

JRG SECURITIES LIMITED



FX Review and Outlook

2010-2011

JRG FX Research Desk

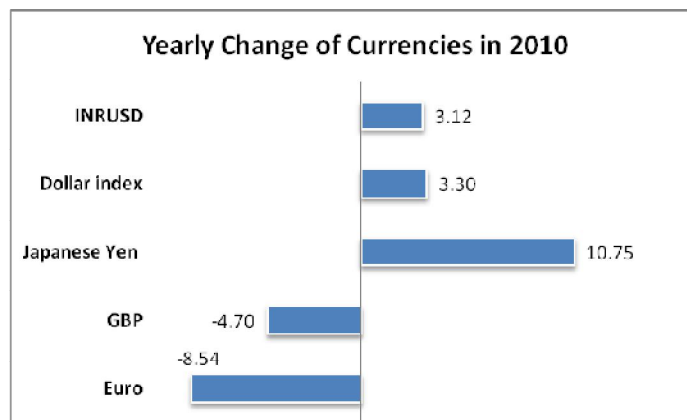
1/5/2011



The year 2010 was marked with high volatility in the FX market globally. The European peripheral debt problems, US quantitative easing, hot money flow in the EM (Emerging Market), UK and European austerity measures, sovereign rating cuts and Chinese exchange rate flexibility are few major themes in the year.

In case of domestic currency, rupee appreciated against the US dollar at limited pace in 2010 with increasing capital account inflow despite a weak current account. The gain in the Indian rupee was affected to some extent by "contagion risk" in the Euro zone. The Indian rupee appreciated to 44.15 against the US dollar during April supported by increasing interest of foreign funds on emerging economies. However, the rupee appreciation paused on fresh "contagion risk" (Public finance crisis and Greece Bailout) in the Euro zone from May onwards and the pair sustained in range of 45.55 to 47.75 (May- August).

The rupee further gained momentum during September on continuous monetary tightening by the central bank and USDINR started falling from 47 to 43.96 in October. The fresh events of Europe in November (Ireland debt crisis) pulled the rupee down again and it has been trading in a band of 46.00-45.00 during December.



For major reserve currencies, Euro turned to be the worst-performing currency over the past 12 months, following the torrent of sovereign debt issues it had. Euro lost 8.54% against the US dollar, 18% against the Japanese Yen and nearly 4% against the British pound.

British pound was slightly under pressure on Eurozone issues. The GBP was down almost 4.7% against the US dollar and 14% against the Japanese yen. However, the pound was slightly stronger than the Euro as the latter was struggling on public debt concern. The UK monetary policy remain soft and MPC and highly accommodative for the 2010 and MPC kept the benchmark rate steady at 0.5%.

In Japan, strong Asian growth helped the yen to gain across the board. The Japanese Yen gained almost 11% against the US dollar. The yen started appreciating faster against the Asian currencies from late June. The yen appreciated over 8% against the Emerging Asia currencies.

As we have entered into 2011, European debt problems remains a key theme for the market. Issues like US rising deficit, soft monetary policy stand, rising global imbalance will be few factors that market should be watching carefully. We see 2011 to be a good year for European currencies i.e GBP and the Euro. The Indian rupee seems slightly neutral while pressure is possible due to weak current account.

Rupee gained on increased Capital account inflows, current account remains weak

The Indian rupee gained moderately on increased capital flows in 2010, despite a weak current account. The rupee rose towards 44 against the US dollar on rise in FII investment in equities and debt market, however failed to see further appreciation on concerns of the weakening current account condition. The tight monetary policy by the RBI in 2010 helped the rupee to gain on interest rate differential compared to the developed economies which is still maintaining a low rate regime.

Indian balance of payments situation is under mild pressure, with the current account deficit expected to reach 3.5% of GDP in the FY11, in spite of remittances from abroad continuing to post respectable growth. What helped was the surplus on the capital account, propped up by a record surge in flows from foreign institutional investors. This more than made up the sharp fall in inflows from a lower level of foreign direct investment.

The current account deficit for the September quarter widened compared with a downwardly revised USD 12.1 billion in the June quarter. Aided by a higher trade deficit and lower net invisibles, India's current account deficit for 2nd Q FY11 widened to a record \$15.8 billion. In the corresponding quarter last year current account deficit was at \$9.2 billion.

The capital account surplus went up to \$19 billion during July-September this year, against \$18.6 billion in the year-ago period. Inflows under portfolio investment doubled to \$19.2 billion as compared to \$9.7 billion in the same period last year.

