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Views, Reflection and Erudition

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Foreign Exchange Risk Management

FEDERATION OF INDIAN CHAMBERS OF COMMERCE AND INDUSTRY

Industry's Voice for Policy Change

MCX Stock Exchange Limited

MCX-SX India's New Stock Exchange

"Application for National Membership of MCX-SX"

ABOUT MCX-SX:

MCX STOCK EXCHANGE (MCX-SX), India's New Stock Exchange, commenced operations in the Currency Futures Segment on October 2008 and currently provides trading facility in Currency Futures and Options. Trades on MCX-SX are cleared by MCX-SX Clearing Corporation Limited (MCX-SX CCL). The Exchange currently has 751 members participating from 734 towns and cities across India.

The Exchange has received permission from SEBI to trade in Equity, Futures and Options on Equity, Interest Rate Derivatives and Debt Segment and would commence operations after enrolment of members and completion of other compliances. The membership offer is for these segments. MCX-SX believes new opportunities will unfold for members and securities industry professionals as the capital market develops further. The exchange proposes to undertake capacity building for members to enable them to manage new opportunities.

1. MEMBERSHIP CATEGORIES:

A person can apply for any of the following membership categories subject to the terms and conditions and relevant eligibility criteria provided in the membership dossier. Potential members can apply for any membership category and be a Trading Member (TM)/ Self Clearing Member (SCM)/ Trading-cum-Clearing Member (TCM)/ Professional Clearing Member (PCM).

i. **Composite Members:** Includes segments referred above and is available to all eligible persons. MCX-SX has conceptualised an 'India Model' to harness the latent potential of domestic savings and reinforce it with institutional, FII and domestic investment. Accordingly two important types of membership are being introduced to create a deep, wide and liquid market and also achieve financial inclusion.

ii. **Professionally Qualified Members:** Includes segments as referred above and is meant only for professionals such as MBA/CA/CFA/ICWA/LLB/CS/BE/MBBS who are taking membership of a Stock Exchange for the first time.

Practicing career professionals with a background of capital market ecosystem such as investment banking, private equity, venture funds, market intermediation, banking, etc could benefit from this membership.

iii. **Rural Entrepreneur Members:** Includes segments as referred above and is meant for such persons who are located in sub-districts and talukas beyond the existing 2000 cities and towns where the capital market access is currently not available.

2. ELIGIBILITY CRITERIA:

Entities: The following entities are eligible to apply for membership, subject to the regulatory norms and related provisions-

i. Individual (sole proprietary firms)

ii. Registered Partnership Firms

iii. Corporate Bodies

iv. Banks and Financial Institutions, including their subsidiaries

MEMBERSHIP DETAILS:

Details of Net-worth, Fees and Deposits, and Admission Procedure information is provided in the Membership Dossier which can be collected from the Exchange or downloaded from: http://www.mcx-sx.com/membership.

Interested persons may obtain Application Form and other details either from Exchange website or Corporate office/ Regional offices. The duly filled in Application Form along with a demand draft for admission fees should reach the Exchange. Payments are to be made through demand draft, drawn in favour of 'MCX Stock Exchange Limited' payable at 'Mumbai'.

Head - Membership

MCX STOCK EXCHANGE LIMITED

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A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. FICCI draws its membership from the corporate sector, both private and public, including SMEs and MNCs; FICCI enjoys an indirect membership of over 2,50,000 companies from various regional chambers of commerce. FICCI provides a platform for sector specific consensus building and networking and as the first port of call for Indian industry and the international business community.

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Contents

Preface

FICCI's Financial Foresights is the flagship research digest of FICCI's Financial Sector Division. With this quarterly publication we aim to facilitate a comprehensive forum for dialogue between India Inc. and policy makers thereby providing necessary directions to all stakeholders including businesses and regulators. The issues discussed herein are invaluable inputs for FICCI's extensive network of industry members and stakeholders. The Q3 Issue of FY12-13 as such focuses on the important issue of Foreign Exchange Risk Management in India.

With the dismantling of trade barriers post economic liberalization in India, business houses started actively approaching foreign markets not only with their products but also as a source of capital and direct investment opportunities. India Inc has reached the scale and size of the global order and several Indian organizations are today world leaders in their respective sectors. Arriving on the global scenario subjects corporations to diversify revenue streams in various geographies, thus leading to invoicing in global currencies such as USD, GBP and EUR to name a few. Similarly, access to various borrowing mechanisms and debt markets had also led to increased non-INR exposure on books.

A broad based, active and liquid forex (Foreign Exchange) derivatives market thus becomes essential to provide businesses with a spectrum of hedging products for effectively managing their foreign exchange risk exposures. Although India has witnessed improvement in informational and operational efficiency of the foreign exchange market, this has happened at a halting pace.

It is in this context that through the voice of some of India's leading names in the financial sector, we will take a closer look at the current formative phase of development of the foreign exchange market and take stock of the initiatives taken by corporate enterprises in identifying and managing foreign exchange risk.

We look forward to your views and suggestions to help us improve the content of the digest and make it more relevant and informative.

Dr. A. Didar Singh
Secretary General
FICCI

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The Risk Management Imperative

Mr. V.K. Sharma[1]**,** *Executive Director, Reserve Bank of India*

1. What with the cataclysmic and apocalyptic events like the US downgrade and Eurozone sovereign debt crisis overwhelming the world and India, the last two years have been characterized by unprecedented and excessive volatility in asset prices and currency values, catapulting the critical imperative of Risk Management to the centre-stage like never before. Against a financial backdrop as somber, traumatic, portentous and sobering as this, FICCI's initiative in focusing attention on the risk management imperative has come not a day too soon !

2. However, if only to reinforce the context of this initiative, I cannot stress more the commonalities between the crisis of 2008-09 and the current one. Specifically, the rupee depreciated against the dollar by about 24% between March 2008 and March 2009 (Rs. 39.80 to Rs. 52.20) with the volatility doubling to about 12% (as measured by annualised standard deviation of daily percentage changes). And during the current crisis, the rupee depreciated by almost 18% in less than 6 months between August 5 and December 15, 2011, with the volatility almost doubling from about 5% to 12%. Equally deserving of the attention is the fact that since March 2010 to date, the

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[1] This article is an updated and revised version of the Keynote Address delivered by Mr. V.K. Sharma, Executive Director, Reserve Bank of India, at the Bangalore Chamber of Industry and Commerce, Bangalore, India, The views expressed are those of the author and not of the Reserve Bank of India.

Reserve Bank hiked key policy rates 13 times, raising the effective policy rate from 3.25%, (the effective rate then being the Reverse Repo Rate) to 8.5% (the effective rate currently being the Repo Rate), resulting in a cumulative tightening of 5.25% in a matter of a little over 1-1/2 years ! Equally significantly, global commodity prices have been just as volatile since the crisis of 2008; crude prices, after rising steeply to US $ 147 per barrel in July 2008 and then falling precipitously to $ 32 per barrel in December 2008, have risen from US $ 32 to around US $100 now ! The reason why I have broadened the canvas to also include interest rates and commodities is to approach the subject matter of Generic Financial Risk Management holistically, as it is not just currency risk alone, but interest rate and commodity price risks just as much, that represent significant sources of risk not just to businesses themselves but equally to financing banks and thus potentially to systemic financial stability !

3. In an increasingly globalised trade and investment environment, business and industry have inevitably to contend with, and manage, not just their normal core business risks, but also financial risks like foreign exchange, interest rate, and commodity price risks. While it will be presumptuous on my part to even contemplate, much less attempt, telling the target audience of this article how to manage their normal business risks, I do consider it my dharma to attempt shining light on financial risk management, comprising foreign exchange, interest rate and commodity price risks. Accordingly, I have crafted, and propose to deliver through this article, what I think, given my own intellectual sense of practice, a practical, nuts-and-bolts, and do-it-yourself tool-kit, elucidating the 'what' (i.e. what must be done), the 'why' (i.e. why it must be done), the 'how' (i.e. how it must be done), and the 'when' (i.e. when it must be done) of financial risk hedging, which in my reckoning is as close as, or, the closest, practice could get to theory.

4. Before I proceed further, I would like to put the subject matter of Financial Risk Management in appropriate perspective. Risk Management is not about eliminating , or which is the same thing as completely hedging out, risk but about first determining , like one's pain threshold, risk tolerance threshold and then aligning an entity's existing risk, be it currency, interest rate or commodity price risk, with its risk tolerance threshold. Having said that, it would also be in order to have a sense of how risk itself is defined and measured. Risk is uncertainty of future outcomes such as cash flows. In finance theory and practice, it is typically measured by annualized standard deviation of a time-series of percentage changes in asset prices. While courting financial risks in pursuit of financial return is the staple and dharma of banking and finance industry, it is not so for industrial and manufacturing businesses ! The staple and dharma of business and industry is courting their normal core business risks in pursuit of delivering a market-competitive stable return on equity to shareholders.

5. I turn now to the subject-matter proper of financial risk management. I propose to deal, in some detail, with the specifics of risk management strategies for hedging foreign exchange, interest rate and commodity price risks. I would very strongly encourage business and industry to invariably hedge their actual risk exposures without exception as a base-case strategy. To say the least, this is by far the most conservative and prudent strategy. Indeed, in the background of the measures announced by the Reserve Bank of India on December 15, 2011, withdrawal of the facility of cancelling and rebooking of forward contracts leaves no other option but to follow the base-case strategy. But as learned, and discerning, readers of this article will readily recognize, the excruciating and wrenching volatility, experienced recently, unquestionably attests to the credentials of such a base-case strategy of being fully hedged. Of course, it does mean that risk is being completely eliminated and, therefore, so is being financial return. But then, this is just as well because, as I said before, this is not the dharma of business and industry whose cardinal principle it must be to earn their market-competitive return on equity from their normal core business risks only to the complete exclusion of foreign exchange, interest rate and commodities price risks !

6. As regards forex risk exposure of business and industry, I would like to take readers of this article back in time to the late 1990s when the Indian corporate sector went in for large scale ECBs. These ECBs were

almost completely for domestic rupee expenditure and were mostly un-hedged and LIBOR-linked-floating-interest-rate based. Indeed, so also was the case with the corporates in Thailand and Indonesia which became repositories of unhedged currency and interest rate risk exposures creating credit risk for the domestic banks. The saving grace was that, unlike in East Asian countries, ECBs by corporates in India were subject to overall limits under Automatic and Approval routes. I am sure the readers would recall that such un-hedged and floating-rate-based foreign currency exposures culminated eventually into the now-all-too-familiar apocalyptic denouement, entailing forex losses in India and the East Asian Currency crisis in India's neighbourhood ! I would, therefore, very strongly commend that business and industry be not tempted and enticed by nominally low interest rates and invariably rigorously evaluate such foreign currency borrowing options, benchmarking them against the comparable rupee borrowings. Only if business and industry find the long-term foreign currency borrowing costs are lower, on a fully-hedged basis, than the comparable rupee borrowing costs, must they choose such borrowing options ! I also regret to have to say that the current popular, but uninformed and totally untenable, refrain has been that forward cover for foreign exchange for longer term such as five years, or so, is not available; what is available is out to one month, three months, six months and maximum one year and not beyond. But I would like to enlighten the discerning readers of this article that a long-term forward foreign exchange hedging solution can be easily customized by banks by recourse to what is known as rolling hedging strategy which simply involves simultaneously cancelling, and rebooking, a short-term forward exchange contract until the desired long-term maturity. Incidentally, such simultaneous cancellation

and rebooking of forward contracts for rollover is exempted from the RBI restrictions introduced on 15th December, 2011. Of course, precisely the same strategy can be replicated in the exchange-traded foreign currency futures markets as well. Contrary to the popular perception, this strategy is fairly simple and perfectly do-able and locks in the original starting spot exchange rate. What, in other words, this entirely unexceptionable, and highly desirable, strategy does is substitute volatility of the spot exchange rate with that of forward margins at each roll over date. It is empirically, and anecdotally, established that volatility of forward margins is far less onerous than that of the spot exchange rate. Therefore, I would very strongly encourage business and industry to routinely avail of this hedging solution both to cover forex risk of long-term imports and long-term foreign currency borrowings.

7. I turn next to the other very popular foreign currency funding option, namely, Foreign Currency Convertible Bonds (FCCBs). I must confess that I have been very intrigued by what I have read in business and finance newspapers. The sense that I got was that corporates use FCCBs to raise long-term fixed rate foreign currency funds hoping that overseas investors will exercise the option embedded in FCCBs and convert into equity ! And precisely for this reason, it has been noticed that corporates do not make provision of domestic rupee and foreign currency resources !! In fact, such basic motivation underlying the FCCB-based funding strategy is completely antithetical to both corporate finance theory and international practice and turns the entire rationale of such funding strategy on its head ! This is because the very raison d'être of FCCB funding option is to lower borrowing costs below that of an otherwise comparable plain- vanilla non-convertible foreign currency bond. The short point is that the FCCB borrower is baiting the overseas investor with an equity option kicker/appetizer, embedded in an otherwise comparable plain- vanilla non-convertible bond. Effectively, in this structure, overseas investor in FCCB purchases an embedded option and pays an option premium in the form of lower coupon on FCCB. I hardly need belabor the point that equity is always more expensive than debt capital of whatever kind, including even junk/ high-yield bonds ! So I would urge business and industry to fully provide domestic rupee/foreign currency resources to meet potential liability under FCCBs, rather than hope that FCCBs will be

converted which, in fact, if anything, can be the case of overseas investors, but certainly not, of issuers of FCCBs !

8. Although as serious as foreign exchange risk, interest rate risk has not compelled as much attention in the Indian debt market space. If only to have a sense of how significant, and serious, it can be, I invite attention to what I said about the key policy rates rising cumulatively by 5.25% since March 2010 to date ! Just like unhedged foreign currency exposure, long-term floating rate loans represent a source of significant risk not only to businesses themselves, but equally to financing banks as they transfer interest rate risk from lenders to borrowers, effectively substituting interest rate risk of lenders with potential credit risk in terms of creating potential non-performing loans ! At another level, as fixed rate loan has more certainty, and hence less risk, both for borrower and lender, it should be preferred both by borrowers and lenders alike. Thus, for interest rate risk management, the base-case, risk-neutral strategy, is invariably fixed rate long-term funding by corporates. Contextually, the current popular refrain in the policy debate is that absence of a competitive, liquid, deep and efficient corporate bond market has been the undoing of infrastructure financing which typically involves long-term fixed rate funding. And as to why banks cannot make long-term fixed rate infrastructure loans, the stock refrain is that this will create asset liability mismatch in banks' balance sheets as their liabilities are mostly short-term. Even then banks have a combined infrastructure loan portfolio of about Rs.6 trillion (US $ 110 bn), representing about 9% of the total bank assets in India of Rs.71 trillion (US $ 1.35 trillion) as of 31st March, 2011. As against this, corporate bond market is around Rs.9 trillion (US $ 170 bn). In this background, it is noteworthy that the Planning Commission have recently estimated infrastructure funding requirements, over the next 5 years, at close to Rs. 55 trillion. While prima facie this may seem a daunting and tall order, on a closer scrutiny, it turns out that it is not really so. Why I say this is because of the fact that bank assets have grown at a Compounded Annual Growth Rate (CAGR) of 20.5% during the last six years and real GDP has grown at a CAGR of 8.2% during the last seven years. Thus, it is readily seen that given total bank assets of Rs. 83 trillion as of 31st March, 2012, a CAGR of 20.5%, total bank assets will grow to Rs. 210 trillion over the next five years and assuming that, as against 10% of total bank assets now, banks can finance infrastructure upto 15% of total assets, they would easily be financing about Rs. 32 trillion in infrastructure loans. And further, assuming the current leverage in infrastructure firms of about 4 times, equity capital of about Rs.14 (55 ÷ 4) trillion will be required, leaving a gap of about Rs. 9 trillion which can easily be financed by corporate bond market, which also, assuming the current bond market to total bank assets ratio of 12.5%, will have grown to Rs. 26 trillion ! But this common and popular, but again uninformed and counter-intuitive, refrain that banks cannot fund long-term fixed rate infrastructure assets is untenable in that banks have not thought of using a very 'vibrant' Interest Rate Swap (IRS) market, where outstanding notional principal amounts aggregate Rs 60 trillion (US $ 1.14 trillion) (almost 82% of total banking assets in India as also of the nation's GDP) ! For banks can easily transform their short term liability into a long-term fixed rate one and thus create a synthetic long-term financing solution for long gestation infrastructure projects by doing the following :

(i) Receive fixed rate for one year and pay floating overnight rate in the IRS market. (Assuming banks' average liability is about one year)

(ii) Receive floating overnight rate and pay 5/10-year in IRS market. This effectively synthetically transforms a one-year floating rate liability of bank into a synthetic 5/10-year fixed rate liability. By loading margin over this rate, banks can make a 5/10-year fixed rate loan to an infrastructure company. And, significantly, considering that IRS trades about 140 to 150 basis points below sovereign yield, it is win-win for both banks and infrastructure companies who, even after bankers' spreads/ margins, will be able to borrow at around 5/10 year Govt. bond yield (currently 8.40%). That is as simple as it can get in terms of creating two-in-

one fixed-rate long-term market-based financing solutions for infrastructure.

Incidentally, another uninformed and untenable, refrain against use of IRS market is that this strategy entails 'basis' risk and 'liquidity' risk. It has been established that there is a statistically significant and positive correlation between one year IRS rate and one year bank deposit rate of 0.75 which will improve further to near perfect level of 0.90 to 1 once this strategy is actively engaged in. As regards 'liquidity' risk, banks have never so far experienced this and will not as their deposits have grown by 18%-plus every year. Indeed, large corporates, can themselves do it in-house by accessing the Rupee Interest Rate Swap Markets. As I said before, corporates must treat fixed rate long-term funding as the base-case, or risk-neutral, strategy. Considering that the five year OIS (Overnight Indexed Swap) have traded about 1% to 1.5% below the corresponding maturity government bond yields, corporates can, and should, swap their short-term floating-rate loans into fixed rate long-term loans and yet pick up the above negative yield spread, effectively borrowing long-term funds much more cheaply than perhaps would be the case if they were to borrow either from banks, or for that matter, from the corporate bond market. This is totally risk free arbitrage strategy corporates can, and must, engage in. Of course, when this starts getting done on a large scale as it indeed should, but has not so far happened, such negative yield spreads will automatically be arbitraged away. In fact, CFOs in corporates must routinely compare the two fixed rate long-term funding options to continually assess if they can borrow fixed rate long-term funds cheaply by borrowing in the short term market where they might have a comparative advantage. But the reverse viz., corporates borrowing fixed rate long-term and swapping

loan proceeds into overnight floating rate funds must be scrupulously avoided. Nothing supports this better than the recent period of tightening cycle which caused overnight floating rates to go up from 3.5% in March 2010 to 8.5% in October 2011 i.e., effective cumulative rise in overnight interest rates of 5% ! Having said that, it is both counter-intuitive, and disturbing, to note that some corporates have consistently been 'receiving fixed' and 'paying floating' ! What this means is that corporates have been speculating by courting interest rate risk by paying 'overnight floating rate' and receiving 'fixed rate'. Why I say this is for the reason that if corporates first borrowed fixed rate long-term funds and then swapped them into overnight floating rate, then they are exposed to interest rate risk because of 5% increase in interest rates. On the other hand, if they speculate in IRS market without any underlying exposure in the fixed rate long-term loans, then they will obviously be paying overnight and receiving OIS fixed rates and, therefore, they lose both on the floating rate side as also on the fixed rate side because during the same period, five year OIS rates also increased, though only, by 0.6%. We thus see if they have speculated in interest rate markets, rather than hedge, they have lost both ways any which way one looks at it ! What I have said about management of rupee interest rate risk applies just as much to floating rate Libor-linked long-term foreign currency loans as well and I would, therefore, strongly commend to business and industry to go in for interest rate swap-enabled fixed rate long-term financing both in domestic and foreign currencies. While still on the subject of Interest Rate Swaps denominated in Indian rupees, I would wish to address the question as to whether counterparties exist on the other side. My answer would be, yes they do, and, in fact, one too many ! This I say because the outstanding notional principal amount of IRS, as I said before, is a whopping Rs. 60 trillion (about 82% of total banking assets) (USD 1.14 trillion) and of which, disturbingly, only less than 2% is accounted for by the real sector i.e. business customers and the rest is accounted for by speculative trading of bank dealers, mostly foreign and private sector banks ! In other words, the remaining 98% interbank exposure of about Rs. 59 trillion represents super-abundant/ overwhelming potential supply of counterparties as the hugely negative spreads to G-Secs yields only mean fixed-rate receivers far exceed, and out-number, fixed-rate payers and, therefore, if corporates, as natural fixed-rate payers, as I said before, come in, that will only make the fixed-rate receivers too happy as the additional demand for paying fixed will only increase returns for fixed interest rate receivers in the IRS market. That this represents potentially a veritable systemic financial risk is another matter to which I have separately, more than once, cogently alluded, to no avail and, do again, in the following paragraph, hopefully, to some avail. This compares very poorly with outstanding OTC forward exchange contracts, where customer (real sector) foreign exchange contracts account for about 40% of the outstanding contracts ! This clearly highlights what is referred to as the 'financial sector – real sector imbalance', which was the cause of the last global financial crisis. In fact, the situation here in IRS segment, unlike forex OTC forward segment, is almost getting to the point where the IRS market, instead of being a means to an end of sub-serving the real sector is, to all intents and purposes, existing almost entirely for its own sake to almost complete exclusion of the needs of the real sector, creating a massive 'financial sector-real sector imbalance' !

Besides, the IRS market is fairly liquid, deep and efficient up to 5 year 5 year maturity, and with the right policy mix, it can easily get so upto 10 years and beyond. For internationally, IRS dealers typically, and routinely, make markets quoting IRS yields as a mark-up over corresponding maturity government bond yields. For example, if a counter-party wants to pay 10 year fixed, and receive overnight floating, in IRS market, a dealer will immediately hedge by shorting a 10 year government bond, and investing sale proceeds in overnight repo market. However, this cannot be done in India for want of short selling and HTM (Held to Maturity) and no MTM (Marked to Market) accounting. As regards mobilizing long-term players, like pension and insurance funds, into

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IRS market, they being "real money" investors, would not be a natural fit to the IRS market. Even if they do, to convert their short-term assets (of which they will have hardly any), into long-term ones, they will not take recourse to the IRS market for the simple reason that, as I also said before, they will be earning 'more' than 100 basis points 'less' than the corresponding maturity G-Secs. The stock refrain explaining this almost a permanent structural, though quirky, counter-intuitive, perverse and preposterous feature of the Indian IRS market is that arbitrage, involving receiving fixed on G-Secs, and paying fixed in IRS, is not possible because of the so-called 'basis risk'. But this is totally untenable for the simple reason that 'basis risk' applies just as much to 'hedging' as it does to arbitrage. In other words, 'basis risk' is "arbitrage-hedging" agnostic and, therefore, it inevitably follows that IRS market, unlike OTC forward exchange market, is being used out and out for speculation and not at all even for hedging and, therefore, incontrovertibly explains why less than 2% of the outstanding notional principal amount of the IRS alone is accounted for by the real sector i.e. business customers ! Besides, significantly, this preposterous feature of the Indian IRS market is anti-thetical to the "law of one price, OR, which is the same thing as no-arbitrage argument" ! This underlies the theory and practice of any derivatives pricing valuation. But in the case of the Indian IRS market, what holds instead is the "law of two prices, AND no-arbitrage argument" !! On this touch stone, the IRS market in India is then a 'non-derivative' !!Another dramatic, but realistic, interpretation of this phenomenon is that there is a super bubble inflating in the IRS market because typically zero to very tight/narrow, but still positive, spreads to risk free G-Secs imply a bubble and, therefore, huge negative spreads of riskier IRS bank dealers to risk free G-Secs imply a super bubble!! However, if banks and corporate practise what I have suggested, the Indian IRS market will turn into a 'derivative' !!

9. As regards commodity prices, business and industry can use international commodity exchanges to hedge dollar price risk, and domestic commodity exchanges to hedge rupee price risk. In fact, whenever some commodities, like crude oil, are in backwardation (the futures price being lower than the current spot price), in addition to buying price protection, business and industry also earn what is known as 'rolling', or 'convenience', yield.

10. By now, I am sure readers must have got a fairly good sense of the repertoire of derivatives to choose from in management of financial risks business and industry need to contend with day in and day out. However, as regards derivatives, I would like to quote Financial Times Columnist Wolfgang Munchau and Warren Buffett who famously described derivatives 'as probably the most dangerous financial products ever invented' and 'financial weapons of mass destruction', respectively. I would beg to differ because, to my mind, they are as strong statements as saying that cars and driving are most dangerous because they might

lead to accidents ! The problem is not so much with derivatives, or with cars, for that matter, but with how we use them !! In this context, as most readers are well aware, the instances of egregious forex losses of hundreds of crores to thousands of crores of rupees, more than offsetting, in some cases, the net profit from normal core businesses, are legion and the print media replete with them. These losses arose primarily because derivatives were used by business and industry not for hedging, but for speculative, purposes. As reported in the media, huge losses were sustained by business and industry on account of complex structured and synthetic, but so much less transparent, derivatives. In other words, business and industry must go in for plain vanilla derivatives which upfront, transparently, and explicitly, disclose cost of hedging strategy rather than arcane, complex, synthetic and structured derivatives which camouflage risk. As regards prudent use of derivatives, the touch-stone that business and industry can use with profit is that any derivatives strategy which promises reduction, or elimination, of hedging cost, or promises enhancing income, is intrinsically speculative and the one that involves incurring hedging cost and promises no income enhancing is intrinsically a hedging strategy. And as regards convincing businesses that over the long haul, the cost-benefit calculus of hedging is net positive, at its most basic and fundamental, it is as net positive as that of insurance for crop, earthquake, health, property, factory, fire, theft, machinery, accident, etc.

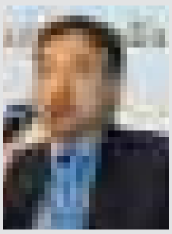
11. As non-financial businesses, unlike financial businesses like banks, have a typical leverage/Equity Multiplier of 2 to 3 times, their assets are funded to the extent of 50% to 33% by common equity shareholders and the remaining 50% to 67% by bank and bond holders; funded to the extent of 42% with bank debt and 8% with bond finance and 55% with bank debt and 12% with bond finance, respectively. It is significant to note that because of such typical corporate finance structure of non-financial businesses (very low leverage), globally there is no regulation and supervision of such non-financial businesses in the same sense as regulation and supervision of financial businesses like banks primarily because, unlike in the case of the former, any imprudent and risky behavior, on the part of the latter, represents significant risks to depositors and systemic financial stability. The point that I am making is that in the case of non-financial businesses, because of the typically low leverage, common equity holders take the bulk of risks and losses from their acts both of commission and omission. Unlike in the case of banks, where acts of commission of shareholders, directors, business managers are either proactively and preemptively front-stopped, or reactively back-stopped, by regulators/supervisors save the latter's own acts of omission themselves, there is no such supervisory/regulatory supervention in the case of non-financial businesses to make them practise the tool-kit delivered in this Speech, potentially culminating in the inevitable consequences of higher costs of both equity and debt capital, and in extreme cases, even insolvency/bankruptcy ! However, in India, since bank debt accounts for roughly up to 55% of the financing of assets of non-financial businesses, the paragraphs 102 and 103 of the RBI's Second Quarter Review of Monetary Policy 2011-12, which require that while extending fund based and non-fund based credit facilities to corporates, banks should rigorously evaluate the risks arising out of unhedged foreign currency exposure of the corporates and price them in the credit risk premium, will have the effect of delivering the required chastising and chastening, with banks pricing unhedged financial risk exposure of businesses into credit risk premium, provided they are effectively enforced in practice.

As regards commodity prices, business and industry can use international commodity exchanges to hedge dollar price risk, and domestic commodity exchanges to hedge rupee price risk

12. Significantly, businesses not practising the nuts-bolts-what-why-how-when regimen, commended in this article, does not make it theory any-more than does a patient not practising a medical practitioner's regimen make it theory. So if the patient does not practise the medical practitioner's regimen, he will pay the price with his deteriorating health and, in the extreme case, even with his life. So also will businesses, which do not practise the nuts-bolts-what-why-how-when regimen in this article, will pay the price with much higher costs of debt, and equity, capital and, in the extreme case, with insolvency/bankruptcy due to financial risks. Just as in the case of a patient, close relations and friends may try, and secure, regimen practice, so also in the case of non-financial businesses, shareholders, through their elected directors, independent directors and 'activist shareholders' on their boards, must do what they can to practise the nuts-bolts-what-why-how-when regimen in this article. As someone has said "once we make a choice, we choose its consequences as well". So, if businesses choose, whether because of enormous pressure from shareholders, or for that matter, because of heads-business-managers-win-and-tails-shareholders-

lose incentive structure, to "behave not rationally" and "not play for the long-term" and take completely avoidable financial risks, they choose the inevitable consequences as well of being backlashed, and chastised, by capital markets comprising equity and debt (both bond and bank debt markets). Such imprudent behaviour will, in equilibrium, result in capital markets exacting higher equity risk premium (lower share price) as well as higher credit risk premium (lower debt price). (The latter is indeed enjoined upon banks by paragraphs 102 and 103 of the RBI's Second Quarter Review of Monetary Policy of October 2011. These decade old instructions/ guidelines, originally issued in 2001, were, more or less, reiterated in 2003 and 2008 and, of course, again, in the Second Quarter Review of Monetary Policy, in October, 2011). Therefore, if they choose not to practise, one need not feel compunctious as they simply will also choose the inevitable consequences of their own choice which will entail much higher equity capital costs and borrowing costs in banking credit and bond markets, and, in the extreme case, insolvency/bankruptcy, thus, not maximizing, but minimizing, and even destroying, shareholder value and wealth.

13. To sum up, such is the insidiousness of risk that its under-pricing is perceived as low, or no risk, and, therefore, economic agents including banks, business and industry are caught unawares and unpleasantly surprised when risk suddenly eventuates. Therefore, to my mind, nothing conveys and expresses the Risk Management mantra more trenchantly than the following : "Just as you make friends when you don't need them, not when you need them and certainly not after you need them, so also you hedge when you don't need it, not when you need it and certainly not after you need it". Complete internalization and ingraining of this holistic risk hedging culture, attitude and temper by business and industry will, in equilibrium, reduce cost of both debt and equity capital by reducing volatility of ROE as markets will perceive them as much less risky and more safe ! If I have succeeded in alerting and sensitizing the learned and discerning readers to the Financial Risk Management imperative enough, I will feel vindicated that I have delivered on my dharma ! And, I have no doubt, if business and industry completely internalize and ingrain this mantra and dharma, they will exemplify the following fairy tale ending viz. "And they lived happily ever after" ! Finally, with the fond hope that I have not unwittingly come across as pontificating on the mantra and dharma of Financial Risk Management, I conclude my article and going forward wish business and industry a truly blissful Risk Management nirvana !



V.K. Sharma

Executive Director
Reserve Bank of India

A career central banker and a Member of the Markets Committee of Bank for International Settlements, Basel, Switzerland, Mr. Sharma retired as Executive Director, Reserve Bank of India (RBI), on 31st December, 2012. As Executive Director, Mr. Sharma was been responsible for 11 critical and sensitive Departments covering such diverse areas as Financial Markets, Foreign Exchange Reserves Management, Internal Debt Management, Human Resources, Administration, Currency Management, Rural Planning and Credit, Financial Inclusion, Customer Service, Premises and Regulation and Supervision of Urban Co-operative Banks.

A B.Sc. in Physics, Pure and Applied Mathematics and an M.Sc. in Physics, he holds an Advanced Studies Certificate in International Economic Policy Research from Kiel Institute of World Economics, Kiel, Germany and is recipient of the prestigious Lord Aldington Banking Research Fellowship and the first RBI Golden Jubilee scholarship for pursuing research and advanced studies abroad,

He has had excellent and versatile performance track-record with strong action, outcome, result and delivery orientation in policy making and execution.

Mr. Sharma has formidable credentials in Financial and Derivatives Analytics and Risk Management.

Several of his research papers, articles and speeches have been published in leading business news papers, prestigious journals and Bank for International Settlement (BIS) Reviews.

He has served as Chairman/Member/Director of several important Committees/ Working Groups/Governing Boards/Councils/Bank Boards and represented RBI in various prestigious national and international fora.

Role of Foreign Exchange Risk Management in Indian Corporate Performance

Mr. B. A. Prabhakar, *Chairman & Managing Director, Andhra Bank*

The Financial Stability Report published by Reserve Bank of India in December 2012 mentions "Excessive volatility in the exchange rate makes it difficult for economic agents to make optimal inter-temporal decisions. The economic agents, therefore, need to properly understand and measure the nature of currency risk embedded in their business and use appropriate derivative instruments to hedge their currency risks." ...."From the information submitted by banks, it is observed that a significant portion of foreign exchange exposures remained unhedged in the recent period. This is especially disquieting given that the exchange volatility has been higher in India in comparison to other emerging market currencies as well as those of advanced economies".

The Indian rupee has been highly volatile in the recent past driven by high trade deficit, unsustainable fiscal deficit and volatile Foreign Institutional Investors (FII) flows. As can be seen from the graph that the rupee depreciated by 15% from `49 to 1 USD to about `56 in June 2012, in a span of 3 months. However, the rupee appreciated from June level to about `52.90 in September 2012, for a short period, but moved up to approximately `55 in December 2012.

