Global Fixed Income Strategy

Special

HSBC Global Research

Japan's trillion dollar bond rotation

Where are the bond flows going?

- **We think Japanese buying of overseas bonds could be close to a trillion dollars this year**
- **This private sector outflow is being driven by anticipation of the Bank of Japan's huge monetary stimulus**
- **German Bunds and French OATs are the biggest winners so far, but emerging markets are also benefiting**

Tracking bond flows after the BoJ shift

The aggressive monetary easing that Japan is planning to boost its economy and kill deflation is already having a big impact in international bond markets. Money is flowing out of Japan in anticipation of further yen weakness and because of the incredibly low JGB yields. The biggest beneficiaries are core European bond markets as Japanese investors seek additional yield and the prospect of currency gains. Over the past six months, 20% of the gross issuance of core Eurozone debt has effectively been bought by Japanese investors.

With more stimulus likely, we think this trend will continue, driving down yields in core Eurozone markets, particularly Germany and France. We think the yield on 10-year German Bunds could fall close to 1.0% later this year, reflecting the extensive new demand for a relatively scarce product. This goes against the consensus view that Bund yields will rise.

USD1 trillion outflow

In total, we estimate USD700bn-USD1trn could flow out of Japan over the next year, reflecting both higher historical levels of Japanese investor ownership and an extrapolation of recent evidence of flows from the mutual fund sector. The beneficiaries include other core markets, supranationals and agencies. We think Indonesia, Mexico, Brazil, Poland, Turkey and South Africa will be among the emerging markets affected.

BoJ QE will contain JGB yields

These private sector purchases of foreign bonds will not lead to higher JGB yields if the BoJ launches earlier quantitative easing, including buying longer maturities, under Haruhiko Kuroda, the new Bank governor.

19 March 2013

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Investment implications

- Short-dated G4 yields to be forced lower for longer by expanding central bank balance sheets which, when combined, already exceed USD10trn
- Significant flows from Japan's private sector investors towards Europe have been detected
- Eurozone bonds are the key beneficiaries but there are investment implications for corporate and EM bonds too

Core Europe and select EM

USD700-1,000bn outflows

The recent monetary policy revolution in Japan has led to a change in the investment pattern of domestic asset management firms. Historically, local asset managers have largely invested in domestic bonds but recently there has been a return to international bond markets.

Assuming an across the board 5-7% increase in foreign bond investment as a proportion of total financial assets, there could be at least USD700bn-USD1trn net inflows into the international bond market from private and state-owned entities in Japan (Table 1, page 8) over the next 12 months.

This estimate is conservative in our opinion and could be far greater if the evidence from individual fund flows by large mutual funds (page 10) proves correct. Please note the BoJ itself has not announced any plans to buy foreign bonds and we think this is unlikely to happen in the near term.

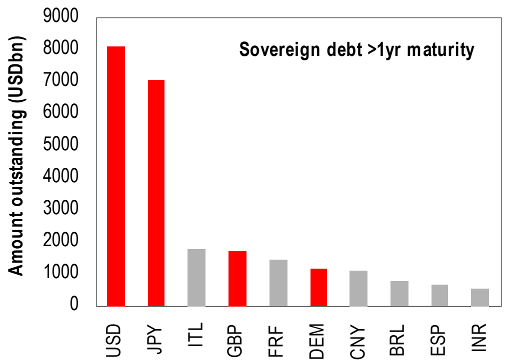
The private sector outflows from Japan are a new dynamic for the Bund market that has traditionally benefited from safe-haven status and flows from periphery countries in the Eurozone. Ten-year Bund yields could fall towards 1.0% in the coming months, defying consensus expectations for them to rise. Previous HSBC forecasts for yields to reach a low of 1.3% in Q3 2013 were not made with the expectation of a significantly weaker yen, with its potentially negative impact on German growth, and the flows from Japanese investors.

Bunds attractive to Japan's investors

From a Japanese investor's perspective, the core Eurozone markets are attractive given the positive yield differential versus JGBs and the prospect of currency gains. The sense that the worst of the eurozone debt crisis may be over is also helping sentiment and potentially reducing exposure to risk for investors buying core markets.

Of the G4 central banks, the ECB will be regarded as the least inclined towards full-blown quantitative easing, making investments in the Eurozone appealing to yen-based investors. The weaker yen could be negative for the growth of competing economies like Germany (see *Japan's policy revolution*, 26 February 2013) and with German Bunds the smallest of the G4 markets (see Figure 1), there is a significant risk of this market being squeezed. Already a number of German bonds trade as 'special' in the repo markets, suggesting a relative scarcity of supply.

Figure 1. Top sovereign markets by market cap.

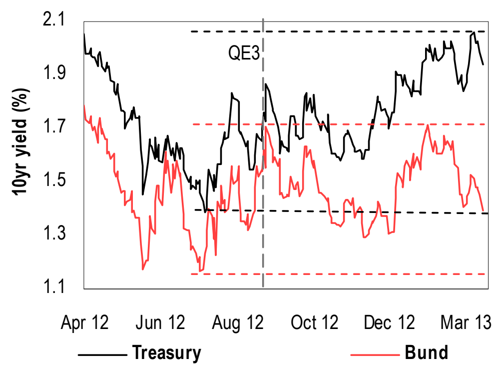


Source: HSBC, Bloomberg Note: For details of BRL please see Latam Rates Guide 2013

As a result of its safe haven status, the short-end of the Bund market has often attracted international flows in times of uncertainty. With yields already very low, the intermediate maturities (7-10 year) are attractive to Japanese investors because they offer an attractive macro backdrop, liquidity and twice as much yield as JGBs.

The fact that the ECB is not easing policy doesn't matter. Under its new governor, the BoJ could soon be joining the Fed with a large QE programme and with short rates of the G4 close to the floor, there will be downward pressure on the intermediate yields, led by Germany. This could benefit the US and UK too, although these markets are likely to follow the Bund. It is noticeable that in recent months Bunds have not been following the Treasury market (see Figure 2).

Figure 2. Bunds and Treasuries – staying within range



Source: HSBC, Bloomberg

And French OATs too

There is also likely to be continued demand for the other liquid core markets, led by France and the Netherlands. These markets offer a pick-up versus Germany and, with short Bunds yielding close to zero, investors will seek good substitutes. Whenever short German yields have approached zero there has been a noticeable increase in flow towards the other core markets that offer a little more yield.

We expect agency and supranational bonds, which offer an additional pick-up versus government bonds, to be in demand also (see Figure 3).

