

**CAMRI ROUNDTABLE DISCUSSION: MEETING SUMMARY**  
**Capital Flow Management: Elusive Global Consensus or**  
**Comprehensive Confusion? – Dr Duvvuri Subbarao**  
**Friday, 15 November 2013**

*(This is a meeting summary of the CAMRI Roundtable Discussion led by **Dr Duvvuri Subbarao**, former Governor of the Reserve Bank of India from 2008 to 2013 and also Finance Secretary to the government of India from 2007 to 2008 (note: Dr Subbarao's bio can be found in [Annex A.](#))*

Management of cross border capital flows has been one of the most actively discussed, if also one of the most contentious, issues in global policy forums over the last five years. Even as there is general agreement that this is an important issue for securing global stability, an effective way forward eludes global consensus. Is this just comprehensive confusion or sheer inability to find a globally optimal solution in a world divided by nation states?

The discussion in the global policy forums has centred mainly around three broad areas – first, understanding the nature and dimension of the problem; second, agreeing on acceptable and appropriate policy responses at the national level; and third, agreeing or disagreeing, as the case may be, on global policy coordination on capital flow management.

## **Capital Flow Management**

To understand the current global perspective on the issue of cross border capital flow management, it is useful to think along the following schematic:

- 1. Areas where there has been consensus in global policy forums;**
- 2. Areas where consensus is in the making; and**
- 3. Areas where consensus remains elusive**

There is a broad understanding that the world is much more integrated today than ever before. There is also an understanding that external developments affect domestic economies in complex, uncertain, and even capricious ways.

Recalling events over the last six months, when Chairman Bernanke's statements, first on 22 May 2013 and then again on 15 July 2013 on 'tapering' in the US sent global financial markets into turmoil, Dr Subbarao graphically elaborated how managing capital flows is a very difficult issue currently, and how external developments, even external communications, can affect domestic financial markets in sharp and unanticipated ways.

Even as capital flow management came to be actively discussed in global forums only post-crisis, the issues go back much further, to pre-crisis days. In Dr Subbarao's view, the two root causes of the global financial crisis of 2008 were global imbalances, and financial sector developments.

In the pre-crisis years, global imbalances arose because China and some emerging economies had accumulated current account surpluses, and therefore capital surpluses; those surpluses went looking for investment opportunities.

The United States was running a huge current account deficit, and the world was content to keep on financing America, because the Dollar is the world's sole reserve currency and for that reason the ultimate safe haven.

When this money went into America, it drove interest rates down, and people went searching for yield - for better investment opportunities. Their chase for higher returns meant that they went into riskier investments, which eventually imploded and caused the financial crisis.

There is also consensus that our understanding of capital flows is outdated. A look at textbooks today shows that international economics even today is taught based on current account flows and trade flows; the teaching of international economics and writing of text books on the subject have yet to catch up with the new reality – that it is capital flows, which are massively larger, that determine economic dynamics.

There is consensus that there are some cross-border transmission channels we do not yet understand. We know that capital flows from surplus to deficit economies, but do we understand that capital also flows following regulatory arbitrage? That if one country or one financial centre is more tightly regulated, and another centre is less tightly regulated, money will flow from the more tightly regulated to the less tightly regulated one?

A major post-crisis initiative has been to tighten financial sector regulation and eliminate, or at any rate minimize, opportunities for regulatory arbitrage by agreeing on uniform global standards. The Basel III Framework for bank regulation falls into this category. Some countries and financial centers, which were thriving on regulatory arbitrage, demurred at this prospect.

There is also consensus that we need to deepen our understanding of the nature and dimensions of global capital flows.

Global financial flows are currently several times global current account flows. Illustratively, global trade as a percentage of global GDP increased from 34% in 1980, to 60% in 1997.

When it comes to capital flows, however, the increase has been several times that order of magnitude. So, that's where there is consensus – that this is a difficult problem, and that there are new dimensions to the problem of capital flows which we need to understand.

While the above sums up the area where there is consensus, consensus is still in the making on certain national level policies such as convertibility, imposing capital controls, intervening in the foreign exchange market, or the level of foreign exchange reserves the countries need to maintain. However, consensus still remains elusive on global coordination on resolving the fundamental problem.