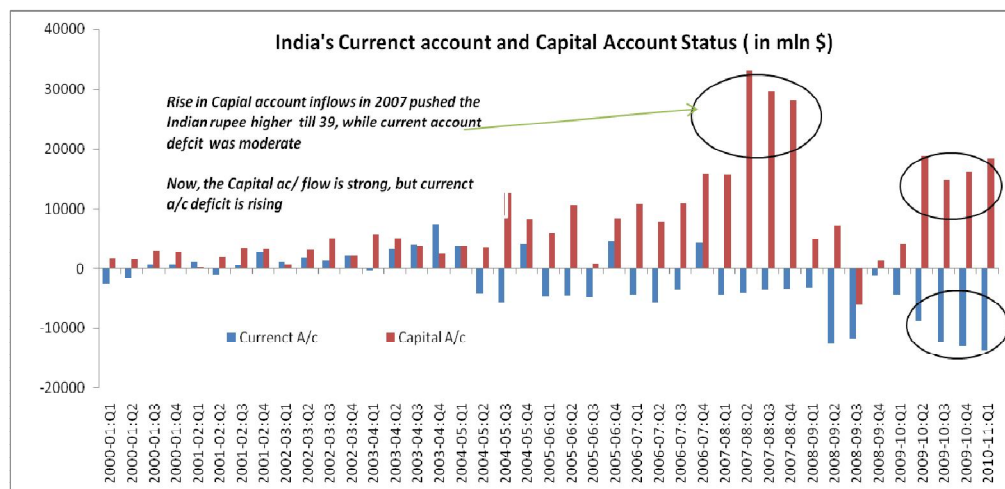


Figure 1 Source- RBI

As a result of higher disbursements of commercial loans to India, net ECBs went up to \$3.7 billion in the quarter, against \$1.2 billion in the same period last year. With an increase in imports due to strong domestic economic activity, short-term trade credit to India recorded net inflows of \$ 2.6 billion during the quarter as compared with a net inflow of \$1.2 billion last year.

However, in the capital account, FDI inflows have been declining. Inflows declined to \$2.5 billion during the second quarter of lower inflows under construction, real estate, business and financial services. The total balance of payment situation was in surplus of 3.7 billion US dollar in the 2nd Quarter.

However, increased dependence on capital account causes vulnerability in the external sector in the event of a reversal of capital flows

As per estimates, current account deficit to widen further till mid 2011 as the developed market's growth is still moderate. Rise in inflation (despite of an expected fall in WPI) in the domestic market, may be a cause of concern to the export competitiveness while imports are expected to rise on continuous basis.

The Indian rupee fundamentals are not as strong as they were in 2007 when the pair reached to 39 marks. During 2007, Indian current account positions were comfortable and slightly above the 1% of the GDP and the capital account inflows were also stronger than the present situation (figure 1)

The rupee is likely to enjoy some benefit of interest rate differentials. In line with market consensus, till 2011 mid, loose monetary policy is likely in the Europe and US. Few argued that ECB will keep the benchmark rate constant at 1% for rest of 2010 for addressing the public finance crisis. The US is also unlikely to move towards Hawkish stand for quite some time with recent actions suggesting a low rate regime. Soft monetary policy in the developed market and better yield in emerging markets may lead further capital account inflows.

However, we see some pause in rate hike cycle in the near future on WPI expected to moderate in 2011.

The uneven monsoon during 2009, domestic supply side constraints coupled with the rising international prices of food grains had pushed the prices of primary food articles, which eventually drove inflation in the manufacturing goods as well as service sectors. As per the recent trend of market price, the inflation should moderate somehow near 5.5-5% by April 2010.

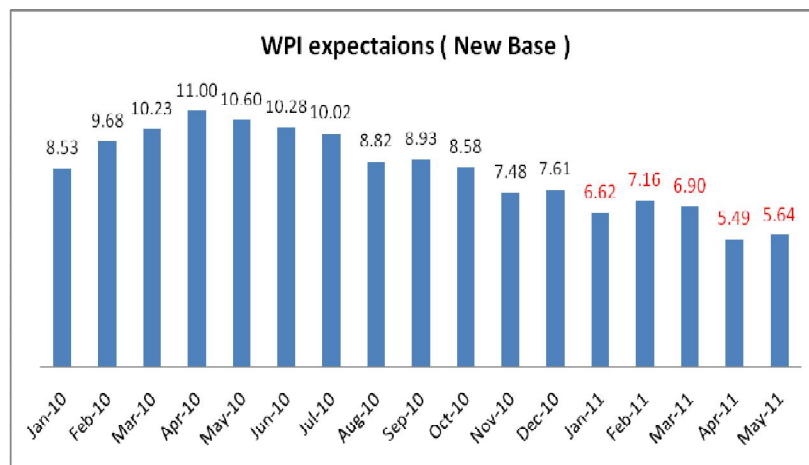


Figure 2 Source- JRG Analytics

The recent Rabi season acreage and production outlook is better than last year. However, the major inflation risk we see is the rise in petroleum cost which may put pressure on other commodity prices. Apart from that, manufacturing inflation should be watched upon. The moderation of inflation numbers may prompt the RBI not to go for any further rate hikes after April 2010. However, it depends on the dynamics of food and manufacturing inflation in 2011.

Apart from the interest rate and external sector, fiscal management is one factor to be watched upon. India's fiscal deficit is expected to be lower than 5.5% of GDP in 2010-11 according to a mid-term analysis of the economy for fiscal 2010-11. Mukherjee, in his budget estimates, targeted to reduce revenue deficit to 4 % of the GDP, and overall fiscal deficit to 5.5 % of the GDP for fiscal 2010-11.