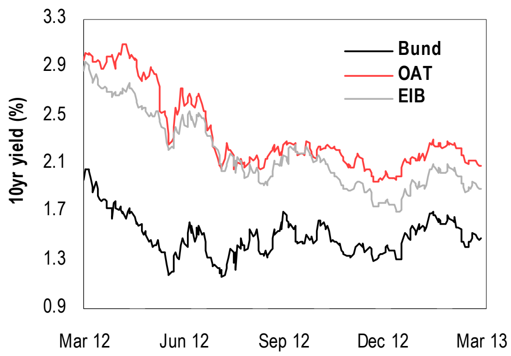
UK gilts could be an alternative

UK gilts have not been bought by Japanese investors, according to the latest flow data, and this is consistent with the historical relationship between the fortunes of the UK currency and the level of overseas holdings. So, if sterling, which has been falling this year, were to stabilise, flows could return to gilts. From the perspective of a yen-based investor, sterling has actually performed quite well – ie the pound has not weakened as much since September– so, with gilts offering 50bp more than Bunds, they might soon offer some diversification.

Pick of the emerging markets

Emerging market debt in general is attractive for yen-based investors, particularly Indonesia. Even if the rupiah currency outlook is less certain, carry considerations alone are sizeable and significant inflows by Japanese investors have been recorded very recently (page 10). Prospective investment-grade status for the Philippines is also likely to be an additional trigger for Japanese investor demand. Currency gains and generous yields have made Turkey attractive, combined with Fitch Ratings raising the country's foreign currency rating to investment-grade status (November 2012). Diversification appears to be well underway, with heavy demand for Poland and Mexico already apparent from Japanese investors.

Figure 3. OATs and Agencies are good Bund substitutes



Source: HSBC, Bloomberg

Europe attracting flows

- Europe – led by France and Germany – has attracted the biggest flows, according to Japan's Ministry of Finance
- The Netherlands, the European supranational and Agency bonds also appear to be benefiting
- The USD36bn flow to France and Germany over the past six months represented c20% of their gross refinancing needs

Germany's short yields fall

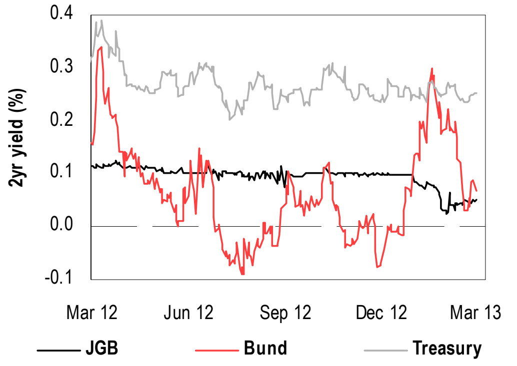
Japanese flows may already have had a big impact on the front-end of Germany, contributing to the reversal of the move that saw yields rising earlier this year.

The rates on two-year G3 government bonds – those of the US, Japan and Germany – have been in a 30bp (0.3%) range over the past year, tight by fixed income standards, but insignificant in the context of the foreign exchange and equity markets.

EUR/JPY at 125 means the yen is 24% below where it was at the beginning of August and the Nikkei is 39% above where it was at the beginning of November, the rally starting three months later.

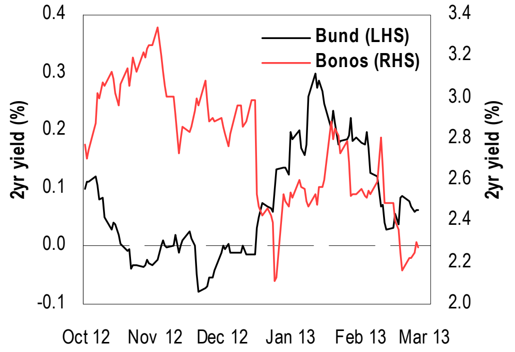
Within the 30bp bond range there has been some significant movement in JGB and Schatz (short German Bunds) yields, while the US two-year Treasury Note has been stable around the top-end of the Fed funds target of 0-0.25% (see Figure 4). Two-year JGB yields have been falling since the start of the year, reflecting anticipation of more BoJ monetary easing. These yields now appear to represent the floor for G3 rates.

Figure 4. G3 two-year yields contained & Japan lowers floor



Source: HSBC, Bloomberg

Figure 5. Bund vs periphery relationship has changed



Source: HSBC, Bloomberg

Germany's rally no longer driven by a Eurozone crisis

The Schatz yield has been the most volatile, moving from negative levels at the start of the year towards that of the US Treasury Note by early February. Germany has been the safe-haven of choice through the Eurozone crisis so the yields on short bonds have tended to move inversely with the fortunes of the Eurozone periphery; eg Spanish yields down, German yields up (see Figure 5). But this relationship has broken down recently and there have been times when the yields have moved in the same direction. Part of the reason is the impact of Japanese policy which has prompted flows into safe assets, with Germany appearing to be the main beneficiary, according to the data (MoF).

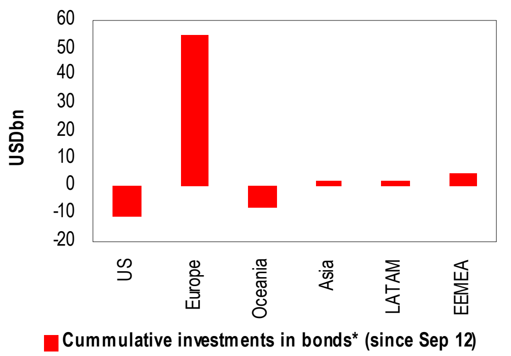
Normal currency basis means hedging is cheap

The normalisation of the currency basis swaps is a measure of the success of G4 central bank policy co-ordination (see Figure 20, page 16). The positive yield spread offered by Bunds, especially higher up the curve in the 5-10 year segment, together with minimal hedging costs, makes Eurozone bonds attractive. Because central banks provided liquidity to deal with the excess demand for dollars, a result of distressed market conditions in 2008/09 and 2011/12, the hedging costs between regions are no longer onerous (see page 16).

Evidence of European bond buying from September onwards

Japanese investors' portfolio reallocation started in anticipation of the regime change and the new policies that might come with it. Since last September – prior to the events which triggered the dissolution of the Diet on 16 November and then elections on 16 December – there has been an increase in overseas bond investments. Japanese investors have, since September 2012, rapidly invested in certain regions, while reducing exposure elsewhere.

