H R Khan: Certain uncertainties, uncertain certainties – India in an interconnected world

Inaugural address by Mr H R Khan, Deputy Governor of the Reserve Bank of India, at the 40th Annual Convention of Department of Business Economics, University of Delhi South Campus, New Delhi, 7 October 2013.

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1. It is a pleasure to be here today at the 40th annual convention of the Department of Business Economics of the University of Delhi. Let me begin by congratulating the Department for selecting a very appropriate theme for the Convention – "Embracing uncertainty: India in an interconnected world". The events over the last few years – beginning from the onset of the global financial crisis, the sovereign debt crisis and, more recently, the events triggered by the announcement of "tapering" by the Board of Governors of the Federal Reserve Bank in the United States have all under-scored the fact that the globe, especially the global financial system, is indeed interconnected. The last five to six years have also brought to the fore the uncertainties associated with such interconnectedness. Interconnectedness in the financial sector can amplify shocks with an isolated event/incident rippling across the financial sector through a domino reaction, in some cases, blowing up into a tsunami. But, it is hard to predict which will be the first domino to fall – and harder still to predict how and to what extent problems in one part of the system will affect the other parts.[1]

2. The events over the last year years have also conclusively established that India is increasingly interconnected with the global financial system. In the early months of the onset of the global financial crisis in 2007, there was a growing belief that India was largely decoupled from the rest of the world. After all, our external sector was relatively small and our growth drivers were primarily domestic. Post collapse of Lehman brothers, much to our bewilderment, the tsunami called the global financial crisis rolled into Indian shores. It showed that we were clearly far more integrated with the global economy than hitherto realised or accepted.

3. Looking at the schedule of the Convention, I see that you intend to cover an impressive range of ground during the course of the day – flagging the challenges for policy making posed by global shocks, deliberating upon the building blocks for a competitive and stable economy and designing a growth compass for the Indian economy. Given the impossibility of doing justice to the breadth of subjects intended to be covered during the convention, I will restrict my remarks to a few broad areas. First, I will discuss the metrics of India's growing interconnectedness with the global economy and touch upon the challenges to policy making posed by the growing integration. I will then illustrate the challenges following announcement of imminent tapering by the United States briefly discussing the Indian experience and policy measures taken to counter the headwinds from the global economy. Finally, I will attempt some comments on the way forward, domestically and internationally, to "embrace" the uncertainties engendered by an interconnected world.

[1] Interconnectedness and the importance of international data-sharing", speech by Jaime Caruana, General Manager, BIS, at the 3rd Swiss National Bank – International Monetary Fund Conference on the international monetary system, Zurich, July, 2012.

Growing globalisation

4. Post-Independence, India remained one of the most closed economies of the world. Even as late as the 1980s, India remained very sparsely integrated with the global economy. The story is very different now. Let me illustrate with a couple of metrics frequently used to measure a country's global integration. One measure of a country's global integration is the ratio of its external trade to GDP. In four decades, from 1972 to 2011, this ratio went up four times from eight per cent to 37 per cent. Another measure, and undoubtedly a more complete, is one which measures the two way flow of goods and services and finance to and from the country. This metric has moved up nearly eight times in four decades – from 14 per cent in 1972 to 109 per cent in 2011. Clearly, even as India has become more and more integrated with the globe, the degree of its financial integration has been deeper than its trade integration. There are other statistics which provide a similar illustration. Gross capital flows as a percentage of GDP stands at around 60 per cent for the country though net capital flows are significantly lower – at about four per cent of GDP. In recent years, the country's current account deficit (CAD) has also grown to reach a high of 6.5 per cent of GDP in the third quarter of 2012–13, though it has since come down. The net international investment position (IIP) of the country has also been deteriorating in recent years – international liabilities exceed international assets by about US$ 309.4 billion in March 2013 as against US$ 250 billion in March 2012, though some improvement has been observed with net liabilities at US$ 296.9 billion in June 2013.