The economic liberalization has facilitated the introduction of derivatives based on interest rates and foreign exchange

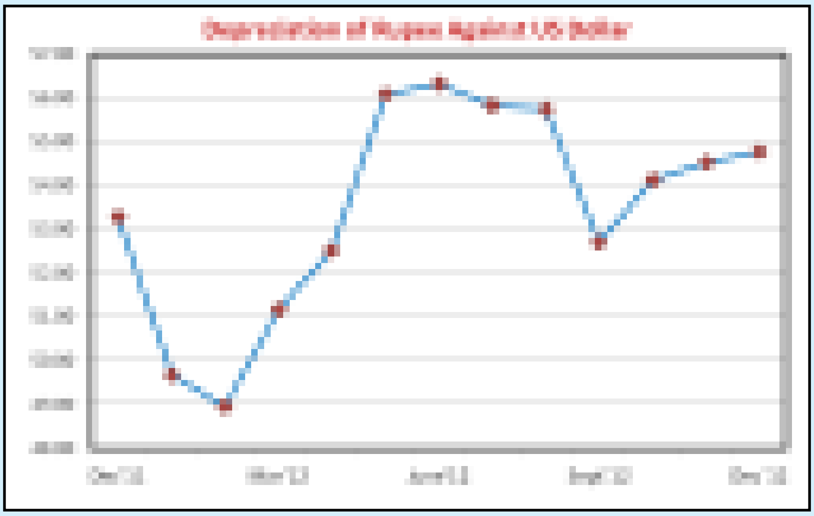
The steep volatility in the rupee is not a recent phenomenon. Such a trend could be observed from the exchange rate movements from 2005 to 2007 when the rupee appreciated from `44 level to `39 level. This again was short-lived as rupee depreciated continuously from December 2007 to March 2009, when the rupee touched `51.

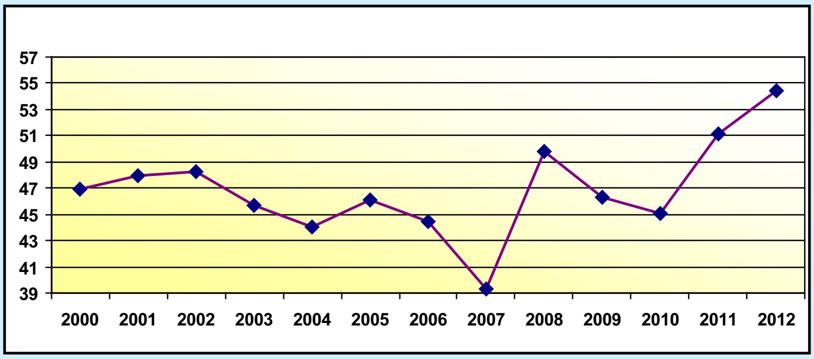
The volatility in rupee movement has brought in undue hardship to economic agents in terms of high import bills, increase in the effective cost of foreign currency borrowing, high Current Account deficit and also contributing for fuel inflation.

How are the various economic agents managing the forex risks arising out of volatile rupee movements? Exposure is one where the contracted or projected cash flow is uncertain at the moment and depends on the value the foreign exchange rates. Exposures arise in the course of imports, exports, borrowings or lending in foreign currency. The process of identifying risks faced by the firm and implementing the process of protection from these risks by financial or operational hedging is known as foreign exchange risk management. Risk management techniques vary with the type of exposure and term of exposure.

The economic liberalization has facilitated the introduction of derivatives based on interest rates and foreign exchange. However, the use of derivatives is still a highly regulated area due to partial convertibility of the rupee. The rational approach to managing the forex risks is to hedge the exposure through the appropriate hedging instruments like forwards, currency swaps and other derivative instruments. But let us look at how our corporates have managed the forex risks.

When the rupee appreciated during early 2007, and touched `39 in mid 2007, exporters rushed to book forward contracts selling their export proceeds of next 3 to 5 years, with the expectation that the rupee will continue to appreciate disregarding the fact that their cost of production was not indexed to foreign currency movements.





However, rupee started depreciating and by mid 2008, touched `50 level wiping out not only the gains seen in 2007 but breaking the earlier levels. Exporters who booked derivative transactions had to account for huge losses, which in some cases wiped out their networth. Some of these companies turned out to be NPA borrowers. Many of them questioned the wisdom of the bankers in selecting such instruments and accused them of misselling the derivatives.

We are now witnessing many Indian Corporates who have borrowed foreign currency loans - both short term and long term – FCCB etc., at attractive interest rates have kept their exposures unhedged ignoring the currency risks. The real cost of borrowings of such loans is not just the nominal rates but also the cost of hedging the borrowings for the entire tenor. It should be ensured that the profit & loss account of each year reflects the economic cost of borrowings and accounting fully for the risk. Failure to do so would result in highly volatile earnings of the company. To illustrate, if a company borrows $ 1 million for five years at 6 months LIBOR + 400 bps (4.50625), the `/$ rate on the date of borrowing is `55. The company accounts for interest equivalent of US$ 45062 each year in P&L account. If the rupee depreciates after two years to a level of `61, the company will have to account for the exchange loss of US$ 60000 in the year in which the depreciation occurs plus the nominal interest. This results in uneven accounting of the cost of borrowings.

The following table gives a list of companies who had to account for losses arising out of currency risks.

Companies incurred huge forex losses

No	Company	Forex Gain / Loss (`Million)	
		2007-08	2008-09 (Q1 to Q3)
1	JSW Steel Ltd	371	-8152
2	Jubilant Organosys Ltd	1040	-4132
3	Tata Motors Ltd	1778	-6326
4	Tata Steel Ltd	5973	-7756
5	Suzlon Energy Ltd	44	-4345

Source: CRISIL Research Report

A CRISIL Research analysis of the effect of the rupee's steep depreciation on select 42 Nifty companies revealed that, at an aggregate level, these companies reported foreign exchange losses of about `48 billion in Q2 of 2011-12, which was around 8 per cent of their total PBT of `572 billion. The foremost reason for these foreign exchange losses is the high level of foreign currency debt, which needs to be reported using the closing exchange rate. The cumulative foreign currency debt of these companies is estimated at `1.5 trillion, which is around 24 per cent of their total outstanding debt, as per the latest available company annual reports. The hedging policy of these companies also plays a role in determining their foreign exchange losses, as the derivative instruments are marked-to-market. (The Hindu – 27th December 2011)

It is in this background that RBI in its Financial Stability Report highlighted the systemic risks arising out of unhedged forex exposure. In the Second Quarter Review of Monetary Policy unveiled in the October 2012, the RBI instructed Banks to ensure that their borrowers have a Board approved policy on hedging currency exposures and that they are adhered scrupulously.

Role of the Boards in Forex Risk Management

Many Chief Financial Officers (CFO) are considering Corporate Treasury as profit centers and are indulging in speculative activities. It is time that CFOs understand the inherent risk and the Boards of these companies play a proactive role in having an appropriate hedging policy in place. The Audit Committee of the Boards should ensure implementation of these policies in letter and spirit.

It is very important for the Boards to take into account factors like size, leverage, liquidity and profitability of the company into consideration while framing the hedging policy. Companies with large size of balance sheet considered as more creditworthy counterparties for forward or swap transactions, have competitive advantage in terms of hedging charges.

Similarly, corporates with highly liquid assets or high profitability have less incentive to engage in hedging as they are exposed to a lower probability of financial distress. Contrary, corporates with high leverage have greater incentive to engage in hedging as it reduces the probability, and thus the expected cost of financial distress.

Role of Banks in Forex Risk Management

Banks have been playing a significant role by extending the required financial support to the corporates who are the backbone for economic development of the country. Of late, the needs of the corporate sector are ever increasing in the light of their global operations and they expect banks to provide advisory services on appropriate hedging strategies. Banks have a fiduciary role in advising the corporate with suitable hedging instruments after analyzing the risk profile of the company.

Unfortunately, it has been observed in the past that the banks have sold derivative products solely with a view to earn profits at the cost of the companies. It has been widely reported in 2007-08 that banks offered derivative products to the companies who did not understand the embedded risks of these products. Eventually this has led the corporates to book huge losses. In the process many corporates have taken the Banks to the courts and substantial bank funds are stuck in Non Performing Assets.

In the above backdrop, while appraising the credit requirements, Banks should factor the unhedged forex risks and the credit risk premium are fixed accordingly. The forex risks, if not addressed suitably by the corporates, may eventually lead to credit risk to the banks. Thus, it is also the responsibility of the banks to ensure that the borrowing companies should have a Board approved hedging policy in place and the policy guidelines are adhered to scrupulously.

Forex Risk Management-Accounting Standards

It is evident from the corporate history that businesses with superior governance practices generate better value to stakeholders. Conversely, the collapse of high profile companies demonstrates the fact that they failed to adopt prudent accounting and governance practices in their operations.

Accounting Standards-11 (AS-11) requires companies to create Mark-to-Market (MTM) provisions for their exposure to foreign currency loans. However, loans availed for working capital purposes alone would show up in the Profit & Loss account and those used for creating assets/capital expenditure would find place in the balance sheet. This standard enables the companies that have borrowed foreign currency loans to buy or create an asset to capitalize the exchange difference on forex loans to the cost of the asset instead of taking to Profit & Loss account. Though the extant guidelines provide relief to the companies who are creating assets by availing foreign currency loans, it is inviting debate especially in the rupee depreciation environment as it results in reporting of inflated profit figures by these companies. Therefore, it calls for immediate attention of the Regulator and other associated professional bodies to revisit the existing Accounting Standards for further improvement to ensure good corporate governance and to prevent potential systemic risk.

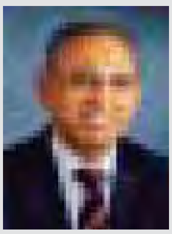
Way forward

The increased foreign trade has been necessitating the corporates to deal with multiple currencies which are fraught with currency risks on account volatile forex market and this trend is likely to stay in the ensuing years also. Thus, it is essential for corporates to implement systematic hedging action plan so that any adverse movements in currency rates will not cause pressure on their margins and profitability.

It is essential for corporates to implement systematic hedging action plan so that any adverse movements in currency rates will not cause pressure on their margins and profitability

The corporates can take best hedging decisions only when the risk managers acknowledge that market movements are unpredictable. However, a hedge should always seek to minimize risk but should not represent a gamble on the direction of market prices.

The adoption of proper hedging policy enables the corporates to optimize their resources and also facilitates them to focus on the core business for its competitive advantage. In this scenario, the Forex Risk Management policies of the corporates have to remain strong and have to be strictly adhered to protect the interests of all the stakeholders and in preventing system risks.



B A Prabhakar

Chairman & MD
Andhra Bank

Shri B A Prabhakar has been appointed as Chairman & Managing Director of Andhra Bank. He assumed office on 02.01.2012. Prior to joining in Andhra Bank, he was Executive Director of Bank of India from 15.10.2008 to 16.12.2011. Earlier Shri B A Prabhakar was General Manager of Bank of Baroda.

A Graduate in Commerce and Chartered Accountant, Sri B A Prabhakar started his banking career with Bank of Baroda in 1977 as a Direct Recruit Officer. He has wide exposure to areas of Corporate Credit, Forex/Treasury and International Banking with a stint in United Kingdom as General Manager and Chief Executive Officer of Bank of Baroda from April 2004 to January 2008. He also worked in Zambia during 1989 to 1993.

Government of India appointed Shri B A Prabhakar as Chairman of "Implementation and Monitoring Committee on Audit Systems & Model Audit Manual in Public Sector Banks".

Divining the Rupee's future

Mr. Saugata Bhattacharya and Mr. Abhishek Upadhyay
Senior Vice President and Senior Manager, Business and Economic Research, Axis Bank

There are known knowns; there are things we know that we know. There are known unknowns; that is to say there are things that, we now know we don't know. But there are also unknown unknowns – there are things we do not know we don't know

The basic point of Former US Secretary of Defence Donald Rumsfeld's oft quoted comment will resonate with forex dealers. Australian economist John Quiggin noted that "… the considerations he refers to provide the case for being very cautious in going to war". And for companies in India, the "fog of war" environment in forex markets will be an increasingly important part of their commercial activity, with "caution" the likely lodestone of approach.

Just as death and taxes are the two constants of life, forex markets have become the polar opposite in terms of volatility. Just when we were getting used to the Rupee at 44 to the US Dollar in July 2011, and fretting about the consequences of it headed towards 30, we were blindsided by a sudden reversal of trend with the Rupee dropping sharply at first, and then quite precipitously November onwards. We actually should not have been very surprised. Econ 101 taught us the "Covered Interest Parity (CIP)" theory of equilibrium exchange rates, which is a no-arbitrage condition under which investors are indifferent

Just as death and taxes are the two constants of life, forex markets have become the polar opposite in terms of volatility between interest rates on bank deposits in two countries. Simply put, this says that to make real returns in a high interest (and presumably high inflation economy) just as unattractive as in a low interest one, the exchange rate (in spot and forward markets) of the high interest rate must depreciate enough.

Be the reality as divergent from theory as it may, why has forex become so important for India? India's economy has very rapidly become more integrated with the global one (Chart 2). If one adds all the foreign flows into and out of India, both current and capital account, the sum has increased from 50 percent of GDP in 2001-02 to 116 percent in 2008-09. Of course, this ratio had dipped to 99 percent in the aftermath of the financial crisis, but has again gone up to 110 percent in 2011-12. We get impacted through multiple channels: both exports and trade finance, external commercial borrowings, portfolio flows, remittances, and others. Exports have become a fairly important component of India's economic activity. India's (merchandise and services trade) now account for 24 percent of GDP, while that of China (which we instinctively believe is much more trade dependent) is not much higher at 33 percent.

This article focuses on the USD INR pair, being the most important among the increasingly large basket of traded currencies in India. Many of the readers are also likely to have to take a view on other currencies, major or minor, depending on the requirements of their transactions, but the directions of movement will be determined to a large extent by those of the majors. How has India done on the forex front? The Rupee has remained an underperformer for much of 2012 compared to our EM peers, reflecting the underlying imbalances of external demand (see Chart 1).

What were the main drivers for forex developments in the past couple of years? Table 1 shows the comparative standing of India's macro fundamentals relative to a selection of our competitors for capital inflows. While India has certainly outperformed on growth, the increasing vulnerability of its twin deficits – fiscal and current accounts – relative to our peers coincided with global developments (Europe's sovereign debt woes erupted during this period)

What do the stars foretell on forex? If, as the joke goes, "the only function of economic forecasting is to make astrologers look respectable", currency forecasting is orders of magnitude riskier. We can but talk of principles and assign probabilities to potential outcomes. The task is now made all the more onerous, since investor sentiment will play a major role, in the short term dominating economic fundamentals, and global capital flows have increased in the past few months, as a global "risk-on" characteristics get under way. As the RBI describes it, the economy is at a "tipping point", and can "flip either way" depending on policy reforms and implementation of de-bottlenecking measures. There are broadly two, interrelated drivers of the Rupee: (a) balance of payments flows and (b) movements of the US Dollar versus other major currencies. The former is the dominating factor.

Before we touch on the fundamental drivers of the Rupee, is the Rupee under- or over-valued, and will there be a reversion to the mean; in other words is there an "equilibrium" value to which the Rupee will revert if economic conditions are stable? There is little clarity. The standard gauge for determining is "equilibrium" is the Real Effective Exchange Rate (REER), based on the CIP theory mentioned earlier (Chart 3). This needs to be interpreted with caution, since the choice of the reference base period tends to bias the signal. In addition, the period over which the reversion to the mean happens is prolonged and uneven. With these caveats, it is evident from Chart 3 that the Rupee looks to be close to some notion of "average". However, there are two critical assumptions underlying the CIP theory: (a) capital mobility and (b) substitutability of domestic and foreign assets, including transactions costs. These imperfections create the potential of currencies diverging from presumed, notional equilibria over long time periods.

Coming back to the fundamentals, India's balance of payments is likely to improve in 2013-14, both via a stable Current Account Deficit (CAD) and higher capital flows. Both FY12 and FY13 have (or will likely have) experienced negative balance of payments flows. The current account, in particular,

One of the factors which determine the USD INR is the movement of the USD against the global major (see Chart 4). A risk on environment usually means funds exiting US Treasuries and seeking risk assets. While there is a likelihood of volatility in the USD EUR, there is little doubt that the USD will weaken against Emerging Market currencies, including the INR. While this is good for the Rupee, it also unfortunately means that prices of many global commodities (particularly crude oil), which are denominated in USD, will tend to increase. This adversely affects India's merchandise trade deficit, and tends to neutralize some of the gains in the currency.

So what are the chances of risk-on environment emerging? As of now, the global economy looks as if the worst in terms of catastrophic volatility is behind us. Growth in the developed markets will be weak, as they go through the deleveraging process and credit growth remains subdued. This will inevitably lead to a capital exodus to faster growing emerging markets. If India is perceived to be a good risk-reward bet, it will attract significant inflows.

In conclusion, the Rupee is likely to remain quite volatile. The direction can flip any way, depending on the way policy changes evolve. The biggest event risk, of course, is the Union Budget, to presented at end-February, which will define the trajectory of the Rupee. India's growth is too strong an attraction for the vast pools of global capital in quest of returns. Given the direction of reforms initiated by the Government, there is a strong chance of the RBI reciprocating by easing monetary policy, which will be growth positive.

India's growth is too strong an attraction for the vast pools of global capital in quest of returns

Chart 1: Comparative performance of Rupee and other EM currencies

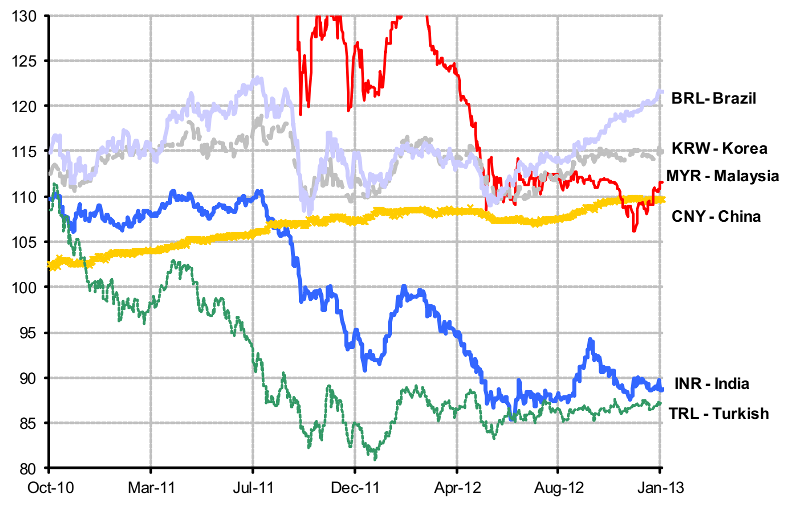


Chart 2: India's integration with the global economy

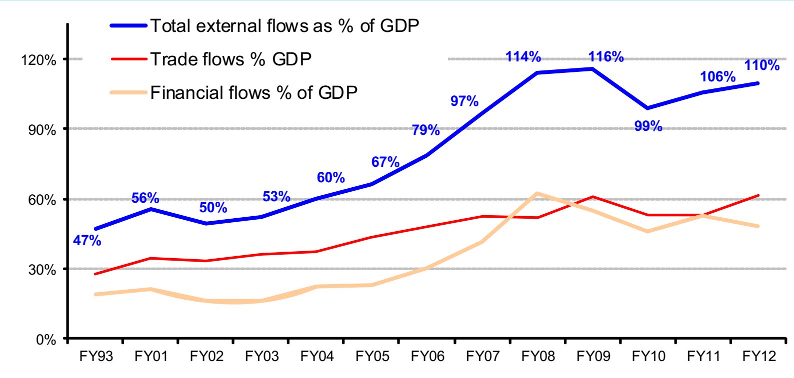
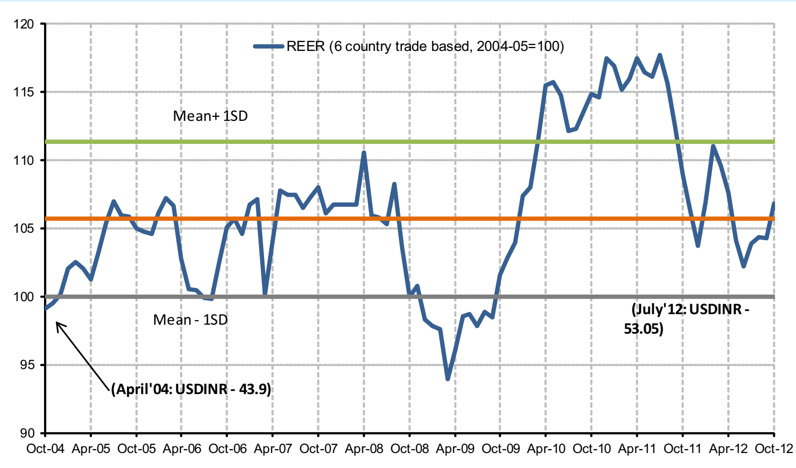


Chart 3: Real Effective Exchange Rate (REER) of INR



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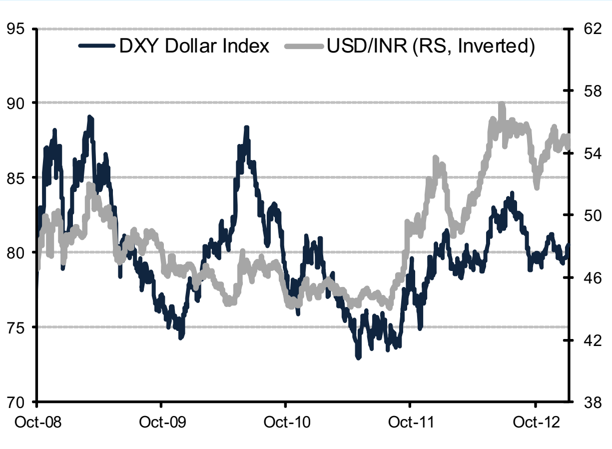
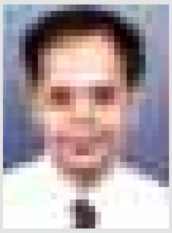


Table 1

	GDP yoy%	Inflation yoy%	Fiscal balance as % of GDP	CAD as a % of GDP	Govt debt as % of GDP
Russia	2.9	10.0	0.7	5.3	97.6
Brazil	4.2	5.2	-2.5	-1.5	65.4
India	8.1	9.2	-7.8	-2.3	72.5
S.Africa	2.7	7.0	-2.7	-4.9	52.0
Mexico	1.5	4.4	-2.9	-0.8	42.4
Turkey	3.6	8.1	-2.5	-6.0	
Korea	3.5	3.4	1.6	2.3	32.4
China	10.5	3.7	-1.2	6.5	22.7
US	0.6	2.2	-8.5	-3.8	86.9
UK	0.1	3.2	-7.3	-2.1	64.5
Japan	-0.1	-0.2	-7.2	3.3	206.0

The views are the authors' own and do not necessarily reflect those of the institution to which they are affiliated.



Saugata Bhattacharya
Senior Vice President and Chief Economist at Axis Bank

Mr. Saugata Bhattacharya is Senior Vice President and Chief Economist at Axis Bank..

He was a member of the RBI's Working Group on Operating Procedures of Monetary Policy and the Finance Ministry Sub-Group on Estimating Foreign Savings for the Approach Paper for the 12th Five Year Plan (2011).

He was previously with Unilever in India and with Infrastructure Development Finance Company (IDFC). He was educated at the Delhi School of Economics and Oxford University. He is a columnist for the Financial Express and is on the Board of India Today Economists (BITE).

Abhishek Upadhyay
Senior Manager and Economist, Axis Bank

Mr. Abhishek Upadhyay is a Senior Manager and Economist at Axis Bank, India. He earned his Masters in Business Economics at the University of Delhi and was previously employed with the Global Markets research team at ICICI Bank, India. He has also worked as a Senior Researcher at the Institute for Indian Economic Studies, Tokyo, Japan

The macroeconomics of managing the rupee

Mr. Indranil Sen Gupta, *India Economist, Bank of America Merrill Lynch*

We believe that the macro management of India's rupee hinges on maintaining sufficient forex reserves and keeping external debt relatively low. After all, India runs a large current account deficit that has to be funded by capital inflows. Given the fluctuations in capital flows in our uncertain world, it is critical to maintain sufficient forex reserves to fund any sudden capital outflow. In recent years, the import cover (ie, months of imports that the RBI's FX reserves can fund) has halved to 7 months – last seen in 1996 - from 14 months in 2008. This has resulted in a sharp depreciation of the Indian rupee. In response, we expect the RBI to recoup FX reserves to stabilize the INR in the coming 1-2 years. In our view, the INR will not stabilize till the RBI rebuilds FX reserves sufficiently to assuage investor confidence.

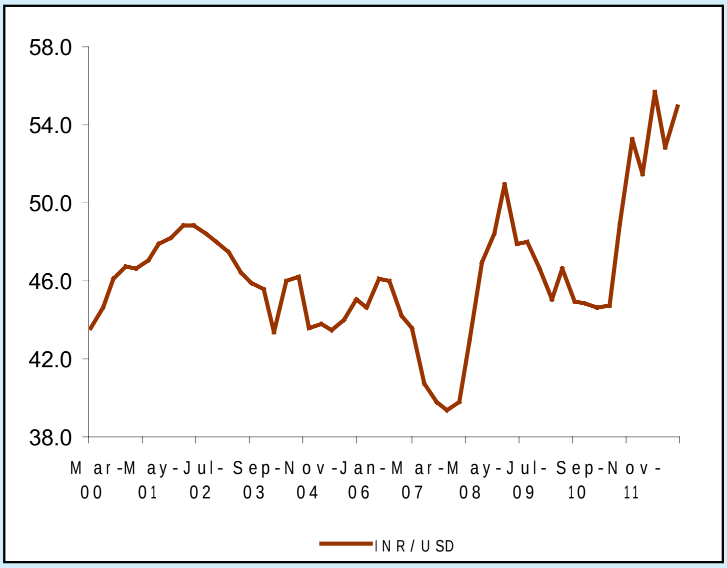
Three phases of RBI policy

The RBI's FX policy can be broken into three phases: nimble 2-way operations to build fx reserves even at the cost of a relatively weak INR (till 2004); sustained fx accumulation to prevent undue appreciation (2004-07); and a preference for appreciation to fight imported inflation even at the cost of building fx reserves

(2009-11). This, in turn, has pulled the import cover down to the 7 months last seen in the mid-1990s. As a result, the RBI will likely need to focus back on rebuilding FX reserves like the late 1990s.

INR will not stabilize till the RBI rebuilds FX reserves sufficiently to assuage investor confidence

Chart 1: Forex reserve management key to stabilize Rupee



Till 2004: Buying FX to build reserves

We expect the RBI to revert to the pre-2004 practice of buying as much FX as possible during periods of capital inflows and selling as little as possible during capital outflows. In the 1990s, the RBI used to build FX reserves as insurance cover to protect the balance of payments from a 1991-type crisis. Governor Bimal Jalan and Deputy Governor Reddy would buy as much FX as possible during capital inflows and sell as little as they could during capital outflows. They also floated the 5-year Resurgent India Bonds in 1998 after the Asian crisis and India Millennium Deposits in 2001 after the dotcom bust to raise US$5bn each. As these guerilla type tactics built up FX reserves, improved investor confidence led to capital inflows and by extension, appreciation.

2005-07: Buying FX to stem appreciation

The RBI's exchange rate policy shifted gears by the mid-2000s. Surplus capital inflows, attracted by the discovery of the India growth story, began to push up the INR. This had allowed Gov Reddy to amass US$113bn to prevent undue INR appreciation. The situation changed dramatically after the Lehman crisis when the RBI had to sell US$30bn to fight contagion. Capital outflows began to pull down the INR. In response, the RBI had to sell FX to prevent a run on the INR in 2008 and end-2011. We do not see a quick return to the easy global liquidity years of 2005-07.

2009-11: Strong INR at cost of FX reserves

During the period of 2009-11 ample FX reserves prevented any questions about their adequacy. This provided Gov Subbarao the scope to appreciate the INR in 2H09-1H11 to fight "imported" inflation even at the cost of not buying FX reserves. This, in turn, has pulled down the import cover down to 1990s levels. Just as importantly, foreign institutional investor (FII) investment in debt has climbed to US$40+bn from hardly US$5bn in 2008. It is thus only natural that the RBI's exchange rate policy will have to revert to 1990s mode of rebuilding FX reserves to comfort investor confidence before the INR can appreciate.

Cyclically high current account deficit remains a challenge

A major challenge will be a cyclically high current account deficit (Table 1). This largely reflects a coupling of low global growth and high global liquidity. India sees a double whammy because its key exports - especially, engineering exports - are hurt by poor growth. At the same time, oil imports have gone up with high oil prices jumping on easy liquidity. We do not expect the current account deficit to narrow to our estimated sustainable 2.5% of GDP till 2015 when US economists expect growth to revive sufficiently for the Fed to start to hike rates. It is for this reason we expect the

Table 1: Cyclically high current account deficit to persist

Item	FY10	FY11	FY12	FY13	Q2 FY12	Q2 FY13
Current Account	-38.4	-46.0	-78.2	-75.5	-18.9	-22.3
% of GDP	-2.8	-2.7	-4.2	-4.1	-4.2	-5.4
Trade balance	-118.4	-130.6	-189.8	-180.5	-44.5	-48.3
- Exports	182.2	250.6	309.8	313.0	79.6	69.8
- Imports	300.6	381.2	499.6	493.5	124.1	118.2
o/w Oil imports	87.1	106.1	155.6	154.0		
Invisibles	80.0	84.6	111.6	105.0	25.6	15.6
o/w income from forex reserve	5.9	7.0	7.0	7.0		
Capital Account	52.7	62.1	67.8	71.0	19.6	23.9
Foreign investment	50.4	39.7	39.2	36.0	5.3	16.6
- FDI	18.0	9.4	22.1	18.0	6.5	8.9
- FII+	32.4	30.3	17.2	18.0	-1.2	7.7
Banking capital	2.1	5.0	16.2	16.0	7.0	5.5
- NRI deposits	2.9	3.2	11.9	12.0	2.8	2.8
Short term credit	7.6	11.0	6.7	12.0	2.9	4.1
ECBs	2.8	12.5	10.3	5.0	5.3	1.2
External assistance	2.9	4.9	2.3	2.0	0.3	0.1
Others	-13.0	-11.0	-6.9	0.0	-1.3	-3.6
Overall balance	14.3	16.1	-10.4	-4.5	0.3	0.5
Memo						
RBI's forex intervention	-2.7	1.7	-20.1	-13.5		

Source: RBI

INR to rule structurally weak for the next 2-3 years.

Higher FX reserves, stronger INR

We do not expect the FX market to get bullish on INR until the RBI has recouped FX reserves. After all, the RBI's external debt indicators are beginning to lag BRIC levels. The RBI will need to buy US$90bn if it is to replenish the import cover to even 9 months. Just as importantly, the FX market will also fear that the INR may see disproportionate losses in case the US Dollar shoots up in risk off. Table 2 below shows that the RBI's external indicators are beginning to lag BRIC levels. Against this backdrop, we expect the RBI to:

- buy FX/retire forwards (of US$14bn) if the INR stabilizes at Rs52/USD levels with the US Dollar settling at 1.30/euro, and
- Defend the INR at Rs56/USD levels if the USD appreciates to 1.20s/USD in a bout of risk-off.

Chart 2: Import cover lowest since FY96

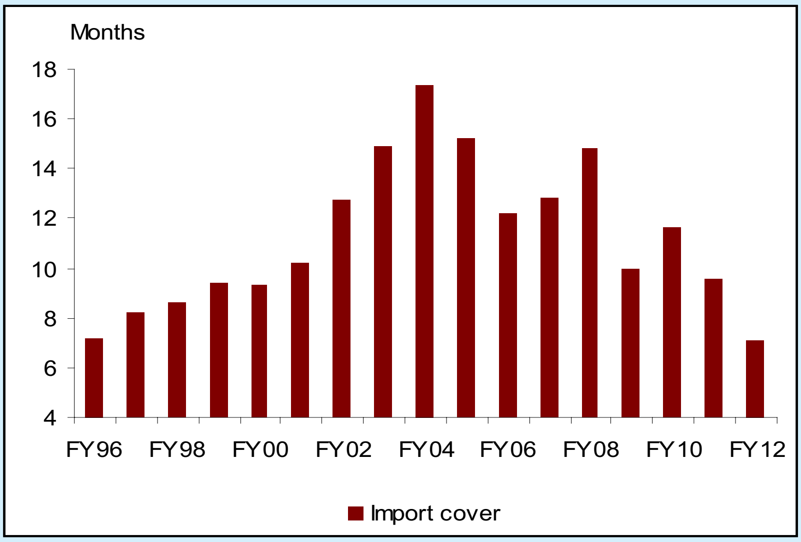


Table 2: India's external indicators are trailing BRIC levels

	Pre-Crisis			Crisis			Current		
	FX reserves (as % of GDP)	Import cover	FX reserves/ Short-term EXD	FX reserves (as % of GDP)	Import cover	FX reserves/ Short-term EXD	FX reserves (as % of GDP)	Import cover	FX reserves/ Short-term EXD
Brazil	13.2	17.9	2.9	14.7	22.4	3.0	16.0	17.9	3.0
Russia	36.7	25.7	4.9	35.9	27.5	6.6	26.0	17.3	7.4
India	25.0	14.4	3.9	21.5	11.1	2.7	15.9	7.1	2.1
China	43.7	20.3	12.5	48.1	30.2	15.9	40.7	21.4	7.6

Higher nostro balances can fund US$5-8bn FX intervention

Can the RBI really buy FX now without disrupting the FX market? Yes, as high banks' nostro FX balances, at a comfortable US$20+bn (inclusive of forwards), should cushion the impact of the RBI's FX purchases to some extent. Secondly, the current account deficit is peaking off at about 4% of GDP. Finally, the bunching of bank and corporate FX payments of US$6.5bn due in September-0ctober are now behind us.