Figure 6. Europe benefits more than any other major region

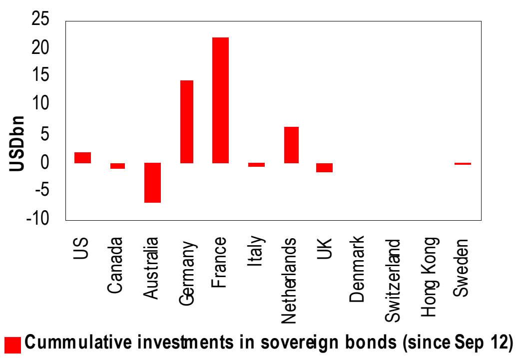


Source: HSBC, Japan's Ministry of Finance *includes bonds and notes issued in the region

Outward investment data for government and corporate bonds confirm that Europe has been the key net beneficiary of Japanese demand since last September (Figure 6).

For sovereigns, France has been the biggest recipient of European inflows with USD22bn since September last year (Figure 7). Germany comes in second at USD14bn. This is a significant change in trend and, based on gross issuance for these two sovereigns, represents about 20%.

Figure 7. France, Germany & Netherlands attract flows



Source: HSBC, Japan's Ministry of Finance

For the past two years (through to January 2013), Germany has actually seen net Japanese outflows of USD17bn, whereas France registered Japanese inflows of USD41bn.

Future flow projections

- There could be a USD700-1,000bn flow into non-yen bonds by Japanese investors over the next year, in our opinion
- This is based on the flows already seen from mutual funds extending to other parts of the private sector and is well within historical precedents
- These projections do not include direct purchases by the BoJ

USD700-1,000bn outflow

The recent policy shift in Japan has led to a change in the investment pattern of domestic asset management firms. Historically, local asset managers have largely invested in domestic bonds but recently there has been a return to international bond markets. Assuming an across the board 5-7% increase in foreign bond investment as a proportion of total financial assets, there could be at least USD700bn-USD1trn net inflows into the international bond market from the private and public sector in Japan (Table 1). This estimate is conservative in our opinion and could be far greater if evidence from some individual fund flows (Page 10) is extrapolated.

Table 1. Flows into bonds could easily reach USD700-1,000bn

	Total assets under management (USDbn)	5-7% increase in allocation to foreign bonds (USDbn)
Private sector		
Pension funds	1000	50-70
Mutual funds	1097	55-77
Banks	3500	175-245
Insurance funds	2830	142-198
Public sector		
Public pension funds	2702	136-190
Japan Post insurance	1100	55-77
Japan Post Banks	1900	95-133
Potential inflows into foreign bonds (USDbn)		700-1000bn

Source: Tower Watson, HSBC

Mutual fund bond flows

In mid-January 2013 Japan's largest mutual fund resumed the purchase of European Financial Stability Facility (EFSF) bonds for the first time in two years. Subsequently, the weighting of EUR-denominated bonds in the funds managed by this fund increased by over 3ppt in two months, from 14.8% in mid-January to 17.9% on 7 March (Reuters, 11 March 2013). If one fund can increase its weighting by 3% in two months, the expectation of a 5% shift over 12 months for total bond holding could prove to be conservative.

Mutual funds – or 'Toushin' – in Japan are the eighth largest in the world, with total assets of around USD1.1trn. Of this, around USD140bn (13% of the total) are held in the form of international bonds, low compared with 2009 (around 20%). So, expectations of a 5% increase would not be unreasonable from current levels.

The share of EUR-denominated bonds in mutual fund portfolios fell from 6% in February 2009 to 1% in August 2012 (Figure 8). However, recent data indicates that these funds have started to return to Europe with net investment increasing by over USD2.8bn between August 2012 and

February 2013. With most of the major investor groups in Japan increasing exposure to international bond markets, there is potential for the ownership of EUR-denominated bonds in mutual funds' portfolio to return to 2009 levels, in our opinion, representing a 5% increase.

Investment trusts also shifting

Total EUR-denominated bond holdings of Japanese investment trusts have already increased by 25% since August 2012. This indicates a broader trend of shifting flows into Europe from Japan. According to flows data, Japanese investors invested USD6.6bn in EUR-denominated bonds between August 2012 and January 2013, a sharp contrast from the disinvestment of USD760m in 2011.

Note that this excludes any reserve diversification by the Ministry of Finance and BoJ purchases of foreign bonds. As discussed on page 17, it is the catalyst of policy stimulus that it is likely to be more important. Flow of funds by the private sector and state-run funds into foreign bonds are set to dwarf any official purchases.

What if pension funds follow?

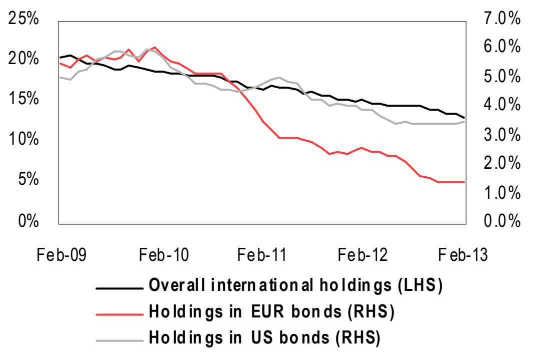
Japan has the second-largest pension assets (both private and public sector, Figure 9) in the world and, at USD3.72trn, the pension industry is larger than the entire German economy. A large chunk of pension fund assets are invested into the bond markets (55%) and the share of international bonds has been rising since 2010. As of December 2012, foreign bonds accounted for 30% of the bond portfolios, compared with 25% in 2010. The shift towards overseas bonds is expected to intensify as government policies have suppressed domestic yields to record lows.

Government pension funds lag private sector in foreign buying

Japan's Government Pension Investment Fund (GPIF), the largest government pension fund in the world, has assets of USD1.13trn, which is almost equal to the size of Korea's economy. The GPIF has, on average, generated 2.6% annual returns on its investments between 2003 and 2011. Japanese PM Shinzo Abe recently pointed out the need to build more sophisticated investment and risk management structures for public funds, so there is clearly a bias to shift more public funds into international markets (WSJ, 11 January 2013).

