUB below 65 and as such do not see a strong case for being positive on the RUB at this juncture.

In Poland, the government's decision not to force mandatory conversion of CHF loans and the limited initial costs to banks (around PLN4bn, versus up to PLN65bn estimated before) has provided relief for the currency. We do not share this optimism in the longer-term but with one short-term hurdle overcome it is possible the PLN may continue to benefit for now.

Elsewhere, the large current account surplus currencies – **the HUF and the ILS** – should be supported by these underlying inflows in a world of low yields. Recycling these flows through outward financial investment is increasingly difficult given the paucity of yield on offer globally. The **CZK** remains close to the EUR-CZK floor but FX intervention has been declining, the macro data remains strong and inflation ticked up in July. These developments, alongside changes to the CNB board which took place in August – including a new Governor – suggest that the risks around the FX floor are tilted more towards a shorter timespan than the policy being extended even further into the future.

EMEA at a glance

EUR-PLN



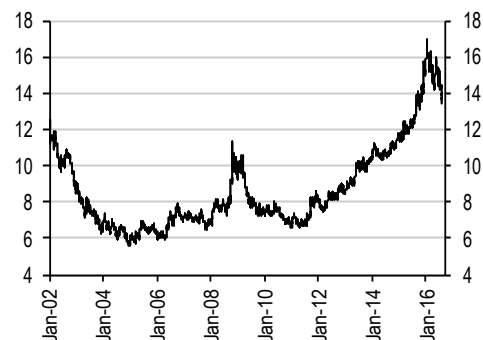
Source: HSBC, Bloomberg

EUR-CZK



Source: HSBC, Bloomberg

USD-ZAR



Source: HSBC, Bloomberg

Poland: relief time

- ▶ On 2 August, Poland presented its long awaited plan to restructure households' FX mortgages. The draft bill does not include mandatory conversion of CHF loans to PLN. Borrowers will be compensated for 'unfair' FX spreads. The overall estimated cost for banks is PLN3.6-4.0bn, i.e. much smaller than PLN67bn estimated for the alternative plan including a mandatory conversion.
- ▶ The plan has provided relief to the PLN. EUR-PLN has fallen below 4.30 for the first time since April. The market no longer fears the risk of substantive losses for the banking sector, and political risk premium has fallen. The President's much less painful plan coordinated with the government and the NBP has been taken positively.
- ▶ However, the risks related to the households' FX debt have not disappeared. The authorities offered banks one year to convert a sufficient share of loans on a voluntary basis. If in a year, they are not satisfied, mandatory conversion could be envisaged.

Czech Republic: new CNB, same policy?

- ▶ On 4 August, the new CNB held its first MPC meeting. It was the first meeting of Jiri Rusnok as Governor, with a further two new members also present. The CNB maintained the policy rate at nearly 0% and has reiterated its commitment to maintain the EUR-CZK floor until mid-2017.
- ▶ At the first sight, it seems the CNB's policy has not changed. However, it is worth noting two important points. First, the balance of risk regarding to the inflation outlook has been changed from 'anti-inflationary' to 'balanced'. Second, the MPC did not discuss postponing the exit from the floor.
- ▶ These changes cannot be overlooked, particularly when the economy is robust and the pressure on the floor is weaker (CNB is intervening less). It will be important to scrutinize inflation and wage data as well as the communication of MPC members in the coming months.

South Africa: ANC weaker, ZAR stronger

- ▶ The ruling African National Congress (ANC) experienced a sharp drop in support at municipal elections on 3 August. The ANC received about 54% of the vote vs 62% in the 2011 election. The Democratic Alliance, the main opposition party, has won several important urban centres.
- ▶ The results of the elections have not stopped the ZAR appreciation trend. USD-ZAR fell below 14.00 for the first since November 2015, making the ZAR the best performing EM currency in the last month.
- ▶ A supportive global backdrop, fewer concerns over a sovereign rating downgrade, an improving inflation outlook and trade balance and attractive valuation are behind the ZAR's recent appreciation. In the near-term, these factors are likely to remain in play, continuing to provide support to the ZAR.

HSBC Volume-Weighted REERs

For full details of the construction methodology of the HSBC REERs, please see “*HSBC’s New Volume-Weighted REERs*” [Currency Outlook April 2009](#).

The value of a currency

Since FX prices are always given as the amount of one currency that can be bought with another, the inherent value of a currency is not defined. For example, if EUR-USD goes up, this could be because the EUR has increased in value, the USD has decreased in value, or a combination of both. One possible method for getting some insight into changes in the value of a currency is to look at movements in the value of a basket of other currencies against the currency of interest. For example, if EUR-USD increased over some time period, one could see how EUR had performed against a range of other currencies to determine whether EUR has become generally more valuable or whether this was simply a USD-based move. An effective exchange rate is an attempt to do this and to represent the moves in index form.

There are two main approaches to building an effective exchange rate: Nominal Effective Exchange Rates (NEERs) and Real Effective Exchange Rates (REERs). NEERs simply track the weighted average returns of a basket of other currencies against the currency being investigated; REERs deflate the returns in an attempt to compensate for the differing rates of inflation in different countries. The reason for doing this is that, particularly over long time frames, inflation can have a large impact on the purchasing power of a currency.

How should we weight the basket?

If we are trying to create an index for the change in value of a currency against a basket of other currencies, we now need to decide on how to weight our basket. One possible solution would be to simply have an equally-weighted basket. The rationale for this would be that there is no *a priori* reason for choosing to put more emphasis on any one exchange rate. However, this could clearly lead to the situation where a large move in a relatively small currency can strongly influence the REERs and NEERs for all other currencies. To avoid this, the indices are generally weighted so that more “important” currencies get higher weighting. This, of course, begs the question of how “importance” is defined.

Trade Weights

Weighting the basket by bilateral trade-weights is the most common weighting procedure for creating an effective exchange rate index. This is because the indices are often used to measure the likely impact of exchange rate moves on a country’s international trade performance.

Volume Weights

The daily volume traded in the FX market dwarves the global volume of physical trade. From this it is possible to make a convincing argument that the weighting which would be really important would be to weight the currency basket by financial market flows, rather than bilateral trade.

To do this properly would require us to have accurate FX volumes for all currency pairs considered in the index. However, these are not available. The BIS triennial survey of FX volumes only gives data for a small number of bilateral exchange rates. However, the volumes are split by currency for over 30 currencies. From these volumes we can estimate financial weightings for each currency. We believe that this gives another plausible definition for “importance”, and one which may be more relevant for financial investors than trade weights. We call this procedure volume weighting and the indices produced through this procedure we call the HSBC volume-weighted REERs.

We would argue that if you are a financial market investor, the effective value of a currency you would be exposed to is more accurately represented by the HSBC volume-weighted index rather than the trade-weighted index.

Data Frequency

This is something which is rarely considered when constructing REERs – inflation data is generally released at monthly frequency at best so the usual procedure is to simply create monthly indices by default. However, some countries release their inflation data only quarterly. The usual procedure for these countries is to simply *pro-rata* the change over the period. Here there is an implicit assumption that the rate of inflation changes slowly. We take this assumption one step further and assume that it is valid to spread the inflation out equally over every day in the month.