What we need to understand is that capital flow management is, by definition, a cross-border problem – capital flows from one country to another. Consequently, purely national solutions are inadequate for what is quintessentially a global

problem. Everyone understands that, but national interests are militating against agreeing on a global solution.

To summarize – we have an understanding of the problem; we know we need to understand it better and deeper. We understand that there is need for both national and global level responses. We have made some headway in agreeing on appropriate national responses and have shown willingness to shed old orthodoxies in this regard. We also understand the urgent need for a united, combined global effort, but we have not, and still do not, agree on global cooperation on managing capital flows.

### **Problems of Capital Flows and its Effect on Emerging Markets**

Having summarized the issue, let us drill down to the details.

In an ideal world, every country will want capital flows just about equal to its current account deficit; some surplus economies accumulate capital and use it for external investment opportunities.

The reality is that no economy gets capital flows just as it wants. No economy gets capital flows at the precise time needed or in the exact quantity wanted - they are either too much, too little, too early or too late.

Capital flows are also volatile. Before the crisis - during the period of the Great Moderation - capital was flowing into emerging economies, including India. These countries, worried about the appreciation of their currency as a consequence, started buying US Dollars, which subsequently caused further problems.

During the crisis, capital flows took a reverse turn and started exiting emerging economies, and that was somewhat ironical, because there was no problem in the emerging economies - the problems that caused the crisis all had their origins in advanced economies. In spite of that, capital flowed out of emerging economies into America; the greater irony was that America was the heart of the crisis, but capital flowed back to America as it was the home of the reserve currency; the Dollar actually appreciated during the depth of the crisis!

Post-crisis, in the past three years of the Euro Sovereign Debt crisis, India witnessed inflows and outflows – the pure “butterfly effect”. Many economies were caught complacent, underestimating the ripple effect of the problems caused by Greece, and the further repercussions on the world thereafter for years.

In spite of very few links between India and Greece, within 12 hours of bad news coming out of Greece, capital started flowing out of India. Also, in the three years following that, any news coming out of Greece, Spain or other European countries would affect capital inflow into or outflow from India as a result.

The last six months have witnessed the most pronounced effect of this on India and other emerging economies. The news from the US Fed on tapering caused capital outflow from India in May; in September, the US did not taper, and capital started flowing back in. So, emerging economies are living in a very uncertain world – a world that they have no control over, but a world that they need to respond to.

Volatility of Capital Flows – Rapidly Reversing and Destabilising Trends in India, 2005\*

Pre-crisis (2005/08)	Great Moderation – Surge of inflows
During crisis (2008/09)	Safe haven – Outflows, sudden exit
Post-crisis	Risk on, risk-off; QE/Euro Crisis
Last 6 months	Capital outflows on apprehension of “tapering” and “Great Exit”

*\*Table reproduced from Presentation Material, Dr Duvvuri Subbarao, 15 November 2013*

**Emerging Markets and their Response to Capital Inflows and Outflows**

The management of capital inflows and outflows has been a difficult issue for central bankers, especially those from emerging economies in Asia and Latin America. However, the critical point to note about a policy response to capital inflows and outflows is that there is no totally benign option – any action taken has some negative side effects.

Take India's case. During the period of the Great Moderation, India got a lot of inflows – much more than we needed; the rupee appreciated by approximately 15-20%. India's fundamentals did not warrant so much appreciation; the large appreciation was due to capital flows.

There were some policy options to address this problem, but none of them as I said was benign: one option was to do nothing. However, if nothing was done, the rupee would appreciate and the economy would lose competitiveness.

The other option was to intervene in the forex market and buy up Dollars, which India did. This could prevent appreciation of the rupee, but the consequence was that you plough back your domestic money into the market; that created its own problems like inflation pressures and asset price pressures.

Curiously, you are buying up Dollars to prevent appreciation of the currency, but when your inflation goes up, your currency appreciates anyway. You are trying to prevent nominal appreciation of the currency by intervention, but instead may end up with real appreciation.

The third option was to fight inflationary pressures by sterilising the currency; that is, to buy the rupees back by selling bonds. However, that hikes interest rates up and if interest rates rise, you actually get more capital inflows. In essence, a good intention to prevent flows ends up raising the interest rate, which actually gets you more capital flows – a case of the solution exacerbating the problem!