5. This increasing integration of the global economy is, in fact, far from a phenomenon peculiar to India. In fact, in the years preceding the global financial crisis, global economic integration grew and grew sharply. World trade, as a percentage of global GDP, rose from a little over 20 per cent of GDP to well over 30 per cent in 2007. Cross border capital flows, as a percentage of global GDP, also rose from about five per cent in the mid-1990s to about 20 per cent in 2007. The ratio fell sharply as the crisis emerged but global capital flows have recovered since then. As a result of financial globalization, international financial openness (measured by the sum of countries' external assets and liabilities as a share of GDP) more than doubled from 150 per cent of world GDP in mid 1990s to 350 per cent in 2007.[2] Greater interconnectedness of the global economy was also reflected in, and, in fact, reinforced by the strong increase in international banking activities and the associated rising share of cross-border ownership of financial institutions. According to the International Banking Statistics of the BIS, the value of external assets and liabilities of banks as a share of world GDP doubled, from about 30 per cent in 1990 to about 60 per cent in 2007 with most of this increase taking place in the 2000s.

6. Even as globalisation intensified in the early part of this century, the deepening was characterised by some interesting trends and features:

i. First, while advanced countries dominated international cross border flows, emerging markets also joined the fray with their share in world capital flows increasing from seven per cent to 17 per cent between 2000 and 2007;

ii. Second, while flows from advanced economies to emerging markets were largely driven by increased investment opportunities in many emerging market economies and by a substantial reduction in home bias in advanced economies, rising outflows from emerging and developing economies were mainly driven by reserve accumulation;

iii. Third, the growing globalisation was accompanied by widening global imbalances. The creditor positions of Germany, Japan, China and major oil producers strengthened while the United States, Spain, France, Italy and the United Kingdom

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2 OECD Economic Outlook, Volume 2011/1

became more indebted. The absolute sum of surpluses plus deficits was around two per cent of world GDP in 1980, more than six per cent of world GDP at their peak in 2006, and over four per cent of world GDP currently. Since current account imbalances are matched by equal and opposite capital account imbalances, this means that there is a very large net capital flow – net flows of assets across borders;[3]

iv. Fourth, as discussed earlier, financial integration deepened to a significantly greater extent than trade integration resulting in financial flows completely swamping trade flows. The sum of financial assets and liabilities roughly equalled the sum of exports and imports in 1970. By the onset of the global financial crisis, financial assets and liabilities were several multiples of the sum of exports and imports clearly pointing to the movement of cross border capital un-related to trade. This means that the net capital flows are supported by much larger gross flows resulting in larger net international position of foreign assets/ liabilities;

v. Fifth, for most countries around the world, rightly, the focus has shifted from net capital flows to gross capital flows. Gross capital flows tend to be several multiples of net capital flows. While they give rise to similar risks as those of net capital flows, viz., the risks of sudden ebbs and reversals, the risks are obviously greater in magnitude. Thus, movements in exchange rates and asset prices remain susceptible to gross capital flows; and

vi. Sixth, even as globalisation deepened, economic policies remained largely national. This inevitably leads to spillovers and sub-optimal responses to what is essentially a global problem.

7. For emerging markets, such as, India, these trends have significant impact for the conduct of financial sector policy. External spillovers from monetary and exchange rate policies of major systemically important countries have been significant. For domestic conduct of policies such spillovers are taken as exogenous, and have to be managed through domestic policy response. This results in an inevitable loss in degrees of freedom.

8. The pattern of capital flows as they emerged, especially in the pre-crisis years is also critical. Several views have been expressed that emerging markets have imported risky capital while exporting safe capital. Let me use the words of Joseph Stiglitz to illustrate this point. Professor Stiglitz in a 2006 paper[4] stated: *"The global financial system is not working the way it ought to. Ordinary laws of physics say that water ought to flow downhill. The parallel in economics is that money is supposed to flow from rich countries to poor countries, and risk is supposed to be transferred from the poor, who are least able to bear it, to the rich. But in the world today, things are moving in the opposite direction. To be precise, for the last several years, money has been going from the poor countries to the rich – the net flow of funds is going in the opposite direction of the way it should. Meanwhile, the poorest countries in the world are left to bear the risks of interest rate and exchange rate volatility".* Recent events have provided a stark example of this. Risky flows can reverse and reverse swiftly reflecting global perceptions as they move between risk-on and risk-off states. Emerging markets are very often left dealing with sudden surges of capital inflows and reversals and have struggled to manage the associated impact on exchange rate and interest rates.

9. These risks were clearly illustrated by the experience in India since the onset of the crisis. As a country with persistent CAD, we needed net inflows of capital. But what the country has

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3 "Global imbalances: current accounts and financial flows", Stephen G Cecchetti, Economic Adviser and Head of the Monetary and Economic Department, BIS, at the Myron Scholes Global Market Forum, University of Chicago, September 2011.