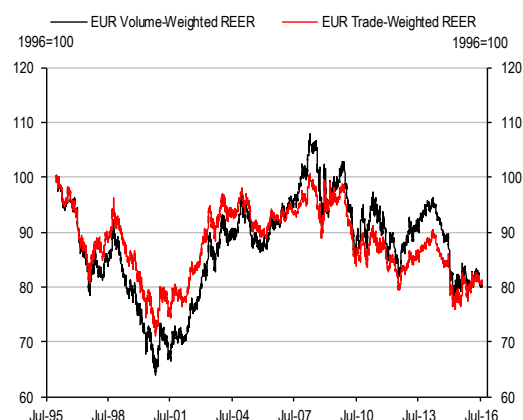
HSBC Volume – Weighted REERs

USD REER index



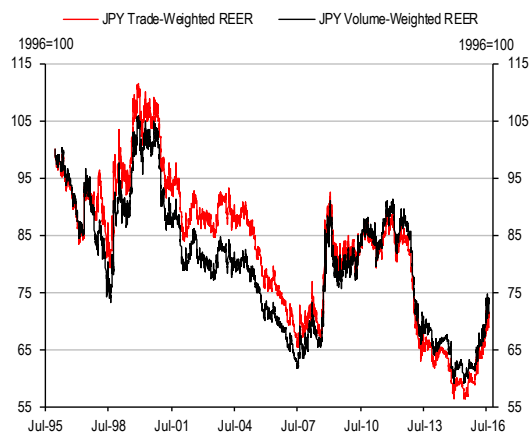
Source: HSBC

EUR REER index



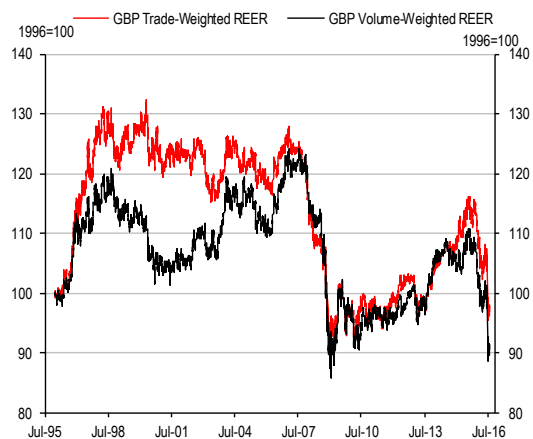
Source: HSBC

JPY REER index

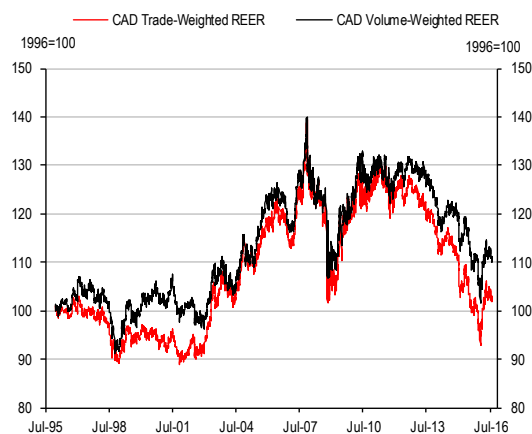


Source: HSBC

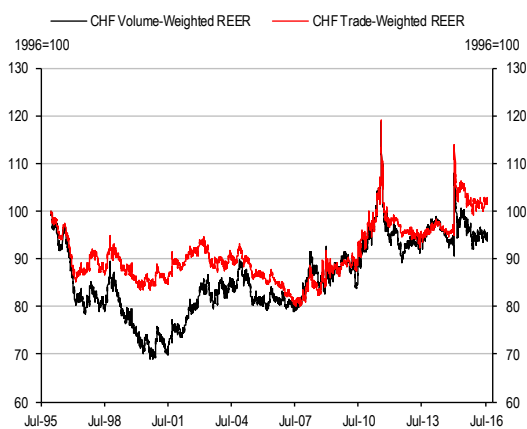
GBP REER index



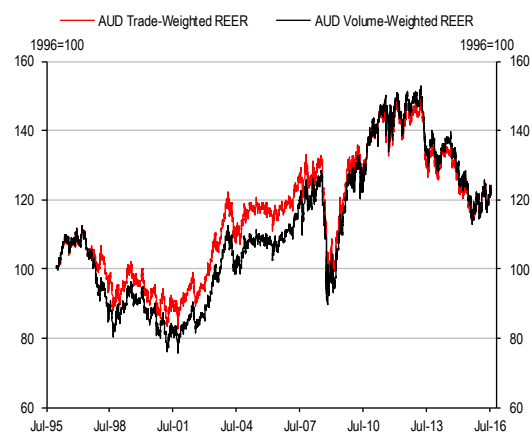
Source: HSBC

CAD REER index

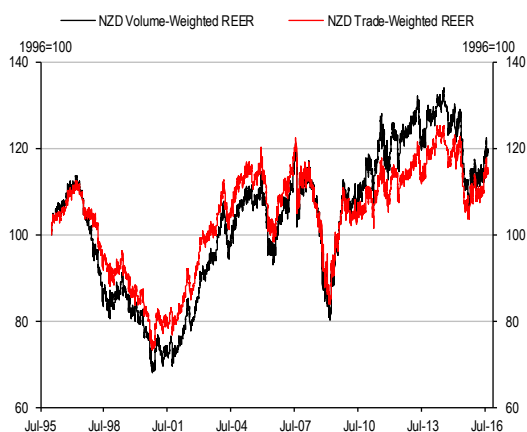
Source: HSBC

CHF REER index

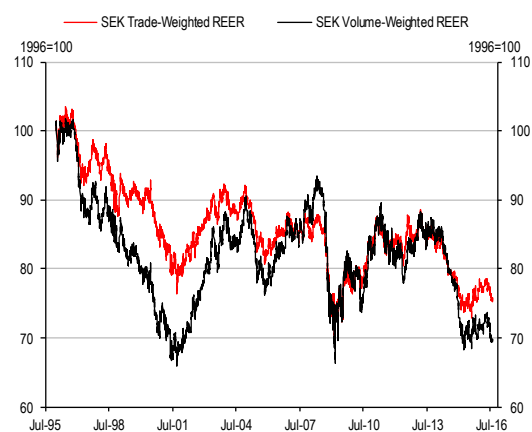
Source: HSBC

AUD REER index

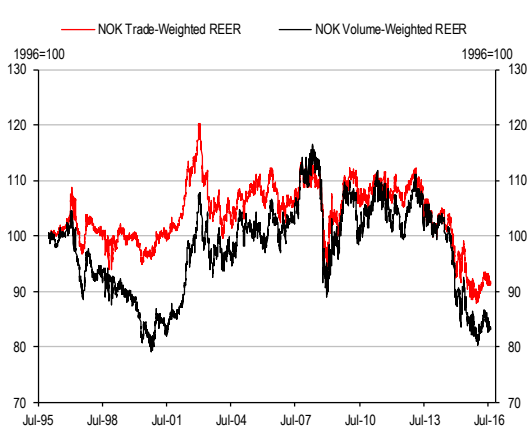
Source: HSBC

NZD REER index

Source: HSBC

SEK REER index

Source: HSBC

NOK REER index

Source: HSBC

HSBC Little Mac Valuation Ranges

When using a REER to measure whether a currency is over/under valued, it is necessary to compare the current value of the REER to some reference value. Calculating REERs is a simple task – the difficulty in using them for FX valuation is deciding on which reference value to choose.