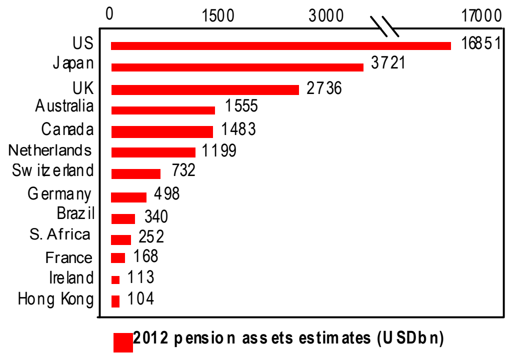
GPIF invests over 62% of its funds in domestic bonds and only 8.8% in international bonds. So increasing the weighting of foreign bonds by another 5% would generate a significant flow (see table 1, page 8). According to the latest investment report released by GPIF, domestic bonds and equities generated total returns of only 1.5% and 1.6%, respectively, compared with 10.3% by international bonds last year.

Figure 8. International holdings of Japanese mutual funds



Source: The Investment Trust Association, Japan

Figure 9. Japan's pension funds are second biggest



Source: Tower Watson

EM markets benefit too

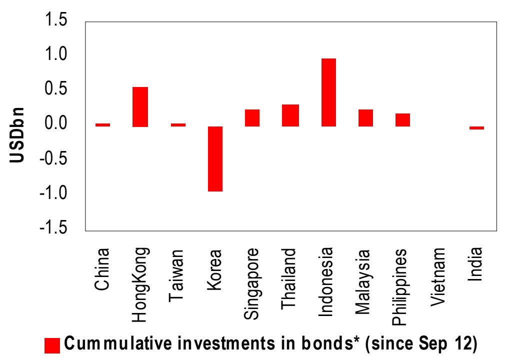
- Acceleration of diversification into EM is already evident
- The size of these markets means that even small flows could have a big impact
- Indonesia, Turkey, Poland and Mexico have been key recipients of inflows

Asia-Pacific

Buying of Indonesia increasing fast

The Indonesian government bond market has registered healthy foreign inflows in recent months. Total foreign purchases reached USD872m in February 2013, the largest since November 2012. This is in part due to strong demand from Japan. Japanese investors' purchases of Indonesian bonds have amounted to JPY81bn (USD850m) since September 2012 (Figure 10). To gauge the degree of this recent appetite, these purchases represent 70% of the total net purchase of Indonesia bonds by Japanese investors over the past two years.

Figure 10. Japanese investment flows into the rest of Asia



Source: HSBC, Japan's Ministry of Finance *includes bonds and notes issued in the region

Greater demand elsewhere in Asia

Japanese net purchases were also observed in Hong Kong, Thailand, Singapore, Malaysia and Philippines but these were more modest. Nevertheless, there is a clear shift with greater demand evident since September 2012. It is not just high yields that Japanese investors are targeting. The country's largest mutual fund, stated that it has added Singapore Sovereign bonds for the first time to its main USD16bn bond fund in order to lower its risk profile. These bonds make up 0.5% of its Global Sovereign Fund as of March 2013 (Reuters, 11 March 2013).

The Philippines could be a key recipient of additional flows from Japanese investors, given the likelihood that it will achieve investment-grade status from at least two of the major rating agencies within the next six months.

Selling of Korea reflects currency reversal

Korea is a notable exception with Japanese investors net selling JPY76.3bn (USD75m) of Korean bonds since September, compared with JPY658bn (USD6.9bn) of net purchases over the past two years. This reflects the significant reversal in direction of the Korean won, which had previously become very cheap versus the yen.

LatAm and EMEA

Mexico and Poland stand out

Growing appetite for emerging market bonds is also evident in other regions. Within LatAm, there has been strong demand for Mexico very recently (Figure 11). Elsewhere, Eastern Europe and South Africa have also been recipients of strong Japanese inflows (Figure 12). Indeed, the country's largest mutual fund has also purchased the sovereign bonds of Mexico and Poland over the past year. These bonds account for 1.6% and 1.9% of its Global Sovereign Fund, respectively, and the portfolio manager has indicated these weightings could be raised further (Reuters, 11 March 2013). Heavy demand from Japanese investors has helped drive foreign holdings of Polish sovereign bonds to a record high of PLN190bn (USD62bn) in December.

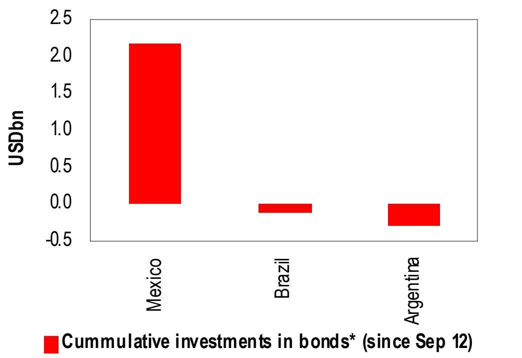
This growing appetite for Mexican, South African and Eastern European bonds has been evident in the investment holdings of retail investors. Data from the Investment Trust Association of Japan reveals that total investments by Japan's investment trusts in Poland have more than doubled from USD808m in September 2011 to USD1.73bn in February 2013.

Mexican bonds have been the top recipient of flows from Japanese retail investors in emerging markets. Total bond holdings in Mexico increased from USD1bn in May 2012 to USD2.3bn in February 2013. Similarly, total holdings in South African bonds have been rising continuously over the past nine months. Investment trusts hold around USD1.1bn of bonds in South Africa as of February 2013. This helps to partly explain why FX weakness has not translated into bond capitulation (*South Africa: flows and woes: bond capitulation? Not yet*, 7 March).

Uridashi bonds – Turkey for retail

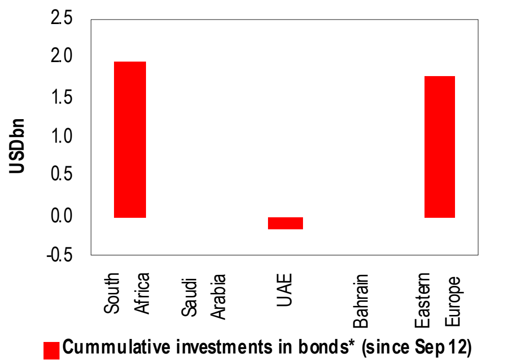
A significant investment channel for Japanese household investors (sometimes referred to as Mrs Watanabe), which is also incorporated in these investment trust flows, is the uridashi market. A uridashi bond is denominated in a foreign currency and sold in the Japanese market by a non-Japanese issuer and tends to be short term, ie up to 3 years. Brazil has been a key target and more recently there has been greater interest in Turkey. Turkish lira bonds sold to retail investors in Japan outstripped those of all other emerging markets in 2012. Of the USD19.5bn uridashi bonds (Bloomberg data) sold last year, USD3.7bn were issued in Turkish lira. This is second only to the USD6.7bn issuance of Australian-dollar uridashi bonds.