4 Making Globalisation Work – The 2006 Geary Lecture Joseph E. Stiglitz, 2006.

experienced is surges (net capital inflows of the order of 9 per cent of GDP in 2007–08) and sudden reversals (after the global crisis); inflows again in 2011–12 and reversals more recently. The movement of capital flows have clearly dominated domestic liquidity management and provided excess volatility to the exchange rate of the domestic currency. While both push and pull factors suggest that India may get adequate capital to finance the deficit, the pattern of inflows could remain volatile, and the impact would have to be managed. Adding to these challenges is the fact that, very often, surges of inflows and sudden outflows to/from the EMEs take place due to reasons which have very little to do with their fundamentals. The Reserve Bank of India has been following a policy of allowing the exchange rate to remain flexible and market determined. The result has been a sharp post-global-crisis depreciation, followed by significant appreciation, and then depreciation again. While we are comfortably placed as far as foreign exchange reserves is concerned, recent events prove that, under stressful conditions, market perception of reserve level could be different. Any decline in reserves is often seen by the markets as a pressure situation.

10. All these factors affected the real economy as well with growth slowing down significantly, though part of the slowdown was clearly attributable to a host of domestic factors. There is a growing element of what could be called "perception" interconnectedness. Any hint of trouble in one EME, for example, very often affects capital flows to all or several EMEs. The impact is skewed disproportionately towards reversals. Countries, thus, get interconnected due to exogenous factors, such as, being located in the same geographic region, or perceived to belong to the same stage of economic development, for example. This kind of "herding" behaviour of capital flows again poses significant difficulties for policy making domestically while at the same time making international cooperation of any form for such intangibles challenging. This is not to suggest that individual characteristics, strengths and weaknesses of countries do not matter. As Ruchir Sharma very succinctly summarizes in his book "Breakout Nations"[5], "not all trees grow to the skies" and there are "scores of emerging markets which have been emerging for decades". The post crisis normal in emerging markets is likely to be one of a more sedate rate of growth as compared to the pre-crisis years, the capital flows from the advanced world far more discerning with regard to the macro fundamentals and performance of individual nations. As I will discuss a little later, countries with current account deficits and relatively weaker macro-economic fundamentals were impacted to a greater extent from the headwinds triggered by the Federal Reserve Board's announcement of a scaling back of accommodative monetary policies earlier this year.

11. Thus, financial globalization has increased the magnitude and complexity of interconnectedness to a point where every country is vulnerable to repeated external shocks. These risks were driven home in the aftermath of the global financial crisis and more recently in the wake of the Fed announcement of possible tapering of its asset purchase programme. These events, what I would like to briefly dwell on now, provide very vivid illustrations of the uncertainties and risks associated with an interconnected world.

Unconventional monetary policies

12. Conventional monetary policies typically operate at the short end of the interest rate curve. Central banks, entrusted with a mandate of low and stable inflation, operated on the short term (typically overnight) interest rates in a bid to affect, at the margin, funding costs for the banking sector. Through their operations on the short term interest rates, central banks, attempt to determine how other market interest rates, including long term rates, behave. As the global financial crisis exploded, central banks in advanced economies acted with unusual policy activism – slashing policy rates to zero or near zero. Soon, however, they realised that

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5 "Breakout Nations: In Search of the Next Economic Miracle", Ruchir Sharma, 2012.

this was not enough to restore stability to the financial markets or restore the functioning of key segments of the financial markets, let alone revive growth. Monetary policy, thus, found itself constrained by the "zero nominal bound". Faced with a collapse in economic activity and soaring unemployment without recourse to the conventional tools of monetary policy, central banks responded with a slew of unconventional monetary policy measures. These un-conventional monetary policy measures largely rested on two planks – forward guidance of continued low policy rates over extended policy horizon and large-scale asset purchases. The policies were unconventional in many ways:

i. First, the quantum of operations was very large and aimed, at least, initially, at providing ample liquidity to the frozen markets;

ii. Second, was the unprecedented relaxation in collateral standards with central banks accepting mortgage bonds, corporate bonds, commercial papers, exchange traded funds and real estate investment trusts; in a sense becoming market maker of last resort;

iii. Third, there were attempts by the central banks to directly affect long term interest rates – the ECB entered into long term repo operations (LTROs) with maturity up to three years while the Federal Reserve introduced two rounds of "Operation Twist" purchasing longer term treasuries against sale of short-term treasuries in an effort to depress the entire yield curve.

