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The INR-USD Exchange Rate – Will the Rupee Depreciate?

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White Paper

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Executive Summary

During the last decade, among major economies, India has achieved consistently impressive growth, second only to China. In the first half of fiscal 2010–11, the Indian economy grew at a healthy rate of 8.9%, and the majority of global growth going forward is expected to be driven by developing countries, specifically India and China. India is home to a vibrant services economy and a hotbed of outsourcing. Its economy has become increasingly interlinked with global markets as trade has flourished.

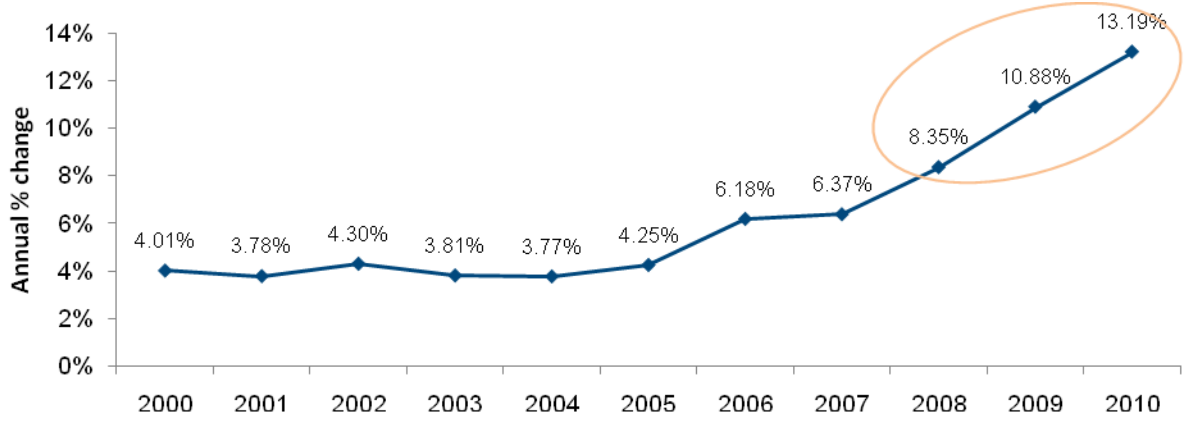
The USD-INR exchange rate is an important indicator of investor sentiment and can significantly impact not only the fortunes of individual firms and sectors but also the government. While this exchange rate has been very stable overall for the last five years (44.86 on April 24th, 2006 and 44.34 on April 15th, 2011), there have been periods of significant volatility. For example, USD-INR moved from 40 to 51.50 from March 2008 to March 2009. During the past 12 months, it has traded in a relatively narrow range, between 47.33 and 43.99. We believe there is a significant downside risk to USD-INR exchange rate and this paper will explore some of the risk factors behind this:

- Inflation is at an all-time high; the Consumer Price Index (CPI) increased by 10.88% in 2009 and by 13.19% in 2010. The monetary policy changes undertaken by the government to control inflation have been ineffective. We believe this is because inflation is being driven primarily by structural supply side challenges such as lack of agricultural infrastructure, low crop yields, and the absence of organized retail.
- India is one of the fastest growing economies and is considered a favored destination for investment. Nevertheless, it witnessed a decline in Foreign Direct Investments (FDI) in 2010, making it the only BRIC country where this happened. This is troubling as FDI is an important indicator of investors' faith in a country's long-term prospects. Foreign Institutional Investment (FII), which provides short-term portfolio investment money inflows, has been buoyant, but these funds are volatile by nature and are prone to "flight risk" at the first signs of trouble, something that happened during the financial crisis.
- Recent widespread corruption scandals have reinforced the negative perception of governance deficit in India and raised doubts about the availability of a level playing field for businesses. This, combined with regulatory and tax uncertainty, will deter many foreign investors. For example, several global firms who invested in India's telecom sector have had to write off billions of dollars of their investments.
- Another major source of foreign currency inflows to India is remittances; India received USD 55 billion in remittances during 2010. This money limits the country's current account deficit. The Middle East accounts for a major share of this inflow and the current turmoil in the region may negatively influence it as Indians abroad leave the region due to security concerns. Remittances from countries like Saudi Arabia and UAE, where the strife has not spread, could also experience a decline as unemployment in these nation rises.
- The government finances are in a bad shape and the combined central and state government deficit has stubbornly stayed around 10% of GDP. Experts believe that oil prices will remain high in the near future. This is a major concern for India as it imports about 70% of its oil and efforts to increase the production capacity of petroleum and natural gas domestically have not been very successful.
- India's current deficit is about 3%, the level it reached during the crisis of the 1990s. A current account deficit is not bad by itself for a growing economy if it helps build important long-term productive assets. However, in India's case it is due to insufficient savings, especially by the government. This does not bode well for the economy. Moreover, given India's rising import bill and threat to remittances, the deficit will remain high in the near future, creating pressure on the Indian Rupee.
- The United States (US) economy seems to be on the path to recovery. It is very likely that the improving US economy will draw more funds at the expense of emerging countries. This can already be seen in the FDI inflows, which increased by 43% in 2010.