Figure 11. Japanese investment flows into LATAM



Source: HSBC, Japan's Ministry of Finance *includes bonds and notes issued in the region

Figure 12. Japanese investment flows into EMEA



Source: HSBC, Japan's Ministry of Finance *includes bonds and notes issued in the region

Higher yields in Turkey and currency gains (eg 24% lira appreciation against the yen over the past six months) have been a draw. In addition, Turkey also received investment-grade recognition from Fitch Ratings on 5 November 2012, the first in nearly two decades. During the first two months of 2013, Japan's investment trusts have increased holdings of Turkish bonds by USD300m to USD1.35bn. This is more than the total purchases of around USD200m in 2012.

Retail like Brazil too

Uridashi bonds denominated in Brazilian real remain significant at USD3.05bn, but the figure has fallen 27% versus a year earlier. Among the emerging markets, Japan's investment trusts have the largest bond holdings in Brazil of around USD17bn. These holdings fell from a peak of USD26.7bn in March 2011 to USD16.7bn in November 2012. Nevertheless, recent investment trust data indicates a pick-up in purchases of real-denominated bonds. In fact, between November 2012 and February 2013, Brazil bonds have received the largest inflows of USD207m among EM bonds.

And some recent losers

- Australian bonds remain at risk of further liquidation by Japanese investors
- There has been profit taking after a significant currency gain
- Inflows may materialise again if AUD/JPY weakens

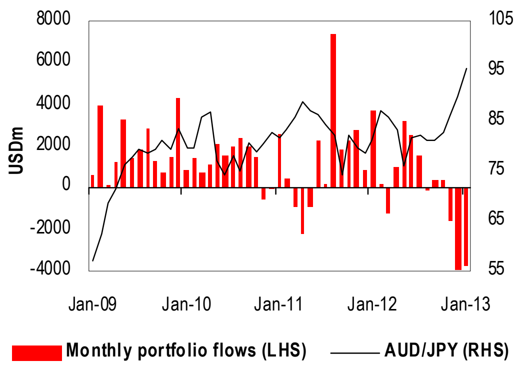
Selling of Australian bonds

Japanese investors have reduced their holdings in Australia. Between September 2012 and January this year, their Australia bond holdings fell by USD8.5bn, the most since the MoF started data collection in 2005. A sizeable proportion of this can be traced back to the USD7bn net sale of Australia government bonds.

The sharp appreciation of the Australian dollar versus the yen, in particular over the past three months, has likely been a trigger for profit taking (Figure 13). Indeed, over the past three years Australian government bonds returned 49% in yen terms, the second highest amongst all other major bond markets (New Zealand bonds rank first at 56%). Japanese investors (especially retail) have been key participants in the Australia bond market in recent years (Figure 14), holding AUD178bn of bonds in 2011 or 21% of the AUD832bn outstanding debt issued by the government and corporations in Australia. Given the scale of such established holdings and impressive returns, pressure to divest may further intensify. Yet a weakening of AUD/JPY towards 80-85 levels could create buying opportunities for Japanese investors.

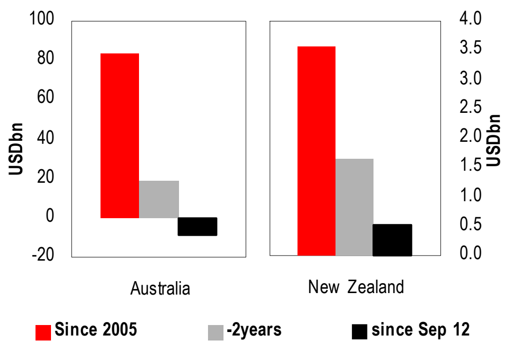
Rather than repatriating the funds obtained from the heavy selling of Australian bonds, Japanese investors are likely to reinvest into other high yielding currencies/bond markets (invariably EM as indicated on page 10) and to certain degree, equities.

Figure 13. Higher AUD/JPY encourages Japanese investors to sell AUD bonds



Source: HSBC, Bloomberg, Ministry of Finance

Figure 14. Large established holdings of Australian bonds by Japanese investors



Source: HSBC, Ministry of Finance

Japan as part of the G4

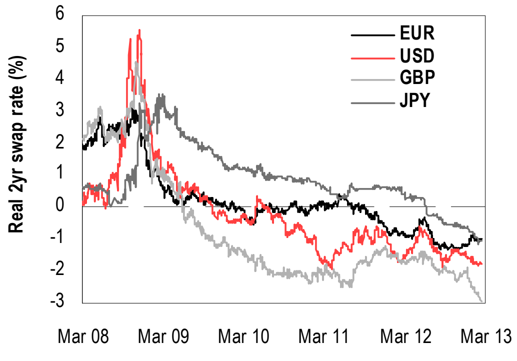
- With the BoJ now expected to increase its balance sheet again, all short-dated G4 real yields are negative
- There has been a normalisation of currency basis swap spreads, so hedging from a yen base is inexpensive
- Convergence of short yields means looser policy from one G4 country can be transmitted to another

G4 intention or coincidence

Real yields negative

With official interest rates zero bound, an objective of monetary policy has been to deliver stimulus through negative real rates. In this regard the Bank of Japan has been lagging the rest of the G4 – the US Federal Reserve, European Central Bank and Bank of England. It was about a year ago that Japan's two-year real swap rate moved below zero (see Figure 15), while the rest of G4 had already achieved this three years ago. Comparing the delivery of monetary stimulus, Japan has some catching up to do.

Figure 15. Negative real yields – Japan joining in



Source: HSBC, Bloomberg Note: Real swap rate = Nominal swap – Inflation swap

The UK has already achieved negative real rates of close to 3%, based on the swap market (see Figure 15) and consistently achieved the lowest level of the G4 over the last five years; the US is not far behind.

G4 balance sheet expansion

To achieve negative real interest rates, inflation must increase, yields on assets must fall or there needs to be a combination of both. Central banks have gone for direct asset purchases, and other forms of balance sheet expansion, to achieve negative real yields. By building bigger balance sheets, with bonds as the assets and reserves typically the liabilities, central banks are pursuing easier monetary policy, the modern day equivalent of cutting interest rates.

In fairness this is not the only way central banks expand balance sheets because the ECB has concentrated on repo operations, accepting bonds as collateral. The nearest the ECB has so far come to the direct quantitative easing of the other G4 central banks is with the Securities Market Programme. Outright Monetary Transactions would be another form of this type of intervention.