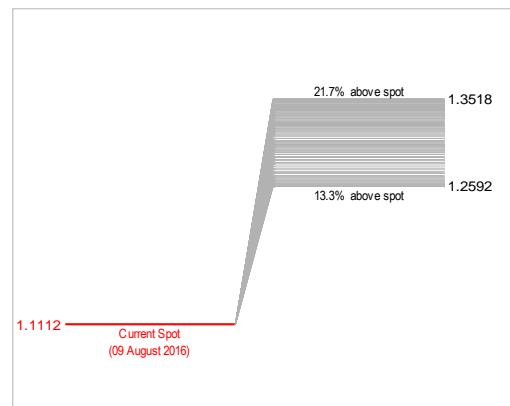
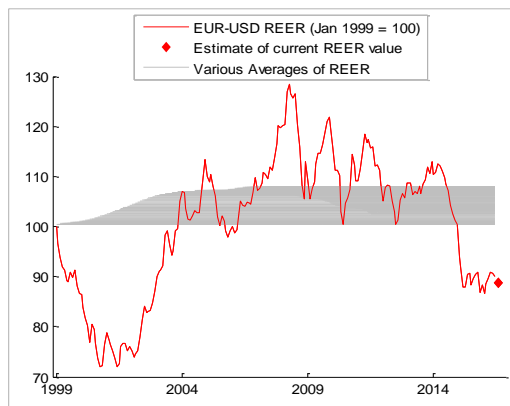
A common approach is to use a moving average value of the REER as the reference. However, this requires an arbitrary choice of window length to use for the moving average. One person might believe that a five-year window was an appropriate choice whereas someone else might choose 10 years. These choices will regularly give contradictory valuations and there is no principled way to choose between them.

Our methodology circumvents this problem by using all possible window lengths of five years and more. Each window choice gives a different valuation and we use the entire range of these valuations. If they **all** give a consistent valuation signal then this gives us some confidence of the direction of valuation.

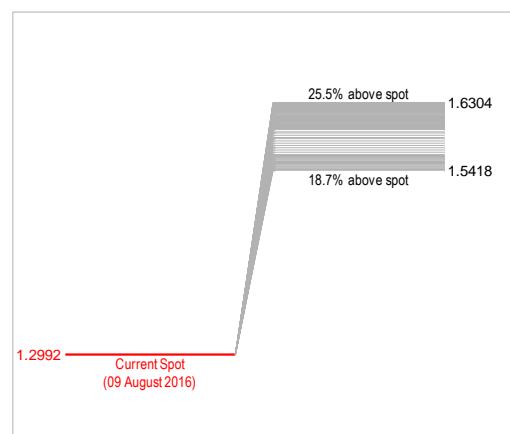
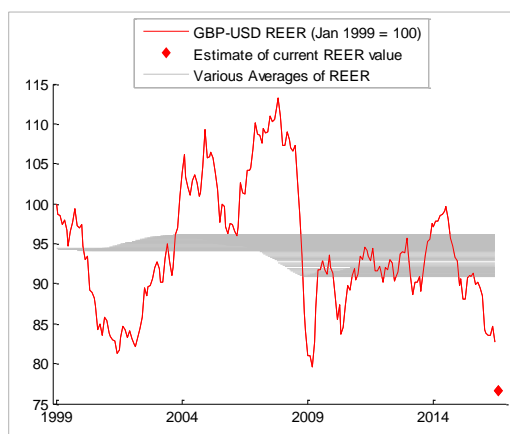
Procedure to calculate the HSBC Little Mac Valuation Ranges

1. We create single currency pair REERs, beginning at 100 in February 1999.
2. We calculate average values of the REER for all recent time windows which are at least five years in length¹.
3. We use the spot moves since the most recently available inflation data to estimate the value of the REER today².
4. For each average value of the REER calculated in step 2, we calculate what value of the exchange rate would move our estimated value of the REER today (step 3) to the average. We use this value as one of our estimated PPP values.
5. The range of the entire set of the estimated PPP values (step 4) constitutes our HSBC Little Mac Valuation Range for this currency pair.

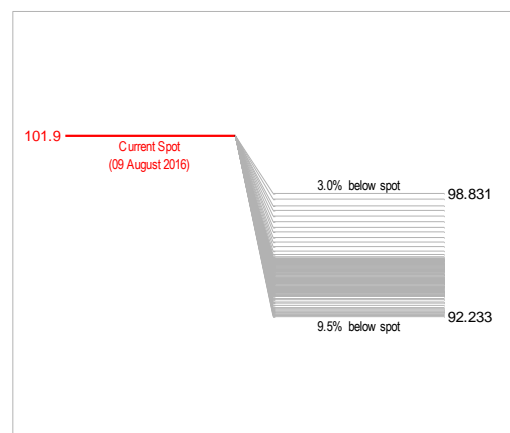
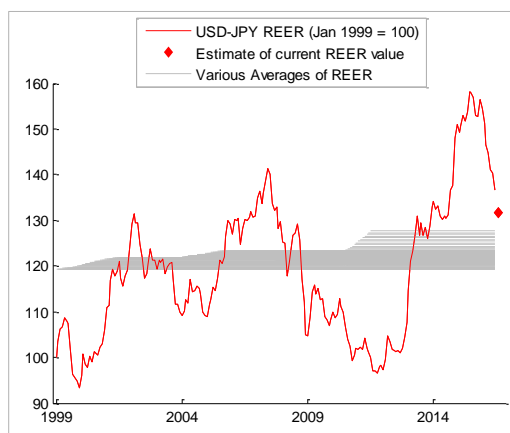
For full details of the construction methodology, please see "[HSBC Little Mac Valuation Ranges](#)", September 2015.