Structural Challenges a Hurdle for Inflation Control

Reining in inflation has been among the foremost challenges faced by the Indian government in 2010. Driven by increases in food prices, inflation in India has been one of the principal factors driving policy changes. Inflation has been in double figures and the government has not had any success in efforts to bring it down to single figures again. Figure 1 depicts the percentage change in the consumer price index (CPI) over the last ten years.

Figure 1: Inflation – Percentage Change in Average Consumer Prices (2000–10)



Source: *International Monetary Fund, World Economic Outlook, April 2011*

The following two measures are used to control inflation:

- Monetary policy initiatives
- Structural changes to improve supply

The government was able to control inflation by monetary initiatives until 2005. Inflation started to increase in a sustained manner only after 2006. One hypothesis for this trend is the impact of the introduction of NREGA[1] in 2006, which provides employment for 100 days to the rural population. This act led to an increase in wages in rural areas, leading to an upward trend in the per capita disposable income. Food prices were directly impacted as food accounts for more than a quarter of an Indian household's income. This in turn led inflation to reach an inflexion point after which it could no longer be controlled only by monetary policy changes.

Monetary Policy Efforts Aimed at Curbing Inflation

RBI has been raising policy rates as an effort to control inflation. In May 2011, the central bank increased rates by 50 bps: the repo rate is now 7.25% and the reverse repo rate is 6.25%. This has narrowed the difference between the two rates, as the increase in reverse repo has been higher. Since March 2010, RBI has raised rates nine times; however, there is a limit to how much these rates can be hiked.

The Reserve Bank of India (RBI) is projecting that inflation will moderate in 2011. However, monetary policy interventions have not worked for the past few years.

Structural Challenges Remain

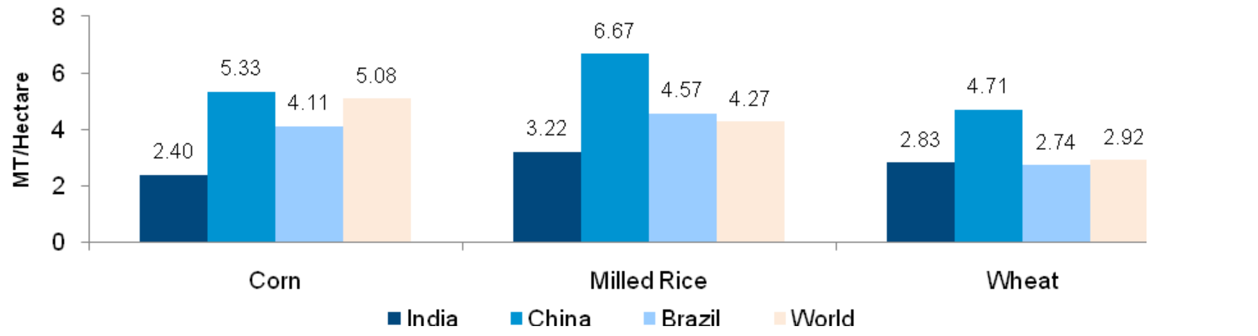
Unforeseen circumstances (like drought and unseasonal rains) compounded by structural problems related to demand-supply imbalances are affecting upward movement in food prices. Monetary policy initiatives cannot overcome these challenges. For instance, food inflation declined to single digits in November 2010; but increased again owing to unseasonal rains and supply chain problems that resulted in a rise in vegetable prices. The main food items that have driven inflation in recent times have been vegetables and pulses. The supply of these items has been unable to match demand, causing imbalances. Given the rise in global food prices, importing these items is not a feasible long-term solution. India needs to focus on the development of agriculture-related business and reduce interstate trade barriers to ensure the removal of the supply-demand imbalance.