The Rupee's Dilemma

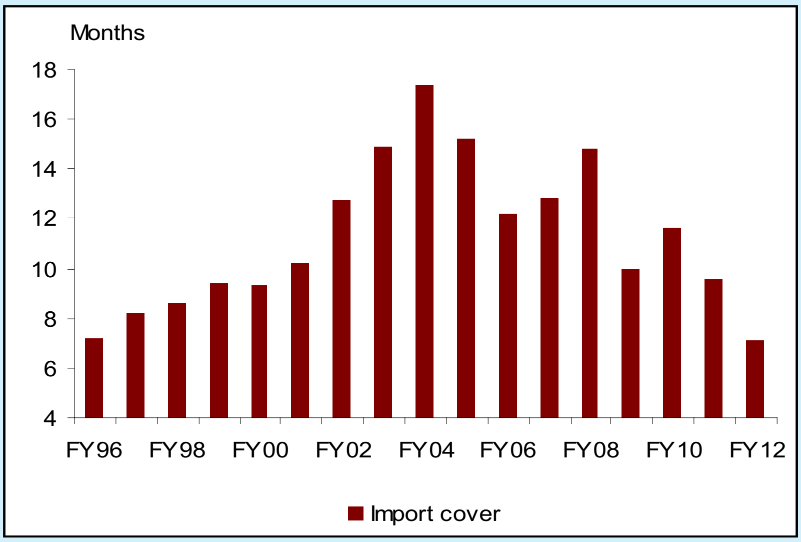
We are seeing a classic Prisoner's Dilemma-type game in the Indian FX market in which the worst outcome of weak INR and lower FX reserves is playing out. In our view, the only way out is for the RBI to buy FX to provide the market the comfort that it can fend off contagion.

1. RBI buys FX, market buys INR: We think the best solution surely will be for the RBI to accumulate FX and the FX market to buy INR. The RBI should then achieve its twin objectives of stabilizing the FX market and reducing 'imported' inflation pressures. The FX market could easily make 5-10% and its gains would be relatively better protected if the RBI is in a stronger position to protect the INR from contagion. The INR did indeed see such a happy coupling of a rising INR real effective exchange rate (REER) and FX reserve accumulation in the 2000s.

2. RBI doesn't buy FX, market sells INR: What is unfortunately happening now is precisely the reverse. Not only has the RBI not been able to buy FX, but it has actually had to sell US$14bn

We think the best solution surely will be for the RBI to accumulate FX and the FX market to buy INR. The RBI should then achieve its twin objectives of stabilizing the FX market and reducing 'imported' inflation pressures

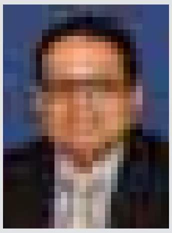
Chart 2: Import cover lowest since FY96



forward. Barring occasional bouts of optimism, most of which have ended in grief, the FX market has sold the INR for the large part since end-2011. If this continues, the INR would become a story of lower tops and deeper bottoms.

3. RBI buys FX, market sells INR: So, why doesn't the RBI buy FX to comfort the market? Because we think that the market may sell INR due to a FX shortage and further fuel inflationary pressures. In September-November 2011, the steep 13.4% INR depreciation was, after all, aggravated by payment of bunched up dues of about US$5bn to Iran for oil imports. A10% depreciation typically translates into 100bp of inflation.

4. RBI doesn't buy FX, market buys INR: Why doesn't the market buy INR to reassure the RBI? Because it likely believes that bullish INR trades would get stopped out if the RBI really starts buying. And if it doesn't recoup FX reserves, the INR could well see disproportionately large losses than other currencies in case the USD shoots up in a sudden risk-off. After all, the INR has depreciated 19.3% - second only to Brazil - since September 2011.



Sen Gupta, Indranil
Economist – India

Indranil Sen Gupta joined Bank of America Merrill Lynch's Asia Pacific Economics team as India economist in July 2007.

Indranil earlier served the Reserve Bank of India as a staff economist for a decade, analyzing monetary conditions and forecasting inflation. He was also co-convenor of its Advisory Group on Insurance Regulation.

Indranil holds a Master's degree in Economics from New Delhi's Jawaharlal Nehru University. He is based in Mumbai.

Foreign Exchange Risk Management

Mr. Vipul Chandra, *Managing Director, Corporate Sales & Structuring , South Asia Markets*

Over the last few years, importance of Foreign Exchange Risk Management for any corporate operating in India or elsewhere has been rising. One of the primary reasons for the same is an increase in the frequency and magnitude of economic crises that hit the world and drive up the volatility in FX markets.

The frequency of financial crises has increased in recent years. Every time a crisis hits the FX markets, the markets tend to get driven by events rather than fundamentals for a period of time. This makes it extremely difficult for anyone to predict the FX market movements or even have a view on the same.

Asian Companies have been severely impacted by this increased volatility in FX Markets.In some cases the impact being as high as 50% of Net income. This impact clearly brings out the importance of managing this financial risk for companies given that most companies in India operate with EBITDA margins of about 10-20% and we have seen FX market swings of similar magnitude which can wipe out the margins for these companies.

The picture below shows a variety of risks faced by a corporate in the course of its business. Some are internal and some external. A corporate is actually in the business of taking some risks that it may be more competent to manage eg. business risks, strategic risks, operational risks etc. The process of risk management starts with understanding the interplay between these various risks

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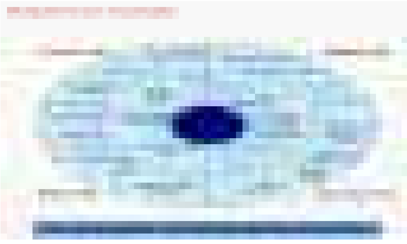


and accepting the fact that risks are not really eliminated but just transformed from one form to another using certain hedge instruments.

Interplay between Financial and Business risks: Typically a corporate is competing with many peers (both domestic and international) in its line of business. Any FX hedges taken by it have to start with a projection of its expected FX exposures into the future. These projections are themselves based upon certain assumptions about the state of its business performance in future. A decision taken by the corporate to hedge all of its FX exposures for next 2 years could leave it in an under/over hedged position depending on how its business actually performs v/s the projections. This under/over hedging could itself pose risks to the corporate. In other words, managing the FX risks, actually transformed the risks into a business risk. If a company is very competent in managing its business risks and very uncomfortable in managing FX risks, it may decide to follow the above strategy.Most companies so far have been approaching FX risk management as a view based approach i.e. taking hedges when their view on market indicates that the market could move against their underlying exposure. This strategy may work in a stable market environment but in an event driven market environment, is likely to be quite un-predictable and hence risky. Hence, for most companies it would be more prudent to follow a more scientific and systematic approach. We present below one such approach that is widely used by many large corporates.

Risk Management Process

This can be divided into 5 main steps as illustrated in the figure to the right.

1. Risk Identification : This is the most important step in the process. The corporate has to start by listing out the various risks faced by it and also understand the interplay between its underlying business dynamics and its financial risks. It has to look at hidden FX risks eg. Competition from imported goods (creates linkages between its selling price and FX rates), reliability of its business cash flow forecasts, possible technology changes, pricing power (ability to pass on price increases to customers or susceptibility to demands for price cuts by customers in case of a favorable market move) etc. If it has exposures to multiple market factors like commodities, interest rates, FX etc then it is also important to look at correlations between them.

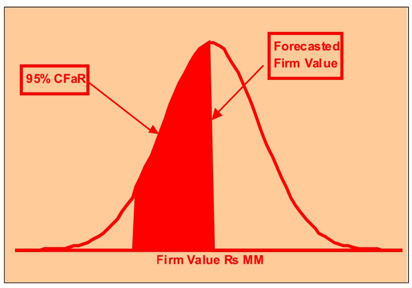
At this stage, it has to also decide on the hedging horizon it is going to operate with i.e. what would be the time frame basis which it will take its risk management decisions. This is again linked to the underlying business cycle. Over a period of time businesses can adapt to changing external environment, hence it is important for the corporate to evaluate its underlying business's adaptability time frame. If the corporate has the ability to adjust its prices every six months, then it needs to manage its risks for 6 months horizon. On the other hand if a corporate is in an industry that operates on long term commitments, its hedging horizon has to be necessarily longer. In addition, the fact that a corporate is a going concern and a partial hedge can always smoothen out the adaptation process. This also needs to be taken into consideration. For most manufacturing companies thus, a 2-3y hedging horizon would typically work.

2. Risk Quantification: The next step after Risk identification is to quantify the risk into a more objectively measurable and easily understood form. This enables the company management to have a common language between finance and business to discuss and understand risks as well as facilitate risk management decision making by the board. Depending upon the nature and complexity of the corporate's exposure and its size it can choose to use one of the below 3 methods for risk quantification:

a. Factor Sensitivity Approach: For a one unit change in the FX rate, what is the change in the EBITDA for the corporate. This approach is good for quantifying risk exposure to a single market factor or a group of independent market factors however it does not take into account any correlations and also the likelihood of such a move.

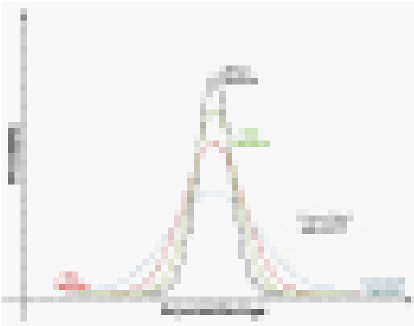
b. Scenario building: This approach involves drawing up a few plausible scenarios of market environment and then quantifying the impact on EBITDA. However the probability of any of the scenarios happening is again a view on markets.

c. CFaR or EaR approach: Using a Monte Carlo simulation to simulate all the market factors the company is exposed to (taking into account their correlations) over the hedge horizon and then quantifying the 95% confidence level (this could also be 99% or 90%) Earnings at Risk (EaR) or Cash Flow at Risk (CFaR). This approach helps



quantify the risks faced by the company into a single number that is easy to understand and manage. However given that it is a statistical measure, this leaves open the risk that at least 5% of the times the risk could be higher than predicted. This has to be taken into account in the next step when formulating the risk strategy.

3. Setting Risk Strategy: At this stage it is important for the company's board to decide on the risk strategy i.e. how much FX risk they are comfortable with (keeping in mind that any steps to mitigate risk also means giving up the opportunity to benefit from a favorable market move). It is important for the board to realize that a hedge transaction, if it is a proper hedge i.e. is offsetting an existing risk position, can never make or lose money or in other words a hedge transaction cannot be evaluated in isolation and needs to be evaluated in the context of the overall risk position of the company to see whether it has managed to achieve the risk mitigation objective. However the trade-off between Risk and opportunity is not evenly balanced eg. If a company is operating on an EBITDA margin of 15% and its EaR over a 1y period comes out to be 30% by the above measure then it is exposed to the risk of being wiped out. Hence for this company, reducing its exposure to FX is more



important than looking at the possible upside that may come about in case the market moves in its favor.

This effectively defines the Risk Capacity of the corporate i.e. a level of EaR it cannot ever exceed no matter the foregone opportunity.

However given that there could be 5% of cases where the EaR could exceed the estimated number, the board may choose to define a tighter band which we call as Risk Tolerance. This would be the target set for the corporate treasurer to achieve. He/ She in turn could set narrower hedge objectives for managing on a day to day basis. This mechanism for defining a risk strategy is explained in the figure below.

4. Hedging Strategy and Alternatives evaluation: Once the target is set by the board, the treasurer's job is then to optimize the hedging strategy to achieve the target at optimum cost. This would mean hedging some of the

exposure irrespective of market views to at least come within the risk capacity and then dynamically managing the hedge ratios to optimize the risk and cost. For example the hedge strategy may be to maintain a hedge ratio of minimum 30% of the total exposure for the hedge horizon which could be increased depending on market views to 70% or any other number in between. The distribution of the hedges over the hedge horizon and choice of hedging instruments like forwards, options, swaps etc. could also be driven by market views and accounting considerations.

5. Review and Re-balancing : Given the above considerations of interplays between business and financial risks, a static hedge program i.e. a passive hedge program is as risky as no hedging. Hence it is important for the company to evaluate its business environment, changing market conditions and movements of market factors itself to dynamically review and rebalance its hedging strategy. This is the 5th and final step of the risk management process.

Accounting and Risk Management

What we have discussed so far is focused on managing the economic risks faced by a corporate due to its exposure to FX rates. However, hedges put on to manage such economic exposures may not always qualify as hedges under the accounting rules. This then poses an additional challenge for the corporate treasurer wherein a hedge program put in place to manage longer tenor economic risk may itself introduce certain amount of accounting P&L volatility due to the non-qualifying hedges being subjected to MTM treatment for accounting.

One of the reasons why accounting considerations have become more important in hedging decisions is that investors do not appreciate earnings volatility arising from factors outside the main business. However, apparent absence of accounting risk does not necessarily mean 'no-risk'. Even in cases where hedge accounting is adopted, the accounting friendly result may lead to the volatility getting parked temporarily in the Balance Sheet (that would otherwise reside in the earnings). All that hedge accounting helps in is to match off the exposures with the hedges where a clear relationship is visible. The same result could also be achieved by the investor if the investor were to analyze the balance sheet a bit more in depth and understand the hedging strategy of a company not following hedge accounting. Focusing only on Accounting risk management may leave the corporate open to longer term impact of economic risks.

Fundamentally, there is no single answer in terms of which of these risks should be given priority over other, but there could be a possible middle path approach with respect to the decision making process. For any exposure, it may be prudent to start with identifying the correct economic hedging decisions. Post this, one could explore if the above hedging decision would create any adverse accounting results. If not, then it is an ideal situation and one should go ahead with the hedging. For cases with potential accounting issues, the corporate treasury may want to attempt quantifying the adverse accounting outcome. The potential scenarios can be put up to the senior management / board of directors for making a conscious choice. At this stage, one can evaluate whether the potential economic benefits of the hedging decision outweigh the potential adverse accounting results. A company's ability to explain the above decision to investors will also play a role at this stage. The above process would aim at ensuring that there are "No Surprises" to senior management and to shareholders arising from the hedging decisions. There are a few global companies that have taken a conscious decision to mark to market all their hedges and simply explain this to their investors.

Vipul Chandra
Managing Director
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Vipul heads the Corporate Sales & Structuring business for Citi India-Subcontinent based out of Mumbai. He has been a part of the Markets group in Citibank India for the last sixteen years and has worked in various areas like Foreign Exchange, Derivatives Sales & Structuring. Before moving into his current role, Vipul was heading the Derivative Structuring business for Citi India Subcontinent where he was responsible for designing new products and risk management strategies for corporate clients.

Vipul completed his Bachelor's degree in Electronics Engineering from Delhi College of Engineering before going in for an MBA from IIM Calcutta. Post that he joined the bank in operations before moving to Treasury Front Office.

Foreign Exchange Risk Management

Mr. Himanshu Kaji, *Executive Director, Edelweiss Financial Services Limited*

Introduction

Recent crisis has clearly highlighted that Indian economy is no longer isolated from global economy. India Inc has enjoyed benefits of globalization in form of new markets for their goods/ services, access to new technology, cheap sources of raw materials & new sources of capital but it exposes them to risk of foreign exchange movement. In past two years, Indian Rupee (INR) has moved from Rs 44 to Rs 57 against US Dollar (USD) greatly impacting profitability & competitiveness of Indian companies globally . A number of corporates which relied upon forex denominated project finance for setting up green field projects or brown field expansion projects have also seen their project costs soaring and making some of the initial projections for the project unviable. As per Crisil report, in just one quarter viz. Q2FY12 the forex losses trimmed 8% of the Nifty companies' profit amounting to Rs 48 billion. During that period these Nifty companies had cumulative foreign currency debt of almost Rs 1.5 trillion. More recently in Q1FY13, as per Capitaline, 167 companies reported loss of Rs 13 bn on foreign exchange transactions since rupee depreciated by 9.4% against USD. This includes MTM losses on debt, besides foreign exchange losses from other transactions, such as higher outflow for bank loans. Such high quantum of losses has been witnessed

Ministry of Corporate Affairs has taken the cognizance of high rupee volatility and has permitted Indian companies to capitalize profit/losses on long term foreign borrowings due to exchange rate fluctuation by large companies that are supposed to be sophisticated and have elaborate treasury departments. From this one can easily deduce the cumulative risk exposure & impact on small & medium size enterprises.

Ministry of Corporate Affairs has taken the cognizance of high rupee volatility and has permitted Indian companies to capitalize profit/losses on long term foreign borrowings due to exchange rate fluctuation. This has provided relief to many corporate on shorter term but in no way addresses the core issue of managing foreign exchange risk.

Risk Awareness

Exchange rate movement does not always lead to losses for the companies. In fact a large number of companies have reported exceptional profit in Q2FY13 due to favorable movement in rupee (5.25% appreciation against USD). Lot of corporate lured by such gains do not find foreign currency movement as risk to their business. So it is imperative for the companies to recognize that their strength lies in their core business and not in taking bets on foreign exchange. Gains in the past due to favorable currency movement would not be repeatable & are in no way indication of the future. Being aware of the risk is first step to efficient risk management & long term sustainability of the company.

All companies are exposed to a variety of risks on a daily basis but not all risks may be required to be acted upon. Companies have to take conscious decision whether to actively manage risk or to live with the risks since it maybe inherent with their business/may have negligible impact/cost of management may be too high. To enable such decision making, companies must determine risk exposure, probability & impact on materialization and if it needs to be managed then they have to define risk management plan based on the available mechanism.

Risk Management Strategies

Risk Transfer Strategy

The companies may choose to do all the transactions in only domestic currency and thereby transfer the risk completely to the counterparty. The strategy may be quite simple but is highly impractical given INR is not fully convertible. So most of the times it would be difficult for the companies to implement this strategy.

Risk Avoidance Strategy

The companies may choose to do business in the manner that at net level there is no financial impact due to currency movement. This can be achieved by having matched currency for cash flow, for asset-liability/revenue-expense etc. Like the previous strategy, it is not practical for the companies to define business strategy constrained by risk strategy. However it can be used to minimize the risk exposure. A natural hedge is one of the best defense mechanism in a company's risk management strategy and should be actively pursued to the extent available.

Risk Mitigation Strategy

Hedging through derivative instrument is most practical but relatively complex solution for the companies. But before taking hedging decision, the corporates must be aware of the limitation that exists in the Indian currency market. Presently, Corporate can hedge their exposure by transacting on the exchanges or entering into over the counter (OTC) contracts. Both methods have their pros & cons which must be evaluated by the companies while defining risk management plan.

Hedging through Exchanges

Indian exchanges provide standardized future contracts in USD-INR, EUR-INR, GBP-INR & JPY-INR for 12 consecutive months, option contracts for USD-INR for 3 consecutive months & 1 quarterly contract. These contracts are cash settled based on the RBI reference rate on the expiry date. Trading on exchange provides benefits of price transparency, confirmed settlement, low transaction cost, well regulated & clearly defined contract clauses. But it removes flexibility provided by the custom made contract that exists in the OTC market.

Normally this would have been the preferred mode for hedging for the corporate but for the problems that exists in the Indian market. There is not enough liquidity in the market for the contracts other than the USD-INR contracts. Even in USD-INR contract, the liquidity is quite low for the contracts with maturity beyond 3 months. This limits the price discovery & also makes it difficult for

the companies to exit their positions without taking haircut. The liquidity in options contract is even more abysmally low. No option contracts are available for EUR-INR, GBP-INR & JPY-INR pair on exchanges.

Further longer dated contracts are not available on the exchanges to enable the corporates to hedge their longer tenure risk exposure. Hedging longer term risk exposure by shorter tenure contract on exchanges exposes companies to basis risk.

These constraints inhibit the ability of the corporates to effectively hedge their risk on exchanges.

Hedging through OTC contracts

Corporate may choose to enter into derivative contracts with the banks to hedge their foreign currency exposure. OTC contracts can be tailor made based on the needs of the corporates. Alternatives are available to hedge larger spectrum of currency pair & longer term risk exposure in OTC market thereby avoiding basis risk for the company. Further it also provides additional instrument in form of currency swaps to hedge foreign borrowings. Such instruments are not available through exchanges.

The above mentioned benefits are marred by the questionable market practices. There is no transparency in pricing of such OTC contracts across banks which makes their evaluation difficult for the corporate. Similarly the contract clauses also vary between banks, between contracts exacerbating the company's issue of determining right contract for them. Further these clauses are often one sided which are detrimental to the companies and almost difficult to enforce at the time of crises. Also in absence of transparent pricing, it is very difficult for the companies to exit the contracts without haircut. Similarly, it is not possible to verify the marked to market charged on the transactions. Most of the banks charge MTM losses to the companies but do not allow them to withdraw/ offset the MTM gains against margins which can lead to liquidity issues for the companies.

In the past, there have been numerous instances of mis-selling of the forex derivative contracts by the banks to companies. Naïve corporate were sold complex derivative product without being aware of the downside risk by the aggressive bankers. Such companies are now averse to the concept of hedging especially through OTC transactions.

Right Risk Strategy:

While recommending risk management strategies for Indian corporate, there cannot be one size fits all solution. Based on the benefits & limitation mentioned for each strategy, business size & needs, companies can select the right strategy for them.

Even though Indian companies have faced double whammy with slowing economy & volatile rupee, the adoption of these risk strategies has been dismal since their limitation overrides the benefits provided by them. Not much can be done to overcome the limitations inherent to the strategy but in Indian context many of the limitations are due to unavailability of appropriate instruments/ markets which can be addressed by multilevel structural reforms. Right instruments & developed market, if provided, would go long way in relieving the problems of the companies with respect to foreign currency movement.

Recommended Exchange related reforms

Low liquidity on the exchanges across the existing contracts is one of the key concerns for the Indian companies. This can be easily solved by permitting banks to trade on the exchanges. They can act as market maker & improve the liquidity across the contracts/across the currencies.

Further longer dated contracts can be introduced on the exchanges to allow companies to hedge their longer tenure currency exposure. This along with increased liquidity on the exchange would be of great help to companies looking for instruments to hedge their risk.

Low liquidity on the exchanges across the existing contracts is one of the key concerns for the Indian companies

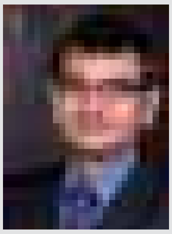
Contracts across wider spectrum of currency pairs can be provided on the exchanges. Though the liquidity in such contracts would be low, it would at least offer some direct mechanism for the companies to hedge their risk.

Recommended OTC related reforms

Banks should be encouraged to make their pricing transparent and to standardize the contracts across industry. Number of regulations have already been implemented to prevent mis-selling to companies. Banks can take more proactive role in educating companies about foreign exchange risk & the techniques available to mitigate them. It is imperative for banks to instill confidence back in the companies with respect to foreign derivative contracts. This can be done by improving their disclosure practices & creating financial risk awareness.

Conclusion

Above mentioned reforms, if implemented, would also greatly enhance the capabilities of Indian corporates to effectively manage their Forex Risks and at the same time would also decrease size of the large offshore markets. This would enhance the control of the central bank on Indian Rupee which could ultimately curb Rupee volatility in longer term.



Himanshu Kaji

Executive Director, Edelweiss Financial Services Limited

Mr. Himanshu Kaji, Executive Director, Edelweiss Financial Services Limited

A Chartered Accountant with a Post Graduate Diploma in Securities Law, Mr. Himanshu Kaji has over two decades of diverse experience in the financial services space. In addition to his responsibilities as Executive Director, Mr. Kaji continues to be Group Chief Operating Officer managing Finance, Risk, Operations, Technology, Governance, Administration, Investor Relations and Compliance at the Edelweiss Group.

His earlier assignments include being an investment banker at ICICI Limited and a stint at his family business of broking. During the latter, he was part of a select group that played a key role in the corporatization and the de-mutualisation of the Bombay Stock Exchange (BSE) -- the oldest stock exchange in Asia.

Foreign Exchange Risk Management

Mr. Baby K P, *Asst General Manager, Federal Bank.*

The post Bretton Woods era of free-floating currencies and economic liberalization, has brought the world closer and intern¬¬¬ational trade has become the life-line for the very survival of nations. Foreign Exchange Trade volumes have now hit more than 4 trillion USD per day. It is all set to grow and turn brisk during the years to come.

Globalization which came on the heels of liberalization has opened up immense opportunities for business houses in India to reach out to greener pastures in world markets to become global traders or multi-national corporates. On making the world their playground, their investments, assets, liabilities, funding, revenues and cash flows get denominated in multiple currencies. These expose them however to enormous foreign exchange risks.

Wild swings in exchange rates impact the vitals of a company and ultimately the market value of its equity. Establishment of a robust and prudent foreign exchange risk management framework is essential for corporate houses to enjoy the fruits of globalization without burning hands. The cash flows, bottom lines and net worth of many SMEs and Corporates were hit hard by the volatility in the foreign exchange rates witnessed in recent months. The resultant credit risk borne by the financing banks has prompted RBI to come out with

"In life, as in chess, forethought wins."
Charles Buxton

directions to banks for monitoring the unhedged forex exposures of their borrower constituents.

Foreign Exchange Risk Management framework

Foreign exchange risk management involves the following key activities: identifying exposures and risks; forecasting rate movements; measuring, monitoring and reporting of risks and continuously employing appropriate mitigation tools. For this Corporates should have a sound framework with a blend of human expertise and technology driven tools. Greater the exposure of a company, the better it would be if forex risk management is handled by a dedicated corporate treasury independent of its core business. It will be ideal if the best practices of risk management are followed by the Treasury under the close oversight of the Risk Committee.

Identification of exposures and exchange rate risks

Identification of a firm's forex exposures and the types of exchange rate risks the firm is exposed to shall be the first step towards implementation of best practices. Identification of exposure involves understanding risk sources and the proportion of business that is dependent on forex, currencies involved, timings of payments/ valuation, natural hedges available etc. Foreign exchange risks can be classified as follows:

1. Transaction risk is the impact of adverse currency rate movements on the value of foreign currency denominated receivables and payables forming part of a contract entered into by the business.
2. Translation risk is the risk associated with the fall in value of foreign subsidiaries when their figures are translated to the currency of the parent company while consolidating figures into the company's master balance sheet. Translation risk is measured by the exposure of net assets of the foreign subsidiaries to potential currency rate movements.
3. Economic risk represents the risk to a firm's present value of future cash flows (and thereby the market value of the firm) on account of adverse exchange rate fluctuations.

Contingent exposure arises on bidding for foreign projects, negotiation of foreign contracts or foreign direct investments, the outcome of which cannot be predicted.

Forecasting exchange rate movements

After identification of exposures and risks involved, a business has to try and forecast the exchange rate movements across appropriate horizons. The forecasts should be based on robust assumptions and calls for a fair idea of the factors affecting currency exchange rates.

Factors affecting exchange rate

Currency exchange rates are largely dependent on the demand and supply factors. The following are major factors impacting currency exchange rate.

Movement of Capital: When there is a good inflow of foreign capital owing to the enhanced investor's confidence in Indian Market, the demand for Indian Rupee becomes high against its foreign counterparts leading to appreciation of Rupee. Conversely flight of foreign capital from India, depreciates rupee.

Interest Rates: Actual or expected rise in interest rates in a currency may attract foreign currency investments, resulting in appreciation of that currency.

Inflation for a short term may result in inflow of foreign funds in anticipation of increase in interest rates and lead to appreciation of the related currency. However, if inflation persists for a relatively longer period, purchasing power of money will get reduced, thereby weakening the currency.

Current account position: Rise in balance of trade deficit results in increased demand for foreign currency, thereby leading to depreciation of domestic currency. In India, increasing import of oil is the major cause of widening trade deficit.

Public debt: Nations with large public debts and deficits are less attractive to foreign investors. Increasing public debt may impact sovereign debt rating indicating increase in sovereign credit risk.

Political stability and prospects for economic growth are also significant factors affecting the movement of foreign exchange rates. Factors like natural calamities are obviously outside the scope of forecasting.

Multiplicity of factors and dynamism inherent in such factors may at times render the predictions incorrect. The probability of deviation from projected rates increases with the projection horizon. Hence forex management cannot be limited to prediction of future rate movements. Yet what Ex U.S. President Eisenhower once said is relevant here: *"In preparing for battle I have always found that plans are useless, but planning is indispensable."*

Measurement of risk

Value at Risk (VaR), defined as the maximum estimated loss that can be incurred on a portfolio over a specified period at a given confidence level, is the most commonly used risk measurement tool. Historical simulation, variance-covariance model and Monte Carlo simulation are the commonly used VaR methods. Historical simulation is the simplest method, which uses historical data on currency rate movements and underlying factors for risk estimation. However, VaR measure is influenced by length of estimation period and application of weights for different periods. The variance-covariance model assumes normal distribution of currency returns and linear relationship of portfolio components. Though the VaR calculation is simple, empirical evidence shows that the returns are not normally distributed. Monte Carlo simulation involves analysis and random simulation of primary components. The methodology can also handle wide range of distributions and non-linear combination of factors. However, the method is most computationally intensive. The choice of the method by individual firms depends on their risk management expertise, availability of sufficient proprietary and market data and composition of forex portfolio.

Projection of cash flows and use of VaR measures need to be supplemented by appropriate sensitivity tests to measure the potential loss to business if the exchange rates prediction turns to be false. Stress scenarios should be selected so as to take care of extreme, but plausible eventualities.

Benchmarking and formulation of policy guidelines

In the light of estimated risk and exposures, an appropriate foreign exchange risk management policy should be formulated. The policy should outlay the responsibilities, strategies, objectives of hedging, authorized hedging approaches and instruments, internal control mechanism and monitoring/ reporting processes. The Policy should encompass risk appetite statements. Stop loss limits and mechanisms for restricting the losses in the event of predictions turning wrong should form part of the policy. A set of controls and monitor mechanisms should be developed to ensure appropriate position taking. This includes specification of limits for each hedging instrument, monitoring of MTM valuations of all currency positions and setting of benchmarks for periodic monitoring of hedging performance. The foreign exchange risk management policy should be subjected to review on a regular basis.

Risk mitigation

Companies can employ one or more of a slew of hedging tools in line with the objectives and risk tolerances laid out in the risk management policy. Hedge costs, benefits, risks and corporate tolerances have a bearing on the feasibility of the tools. The firm should first consider natural hedges before resorting to use of hedge instruments. Natural hedging means offsetting of the total inflows against outflows (receivables & payables, import and exports) in a particular currency based on amounts and timings. Natural hedging effectively reduces forex risk but creation of natural hedges is a time consuming process and involves long term commitments.

Forward contracts, being an agreement to purchase or sell specified amount of foreign currency on a fixed future date at pre-specified rate, provides perfect hedge for transactions with certainty in terms of amount and timing. However, forward contracts are not marketable and involve loss of opportunity gains in the event of favorable exchange rate movement. Forward contracts are being used extensively to hedge trade transactions where amount and timings of cash flows are almost certain.

Currency options give the holder the right but not obligation to buy (call option) or sell (put option) specific quantity of one currency in exchange of another, within or at the end of a specified period at a predetermined price. The maximum loss on an option is the premium paid. Options are tradable on exchanges and also enable the user to participate in favorable currency movements. However, exchange traded currency options are standardized in terms of lot size. Option is an ideal hedge for contingent cash flows. **Option contracts maybe combined to form strategies that reduce cost and achieve desired pay off profiles at maturity.**

Currency futures are standardized forex derivative contracts traded on a recognized stock exchange to buy or sell one currency against another on a specified future date, at a price specified on the date of contract. Currency futures though require a small initial outlay, provide the leverage of covering significant amount of forex exposure. A currency future contract can be closed before settlement date by sale of an identical futures contract. However, as the maturity and lot size is standard, it is less tailored than forward contracts.

In India, recognized exchanges are permitted to offer currency futures in the pairs of USD-INR, EURO-INR, GBP-INR and JPY-INR in the lot size of 1000 units of foreign currency (except for JPY where the lot size is 100,000).

Currency swap involves exchange of equal initial principal amounts of two different currencies at spot rate between two parties. Interest payments are made at prefixed intervals in the respective swapped currencies over the term of contract. At maturity, principal amounts are re-swapped at prefixed rates. Swaps are used to hedge exposures for longer periods and also provide for hedging of translation risk.

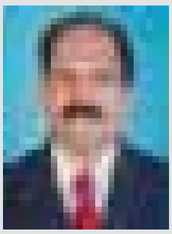
Foreign currency loans and foreign currency denominated deposit accounts provides alternative methods for forex risk management, which may be used where mismatch exists in timing of foreign currency inflows and outflows.

Firms exposed to different facets of forex risk should practice an integrated approach to hedge the risks and consider using a bouquet of hedging instruments, duly taking into account the nature of risk exposures and conducting cost benefit analyses. Hedge optimization models may be employed to determine the most efficient hedging strategy. Hedge performance should be assessed against fixed benchmarks and hedge strategies should be reviewed accordingly.

In the globalized environment, India should have a good market for liquid foreign exchange derivatives markets to reap the fruits of liberalization. It is a welcome sign that the regulatory authorities in India is focusing on enabling effective forex management tools commensurate with the opportunities in a liberalized environment and introducing effective checks and balances to maintain a healthy foreign exchange market.

It is obvious that multiple currencies are here to stay for the foreseeable future and so is the foreign exchange risk

A global currency doing away with exchange rate risk was once dreamt by British Economist Dr John M Keynes and was recently echoed by US Treasury Secretary. It is true that Euro and EMU became a reality. However the European experiment is shaking. Hence, the integration of the countries of the wider world operating on uneven economic terrain under a Super Reserve Currency is too pre-mature. It is obvious therefore that multiple currencies are here to stay for the foreseeable future and so is the foreign exchange risk. The concern of corporate, banks and traders should be how best to stave off the forex risk and stay afloat.



Baby K P

Asst General Manager, Federal Bank

Mr. Baby K P is currently working as Asst General Manager, in Treasury, Mumbai in Federal Bank. He has wide experience in different areas of banking like branches , regional offices and in the corporate office. A commerce graduate and a Chartered Financial Analyst from ICFAI and with many diplomas in Banking , Management and Finance, he headed many metro and semi urban branches and has been steering the biggest region of the bank, before moving to Treasury in year 2012. A mentor, leader, good administrator, he is a certified associate of Indian Institute of bankers. He has been in the leadership role in taking up many successful projects such as Group Housing projects, Educational Institutions for the welfare of the officers community of the Bank.

Foreign Exchange Risk Management for Corporates

Mr. Mohan N. Shenoi, *President- Group Treasury & Global Markets, Kotak Mahindra Bank Limited*

Foreign exchange risk management became increasingly important internationally after the abolition of fixed exchange rates of Bretton Woods in 1976. In a floating rate system currency movements were influenced by demand supply factors as well as economic and political factors. This impacted the profitability of companies exposed to currency risk out of trade and debt.