13. Un-conventional monetary policies were not confined to advanced economies. Some emerging markets also responded with innovative measures to the headwinds of the crisis, although interest rates did not hit the zero bound in these economies. For instance, the Reserve Bank of India announced/operated a liquidity window for NBFCs and for mutual funds at the height of the crisis in 2008 to assist the funds in managing redemption pressures. Again, in July 2013, we had announced a special repo window for liquidity requirements of mutual funds. Another innovative measure in this regard was the introduction of a concessional window for the banks to swap their FCNR (B) dollar funds with the Reserve Bank at a fixed rate for the tenor of the deposits.

14. The objectives of the unconventional policies were multi-fold. While the initial set of measures were aimed at providing liquidity and at reviving dysfunctional segments of the financial markets, the follow up measures were aimed at reviving credit offtake, incentivising long term investment and fostering economic growth.

15. Policy rates in major advanced economies continue to remain at zero or near zero. With the exception of the United States, there has been little indication of exit from unconventional monetary policy in any of the other advanced economies. Balance sheets of central banks in advanced economies have burgeoned to unprecedented levels. Central bank balance sheet of major advanced economies currently stands at over 20 per cent of GDP as compared to around 10 per cent in 2007. The expansion in the size of the balance sheet has been accompanied by a significant lengthening of the maturity profile of central banks assets.

16. That there were risks from a prolonged period of monetary policy accommodation was well understood and debated. There were risks that the policies may not work, for example, if the transmission mechanism between the real and financial sector was impaired or if the quantum of policy measure was, not appropriately judged. After all, central bankers were operating in unchartered waters! There were risks that the policies may work too well and unconventional monetary policy may become the new normal. In any case, it was clear that unconventional monetary policies, however necessary and justified during periods of acute instability, distort markets over time. They result in postponed balance sheet adjustments, provide incentives for risk taking and increased leverage and carry the risk of distorting the functioning of financial markets impairing the ability of markets to measure and price risks. Most importantly, there were clearly risks from exit. The primary risks associated with the exit from unconventional monetary policy are associated with an increase in interest rates, especially long term interest rates. These risks include the risks of large losses of banks,

financial institutions and reserve managers on their fixed income portfolios, increased credit risk, funding challenges and spillovers to the global economy. All of these underline the importance of a calibrated and gradual increase in interest rates providing markets sufficient time to adjust. But as recent events proved, the transition to the new equilibrium is likely to be far from smooth. Several years of near zero interest rates and reduced volatilities have curbed tail risks and provided incentives for higher risk taking. As perceptions of two way risks return to financial markets, the markets are likely to overshoot, at least partially as a result of changing sentiments, making the adjustment process far more painful than necessary.

17. Recent market developments around the world illustrate how the anticipation of exit can generate significant volatility. On May 22, 2013 Federal Reserve Chairman Bernanke announced that the improvements to the US economy could prompt a tapering in its asset purchase programme before the end of the year. The markets were spooked. Large capital outflows, slump in the stock markets, and sharp exchange rate depreciations in emerging markets followed at the mere prospect of the tapering down of Fed asset purchases. Between May 22 and June 20 (following the FOMC press conference on June 19, when the Fed chairman unveiled the plan for tapering off), exchange rates of emerging markets depreciated considerably. This currency depreciation was concomitant with large outflows of debt and equity capital. The trend continued even after June 20. Rough estimates place the outflows from EMEs since May 22 at around US$ 44 billion till end August 2013. Emerging market economies witnessed heightened volatility even as the sell-off in key markets continued unabated. Emerging market equities went down by almost 11 per cent between May 22 and the first week of September 2013, significantly underperforming their mature market counterparts (which went down just one per cent during that period). MSCI indices for emerging and developed market equities showed a clear decoupling in returns from equity markets in the recent months. EM currencies and bonds (as indicated by the JP Morgan Emerging Markets Currency Index and the Bloomberg USD Emerging Markets Composite Bond Index) were down by about seven and eight per cent respectively during the same period. These figures do not represent the trough level reached in the different markets between May 22 and September 5, 2013. The trends have been accompanied by significantly heightened volatilities across all markets.