The progress in reduction in fiscal deficit for the year 2010-11 is in line with the commitment made in the medium-term fiscal policy statement. Revenue receipts during the first half of the current fiscal were 58.4 %

of the total budgetary estimates for whole fiscal - a significant surge in comparison to last fiscal's 38.9 % and a five-year average of 39.1 %.

Almost all major components of tax revenue have shown better than estimated growth during the first half of 2010-11, including direct and indirect taxes, according to the survey.

In addition, non-tax receipts were also significant and placed at Rs.1, 64,819 crore during April-September 2010 amounting to 111 % of budgetary estimates of 2010-11 and an unprecedented 180 % growth, due to the higher receipts from 3G spectrum allocation auction. Non-debt capital receipts were also higher due to disinvestment receipts. With the robust disinvestment pipeline in place, the budgetary estimate of Rs.40, 000 crore would be met.

The Indian rupee fundamentals as of now remain mixed. The short term capital inflows may support rupee appreciation but a major gain in the rupee is less likely.

A reverse capital flows may hurt the Indian rupee which is a significant threat as current account remains weak. Apart from the same, weak US dollar fundamentals will cap any upside in the USDINR pair.

We maintain a neutral stand on the USDINR for 2011 with downside expected till 42-43 range. In case of reverse capital flow which is less likely till mid 2011, pair may reach 49 as well.

USA: US dollar fundamentals weak, gained in 2010 due to Eurozone peripheral problems

Although the recession officially ended in June 2009, the pace of recovery has been less than expectation. However, the US Dollar index managed to advance in 2010 with YoY gain of 3.3% with major support trigger European debt crisis. The US dollar is regarded as flight to safety during uncertainties.

US growth consolidated during 2010 after a promising recovery by a 5% GDP growth during the 4th Quarter of 2009. During 3rd Quarter 2010, the GDP growth reads at 2.6% after a 1.75% rise in GDP during 2nd Quarter.

The key problem US is facing now is high unemployment rate- if not addressed may dampen the recover process. The employment situation has not improved, despite decline in payroll has halted. As per latest data, private sector payrolls remain 6.6% below the peak registered in the fourth quarter of 2007. Historically, it is the weakest recovery on record in terms of private sector job growth. The 1991 and 2001 recoveries have been coined as jobless recoveries also, but the staggering loss of jobs this time around leaves the Fed with little choice. As per the latest figures, the 2010 unemployment rate is around 9.8%.

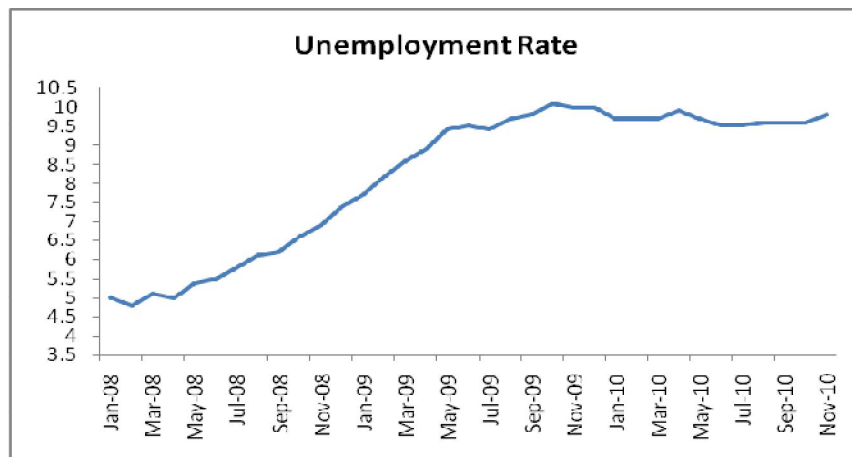


Figure 3 Source- US Labor Department

One major reason attributed to a weak job market is slower growth in corporate spending. Private investment growth was steady on sharp decline in residential investment. Residential investment fell 27.3% after rising 25.7% during the 2nd Quarter. Non residential investments growth slowed to 10% from 17.2% to 10%. Fixed investments as a whole gained 1.5% from 18.9% during the 2nd quarter.

The key for recovery was majorly attributed to increase in personal consumption expenditure. Personal consumption has been steadily growing by 1.9%, 2.2% and 2.4% during 1st, 2nd and the 3rd quarter. PCE contributes almost 70% of the US GDP.

The decline in private investment explains extension of tax cut by federal government and also fed further quantitative easing programme. It acts as an incentive for producers. In addition, it will fuel the growth through rise in domestic investment along with steady growth in the consumption expenditure. The advocates of QE2 expect a positive impact from lower interest rates lifting all interest sensitive areas of expenditures such as home purchases, refinancing of mortgages, and increased business expenditures, at the margin.

The high level of unemployment and low rate of inflation are the key consideration for the Federal Reserve Bank now. As a matter of fact, consumer spending in the quarters ahead depends importantly on the pace of job creation but also on households' ability to repair their financial positions.

As per FOMC, attaining the long-run sustainable rate of unemployment and achieving the mandate-consistent rate of inflation are the key objectives of monetary policy but somewhat different in nature. Most importantly, whereas monetary policymakers clearly have the ability to determine the inflation rate in the long run, they have little or no control over the longer-run sustainable unemployment rate, which is primarily determined by demographic and structural factors, not by monetary policy.