[1] *The Mahatma Gandhi National Rural Employment Guarantee Act (NREGA) guarantees 100 days of wage-employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work.*

Agriculture Infrastructure in India Is Sorely Lacking

Due to the lack of good agricultural infrastructure, India has not been able to sufficiently increase food production. Yields in India are significantly lower than in other emerging countries. Figure 2 highlights the comparison of yields for select crops.

Figure 2: Agriculture Yield – Select Crops – A Comparison (2010/11)



Source: *United States Department of Agriculture (USDA) Foreign Agriculture Service*

Government investments in large irrigation projects have been marred by corruption and execution delays. The private sector has been unable to pick up the slack due to an uncertain regulatory landscape and intermittent ad hoc government interventions. For example, the government has banned futures trading in several agricultural commodities, thereby killing what seemed to be a promising new sector. There are also yearly interventions either in the form of import or of export bans. These lead to high price volatility and deter private investments.

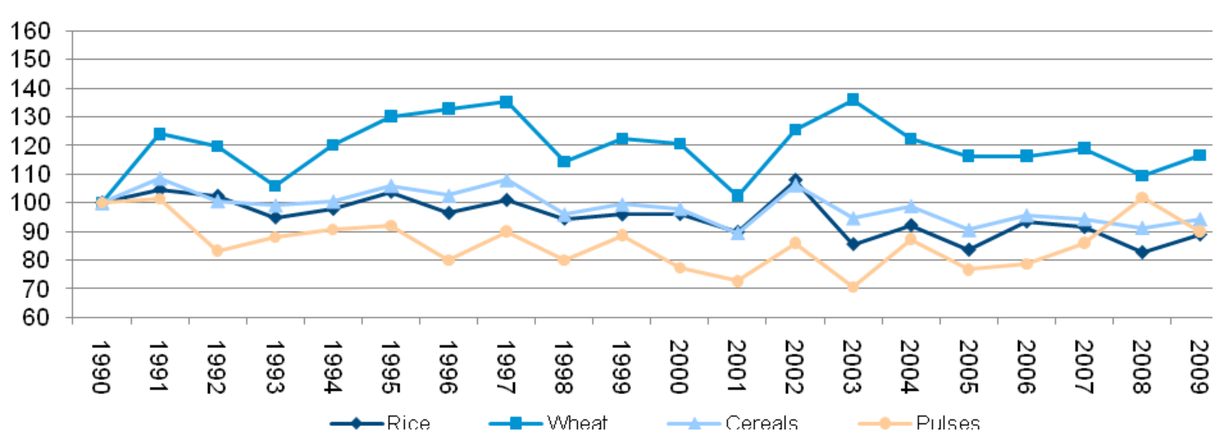
The standard of warehousing and transportation infrastructure for agricultural products is underdeveloped in India. Perishable items such as vegetables are damaged in large quantities before reaching the market. Recently, large quantities of wheat and rice were also found rotting in government stores in the state of Punjab (a major producer) because of improper storage.

Another example is the ‘Onion Crisis’ that India has been facing repeatedly. This is in spite of the fact that the country is the second largest producer of onion. A major reason for this problem is lack of buffer stock in warehouses that can be used in situations of supply disruptions.

No Import Buffer for Certain Crops

The demand for protein rich food has increased, but production has not grown accordingly. Apart from wheat, all the other major food grains’ per capita availability went down in 2009 as compared to 1990 (see Figure 3). Also, as India is one of the main producers of pulses worldwide, there is no import buffer that can be used to overcome short-term shortages.

Figure 3: Per Capita Net Availability of Select Food Grains (Per Annum)



Source: *Evalueserve Analysis based on data from Directorate of Economics and Statistics, Department of Agriculture and Cooperation, India*

Small Land Holdings

The Indian government prohibits the formation of large land holdings. This is a major setback for the development of this sector, since small farmers lack the education and expertise to increase their yields and are unable to access finance to buy better equipment, fertilizers and seeds. It is a vicious circle: small farmers do not have money to invest in improving their harvest, which leads to food shortages. These shortages lead to high food prices, which affect the financial stability of the small farmers.