18. The sequence of events over the last few months have almost been textbook perfect. Currencies of capital recipients, especially those with large current account deficits, came under pressure. While the textbook advice is to allow the depreciation, countries remained wary of their exchange rate overshooting on the downside, especially given the possibility that some domestic corporations may have un-hedged foreign currency debt. There were also concerns about the inflationary consequences of exchange depreciation, worry that the short term boost to competitiveness will not increase exports when partner-country growth is sluggish, and imported intermediate content of exports is generally increasing. There remained the risk that tighter monetary policy in hitherto capital recipient countries can slow growth and exacerbate a pattern of slowing growth. Significant falls in stock markets, if they persist, could also hurt growth through wealth effects. In fact, spillovers are not inconsequential even for industrial countries. 10 year rates in Japan, Germany and UK were all impacted after May 22, 2013.

Recent trends in Indian financial markets

19. In India, the impact of the Fed announcement has been striking, as in the case of many other emerging markets, especially those with current account deficits. The net FII disinvestment from the Indian debt market since May 23, 2013 (till August 30, 2013) was around US$ 10.4 billion as compared to net investment of US$ 5.6 billion during the period January 1-May 22, 2013. There were reversals in FII investments into equity segment from India as well, with net FII disinvestment into equities since May 23, 2013 (till August 30, 2013) standing at USD 2.8 billion as compared to the investment of USD 14.35 billion during

the period January 1-May 22, 2013.The impact on Indian financial markets was one of the most severe amongst emerging markets. Between May 22 and September 4, 2013,

i. The currency depreciated by 17.3 per cent;

ii. India's equity market was down by 7.9 per cent;

iii. 10 year interest rates were higher by 123 basis points;

During this period, US 10 year yields rose by about 100 bps.

The volatility in financial markets spread like a contagion through the interconnectedness in markets with the rupee depreciation weighing on the stock market, foreign outflows from the debt market further aggravating the FX markets and impacting yields as also the equity markets. Things have improved considerably since early September though the risks of heightened volatilities persist, as I will shortly discuss.

Triggers and drivers

20. A key driver of capital inflows over past years had been loose monetary policies in mature economies, which were "pushing" money into the EM world. This was helped by strong growth in EMs, "pulling" money into those countries. When both the factors lost strength recently, investors became increasingly concerned about an exit from easy monetary conditions, notwithstanding the announcement of an aggressive expansionary policy in Japan. Additionally, growth in many emerging economies has lost some momentum recently, while growth prospects in mature economies have brightened somewhat, thus reducing the relative attractiveness for developed market investors to move capital abroad. The Fed comments on May 22 were the immediate trigger which brought these factors to centre stage.

21. India, as one of the major absorbers of foreign capital has been vulnerable to these global trends. But, it was not only India's problem – many EMs were hit, albeit to different degrees with domestic macroeconomic conditions, especially the current account deficit, to some extent moderating or accentuating the headwinds from the tapering announcement.

Structural factors

22. These trends were sparked off by fears of surging global risk aversion and a worsening environment for capital flows in the wake of the Fed statement. There were, however, some domestic structural factors which aggravated the trends. Key in this regard has been the deterioration in India's external sector performance including a high trade and current account deficit. The deterioration in the external sector, which began in Q3 of 2011–12, has persisted. The impact of external developments on Indian economy was mainly evident through trade channel and more recently through finance and confidence channels. Although India's exports started showing deceleration in month of October during FY 2011–12, the impact of slowdown in major trading partner countries on India's exports was more pronounced in 2012–13. During 2012–13, merchandise exports contracted by 1.8 per cent as compared with a rise of 21.8 per cent in 2011–12. Growth in export to major trade partner countries either declined or decelerated in 2012–13. In particular, exports to trading partners, viz., EU, China, Singapore, Hong Kong and Japan were impacted significantly. Even though sluggish trend in exports continued in Q1 of 2013–14, there have been signs of recovery from July 2013 onwards. Despite slowdown in domestic economy in 2012–13, India's merchandise imports grew marginally. Although non-oil non-gold imports declined in 2012–13, Petroleum, Oil & Lubricants (POL) and gold imports remained at elevated levels. This led to widening of trade deficit from US$ 183 billion in 2011–12 to US$ 191 billion in 2012–13. The larger merchandise trade deficit along with the significant deceleration in services exports and higher income payments led to a further widening of the CAD in 2012–13. CAD remained elevated in the first quarter of 2013–14 at 4.9 per cent of GDP but is expected to narrow substantially in the following quarters.