In India, the gradual liberalization of the Indian economy after the 1990s and its integration into the global marketplace has resulted in substantial exposure to foreign exchange risks for Indian corporates also. The dismantling of trade barriers, access to global capital markets/hedging products and the move to market-determined exchange rates has made it imperative to manage the foreign exchange risk in a judicious manner.

Why manage foreign exchange risk?

In recent years, Indian corporates have expanded their global footprint. Not only have they increased their pursuit of global trade opportunities but have taken on foreign currency debt and acquired companies abroad. One measure of India's global integration is the growth in the ratio of the external trade to GDP from 8 per cent in 1972 to nearly 40 per cent now while non-trade cross border flows have risen from 14 percent in 1972 to well over 100 per cent of GDP now. As a result the monthly turnover in

In India, the gradual liberalization of the Indian economy after the 1990s and its integration into the global marketplace has resulted in substantial exposure to foreign exchange risks for Indian corporates the Indian foreign exchange markets has grown more than 14 times from USD 76 billion in 1996 to over USD 1.07 trillion in 2012. This increased integration gives better business opportunities in normal times but during volatile times it poses immense challenges to manage risks.

In recent times with significant global economic and geopolitical uncertainty in the developed world, amid slowing growth, long standing correlations among asset classes have broken down and currencies have moved into newer ranges. Markets are now driven more by liquidity and events rather than fundamentals. Sharp moves have become common as markets swing between "risk on" and "risk off" scenarios. The "black swan" has become the norm rather than a "tail event".

Thus, larger currency exposures, the concomitant volatility in currency markets and the impact it has on cash flows as well as reported accounting earnings have made foreign exchange risk management imperative for Indian corporates.

Managing foreign exchange risk provides the following benefits to companies:

- Minimize the negative impact of exchange rate movements on profit margins
- Increase predictability of future cash flows
- Eliminate the need to accurately forecast exchange rates
- Facilitate competitive pricing
- Protect the companies competitiveness in case the rupee appreciates/depreciates

The risk management policy should be primarily driven by the business the company is in

How is foreign exchange risk managed?

Risk management is "the performance of activities designed to minimize the negative impact (cost) of uncertainty (risk) regarding possible losses"

Foreign exchange risk management allows the company to focus on maximizing the operating value of their firm while minimizing the financial disruptions caused by market fluctuations.

The cornerstone for a robust risk management practice begins with having a well-defined Board approved Risk Management Policy accompanied by proper execution of the same as well as constant reviews and fine tuning of the policy as required. In most firms, the execution of the policy is the responsibility of the Chief Financial Officer or where there is a separate Treasury, then it is the role of the Treasurer.

The Board approved policy should be consistent with the strategy, commercial objectives and risk/reward aspirations of the company. This is important since it would provide operational clarity to the risk manager. For example, a risk-averse corporate would have the objective of minimizing the negative impact of foreign currency fluctuations on the rupee denominated cash flows. So if the guiding principle is conservatism then it would dictate the choice of hedging instruments, hedge cover ratios, benchmarks and the timeframe or dynamism with which the hedges are managed. On the other hand, if the objective is to generate non-operating earnings by virtue of fluctuations in the markets then the choices would be different.

The risk management policy should be primarily driven by the business the company is in.

It should **start by isolating and enumerating the currency exposures of the firm. Currency exposures** arise from any of the following:

A. Transaction Risk: This arises out of cash flows in foreign currency that needs to be converted to domestic currency. These could be imports, exports, receipts or payments, interest flows, dividend flows, loan repayments.

B. Translation Risk: This relates to the risk arising out of translation of foreign currency assets or liabilities in the balance sheet.

C. Contingent Risk: As the name suggests, these are contingent foreign currency exposures that arise in special situations.

D. Economic Risk: This refers to the currency risk that is embedded in the business itself and could arise out of factors like input or output costs being linked to the exchange rate, threats from imports, correlation between commodity prices and exchange rates etc. This is of particular significance as the impact of this, while not so obvious, can be very significant in formulating the risk management policies and the hedging strategies.

E. Policy Risk: These are risks that crystallize because of sudden change in government policies. However it is very difficult to forecast and hedge these exposures.

Once the risks are enumerated, it should then establish the procedure and parameters for implementation of the program on an ongoing basis which includes the procedure to report exposures, assign risk management responsibility, identify appropriate hedging tools and affix appropriate benchmarks.

One of the key issues is the hedging decision for each exposure, its time-frame and the benchmarks to be set. The decision whether to hedge or not (a particular exposure) and the extent to which hedging is used is determined by the size of the exposures in relation to the firm's size and its material impact on the reported earnings. Subsequent adjustments to the hedges are done keeping in mind, the market conditions, management policy and concurrent RBI regulations. For conservative companies, the hedging benchmark for trade exposures could be the outright forward rate at the start of the exposure (100% cover rate). A risk-seeking firm could set an aggressive benchmark of the best outright forward cover rate at any time during the life of the exposure. It should also mandate the minimum and maximum hedge ratio for each type of exposure, drawing from the hedging principles laid down by management.

Also, it should create appropriate controls by assigning authority, dealing limits, banking relationships and prevent dealing by unauthorized individuals and in prohibited transactions/ products. For example, if the management is risk-averse then usage of complex derivative products as well as third currency hedging can be prohibited.

Finally it should lay down the system for exposure monitoring, measurement, evaluation, reporting and establish a reasonable budget for the hedging program. This can include the costs of using hedging instruments such as the premiums paid for options, costs of information systems, software and other administration costs.

How can foreign exchange risk be managed?

Foreign exchange risk can be managed primarily by two methods. Hedging is the primary method by which foreign exchange exposure of a company is managed while non-hedging techniques can also be used.

1. Non-hedging techniques include settlement of transactions through advance payment to reduce time-frame of exposure and invoicing in the home currency to foreign counterparties to eliminate the risk.
2. Hedging techniques are also of two types. They include internal hedging such as matching/ netting of receivables/ payables and raising debt in the currency of receivables. External hedging involves the use of financial instruments such as (a) Forward Contracts (B) Currency Options (c) Exchange traded currency futures (d) Currency Swaps

The choice of external hedging instruments is dictated by the risk which is being sought to be hedged. Forward contracts are usually used to hedge short-term transaction risks arising out of cash flows while currency swaps are used to hedge longer-term translation risk out of say foreign currency debt. Currency options are best suited to hedge contingent risks out of say bidding contracts. However of late in the Indian market, there has been lot of interest in hedging transaction risks through currency options. This interest is driven by the high volatility in exchange rates because of which corporates are reluctant to lock on to the exchange rates using forward contracts while at the same time want to protect any downside arising out of unhedged exposures.

Recent Lessons

The extreme volatility out of the geopolitical events in the global currency markets has proved the necessity to have in place a prudent and elaborate foreign exchange risk management programme. The recent events post-2008 have many lessons in foreign exchange risk management for corporates.

Firstly, corporates have seen that the impact of the risk of keeping large exposures un-hedged can be significant especially when there are large movements in exchange rates hence there has been focus on management of such large exposures.

Secondly, the risks in shifting focus from core businesses to active management of exposures have sometimes led to undesirable outcomes.

Thirdly, the choice of hedging instruments such as third currency hedging, complex derivative products having asymmetrical pay-offs have their own specific risks and again may not be effective when there are sharp moves and correlations break down.

Fourthly, risks of hedging based on past performance when the entire underlying business scenario is under threat also surfaced in many cases.

Fifthly, the absence of scenario planning in the case of adverse movement led to inaction in many cases and causing losses.

Hedge accounting:

While it is important to have well defined hedging strategies, it is equally important to ensure that these hedging strategies have the correct impact on the statement of accounts. In many cases, the hedges while being economically sound, have led to losses from an accounting perspective. Many times this has led to corporates formulating hedging strategies based on accounting considerations rather than economic considerations.

In order to address this issue, a few corporates have adopted hedge accounting standards. This ensures that the accounting treatment of hedges is aligned with the economic rationale of the same and thus there are no distortions in the statement of accounts arising out of hedging transactions. However, it must be remembered that hedge accounting places lot of onerous requirements on the corporates like documentation, systems to record and monitor the same, as well as various disclosures in the statement of accounts.

RBI regulations:

The RBI regulations on foreign exchange, which are one of the key determinants of corporates hedging strategies have also been constantly evolving over the years. The fundamental principle guiding the RBI regulations is that corporates can enter into foreign exchange contracts only for the purpose of hedging.

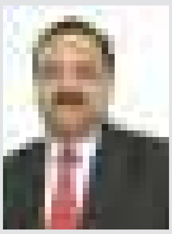
The regulations on what are the exposures that are permissible for hedging have also been changing over the years and the list has been growing constantly. While initially only contracted exposures could be hedges, over the years RBI has permitted hedging based on past performance, hedging of contingent exposures as well as hedging of certain kinds of economic exposures.

The instruments allowed for corporates have also been changing over the years. However while RBI had earlier given corporates considerable leeway in the choice of hedging instruments (including exotics) for non INR contracts, following the issues in the market post 2008, only plain vanilla hedging instruments have been allowed.

In addition, RBI has also increased the documentary requirements from corporates to ensure compliance with the guidelines. This is in the form of documents evidencing proof of underlying exposures, past performance in terms of exports and imports, quarterly certificates from statutory auditors ensuring compliance with all the guidelines as well as annual certificates from the Board of directors. This has placed additional responsibilities on corporates in terms of setting up the infrastructures to comply with all the requirements and the accompanying costs. However, these may be necessary in the short run, till the markets attain maturity and the RBI in turn gains comfort in the system. In the long run, relaxation of the above measures is linked to the overall policy of the country on capital convertibility.

In conclusion, the resurgence of foreign trade – combined with volatility in the global financial markets- heightens the importance of having a proper foreign exchange risk management in place. A well documented policy allows the firm's management to focus on new business opportunities without any concern about how its risk exposures would inhibit its expansion plans.

The views expressed in the article are personal and do not reflect the views of Kotak Mahindra Bank Ltd.



Mohan N. Shenoi

President- Group Treasury & Global Markets

Kotak Mahindra Bank Limited

Mohan Shenoi Heads integrated treasury (includes Forex, Fixed Income, Money Markets, Derivatives and Bullion), Primary Dealership, Debt Capital Markets and the Balance Sheet Management Unit.

He is also a Director at Kotak Mahindra Prime Ltd. and Director at Kotak Forex Brokerage Limited.

Shenoi started his banking career at Corporation Bank in 1978. He was responsible for shifting the Corporation Bank Treasury from Mangalore, H.O. to Mumbai in 1990. Corporation Bank Treasury thereafter became one of the well-known Bank Treasuries.

He joined ICICI Bank in 1994 – the 5th employee to join ICICI Bank and member of the original team which set up the Bank.

He moved from Treasury to Planning in ICICI Bank in 1996. Was the Head of Retail in 2000-01.

Shenoi is a Bachelor in Business Management (BBM), Certificated Associate of Indian Institute of Bankers (CAIIB),

Post Graduate Diploma in Bank Management (PGDBM)

A perspective on the trends in the foreign exchange market and identifying and managing foreign exchange risk

Mr. Ramaswamy Govindan, *Vice President (Corporate Finance& Risk Management), Larsen & Toubro Limited.*

Introduction

The foreign exchange market has grown by leaps and bounds since the collapse of the Bretton Woods system in 1971, which also marked the beginning of the floating exchange rate regimes in many countries. With daily turnover in excess of $4 trillion, it has become the largest market in the world. However, over the last few years, the foreign exchange market has seen a spill-over from slowing international trade and investment flows, owing to the heightened uncertainty in wake of muted recovery from the financial crisis. As the liquidity across markets dried up, the financial crisis challenged the micro-structure of foreign exchange markets across many countries with increased volatility. Though conditions have eased since, risk managers are still grappling with heightened business uncertainty, asset market volatility and stringent regulatory norms. In challenging times like these, the practice of foreign exchange risk management needs to constantly evolve, adapt and engage all business stakeholders to ensure a prompt, smooth and intelligent decision making process.

In the sections ahead, I will aim to share my thoughts on the developments in the foreign exchange market and provide an overview on foreign exchange risk management, with a reference to the approach at L&T.

As the liquidity across markets dried up, the financial crisis challenged the micro-structure of foreign exchange markets across many countries with increased volatility

Global FX Markets – Deep, liquid but volatile

The decade of the 1990s was witness to a visible policy shift in many emerging markets towards realigning their financial markets for new products and instruments, promoting institutional and market infrastructure and a rejig of the regulatory framework consistent with the liberalised operating environment. The changes resulted in a rapid expansion of foreign exchange market in terms of participants, transaction volumes, decline in transaction costs and more efficient mechanisms of risk transfer.

In this backdrop, the volumes in the FX market have continued to rise rapidly. Drawing on the 2010 BIS Triennial Survey of Foreign Exchange and Derivatives Markets, the global foreign exchange turnover grew by 20 percent over three years. This rate of growth was slower than the rapid 72 percent growth rate seen in the 2007 survey.

Turnover continued to be dominated by the four major currencies. The US dollar made up one leg in 85 per cent of transactions, the euro was used in close to 40 per cent of transactions and the Japanese yen was used in around 20 per cent of transactions. The British pound was exchanged in around 13 per cent of deals, with the share of turnover conducted in the British pound continued to fall.

The pattern of growth across instruments differed from the previous three-year period. Spot turnover increased by 48 per cent over the three years to April 2010, following a 59 per cent increase over the previous three years. In contrast, turnover in foreign exchange swaps increased by only 3 per cent, compared with an 80 per cent rise between 2004 and 2007. As a result, the share of spot transactions in total turnover had increased to 37 per cent from 30 per cent, while the share of turnover accounted for by foreign exchange swaps fell to 44 per cent from 52 per cent. Turnover in the other instruments – forwards, cross-currency swaps, and OTC options – continued to be much lower on average than for spot and foreign exchange swaps.

The survey clearly highlighted that the growth in turnover was driven by demand from 'other financial institutions'. The global financial crisis had taken its toll on the cross border trade and investment flows. As a result, for the first time in the history of the survey, turnover between dealers and other financial institutions was higher than the turnover with the interdealer market.

The survey also shows the increasing activity in the spot market through electronic platforms. The growth in electronic trading has increasing the scope for high-frequency and algorithm based trading in the foreign exchange market. Although, these 'technology aided' strategies bring enhanced liquidity and lower transaction costs to the table, they are also a source of 'unwanted' volatility in the market space.

The FX market in India

The origin of the foreign exchange market in India can be traced to 1978 when banks were permitted to take intra-day trades in foreign exchange. However, it was only in the 1990's, that India witnessed a landscape change in the foreign exchange market along with shifts in currency regime. A further impetus to the foreign exchange market was provided by the setting up of the expert group on Foreign exchange that submitted its report in June 1995, providing various measures for deepening and widening the FX market in India. Since then, helped by a rapidly expanding global market, higher risk appetite of banks and corporate, the foreign exchange & its derivative market in India has seen consistently increasing volumes and improved liquidity. At a daily average turnover of $37 billion, the share of India in the global FX turnover has remained constant at 0.9 percent from 2007 to 2010 BIS Survey.

The derivatives primarily used in the Indian context include forwards, options and currency swaps. Available data indicates that most widely used instruments are the forwards and foreign currency swaps. OTC currency options volumes have not gained traction given the low liquidity and the regulatory restrictions in this space. Currency futures are another product that was launched in 2008 and has in the last two years seen a strong pick up in volumes.

The FX market in India is strictly regulated. Though efforts have been made by the central bank to ease the norms, global financial conditions have at various points slowed down the reforms process. One such feature is the 'role of an underlying transaction' in booking of a forward contract.

This feature is unique to the Indian derivatives market. In the backdrop of the corporate being given increased freedom to tap the foreign exchange markets, the central bank has insisted in the requirement of an underlying in order to curb excess volatility and speculation in the nascent market.

In the last 2 years, the central bank, on various occasions, has increased the oversight on the transactions in the foreign exchange market. Under this stricter operating environment, an increasing number of corporates, especially, the medium scale enterprises have found it difficult to keep up with the regulatory requirements. The December 2011 circular that bans the rebooking of cancelled forward contracts under the same underlying exposure has driven many corporates away from the OTC market and has impacted the spot market liquidity adversely.

A direct beneficiary of this has been the currency futures market. Volumes have zoomed in the NSE currency futures segment, with more and more corporates players now active on the exchanges. However, the exchange provides only a standardised product and the liquidity remains poor beyond the near-month contract.

To summarise, all the recent trends in the Indian FX market have made effective and dynamic risk management a challenge. This reduced manoeuvrability; along with exogenous and endogenous macroeconomic shocks are big challenges for foreign exchange risk management for an Indian Corporate.

Foreign Exchange Risk Management – L&T Perspective

In light of the tightly coupled foreign exchange markets and complex and uncertain business environment, foreign exchange risk management has evolved from being a standalone function to a role which is completely integrated with business and has to be uniformly implemented across the organization.

Risk management framework and the contours of the approach have undergone a radical shift in order to ride the unprecedented volatile times. Most critical here is the top management recognition of the criticality of foreign exchange risks – at strategic, tactical and operational levels.

The L&T Group handles financial risk management through a centralized Treasury function –and other business risks through a central review–decentralized management approach. Risk management is clearly viewed as a part of the company's overall strategy and a way to compete effectively on the business front. It has become imperative to apply analytics to create a forward looking risk framework that keeps the company at the top of the leader board.

To implement the same, the risk management framework needs few pre-requisites –

- Management commitment & a broad Board approved framework; including Risk management committees also comprising independent directors
- Clarity in roles and responsibilities – Risk owner/Aggregator / Analyzer /Decision Maker /Execution which fits best from the point of view of the structure of the organization, risk profile, geographical spread, regulation, accounting and so on
- A top-down approach to setting tolerable risk parameters within which subsequent decisions need to be fitted
- A robust process /system to aggregate risks and analyze them
- A strong Treasury/Corporate Finance function manned by professionals with financial market and risk management expertise; supported by a superior external intelligence network of financial institutions

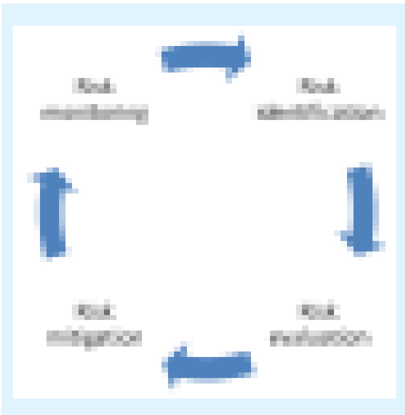
Under this stricter operating environment, an increasing number of corporates, especially, the medium scale enterprises have found it difficult to keep up with the regulatory requirements.

At L&T, the framework is spliced across the organization through business specific risk management committees which work in tandem with treasury committee at corporate level. This ensures process of risk management is implemented across organization. Centralized guidelines are formulated to ensure uniformity.

Risk management process involves following elements:-

Risk identification:

Different types of businesses face different types of forex exposure related risks. Typically for a project type of business involving multiple currencies, forex risks will arise from long tenors of project, payment milestones involved and uncertainty



involved in timing of cashflows.

On the other hand, product business will get affected due to macroeconomic factors which in turn will alter product demand cycle. In current environment where sourcing is global and products manufactured are exported to all corners of world, such changes inevitably expose an organization to forex risks which will impact profitability.

It, thus, becomes imperative to identify these risks based on business needs and intricacies so that corrective actions can be taken proactively. Tools like risk register can be effectively used to build a strong repository of risks pertaining to specific businesses. It also acts as a repository of unforeseen forex risks emerging from unprecedented moves in currency markets (a la black swan events) and assists in preparing for suitable contingency measures.

Risk Evaluation:

Risk evaluation as the name suggests involves estimation of likely impact in case the risks envisaged materialize and how they will affect profitability of a business. With evolving complexity in currency markets and high level of correlation between currencies, we have to evolve our methods used to evaluate forex risk and its impact as well.

A quantitative approach is thus more suited in this situation. The objective is to estimate impact as accurately as possible covering as many scenarios and alternatives and ensure a largely shock proof portfolio of risks. Hence analysis of forex risk impact is done using simulation based modeling to incorporate currency trends, currency correlations, cross asset correlations to arrive at likely impact. Critical point to note here is that input and formulation of appropriate models is essential to successful implementation of these tools.

Risk Mitigation:

The main objective at this stage is to evaluate different hedging alternatives in terms of instrument selection while ensuring choice of strategy is consistent with policy objectives.

Evaluating use of Real options is also a very effective strategy.

Risk monitoring:

As it has been highlighted in the prelude to risk management, currency markets now operate 24 hours a day and almost 365 days a year. Hence actions taken to mitigate forex risk in the previous steps can go off the target due to fluctuations in currency markets. Risk monitoring is essential to track the changes and take corrective actions to appropriately adjust mitigation measures.

Given the complexity of business operations, top management needs to be abreast of all such action in real time basis to take swift actions. Tools like risk dashboard is an effective way to capture essence of forex risk impact. It not only gives us an idea of impact as on date but can also provide valuable insights into future scenarios. This structured process forms the backbone of forex risk management process. I believe that we should be able to meet challenges thrown at us by forex risk head on with the help of an appropriate mix of skill set, advanced tools and standardized processes implemented throughout the organization.

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Ramaswamy Govindan

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Mr. Ramaswamy Govindan is Vice President (Corporate Finance& Risk Management) in Larsen & Toubro Limited. He heads the Treasury and Finance functions including regional finance / treasury centers outside India. He manages the finance / treasury portfolio of more than 100 group companies at policy level. Has been a part of many international/ domestic benchmark transactions in various spheres for L&T Group (GDR, QIP, FCCB).

Mr. Govindan alsooversees the enterprise risk management functions for the group.

Govindan has done BSc (Statistics) from Loyola College Madras and done his Post Graduate Diploma in Management from IRMA, Anand.

Foreign Exchange Risk Management

Smt. Usha Ananthasubramanian,
Executive Director, Punjab National Bank

The Backdrop (Globalisation and International Business)

Globalization, commonly understood as "acceleration and extension of interdependence of economic and business activities across national boundaries", has become a buzzword of modern times. It's an inevitable phenomenon in human history which has been bringing the world closer since the time of early trade and exploration through the exchange of goods, products, information, jobs, knowledge and culture. What is unique is the pace and scope of global integration resulting from unmatched advancements and reduction in the cost of technology, communications, science, transport and industry. Markets have become more interwoven and the production process has been made more efficient by the option to create 'world products'. Also, the ability to ship information and products easily and economically from one country to the next and to locate the manufacturing process where labour and work processes are less expensive, has changed the pattern of production and consumption across the world.

Globalisation has yielded magnanimous scope for international businesses. International business refers to the business activities that involve transfer of resources, goods, services, knowledge, skills, or information across national boundaries and includes international trade and

Globalisation has yielded magnanimous scope for international businesses

investment. Resources may be human, capital or raw material. Goods may be semi-finished or finished assemblies and products. Services include accounting, legal counsel, banking, insurance, management consulting, trade service, education, health care, and tourism, among others. Knowledge and skills include technology and innovation, organizational and managerial skills, and intellectual property rights such as copyrights, trademarks, and brand names. Information flows include databases and information networks, among others. The parties involved may be individuals (e.g., tourists and individual investors buying foreign stocks or bonds), companies (private or public), company clusters (e.g., alliances), government bodies (e.g., central banks), and international institutions (e.g., the World Bank, the IMF). Of these, companies are the dominant players. The firm is the primary economic agent facilitating and gaining from globalization. Activities and exchanges involving the crossing of national boundaries are called international transactions. International transactions are manifested mainly in international trade and investment. International trade occurs when a company exports goods or services to buyers (importers) in another country. International investment occurs when the company invests resources in business activities outside its home country.

Indian Perspective To Economic Liberalisation And International Businesses

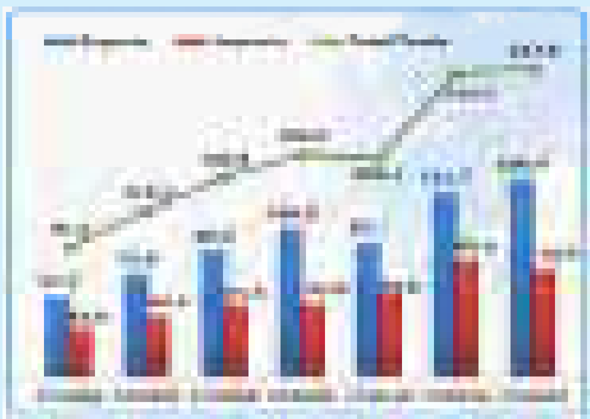
For decades after independence in 1947, India embarked on a program of autarky (national economic self-sufficiency). India started economic liberalization in 1991 after pursuing an import substitution strategy for nearly forty years. Import Substitution strategy attempted to accelerate the development by limiting imports of manufactured goods, in order to foster manufacturing sector serving the domestic market. The logic behind was the "Infant Industry Argument" saying new manufacturing industries in developing countries cannot initially compete with well-established manufacturing in developed countries. To allow manufacturing to get a toehold, then, governments should temporarily support new industries until they have grown strong enough to meet international competition. Thus, according to this argument, tariffs or import quotas were used as temporary measures to get industrialization started. It is a historical fact that some of the world's largest market economies began their industrialization behind trade barriers only. The United States had high tariff rates on manufacturing in the 19th century, while Japan had extensive import controls until the 1970s.

By 1991, however, a sluggish Indian economy combined with the forces of economic liberalisation led to a more open economy. The neo-liberal policies included opening for international trade and investment, deregulation, initiation of privatization, tax reforms, inflation-controlling measures, Simplifying procedures of business, i.e. investment, trade etc. such as doing away with the license, permit and Less interventionist and more co-operative role of the Government in economic affairs, i.e. facilitating business rather than controlling it. There was simultaneously a gradual rise in International trade, investment and overall economic growth.

As per WTO, in 2011 the world as a whole produced goods and services worth about $69.9 trillion, at current prices. Of this total, approx. 30 Percent was sold across national borders. World trade in goods and services exceeded $20.03 trillion. In the same year India was the 19th largest merchandise exporter and 12th largest importer in the world with shares of 1.7 per cent and 2.5 per cent in world exports and imports respectively. India's merchandise exports increased by 21.3 per cent to reach US $ 304.6 billion while imports increased by 32.3 per cent to US $ 489.2 billion in 2011-12. In commercial services, India was the 8th largest exporter and 7th largest importer in the world with shares of 3.3 per cent and 3.1 per cent in world

Total Trade in Merchandise (US$ bn)

Total Trade in Services (US$ bn)



exports and imports respectively. India's service export increased to US $ 140.9 billion and imports increased to US $ 76.9 billion in 2011-12. In FY2012, the total trade GDP ratio of India increased to 42.9%.

Foreign Exchange Risk

Risk may be broadly defined as "probability of occurrence of an event that causes a loss or reduction in expected gains in the future". Every business has Inherent risks which may differ depending on the underlying risk factors. All international businesses (Trade, Investments, borrowings etc.) lead to international transactions, which in turn yield FOREX positions/ exposures. These FOREX positions exhibit some unique set of risks which are enlisted hereunder:

1. Exchange Rate Risk
2. Interest Rate Risk
3. Country/Sovereign Risk
4. Compliance Risk
5. Settlement Risk

1. Exchange Rate Risk: The price of one currency in terms of another is called as exchange rate. Risk of losses due to adverse fluctuation of exchange rates is called exchange rate risk.

a) Exporter suffers when domestic currency appreciates.
b) Importer suffers when domestic currency depreciates.
c) Liabilities viz. ECBs, FCL/FCTL, Buyers Credit, PCFC increase in value when domestic currency depreciates.
d) Assets viz. Overseas Investments RFC, EEFC, FCNR (B), Nostro Balances lose value when domestic currency appreciates.

The exchange rate risk has prominently surfaced since adoption of the floating exchange rate regime by the world community after fall of the Bretton Woods system in 1973. Earlier two fixed exchange rate systems had marked their failure. 1st was the gold standard in which price of all currencies were fixed against gold. After failure of the gold standard,

Bretton Woods system emerged in 1941 in which price of all currencies were fixed in terms of US dollar. It also demised in 1972 giving rise to the present day's exchange rate regime i.e "Floating Exchange Rate Regime", in which market forces determine the exchange rates with least sovereign interferences. Of course few countries like china are exceptions, which still follow a fixed exchange rate regime.

The basic principle governing the exchange rate in floating regime is "Purchasing Power Parity (PPP)". According to PPP an identical basket of goods should cost equal in different countries, given the exchange rate. It means if one apple costs Rs. 50 in India and $1 in USA, then USD/INR exchange rate has to be 50 in principle. It may be further affected by demand-supply or/and speculative factors.

Since prices of goods in different countries keep on changing subject to varied inflationary forces and the demand-supply or/and speculative factors keep on playing their roles, the exchange rates have become a dynamic phenomenon. This dynamism gives birth to the Exchange Rate Risk. It implies that value of one's forex exposures are subject to change based on the aforementioned factors, and in today's age of interwoven economies, advanced technology and vibrant and large forex markets, exchange rates fluctuate every second. The volatile nature of the FOREX market poses a great risk of sudden and drastic FOREX rate movements, which may cause significantly damaging financial losses from otherwise profitable FOREX transactions.

Mitigation/Hedging of the Exchange Rate Risk

Since the exchange rate risk is a major deterrent in expansion of the International Businesses, it needs to be properly mitigated in order to minimise the impact of exchange rate fluctuations on the P/L and balance sheets. The primary objective of FOREX risk management is to minimize potential currency losses, and not to make profits from FOREX rate movements which are unpredictable and frequent. There is a wide array of derivative products in the market for effective management and hedging of exchange rate risk. Few of them are explained hereunder:

a) **Forex Forward contracts:** These are bilateral contracts between two parties to buy/sell foreign currency at a pre-specified future date at a pre-specified rate. With this one can lock the exchange rate and prevent the exposures against any future exchange rate fluctualtion. Example:
b) **Currency Futures:** These are Exchange traded standardized forward contracts where exchange

India Trade with Asia (in $ bn)

Forex Exposure	**Hedging Instrument**
• Exporter to Euro zone will receive EUR 1 mio in 3 months • Spot rate EUR/INR: 59.77, Exporter believes Rupee will appreciate against Euro in the next 3 months	• Exporter sells EUR 1 mio forward at forward rate of 60.15 • If EUR/INR is unfavorable in 3 months (i.e., < 60.15), Exporter still receives Rs. 60.15 per Euro, that is Rs. 60.15 mio
Unhedged Company	**Effect of Hedging**
• If in 3 months, spot rate is 58.00… - Unhedged Company will receive: - 58.00 x 1,000,000 = - Rs. 58,000,00	• Hedged Company has already sold EUR forward – Hedged Company will receive: – 60.15 x 1,000,000 = Rs. 60,150,000
Money saved by hedging: 60,150,000 – 58,000,000 = Rs 2.15 mio	

acts as central counterparty to both Buyer and seller. This takes away the counterparty and settlement risks as well, other than the exchange rate risk. The standardized terms in the contract are for Quantity of FOREX, Expiration Dates of Contract, Delivery Period and Locations, Payment and Settlement terms, and Units of Price Fluctuations.

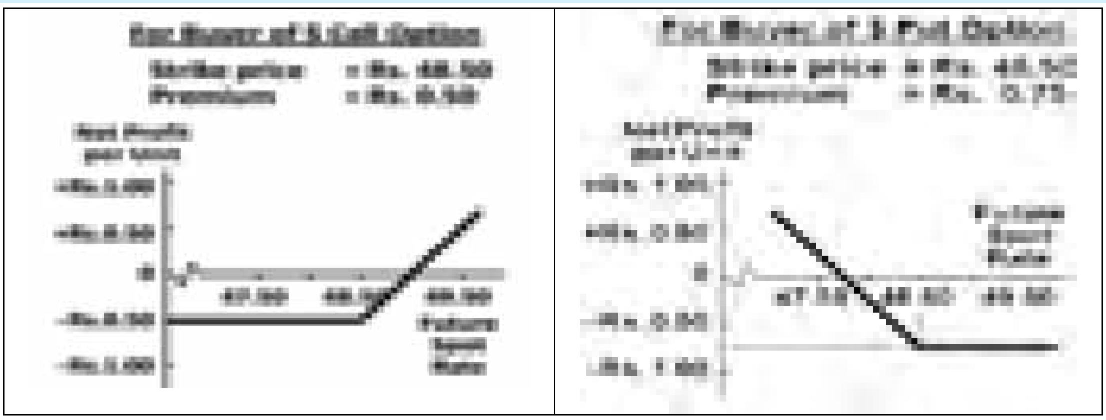
c) **Currency Options:** Currency option is a financial contract between two parties that provides the buyer with the right (without an obligation) to buy/ sell a particular currency at a pre specified price at a future date. The right to buy is Call Option whereas the right to sell is Put Option. An option is a non-linear derivative that holds only the upside for the buyer. It means that the buyer of an option may exercise his option if it is in the money, else he may let it expire without being exercised. The price of only having an upside and no downside, is reflected in the premium of the option.