The present level of inflation is too low for Federal Reserve's dual mandate in the longer run. In particular, at current rates of inflation, the constraint imposed by the zero lower bound on nominal interest rates is too tight (the short-term real interest rate is too high, given the state of the economy), and the risk of deflation is higher.

As per our view, FOMC will opt for soft monetary policy till the first half of 2010 and apart from that rising yield from September 2010 may lead to dovish stand by the Fed if it moves sharply. Rising long term yield will dampen the economic recovery process of the US.

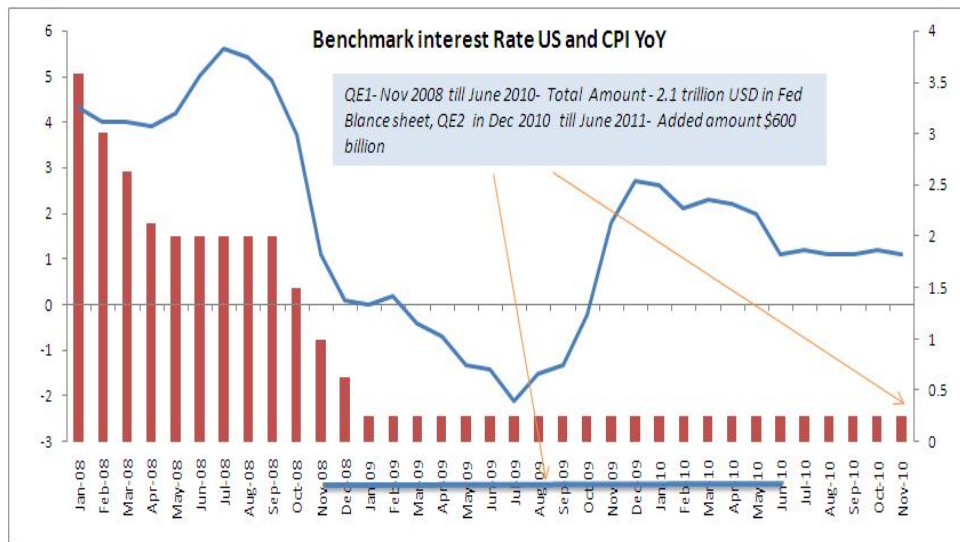


Figure 4 Source- Bureau of Labor Spastics

Soft policy may put pressure on prices and inflation may head towards 2.5%-3% during the mid 2011.

US structural problems remains intact- a negative factor for the US dollar in 2011

Rising budget deficit and public debt is another key concern for the US dollar. The two major reserve currency the US dollar and Euro has been under pressure and any stability in the Euro area may put pressure in the US dollar.

US budget deficit is now in the range of 9-10% of the GDP which is higher than few European countries. The public debt as a % of GDP has been rising after placing itself as the 12th largest public debt holding country in 2009. US public debt is reported under two heads, Debt held by the public and Intra governmental holdings.

As of November 30, 2010, total public debt outstanding was \$13.9 trillion and was approximately 97% of 2010's fiscal year-end annual GDP of \$14.4 trillion, with the debt held by the public at approximately 65% of GDP (\$9.3 Trillion) and Intra governmental holdings standing at 32% of GDP (\$4.6 Trillion). In 2009, the total debt was 86.1% of GDP and Debt held by the Public was at 53.5%.

With high deficit, lower rate of interest the US dollar may come under pressure when some stability comes in the euro zone. Never mind, the US dollar has been a flight of safety for investors during crisis situations.

EUROPE: Public debt is the theme for Euro, recovery possible

The euro started weakening after a modest recovery during 2009 to post a high of 1.51. The pair was mostly under pressure during 2010 on contagion risk in the Euro zone arising out from Greece, Portugal and Ireland. The EURUSD posted a yearly low of 1.1874 during June 2010, also a 4 year's low.

A common metaphor in recent euro area problems has been the domino theory. One domino (Greece) topples, leading to the next (Ireland) falling over, resulting in pressures then turning to Portugal. Also after Portugal, if the dominoes were to continue falling, as many investors fear, the euro area would likely have huge problems because the next two economies likely to be affected are Spain and Italy, both far larger, more difficult to support and important for the euro area economy in aggregate.

As per our view, Portugal is likely to need aid probably in the 1st Quarter of 2011 itself and the EURUSD will be under pressure during the period.

Still, there are long term issues like high fiscal deficit and debt to GDP ratio. A high debt to GDP ratio and higher fiscal deficit prevails in most of the developed economies now.

US debt to GDP just near 100%, fiscal deficit is above 9% of GDP. Most of the economies are placed with high deficit situations on stimulus provided by fiscal authority.

We believe that the recent reaction of Yield curve (Euro zone) and Euro on the European debt crisis is more of a market jitter. The influence of sovereign rating agencies on EU government bond market is profound which has been putting pressure on the common currency. The solution for European debt issue is long term in nature and it requires time and proper management.

As of now, Greece and Ireland has been bailed out. Next country which may go for financial aid is Portugal, despite government denies taking external assistance in the immediate future. Portugal needs to raise up to 20 billion euros on international markets in 2011, the national debt agency said. The Institute for Treasury and Public Credit Management said it intends to issue bonds worth 18-20 billion euros to meet Portugal's financing requirements next year.