The point is that in managing capital flows, there is no option that is totally benign. Whatever you do, you end up with a problem, and your endeavour is to minimize the costs.

### **Emerging Markets' Response to Volatile Capital Outflows**

Managing volatile capital outflows has increasingly been a challenge for the Reserve Bank of India. When the rupee depreciated sharply, like it did in the last six months, the Reserve Bank intervened in the market, selling from its foreign exchange reserves, in an effort to stem the volatility in the exchange rate.

For a central bank, one thing that is extremely important when intervening in the foreign exchange market is that its action has to be credible. It has to succeed, because markets do not condone failure, and the central bank cannot afford to lose credibility. A failed defense of the exchange rate can be worse than no defense at all.

So when there are large and volatile capital outflows and we decide to intervene, we must be sure that we can prevent depreciation. If the market senses, and invariably finds out, that the central bank has intervened but has not been able to prevent the depreciation of the currency, the central bank betrays its weakness and exposes itself to further vulnerability.

There is another problem with intervening in the foreign exchange market – ‘the tipping point’ the danger is that you don’t know where the tipping point is, and you also cannot test it. You are spending your reserves and maybe you are able to stem some depreciation, but if your reserves go below a certain level, you could hit a tipping point, when the floor caves in as it were, your exchange rate goes into a free fall, and you are rendered completely helpless.

On the contrary, there is also a counter argument that there is indeed a tipping point, but that tipping point is more like a floor. If the exchange rate hits that point, outflows stop because exit becomes unacceptably costly. Cutting losses would then mean staying in rather than bailing out.

The point is that, whether the currency is appreciating because of large and volatile capital inflows, or whether it is depreciating because of large and volatile capital outflows, you have a problem. And central banks have the challenge of managing not only the movement of the currency, but also of managing the financial market sentiment.

### **Dilemmas in Forex Intervention Issues with Central Bank Intervention**

There are three issues to worry about in intervention.

The first is managing market perception about a ‘target exchange rate’. Even as a central bank might repeatedly assert that it has no target exchange rate and that

its policy is only to manage volatility, the market may not believe that and is forever engaged in guessing the “target”. The lack of credibility of the central bank will decidedly lead to sub-optimal solutions.

The second problem is that exchange rates are known to overshoot, and once the overshoot happens, it can go into a spin. Preventing an overshoot is therefore vital; the problem though is that in a volatile situation, it is difficult to estimate the equilibrium value of the exchange rate in order to determine if there has actually been an overshoot.

The third area of uncertainty stems from asymmetry. For a central bank, the problem of preventing depreciation and the problem of preventing appreciation are asymmetric. In preventing appreciation, the central bank is fighting the battle in its own currency; the war chest is virtually unlimited notwithstanding other collateral negative effects of intervention. On the contrary, in preventing depreciation, the central bank is using up its forex reserves which are limited. The market is aware of this and consequently managing market sentiment becomes quite crucial.

### **Reserve Bank Reactions and Responses**

Over the last six months, it was challenging for the Reserve Bank to defend the exchange rate. However, it is better prepared to face the taper now than it was in May 2013, having accumulated reserves and long-term inflows.

While the structural problems afflicting India’s external sector cannot be fixed in the short-term, reserves can be augmented, which is what India has done.

### **Inflation in India**

The Reserve Bank has a desirable “comfort rate” target of 5% for inflation in India. Recently, though, the depreciation of the rupee has had significant inflation consequences. India imports 80% of the oil it uses. It is the 4<sup>th</sup> largest importer of oil in the world – the Dollar cost is translated into rupee cost, and if the rupee depreciates, it has inflation consequences, either because the price is passed on



to the consumers, or if the government subsidises the price, then through the fiscal deficit; this is a main worry for the Reserve Bank currently.

India has a current account deficit; the sustainable current account deficit is 2.8% to 3.0% of GDP. India has had current account deficits for three years in a row above the sustainable level; in 2011/12, it was 4.8% of GDP, way beyond sustainable limits. Because of the large and persistent current account deficit, the rupee was programmed to depreciate.