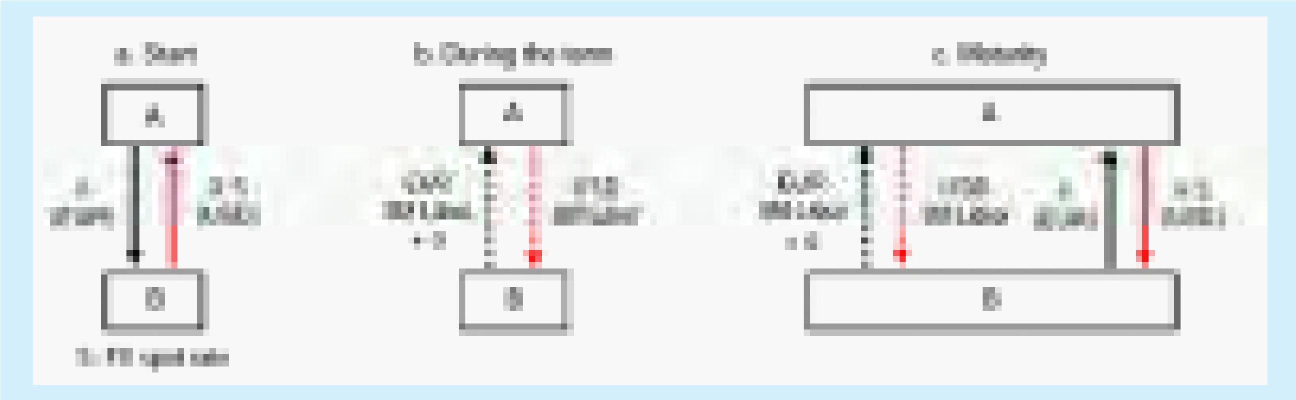
It is evident from the above graphs that potential losses arising out of an option contract are restricted to the amount of premium only; whereas the potential gains are theoretically unlimited.

d) **Cross Currency Swaps:** A Cross currency swap (CCS) is a derivative contract by which two counterparties exchange, over an agreed period, two streams of interest payments in different currencies and, at the end of the period, the corresponding principal amounts at an exchange rate agreed at the start of the contract. It helps hedging of foreign currency loans and investments of residents.

2) **Interest Rate Risk:** Interest rate risk is the risk (variability in value) borne by an interest-bearing asset (Investments) or liability (borrowings) due to variability of interest rates. Return on assets (overseas loans & investments) decreases with decrease in overseas interest rates and vice versa. Cost of liabilities (ECBs) increases with increase in overseas interest rates. The currencies with lower interest rates are traded at premium in the forward market and vice versa. The forward

Graphical Representation of Currency Option Payoffs





premium decreases (increases) with increase (decrease) in the interest rates of the currency at premium.

Mitigation/Hedging of the Interest Rate Risk

Most prominent derivative instrument to hedge the Interest rate risk in a forex exposure is Interest Rate Swap (IRS). An interest rate swap is a derivative contract in which one stream of interest payments (Fixed or floating) is exchanged with another.

3) **Country/Sovereign Risk:** Country risk refers to the risk of doing business in a foreign territory or with foreign nationals, dependent on changes in the business environment and policies that may adversely affect operating profits or the value of assets. Many countries follow a bigger interventionist role creating uncertainties and risks in the market. They may frequently tamper the exchange rates or the currency convertibility (current or capital account) policies impacting the profitability of the business.

Mitigation/Hedging of Sovereign risk

The sovereign risk can be mitigated by confining our businesses and forex exposures in politically stable countries and restrict our transactions covered/ guaranteed under/by international treaties/organisations/banks.

4) **Compliance Risk:** Compliance risk refers to the expected losses/ penalties arising due to non compliance of regulatory guidelines. The foreign exchange market is controlled and regulated by a number of agencies which enhances the compliance risk manifolds.

a) RBI: It regulates the FOREX market through participants and products.

b) FEMA (2000): It lays down detailed guidelines on permitted capital & current a/c transactions as well as International Remittances.

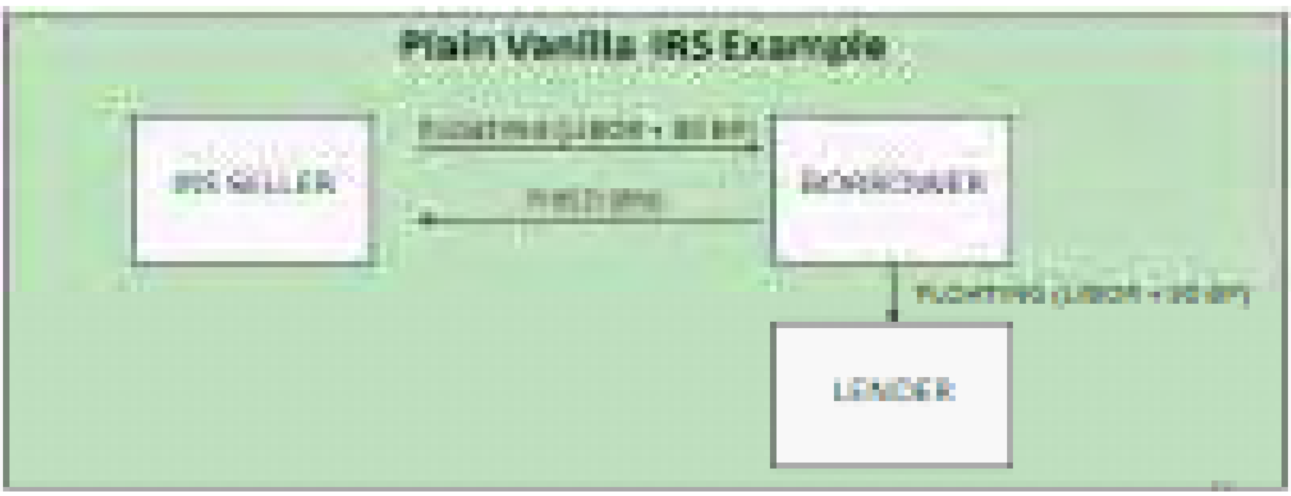
c) DGFT (MOC): It frames the Foreign Trade Policy.

d) FEDAI: It does the Accreditation of Forex Brokers and frames rules governing the conduct of inter-bank foreign exchange business among banks vis-à-vis public.

Mitigation/Hedging of compliance risk

The compliance risks are mitigated by careful and informed business practices and efficient processes.

5) **Settlement risk:** Settlement Risk refers to the risk of losses arising out of non receipt of funds as per agreed terms. Since forex markets are virtual markets spread round the globe, one party to an FX trade could pay out the currency it sold but not receive the currency it bought. This is caused mainly due to different time zones in various countries. If you trade YEN (Bank of Tokyo in Japan) against USD



(Citibank in USA) sitting in India, with a difference of 15-16 hours the settlement may take place on different dates.

Mitigation/Hedging of settlement risk

Settlement risk can be mitigated by proper assessment of settlement methodology, efficient processes and error free operations. Continuous linked settlement (Payment vs. Payment) is the optimal methodology to hedge the settlement risk.

Summary and Conclusion

Risk and Reward are two facets of the same coin. Every business has Inherent risks which may differ depending on its operations, activities and the underlying risk factors. Business is actually an art of taking risks and getting compensated for it. Risk management doesn't mean avoiding risk. It focuses to optimize risk-reward trade-off rather than minimize/eliminate risk. Since FOREX transactions cross national boundaries, it involves multiple set of macro and micro economic factors spread over different countries. It yields unique and complex risks which are generally unmanageable without hedging through the derivative products. Although, FX derivatives are magnificent risk management tools enabling the investors to protect themselves from the vagaries of the volatile FX markets, it may prove to be disastrous if used without proper understanding. So need of the hour is to educate ourselves with the vibrant derivative products and participate effectively in the derivatives market to help it evolve to its optimum levels.

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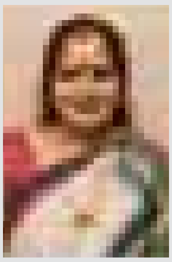


Usha Ananthasubramanian
Executive Director
Punjab National Bank

Smt. Usha Ananthasubramanian has taken over as Executive Director of Punjab National Bank on 19th July 2011. Prior to joining the Bank, she was General Manager in Bank of Baroda. Born on 1st October 1958, Smt. Usha holds a Master's Degree in Statistics from the University of Madras and a Master's degree in Ancient Indian Culture from University of Mumbai.

She started her banking career in February 1982 as a Specialist Officer in the Planning stream of Bank of Baroda. In a career spanning over 29 years, she has worked in various positions and has acquired rich experience. The key assignments include Zonal Head of Southern Zone of Bank of Baroda, Life Insurance Joint Venture formation and Secretary to the Board of Directors. She has been closely associated with the transformation project of Bank of Baroda including rebranding and innovative HR initiatives.

Smt. Usha has attended Leadership Development Programme at MDI, Gurgaon, Leadership & Corporate Excellence Management Programme at Kellogg School of Management, Northwestern University, Chicago. and the Top Management Programme at Indian School of Business, Hyderabad.

Foreign Exchange Risk Management

Shri Nishant Jha, *Vice President (Research)*
Shri Selvaraj Kalyanasundaram, *Deputy General Manager (Forex, Financial Engineering & New Products)*

Foreign Exchange Risk has globally come to prominence since the abolition of the Bretton Woods system of administering exchange rates in 1971. Under Bretton Woods, national currencies were pegged to the US Dollar, which in turn was pegged to gold at $35 per ounce of gold. By breaking its peg to Gold, US broke up the Bretton Woods system of "fixed" exchange rates, making the currencies float freely. This left corporates havingcross border exposures with a high risk of uncertainty in cash flows, profits as well as future costs. Since then foreign exchange risk management has become an important topic of deliberation and we have seen banks come up with multiple tools for hedging these risks by corporates.

Domestic Scenario

In India, till mid-sixties, Rupee was reasonably stable and pegged to Pound Sterling. However, trade and fiscal imbalances and prevailing circumstances warranted a steep devaluation of Rupee in 1966. In the following period, after experimenting with pegs to different currencies, India pegged Rupee to a basket of currencies of major trading partners.

Inspite of these measures and a continuously weakening Rupee, India again had a serious balance of payments crisis that led to the reforms of 1991 which also included successive sharp devaluations of the Rupee in June 1991. The process of full convertibility on current account for Indian Rupee started in 1992. But the exchange rate was kept stable under Liberalized

"Human beings, who are almost unique in having the ability to learn from the experience of others, are also remarkable for their apparent disinclination to do so."

....Douglas Adams

Exchange Rate Management System (LERMS) and then a unified exchange rate mechanism between 1993 and 1995. Rupee continued its gradual depreciating tendencies against the US Dollar after the withdrawal of the unified exchange rate.

In the new millennium, Indian trade has grown by leaps and bounds. Indian businesses have started to generate significant revenues from their overseas operations. Investors are also finding value in their investments in India. This has created a larger market base for Rupee leading to higher volumes. Rupee exchange rate has thus been given more leeway to find its own value, motivating Indian corporates to take up risk management in a more focused manner. Now that Rupee has braced two way movements of larger degrees exchange rate risk management has become of utmost importance even for corporates who have kept a passive stance towards exchange rate risk management.

India – Highly Exposed to Exchange Rate Fluctuations

In November 2012, India had a merchandise trade deficit of $19.287 billion or Rs. 1,05,647 crores. Out of around $64 billion trade volumes in November ($41.59 billion imports), $14.52 billion was contributed by oil imports, making it 35% of India's imports, and around 23% of total trade volumes.And the even more worrying bit is that oil imports grew at 16.77% over previous year in November. In addition, gold has emerged as a new shock to the Indian current account. Last fiscal we imported $58 billion worth of gold, compared to $140 billion worth of oil. The current account deficit in this fiscal is likely to end up above 4.5% of GDP.

With gold and oil imports putting pressure on Rupee to depreciate, RBI has tried to allow a number of ways to increase capital inflows. An increasing number of companies have been allowed to borrow abroad and foreign investors to invest in India to counter the negative trade flows. FIIs can now invest upto $75 billion into the Indian debt markets. This is in addition to the large holdings of FIIs in Indian stock markets worth more than $230 billion.Any shake up in confidence can quickly see large outflows from India, leading to a sharp depreciation of the Rupee.

Since 2007, Rupee has traded between a wide range of 57.33-39.21, which is a 46% change between the lowest level to the highest. During the same period the change between lowest and highest value of EUR/USD has been 35%, while the same for Yuan is just 15%.

Sources of Risk for Corporates

Indian corporates are exposed to the risk of losses due to exchange rate fluctuations through various channels. The most obvious of these is through tradeexposures. This channel of risk exposure is well recognized in India, though most corporates still do not hedge even these exposures. This may include simple business exports/imports, capital expenditures in foreign currency like import of machinery and/or revenues in foreign currency. Such exposure may also include other income, such as royalties, interest, dividends etc. received in foreign currency.

For exporters, exchange rate fluctuations can be detrimental to the margins or in extreme cases even to the whole business as an appreciation of Rupee can lead to reduced competitiveness or even non-viability of committed orders. Another source of exposure to exchange rate risk for Indian corporates is due to their non-Rupee borrowings through ECB/FCCB route. Recently we have seen many corporates having trouble with repayment of their FCCB/ECB borrowings due to Rupee weakness. Even those corporates who were able to repay their borrowings have been hit due to exchange rate movement. A corporate could also be exposed to exchange rate risk in case it has offshore assets such as operations or subsidiaries that are valued in a foreign currency (translation exposure).

The other two channels that expose Indian corporates to exchange rate risks are lesser known, even though they are quite prevalent. Many companies assume dollar liabilities using swaps leavingthem open to exchange rate risk in case there is no natural hedge. Similarly, many corporates prefer to use cost reduction structures in place of simple forwards to reduce their hedging costs. This also exposes them to exchange rate risks for the sell option leg of the structure as writing of an option creates an obligation. Risks arising through these two channels also need to be considered while considering total exposure to foreign exchange risks.

Exchange Rate Risk Management

It is an accepted fact that currency exchange rates are not predictable to any satisfactory degree. Given the large number of ways in which a firm can be exposed to exchange rate risks, it is imperative to consider managing these risks. Management of exchange rate risk involves a number of steps for a corporate, like recognizing types of exposures, calculating thepotential value of exposure as well ascontrol and mitigation of the risk due to these exposures.

To ensure that a system of exchange rate risk management is in place, especially after the disputes that arose after the 2008 financial crisis, RBI has put in place a customer Suitability and Appropriateness Policy to be followed by banks. The policy instructs banks to make sure that the corporates have a board approved Risk Management Policy.

Risk Measurement

One of the most widely used measures of currency risk is Value at Risk or VAR. VAR gives us the maximum change for a specified number of days and for a specified confidence level. While VAR can be calculated in a number of ways, one of the simplest ways is explained below:

We take historical closing prices of USD/INR from 2008 to 2012 and then calculate daily returns using the formula ln(p2)-ln(p1), where p1 is closing price on a day and p2 is the closing price on the next day. Then we calculate the mean (m) and the standard deviation (sd) of these returns. The 1-day 99% confidence VAR for this is calculated as:

VAR (V) = m-2.33*sd

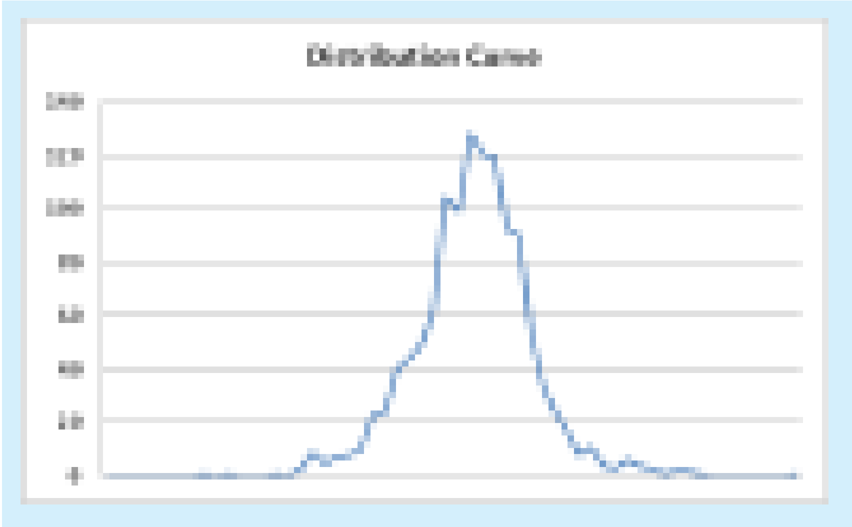
To calculate the range of possible values, we need another data, today's price (p). Then the formula for 1-day change in exchange rate can be calculated using the formula:

1-day change = p*(1+V) or p*(1-V)

For a 10-day change, we just need to multiply the 1-day VAR with square root of 10, and for 100-day change with square root of 100, and so on. We use this to calculate the 99% confidence VAR for USD/INR using closing prices data from 2008-2012 and current price as 55.15 below:

These figures show that 100 days from now USD/INR can be between 58.34 and 51.96 with a 99% confidence. This still leaves a 1% chance of the Rupee trading beyond this range. Actually, this model assumes a normal distribution for the returns, which is a bell curve. In reality, the returns distribution curve is like the one given below. This is flatter than a normal curve with fatter tails. This means that the chances of USD/INR trading beyond this range in the next 100 days are more than just 1%. To get a better range estimate, there are fat tail adjustments that can be used.

Number of Days	1	10	100
VAR	0.005778	0.01827	0.057775
Maximum	55.47	56.16	58.34
Minimum	54.83	54.14	51.96



Now that the maximum and minimum value of the exchange rate has been derived, we can use to easily calculate the risk. Say our exposure is one million USD long at the current price. Then our risk on this position is approximately 3.19 million Rupees or $57,842 (55.15-51.96=3.19).

Risk Control and Mitigation – Hedging

RBI allows banks to provide various hedging tools to their customers like Forward contracts, Swaps, Options and Currency Futures.Selection of a particular hedging instrument by a corporate would depend upon availability, flexibility and cost. Most common among these tools in India for hedging are the forward contracts given their high ratings on all three parameters. Most large corporates typically use a combination of these hedging tools to hedge their various exposures, depending, in addition to the above noted parameters, on their view of the currency movement going forward, expected flows, etc. Banks are also instructed by RBI under the Suitability and Appropriateness Policy to judge the appropriateness of a customer and ensure proper Board approvals for the products that may be offered to a corporate.

In India we still see a lot of reluctance to address the issue of foreign exchange risk by corporates instead of the large number of ways in which it can impact them. Many firms are simply not sensitized of the risks, especially small and some medium sized firms.Others are aware of the risks but do not know how to hedge the risks. There are also firms who like to only hedge part of their risks and still others who feel that hedging is too expensive and it is better to leave the exposures open. Further, zero cost or cost reduction structures are very popular to reduce the hedging cost, but such strategies do not come without their own risks as they involve writing of options. Only sophisticated large treasuries should write options, under the rules prescribed by RBI, while smaller less savvy corporates need to pay for the hedge. Moreover, Corporates should be sensitised to avoid use of structured products for profit making purpose. It should be used strictly for hedge purpose.

Companies should broadly try to find a break even exchange rate based on their costing and then hedge the risk after accounting for some margin. This may not be simple in case of certain sectors and in certain conditions, but is useful as a thumb rule to make a decision. They also need to take a decision, again based on industry specific factors, on the optimal hedge for their exposure. For example, a certain firm may decide to hedge in parts, especially in case of probable exposures, while another may decide to go for a one time hedge. Once the hedging is done the firm should not see favourable exchange rate movement as a lost opportunity. But here it is important to note that partial exposures or even incorrect hedging can leave a firm open to exchange rate risks and in some cases even create additional exposures. So choosing an optimal hedging strategy should be given due importance in any corporate with foreign exchange exposures.

Hedging Products in India

RBI has specified (Circular dated 28th December 2010 - Comprehensive Guidelines on Over the Counter (OTC) Foreign Exchange Derivatives and Overseas Hedging of Commodity Price and Freight Risks) which entity can access what products for hedging their exchange rate risks. The facilities are divided based on products/purpose:

1. Contracted Exposure: Products allowed are Forward Foreign Exchange Contracts, Cross Currency Options (not involving the Rupee), Foreign Currency-INR Options,Foreign Currency-INR Swaps, Cost Reduction Structures, Cross currency swap, Interest Rate Swap, Coupon Swap, Interest Rate Cap or Collar(purchases), Forward Rate Agreement
2. Probable Exposures based on Past Performance: Products allowed are Forward Foreign Exchange Contracts, Cross Currency Options (not involving the Rupee), Foreign Currency-INR Options, Cost Reduction Structures
3. Special Dispensation: Following are permitted under special dispensation:
   a. Small and Medium Enterprises (SMEs): Permitted to book forward foreign exchange contracts without production of underlying documents. Products allowed is only Forward Foreign Exchange Contracts
   b. Resident Individuals: Can hedge actual or anticipated exposure without underlying documents upto USD 1,00,000
4. Persons resident outside India: Foreign Institutional Investors (FIIs), Persons having Foreign Direct Investment (FDI) in India and Non-resident Indians (NRIs) can use Forward Contracts and Foreign Currency-INR Options
5. Authorised Dealers Category I: Can hedge for management of assets and liabilities, hedging of gold price risk and hedging of currency risk on capital

According to RBI's Master Circular on Risk Management and Inter-Bank Dealings, the following products are allowed for hedging foreign exchange risk in India:

Companies should broadly try to find a break even exchange rate based on their costing and then hedge the risk after accounting for some margin

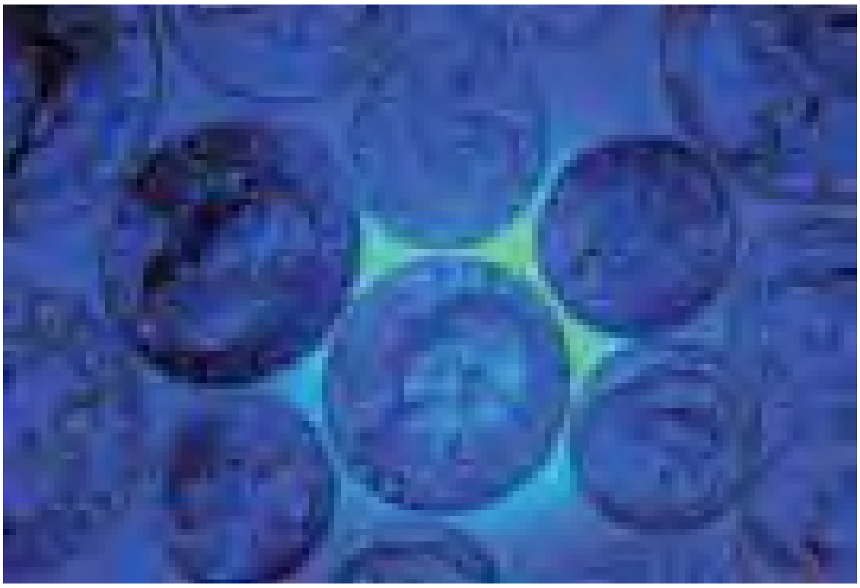
1. Forward contracts: Can be done for maturity not exceeding the exposure maturity, and for an amount upto the exposure amount, or a reasonable assumption. While forward contracts are very flexible at the time of making the contract in terms of the amount, maturity date (though costs of contracts with maturity not on end of month may be more), pricing transparency, etc., they are binding at the maturity.
2. Currency Options: Similar restrictions as forward contracts in terms of maturity and amount. The pricing transparency is less than forwards as the market is not actively traded in India, but it provides more flexibility at maturity as it creates a right and not an obligation to execute the contract, leaving the possible

upside with the hedger. But the flexibility comes with a higher cost of hedging. For now only plain vanilla European options are allowed, along with some of their combinations. Exotic options and other features like barriers etc. are not permitted by RBI anymore. RBI also does not allow corporates to receive premium, but hedging costs may be reduced using cost reduction structures as long as the bank is comfortable with the suitability of the corporate treasury's ability to manage a written option exposure. Interest rate caps and collar purchases are also allowed for hedging borrowings in foreign currency.

3. Futures: Similar to forward contract, except that an initial margin needs to be placed with the exchange. The position MTMs are settled on a daily basis. A major weakness of futures as a hedging product is that they cannot be tailored in terms of amount or maturity date.

4. Swaps: Swaps are among the most popular derivative contracts due to their wide usefulness and low cost. RBI allows FCY-INR swaps for hedging forex risks and cross currency swaps, interest rate swaps and forward rate agreements (FRAs) for hedging borrowings in foreign currency.

Along with the amount of exposure, RBI also allows corporates to hedge exposures based on past performance, which is based on past performance up to the average of the previous three financial years' actual export turnover or the previous year's actual exportturnover, whichever is higher. For imports, the rule is the same except that only 25% of the eligible turnover amount is allowed to be hedged. For such hedges, banks are not allowed to pass on any gains on any cancellations to corporates.



Documentation - ISDA Master Agreement and CSA

RBI's Derivative Guidelines mention that documentation should be complete in all respects between parties entering into derivatives contracts. This has become even more important after the problems faced in settlements in the aftermath of the Lehman Brothersbankruptcy. For reducing the documentation efforts during each deal and to minimise any disputes through standardisation, ISDA Master Agreement should be signed by corporates with the banks they want to do derivatives contractswith, including for forward contracts where the tenor exceeds 13 months. The Master Agreement allows enough flexibility while also providing a globally standardised format for the documentation so that disputes and disagreements are minimised.

The CSA, or Credit Support Annexure, is an optional part of the ISDA Master Agreement which regulates credit support or collateral for derivative transactions. This is not yet popular in India as banks tend to use their marked-to-market limits for customers to manage their credit risk and posting collateral is not popular in the OTC derivatives market here. Making the use of CSAs along with ISDA Master Agreements can lead to a reduction in hedging costs.

Move Towards Transparency – Exchange Traded Products and CCPs

In September 2009, G20 leaders agreed all standardised OTC derivative contracts be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counter-parties (CCPs); that OTC derivative contracts be reported to trade repositories; and that non-

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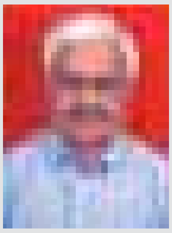
centrally cleared contracts be subject to higher capital requirements.We have seen the development on some of these areas, especially in setting up reporting to central repositories with CCIL being developed as a central repository. RBI has mandated banks to report all derivative deals to CCIL. In US, the Wall Street Transparency and Accountability Act(Title VII of Dodd Frank) also promotes central clearing and reporting to repositories for swaps.

We have mostly talked about the exposure of corporates to USD/INR exchange rate fluctuations, but the same applies to exposures to other currency pairs. Since many corporates have exposures in other currencies, their risk managers need to follow the developments across the globe: whether it is the Euro zone crisis, US fiscal negotiations, geopolitical events in the MENA (Middle East and North Africa) region or South China Sea, or the election of a nationalist government in Japan. For example, the latter has led to 9% depreciation in Yen within two months of the announcement of elections. Finally, it is important for the top management to be aware of the risk management function's activity on a regular basis. In the end, I think this quote from Theodore Roosevelt nicely sums up the way in which we need to see risk management:

"Risk is like fire: If controlled it will help you; if uncontrolled it will rise up and destroy you."

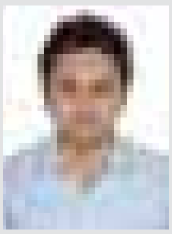


Selvaraj Kalyanasundaram
Deputy General Manager
(Forex, Financial Engineering & New Products)

Shri Selvaraj Kalyanasundaram, Deputy General Manager (Forex, Financial Engineering & New Products)

Joined State Bank of India as Probationary Officer in 1985. Among the assignments he has handled are Dealer - Overseas Branch Chennai, Dealer - Frankfurt Branch, Chief Manager (International Banking) - Leather International Branch, Branch Head - SBI DFHI Ltd., Chennai, Assistant General Manager (Treasury Management Group) - International Division, Mumbai.

He was actively involved with the activities of The Fixed Income Money Market and Derivatives Association of India (FIMMDA) and held the positions of Vice Chairman and Chairman between Nov'10 and Feb'12. Shri Selvaraj currently holds the position of Chairman, Forex Association of India (FAI).



Nishant Jha
Vice President (Research)

Shri Nishant Jha, Vice President (Research)

Joined State Bank of India as Management Trainee in 2006. He is an engineering graduate in Computer Science from Rajasthan University and an MBA in Finance from Management Development Institute, Gurgaon.

He has been publishing Forex Research for Global Markets for the past seven years.

Foreign Exchange Risk Management

***Mr. James Berry**, Chief Information Officer,*
India & South Asia, Standard Charted Bank

As Asian debt and foreign exchange markets are set to grow strongly with Asian financial centres getting more focus, it is becoming even more pertinent to manage the foreign exchange risk more proactively. The significance of foreign exchange risk management has increased due to several factors.

India is now more open to the global economy with its growing trade and financial integration with the rest of the world. The global FX turnover has tripled between 2001 and 2010. In India, the export and import turnover has trebled since 2006 (export $305bn & import 489bn in FY2012 as compared to $103bn and $149bn in FY 2006 respectively). The total merchandise trade has thus increased threefold to USD 794 bln in 2012. This implies increased FX risk to domestic corporates across various geographies with Asia taking up a large chunk (51.6%) closely followed by Europe (19%), North America (11.9%), Africa (6.6%)[1].

Also, the volatility in FX markets can be attributed to the crisis in US & euro zone which continues to be high. While several emerging and developing economies are gradually returning to higher growth, weak external demand and contagion risks from advanced economies render them vulnerable to further shocks. Lead indicators point to a modest firming up in the momentum of global growth over 2013 if there is firm policy action in the Euro area and the US[2].

The global FX turnover has tripled between 2001 and 2010

[1] Source : Ministry of Commerce & Industry, Government of India
[2] Source : Various Research reports including the Super Cycle report of Standard Chartered

The INR has depreciated quite sharply and has become very volatile during the recent period due to a host of factors, both external as well as internal. Of late, we are seeing a period of high volatility in most of the asset classes. RBI had taken a raft of measures in December 2011 to tackle the high INR volatility which impacted the trading and hedging volumes. However, the resumed activity later saw a pick up again despite the continuing restrictions.

The forward markets in India are very liquid upto one year. However, it is not so beyond say one year or two years. This liquidity risk can be managed to a certain extent by taking a short hedge till the maturity of the underlying exposure. This is allowed for, under the current regulations, subject to amount and tenor availability on the underlying exposure.

The regulator has taken several steps to streamline and support the markets such as i) introducing currency futures trading, ii) relaxing curbs on intra-day position limits, iii) allowing re-booking by Corporate to the extent of 25%, iv) allowing non resident entities to hedge their Rupee denominated invoices, v) hedging Rupee ECBs, vi) allowing short term rollovers on past performance facility, and vii) allowing exporters the flexibility of additional 15 days beyond the maturity date of the underlying by 15 days, to name a few.

The RBI report on currency and finance 2008-09 – Global Financial Crisis and the Indian Economy stated that "in the aftermath of the sub prime and the financial crisis of 2008/9, several questions were raised which included, inter alia, the functioning of the financial markets and the transparency, their capacity to price, allocate and manage risk efficiently. Given the large size of the market for structured finance products and over the counter (OTC) products, the determination of the fair value became increasingly difficult to ascertain". Subsequently, the regulator issued revised comprehensive guidelines on dealings in foreign exchange derivative contracts and commodity hedging, clearly stipulating products that are disallowed and specific product related requirements.

The regulators intentions are well intended, namely to curb speculation and allow the derivative products only for the purposes of hedging against the underlying exposure requirements of the clients. For example, the hedges should only be undertaken on the back of genuine underlying exposures towards which the clients are required to submit the underlying documents within 15 days of the deal date.

Another example of product restriction is the cost reduction or zero cost structures which can only be undertaken subject to pre conditions such as all products to be fair valued, AS 30-32 compliance, financial disclosures, risk management policy approved by the board of directors etc.

For other facilities like the past performance, similar structure can be dealt provided the company has a minimum net worth of INR 200 crores and an annual export and import turnover exceeding INR 1000 crores. Another important step taken by the regulator was to restrict cancellation and rebooking as it was observed that this was being used for speculative purposes rather than long term hedge or a view.

The guidelines also mandated the banks to carry out due diligence regarding "user appropriateness" and "suitability" of the derivative contracts to ensure that the corporate understands the nature of risk inherent and have the requisite risk framework in place to monitor and manage the risk on an ongoing basis. The RBI also came out with specific guidelines on generic and structured derivative products. This stipulates market makers undertaking derivative transactions, "with a sense of responsibility and circumspection that would avoid, among other things, mis-selling". It further states that the banks should offer these products only to users where these are consistent with the users business, financial operations, skill and sophistication, internal policies as well as risk appetite"[3].

With the Indian economy expanding at circa 6% p.a, there is an increased focus on FX risk management

With the Indian economy expanding at circa 6% p.a, there is an increased focus on FX risk management. Further, FX liberalisation is expected over the next few years. The preliminary results of the Bank for International Settlements' (BIS') 2010 Triennial Central Bank Survey shows that average daily turnover in global FX markets was USD 3.98trn in April 2010 – a 221% increase since 2001, a period when nominal global GDP almost doubled and world trade increased 2.5 times. 2

"While CNY is expected to be the fastest-growing currency in terms of average daily turnover, mirroring the early and middle phases of G10 currency development, other large EM currencies, such as the INR and BRL, should also grow fast From 2010-20, the MXN, ZAR, RUB and THB are likely to experience similar growth rates as the AUD experienced

[3] Source : RBI/2011-12/243 Comprehensive Guidelines on Derivatives : Modifications

from 2001-10 as the average turnover of these currencies put together collectively has reached a relatively high level". 2

India's market infrastructure, the regulator and market participants need to be prepared for this. A better understanding of the need for FX risk management and functioning of the FX markets and the associated risks in hedging instruments that are available in the market is the need of the hour.

RBI has very rightfully taken a lot of corrective steps in this regard which has brought about a great degree of discipline in the market. Some of the broad stipulations in this regard are as below.

- Corporate need to get the appropriate systems in place to capture, monitor and accurately manage the risks in various instruments like futures and options
- Corporate need to put in place risk management policies clearly establishing a system of risk oversight, internal controls to identify, assess, monitor and manage risks associated with dealing in derivative hedging instruments.
- Corporate need to have a frameworkforanunderstanding of the company's risk tolerances and limits.
- The risk management policy should clearly lay down the guidelines on prudent accounting and disclosure norms and mark to market positions.
- The risk management policy should clearly stipulate the hedging strategy and the products through which the company plans to hedge their FX risk through well illustrated examples such as scenario analysis.
- Various certification requirements from the statutory auditors of the companies on a regular basis which entails the statutory auditors certifying the outstanding exposure on all derivative products to be within the overall underlying exposure at any point of time.
- AD (Authorized Dealers) banks should obtain specific board resolution from the corporates which i) explicitly mentions the limit assigned by the corporate to the bank, ii) the names and designation of the officials of the company authorized to undertake particular derivative transactions, iii) the name of the people to whom transactions should be reported by the bank, among other requirements.