The yield on Portuguese 10-year bonds has risen in recent days near 6-7 in comparison of 3% for German bonds. Portugal has to raise money because its budget deficit is too high - though its budget deficit of 9.6 % last year was far below Greece's 15.4 %; it was still the fourth-highest in the euro zone.

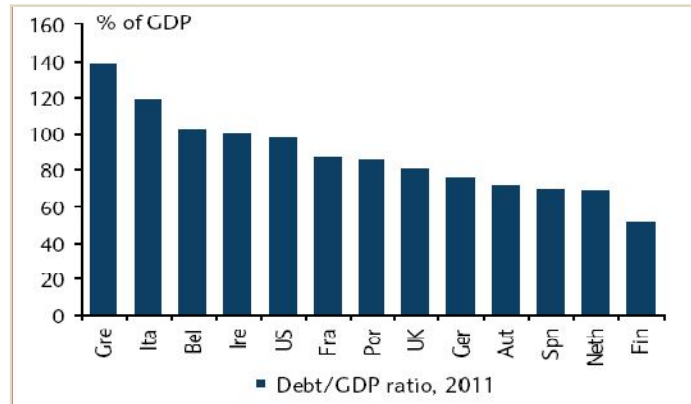


Figure 5 Source- IMF

We don't see Spain's situation to deteriorate like Greece, Ireland and Portugal. Its fiscal situation appears manageable, in our view. It has a large deficit but a lower debt/GDP ratio than Germany and the government's plans appear sufficiently aggressive to bring about sustainability fairly smoothly as long as yield do not move too aggressively against it. Also, generally, the overall banking sector appears to be in reasonable shape, although the worse the macroeconomic situation, the more pressure it will be under.

Apart from that China has been consistently supporting the European bond market. Chinese Vice Premier Li Keqiang recently noted that China supports Spain's economic reforms and will continue to buy its government debt. China is one of the biggest foreign owners of Spanish sovereign debt, with around 10% of the total.

From the monetary policy stand, benchmark rate is expected to remain unchanged till mid 2011. There is high probability of no further hikes in the latter half of 2011. A soft policy is generally negative for a particular currency. However, as of now a low rate is accommodative for European growth and problem resolution. The outlook of Euro depends on the public finance management and as per our expectations on Spain; Euro may see some decent recovery against the US dollar.

Mild pressure can be seen in the Euro during the 1st Quarter if Portugal seeks external help and may see EURUSD approaching 1.25-1.23 mark from present rate of 1.34. On a year on year basis, we see EURUSD to advance towards 1.50 in 2010.

UNITED KINGDOM: British pound has better outlook in 2011

In the period since the financial crisis started, the GBP has been the weakest major currency; in some cases most spectacularly relative to the JPY – its depreciation has been extreme. The depreciation has led it to become one of the G10's most undervalued currencies.

The economic fundamentals has deteriorated in the UK during crisis and post crisis it was difficult to find a single factor that argues for the depreciation to stop, other than the fact that it had become too cheap even given all the UK's problems.

The most important factor in the GBP's fall was the Bank of England's response to the deteriorating prospects for UK demand. Prior to the crisis, the UK policy rate had been one of the highest in the G10. However, UK monetary policy quickly became looser than that in any other economy, especially when taking the prevailing rates of inflation into account.

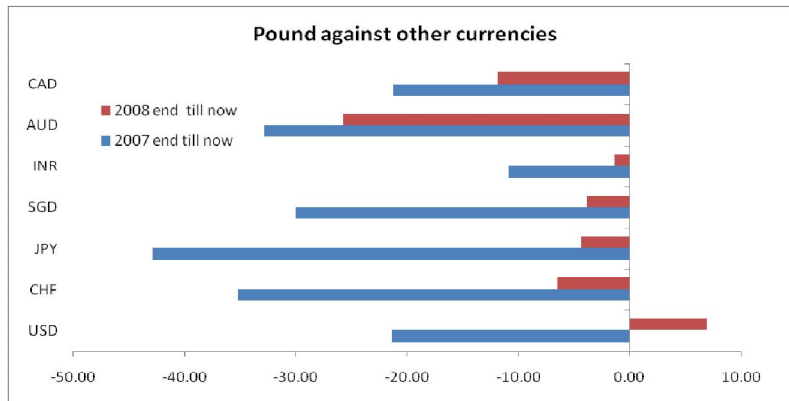


Figure 6- Source -JRG Analytics

Where the monetary policy likely to move next?

Over the next few months, we believe that the MPC is not likely to make any move. Doing nothing over that period is the consensus expectation, but we judge the market thinks further easing is more likely than tightening over the next few months. No action would therefore be mildly positive in itself for GBP. As per BoE survey, inflation expectations are rising in the economy and the CPI inflation is above 3%.