Absence of Organized Retail

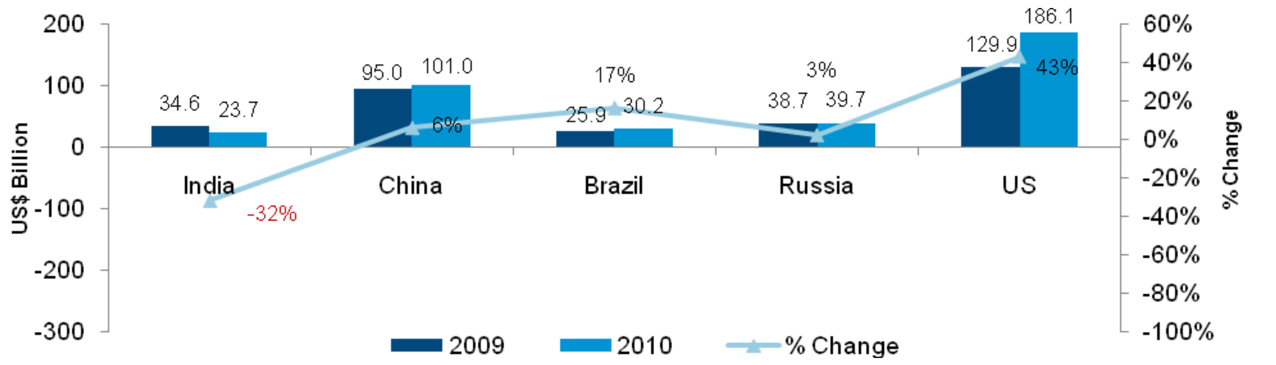
The government has not opened up the retail sector for foreign investment, a huge roadblock in improving the supply chain of food items in the country, which is currently being developed only by limited private investment. Currently, retail in India is essentially unorganized (only 5% is organized) with a major share accounted for by family-run stores. Gaps in the distribution systems lead to major differences in wholesale and retail prices.

As a result, agriculture has continued to grow at a stubbornly low rate of 2-3%, barely keeping up with population growth. This is likely to keep food inflation high.

Changing Landscape of Investment Inflows

Cross-border investment inflows in India follow one of the two routes – Foreign Direct Investment (FDI) and Foreign Institutional Investments (FIIs). While FDIs are long-term, stable investments, FIIs can be extremely volatile. Hence, most countries prefer FDIs to FIIs. India in 2010 experienced a decline in FDI although FDI increased globally (see Figure 4).

Figure 4: FDI Inflows – A Comparison



Source: *United Nations Conference on Trade and Development (UNCTAD)*

Decline in FDI Signals Lack of Confidence

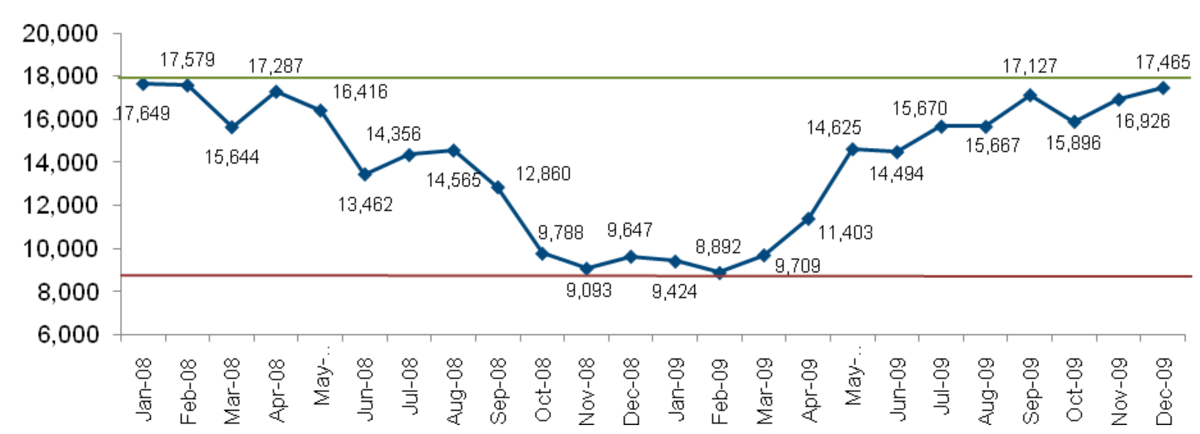
The decline in FDI flows to India highlights the lack of confidence investors have in the India story. Fraud and corruption scandals mar India's international image as a desirable long-term investment destination. A compelling example is the Telenor case. Telenor, a Norwegian telecom company, bought a 67% stake in Unitech Wireless in 2008 for about USD 1.3 billion, Unitech having been awarded a 2G license in January 2008. A recent corruption scandal in the Telecom Ministry has brought Unitech's 2G licenses under scrutiny. A. Raja, the former Telecom Minister, is accused of malpractice and corruption, and major irregularities were found in the entire license allotment procedure. There is a significant likelihood that the government will withdraw these licenses, further Unitech, now Uninor, has already paid fines due to its inability to meet rollout targets. As long as there is no resolution of the regulatory status, Telenor's future in India remains unclear and it has already written off most of its investment.