EUR-USD HSBC Little Mac Valuation Range

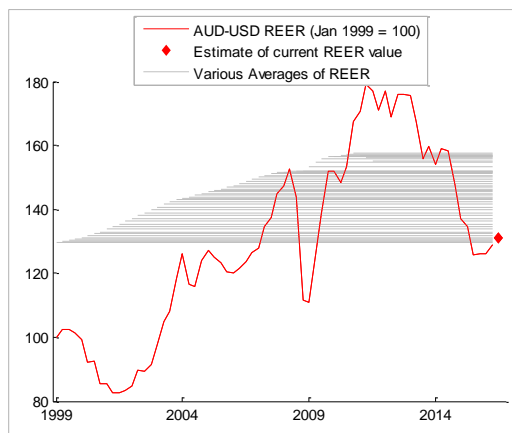
Source: HSBC, Thomson Reuters Datastream

GBP-USD HSBC Little Mac Valuation Range

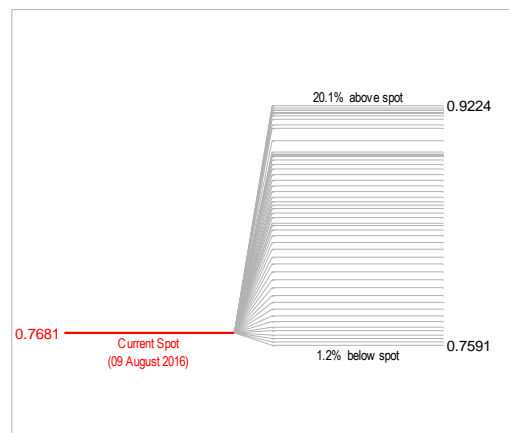
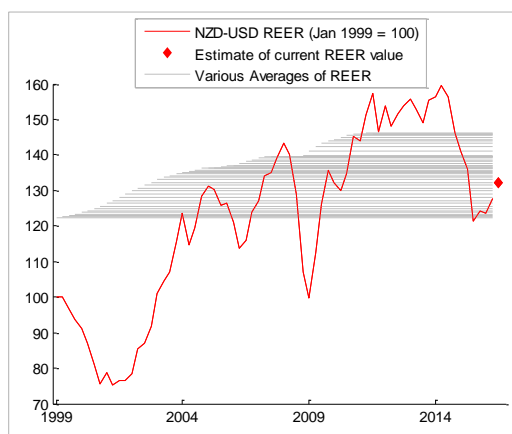
Source: HSBC, Thomson Reuters Datastream

USD-JPY HSBC Little Mac Valuation Range

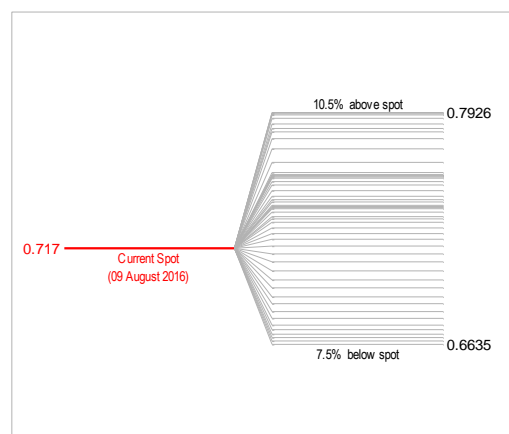
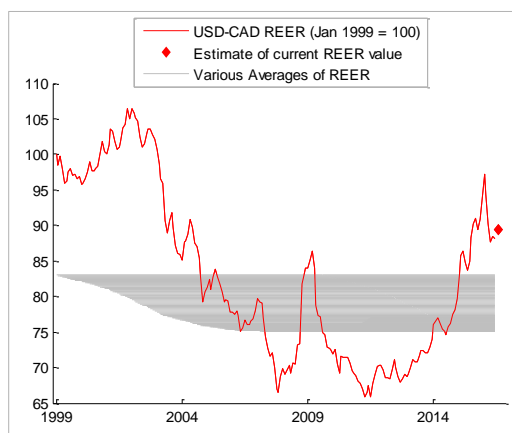
Source: HSBC, Thomson Reuters Datastream

AUD-USD HSBC Little Mac Valuation Range

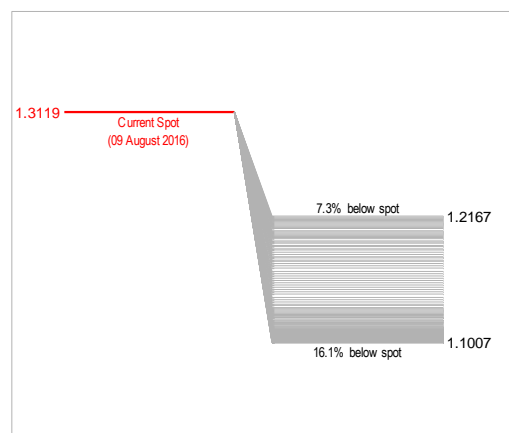
Source: HSBC, Thomson Reuters Datastream

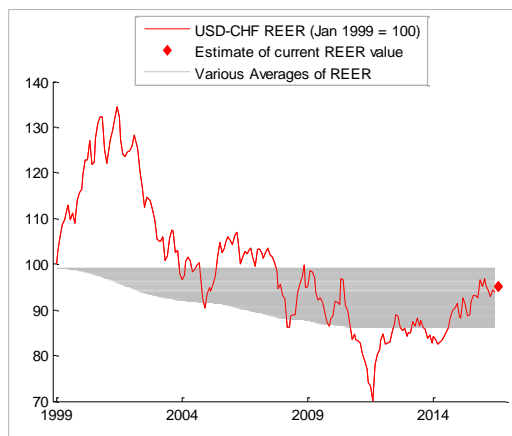
**NZD-USD HSBC Little Mac Valuation Range**

Source: HSBC, Thomson Reuters Datastream

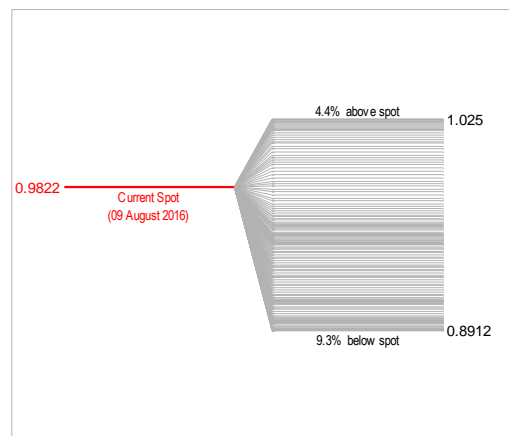
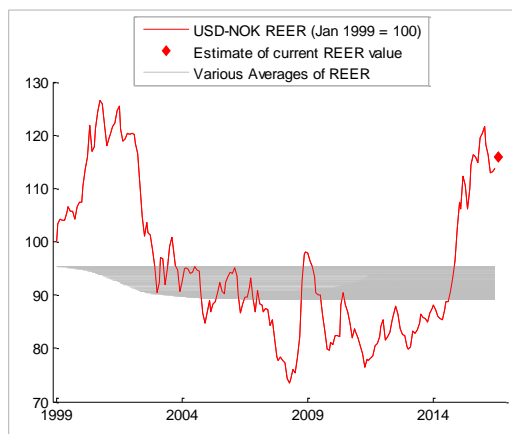
**USD-CAD HSBC Little Mac Valuation Range**