23. Net investment income worsened in recent past reflecting lower interest/discount earnings on foreign exchange reserves and rise in interest payments on growing foreign debt including NRI deposits, external commercial borrowings and short term trade credits. The CAD-GDP ratio reached a historical high of 6.5 per cent in Q3 of 2012–13 before moderating to 3.6 per cent in Q4. Overall, CAD to GDP ratio stood at 4.8 per cent in 2012–13 as compared with 4.2 per cent in 2011–12. At this level, CAD was well above the estimated sustainable level for India and has emerged as a key macroeconomic risk factor in recent period. The experience showed that CAD can increase substantially even in a low growth environment if supply constraints impact both growth and external trade as has been the case with us. The higher CAD was accompanied by an increase in the proportion of non-stable flows. These flows, comprising FIIs and short-term credit, to total capital flows accounted for over half of the total capital flows in 2012–13 compared with one-third in 2011–12. This reflects a continued dependence on short-term flows to meet the widening CAD, which can enhance the vulnerability of the economy in a scenario of adverse global financial conditions.

24. As the recent events unfolded, concerns about the impact of exchange rate depreciation on the balance sheet of corporates and banks came to the fore. While banks in the country have limited direct exposure to exchange rate movements, the same is not true of corporates whose overseas indebtedness has risen over the last few years. Such exposures, which are to some extent, un-hedged, rendered corporate and (indirectly) bank balance sheets vulnerable to the sharp exchange rate movements.

25. There were concerns about the size of the fiscal deficit and the possibility of slippage from fiscal deficit targets although the Government is unequivocally committed not to breach the fiscal deficit target. Supply side bottlenecks including infrastructure and issues of governance also weighed on growth even as GDP growth slipped in recent quarters. Supply side factors also ensured that inflation remained elevated and constrained monetary policy action for stimulating growth. It became increasingly evident that more needs to be done to address structural factors.

Risks and challenges

26. The recent episodes underscored several risks and threw up many challenges – for the economy, for policy makers and, I must say, for the global economy. Let me briefly touch upon some of them:

i. The first challenge arose in the context of maintaining financial stability amidst the recent global turmoil and conducting macro-economic and regulatory policy in markets which are interconnected and globally integrated. The global financial crisis, the Eurozone sovereign debt crisis as well as the currency market volatility over the last few months have emphatically demonstrated how external developments influence our domestic macroeconomic situation in complex, uncertain and even capricious ways. In making our policies, we have to factor in external developments, particularly the spillover impact of the policies of advanced economies on our macro-economy. This will become even more important as India's integration with the global economy increases. Surely, globalization is a double edged sword. It comes with costs and benefits.

ii. The recent experience has once again demonstrated that vulnerabilities in one market transmit to other markets at lightening speeds often raising new challenges before earlier ones are addressed. The Reserve Bank tried to use the liquidity and interest rate channel to address the volatilities in the forex market. This resulted in a sharp uptick in long term yields and impacted the functioning of the money and government securities markets requiring a series of market measures to arrest the disproportionate rise in yields and prudential measures to enable banks to manage the sharply higher yields. Concerns about the collateral impact of higher interest rates on growth also emerged.

iii. The recent events have again focused attention on the need for and efficacy of capital controls to manage capital flows. It has raised questions about the benefits and costs of capital account liberalization. A recent paper by Helene Rey of the London Business School,[6] highlights the fact that the impossible trinity of fixed exchange rate, an open capital account and an independent monetary policy has now been rendered irrelevant. What is relevant today is a *dilemma* or an "*impossible duo*" – free capital flows may inevitably mean a loss of monetary policy independence.

iv. Till recently, in India, foreign investment in debt markets was not permitted to any significant degree. The market has slowly been opened up to foreign funds in recent years. Ironically, the outflows during the recent months happened from exactly these markets reaffirming the belief that opening up of debt markets needs to be approached with caution.

v. In fact, the Reserve Bank did introduce some pre-emptive measures to limit capital outflows by residents but these in some ways affected sentiments in the economy – highlighting the importance of the confidence channel. The challenge going forward in managing the capital account will clearly be on ensuring that measures are taken in a nuanced manner so that the measures themselves do not exacerbate the situation.