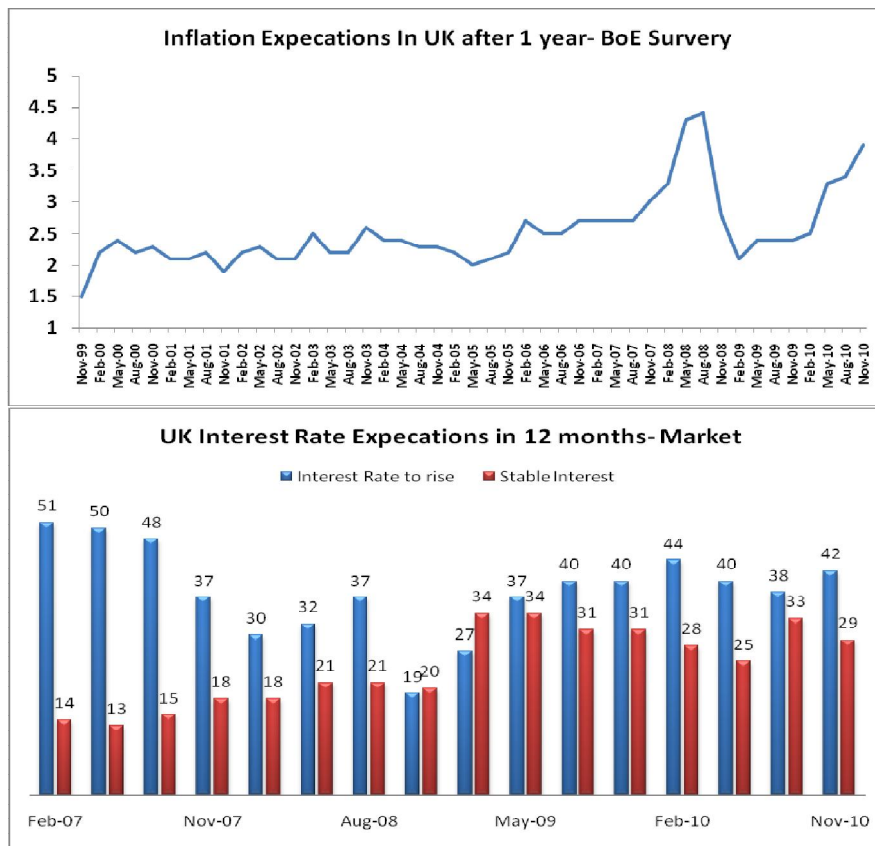


Figure 7&8 Source- Bank of England

Part of the high inflation rate is attributable to one-off factors, such as the VAT rise at the beginning of 2010 despite a part of the rise. The short run can have long-run consequences, and recent MPC statements do suggest growing concerns about the effect. Inflation to head up in 2011 which is going to put some pressure on soft monetary policy stand and further QE is less likely by the BoE is less likely.

Solution to its structural problems is the key to UK economy and the GBP

During the worst of the crisis, UK prospects seemed significantly worse than any other G10 economy. The concerns about the UK fiscal problems remain in place, but the UK government has made it as clear as seems possible that it takes the situation seriously and will do all it can to rectify the problems quickly. UK trade position has shown surprisingly little improvement over the past couple of years, other indicators suggest some underlying improvement in prospects for the export sector. Manufacturing sector surveys suggest that export orders are robust, and overall manufacturing production growth has picked up, in both the surveys and official data. It suggests some improvement in current account.

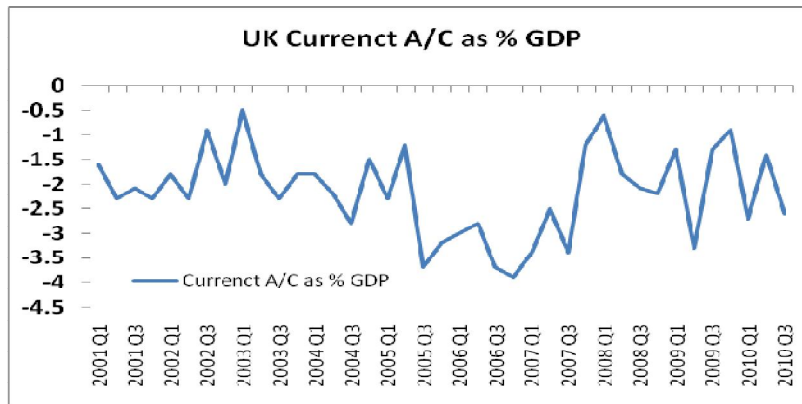


Figure 9, Source- NSO, UK

While country like- US position though is likely to deteriorate, partly because of the combination of fiscal and monetary policy stimuli reducing savings.