While the regulator has put the onus on ADs for the due diligence, the end user Corporates also have a great responsibility in this regard. The regulations have brought about a great degree of discipline, orderliness and a sense of responsibility in the market which augurs well for all.

To summarise, effective risk management is about identifying and managing the root causes of risk, rather than the symptoms. FX risks will always exist, and managing them well with the tools we have available within your pre-defined risk thresholds and the regulations just makes good business sense.

James Berry
Chief Information Officer,
India & South Asia,
Standard Charted Bank

James joined Standard Chartered in London in April 1997. An accountant by trade, he has previously worked in Australia and the United Kingdom in a variety of Finance and Operational roles in manufacturing and technology. Since joining Standard Chartered he has undertaken Finance, Operational and Consumer Banking positions, working in London, Hong Kong and Singapore. He led the Global Sourcing group since 2007 and created a structured and professional approach to how the Bank approaches this important area. In his current role as the Chief Information Officer, his major responsibilities include developing and executing world-class technology and operations strategies that drive the business agenda.

Foreign Exchange Risk Management

Mr. Ananth Narayan G, *Co-Head of Wholesale Banking, South Asia, Standard Charted Bank*

Managing market risks has become a critical imperative of every corporate treasury. This article presents my own personal view on 'hedging' of market risk, and offers unsolicited advice on how risk managers should perhaps approach their thankless task of risk management.

'Hedging' of market risk

Wikipedia defines a financial hedge as 'an investment position intended to offset potential losses/ gains that may be incurred by a companion investment'.

Notice that this definition does not imply that 'hedging' reduces all financial risks – it merely implies more predictability, in the hedger's cashflows. In practise, however, we sometimes present 'hedging' as a panacea for all risks – economic, accounting, competitive etc. So we often hear suggestions that corporates should 'hedge' their market risk to factors such as foreign exchange and interest rates, and focus solely on their 'core' business. The implication is that it is possible to achieve a state of riskless insured nirvana, by some astute 'hedging'. A corollary is the advice that corporates should not 'speculate', i.e. be biased by a view on the underlying markets. Again, the implication is that having a view is unnecessary, since risks can be negated by 'hedging'.

Unfortunately, a 'hedge' – or finding a dampener to underlying volatility in financial results – is not necessarily a favourable or even less risky economic outcome for a practitioner, apart from the narrow and almost

I will never die for my beliefs; because I might be wrong

... Bertrand Russell

academic context of increasing cashflow certainty. An exporter, with underlying receivables in foreign currency would be 'hedging' her exposures by selling foreign currency against INR in the forwards market. While this would naturally crystallize her receivables in INR, this does not mean her relative economic risks have reduced. If INR were to depreciate sharply – as it did between August 2011 and now, our exporter would be severely disadvantaged vis-a-vis any competition that chose to keep its foreign exchange risk open.

What about using insurance products such as options? Surely, buying tail risk insurance by way of options truly does reduce risk – perhaps by guaranteeing a floor on the downside, and perhaps allowing participation on the upside? While options can offer more variety of appropriate payoffs than simple forwards, they cannot ensure relative financial well-being under all circumstances. Insurance comes at a cost, and rarely are such costs negligible. Academia provides us with analysis such as the efficient frontier hypothesis, which tells us that choosing a certain hedge ratio can help reduce volatility of financial outcomes over a longer term. Even this, however, does not make a commitment on ensuring competitive parity.

So is competitive hedging the right 'hedging' strategy? Should our CFO watch what her competition is doing, and try and mimic them, so that no competitive price/ cost advantage accrues to anyone? The problem in today's complicated and interconnected world, is actually trying to define who the competition is. Is it the company next door, or are there several possible diverse companies, including possible substitutes to the company's client solutions, across the world?

Each one of us, to varying degrees, is perhaps guilty of using 20-20 hindsight vision to 'predict' the past. We have berated importers and borrowers in foreign currencies for not having sufficiently 'hedged' their FX risk by buying USD 18 months ago, when USDINR was in the 45.00 range. After all, 'hedging' is always the right thing to do, we seem to imply. So, what about exporters, who hedged when USDINR was at 45.00 – do we, for consistency, in turn praise them? We should recognise that in markets like India, with relatively small risk size, of financial market players (besides the RBI!), for every real sector hedge that involves buying of foreign currency, there will be a balancing real sector selling of foreign currency.

Reality is that stakeholders – internal and external – will measure the quality of a risk management strategy by the relative return it eventually produces. A CFO/ Treasurer's job is quite thankless in that sense – the earlier the CFO recognizes and reconciles to this, and defines her response as 'Risk Management' as opposed to 'Hedging', the better.

In addition to getting an acceptable relative return from the market, the CFO also has to manage several stakeholders - and in the wake of the regulatory response to the financial crisis, accounting and governance standards are changing extremely rapidly. Reams of new regulations/ strictures are being published - and ignorance is simply not an excuse for today's CFO. The CFO must understand, digest and provide proactive feedback where she disagrees, and debate with relevant stakeholders. For instance, is the current pro-cyclical increase in prescribed banking capital really appropriate? Do some parts of proposed Basel III, such as CVA for OTC derivatives, have severe unintended and contra consequences in the Indian context (where every trade requires underlying client exposure), of actually penalising risk management by corporates?

So what should the Treasurer/ CFO do today?

If you are a CFO/ Treasurer, you should probably be looking at the following:

a) As an extremely critical first step, you should look to understand what your net financial risks to various market factors are – across assets and liabilities, across costs and revenues. Look for natural risk offsets within your own financials. An importer, who exports value added produce will most likely have a net economic risk – even if regulators give her the luxury of managing risks on a gross basis. Look for correlated risks – if you are dealing in commodities for instance (even if they are billed in INR), there could

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be an implicit exposure to foreign exchange. On the flip side, beware of pitfalls of logical correlations – many exporters in the past have found to their dismay that their exports actually dipped well below forecast despite sharp INR depreciation, because global growth and risk appetite had dropped alongside. Measure the sensitivity of your net financials to moves in various markets – a true measure of your risk.

b) Know what tools are available to manage those net risks – and the costs of using such tools. In the Indian FX context, this would include tracking FX spot/ forward (including long term forwards)/ futures/ options/ currency and interest rate swaps of various kinds etc. And if you intend to dynamically manage your risks, make sure you independently understand how the pricing works, and the potential unwind costs.

c) Be aware of what various direct and indirect competitors are doing, to manage their own risks. Try and estimate, therefore, as to how your absolute and relative returns would look like, under various market scenarios.

d) Track markets closely, and look for low risk opportunities. Be aware that in markets like India, which are relatively illiquid and do not have capital account convertibility, you will have market dislocations that offer significant opportunities to you. As an example, there have been situations where a fully hedged ECB, results in raising INR liabilities at a significantly lower cost than where one could raise straight INR liabilities via either INR loans or bonds. On the reverse side, we have also seen situations, where an INR liability raised onshore, fully swapped into foreign currency, has resulted in net foreign currency liabilities at far cheaper rates than what could have been raised directly via ECB's. Likewise, given dislocations in India's rather shallow interest rate swap markets (IRS), it may actually be possible today to raise a floating rate loan, hedge with an INR IRS, and arrive at a net fixed rate that is significantly lower than a straight fixed rate loan. And given the illiquid nature of our FX options markets, it may be possible at times to purchase insurance-like payoffs at acceptably cheap rates. These are tangible and definite value-adds, every CFO can and should provide to her organization.

Managing market risks has become a critical imperative of every corporate treasury

e) Besides taking advantage of these sometimes substantial dislocations, the CFO, in my humble opinion, has no choice but to form a view on underlying markets.
The first step to forming a view is to accept we will be periodically wrong. The second step is to study and keep abreast of fundamental, technical, market positioning, market flow, and regulatory factors. Then form, and constantly review your own base case, short-term, medium-term and long term view of markets. Remember, your call is yours, and yours alone.

f) Consider the price at which you could crystallize your exposures, and compare them with your own world view. If you are a net importer, if your base view is of steep INR depreciation, far more than that implied in the INR forwards market, go ahead and hedge aggressively. If the cost of hedging exceeds the extent of expected depreciation, go easy on the hedges. Doing nothing is a perfectly valid strategy, as long as this is a conscious and well thought out choice.

g) Irrespective of your base view, though, look for disaster and fat tail protection. Try and estimate what the tipping points are for various market factors, and be on the constant lookout to buy insurance at an acceptable cost.

h) Communicate openly and constantly with your stakeholders. Be open to challenge. Ensure you have an independent, honest review process that directly reports risks/ results to your management & other stakeholders. It's okay to be shown as wrong, but never okay to lose one's credibility/ be suspected of being less than honest. Good governance will be the key defining managerial attribute in the future.

i) Never stop learning and reviewing. Markets are extremely complicated, and forever evolving – from an accounting, regulatory, technology perspective. We could probably never master all parts of it – but there's no harm in trying. Encourage your team and stakeholders to constantly learn and disseminate as well. Provide constant feedback to all stakeholders – including regulators, policy makers etc.

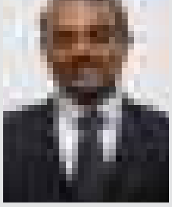
In Summary

To cut a long story short, none of us so-called market experts can provide any magic wand that will manage the CFO's considerable market risks. The CFO is, sadly, pretty much on her own. At best, we can share with her our own outlook – and then let her take her own call on her world view and the consequent risk management strategy. And sadly, complete & holistic 'hedging' probably does not exist in the real world of the CFO.

In my own personal view, I believe that the underlying fundamentals in the US private sector are very strong – notwithstanding the political and fiscal mess there. Between low land prices, availability of labour, the emerging North American energy and shale gas story, and the large amount of cash available with US corporates, conditions are ripe for a resurgence of growth and private investment in the US. This growth should help ease the fiscal side of the picture, in the long run. And while not as compelling as the US, parts of Europe and China are looking relatively strong too – compared to the doomsday pictures that were painted earlier. All in all, the external context from India's standpoint looks reasonably favourable. A better global growth should keep the risk on sentiment, encourage capital flows into India, besides giving a fillip to our exports. And importantly, the emerging energy supply story promises to be a true and genuine positive for energy hungry India in the medium term.

Our domestic context, however, remains murky. Our much needed infrastructure investments – in power, ports, natural resources, education, freight and investment corridors etc. – remain moribund. Our microeconomics – witness the high levels of corporate leverage and stressed banking assets – remains weak. There is a palpable trust and/ or governance deficit all around. We remain vulnerable to fiscal led inflation, and the twin deficits. We need things to change. In the long run, though, I remain bullish on our country's prospects. The true strength of this country is, it's almost clichéd demographic dividend – we will after all, provide much of the world's workforce in the future. And we do have the entrepreneurs, the work ethics and the promise of opportunity to pass the ongoing tests – eventually.

Unfortunately, I could well be completely wrong in my analysis – but I can assure that I would be practising what I preach.



Ananth Narayan G
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Ananth has 19 years of experience in the banking industry. He joined Standard Chartered Bank in August 2009. Prior to Standard Chartered Bank he was with Citibank in Mumbai till 2005 (Director & Head of FICC Trading), and with Deutsche Bank in Mumbai (Head of Rates Sales & Trading, South Asia – till August 2009). As Co-Head of Wholesale Banking in SCB, he has joint responsibility for business strategy, performance and people for Wholesale Bank across South Asia. Ananth is a director on the board of Fixed Income Money Market and Dealers Association (FIMMDA), on the board of Standard Chartered Securities (India) Ltd.. Ananth has been a part of various RBI committees (including the one that launched FX Options in India, Interest Rate Futures, Financial Stability etc). He appears in print and television media for views on financial markets.

He holds a B. Tech (Electrical Engg.) from Indian Institute of Technology (IIT) Bombay and a MBA from Indian Institute of Management (IIM) Lucknow.

Foreign Exchange Risk Management- The way forward

Mr. Apoorv Srivastava,
Research Associate-Financial Sector, FICCI

Introduction

The gradual liberalization of Indian economy has resulted in substantial inflow of foreign capital into India. In India, the economic liberalization in the early nineties provided the economic rationale for the introduction of Foreign exchange (FX) derivatives. The far-reaching changes in the Indian economy since liberalization in the early 1990s have had a deep impact on the Indian financial sector. The various steps taken by the Government since liberalization to meet the challenges of a complex financial architecture have ensured that a new face of the Indian financial sector is emerging to culminate into a strong, transparent and resilient system.

The following developments led to foreign capital inflow into India.

- With limited convertibility on the trade account being introduced in 1993, the environment became even more conducive for the introduction of these hedge products
- In the year 1999, India ceased to be a closed and protected economy and adopted the globalization route, to become a part of the world economy

These steps were largely instrumental in the integration of the Indian financial markets with the global markets. With the dismantling of trade barriers, business houses started actively approaching foreign markets

In India, the economic liberalization in the early nineties provided the economic rationale for the introduction of Foreign exchange (FX) derivatives not only with their products but also to source capital and direct investment opportunities. The development in the Indian FX derivatives market should be seen along with the steps taken to gradually reform the Indian financial markets. After liberalisation and current account convertibility, the whole scenario changed. Risk management since then has under gone a paradigm shift. The spurts in foreign investments led to substantial increase in the quantum of inflows and outflows in different currencies, with varying maturities.

Foreign Exchange Risk: A Historical Perspective

In India, there has been an increasing awareness for the need to introduce financial derivatives in order to enable hedging against market risks in a cost effective way. A dynamic foreign exchange market provides businesses with a spectrum of hedging products for effectively managing their foreign exchange exposures. As Indian businesses become more global in their approach coupled with globalization of trade and relative free movement of financial assets, risk management through a broad based active and liquid foreign exchange market becomes a necessity in India, like in other developed and developing countries. The most common cause of foreign exchange (FX) risk arises from making overseas payments for imports that are priced in a foreign currency and receiving foreign currency as payment for exports. Failing to protect against movements in FX rates effectively means buying or selling without having agreed to a price in dollars.

FX protection is an essential service for:

- Importers and exporters of goods and services
- Owners of overseas assets, joint ventures or partnerships
- Group companies and subsidiaries in more than one country

Corporate enterprises have had to face the challenges of the shift from low risk to high risk operations involving foreign exchange. Exposure to foreign exchange risk arises from:

- Foreign currency borrowing or deposits
- Overseas subsidiaries
- Assets located overseas

The global market for financial derivatives[1] has grown substantially in the recent past. This tremendous growth in global derivative markets can be attributed to a number of factors. They help to protect the company from unanticipated events: adverse foreign-exchange or interest-rate movements and unexpected increases in input costs, which is the risk that a change in currency exchange rates will adversely impact business results.

Derivatives also aid in the following:

- They reallocate risk among financial market participants
- Help to make financial markets more complete
- Provide valuable information to investors about economic fundamentals
- Provide an important function of efficient price discovery
- Make unbundling of risk easier

Need for a dynamic foreign exchange market in India:

India Inc has reached the scale and size of the global order and several Indian organizations are today world leaders in their respective industries. Arriving on the global scenario subjects corporations to diversified revenue streams in various geographies, thus leading to invoicing in global currencies such as USD, GBP and EUR among others. Similarly, access to various borrowing mechanisms and debt markets has also led to increased non-INR exposure on books. It is important to note that some of Indian entities are subject to volatility induced by rupee fluctuations on both their P&L as well as Balance Sheet. Complications arise from the fact that competition from other geographies, while sharing similar risk profile, is helped by favourable exchange rate mechanism and induced cost advantages.

In the corporate finance literature, research on risk management has focused on the important question of why firms should hedge a given risk.

[1] A derivative instrument is commonly defined as one whose price is derived from an underlying quantity that could be an interest or an exchange rate (in this case exchange rate) we refer to derivatives of money and foreign exchange market prices as "financial derivatives".

The literature makes the important observation that measuring risk exposures is an essential component of a firm's risk management strategy. Without knowledge of the primitive risk exposures of a firm, it is not possible to test whether firms are altering their exposures in a manner consistent with theory.

Issues in the Indian market:

The history of using financial derivatives to hedge foreign exchange exposures by corporations in India is fairly recent. Early 90s' witnessed few foreign currency call options written by some Indian corporations. Indian corporations have historically preferred staying away from the currency market as companies have considered hedging as unwanted cost centers. Firms preferred to keep their risk exposures un-hedged as they found the forward contracts to be very costly.

Periods of exchange rate stability bred complacency. Importers were confident that the Reserve Bank of India (RBI) would intervene to halt any rupee decline where as exporters were of the view that rupee has always been over rated and that there is no way that it shall appreciate from the present value. This traditional mindset also kept companies away from hedging their exposures. Due to the generic corporate reluctance, lack of information & technology and consideration of hedging as unwanted cost centre, companies involved in hedging have mostly gone the conservative way to hedge their exposures.

Historically, out of the Indian companies engaging into hedging, majority have been entering into forward contracts with banks, which have been the Authorized Dealers (AD) in foreign exchange. The limited use and general lack of interest in the available instruments can be explained by the fact that dependence on external sources of funding was limited and the external sector wasn't really developed.

If we examine the role of PSU banks in FX risk management, we observe that although India has witnessed improvement in informational and operational efficiency of the foreign exchange market, this has happened at a halting pace. Earlier, the Indian companies had been entering into forward contracts with banks, which were the Authorised Dealers (AD) in foreign exchange. Today, banks that have been playing the role of facilitators are suffering from acute problems. Public sector banks, which control almost 75% of Indian forex market, have been grappling with issues such as under-staffing and bureaucratic pressures. Most of the banks in public sector banks have not merged the forex and money operations which has bred inefficiency in their working that has percolated to the corporate sector as well.

Impact of Global economy and the India story

The global economy is in the midst of a deep crisis and the centre of action this time is the Euro Zone. The story of the sovereign debt crisis in the peripheral countries of the Euro zone region is getting complex by the day. Even as members of the European Union agreed on a plan to address the problems in Greece, Italy and other potentially fiscally stressed nations, the reaction from the markets was muted. This is indicative of a severe lack of confidence amongst market players and is also reflected in the difficulties countries like Spain, Italy and now even France are having in accessing funds from the market.

If we take the case of banking sector in India, the government as well as the RBI have aptly recognized the need for broadening Indian markets and have taken several steps to evolve a truly global currency, the Rupee. Just recently the outlook for the Indian banking sector was downgraded from stable to negative by Moody's. While there are some concerns, they are not grave enough to have warranted such a move. The banking regulations in India are in line with the international standards and the RBI – India's central bank – has had a particularly successful track record. The capital adequacy ratios for a vast majority of Indian banks are above the prudential norms and we expect that as we go ahead and embrace the Basel III norms, we will find ourselves on a firmer footing. For managing the Indian banking system astutely and for keeping it away from the fires started following the Lehman collapse the RBI has won accolades across the world. This is an area where other countries can learn successful lessons from the Indian experience.

India is now a well-integrated with the world economy and moves in tandem with global developments, both on the economic front as well on the currency front. In India, the financial economy directly impacts the real economy and any financial sector crisis would have ramifications far beyond itself. India's financial sector has been one of the fastest growing sectors in the economy. The economy has witnessed increased private sector activity including an explosion of foreign banks, insurance companies, mutual funds, venture capital and investment institutions. Although significant steps have been taken in reforming the financial services sector, some areas require greater focus.

1. One area of concern relates to the ability of the financial sector in its present structure to make available investible resources to the potential investors in coming years, such as equity, long term debt and medium and short-term debt.
2. The other major constraint in the Indian scenario has been the inability of banks to quickly enforce security and access their collateral, and the capital constraints in recognizing large loan losses. Recent measures taken by the Government have attempted to address both these problems.
3. Volatility in global commodity prices has had a major impact on Indian companies. This has led to non-performing loans and provisioning for credit losses becoming a key area of concern for the Indian financial system.

Way Forward:

Going forward, companies do take cognizance of the importance of currency risk management; however, one is not certain how many of the companies are working towards building capacity to deal with this changing scenario. Nevertheless, new financial derivatives have been allowed in the market to provide for exposures arising out of increased business activity in the external sector. The heightened volatility and inability to predict rupee movements has led to severe pain on the part of corporations, irrespective of whether they have chosen to hedge their foreign exchange risks or not.

In the recent times, there has been an increasing awareness of the need for introduction of financial derivatives in order to enable hedging against market risk in a cost effective way. But many firms still prefer to keep their risk exposures un-hedged as they find the forward contracts as cost centres. The problem in the Indian context is that the market for derivatives in India other than forward contracts is very shallow.

In the current formative phase of the development of the foreign exchange market, as we take a closer look at the initiatives taken by corporate enterprises, it would be worthwhile to provide indicative recommendations on the way forward.

Recommendations:

- The corporations are recommended to look strategically into their exposure and take prudent decisions in hedging. This decision should be backed by professional treasurers, an efficient back office and good forecasting techniques.
- Companies are also advised to consider going in for various other derivatives that are flexible and cost effective. In addition to the traditional "physical" products, such as spot and forward exchange rates, the new "synthetic" or derivative products, including options, futures and swaps, and their use by the corporate sector should be considered prudently. These synthetic products have their market value determined by the value of a specific, underlying, physical product.
- The banking sector is recommended to recruit specialized personnel for the job with latest

The problem in the Indian context is that the market for derivatives in India other than forward contracts is very shallow

technology to deal in the market. They should also merge their money market and forex operation and treat it as a separate profit centre for better efficiency.

- The focus of next generation regulation in domestic securities market should be on inclusive growth, i.e. broad basing or deepening the market with more innovative products and technology for a sustained growth brought out through healthy competition. Whatever path the Exchange industry takes, it is necessary to keep it aligned with public policy objectives, as exchanges are the mechanism through which market capitalism survives.

These all measures will definitely make the FX market deep and vibrant, which will make the working of corporate sector easier in dealing with the currency exposure.

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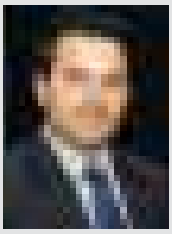

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MCX Stock Exchange Limited

MCX'SX India's New Stock Exchange

"Application for National Membership of MCX-SX"

ABOUT MCX-SX:

MCX STOCK EXCHANGE (MCX-SX), India's New Stock Exchange, commenced operations in the Currency Futures Segment on October 2008 and currently provides trading facility in Currency Futures and Options. Trades on MCX-SX are cleared by MCX-SX Clearing Corporation Limited (MCX-SX CCL). The Exchange currently has 751 members participating from 734 towns and cities across India.

The Exchange has received permission from SEBI to trade in Equity, Futures and Options on Equity, Interest Rate Derivatives and Debt Segment and would commence operations after enrolment of members and completion of other compliances. The membership offer is for these segments. MCX-SX believes new opportunities will unfold for members and securities industry professionals as the capital market develops further. The exchange proposes to undertake capacity building for members to enable them to manage new opportunities.

1. MEMBERSHIP CATEGORIES:

A person can apply for any of the following membership categories subject to the terms and conditions and relevant eligibility criteria provided in the membership dossier. Potential members can apply for any membership category and be a Trading Member (TM)/ Self Clearing Member (SCM)/ Trading-cum-Clearing Member (TCM)/ Professional Clearing Member (PCM).

i. **Composite Members:** Includes segments referred above and is available to all eligible persons. MCX-SX has conceptualised an 'India Model' to harness the latent potential of domestic savings and reinforce it with institutional, FII and domestic investment. Accordingly two important types of membership are being introduced to create a deep, wide and liquid market and also achieve financial inclusion.

ii. **Professionally Qualified Members:** Includes segments as referred above and is meant only for professionals such as MBA/CA/CFA/ICWA/LLB/CS/BE/MBBS who are taking membership of a Stock Exchange for the first time.

Practicing career professionals with a background of capital market ecosystem such as investment banking, private equity, venture funds, market intermediation, banking, etc could benefit from this membership.

iii. **Rural Entrepreneur Members:** Includes segments as referred above and is meant for such persons who are located in sub-districts and talukas beyond the existing 2000 cities and towns where the capital market access is currently not available.

2. ELIGIBILITY CRITERIA:

Entities: The following entities are eligible to apply for membership, subject to the regulatory norms and related provisions-

i. Individual (sole proprietary firms)
ii. Registered Partnership Firms
iii. Corporate Bodies
iv. Banks and Financial Institutions, including their subsidiaries

MEMBERSHIP DETAILS:

Details of Net-worth, Fees and Deposits, and Admission Procedure information is provided in the Membership Dossier which can be collected from the Exchange or downloaded from: http://www.mcx-sx.com/membership.

Interested persons may obtain Application Form and other details either from Exchange website or Corporate office/ Regional offices. The duly filled in Application Form along with a demand draft for admission fees should reach the Exchange. Payments are to be made through demand draft, drawn in favour of 'MCX Stock Exchange Limited' payable at 'Mumbai'.

Head - Membership

MCX STOCK EXCHANGE LIMITED

Exchange Square, Suren Road, Andheri (East), Mumbai – 400 093.

Tel.: 022-6731 8899 • **Fax:** 022-6731 9004 • **E-mail:** newmem@mcx-sx.com • **Visit:** www.mcx-sx.com

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The Policy Pulse

Banking Sector

Mid Quarter Monetary Policy Review 2012 – 18th December, 2012

The RBI left the key policy rates unchanged in its Mid Quarter Monetary Policy Review 2012. The Cash Reserve Ratio (CRR) stood at 4.25% and repo rate under the Liquidity Adjustment Facility (LAF) stood at 8%. Consequently reverse repo rate under the Liquidity Adjustment Facility (LAF) remained unchanged at 7%.

However, RBI had cut the Cash Reserve Ratio (CRR) by 25 basis points from 4.5% to 4.25% in second Quarter Review of Monetary Policy held on 30th October, 2012. This move by RBI injected around $175 billion of primary liquidity into the banking system.

It is expected that the RBI will start cutting rates only from January – July 2013, once inflation eases. Inflation as measured by all indices has remained elevated and wholesale price index-based inflation has remained above RBI's comfort zone of 5-5.5 per cent for nearly three years now.

RBI plans to push Export Lending

The RBI has mooted a separate carve – out for export credit within the overall priority sector lending target for banks to make funds available for exports amidst rising concern that declining exports will keep current account deficit elevated and depreciate the rupee, undermining its efforts to rein in inflation.

India's exports fell for seventh month running, declining 4.2% in November to $22.9 billion while imports rose 6.4% to $41.5 billion, yielding a trade deficit on $19.3 billion, just short of record high $21 billion.

Companies in Agri Business now in Priority Sector

The RBI has revised the definition of priority sector to include corporate engaged in agriculture and allied activities, and amended the limits for certain categories. RBI has clarified that loans to corporate, including companies formed by individual farmers, partnership firms and co-operatives of farmers directly engaged in agriculture and allied activities, will now be considered as priority sector lending. However, the central bank has capped such lending at Rs 2 crore. It said only crop loans and lending to pre-harvest and post-harvest activities and export credit will come under priority sector lending. Allied activities will include dairy, fishery, animal husbandry, poultry, bee-keeping and sericulture.

The RBI has also raised the priority sector lending limit for medium and small enterprises in the service sector to Rs 2 crore from Rs 1 crore. It has also amended norms for housing loans under priority sector. Bank loans to any government body for construction of homes or for slum clearances and rehabilitation of slum dwellers will also be included in the priority sector subject to a ceiling of Rs 10 lakh per dwelling unit.

The per unit housing cost limit for housing projects for construction of homes exclusively for weaker section has been raised from Rs 5 lakh to Rs 10 lakh per unit.

RBI plans to roll out gold – linked products

The RBI has proposed the introduction of gold – linked products to promote the use of gold as a financial asset in a way that will reduce the pressure on gold imports and manage the country's obsession with gold investment.

RBI could consider modified gold deposit schemes, gold linked accounts, gold accumulation plans and gold pension plans.

Gold deposit schemes – Investors can hold gold deposits with banks for a definite period of time.

Gold - linked accounts – They would be non interest bearing accounts, giving users the exposure to gold markets – where the gold would be purchased and hedged abroad.

Gold accumulation plans – To be in the form of SIPs where small quantities could be bought at regular intervals.

Gold Pension Plan – It's targeted at senior citizens and allows reverse mortgage of properties. Banks will open an annuity plan with the insurance companies for a definite period.

Figures on Gold Imports

Gold imports	2011	2012
Q1		228
Q2		153
Q3	205	223
Q4	157	

RBI bans bank loans to buy gold in any form

The RBI has notified a total ban on banks from advancing any loans to customers for purchasing gold in any form, which includes primary gold, gold bullion, gold jewellery, gold coins, units of gold Exchange Traded Funds (ETF) and units of gold mutual funds, to dissuade people from indulging in speculative activity.

No advances should be granted by banks against gold bullion to dealers or traders in gold if, in their assessment, such advances are likely to be utilised for purposes of financing gold purchase at auctions or speculative holding of stocks and bullion.

However, RBI said that banks are allowed to give loans for 'genuine working capital requirements to jewellers' The decision was taken in view of significant rise in imports of gold in recent years, The step by the RBI, came on concerns that direct bank financing for the purchase of gold in any form that is bullion, primary gold, jewellery, gold coin, etc could lead to fuelling of demand for gold in the country and will put pressure on current account deficit.

Government, RBI for flexibility in valuation norms of unlisted Indian firms

The Government and the RBI are considering relaxation in the stiff valuation norms governing foreign direct investment in unlisted Indian firms, a move that could potential boost private equity flows. The proposal is among measures being considered to boost capital flows to fund India's yawning current account deficit that is weakening the currency.

RBI to simplify KYC norms

The RBI will soon come up with guidelines to simplify know-your-customer (KYC) norms and to make Aadhaar the proof for address and identification. There are also thoughts on coming up with policy measures on the International Bank Account Number, which will facilitate portability. RBI is also trying to marry banks and post offices in an electronic fund management system. RBI is also stressing on the means by which the payment system could work as a catalyst for financial inclusion. India is the second largest in terms of cash usage to gross domestic product. Therefore, efforts were being made to make India a "less-cash society". Innovative payment systems can handle large account transactions. There is also a need for point-of-sale infrastructure and banks should go in a big way for its acquisition. There is also a need to create easy-to-use products and easily available products.

RBI trying to mesh current liquidity, Basel-III norms

The RBI is working on a way to include liquidity held by banks under the current mandate to get eligibility under the Basel-III regime as well. This might involve bringing down the requirement of additional liquidity that banks need to provide as

the new norms set in. The set of rules under Basel-III prescribes banks to build a liquidity coverage ratio. However, banks in India are mandated to maintain the minimum liquidity at 23 per cent of net demand and time liabilities as the Statutory Liquidity Ratio (SLR) under RBI norms.

RBI is therefore working out a scheme under which part of SLR is treated as the Basel-III liquidity requirement. For Indian banks, RBI has laid down phases in order to comply with the Basel-III norms within the transition period of January 2015-January 2018. According to RBI, Capital requirements will increase and might have an impact on banks' profitability. Therefore, there is a need to raise capital even if the Basel-III norms were not in place.

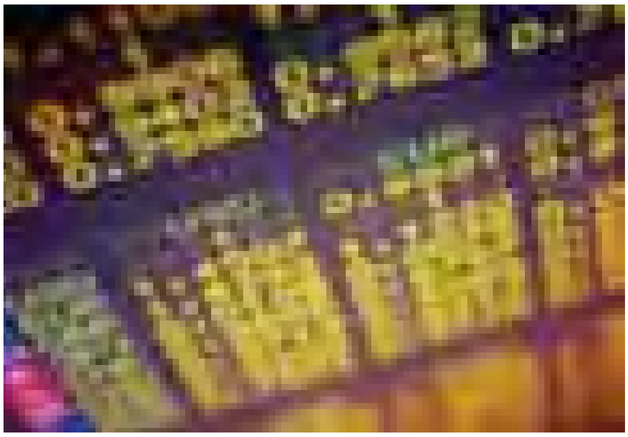
RBI to set aside funds for buying illiquid gilts

The RBI is working with the government to set aside funds for buying illiquid gilts from the market. "Over a period of time RBI will have some budget where we will try to repair some of those securities in which volumes are low, and create volumes for those securities which have higher volumes". According to Mr. H R Khan, Deputy Governor, RBI, there is a joint group between the RBI and the government where this has been discussed under cash and debt management. But it is difficult to say if immediately they will be in a position to do so.

Experts say this move should come in when liquidity tightens in the system. "In a scenario of tight liquidity, the RBI can announce this. If this happens, it will pump in liquidity into the system, and gilt yields will also fall". This move will also help banks to get rid of illiquid securities. "Banks hold a lot of illiquid securities. The difference between the yield of liquid and illiquid securities of same maturity tenure is about 10-15 basis points. If these illiquid securities are bought by the RBI, the yield curve will get realigned."

RBI aims to develop more efficient, integrated payment system

The Reserve Bank aims to develop a more efficient and integrated payment system in the country. In its 'Payment Systems In India: Vision 2012-15' document, RBI said the main focus is to provide a modern electronic payments system that is safe,



simple and low-cost for use by all. The payment system initiatives taken over 2009-2012 have resulted in deeper acceptance and penetration of modern electronic payment system. Though cheque is still a dominant mode of payment, its share has come down from 65% to 52% in volume terms and from 12% to 9% in value terms.

Payments in non-cash payments have shown an upward trend with electronic payments by the end of 2011-12, constituting 91% in terms of value (from 88% in 2009-10) and 48% in terms of volume (from 35% in 2009-10)."Notwithstanding these accomplishments, cash remains the predominant payment mode in the country. The value of banknotes and coins in circulation as a percentage of GDP (12.04%) is very high in the country when compared to other emerging markets, like Brazil, Mexico and Russia," according to RBI.

Likewise, non-cash transactions per citizen are very low in India (six transactions per inhabitant) when compared with other emerging markets. The electronic payment products and services is concentrated to a large extent in the tier-I and tier-II areas and mostly to people having access to formal banking channels.