vi. The recent events have refocused attention on the adequacy of foreign exchange reserves. The Reserve Bank has, in recent years, permitted market forces to determine the level of the currency. Intervention has been infrequent and essentially to manage excessive volatility. In recent months, however, more frequent interventions have been necessary given the growing turbulence in the foreign exchange market. We understand that this has been the experience of other emerging markets as well.

vii. The role of offshore or NDF markets is also being debated in the context of the recent events for currencies which are not fully convertible. A study conducted in the Reserve Bank[7] suggests that there is a long term relationship between the spot and the NDF markets. During periods of rupee appreciation, the relationship is generally bi-directional. During periods of rupee depreciation, however, the relationship could turn uni-directional from the NDF to the on-shore market, potentially resulting in greater spillovers of international shocks. This has raised the need for much greater policy coordination between countries than has been the case so far, particularly as currencies of many EMEs including India are officially not allowed to be traded overseas under the current capital account management framework.

viii. Another challenge has arisen in the context of central bank communication, especially during volatile times. Our experience has been that when markets are volatile and trending downwards, no news is good news. Many policy measures have been misinterpreted by a market waiting to look at the worst possible scenario at every juncture. We have been accused of not being serious about addressing rupee volatility, trying our own version of "operation twist", flip flopping on policy, etc. In fact, the efficacy of our measures are yet to be fully tested and, I hope I am not speaking too soon, there has been quite a bit of normalcy in our markets over the last few weeks.

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[6] "Dilemma not trilemma: The Global Financial Cycle and Monetary Policy Independence", Paper presented by Professor Helene Rey, London School of Economics, at the Jackson Hole Symposium, August 2013.

[7] Reserve Bank of India, Annual Report, 2012–13 (http://rbidocs.rbi.org.in/rdocs/AnnualReport/PDFs/P1_02ECRV220813.pdf)

ix. Finally, for India, of course, the greatest challenge will be to the address the structural vulnerabilities which exacerbated the impact of global developments. This will be critical for enhancing the resilience of the economy to global headwinds of instability.

Silver linings

27. To address vulnerabilities arising out of high trade and current account deficit, the Government and the Reserve Bank have undertaken various measures in recent period. These measures mainly aimed at boosting exports, curbing imports and facilitating foreign capital flows. A series of measures have been taken to rein in imports, especially gold imports, in the recent months. These have been reflected in a significant moderation in CAD in Q4 of 2012–13. Though the CAD in the first quarter of 2013–14 was higher at 4.9 per cent of GDP, going forward, it is expected that the deficit would moderate significantly due to reduced imports of gold, growing exports, particularly in the context of improved economic conditions of the advanced countries and the lagged impact of the rupee depreciation on the trade balance. Our foreign exchange reserves can be considered comfortable with a reserve cover of over 35 months to the CAD. The government has reaffirmed its commitment to fiscal consolidation and it is expected that the targets will be met. Domestic growth is also expected to rebound given a still high savings rate, a good monsoon performance this year and measures being taken by the policy makers to boost investments and attract foreign investment flows. There are of course risks – the spillovers of exit from accommodative monetary policy in the advanced economies that we are discussing today and the possibility of recurrence of geo-political tensions and their consequent impact on oil prices.

Way ahead

28. I have used the sequence of events between May 22 and the first week of August 2013 to illustrate the risks from exit from unconventional monetary policies. Some calm appears to have been restored to markets especially, after the decision by the Federal Reserve, on September 18, not to commence tapering. But, what is clear is that the commencement of tapering has only been postponed. Markets have already begun speculating when the Fed would start the tapering. Will it be October? Will it be December? Or would the Fed wait till early 2014? As these uncertainties persist, volatility may return to markets. The on-going fiscal face-off in the US, which also carries the risk of US defaulting on its debt has introduced another set of uncertainties for the global financial markets and growth outlook in the US and other countries. There is, hence, a need to look ahead and chalk out a plan of action, ideally a global plan of action, to address the risks.