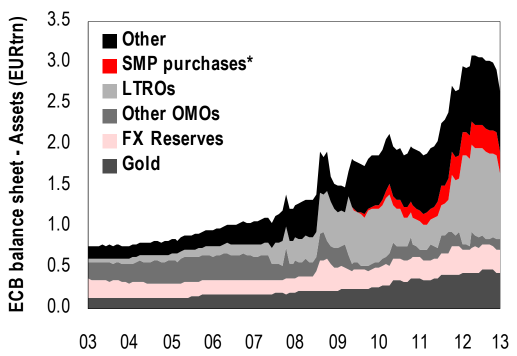
As a percentage of GDP the G4 central banks have balance sheets that represent 20-30% of GDP (see Figure 16) with the BoJ the first of the G4 to move towards 30% at the start of the last decade.

Japan is just catching up

G4 central bank balance sheets currently total circa USD9trn and the re-entry of the Bank of Japan to purchasing assets is likely to take this figure close to USD11trn before long. Note that this year alone the US Fed will add USD1trn to its balance sheet, through purchases of USD85bn government and mortgage bonds per month. Strikingly, when viewed over the last five years, the BoJ's balance sheet has been relatively static (see Figure 18). Choosing 2008 as a starting point means this is a form of selection bias and framing but it serves to illustrate how, since the start of the developed world's financial crisis, Japan has been a relative laggard when it comes to monetary stimulus.

The ECB has recently overseen a modest balance sheet contraction as LTRO funds have been repaid, resulting in its balance sheet moving back below EUR3.0trn (see Figure 17). But this should be regarded as temporary, as the Eurozone economy is a long way from being able to tolerate higher interest rates, which is what will happen if liquidity becomes scarce. With many countries enduring year-after-year of negative growth, a continuation of austerity policies, and the growing threat of deflation, we think the ECB will eventually have to deliver easier monetary policy.

Figure 17. LTRO prepayments reduce balance sheet

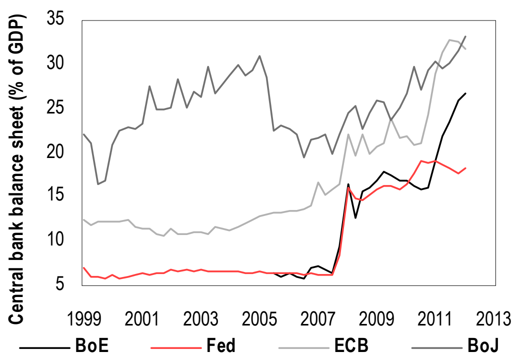


Source: HSBC, Bloomberg *SMP purchases also includes CBPP1 and CBPP2
OMOs: Open market operations

G4 yield convergence

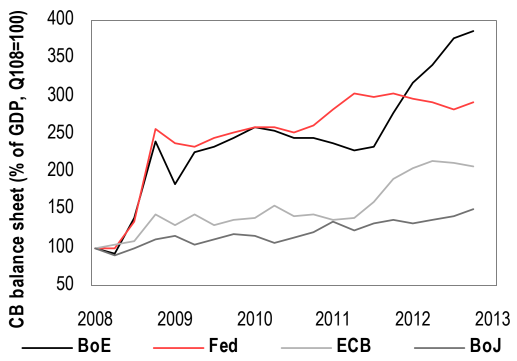
Whether this was an intention of G4 policy or not, the result has been the same. G4 risk-free rates have been driven lower and the spreads have converged on zero (see Figure 19). US swap yields have converged on their European and Japanese equivalents over the last five years so that there is now only a few basis points of spread left. In the case of the US vs Europe, it was more a case of European rates falling towards US levels, a function of lower core rates and the more recent convergence of the short periphery yields as a result of the ECB's OMT policy announced last summer. For the US vs Japan, it has been the US rates that converged on

Figure 16. Central bank balance sheets, from the beginning



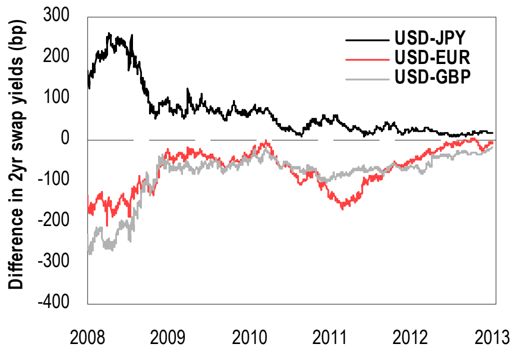
Source: HSBC, Bloomberg, Thomson Reuters DataStream

Figure 18. Since 2008: scope for BoJ balance sheet catch-up



Source: HSBC, Bloomberg, Thomson Reuters DataStream

Figure 19. G4 yield convergence, side-effect or objective?



Source: HSBC, Bloomberg

the Japanese equivalents, which were already zero bound as a result of previous quantitative easing and persistent deflation.

Cross-currency basis normalisation

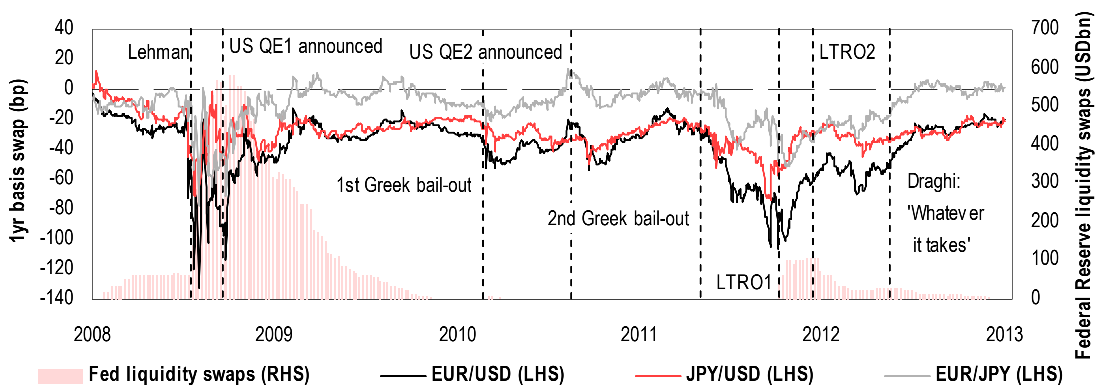
A measure of success from G4 central bank co-ordination has been the removal of distortion in the cross-currency basis spreads (see Figure 20). The Fed introduced liquidity swaps in the aftermath of the Lehman collapse in 2008 and continued to offer USD in swaps with other central banks through the start of 2009 as the Fed's quantitative easing started. The negative basis swap was the result of a huge demand for funding in dollars, especially from banks in Europe that had become exposed to the US sub-prime market. By satisfying this demand for dollars, the basis swap eventually normalised but, as can be seen from the chart, the safe-haven status of the dollar was to return with the Eurozone sovereign and financial sector crisis, culminating in the bailouts for Greece in 2011/12.