It would be misleading to believe that the rupee depreciated because of the sudden stop and then reversal of capital flows. Yes, that was the proximate cause, but the root cause is India's external sector imbalances. Given the large current account deficit year on year, the rupee was bound to depreciate. However, the depreciation did not happen because there was money around the world financing India's current account deficit. But the easy global liquidity only provided short term comfort as the short term money that came in was bound to leave when the global situation changed. That is indeed what happened at the first talk of 'taper'. The long term and sustainable solution to India's external sector problems lies in bringing the current account deficit down and maintaining it at that level.

### **Change in Orthodoxy - Capital Account Convertibility**

What has really happened over the last five years is that in global policy forums, especially in the IMF, there has been a change in the orthodoxy regarding a host of national-level policy responses to capital flows. There has been a change in the world view on what is desirable and advisable - before the crisis, and after the crisis.

For example, on capital convertibility, the world view before the crisis was that it was the Holy Grail - every country had to progress towards capital convertibility. After the crisis, we are not so sure. The conventional wisdom today is that this need not be the goal; not every country needs to become capital convertible. Indeed, it was because some of the emerging economies were not fully capital-convertible, they had insulated themselves against some of the toxic financial

products prevalent in advanced economies that caused the crisis. So the conventional wisdom after the crisis is different from the one before the crisis.

## Capital Controls

There is a similar change in policy orthodoxy on capital controls. Before the crisis, the view was that capital controls were bad, always and everywhere. The IMF typically reprimanded countries that imposed capital controls. But after the crisis, again, we're not so sure. In fact the IMF, which had an orthodox view pre-crisis, has since changed its view. The IMF now agrees that it is advisable, and indeed even desirable, for countries to impose capital controls in certain circumstances. However, there is disagreement on who should set the rules governing controls – individual countries themselves or should there be a global code of conduct agreed and signed off at the global level?

## Intervention in the Forex market

Before the crisis, the dominant world view was that countries should not intervene in the foreign exchange market; the exchange rate should be left to be determined by the market. After the crisis, however, there is a change in view. Just like in the case of capital controls, there is an emerging consensus that it sometimes becomes necessary for countries to intervene in the forex market to defend the exchange rate if it is seen to be going out of line with fundamentals.

## Level of Forex Reserves

Most countries hold a certain level of forex reserves as a measure of strength, as a measure of ammunition, to use in times of stress. During the crisis and after the crisis the IMF's position has been that it is wasteful for countries to hold foreign exchange reserves on the argument that if countries had an external payment problem, they could always approach the IMF for assistance.

However, emerging economies have countered this argument on several counts. First, IMF assistance is not as quick and unquestioned as it is projected to be. Second, even after all the water that has flown down the river, there continues to be a stigma attached to going to the IMF regardless of how willing the IMF is to

give the money out. Finally, some forex reserves are necessary as a measure of self-insurance. In real politick, it is not feasible for any country to so totally depend on external assistance.

## Global Reserve Currency

This issue came centre stage in 2010, when France was the Chair of the G20. President Sarkozy took the initiative in setting the course for exploring the possibility of an alternative to the dollar as the world's sole reserve currency. The motive wasn't entirely political. During the crisis, we realized the risks to global stability if the world continued to depend on a single reserve currency - the Dollar.

The point to note though is that finding an alternate is a complex problem. The dollar is the world's sole reserve currency not because all the countries in the world agreed on it; it is so because of the strength and resilience of the US economy and the world's confidence in the dollar. An alternate certainly has to emerge but that has to happen organically on the strengthening of that currency. Disappointingly, no alternative appears to be on the horizon. The Euro is still in the doldrums; there is no or little understanding of what it really means to be an alternative reserve currency or an additional reserve currency, so the Chinese seem to be taking no definitive position on this.

To be a reserve currency, the economy issuing that currency needs to meet certain criteria – its financial markets have to be open, its exchange rate has to be market-determined, the currency has to be largely convertible on the capital market, it has to meet international standards on transparency, on anti-money laundering, etc.

In summary, the world needs, for its own safety and security, an alternate reserve currency, but it is not clear how or when this alternate currency might emerge.

## Currency Wars

“Currency wars” drew a dividing line between emerging economies and advanced economies in the G20. Emerging economies' currencies were appreciating or

depreciating sharply because of the policies of advanced economies, such as quantitative easing. The constant refrain of emerging economies was: “Your policies are impacting our economies in a big and possibly unintended way. We have to make big adjustments to mitigate the negative impact of our policies. This is proving to be very costly. How we should share the cost is something that we can discuss, but the cost cannot be left entirely to us.”