FIIs Continue to Invest in Indian Market

During January-October 2010, FII inflows had already crossed USD 24.5 billion with about USD 6.1 billion worth of investment in October alone. The government raised the amount FIIs can invest in bonds in September 2010, bringing the threshold up to USD 30 billion (USD 20 billion in corporate and USD 10 billion in government bonds), aiding the rise in such inflows and meaning investors can benefit from the higher interest rates prevalent in the country. Due to these ongoing investments, the Indian Rupee experienced a sharp appreciation against the USD during September–October. The limit was further revised upwards in February 2011 to USD 40 billion in corporate bonds. The additional USD 20 billion can only be invested in bonds issued by companies in the infrastructure sector. Even traditionally risk-averse investors such as central banks are also now looking to invest in the Indian debt market. For example, Malaysia's central bank, Bank Negara Malaysia, registered as an FII to gain access to India's debt market in February 2011.

As of December 2010, the value of net inflows was USD 39 billion, the highest single year investment in India since the beginning of FIIs. Furthermore, the net FII inflow during the period April 2009 – February 2011 was about USD 58 billion. Unfortunately, this news is not entirely positive. For instance, in 2008, as the global economy foundered, FIIs started to pull out money from the Indian stock market at a breakneck speed. This led to a freefall in the Bombay Stock Exchange's (BSE) benchmark index, Sensex. FIIs pulled out about USD 13 billion in between March 2008 and March 2009, leading to a 50% decline in the benchmark index value and approximately 30% depreciation in the INR vs. USD. Figure 5 depicts the movement of Sensex during this period.

Figure 5: The 2008 Stock Market Crash – Sensex Movement

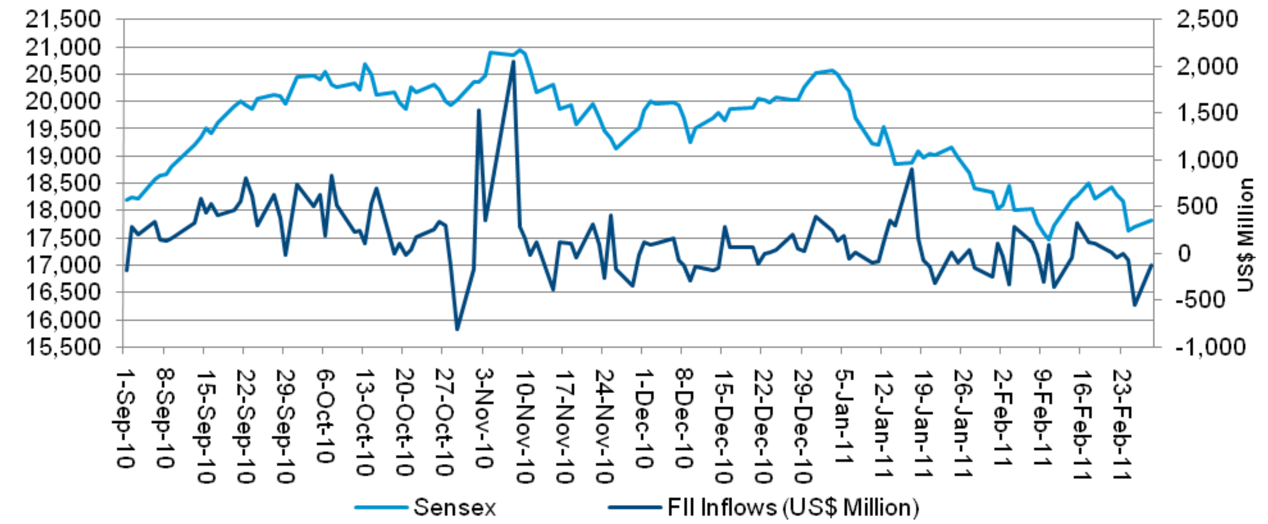


Source: *Evalueserve Analysis based on data from Thomson One Banker*

India needs to be cautious about being over-reliant on these inflows as they are very fickle. One piece of bad news can cause an exodus of foreign money, leading to a sharp fall in the equity markets and depreciation of Indian currency.

Figure 6 highlights the close correlation between trend in FII inflow and the movement of the stock market.