The basis swap allows an investor or issuer to hedge cash flows, although not principal, through the life of the swap. European issuers sought to take advantage of the wide spread by issuing in dollars and swapping back into local currency, thereby achieving a lower all-in cost of funds (such as an AAA rated, outlook negative, European issuer that gained around 35bp while issuing a 5-year dollar bond in July 2012).

Opportunities for investors to hedge

The normalisation of the swap spreads means that the opportunities for issuers across currencies are no longer so attractive but logically it has implications for investors; if the advantage has been removed from the issuers, it must have gone somewhere else. From Figure 20 it can be seen that the EUR/JPY currency basis swap has returned to zero, which means it should be possible for investors in Japan to buy European bonds, which yield more than the local equivalents, and hedge the cash flows at minimal cost. Indeed, the motivation for doing this is probably more than the relative value, rather a view on where yields could be going in the future.

Figure 20. Currency basis normalisation, EUR/JPY at zero



Source: HSBC, Bloomberg, Federal Reserve

Note: In basis swaps the denominator currency is held flat at zero. When the spread is negative the said currency is viewed as 'riskier'

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BoJ's policy is a catalyst

- The need for diversification and higher returns has intensified as a result of planned BoJ policies and low JGB yields
- The Government pension fund aims to boost returns by diversifying and already invests in emerging markets – we expect others to follow suit
- Japanese bank holdings of JGBs are substantial and vulnerable to any policy success in engineering inflation

It is not all about the BoJ

Much of the focus in Japan is on the prospect of BoJ policy measures to defibrillate the economy and cure the ills of deflation. Measures that could be introduced imminently by the new BoJ Governor Haruhiko Kuroda and his deputies include bringing forward open-ended QE and extending the maturities of JGB purchases made under the asset purchase programme. By implication, this points at further yen weakness. In a similar vein to the Fed's QE, this will provide additional global liquidity even if the sustained impact on the economy is more debatable. Yet, what could be more significant for international capital markets is the repositioning of investment portfolios by Japan's private sector and government-owned entities.

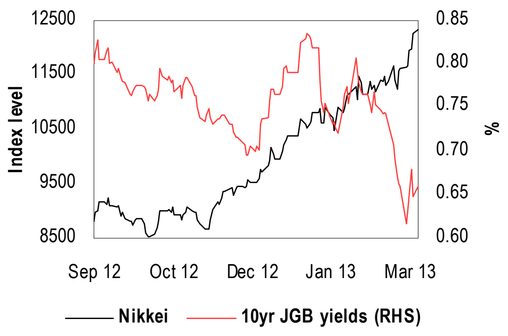
BoJ foreign bond purchases?

BoJ purchases of foreign bonds seem to be ruled out for now and the priority is likely to be an extension of long-term JGB purchases. Finance Minister Taro Aso indicated in January that the Ministry of Finance planned to use its foreign-exchange reserves to buy bonds issued by European Stability Mechanism and euro-area sovereigns (Bloomberg, 8 January 2013). No schedule or amounts were disclosed but purchases of ESM and euro-area sovereigns by the MoF via reserves are likely to be modest as this is financed by existing euro positions. A majority of Japan's foreign USD1.27trn reserves, the world's second-largest after China, are in dollars. Japan already bought EUR7bn of bonds issued by the Eurozone's temporary rescue fund – EFSF – last year and held around 6.7% of outstanding EFSF bonds as of the end of 2012. Potential shifts in portfolio flows by key domestic investors are more sizeable (as indicated above) and pressing.

Japanese diversification on the agenda

While the Nikkei 225 has soared over the past 6 months, JGB yields have actually edged lower, primarily as a result of the market anticipating that the BoJ would extend the maturity of its government bond purchases (Page 18, Figure 21) sooner rather than later, with the incoming governor. This has already driven the 10-year JGB yield back to around 60bp, near record lows. The need for higher returns and diversification has therefore intensified as a by-product of anticipated BoJ policies.

Figure 21. Lower JGB yields despite a surge in the Nikkei



Source: HSBC, Bloomberg

The Government Pension Investment Fund (GPIF), which has substantial holdings of domestic debt (page 19), has already started to sell Japanese bonds, as pension payouts are becoming larger than revenues. To boost returns, the GPIF started to invest in emerging markets last year (Pension & Investments). Lower JGB yields as a result of more aggressive BoJ buying will only exacerbate this trend.

The prospect that the BoJ will continue easing monetary policy to meet its 2% inflation target is set to keep yields low and pinned down over the next couple of years. Domestic investors are therefore likely to continue to struggle to achieve favourable returns in JGBs and will be encouraged to look at alternative assets, including foreign bonds.

Equities may not be the answer

Domestic equities might be an obvious target for the reallocation of assets, especially if the impressive rally in the Nikkei continues. But Japanese investors will be very reluctant to immediately pile into the local stock market. The asset bubble that burst more than 20 years ago left its mark. More than half of households' USD15trn financial assets were kept in cash as of September 2012 and only 6% in equities, according to BoJ data. Other significant domestic holders of JGBs such as banks and pension funds will also be constrained to match liabilities and meet regulation requirements, implying bond investments, including overseas bonds, are more likely than equity investments.