29. The recent events serves as a useful lesson in caution to both those who are contemplating exiting and those who are likely to be on the receiving end of any spillovers. Fortunately, the incentives of both groups at a broader level are well aligned. Neither would like to see a disorderly exit. It is, however, unlikely that any one country's policy needs will suit others since economic conditions differ across countries and their business cycles are not perfectly aligned. Different countries currently employing unconventional monetary policy will no doubt want to exit at different times. EMEs and others who are affected by the exits, in many cases, will also find it does not meet their immediate needs. To some extent, however, the lack of synchronicity may be helpful, allowing for some offset, so everyone is not moving in the same direction at once.

30. History does have examples of past exits from accommodative monetary policy which could be instructive to review. After the 1990–91 crisis, the Fed hiked rates in February 1994. The hike was largely unanticipated by markets, policy rates were raised sharply within a relatively short span of time. Resultantly, there was a sharp and sudden rise in bond yields with significant international spillover effects on global financial markets. In contrast, in 2004, the Fed's exit from accommodative monetary policy was largely anticipated. Also, the pace of

increase was gradual. This time around the impact on global markets was significantly limited especially as compared with the 1994–95 cycle.

31. Experience with an exit of the scale and magnitude currently being faced is however lacking, implying thereby that the risks from exit will need to be even more carefully managed. The key message and the major challenge for all exiting central bankers is the need for clear and transparent communication about intent on purchases, holdings and policy rates. Of course, to the extent that markets have become over-optimistic, any communication may entail significant and abrupt adjustment of asset prices and exchange rates. This does not weaken the argument for effective communication. Opaque communication or conflicting signals may not prevent the eventual adjustment, and may even induce greater volatility in markets. What is unclear is whether the recent market reactions suggested an overreaction, a front-loaded reaction, or a small taste of what is to come. It is clear from the recent events that the global policy coordination process needs to pay more attention to monetary policy than it has so far. There are challenges to this. Central banks typically guard their independence. We will need to find a way to balance such national autonomy with greater international accountability.

32. The need for coordination of fiscal policy among the systemically important countries is now accepted, particularly from the point of view of growth and development across economies – developed & emerging. There is an equally compelling case to include monetary policy in the reserve country currencies in a co-operative framework. These issues were flagged in the recently concluded G20 summit in Moscow. In fact, bilateral and multilateral arrangements may also have a critical role to play in addressing the risks from tapering. Markets were soothed when we recently increased the quantum of our swap lines with Japan. These are contingency lines which we do not expect to use but nevertheless they provide the comfort of a backstop. The joint statement issued after the sixth China-India Financial Dialogue late last month also acknowledges the importance of bilateral communication and cooperation.

33. Let me sum up by flagging some issues which need to be discussed in global fora. To what extent should countries take cognisance of spillovers? Do countries sufficiently internalise spillovers? Should countries posing systemic risks to the global financial system assume a higher burden of mitigating such risks? What are the pros and cons of enhanced cooperation and what form should such cooperation take – increased dialogue, liquidity/swap arrangements, bilateral agreements, etc.

Concluding thoughts

34. It is clear now that the developments of the last few decades have resulted in a global economy which is closely integrated and interconnected. There are benefits from globalisation. It is indeed difficult to argue against the benefits of cross border flows. But there are clearly associated costs. The challenges of globalization are only accentuated by the uncertainties surrounding events and developments in the global economy. We were rudely and abruptly brought face to face with these challenges in the recent months. Fortunately, volatilities have retreated but the only certainty is that the uncertainties will remain even while uncertainty about certainties persists. It is, however, critical that we prepare well to meet the challenges of uncertainties. Our structural vulnerabilities, including those arising out of macro-economic imbalances in the external and fiscal fronts need to be addressed. This is not to say that we will then become immune from global shocks. Therefore, we will need to build our resilience to such shocks as countries like India with deeper fault lines are more vulnerable to the vagaries of capital flows. It is imperative to have deeper financial markets which enable absorption of such shocks with relatively greater equanimity. For example, we need infrastructure which facilitates, in fact, incentivises market players to efficiently hedge their foreign exchange and interest rate risks without, of course, providing perverse incentives to indulge in excessive speculation, thereby adding to the risks of the firms at the micro-level and the financial system at the macro-level. Above all we have

to strive to build a strong national balance sheet with focus on growth and development that would sustain the interest of investors, both domestic and international, and shock-proof our economy and the financial markets.

35. Let me once again congratulate the Department of Business Economics of Delhi University South Campus for selecting a very topical and relevant theme for this convention. I wish the convention every success. Thank you.