Figure 6: FII Inflows Influence Stock Market Sentiment



Source: *Evalueserve Analysis based on data from SEBI and Thomson One Banker*

India Facing 'Crisis of Confidence'

India's corporate governance structure has become suspect after the Satyam scandal broke in 2009. Satyam, one of the leading Information Technology companies of India, was found to have been "cooking the books" for many years. This exposé led to an erosion of investor confidence in the governance systems in place, especially since the company had been winning corporate governance awards in recent years.

The mishandling of the Commonwealth Games, where allegations of corruption were made against the committee planning the games, further damaged India's image in the international community. Ineffective management marred the Games – stadiums were not completed on time and the athletes' village was in poor condition. The authorities have been investigating irregularities in these Games-related projects for more than a year, which has led to a further increase in costs.

The irregularity in the Telecom Ministry and the removal of Minister A. Raja, who was heading it, added to this crisis of confidence. The process of spectrum allocation was found to be biased and corrupt, and might have led to a USD 39 billion loss for the Indian exchequer. To skew the allotment in their favor, the minister allegedly colluded with certain participants of the auction process. This has caused a major embarrassment for the government, as it has exposed the reach of corruption in India's higher echelons. It has also made investors wonder whether any decision taken by the various ministries can be impartial and not influenced by corrupt practices.

After these high profile cases, confidence in Indian governance and the government has become shaky. The delayed response to the allegations and the traditionally slow judicial system has not reassured important investors and stakeholders, since there is still no deterrent to any future offenders. We believe that the negative impact of these scandals is reflected in the decline in FDI. Any more scandals could lead to a flight of capital from the country.

Are Remittances under Threat?

In 2010, India was the largest recipient of remittances globally, with Indians abroad sending USD 55 billion to their home country, according to World Bank estimates. Migrants from India settled in the Middle East (ME) countries contribute a major share of these remittances: approximately 48% in 2010.

The recent political and economic upheavals in the ME countries may negatively influence the inflow of remittance. The unrest in Egypt, along with rising unemployment in the United Arab Emirates (UAE) and Saudi Arabia could lead to a reduction in the number of migrants in these countries, and the volatile political environment in Libya and Bahrain is likely to lead to an exodus of Indian expatriates. The ongoing strife in these oil-producing countries could also hamper the economic recovery of the US economy in coming quarters, putting pressure on remittances received from the country.

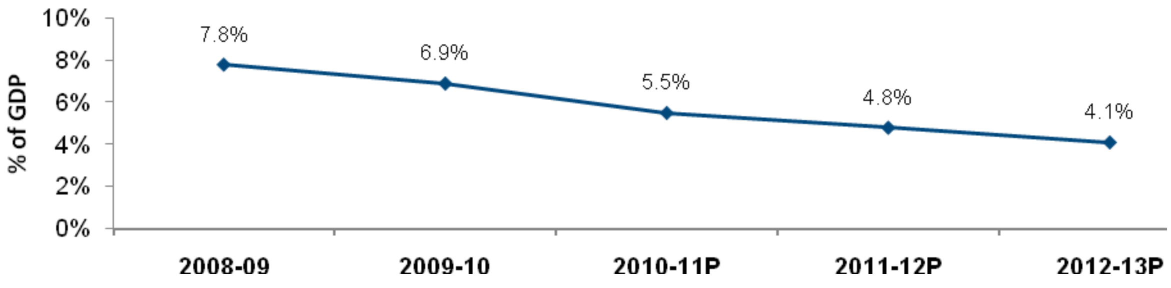
Remittances go a long way to keeping the country's current account deficit manageable. Any decline in these inflows will lead to a widening of current account deficit and influence the stability of the Rupee against the US Dollar.

Status of Deficit – Is it Sustainable?

According to the recent budget proposal tabled by the Government of India, the fiscal deficit for fiscal 2010–11 will be 5.5% of the gross domestic product (GDP) (see Figure 7). After including the deficit incurred by the state governments, the combined deficit is believed to be closer to 10%, which is clearly unsustainable.

Concerns remain regarding the government's ability to structurally reduce the deficit. Rising oil prices and resulting inflation could prove a further hurdle in efforts to control the deficit. Despite recent attempts to align the retail prices of petroleum products with international crude prices, considerable subsidies remain. Subsidy provisions in the budget are expected to fall short, as the government has assumed very optimistic crude prices and the cost of the National Food Security Bill, to be introduced this year, will lead to an increase in social spending in 2011–12. According to the speech given by India's Finance Minister, social spending will increase by 17% in this fiscal year. This makes it even more difficult to bring down the country's fiscal deficit.