However, the section of unbanked and under-banked population in the country have missed the bandwagon of modern electronic payments system."The use of electronic payment instruments allows the unbanked to start building a transaction history, which can be a step towards initiating them towards financial inclusion." The modern electronic payment systems will also meet the payment needs such as remittances under the overall ambit of financial inclusion.

Capital Markets Sector

SEBI allows Mutual Funds to take part in credit default swaps market

In a note issued on November 15, 2012, SEBI has permitted mutual funds to participate in credit default swaps (CDS) market, as per the guidelines issued by RBI. This follows the RBI notification issued in May 2011 stating the guidelines on CDS for corporate bonds. In a swap agreement, the seller of the CDS compensates the buyer in the event of a loan default.

SEBI has allowed mutual funds to participate in CDS transactions only as users (protection buyer). Thus, mutual funds are permitted to buy credit protection only to hedge their credit risk on corporate bonds they hold. They shall not be allowed to sell protection and hence are not permitted to enter into short positions in the CDS contracts. However, they shall be permitted to exit their bought CDS positions.

SEBI relaxes MF exposure for Housing Finance companies

Providing more leeway for housing finance companies (HFCs), SEBI has relaxed the investment limit for such entities in debt mutual funds. In light of the important role played by the HFCs in the housing sector, it has been decided that an additional exposure not exceeding 10 per cent of net assets of the scheme shall be allowed only to HFCs as part of financial services sector for prudential limits in debt oriented schemes. The total investment in HFCs shall not exceed 30 per cent of the net assets of the scheme.

SEBI allows trading of ETFs in SLB segment

SEBI has made 'liquid' Index Exchange Traded Funds (ETFs) eligible for trading in the Securities Lending and Borrowing (SLB) segment. Earlier, SEBI had allowed only securities traded in the Futures & Options (F&O) segment for lending and borrowing of securities. With the introduction of the ETFs in the SLB segment, there would be wider participation as well as increased volumes. ETF shall be deemed 'liquid' provided the Index ETF has traded on at least 80 per cent of the days over the past six months and its impact cost over the past six months is less than or equal to 1 per cent.

SEBI seeks more powers to deal with defaulters

SEBI has proposed that the SEBI Act be amended to provide for effective mechanisms for recovery of monetary penalties from defaulters in such a manner as may be specified by regulations or if found expedient as per provisions of the Income Tax Act through a reference to the income tax authority on the lines of the provisions of Section 39 of the Competition Act, 2002.

SEBI comes out with norms for RGESS and asks stock exchanges to furnish list of eligible stocks for RGESS

The Rajiv Gandhi Equity Savings Scheme (RGESS) was notified by the Department of Revenue, Ministry of Finance on November 23, 2012. SEBI has asked stock exchanges to provide a list of eligible stocks for the RGESS. Stock exchanges will have to also furnish a list of eligible exchange traded funds and mutual fund schemes on their websites. Fund houses will have to come out with special plans under Rajiv Gandhi Equity Savings Scheme (which was initially restricted to direct stock investments).

Government asks States to act against illegal share trading

The Government has advised States and Union Territories to take urgent steps to tackle illegal trading of shares. SEBI has received complaints against some entities alleging illegal trading of shares

in various parts of the country. SEBI on its part has initiated training programmes and guidance to State Police Departments to deal with instances of illegal trading.

SEBI Committee to review depository system

SEBI is looking to overhaul its norms for depository systems with an aim to strengthen its oversight mechanism and to safeguard against any systemic risks posed by single-point failures. A 'Depository System Review Committee' constituted by SEBI has been asked to conduct an overall assessment/ adequacy of existing depository framework and identify potential areas for review. The move comes at a time when efforts are on to expand the ambit of depositories by allowing them to hold new asset classes in demat format.

Government may cut withholding tax on FII debt

All FII debt investments are subject to a withholding tax deduction on coupons. The tax, which varies between 20.6 per cent to 21.012 per cent depending on the nature and net taxable income of the FII, makes investments in Indian bonds uneconomical. It is believed that if the cost of hedging exchange risk is also factored in, then returns from the bond drops to unacceptably low levels. The Finance Ministry is considering a proposal by FIIs to bring down the rates of withholding tax on long-term government debt instruments. The proposal was discussed in a meeting between Finance Ministry, SEBI, top FIIs and intermediaries.

SEBI discontinues mini derivatives contracts on bourses

SEBI said it has decided to discontinue mini derivatives contracts on Sensex and Nifty indices, to discourage small investors from getting attracted to this segment. The latest move revises SEBI's decision in December 2007 that allowed mini derivative contracts. Such contracts – having a minimum size of Rs 1 lakh – were allowed on leading indices, Sensex and Nifty. No fresh mini derivatives contracts shall be issued.

SEBI allowed 12 more Alternative Investment Funds in October and November 2012

SEBI allowed 12 entities to set up Alternative Investment Funds (AIFs), a newly created class of pooled-in investment vehicles for real estate, private equity and hedge funds, in the months of October and November 2012. SEBI in the last few years has already allowed nine AIFs to set up shop in the country.

SEBI raises minimum capital requirement for brokers

SEBI has revised the base minimum capital (BMC) deposit requirement for brokers (offering algorithmic trading) to a maximum of Rs 50 lakhs. BMC is the deposit given by the member of the exchange against which no exposure for trades is allowed. Stock brokers and trading members with nation-wide presence doing proprietary trading (without algorithms) will have to bring in a BMC of Rs 10 lakh. Those who trade only on behalf of clients (without algorithms) have to bring in Rs 15 lakh. For those doing prop and client transactions (without algorithms), the BMC is Rs 25 lakh. For brokers/trading members not having nationwide presence the BMC requirement would be 40 per cent of the above.

The revision is based on the risk that brokers are exposed to, as a result of buying and selling stocks on their own behalf (proprietary trading) and on behalf of their clients. This applies to both algorithmic and non-algorithmic trades. Exchanges have to implement the circular by March 31, 2013.

SEBI takes measures to beef-up retail investor safety

Nearly two months after releasing a draft paper on a safety net me chanism, indications are that SEBI is leaning towards increasing safety for retail investors. SEBI's draft proposal seeks to shield any IPO investor who invests up to Rs 50,000 and caps the safety net at 5 percent of the issue proceeds. Exchanges have voted supporting the proposal, especially given the huge variance in information available about various issues, which affects pricing. SEBI believes that if there was good pricing and the disclosures were correct and well laid out, issues would be successful.

Companies Act gives SEBI a leg-up

According to the new provisions of the Companies Bill, 2012, if a company, listed or unlisted, makes an offer to allot or invites subscription, or allots, or enters into an agreement to allot, securities to 50 or such higher number as may be prescribed, the same shall be deemed to be an "offer to the public" and shall accordingly be governed by the provisions provided in this regard by SEBI. Though the earlier legal position of the law on issues of securities made to over 50 persons was held to be the same, there was no express provision that covered the differences between a private placement and a public offer.

Disclose data to exchanges first: SEBI to India Inc.

SEBI asked listed companies to disclose their monthly sales, turnover and production figures to stock exchanges, before sharing these with trade bodies and industry associations. SEBI believes such data, which have a bearing on stock prices, should first be disseminated to stock exchanges to ensure all investors have uniform access to these.

SEBI seeks approval for foreign funds in alternative investment funds

In May 2012, SEBI had notified the guidelines for AIFs, a new class of market intermediaries that are essentially funds established or incorporated in India for the purpose of pooling in capital from Indian and foreign investors for further investments. SEBI has now asked the government to allow foreign investments into alternative investment funds and also boost downstream investments by offshore entities under the foreign direct investment policy framework. SEBI has also allowed promoters of listed companies to offload up to 10% of equity to registered AIFs to attain minimum 25% public holding.

SEBI eases debt allocation mechanism for FIIs

In November 2012, SEBI had allowed FIIs to re-invest 50 per cent of their debt holdings from the previous calendar year to the succeeding calendar year with effect from January 1, 2014. In a part-modification of this circular, SEBI has now allowed certain FIIs to re-invest up to 50 per cent of their maximum debt holdings at any point of time in 2013 itself.

SEBI to revise rules on insider trading; to synchronize norms with the guidelines of Companies Bill

SEBI plans to revise the rules on insider trading and front-running, to synchronize the rules with those set down by the government in the Companies Bill, which was approved by the Lok Sabha in December 2012.

SEBI mulls norms for trading permitted stocks on exchanges

Every company, which is listing on the stock exchange, is required to sign a listing agreement with either one or with both the stock exchanges.

The Securities Contracts (Regulation) Act (SCRA) has a provision that any company, which has a listing agreement with a recognized stock exchange, can be traded in any of the recognized stock exchanges. SEBI is now mulling some guidelines for this purpose because there are no such guidelines available except for the SCRA provisions, which allow such trading to happen and also because a third exchange would now come in.

SEBI's unveils share buyback proposals

The SEBI unveiled a series of proposals including one that says companies must purchase at least 50 percent of the announced buyback offer from the current minimum of 25 percent. SEBI also proposed that the process be completed within three months of the announcement of the offer from the current one year, and suggested companies be barred from raising capital for two years after purchasing its own shares. These measures are meant to crack down on potential abuses as some companies have announced buybacks but did not actually end up doing so, benefitting nonetheless from the ensuing gains in their share price.

Government asks SEBI to remove cool-off period in OFS

The Central Government has sought a relaxation from SEBI on the mandated 12-week cooling-off period after any divestment through the newly-introduced offer for sale (OFS) route. In the current SEBI regulations, a promoter offering shares through an OFS is restricted from sale or purchase of shares for 12 weeks. During this period, they may sell further shares only through another OFS, with a gap of two weeks. Relaxation of the 12-week cooling off period will allow companies such as NTPC and SAIL, in which the government has proposed to divest stakes, to allot shares to eligible employees immediately after the share-sale.

Insurance Sector

Standard insurance product for rural and social sector: IRDA

The IRDA released draft guidelines for a composite package of standard insurance product for rural and social sector.

In order to promote and develop insurance awareness in the rural areas, provide protection to various risks and to enable them to build a corpus for their future needs, IRDA is keen to launch a comprehensive standard product combining both life and non-life covers. For this the regulator has released some draft guidelines and invited feedback from insurance companies, intermediaries and other members from the insurance industry.

Finance Minister announced incentives to promote life insurance

To revive the life insurance sector in India, the FM announced a few incentives to boost growth. Incentives proposed could be in the form of bringing ease in investment norms for insurance companies, empowering banks to sell products of multiple insurance companies and expedite the process for clearing new products. Chidambaram had asked Department of Revenue and CBDT/CBEC to complete the examination of suggestions by October 10, 2012 so that appropriate decisions may be announced soon.

IRDA prescribes time limits for filing Referral applications

October 2012

After the IRDA rolled out the Sharing of Database Regulations, 2010, all insurance companies have been

filing applications for approval of referral entities with IRDA. This process is done through Referral Portal designed by IRDA.

But a recent review done by the IRDA brought some issues to the fore which is making it difficult for the IRDA to know how many agreements are actually in effect. If the time frame exceeds a certain period and falls in the next financial year, all such applications i.e., pending/approved need to be evaluated afresh by the regulator.

In order to avoid this, IRDA has decided to prescribe time limits for each of the following cases:

- Insurers are required to resubmit the pending applications after submitting their remarks/ responses for the queries/requirements raised by IRDA within three (3) months from the date of queries/requirements and
- Insurers are required to execute referral agreements with the approved entities within three (3) months from the date of approval by IRDA

All the insurance companies have to comply with the above time limits. In case any of the insurance companies fail to do so, then the applications will be deemed to be "Withdrawn" by the Insurers.

IRDA gears up to deliver better and faster product decisions

November 2012

For a long time now, the insurance companies have been complaining that the process of any guideline formation by the IRDA is very slow. They believe that the delayed process affects their productivity and increases daily hassles and operational difficulties. However, the new step taken by IRDA to work in sync with the Life Insurance Council of setting up product-specific committees will indeed expedite the entire process and ease out the sharp edges.

The product specific committee would in fact, cover Unit Linked Insurance Plans (ULIPs) as well as traditional plans.

Insurers eye tier II and tier III cities to evaluate new business statistics

November 2012

India is fast emerging on the world map as a strong economy and a global power. The country is going

through a phase of rapid development and growth. With a huge population and large untapped market, insurance happens to be a big opportunity in India. According to sources large segment of rural India is still untouched because of long distances, poor distribution and high return costs.

Premium collection drops for life insurance companies

November 2012

According to a report shared by IRDA, premium collection of the Life Insurance Companies fell by 3.45 per cent during the first seven months of the financial year 2012-13. This fall is attributed by various factors such as lack of innovative products, volatile equity market and various other factors that are affecting financial sectors.

Insurance Firms being investigated for suspected nonpayment of Service Tax

December 2012

Finance Minister said in Lok Sabha that some Insurance Companies have been suspected to have evaded service tax and investigation for the same has been done. He also mentioned that in some cases the amount due has already been recovered as well. He added that in cases where investigations are completed, cases have been adjudicated and service tax liability confirmed; demand notice has been issued.

Motor Insurance Policy Tenure may rise to 2 Years soon: IRDA

December 19, 2012

The IRDA is contemplating to provide for motor insurance policies having two years terms for both commercial and private vehicles. This will reduce their renewal hassles. At the same time it will augment the income through premiums for insurance providers.

Cabinet defers decision on Insurance and Pension reforms bill

December 2012

Government has postponed its decision to present two bills pertaining to insurance and pension sector to the next session of parliament, thereby delaying the plans to repair the slacken economy. The Insurance and Pension reforms bill proposes to hike the Foreign Direct Investment (FDI) cap in the insurance and pension sector from 26% to 49% which in turn is expected to give the required boost to the insurance sector and the economy.

IRDA relaxes proof of residence norms for micro-insurance products

December 31, 2012

The IRDA has decided to relax the requirement of written confirmation from banks as a proof of residence for micro-insurance policy seekers from rural regions. According to IRDA, the requirement of providing written confirmation from banks was hampering financial inclusion measures.

"It has come to our notice that customers in remote areas who have limited access to banking facilities have difficulty in providing such written confirmations from banks," the insurance regulator said in a notification.

Reforms Tracker

Reforms Tracker: A Review of the Winter Session of Parliament and Bills Passed

The Winter Session, 2012 of Parliament which commenced on Thursday, the 22nd of November, 2012, concluded on Thursday, the 20th of December, 2012. The Session provided 20 sittings spread over a period of 29 days. As many as seven bills were passed by the Indian Parliament at the end of the Winter Session which started on Nov 22.

One of the important features of the Winter Session was that several bills including FDI and matters related to FEMA, Constitution Amendment Bills etc. could be steered through "division of vote", exhibiting Government's resoluteness and better preparedness.

During the Session, 9 Bills (7 in the Lok Sabha and 2 in the Rajya Sabha) were introduced. The Lok Sabha passed 7 Bills and the Rajya Sabha passed 8 Bills during the session. Total number of Bills passed by both Houses of Parliament during the Session was 7.

Winter Session, 2012

Bills Introduced In Lok Sabha	Bills Passed By Lok Sabha	Bills Introduced In Rajya Sabha	Bills Passed By Rajya Sabha	Bills Passed By Both Houses
1. The Coal Mines (Conservation and Development) Amendment Bill, 2012 **2. The Central Universities (Amendment) Bill, 2012** **3. The Criminal Law (Amendment) Bill, 2012** **4. The Competition (Amendment) Bill, 2012** **5. The Appropriation (No.4) Bill, 2012** **6. The Governors (Emoluments, Allowances and Privileges) Amendment Bill, 2012** **7. The Constitution (Scheduled Tribes) Order (Second Amendment) Bill, 2012**	**1. The Prevention of Money Laundering (Amendment) Bill, 2011** **2. The Unlawful Activities (Prevention) Amendment Bill, 2011** **3. The Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Bill, 2011** **4. The Appropriation (No.4) Bill, 2012** **5. The Constitution (One Hundred Eighteenth Amendment) Bill, 2012** **6. The Banking Laws (Amendment) Bill, 2011** **7. The Companies Bill, 2012**	**1. The Child Labour (Prohibition and Regulation) Amendment Bill, 2012** 2. The Indecent Representation of Women (Prohibition) Amendment Bill, 2012	**1. The North Eastern Areas (Reorganisation) Amendment Bill, 2012** 2. The Prevention of Money- Laundering (Amendment) Bill, 2012 3. The Constitution (One Hundred Seventeenth Amendment) Bill, 2012 4. The Appropriation (No.4) Bill, 2012 5. The Constitution (One Hundred Eighteenth Amendment) Bill, 2012 6. The Unlawful Activities (Prevention) Amendment Bill, 2012 7. The Banking Laws (Amendment) Bill, 2012 8. The Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Bill, 2012	**1. The North Eastern Areas (Reorganisation) Amendment Bill, 2012** 2. The Prevention of Money-Laundering (Amendment) Bill, 2012 3. The Appropriation (No.4) Bill, 2012 4. The Constitution (One Hundred Eighteenth Amendment) Bill, 2012 5. The Unlawful Activities (Prevention) Amendment Bill, 2012 6. The Banking Laws (Amendment) Bill, 2012 7. The Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Bill, 2012

The Banking Laws (Amendment) Bill, 2011

FICCI welcomes the passing of the Banking (Amendment) Bill, 2011. This Bill is an important piece of legislation that will lay the foundation for many reforms in the Indian banking sector.

"FICCI hopes that all other enabling factors as prescribed by RBI are soon fulfilled so that new bank licenses may be issued to the private sector. This will help expand the reach of banking services to the financially excluded. New bank licenses will also provide an excellent impetus to the Government's and RBI's financial inclusion agenda," said Ms. Naina Lal Kidwai, President, FICCI.

The Bill further clarifies the role of RBI and the Competition Commission of India (CCI) in terms of mergers and acquisitions that take place in the banking industry. This clarification mitigates the regulatory overlaps that have so far existed between RBI and CCI in this regard. This will help the industry in executing their transactions with greater ease and efficiency.

While the contentious clause of allowing Banks to trade in commodity futures has been removed from this Bill, FICCI is hopeful that this aspect will continue to remain on the Government's reform agenda and will be addressed as and when the Parliament clears the Forward Markets Commission Act, an act that will provide the regulator of the commodities market with greater power.

FICCI is confident that the passing of this Bill will encourage foreign investment in the banking sector. FICCI congratulates the Government on the timely passing of this Bill. This will no doubt help in steering the Indian economy back to an increased growth trajectory.

Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Bill, 2011

Through the Enforcement of Security Interest and Recovery of Debts Laws (Amendment) Bill, 2011, the government has amended the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act and Recovery of Debts due to Banks and Financial Institutions (RDBF) Act. This strengthens the regulatory and institutional framework related to the recovery of debts due to banks and financial institutions.

A slowing economy has increased the level of bad debts in the system and forced many banks to undertake corporate debt restructuring. Gross non-performing assets (NPAs) in the banking system were around 3.5% of the total at the end of the first half of this fiscal, according to government estimates. Cumulatively, banks restructured `1.9 trillion of loans till September.

Banks and financial institutions (FIs) have been facing numerous obstacles in the recovery of defaulted loans on account of delays in the disposal of recovery proceedings. The government, therefore, enacted the RDBF Act in 1993 and SARFAESI Act in 2002 for the purpose of expeditious recovery of non-performing assets (NPAs) of the banks and FIs.

Although these two laws are aimed at reducing bad debts, banks have sent certain suggestions for further strengthening of secured creditor rights. The new banking law will also enable banks to improve operational efficiency, deploy more funds for credit disbursement to retail investors and home loan borrowers without fears over recovery.

Under the current laws, banks can undertake corporate debt restructuring and convert some of the debt into equity according to prescribed guidelines. But no such option was available for asset reconstruction companies (ARCs). They acquire bad debts from banks and other lenders at a discount and then try to recover them.

The Companies Bill, 2012

FICCI welcomes the passage of this important Bill by the Hon'ble Lok Sabha. The new Bill is progressive and adopts best global practices. As India Inc. is fast becoming a favoured investment destination, there was an imperative need to overhaul the archaic Companies Act that has governed the functioning of businesses in India for over fifty years. Therefore the Companies Bill comes at a very opportune time. It would go a long way in simplifying regulations making it easier for companies to manage and grow their businesses.

"The Bill intends to simplify regulations, bring greater clarity, accountability and oversight in managing businesses and balance various stakeholder interests including encouraging greater social responsibility by profitable corporates", said Mrs. Naina Lal Kidwai, President, FICCI, complimenting the Government on its dynamic approach in making the Companies Act as contemporary and robust as possible.

The new Bill has brought in numerous concepts of governance into law, which should ultimately lead to higher transparency and better administration of the corporate sector. Several new provisions have been introduced in the Bill which will have an impact on the functioning and administration of companies. To name a few- CSR, rotation of auditors, certain classes of companies to have women directors, concept of independent directors and a separate Schedule detailing a Code for independent directors, definition of 'promoter' along with liability in certain cases, Certain class of companies having multiple business & separate divisional Managing Director's can appoint same person as Chairman and Managing Director, restriction on managerial remuneration and class action suits. The operation of the Bill also leans heavily on extensive Rules, which are expected to be put out for wider debate before their notification.

FICCI has had several rounds of very constructive deliberations with the Ministry and its officials in the evolution of the Companies Bill and wishes the Government for many more positive initiatives for the growth and development of business in the country.

FICCI's Data Centre

A to Z of Financial Services

Religare Enterprises is a leading financial services group anchored in India with a global presence that cuts across languages, cultures and time-zones. In India, the group serves more than a million clients through its presence in over 500 cities.

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Values that bind

Indian Economy-An Update

Key Economic Indicators

(GDP)	5.3% - Q 2: 2012-13 5.5% - Q 1: 2012-13
(IIP)	General Index 171.3 for the month of October 2012 (8.2% higher as compared to the level in October 2011)
WPI Inflation (%)	All commodity: 7.45% (October, 2012) All commodity: 7.81% (September, 2012) All commodity: 8.01% (August, 2012) All commodity: 7.52% (July, 2012)
Interest Rates	CRR: 4.25% p.a. (wef 3rd November, 2012) Bank Rate: 9.00% (wef 17th April, 2012) Reverse Repo Rate: 7.00% (wef 17th 2012) Repo Rate: 8.00% (wef 17th 2012)
Exchange Rate:	54.84 (Dollar) 88.16 (Pound Sterling) 71.54 (Euro) 62.50 (Japanese Yen)

(Rates as on 4th Jan, 2012)

**Source: RBI, MOSPI, GOI, Ministry of Finance, Ministry of Consumer Affairs*

Economic Scenario

In line with general economic outlook, Gross Domestic Product (GDP) growth dipped to 5.3 per cent in the second quarter of 2012-13 from 6.7 per cent in the same quarter during the previous fiscal year mainly owing to dismal performances by farm and manufacturing sectors.

A major setback to the overall GDP in Q2 was poor show by the manufacturing sector which had dealt a severe blow to the industrial sector even in the past months. It aggregated to only a mere 0.8 per cent growth as compared to earlier record of 3.4 per cent in the same quarter of the last fiscal. Mining and quarrying fared at 1.9 per cent while electricity, gas and water supply at 3.4 per cent during this period in contrast to 4.1 per cent and 10.5 per cent respectively in Q2 of 2011-12.

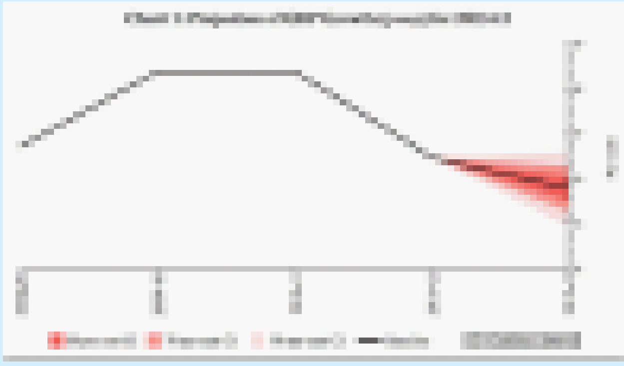
Agriculture sector also failed to impress with only 1.2 per cent growth rate. In the second quarter of the current fiscal, this was a major nose dive in comparison to the growth rate of 3.1% in the last year.

The service sector was by far the highest contributor to the overall GDP and has shown a tremendous growth compared to the other sectors. Compared to other sectors, prominent growth in Q2 of 2012-13 over Q2 of 2011-12 are construction (6.7 per cent), trade, hotels, transport and communication (5.5 per cent), financing, insurance, real estate and business services (9.4 per cent) and community, social and personal services (7.5 per cent).

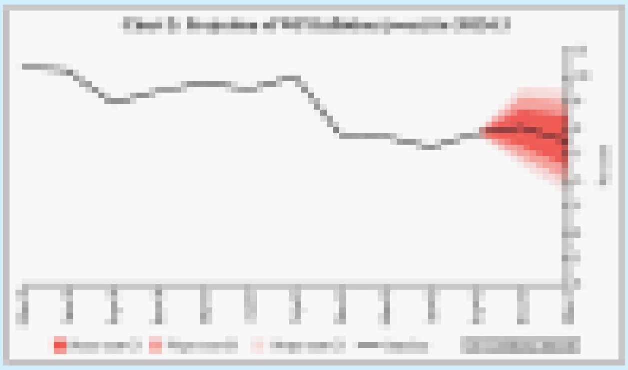
In its April 2012 Policy Reserve Bank of India (RBI) projected GDP growth at 7.3 per cent. This was revised to 6.5 per cent in the first quarter review due to following reasons

1. Possibility of hampering domestic growth due to global slump
2. Weak domestic industrial activity
3. Slower growth of service sector

The predictions unfortunately came true by the time of Mid Quarter Review and the economy went in a gradual nose dive in terms of domestic growth rate. During the second quarter of 2012-13 industrial output picked up marginally along with services Purchasing Managers Index (PMI) showing a decent improvement. The agricultural sector failed to impress although there was a modest rainfall during the month of August and September and could not match up to figure corresponding to same quarter of last fiscal year. The overall economic outlook failed to put a smile on the investor's face. Taking cue from these factors, the baseline projection of GDP growth for 2012-13 is revised downward to 5.8 per cent. (Represented in chart below)



Source: RBI



Source: RBI

Inflation

Headline Wholesale Price Index (WPI) inflation (at an average) continued to remain above 7.7 per cent in Q2, much like the first quarter of the fiscal year. It figured at 7.52 per cent in the month of July, shot up to 8.01 per cent in the month of August (peak point during the quarter) before setting at 7.81 per cent in September. Some signs of recovery were seen during the start of third quarter when it came down to 7.45 per cent in the month of October.

As per RBI's quarterly report, inflation picked up pace in the middle of second quarter of 2012-13 due to sudden hike in fuel price and increased price level of non food manufactured items. WPI for primary food articles was restrained by the end of first quarter of the current fiscal but swelled in September owing to price rise of sugar, edible oils and grain mill products. Rise in fuel price which continued from Q1 was mainly due to a rise in global crude oil prices. Non food manufactured products inflation remain fixed at 5.6 per cent in Q2. The new combined [rural & urban] Consumer Price Index (CPI) (Base: 2010=100) inflation was high indicating build-up of food price pressure. CPI excluding food and fuel groups slightly declined during Q2. Provisional annual inflation rate based on all India general CPI (Combined) for December 2012 on point to point basis (December 2012 over December 2011) remained at 10.56 per cent as compared to 9.90 per cent (final) for November 2012 and 9.75 % (final) in October 2012.

A decline or at least stable commodity price with an appreciating rupee will help to contain inflationary pressures by bringing down the rupee cost of imports, especially of commodities.

Scrutinizing the following aspects the baseline projection for headline WPI inflation for March 2013 is raised to 7.5 per cent from 7.0 per cent indicated in July. Economists expect it to rise somewhat in Q3 before beginning to ease in Q4.

Fiscal Deficit

Just ahead of the Union Budget for the next fiscal, top secretaries of the finance ministry asserted that the fiscal deficit will be contained at 5.3% of the GDP, which is the revised Budget estimate for 2012-13. The confidence of the officials is based on the government meeting the budget target of disinvestments for Rs 30,000 crore and the expected revenue from spectrum auctions is likely to be around Rs 40,000 crore, sources said.

Till November 2012, the fiscal deficit was Rs 4.13 lakh crore or almost 80% of the budget estimates in the first eight months of 2012-13. Last year the government had slipped on its fiscal consolidation with the target going up by 1.6%. Finally, 2011-12 ended with fiscal deficit of 5.7%. This year the government had estimated fiscal deficit to be around 5.1% of the GDP, but later revised it to 5.3%.

Current Account Deficit

India's' current account deficit (CAD) worsened in July-September to hit a record of $22.3 billion primarily on account of a sharp fall in merchandise exports —exports fell $7 billion quarter-on-quarter (q-o-q) — and lower services exports. While FII and FDI flows both rose sharply — by $5 billion and $9.5 billion respectively on a q-o-q basis — the impact of this was lowered somewhat by a $4-billion contraction in NRI deposits between the June and September quarters.

At this level, the CAD is a record 5.4% of gross domestic product, worse than 4.2% in the same period the previous year. For the nine-month period of April-September, the CAD stood at $38.7 billion or 4.6% of GDP, balance of payments data released by the Reserve Bank of India

Previously, RBI Governor D Subbarao had said that a CAD of around 2.5-3.0% is sustainable for the Indian economy. Anything above that has implications for the stability of the external sector.

Trade Deficit

Exports fell by 12.2% in July-September as compared with a 45.3% growth in the same period the previous year while imports fell marginally by 4.8% compared with a rise of 38.1% in the previous year. The government's decision to hike import duty on gold in June seemed to have not had a big impact as gold imports stood at $10.46 billion, a fall of just$1 billion from the previous quarter. Owing to the sharp fall in exports and a rather small fall in imports, the trade deficit widened to $48.3 billion from $44.5 billion a year ago.

During July-September, the financial account surplus was $24.24 billion, up from $19.01 billion a year ago, largely due to higher foreign direct investment.

Net FDI flows rose to $8.9 billion, up from $6.5 billion a year ago while the more volatile portfolio flows were $7.6 billion, up from $1.4 billion a year ago. Inflows including ECBs and bank capital fell to $3.3 billion from $9.5 billion a year ago.

Rupee Movement

The Indian rupee has started 2013 with a bang, with 1 per cent gain in the first two days of the New Year on the back of strong foreign inflows. The volatility is expected to continue as the rupee would track cues from the domestic markets as well as global shores.most-awaited cues in the first quarter of Calendar Year 2013 are the Reserve Bank of India's monetary policy meeting in January, followed by the Union Budget in February. The RBI is widely expected to cut interest rates helping economic growth. The encouraging factors have been the softening inflation numbers, the decline in crude oil prices and expectation of a good Rabi crop.

Last year was a roller coaster ride for the Indian unit which ended 2012 on a weak note against the US dollar for a second consecutive year. The rupee closed 3.5 per cent lower after hitting a record low at 57.32 per dollar in June 2012. It recovered over 4 per cent from the lows since then. The Indian rupee is the third worst-performing Asian currency in 2012.