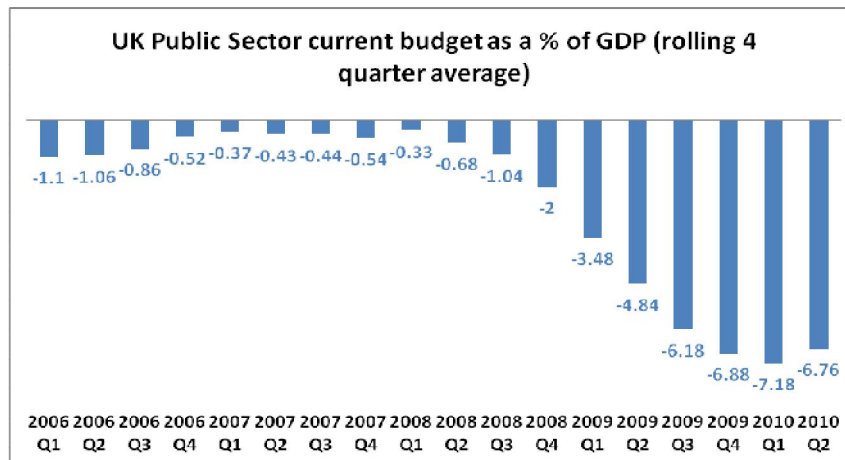


Figure 10 Source- NSO, UK

British comprehensive spending review outlined plans to return public spending as a percentage of GDP to its 2006/07 levels, in the most sweeping package of austerity measures seen in Britain for a generation. Decisive action in the emergency Budget earlier this year sent a signal to markets that Britain was unlikely to maintain

a high public spending deficit long. Chancellor George Osborne has repeatedly argued the stability this has brought will help return the UK economy to growth

Britain's plan to reduce its record deficit will stay on track this year because deep spending cuts and tax rises will not cut growth enough to cause a double-dip recession.

In a survey of economists for the Financial Times, most were of the view that the deficit-slashing measures were a big gamble, but one that was likely to pay off. The view of the economists will be a boost to the Conservative-Liberal Democrat coalition on the day a tough austerity measure comes into force.

While in the case of US, the country is not well prepared to handle deficit as of now. The U.S. governments do not appear ready to make the kind of tough changes that could begin to turn things around. But that's what needs to happen, and it needs to begin now.

The British pound will track the EURUSD movement which in our expectations may see decent recovery in 2011. The initial pair on EURUSD on Portugal debt may transfer some pressure to GBP as well in the initial part. On a yearly perspective the GBPUSD can show recovery towards 1.75-1.80 this year with continuous buying from investors as undervalued currency.

Japan: Yen supported by export growth, strong Asian demand

Most of the EM Asia currency gained v/s the US dollar during 2010 with most of the economies are enjoying a favorable current account surplus, except India. The Asian growth story was intact with export growth and healthy domestic demand. Since July starting, most of EM Asia gained across the board led by the Korean Won (10.0%), Thai Baht (9.74%), Singapore Dollar and (8.73%) and Philippines peso. (7.15%). The Japanese Yen gained almost 11% against the US dollar. The yen started appreciating faster against the Asian currencies from late June. The yen appreciated over 8% against the Emerging Asia currencies.

Japan has been enjoying a favorable current account surplus with mostly rise in exports. Capital account remained negative but stable.

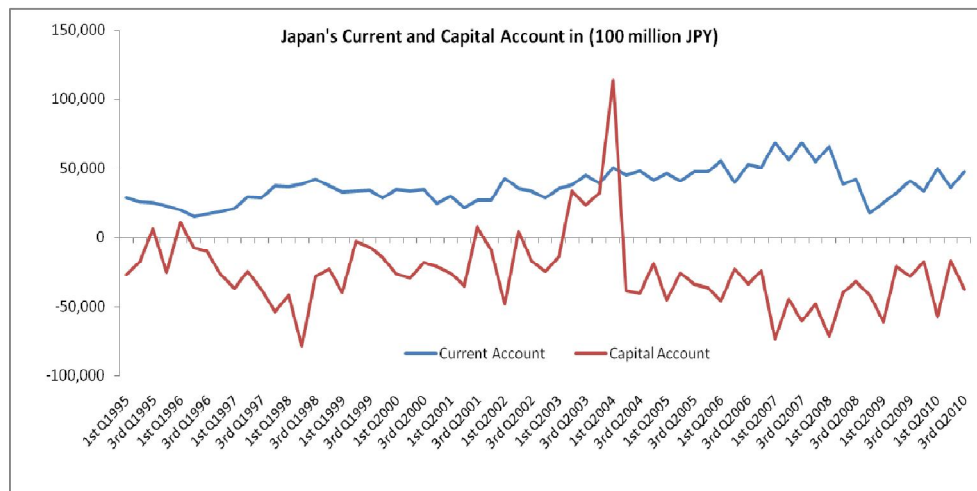


Figure 11- Source- MoF, Japan

As per the recent data, Japan's exports rose 9.1 % in November from a year earlier marking the 12th straight month of growth. The rise follows a 7.8 percent rise in October, although authorities cited rising demand from China and a stable yen in November was as boosting Japanese exports in November.

The trade relationships between Japan and EM Asian countries have expanded significantly in recent years. Japan's trade with EM Asia is now larger than its combined trade with the EU and US. This shift has been accompanied by strong investments by Japanese companies in Asian economies, especially in China, India and Indonesia.

The more developed economies such as Malaysia, Singapore and Thailand have also seen a pick-up in investment flows from Japan through the FDI route. For Japan, its increasing trade dependency on EM Asia to support its export sector has led it to play a larger role in these economies, especially in infrastructure development.

As per the recent data release, exports to Asia, which account for more than half of Japan's total exports, rose 13% above the baseline growth of 9.1% in November, while shipments to China increased 18.3 percent.