JGB concentration risk

- Low JGB yields could catalyse the liquidation of domestic bond holdings by public and private sector funds
- But BoJ's QE could help to contain yields of JGBs over the next few years
- Just bringing forward the plans of the ex-Governor of the BoJ would result in more than USD1,000bn purchases over a year

Selling of JGBs contained

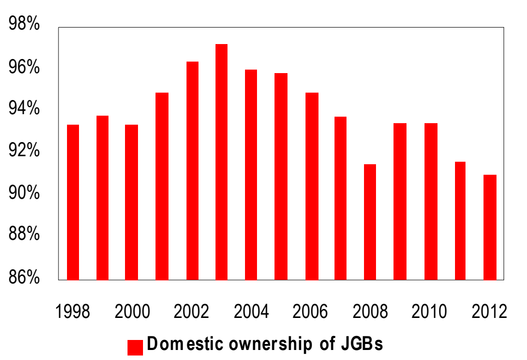
Investment funds likely to shift to international bonds

There is significant concentration risk in the JGB market, with Japanese domestic investors holding 91% of outstanding JGBs (Figure 22). Japan's Government Pension Investment Fund (GPIF), the world's largest pension fund, holds assets of JPY108.2trn (USD1.13trn), of which 67% is held in domestic bonds. The scale of JGB holdings (USD720bn) is significant and accounts for around 10% of the outstanding market. The remaining exposure is in Japanese equities (11%), foreign equities (9%), foreign bonds (8%) and short-term assets (5%) (Figure 23). According to GPIF Chairman Takahiro, the fund started to diversify into emerging markets in 2012.

Pension review started

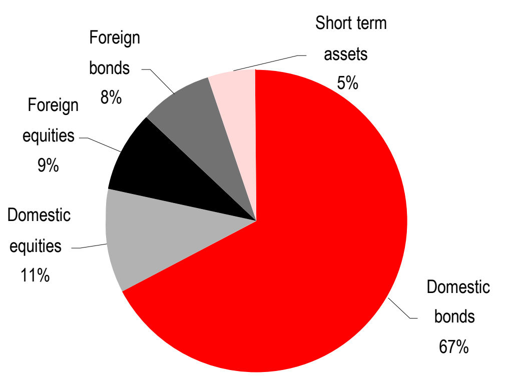
Crucially, the GPIF is conducting a review to accelerate divestments in domestic bonds in favour of EM (Reuters, 4 February 2013). Other state-run institutions in Japan also have substantial holdings in JGBs and may soon follow suit in diversification. The Japan Post Group

Figure 22. Domestic ownership of JGBs still high at 91%



Source: HSBC, Japan's Ministry of Finance

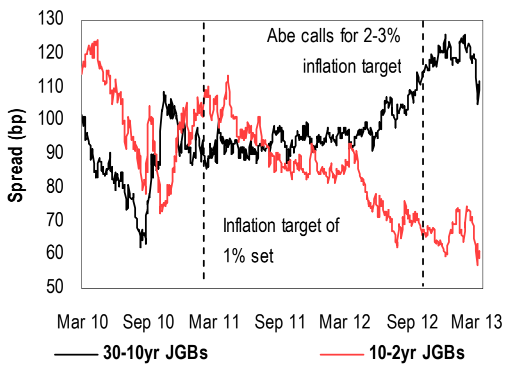
Figure 23. Holdings of Japanese Govt Pension Investment fund



Source: Ministry of Finance

consists of Japan Post Insurance, which owns around USD800bn of JGBs, and Japan Post Bank, which holds around USD1.8trn of JGBs. Potential listings of such government entities (Seiho, 2011-2012) is also likely to accelerate the shift in asset allocation away from domestic bonds. Publicly offered mutual funds have already increased their purchases of international bonds, adding over USD10bn to their USD780bn portfolio in the past six months.

Figure 24. Local impact of regime change in Japan



Source: HSBC, Bloomberg

Other large funds in Japan, in particular pension funds, are also likely to re-evaluate their approach to portfolio management. Unfavourable demographics and underfunded pensions have been well known problems facing the sector. The recent emphasis on re-inflationary policy measures exacerbates the need to diversify and obtain higher returns than that currently achieved from domestic bonds. The super-long sector (20yr+) of the JGB curve, a natural target for pension funds, is already begin to dislocate (Figure 24) on concerns of re-inflation, debt supply and the absence of BoJ buying for this area of the curve. This has significant ramifications as Japan has the second-largest pension assets (USD3,721bn) globally. The industry's asset allocation as of 2012 was 55% in bonds, 35% in equities, 7% in other asset classes and 3% in cash. Though pension funds have reduced their allocation to domestic bonds over the past two years from 75% in 2010 to 70% currently, this is still a large proportion (pension funds hold around USD2.6trn or 33% of total bond markets).

Bank holdings of JGBs vulnerable

There is also an asymmetric risk to JGB yields in the very long term (ie beyond the next couple of years), making diversification compelling on a risk-adjusted basis. If official policies in Japan begin to bite and inflation rises on a more sustainable basis, this would place pressure on interest rates and materially reduce the value of JGBs held by banks. Yet, given the scale of such holdings, reducing exposure to JGBs would be difficult. Japanese financial institutions hold a substantial amount of JGBs. According to the BIS, Japanese banks hold 90% of their tier 1 capital in JGBs. Japan's largest bank, Bank of Tokyo-Mitsubishi, has already acknowledged that reducing its USD485bn holdings of JGBs would be disruptive for the markets (Financial Times, 2 December 2012).

Debt dynamics in Japan have so far proven not to be a detriment to the JGB market. The debt-to-GDP ratio of around 220% and the large budget deficits have been financed by domestic investors. Unlike other 'true' sovereigns, a weaker currency does little to erode the value of debt as foreign ownership at around 9% is very modest. As indicated above, a shift in the value of debt may come more internally in the form of inflation. At that point, domestic investors would be unlikely to stand idle with their JGB holdings. Such a scenario is likely to take a considerable time, especially considering that the last time inflation reached 2% and above was in 1991 but it is a risk that needs to be acknowledged.

How much QE could BoJ do?

If the outgoing BoJ Governor's (Shirakawa) open-ended QE programme – due to start in 2014 – was brought forward to this year and the maturities of JGB purchases lengthened, the scale of government bond buying could be around USD1.1trn for a 12-month period, even outpacing the sizeable USD1trn open-ended QE3 by the Fed this year. More aggressive implementation of QE under the new governor, Kuroda, is widely expected. However, at the time of writing, the BoJ is scheduled to start in January 2014 a JPY13trn per month asset purchase programme, including JPY2trn in government bonds and JPY10trn in treasury bills. The overall net increase in the size of the asset purchase programme would amount to only JPY10trn in 2014 given that a large proportion of the monthly purchases will be offset by redemptions of previous short-dated purchases. The net growth in the size of the asset purchase programmes could rise substantially if the BoJ extends the maturities of JGB purchases.

If the proportion of long-dated JGB purchases increased JPY10trn (USD105bn) per month instead of treasury bills then the net increase (after redemptions) over time could be equivalent to approximately USD1.1trn for a year.

Notes

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Disclosure appendix

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