Reference:

1. RBI
2. Ministry of Finance, India
3. MOSPI
4. GOI

Investment Banking Updates

In association with dealogic

Mergers & Acquisitions

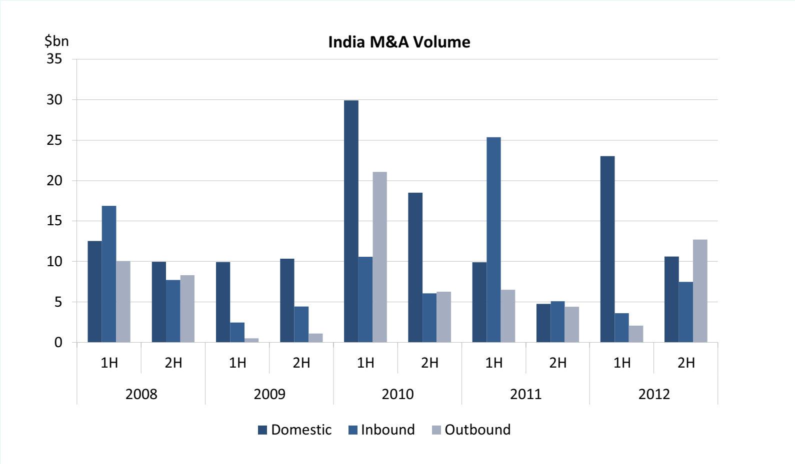
- **India** ranked as the fourth most targeted nation in **Asia Pacific region** in 2012 with $44.7bn, marginally down compared $45.1bn announced in 2011
- India **Outbound M&A** volume increased significantly to $14.8bn in 2012, up 35% compared to 2011 ($10.9bn). Although, 1H 2012 only accounted for $2.1bn of the total outbound volume, 2H 2012 saw a steep rise in volume with $12.7bn
- India **Inbound M&A** volume dropped 64% to $11.1bn in 2012 compared to $30.5bn for the year 2011
- Conversely, India **Domestic M&A** volume stood at $33.6bn in 2012, more than double $14.6bn announced last year
    - The $9.5bn merger by Sesa Goa with Sterlite Industries/Cairn India/Madras Aluminium/ Vedanta Resources announced in 1Q 2012 was the largest India M&A transaction this year and the largest India Domestic deal on record

India Announced M&A Advisory Ranking 2012

Pos.	Advisor	Value $m	# Deals	% Share
1	Citi	18,669	13	41.8
2	Goldman Sachs	12,715	7	28.4
3	Morgan Stanley	12,452	14	27.9
4	JPMorgan	11,883	11	26.6
5	Barclays	11,211	9	25.1
6	Bank of America Merrill Lynch	9,168	2	20.5
7	Credit Suisse	6,927	4	15.5
8	JM Financial Ltd	4,809	3	10.8
9	Ambit Corporate Finance Pvt Ltd	3,070	11	6.9
10	Axis Bank	2,998	10	6.7

SE Asia M&A Ranking by Target Nationality 2012

Pos.	Advisor	Value $m	# Deals	% Share
1	China	183,400	3495	43.6
2	Singapore	52,483	374	12.5
3	South Korea	47,473	858	11.3
4	India	44,702	1163	10.6
5	Malaysia	19,184	705	4.6
6	Hong Kong	18,675	310	4.4
7	Indonesia	17,752	279	4.2
8	Taiwan	12,310	168	2.9
9	Philippines	9,987	141	2.4
10	Thailand	7,203	236	1.7

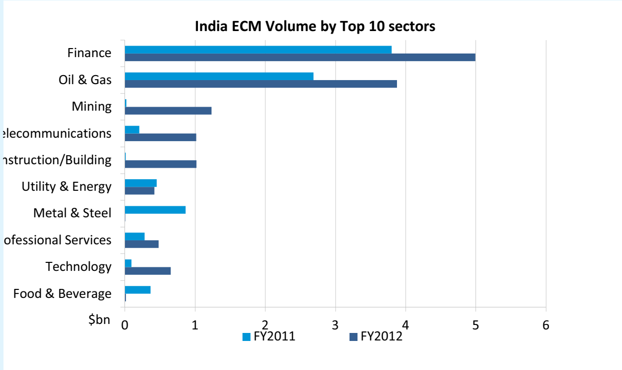


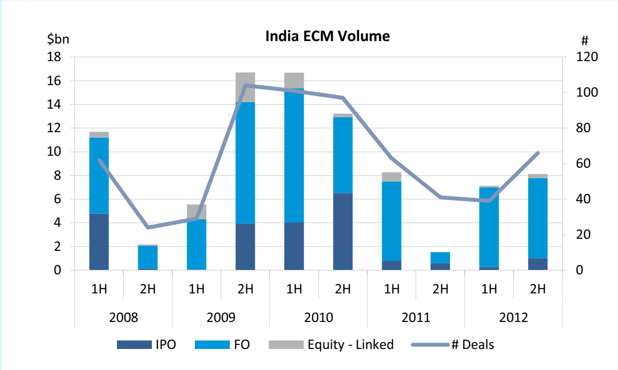
Equity Capital Markets

- Indian ECM volume stood at $15.3bn via 105 deals in 2012, a 56% increase on the $9.8bn raised in 2011
- IPO volume totaled $1.3bn in 2012, down 6% from the $1.4bn raised in 2011 and marks the lowest yearly volume since 2003 ($1.2bn)
  - Conversely, follow-on volume rose significantly to $13.5bn in 2012 compared to $7.6bn raised in 2011
- Oil & Natural Gas Corp-ONGC's $2.6bn follow-on via bookrunners Citi, Bank of America Merrill Lynch, HSBC, JM Financial Group, Morgan Stanley and Nomura was the largest ECM transaction for India in 2012 and the fifth largest Indian ECM transaction on record

Top 10 ECM Deals in FY2012

Date	Issuer	Sector	Deal Type	Deal Value ($m)	Bookrunners
2-Mar	ONGC	Oil & Gas	FO	2,584	CITI, BoAML, HSBC, JM Financial, MS, NOM
23-Feb	HDFC	Finance	FO	1,927	CITI
12-Dec	NMDC	Mining	FO	1,089	AXIS, CITI, BoAML, MS, ICICI
25-Sep	Cairn India Ltd	Oil & Gas	FO	929	CITI
5-Oct	HDFC	Finance	FO	839	CITI
17-Dec	Bharti Infratel Ltd	Construction	IPO	767	BoAML, JPM, SCB, UBS, BARCAP, DB, AXIS, HSBC, KOTAK
12-Oct	Network 18 Media & Investments Ltd	Telecom	FO	512	ICICI, RBS
23-Oct	TV18 Broadcast Ltd	Telecom	FO	504	ICICI, RBS
29-Jun	Cairn India Ltd	Oil & Gas	FO	362	CITI
27-Nov	IndusInd Bank Ltd	Finance	FO	360	MS, JM Financial, Credit Agricole, HSBC

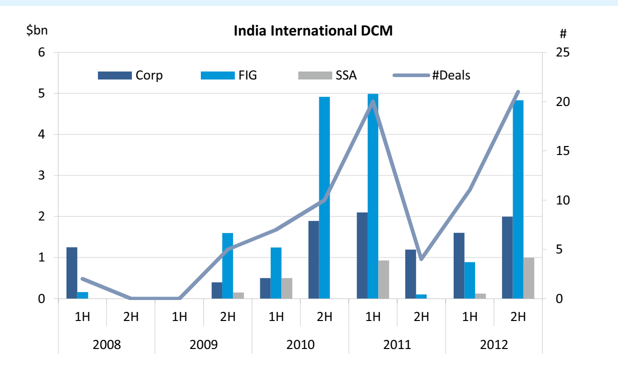


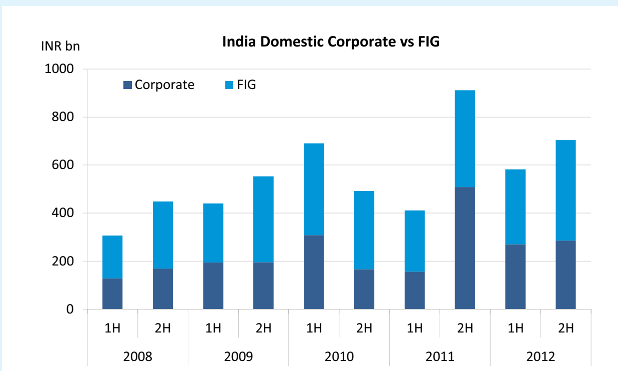


Debt Capital Markets

- **India DCM** issuance reached $46.1bn raised via 476 deals, up slightly on the $45.9bn raised in 2011 but still marked the highest annual volume and activity on record
- **Corporate IG and Agency** bonds accounted for 54% and 25% of the total DCM volume with $25.1bn and $11.7bn, respectively for 2012
  - **Reliance Industries** led the offshore issuer table for 2012 with a 14% share, while **Power Finance Corp** topped the domestic issuer ranking with a 13% share
- India **Domestic DCM** volume reached a record INR1.90tr in 2012, up 9% from the INR1.75tr raised in 2011. Activity was up 53% to 444 deals in 2012 from the 290 recorded in 2011, and marked the busiest year on record
- **International** issuance recorded an all-time high of $10.4bn in 2012, up 12% from $9.3bn priced in 2011. Although, issuance for 1H 2012 had dropped considerably to $2.6bn compared with $8.0bn for 1H 2011, volume trebled to $7.8bn in 2H 2012

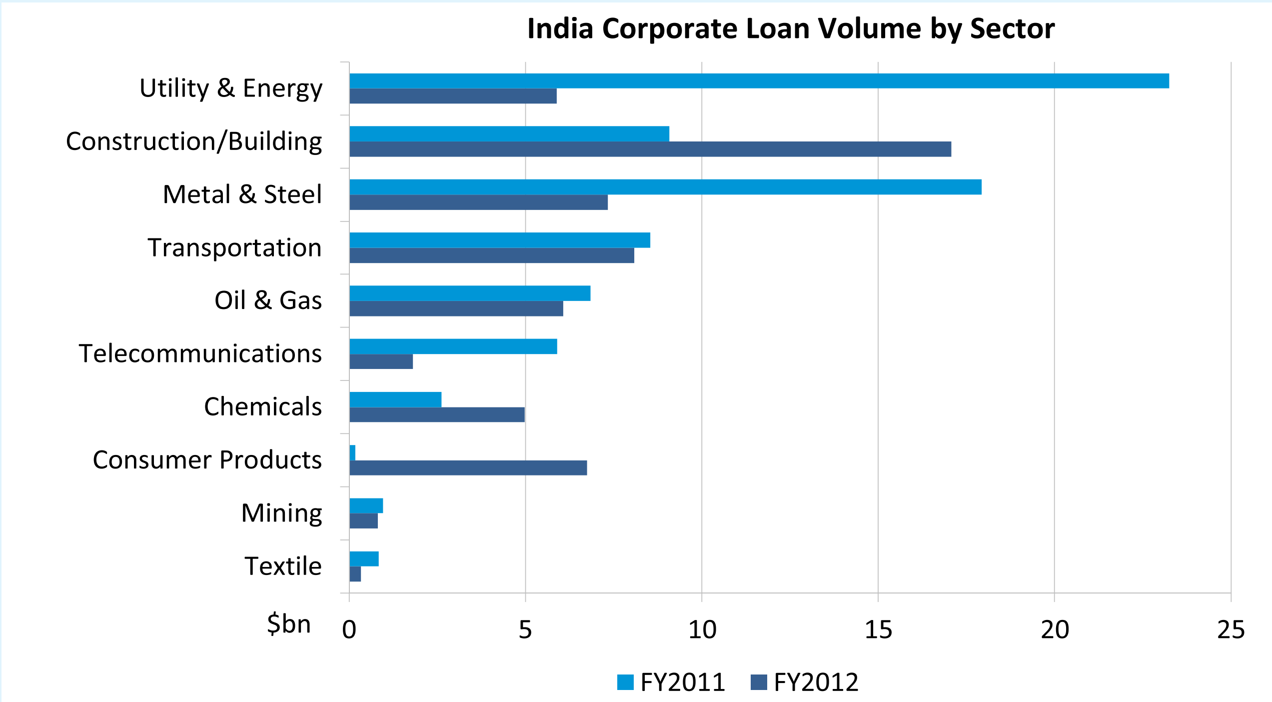
Pos.	Bookrunner Parents	Value ($m)	No.	%share
1	AXIS Bank	6,707	150	14.5
2	ICICI Bank	4,513	105	9.8
3	HSBC	3,753	71	8.1
4	Standard Chartered Bank	3,139	57	6.8
5	AK Capital Services Ltd	2,983	103	6.5
6	Barclays	2,654	60	5.8
7	Trust Investment Advisors	2,596	148	5.6
8	Citi	2,317	20	5.0
9	Kotak Mahindra Bank Ltd	2,129	85	4.6
10	Deutsche Bank	1,789	39	3.9

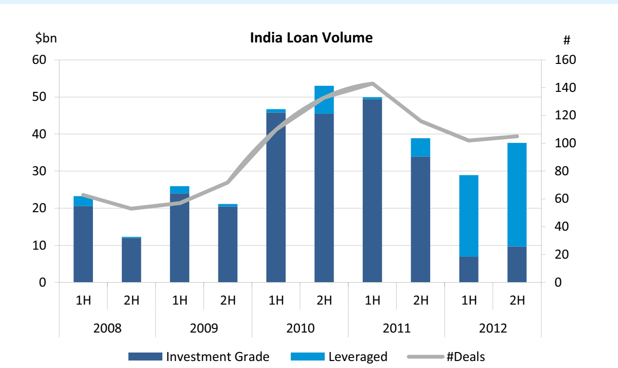


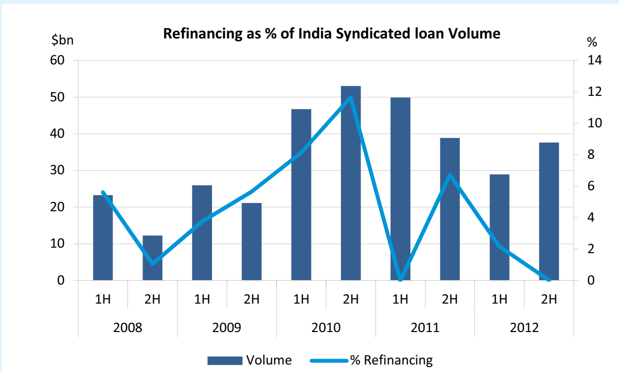


Loan Markets

- **India loan** volume reached $66.6bn in 2012, down 25% on the $88.8bn in 2011 and the lowest volume since 2009 ($47.1bn)
  - **Leveraged** loan volume reached all time high of $49.9bn via 158 deals, and up significantly on $5.5bn for 2011
  - In contrast, **Investment grade** loan volume dropped to a six year low of $16.6bn since 2006 ($15.3bn)
- Among the corporate borrowers, **Construction/ Building** sector topped the industry ranking in 2012 ($17.1bn) with a 28% share

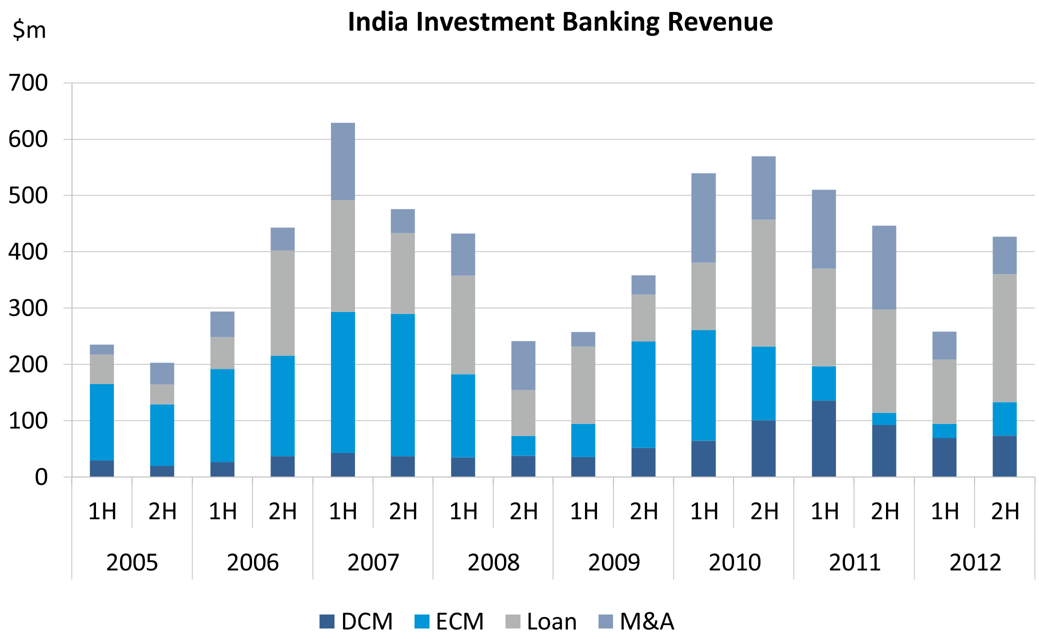


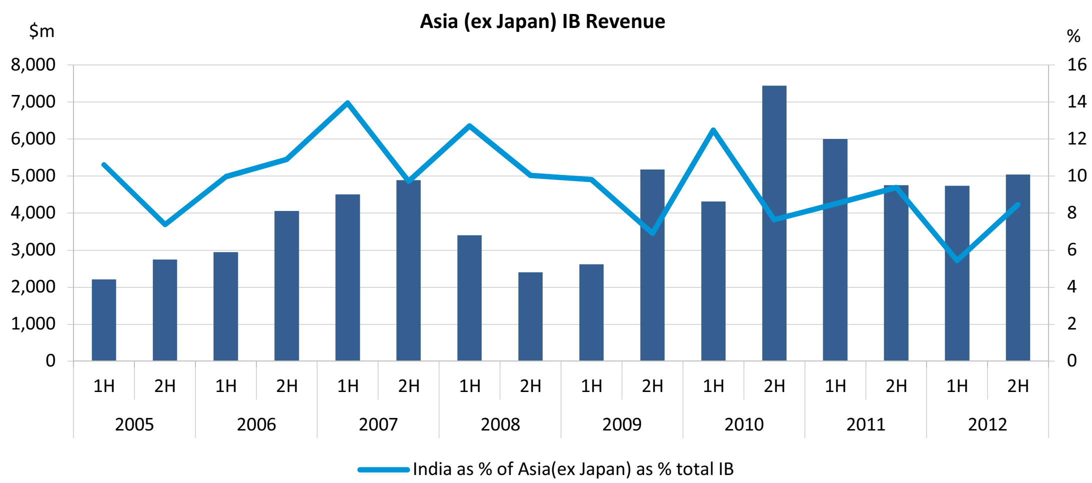




IB Revenue

- **India IB Revenue** has reached $684m in 2012, down 28% on 2011 ($956m) and marked the lowest level since 2009 ($615m)
- **Syndicated Loan revenue** accounted for 50% of total India IB revenue in 2012 with $341m. Despite the record share in 2012, loan revenue is down 4% from the $357m earned during 2011
- **M&A revenue** saw the biggest fall with $116m in 2012, a 60% drop from 2011, and represents the lowest full year level since 2009 ($59m)
  - **ECM fees** accounted for lowest share of India IB revenue with $84m and a 12% share in 2012
  - **DCM fees** showed a considerable drop of 37% to $143m in 2012, on the $228m for 2011





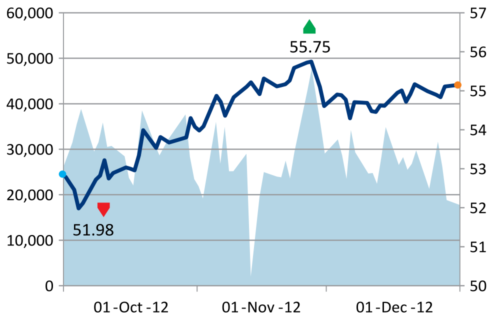
Markets Watch

USD-INR

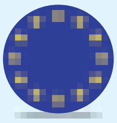
OCT-DEC 12

Turnover* (₹/cr)
16,97,869

Volume* (in lots)
31,32,00,775



Open: 53.10 | High: 55.75 | Low: 51.98 | Close: 55.15 — Price — Volume
Currency futures prices from MCX-SX. *Combined turnover and volume of all exchanges compiled from exchange websites.

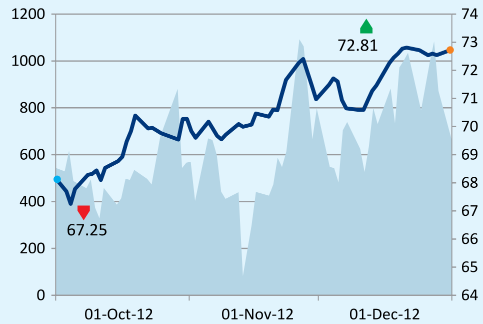


EUR-INR

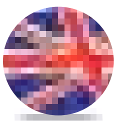
OCT-DEC 12

Turnover* (₹/cr)
36,906.00

Volume* (in lots)
52,15,466



Open: 68.23 | High: 72.81 | Low: 67.25 | Close: 72.71 — Price — Volume
Currency futures prices from MCX-SX. *Combined turnover and volume of all exchanges compiled from exchange websites.

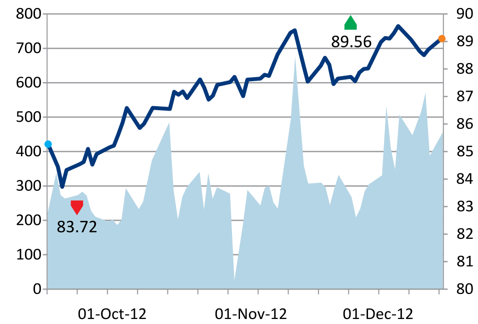


GBP-INR

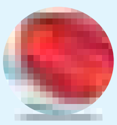
OCT-DEC 12

Turnover* (₹/cr)
18,539.00

Volume* (in lots)
21,19,258



Open: 85.58 | High: 89.56 | Low: 83.72 | Close: 89.10 — Price — Volume
Currency futures prices from MCX-SX. *Combined turnover and volume of all exchanges compiled from exchange websites.

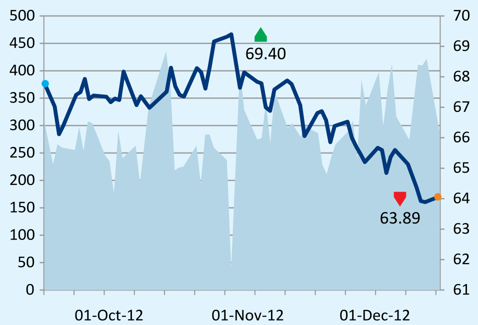


JPY-INR

OCT-DEC 12

Turnover* (₹/cr)
17,321.00

Volume* (in lots)
25,95,675



Open: 68.29 | High: 69.40 | Low: 63.89 | Close: 64.05 — Price — Volume
Currency futures prices from MCX-SX. *Combined turnover and volume of all exchanges compiled from exchange websites.

Market Commentary

Indian Rupee appreciated around 2% against the Dollar in the December 2012 quarter compared with the previous quarter. A couple of major events like the US Election and US "fiscal cliff" were the main drivers of the currency market in the last quarter of 2012. Reelection of Barack Obama as the US President and the final agreement on the so called US fiscal cliff sent dollar lower on risk appetite and Asian currencies got a boost and appreciated sharply against the US dollar. After this, Dovish FOMC minutes along with official data revealed that India's fiscal deficit rose to its highest levels during the July-September quarter and boosted Dollar sentiments against the Indian Rupee.

Outlook

Now focus would possibly shift to so called "debt ceiling" and the European sovereign crisis that was abated in fourth quarter of 2012. At Indian front, trade deficit is expected to continue to widen as growth in imports outweighing growth in exports resulting a weaker Indian Rupee.

MCX-SX USDINR remained weak during the month of October, November and December 2012. In the first week of October, USDINR weakened and tested a low of 52.195 on October 5, followed by a sharp appreciation in the pair, which sent it back to test a high of 56.33 on November 26. After this, USDINR consolidated in a range of 54.40 to 55.62. Now break in the either direction would decide further trend.

On the upside, immediate resistance is at 55.62 and daily close above the given level will push the pair to test a high of 56.33, which is the next key resistance as break of this level will pull pair towards 57.16 -57.95. On the downside, immediate support is seen at 54.40 and if the pair breaks and sustains below the given level, it may then test 52.00 levels.

- Rekha Mishra, Sr. Research Analyst
Bonanza Commodity Brokers Pvt. Ltd.

Synopsis of past events

Asian Financial Cooperation Conference

26th- 27th November, 2012, Mumbai

L to R: Mr. Zhou Wenzhong, Secretary General, Boao Forum for Asia; Dr. Arbind Prasad, Director General, FICCI; Mr. Yasuo Fukuda, Chairman, Boao Forum for Asia; Mr. Zeng Peiyan, Vice Chairman, Boao Forum for Asia; former Vice Premier, China; Mr. Suresh P. Prabhu, Former Union Minister for Power , Government of India & Chairperson of the Council on Energy, Environment and Water, India; Mr. Sidharth Birla, Vice President, FICCI & Chairman Xpro

The Conference was co-hosted by FICCI and BFA on November 26th and 27th, 2012 at Hotel Trident, Nariman Point, Mumbai, India, under the theme of "Open Asia, Open Finance." Top decision-makers, regulators and CEOs of large Asian banks, insurance companies, financial service institutions and other stakeholders were invited to tackle the challenges of balancing innovation, openness and regulation the Asian way. A wide range of issues will be deliberated upon during the two days of discussions, including global economic outlook and Asian transformation, financing Asian infrastructure through capital market innovation, currency swaps and exchange rate coordination, FTA and Asian economic integration, supplier-consumer-investor dialogue on energy and resources and Asian financial cooperation amongst many other central themes.

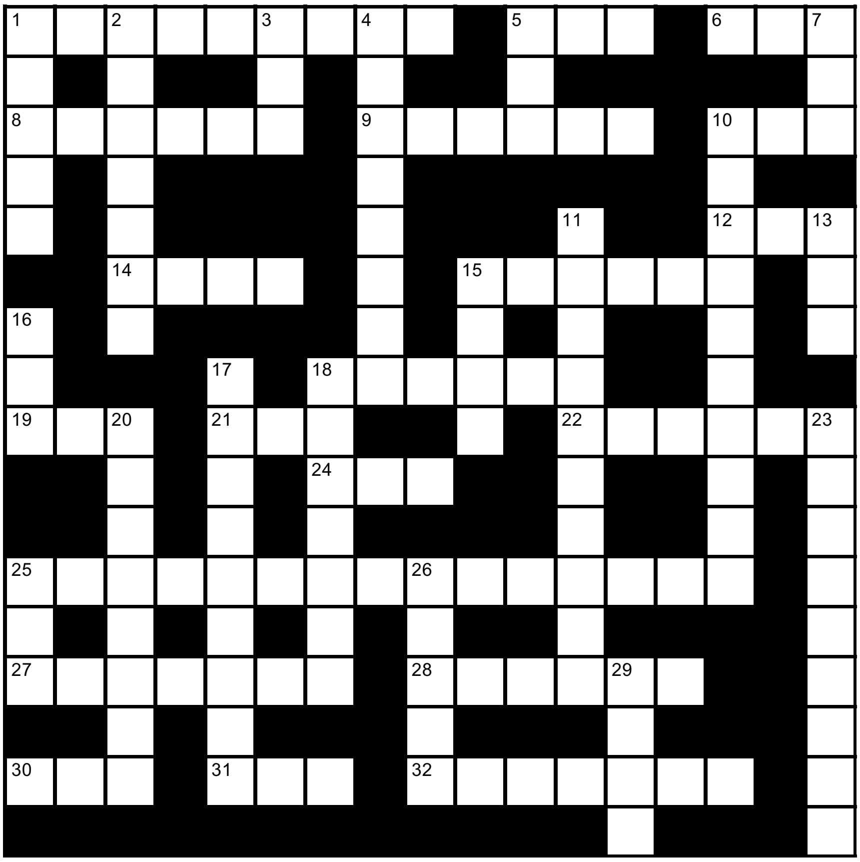
The conference was a high profile knowledge-sharing and networking platform. The purpose of this conference was to invite leaders from governments, policy makers, international corporations and renowned scholars and academicians for further cooperation amongst Asian in the areas of finance and investment and to provide an effective platform to work out a road map for the industry that could help unleash the true potential of the sector. The conference discussed capital liquidity challenges especially on how to overcome policy, market and information bottlenecks in areas such as building international and regional finance centre, international mergers and acquisitions and trade financing to name a few.

With this mega event FICCI and BFA aimed to create a credible global platform to identify the key challenges and constraints within the financial sector and how to address these effectively through recommendations on suitable policy reforms and business processes, thus paving way for converting potential into reality. FICCI and BFA thank the marquee panel of prominent ministers, bureaucrats, regulators, corporates, scholars and experts from across Asia who gathered at this mega event.

Fintainment Section

Crossword

Notes:
Clues ending in “?” imply play on words.
Digits in bracket at the end of the clue indicate number of letters in each word of the answer.
Clues that have an acronym or “abbr.” or “in short” imply that answers are abbreviated.



Across

1 Matter of policy, perhaps (9)
5 Biggie on Dalal Street, abbr. (3)
6 19-A counterpart (3)
8 “The creditor hath a better memory than the ___” (6)
9 PIPE component (6)
10 One of RBI’s policy levers (3)
12 19-A counterpart (3)
14 Casino activity, maybe (4)
15 OPEC is one, perhaps (6)
18 End of mid life? (6)
19 Feature of many a corporate title, in US (3)
21 Big number cruncher? (3)
22 Market operator OR Nickname of recently retired Australian cricketer (6)
24 Degree for wannabe fin. pro (3)
25 1969 event for Indian banks (15)
27 Once a year outgo (7)
28 Mumbai benchmark (6)
30 Co. listing debut (3)
31 Wall Street reg. (3)
32 Trade restriction (7)

Down

1 28-A, for e.g. (5)
2 Recent subject of direct cash transfer (7)
3 British retailer Selfridges was the first to introduce this security in 1927, abbr. (3)
4 One with vested interest? (8)
5 Overseas investment route not available for atomic energy, lottery sectors, abbr. (3)
7 Lender’s ICU? (3)
10 Popular derivative (4,6)
11 Part of RHP (10)
13 Valuation methodology, abbr. (3)
15 ___ is king! (4)
16 Bank that was nationalised in 1949, abbr. (3)
17 “A study of ___ reveals that the best time to buy anything is last year”: Marty Allen (9)
18 What two is, but three is not? (7)
20 Situation where futures price rise with maturity (8)
23 When austerity is in fashion, perhaps (9)
25 Banker’s nemesis, abbr. (3)
26 Any Time? (5)
29 Currency whose symbol resembles Greek epsilon (4)

Financial Fundas

Greenspan Put - The "Greenspan Put" refers to the monetary policy approach that Alan Greenspan, the former Chairman of the United States Federal Reserve Board, and other Fed members exercised from the late 1987 to 2000. During Greenspan's chairmanship, when a crisis arose and the stock market fell more than about 20%, the Fed would lower the Fed Funds rate, often resulting in a negative real yield. In essence, the Fed added monetary liquidity and encouraged risk taking in the financial markets to avert further deterioration.

Dogs of the Dow - Devised by US fund manager Michael O'Higgins, this strategy exploits the tendency for stock markets to overreact to bad news, which throws up cheap shares. Fans of the theory say that bargains can be spotted by looking for high dividend yields – the annual dividend as a proportion of the current share price. Buy these and you not only get a big income, but the likelihood of capital gains too when share prices recover.

Squawk Box - Firms use squawk boxes to inform their brokers about current analyst recommendations, market events and information about block trades. This line of communication helps to keep brokers updated on important market factors and allows the firm to guide its brokers' trading. While many other forms of communication have arisen as a result of technology, the squawk box is still used in most investment banks and brokerages.

Source: Investopedia.com

Quiz

Quick quiz to tickle your interest in the financial world:

(1) According to the latest forecasts from the Centre for Economics and Business Research, by 2015 which city is expected to employ highest number of financial professionals?

a. New York

b. London

c. Hong Kong

d. Singapore

(2) Set up by Sweden's central bank in 1968 and awarded to Alvin Roth and Lloyd Shapley in 2012, the Nobel Prize in Economic Sciences is officially known by which name?

a. The Sveriges Riksbank Prize

b. The Alfred Nobel Prize in Economics

c. The Keynes Prize in Economics

d. None of the above

(3) Until 2000, India's union budget was announced at 5 pm on the last working day of February. What is the name of the Finance Minister who changed the budget announcement time to 11am?

a. Pranab Mukherjee

b. Yashwant Sinha

c. Jaswant Singh

d. P Chidambaram

Jumble

Solve the 5 jumbled letters to form 5 financial terms. The circled letters in these terms can be rearranged to form a popular financial buzz word(s) hinted by the clue.

Question. 1

a. DEHEG ○□□□□

b. SPHIGNHI ○□□○□□□□

c. GNTIAR ○□○○□□

d. ARRARE ○○□○○□

e. OOPUNC □○□□□□□

f. Measure which calculates risk adjusted return by a mutual fund : _____________ (5,5)

Question. 2

a. OAFLT ○□□○□

b. SALEE ○□□○□

c. NOFALIITN ○□○○□□□□□

d. ICLAPTA ○□□○□□□

e. AOFRCYT ○□○□□□□

f. Much used term to describe America's mounting debt situation _______ (6, 5)

Question. 3

a. UFTDEAL ○□□□○□□

b. ELWHAT ○○□□□□

c. ETURNR ○○□□○□

d. AINRGM □□○□○○

e. One whose business is to takes other's risks for a fee : ___ (11)

Quick look at financial apps

1. StockTwits

Find out what the rest of the world is saying about the stocks you follow by using StockTwits.
You can limit the comments to the stocks you follow or receive all the tweets.
Plus, users can chat with other investors, get customized financial news, and see stock charts and videos with tips on investing.
Available for iPhone, BlackBerry, iPad

2. FRED

Gives users free access to the titular Federal Reserve Economic Database.
With feeds to more than 60,000 streams of data from 48 different sources, FRED draws on government data from local, state and national governments, international data and private firms. Categories include GDP, unemployment, debt and other sectors of the economy and governments across the world.
Android and iOS (optimized for both iPhone and iPad)

3. IRDA

Enables comparison of Unit Linked Insurance Policies (ULIPs) introduced on or after 1st September, 2010, when the new ULIP guidelines came into force.
Real-time access to IRDA's repository of ULIPs
Compare features of ULIPs like premium and benefits
Search by Company, by Policy type and by Keyword
Works on Android, iPhone, Nokia and Blackberry platforms

Fintainment Section Credits

Mangesh Ghogre

Mangesh Sakharam Ghogre, an alumnus of VJTI and NMIMS, is a professional investment banker with a passion for equity markets and words alike. He is a cruciverbalist and an international crossword constructor with crosswords published in Wall Street Journal, Los Angeles Times and recent acceptance by The New York Times. He has the unique distinction of being the first and the only constructor from India to be invited by the New York Times to be a judge at the prestigious American Crossword Tournament. He is also a freelance writer and his columns have been published in leading dailies like The Economic Times, The Hindu Business Line, Deccan Herald and The Times of India – including its much-followed Speaking Tree column. His published work is available at www.mangeshghogre.com

Solution of Fintainment Section

1 I	N	2 S	U	R	3 A	N	4 C	E		5 F	I	I		6 P	L	7 C
N		U			D		R			D						D
8 D	E	B	T	O	R		9 E	Q	U	I	T	Y		10 C	R	R
E		S					D							A		
X		I					I				11 P			12 L	T	13 D
		14 D	E	A	L		T		15 C	A	R	T	E	L		C
16 R		Y					O		A		O			O		F
B				17 E		18 C	R	I	S	I	S			P		
19 I	N	20 C		21 C	F	O			H		22 P	U	N	T	E	23 R
		O		O		24 M	B	A			E			I		E
		N		N		P					C			O		C
25 N	A	T	I	O	N	A	L	26 I	Z	A	T	I	O	N		E
P		A		M		N		S			U					S
27 A	N	N	U	I	T	Y		28 S	E	N	S	29 E	X			S
		G		C				U				U				I
30 I	P	O		31 S	E	C		32 E	M	B	A	R	G	O		O
												O				N

Answers of Quiz

Answer: 1 - c

Answer: 2 - a

Answer: 3 - b

Answers of Jumble

Answer 1: **a -** HEDGE, **b -** PHISHING, **c -** RATING, **d -** ARREAR, **e -** COUPON, **f -** SHARPE RATIO

Answer 2: **a -** FLOAT, **b -** LEASE , **c -** INFLATION, **d -** CAPITAL, **e -** FACTORY, **f -** FISCAL CLIFF

Answer 3: **a -** DEFAULT, **b -** WEALTH, **c -** RETURN, **d -** MARGIN, e **-** UNDERWRITER

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