However, the property price bubble and monetary tightening in China is expected to impact the Japanese export. The recent PMI data of China though showed expansion in manufacturing activities but fell then the previous period. Apart from that EM Asia has increased tightening measures on increasing imported inflationary pressure which is expected to see some moderation in export for Japan. Meanwhile, it cannot net off by DM demands as it still moderate there.

Soft monetary policy on risk of deflationary pressure, growth to moderate in 2011

While it is unclear whether growth will hold up in the coming months, we think a double-dip is unlikely. Further, with strong currency appreciation, risks of a deflationary spiral have risen, which has led to further monetary easing by the Bank of Japan.

Prices continued to drop in Japan. The core consumer price index, which doesn't include volatile fresh-food prices, was 0.5% lower in November than in the year-earlier period. Compared to October, the core CPI lost 0.1%. The overall CPI, including all items, managed to rise 0.1% from the year earlier, but was down 0.3% from October.

As per government latest forecast, total CPI to fall -0.6% in fiscal 2010 an upward revision from earlier -0.9%. It factored in government simulative measure to provide free high school education from April 2010. As per estimates, the measure will depress total CPI in the current fiscal year by 0.5 percentage point. The nation's economy is expected to grow 1.5% in fiscal 2011 that starts next April, with the growth rate decelerating from an estimated +3.1% in the current fiscal year. The GDP forecast for fiscal 2010 has been revised up from an earlier projection of +2.6%.

Looking at the US dollar situation which is expected to stay weak in 2011 may bring some stability in the USDJPY pairs. The Bank of Japan will be more concerned for further appreciation for the yen as Asian demand may moderate slightly. This suggests a risk for lower USDJPY in 2011.

Oil prices and Global economy

Another phenomenon the global economy will be affected by, even though not uniformly, is the prices of crude oil. Crude oil is a commodity that drives economic development across the world and the role of it is so profound that it has even turned into paraphernalia of international politics.

Crude oil prices have been rising steadily and has picked up pace in the in the second half of 2010. Higher prices of crude oil will be straining the balance of payments of importing countries, not to mention its contribution to inflation.

India imports all of its crude oil and in such a scenario, the rising prices can beget a cost push inflation. This will be happening in an already inflationary situation, making conditions worse. *The imports of crude oil at higher prices will also be contributing to the widening of the country's current account deficit, which already poses a threat to the economy.*

Oil prices can have a large influence on the US dollar as well. The status of Euro as a reserve currency among the oil producing nations has undoubtedly risen. Consequently, a rise in crude oil prices can definitely create demand for the European currency, and such a situation could hamper the US dollar.

Outlook of Currency pairs for 2011

In 2011, European currencies are expected to see modest recovery while the US dollar may remain weak. The European peripheral debt problem is the key concern for the Euro in some ways has influence in the British pound.

As already discussed, the fear of deepen debt crisis in the Euro zone may end after Portugal is being bailout out. After Portugal the next is Spain which is better positioned in terms of debt to GDP ratio. The government's plans appear sufficiently aggressive to bring about sustainability. Apart from that Chinese demand for Spain debt to sustain and the country seems remain invested in Europe bond market.

The recovery of the Euro will be beneficial for the GBP. The pound will be supported by UK government's response to address the rising deficit problem. In such a scenario, weak US fundamentals will push the US dollar lower against the Pound.

In the case of USDINR, gains in Euro and the Pound will support Indian rupee appreciation, but at a limited pace. As we have a weak current account and deficit has been widening from past three years, rupee appreciation to some extent below 42 will be unsustainable. The risk for falling Capital account inflows may limit any major upside in the Indian rupee. Apart from that, the gain the Euro and other currencies may limit downside as well.

Currency Pair	Outlook for 2010
Indian rupee	The Indian rupee may appreciate, but at limited pace. Downsides in the USDINR possible till 42-43 range. On reverse capital flows may push back rupee on back foot. On the higher side 48 is possible.
Euro	The 2011 theme again goes to European peripheral debt problems. We are confident on Spain's ability to tackle the public fiancé crisis. Euro may gain towards 1.50 against the US dollar
Pound Sterling	Pound is the highly undervalued compared to other major currencies as of now. The GBPUSD may see decent recovery as the former is more committed to solve its structural problems. US dollar is expected to be under pressure on high deficit soft monetary policy. The GBPUSD is expected to gain towards 1.75-1.80 in 2011
Japanese Yen	The Bank of Japan will be more concerned for further appreciation for the yen as Asian demand may moderate slightly. This suggests a risk for lower USDJPY in 2011. Policy response may push the USDJPY towards 88-90 levels in the 2011 despite weak US fundamentals.

DISCLAIMER: This research report is prepared by JRG research. The report is only for the purpose of use by the recipient and should not be circulated or copied without the prior permission of the company. The views expressed in this report are based on the analysis of data and information obtained from sources we consider reliable. However, the company takes no responsibility for the accuracy and completeness of any such data or information. Investors may note that neither the company nor any persons, associates or any subsidiaries accept any responsibility for any potential loss arising as a result of use of the data, information or views expressed in this report. The recipient is requested to seek independent expert advice prior to acting on this report.