In 2010 and 2011, there was a lot of money surging around the global system because of the easy money policies of advanced economies. Apart from going to emerging economies, the money was also going into speculative commodities. So even as advanced economies were in a downturn, which should actually have softened commodity prices, commodity prices had firmed up, in part because there was a lot of speculation engendered by easy money in the global system.

The advanced economies, particularly the US, countered this argument on several counts. Their main refrain was that their quantitative easing (QE) policies were intended to manage their domestic economies. There was no intention, direct or indirect, to debase their currencies. If there was any depreciation of their currencies, it was an unintended and possibly unavoidable side effect. Also, emerging markets were attracting flows not because of “push factors”, *pushing flows out of* advanced economies but “pull factors” that were *pulling flows into* emerging markets. It was also contended that there was no clear evidence of appreciation of emerging economy currencies in real terms. Finally, the restoration of stability and growth to advanced economies, the aim of this easy money policy, is in many ways a global public good which benefits even emerging markets.

## Summing Up

To summarize, the position today is that everybody understands that in a globalizing world, capital flows are inevitable and unavoidable. Capital flows need to be managed to preserve economic and financial stability. This requires responses at both national and global levels. While we have made considerable advance in thinking through national level responses, consensus on global coordination remains elusive. In a globalizing world, large capital flows are inevitable. But experience, especially over the last decade, evidences that capital

flows need to be managed so that they do not cause global imbalances. This is a global problem that requires a global consensus on sharing the burden of adjustment and on global policy coordination. In a world divided by nation states with no constituency for the global view, such a consensus is proving elusive. But if we don't reach a consensus, we risk the threat of financial crises.”

*Edited transcript of the presentation by Dr Duvvuri Subbarao and the follow on discussion, 15 November 2013*

## Annex A

### BIO

Dr. Duvvuri Subbarao served as Governor of the Reserve Bank of India for five years (2008-13), and stepped down in September 2013. Prior to that, Dr. Subbarao was Finance Secretary to the Government of India from April 2007 to September 2008 and Secretary to the Prime Minister's Economic Advisory Council from March 2005 to March 2007. Dr Subbarao joined the Indian Administrative Service (IAS) in 1972, topping the highly competitive civil services entry examination in that year. As a career civil servant, he worked in various positions in the state Government of Andhra Pradesh and in the federal Government of India acquiring hands on experience in public finance management at the national and sub-national levels. He was also involved at the policy level in economic and financial sector reforms in India. Dr Subbarao was a Lead Economist in the World Bank (1999 - 2004), where his responsibilities involved advising developing countries on public finance management. He also task managed a flagship study on decentralization across major East Asian countries which was acknowledged as innovative policy work. Dr Subbarao received BSc (Hons) in Physics from the Indian Institute of Technology, Kharagpur finishing at the top of his class; and MS in Physics from the Indian Institute of Technology, Kanpur. He went to Graduate School at Ohio State University where he got MS in Economics and later went to MIT as a Humphrey Fellow to study Public Finance. He earned his PhD in Economics from the Andhra University for his thesis on "Fiscal Reforms at the Sub-national Level". Dr. Subbarao came in as Governor of the Reserve Bank of India just a week before the global financial crisis erupted in full in mid-September 2008, and he led the effort to mitigate the impact of the crisis on the Indian economy and to institute economic and financial sector reforms reflecting the lessons of the crisis. His five year tenure was also marked by a calibrated monetary policy response to the growth-inflation balance and managing the growing strains on India's balance of payments. Dr. Subbarao was alternate Governor for India on the Governing Boards of both the World Bank and the IMF. He participated actively in the G 20 meetings, the meetings of the International Monetary and Financial Committee (of the IMF), bi-monthly meetings of Governors at the Bank for International Settlements (BIS) in Basel and a host of other international committees and conferences where his views were respected for the emerging market perspective he brought to bear on the discussions, especially in crisis management and post-crisis reforms. Dr. Subbarao has all along maintained a strong commitment to academic pursuits, and has written and spoken extensively on issues in macroeconomic management, public finance and financial sector reforms.