Figure 7: Trend in Fiscal Deficit in India



Source: *Government of India, Budget Speech of Fiscal 2010–11*

Worrying Trend in Current Account Deficit

During fiscal year 2010–11, the current account deficit is expected to be about 3% of the GDP. The last time India's current account deficit reached this level was in 1991, the year when the country nearly defaulted on repaying its foreign debt.

For a long time conventional wisdom held that a current account deficit is a necessity for growing economies. But China showed that it is possible to sustain very high growth without running current account deficits, achieving trade surpluses and high domestic savings that resulted in a current account surplus. In India's case, both these factors are negative and hence there is a high current account deficit.

The current account deficit by itself is not a bad thing if it is used to build productive assets (e.g., roads, ports, electricity generation) that deliver long-term growth. Nevertheless, it is not clear that this is the case in India.

Shades of the 1997 Asian currency crisis are already visible. In the nineties, foreign investors poured money into several East Asian economies, chasing higher growth than was available in their home countries. They also felt secure in the knowledge that their investments would be safe from currency devaluations because the local governments ran balanced budgets and held large foreign exchange reserves. Although most countries ran large current account deficits, this was considered normal for growing and healthy economies. By the mid-90s, a large portion of this current account deficit started going into "poor quality" and speculative investments, especially in real estate. The crisis began in Thailand, where foreign investors started slowly pulling out in late 1996, and quickly turned into a deluge, resulting in massive currency devaluations and economic stagnation.

Although India's economy is different in both size and nature from those of East Asian countries, there are some worrying similarities, e.g., persistent current account deficits, short-term funds that are chasing high growth, and enormous speculation in real estate. There has been a spectacular rise in real estate prices during the past two years, especially in large metropolitan areas such as Delhi and Mumbai, where both residential and commercial property prices have increased by 50% or more.

This increases the risk that instead of building productive assets, the current account deficit will fund speculative investments and lead to a currency crisis when investors realize that the promised returns won't be there. This is exacerbated by the fact that the more volatile FII money (and not the more stable FDI) is funding the current account surplus.

This risk is also heightened by the fact that India's capital markets are very shallow and do not have the capacity to absorb even moderate external shocks. As discussed earlier in this article, in 2008 it took an outflow of only USD 13 billion for the Indian stock market to crash by over 50% and the Rupee to depreciate by 30%.

Oil Prices Continue to Spiral Upwards

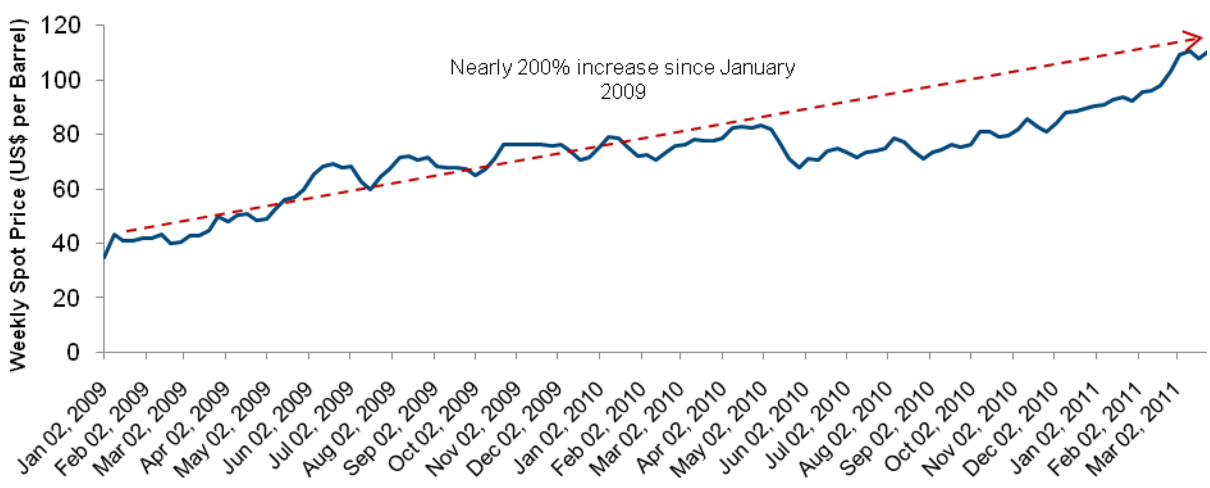
As developed economies move out of the slump caused by the financial crisis, the demand for oil has rebounded. This, compounded by the growth in emerging markets, is leading to an increase in oil consumption and has driven the rise in oil prices. A barrel of Brent (Crude) Oil was already trading at USD 90 in December 2010.