Source: HSBC, Thomson Reuters Datastream

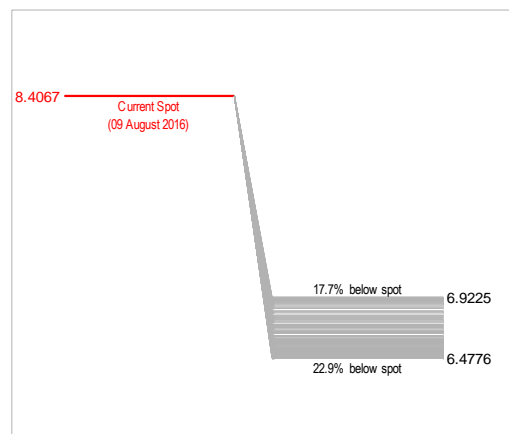
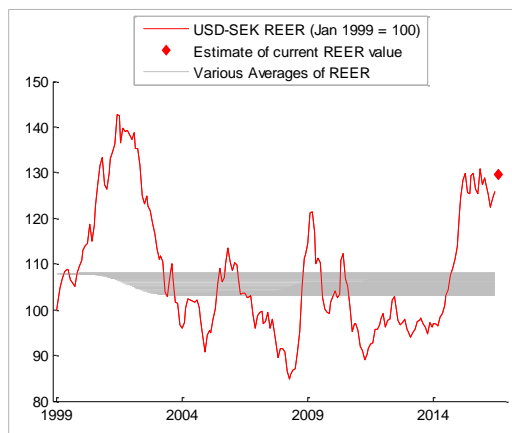


USD-CHF HSBC Little Mac Valuation Range

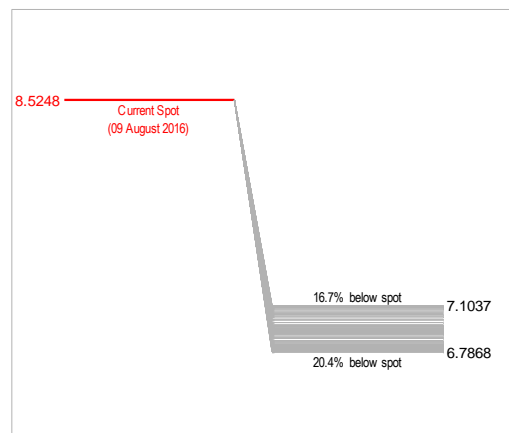
Source: HSBC, Thomson Reuters Datastream

**USD-NOK HSBC Little Mac Valuation Range**

Source: HSBC, Thomson Reuters Datastream

**USD-SEK HSBC Little Mac Valuation Range**

Source: HSBC, Thomson Reuters Datastream



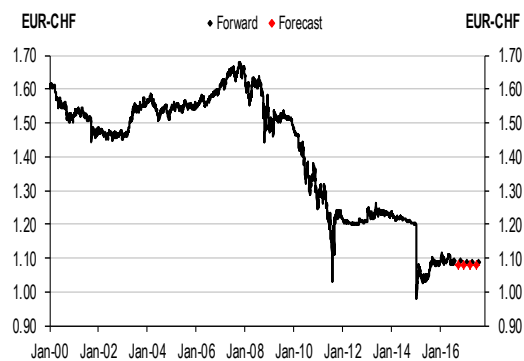
HSBC forecasts vs forwards

EUR-USD vs forwards



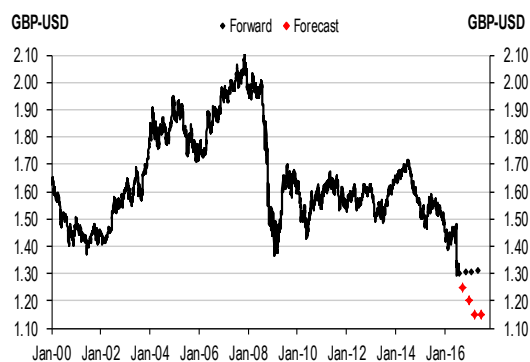
Source: Thomson Reuters Datastream, Reuters, HSBC

EUR-CHF vs forwards



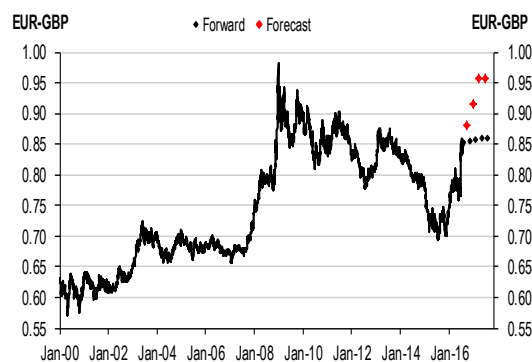
Source: Thomson Reuters Datastream, Reuters, HSBC

GBP-USD vs forwards



Source: Thomson Reuters Datastream, Reuters, HSBC

EUR-GBP vs forwards



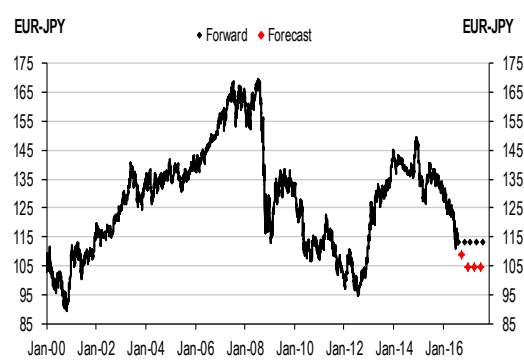
Source: Thomson Reuters Datastream, Reuters, HSBC

USD-JPY vs forwards



Source: Thomson Reuters Datastream, Reuters, HSBC

EUR-JPY vs forwards



Source: Thomson Reuters Datastream, Reuters, HSBC

Policy Rates

end period	2015			2016				2017	
	Current	Q3	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f
North America									
US	0.25-0.50	0.00-0.25	0.25-0.50	0.25-0.50	0.25-0.50	0.25-0.50	0.25-0.50	0.25-0.50	0.50-0.75
Canada	0.50	0.50	0.50	0.50	0.50	0.50	0.25	0.25	0.25
Asia									
China	4.35	4.60	4.35	4.35	4.35	4.10	3.85	3.85	3.60
Japan	-0.10	0.10	0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Hong Kong	0.75	0.50	0.75	0.75	0.75	0.75	0.75	0.75	1.00
India	6.50	6.75	6.75	6.75	6.50	6.50	6.25	6.25	6.25
Indonesia	6.50	7.50	7.50	6.75	6.50	6.25	6.00	6.00	6.00
South Korea	1.25	1.50	1.50	1.50	1.25	1.25	1.00	0.75	0.75
Malaysia	3.00	3.25	3.25	3.25	3.00	2.75	2.75	2.75	2.75
Thailand	1.50	1.50	1.50	1.50	1.50	1.25	1.25	1.25	1.25
Australia	1.50	2.00	2.00	2.00	1.75	1.50	1.50	1.50	1.50
New Zealand	2.00	2.75	2.50	2.25	2.25	2.00	1.75	1.75	1.75
Western Europe									
EMU - Refi	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00
EMU - Deposit	-0.40	-0.20	-0.20	-0.30	-0.40	-0.40	-0.40	-0.40	-0.40
UK	0.25	0.50	0.50	0.50	0.50	0.25	0.10	0.10	0.10
Norway	0.50	0.75	0.75	0.50	0.50	0.50	0.50	0.50	0.50
Sweden	-0.50	-0.35	-0.35	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50
Switzerland	-1.25/-0.25	-1.25/-0.25	-1.25/-0.25	-1.25/-0.25	-1.25/-0.25	-1.25/-0.25	-1.25/-0.25	-1.25/-0.25	-1.25/-0.25
CEEMEA									
Poland	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Hungary	0.90	1.35	1.35	1.20	0.90	0.90	0.90	0.90	0.90
Turkey	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Russia	10.50	11.00	11.00	11.00	10.50	10.00	9.50	9.00	8.00
Israel	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
South Africa	7.00	6.00	6.25	7.00	7.00	7.00	7.00	7.25	7.25
Latin America									
Brazil	14.25	14.25	14.25	14.25	14.25	14.25	13.25	12.25	11.25
Chile	3.50	3.00	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Mexico	4.25	3.00	3.25	3.75	4.25	4.25	4.25	4.25	4.50