Since then, the countries in the Middle East have been embroiled in uprisings against incumbent governments. The turmoil has spread from Egypt to Yemen, Libya and Bahrain. The uncertain political environment in these countries, coupled with widespread fighting, has led to uncertainty about oil supply, driving prices even higher. The differences in oil supply and demand only add to the premium on crude, Brent was trading at USD 121 per barrel as of April 5, 2011.

Figure 8 below highlights the upward movement of oil prices. If the price rise continues, India will be in a difficult position, as it imports nearly two-thirds of its oil requirement, and the Indian Rupee will come under pressure.

Efforts to develop domestic fields to meet the oil and natural gas requirements have not done well. The recent round of oil well auctions by the government attracted limited interest from international oil companies. Only 74 bids were received for 33 of the 34 blocks on auction. This reflects either unrealistic terms set by the government or a lack of investor confidence, and is a huge setback, especially because it takes at least two years to organize a round of auctions and then a few more before any oil is produced. Thus India's reliance on expensive imported oil is likely to continue in the near and medium term. This leaves the economy exposed to the vagaries of volatile oil prices, specifically the sharp upward trends.

Figure 8: Oil Prices Rising Globally



Source: *U.S. Energy Information Administration (May 2011)*

Rebounding Global Economic Growth

According to forecasts by the International Monetary Fund (IMF), the global economy is improving. Due to the fragile economic situation in the advanced economies, investors are flocking to the more risky but faster growing markets, which are mainly located in emerging countries, but a positive change in the economic environment of the advanced (stable) economies could easily alter the direction of money flow.

The US is a potential rival for the money flowing into emerging markets including India. While FDI flows to India have declined in 2010, inflows to the US have increased by 43% during the same period. This is in spite of the fact that the country was badly hit by the economic crisis. Now that the saving rate is up and unemployment is gradually coming down, the US will become even more attractive to investors.

Conclusion

After studying the various demand and supply factors, we have arrived at three likely scenarios:

First Scenario – Rupee Depreciation

This scenario is likely to occur if oil prices continue to rise or if FII money “exits” because of a crisis of confidence. Based on past evidence, even a relatively orderly outflow of USD 15 billion of FII money over a year could result in the INR depreciating by 22–30%. This would imply an exchange rate in the range of INR 55–60 to USD 1. It could get even worse if the flight of capital were to take place over a shorter period, which would cause massive concern among businesses and the government, since it would imply a higher cost of petrol, diesel, and petroleum products in India, leading to even higher food prices and Consumer Price Index. The current account deficit would balloon and the rising inflation could create a vicious cycle.

Second Scenario – Rupee Appreciation

This scenario is likely to occur if the FII money continues to flow in and FDI levels improve. The stock markets will climb and there will be a rise in demand for INR. An appreciating Rupee will make imports cheaper and lead to better managed deficits and inflation. It must be pointed out that Rupee appreciation would erode India’s cost advantage in the export sector and negatively affect the booming ITES sector as well as the textile sector and this in turn would invite government intervention. This is what happened just before the onset of the 2008 financial crisis when the USD-INR touched 39 and the Indian government repeatedly intervened in the currency markets to halt the appreciation of the Rupee.

Third Scenario – Status Quo

This is the most benign scenario. The exchange rate continues to move in its current range and appreciates over the long term as the economy continues to develop and India strengthens its position in the global markets. The government’s efforts to improve agricultural infrastructure bear fruit in the longer term and inflation declines. The rate fluctuations do not cause any major disruption in the trade environment.

According to our analysis, during the next two years the probability of the first scenario (depreciation of Indian Rupee by 20%) is the highest (about 50%) while the other two scenarios have an equal probability of approximately 25% each. In other words, there will be pressure on the Rupee unless steps are taken to fix structural issues described in this article. The Indian government and RBI are well aware of this risk and are definitely hoping for the third scenario, in which India essentially grows its way out of trouble over a couple of decades and where they only have to intervene occasionally to smoothen out excess volatility. As Subir Gokarn, a deputy governor of RBI recently said, “Intervention is not costless, it simply transfers the cost from one constituency of the economy to another.”

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