Source HSBC

Emerging markets forecast table

end period	14-Jul-16	2015		2016				2017	
	last	Q3	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f
Latin America vs USD									
Argentina (ARS)	14.57	9.42	12.94	14.59	14.94	16.25	16.75	17.50	18.25
Brazil (BRL)	3.27	3.96	3.96	3.56	3.18	3.35	3.50	3.55	3.60
Chile (CLP)	658	697	709	668	660	690	700	700	700
Mexico (MXN)	18.28	16.91	17.23	17.28	18.47	17.85	17.50	17.50	17.50
Colombia (COP)	2939	3089	3175	3009	2914	2900	2800	2800	2800
Peru (PEN)	3.28	3.23	3.28	3.33	3.29	3.37	3.40	3.42	3.45
Eastern Europe vs EUR									
Czech Republic (CZK)	27.0	27.2	27.0	27.0	27.1	27.0	27.0	27.0	27.0
Hungary (HUF)	313	314	316	314	315	315	320	320	320
Poland (PLN)	4.40	4.25	4.27	4.25	4.37	4.50	4.60	4.60	4.60
Romania (RON)	4.49	4.42	4.52	4.47	4.52	4.50	4.50	4.50	4.50
Russia (RUB)	70.6	73.3	79.2	76.5	70.8	77.0	79.2	77.0	74.8
Turkey (TRY)	3.22	3.39	3.17	3.21	3.18	3.30	3.30	3.30	3.30
Middle East vs USD									
Egypt (EGP)	8.88	7.83	7.82	8.88	8.88	8.78	11.00	11.00	11.00
Israel (ILS)	3.86	3.92	3.89	3.76	3.86	3.80	3.75	3.75	3.75
Africa vs USD									
South Africa (ZAR)	14.37	13.86	15.49	14.69	14.69	16.00	16.20	16.20	16.20

Source HSBC

Exchange rates vs USD

end period		2015				2016				2017	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f
Americas											
	Canada (CAD)	1.27	1.25	1.34	1.38	1.30	1.30	1.28	1.25	1.25	1.25
	Mexico (MXN)	15.27	15.69	16.91	17.23	17.28	18.47	17.85	17.50	17.50	17.50
	Brazil (BRL)	3.20	3.11	3.96	3.96	3.56	3.18	3.35	3.50	3.55	3.60
	Argentina (ARS)	8.82	9.08	9.42	12.94	14.59	14.94	16.25	16.75	17.50	18.25
Western Europe											
	Eurozone (EUR*)	1.07	1.12	1.12	1.09	1.14	1.11	1.10	1.10	1.10	1.10
Other Western Europe											
	UK (GBP*)	1.48	1.57	1.51	1.47	1.44	1.33	1.25	1.20	1.15	1.15
	Sweden (SEK)	8.63	8.29	8.38	8.46	8.11	8.48	8.27	8.18	8.18	8.18
	Norway (NOK)	8.06	7.84	8.54	8.85	8.27	8.38	8.09	7.91	7.91	7.91
	Switzerland (CHF)	0.97	0.94	0.97	1.00	0.96	0.98	0.98	0.98	0.98	0.98
Emerging Europe											
	Russia (RUB)	58.2	55.3	65.5	72.9	67.2	63.9	70.0	72.0	70.0	68.0
	Turkey (TRY)	2.60	2.68	3.03	2.92	2.82	2.87	3.00	3.00	3.00	3.00
	Poland (PLN)	3.80	3.76	3.80	3.93	3.73	3.95	4.09	4.18	4.18	4.18
	Hungary (HUF)	280	283	281	291	276	285	286	291	291	291
	Czech Republic (CZK)	25.7	24.5	24.3	24.9	23.8	24.4	24.5	24.5	24.5	24.5
Asia/Pacific											
	Japan (JPY)	120	122	120	120	113	103	99	95	95	95
	Australia (AUD*)	0.76	0.77	0.70	0.73	0.77	0.74	0.70	0.70	0.70	0.70
	New Zealand (NZD*)	0.75	0.68	0.64	0.68	0.69	0.71	0.68	0.68	0.68	0.68
North Asia											
	China (CNY)	6.20	6.20	6.36	6.49	6.45	6.65	6.75	6.90	6.90	6.90
	Hong Kong (HKD)	7.75	7.75	7.75	7.75	7.76	7.76	7.80	7.80	7.80	7.80
	Taiwan (TWD)	31.3	30.9	33.0	32.9	32.2	32.2	32.6	33.0	32.8	32.5
	South Korea (KRW)	1109	1118	1185	1176	1142	1152	1165	1170	1160	1150
South Asia											
	India (INR)	62.3	63.6	65.5	66.2	66.1	67.5	68.0	69.0	69.0	69.0
	Indonesia (IDR)	13074	13353	14637	13856	13118	13179	13400	13500	13500	13500
	Malaysia (MYR)	3.71	3.74	4.39	4.30	3.87	3.99	4.00	3.95	3.92	3.90
	Philippines (PHP)	44.7	45.1	46.7	46.9	46.0	47.1	45.5	45.0	44.8	44.6
	Singapore (SGD)	1.37	1.35	1.42	1.42	1.35	1.35	1.37	1.38	1.38	1.38
	Thailand (THB)	32.6	33.8	36.4	36.0	35.1	35.1	35.3	35.0	34.8	34.6
	Vietnam (VND)	21480	21725	22478	22485	22293	22304	22600	22800	23000	23000
Africa											
	South Africa (ZAR)	12.14	12.15	13.86	15.49	14.69	14.69	16.00	16.20	16.20	16.20

Source HSBC

*pairs denoted XXX-USD

Exchange rates vs EUR & GBP

end period		2015				2016				2017	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3f	Q4f	Q1f	Q2f
vs euro											
Americas											
	US (USD)	1.07	1.12	1.12	1.09	1.14	1.11	1.10	1.10	1.10	1.10
	Canada (CAD)	1.36	1.39	1.50	1.50	1.48	1.44	1.41	1.38	1.38	1.38
Europe											
	UK (GBP)	0.72	0.71	0.74	0.74	0.79	0.83	0.88	0.92	0.96	0.96
	Sweden (SEK)	9.26	9.25	9.38	9.19	9.23	9.39	9.10	9.00	9.00	9.00
	Norway (NOK)	8.65	8.74	9.54	9.62	9.41	9.28	8.90	8.70	8.70	8.70
	Switzerland (CHF)	1.04	1.04	1.09	1.09	1.09	1.08	1.08	1.08	1.08	1.08
	Russia (RUB)	62.4	61.6	73.3	79.2	76.5	70.8	77.0	79.2	77.0	74.8
	Poland (PLN)	4.07	4.19	4.25	4.27	4.25	4.37	4.50	4.60	4.60	4.60
	Hungary (HUF)	300	315	314	316	314	315	315	320	320	320
	Czech Republic (CZK)	27.6	27.4	27.2	27.0	27.0	27.1	27.0	27.0	27.0	27.0
Asia/Pacific											
	Japan (JPY)	129	136	134	131	128	114	109	105	105	105
	Australia (AUD)	1.41	1.45	1.59	1.49	1.48	1.49	1.57	1.57	1.57	1.57
	New Zealand (NZD)	1.44	1.65	1.75	1.59	1.65	1.55	1.62	1.62	1.62	1.62
vs sterling											
Americas											
	US (USD)	1.48	1.57	1.51	1.47	1.44	1.33	1.25	1.20	1.15	1.15
	Canada (CAD)	1.88	1.96	2.03	2.04	1.87	1.73	1.60	1.50	1.44	1.44
Europe											
	Eurozone (EUR*)	0.72	0.71	0.74	0.74	0.79	0.83	0.88	0.92	0.96	0.96
	Sweden (SEK)	12.81	13.04	12.69	12.46	11.70	11.28	10.34	9.82	9.41	9.41
	Norway (NOK)	11.96	12.32	12.92	13.04	11.93	11.15	10.12	9.50	9.10	9.10
	Switzerland (CHF)	1.44	1.47	1.48	1.47	1.38	1.30	1.23	1.18	1.13	1.13
Asia/Pacific											
	Japan (JPY)	178	192	181	177	162	137	124	114	109	109
	Australia (AUD)	1.95	2.04	2.16	2.02	1.88	1.79	1.79	1.72	1.64	1.64
	New Zealand (NZD)	1.99	2.32	2.37	2.15	2.09	1.87	1.84	1.77	1.69	1.69

Source HSBC *denoted EUR-GBP

Disclosure appendix

Analyst Certification

The following analyst(s), economist(s), and/or strategist(s) who is(are) primarily responsible for this report, certifies(y) that the opinion(s) on the subject security(ies) or issuer(s) and/or any other views or forecasts expressed herein accurately reflect their personal view(s) and that no part of their compensation was, is or will be directly or indirectly related to the specific recommendation(s) or views contained in this research report: David Bloom, Daragh Maher, Paul Mackel, Clyde Wardle, Mark McDonald, Murat Toprak, James Steel, Dominic Bunning, Alastair Pinder, Joey Chew, Ju Wang, Simon Wells, Elizabeth Martins, Frederic Neumann and Joseph Incalcaterra

Important disclosures

This document has been prepared and is being distributed by the Research Department of HSBC and is intended solely for the clients of HSBC and is not for publication to other persons, whether through the press or by other means.

This document is for information purposes only and it should not be regarded as an offer to sell or as a solicitation of an offer to buy the securities or other investment products mentioned in it and/or to participate in any trading strategy. Advice in this document is general and should not be construed as personal advice, given it has been prepared without taking account of the objectives, financial situation or needs of any particular investor. Accordingly, investors should, before acting on the advice, consider the appropriateness of the advice, having regard to their objectives, financial situation and needs. If necessary, seek professional investment and tax advice.

Certain investment products mentioned in this document may not be eligible for sale in some states or countries, and they may not be suitable for all types of investors. Investors should consult with their HSBC representative regarding the suitability of the investment products mentioned in this document and take into account their specific investment objectives, financial situation or particular needs before making a commitment to purchase investment products.

The value of and the income produced by the investment products mentioned in this document may fluctuate, so that an investor may get back less than originally invested. Certain high-volatility investments can be subject to sudden and large falls in value that could equal or exceed the amount invested. Value and income from investment products may be adversely affected by exchange rates, interest rates, or other factors. Past performance of a particular investment product is not indicative of future results.

HSBC and its affiliates will from time to time sell to and buy from customers the securities/instruments, both equity and debt (including derivatives) of companies covered in HSBC Research on a principal or agency basis.

Analysts, economists, and strategists are paid in part by reference to the profitability of HSBC which includes investment banking, sales & trading, and principal trading revenues.

Whether, or in what time frame, an update of this analysis will be published is not determined in advance.

For disclosures in respect of any company mentioned in this report, please see the most recently published report on that company available at www.hsbcnet.com/research. In order to find out more about the proprietary models used to produce this report, please contact the authoring analyst.

Additional disclosures

- 1 This report is dated as at 11 August 2016.
- 2 All market data included in this report are dated as at close 09 August 2016, unless a different date and/or a specific time of day is indicated in the report.
- 3 HSBC has procedures in place to identify and manage any potential conflicts of interest that arise in connection with its Research business. HSBC's analysts and its other staff who are involved in the preparation and dissemination of Research operate and have a management reporting line independent of HSBC's Investment Banking business. Information Barrier procedures are in place between the Investment Banking, Principal Trading, and Research businesses to ensure that any confidential and/or price sensitive information is handled in an appropriate manner.
- 4 You are not permitted to use, for reference, any data in this document for the purpose of (i) determining the interest payable, or other sums due, under loan agreements or under other financial contracts or instruments, (ii) determining the price at which a financial instrument may be bought or sold or traded or redeemed, or the value of a financial instrument, and/or (iii) measuring the performance of a financial instrument.

Disclaimer

Legal entities as at 1 July 2016

'UAE' HSBC Bank Middle East Limited, Dubai; 'HK' The Hongkong and Shanghai Banking Corporation Limited, Hong Kong; 'TW' HSBC Securities (Taiwan) Corporation Limited; 'CA' HSBC Bank Canada, Toronto; HSBC Bank, Paris Branch; HSBC France; 'DE' HSBC Trinkaus & Burkhardt AG, Düsseldorf; 000 HSBC Bank (RR), Moscow; 'IN' HSBC Securities and Capital Markets (India) Private Limited, Mumbai; 'JP' HSBC Securities (Japan) Limited, Tokyo; 'EG' HSBC Securities Egypt SAE, Cairo; 'CN' HSBC Investment Bank Asia Limited, Beijing Representative Office; The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch; The Hongkong and Shanghai Banking Corporation Limited, Seoul Branch; HSBC Securities (South Africa) (Pty) Ltd, Johannesburg; HSBC Bank plc, London, Madrid, Milan, Stockholm, Tel Aviv; 'US' HSBC Securities (USA) Inc, New York; HSBC Yatirim Menkul Degerler AS, Istanbul; HSBC México, SA, Institución de Banca Múltiple, Grupo Financiero HSBC; HSBC Bank Australia Limited; HSBC Bank Argentina SA; HSBC Saudi Arabia Limited; The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch incorporated in Hong Kong SAR; The Hongkong and Shanghai Banking Corporation Limited, Bangkok Branch

Issuer of report

HSBC Bank plc
8 Canada Square, London
E14 5HQ, United Kingdom
Telephone: +44 20 7991 8888
Fax: +44 20 7992 4880
Website: www.research.hsbc.com

This document is issued and approved in the United Kingdom by HSBC Bank plc for the information of its Clients (as defined in the Rules of FCA) and those of its affiliates only. If this research is received by a customer of an affiliate of HSBC, its provision to the recipient is subject to the terms of business in place between the recipient and such affiliate. In Australia, this publication has been distributed by The Hongkong and Shanghai Banking Corporation Limited (ABN 65 117 925 970, AFSL 301737) for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). Where distributed to retail customers, this research is distributed by HSBC Bank Australia Limited (AFSL No. 232595). These respective entities make no representations that the products or services mentioned in this document are available to persons in Australia or are necessarily suitable for any particular person or appropriate in accordance with local law. No consideration has been given to the particular investment objectives, financial situation or particular needs of any recipient.

The document is distributed in Hong Kong and Japan by The Hongkong and Shanghai Banking Corporation Limited and has been prepared for the New York office of HSBC Bank USA, National Association. In Korea, this publication is distributed by either The Hongkong and Shanghai Banking Corporation Limited, Seoul Securities Branch ("HBAP SLS") or The Hongkong and Shanghai Banking Corporation Limited, Seoul Branch ("HBAP SEL") for the general information of professional investors specified in Article 9 of the Financial Investment Services and Capital Markets Act ("FSCMA"). This publication is not a prospectus as defined in the FSCMA. It may not be further distributed in whole or in part for any purpose. Both HBAP SLS and HBAP SEL are regulated by the Financial Services Commission and the Financial Supervisory Service of Korea.

Each of the companies listed above (the "Participating Companies") is a member of the HSBC Group of Companies, any member of which may trade for its own account as Principal, may have underwritten an issue within the last 36 months or, together with its Directors, officers and employees, may have a long or short position in securities or instruments or in any related instrument mentioned in the document. Brokerage or fees may be earned by the Participating Companies or persons associated with them in respect of any business transacted by them in all or any of the securities or instruments referred to in this document. This publication is distributed in New Zealand by The Hongkong and Shanghai Banking Corporation Limited, New Zealand Branch incorporated in Hong Kong SAR.

The information in this document is derived from sources the Participating Companies believe to be reliable but which have not been independently verified. The Participating Companies make no guarantee of its accuracy and completeness and are not responsible for errors of transmission of factual or analytical data, nor shall the Participating Companies be liable for damages arising out of any person's reliance upon this information. All charts and graphs are from publicly available sources or proprietary data. The opinions in this document constitute the present judgement of the Participating Companies, which is subject to change without notice. From time to time research analysts conduct site visits of covered issuers. HSBC policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

This document is neither an offer to sell, purchase or subscribe for any investment nor a solicitation of such an offer. HSBC Securities (USA) Inc. accepts responsibility for the content of this research report prepared by its non-US foreign affiliate. All US persons receiving and/or accessing this report and intending to effect transactions in any security discussed herein should do so with HSBC Securities (USA) Inc. in the United States and not with its non-US foreign affiliate, the issuer of this report. In Singapore, this publication is distributed by The Hongkong and Shanghai Banking Corporation Limited, Singapore Branch for the general information of institutional investors or other persons specified in Sections 274 and 304 of the Securities and Futures Act (Chapter 289) ("SFA") and accredited investors and other persons in accordance with the conditions specified in Sections 275 and 305 of the SFA. This publication is not a prospectus as defined in the SFA. It may not be further distributed in whole or in part for any purpose. The Hongkong and Shanghai Banking Corporation Limited Singapore Branch is regulated by the Monetary Authority of Singapore. Recipients in Singapore should contact a "Hongkong and Shanghai Banking Corporation Limited, Singapore Branch" representative in respect of any matters arising from, or in connection with this report. HSBC México, S.A., Institución de Banca Múltiple, Grupo Financiero HSBC is authorized and regulated by Secretaría de Hacienda y Crédito Público and Comisión Nacional Bancaria y de Valores (CNBV).

The document is intended to be distributed in its entirety. Unless governing law permits otherwise, you must contact a HSBC Group member in your home jurisdiction if you wish to use HSBC Group services in effecting a transaction in any investment mentioned in this document. HSBC Bank plc is registered in England No 14259, is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority and is a member of the London Stock Exchange. (070905)

In Canada, this document has been distributed by HSBC Bank Canada and/or its affiliates. Where this document contains market updates/overviews, or similar materials (collectively deemed "Commentary" in Canada although other affiliate jurisdictions may term "Commentary" as either "macro-research" or "research"), the Commentary is not an offer to sell, or a solicitation of an offer to sell or subscribe for, any financial product or instrument (including, without limitation, any currencies, securities, commodities or other financial instruments).

© Copyright 2016, HSBC Bank plc, ALL RIGHTS RESERVED. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, on any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of HSBC Bank plc. MCI (P) 094/06/2016, MCI (P) 085/06/2016 and MICA (P) 021/01/2016

[522488]

HSBC FX Strategy Team



David Bloom
Global Head of FX Research
HSBC Bank plc
david.bloom@hsbcib.com
+44 20 7991 5969



Alastair Pinder
Asia FX Strategist
The Hongkong and Shanghai Banking
Corporation Limited
alastair.pinder@hsbc.com.hk
+852 2822 1672



Daragh Maher
Head of US FX Strategy
HSBC Securities (USA) Inc.
daragh.maher@us.hsbc.com
+1 212 525 4114



Murat Toprak
Head of CEEMEA FX Strategy
HSBC Bank plc
murat.toprak@hsbcib.com
+44 20 7991 5415



Paul Mackel
Head of Global Emerging Markets FX Research
The Hongkong and Shanghai Banking
Corporation Limited
paulmackel@hsbc.com.hk
+852 2996 6565



Dominic Bunning
CEEMEA FX Strategist
HSBC Bank plc
dominic.bunning@hsbcib.com
+44 20 7992 2113



Ju Wang
Senior Asia FX Strategist
The Hongkong and Shanghai Banking
Corporation Limited
juwang@hsbc.com.hk
+852 2822 4340



Mark McDonald
Head of Quantitative FX Strategy
HSBC Bank plc
mark.mcdonald@hsbcib.com
+44 20 7991 5966



Joey Chew
Asia FX Strategist
The Hongkong and Shanghai Banking
Corporation Limited
joey.s.chew@hsbc.com.hk
+852 2996 6568



Clyde Wardle
Senior Emerging Markets FX Strategist
HSBC Securities (USA) Inc.
clyde.wardle@us.hsbc.com
+1 212 525 3345