

DNA OF INFLATION IN INDIA

PREFACE

Indian economy is no stranger to inflation. In fact it has been subjected to periodic bouts of inflation repeatedly. Being a democracy, inflation has the potency to make and mar the political fortunes of governments. It may be recalled that the spurt in the prices of the lowly onions had humbled many a government in the past. Naturally, Inflation has been a nightmare for the polity.

Nevertheless, thanks due to the increased integration of the Indian economy with the global economy the cause of inflation have undergone tectonic shifts in the past decade or so. It may be noted that inflation of the pre-liberalisation era was characterised by shortages, especially when the farm production was affected. In such a scenario the policy responses were typical – imports were the key to solving the inflation puzzle and the usual suspects were wheat and edible oil, notably the palm oil.

While such a policy initiative was indeed effective in the pre-liberalisation era, the fact of the matter remains that Indian economy has indeed come a long way and in the process has become more complex. Naturally questions follow:

- What is the appropriate Exchange Value of the Rupee that would insulate the Indian economy from the vicissitudes of inflation?
- Is the game of competitive devaluation, engaged by Asian countries in the post Asian currency crisis phase, come to an end? Has this lead to the increased global liquidity? To what extent is this increased liquidity fuelling inflation at the global level?
- Is the inability of various Asian countries to consume leading to export of capital and thence leading to savings glut? Is this taking a toll on the global economy? Crucially, by parking their FE reserves with the US, is it not that the US is picking up the corresponding debt? How long can the US Dollar sustain these borrowing programme?
- Consequently, would the US Dollar be subjected to a sharp devaluation vis-à-vis the other currencies? And is the recent spurt in asset prices from gold to tin to food grains an indication that the global economy has lost faith in the US Dollar?
- Is the recent trend in diverting food grains for the manufacture of bio fuels driving their prices of grains, especially corn up? Naturally as grain prices go up, it may be impossible for India to import at prices, which are lower than the domestic prices.
- On the contrary India may have to redesign her policy of improving her agricultural production substantially to meet the increased demand
- Are free capital flows, especially those that are alleged to be from tainted sources the reason for the recent spikes seen in our Stock and Asset markets? Do we need to control our capital flows?

This monograph seems to analyse and find answers to some of these vexatious questions.

CHAPTER I – GLOBAL IMBALANCE AS A CAUSE OF GLOBAL LIQUIDITY

Explaining at the outset the Extreme Global Imbalance and why countries, which had modelled their economy through exports and a weak currency are having a re-look at the assumptions governing their economy as an antidote to inflation

To understand the text of the present bout inflation, let us at the outset understand the context - the functioning of the global economy, which is in a state of extreme imbalance. The robust growth of the global economy in recent times obscures a very important issue – the global economy is in a state of extreme imbalance¹. In the globalised era, the root of any macroeconomic problem within a national cannot remain insulated from the impact of the global economy. On one hand we have developing countries, mostly Asian countries, producing, exporting, and saving at a massive scale. However, they lack the necessary confidence² to consume their production and the resultant savings. On the other we have developed countries – notably the US who are in post-modern stage of economic evolution – and consequently run in a huge consumption binge. The extreme levels of consumption and imports of the developed countries are matched by the proclivity of the developing countries to save and exports. Thus while a set of developing countries produce, save and export both their production and savings, developed countries are consuming both the production and investment originating from the developing countries. In effect, developing countries are building their Foreign Exchange (FE) reserves while the developed countries are accumulating the corresponding debt. It is at this point we look at the causes of this imbalance, its impact on the global economy.

The current global imbalance arises primarily because of the huge levels of current account surpluses in some countries and mirrored through current-account deficit of a few countries. For instance, the US current account deficit was 7 per cent of GDP in 2006 and stood at approximately USD 900 billion While the current account surplus of Japan and emerging economies of Asia accounted for about 60% of the current account deficit of the US and the rest made by oil exporting countries, thanks to the high oil prices prevailing in the global markets.

The imbalance has become so acute and embarrassing that the assumption of globalisation – of capital flows from developed countries to capital starved developing countries – has been turned on its head. It is not the question of mere surpluses and deficits of countries. Rather it is the cause of these surpluses and deficits on a sustained basis and its size that has placed the global economy under tremendous risk of an abrupt winding³.

¹ Some economists do not define it as lack of confidence – they attribute it to cultural factors and family values, usually prevailing in Asian countries which restrains spending in a significant manner. Consequently, the very definition of global imbalance is challenged by such economists and redefined as cultural imbalance between the West and Asian values and refuse the look at this issue within the narrow definition of currency imbalance.

² Ben Bernanke, the US Fed chief calls this as savings glut, indicating as if savings were a vice. Crucially it implies that he is blaming the non-consumption of the rest of the World for the present imbalance.

³ It must be noted that the solutions proffered from well-intended quarters seems to fear the abruptness in the unwinding process and therefore are directed at achieving a soft landing. Implicitly, they seem to concede the fact that there is a global imbalance and that it needs correction.

The cause of the current imbalance stems from the fact that post Asian currency crisis, many countries found virtue in a weak currency resulting in “competitive devaluation.” Under this scenario, many countries adopted a mercantilist policy and to maintain their competitiveness, intervened through their central banks in the currency markets by buying FE, notably the US Dollar, against their own currency! Implicitly it meant the poor developing world subsidizing the rich developed through its weak currency and propping the USD against their own. In real economics it has the calculated effect of developing countries exporting deflation to the developed world and simultaneously importing inflation from the others.

This “export led model” aided through a weak currency was matched by a sharp deterioration in the saving-investment ratio in the US. With billions of unemployed people within the developing countries, the “export led” model – rationalized through the Washington Consensus and legitimised by the Asian Exchange Crisis - suited the Asian countries as it provided job opportunities to their unemployed. It may be noted that this model also suited the developed nations as it provided cheap products to them, made cheaper through a strong USD and a weak currency of other nations. In their post modern stage of economic evolution, manufacturing within the US economy did not matter while consumption for all obvious reasons did. Apparently, the sustained rise in the gap between domestic production and consumption could be met only through increased imports. This explains the rising current-account deficits of the US economy. The adverse shift in saving-investment balance in the US is reflected both in the high budget deficit since 2002 and the deterioration in net personal saving since 1998.

No wonder, of late countries are discovering that this arrangement has its own limitations. The world is realizing that while the rest of it gives products and services to US, the US gives the rest, Dollars, (aggregating to more than USD 700 billions) every year. This arrangement would continue till the world “perceives” the USD to have a value. While this is rooted in is pure psychology, simple economics tells us this increased supply of the USD of this magnitude will obviously result in a fall in its value.

Countries are increasingly realizing that the value of the USD that they are holding is fast eroding, whatever be the “officially managed exchange rate.” And if fewer people want the USD it would trigger an avalanche and the USD could tumble dramatically. No wonder, the Fed is loath to make public the M3 figures⁴, as it does not want the holding position of the USD by central banks across the globe to be publicised. Interestingly, in such a doomsday scenario, economists are betting on central banks of other countries to defend the USD. It would seem that the US has outsourced even this “Sovereign” function of defending its own currency!

Nevertheless, countries across continents are caught in a serious dilemma – should they not intervene, the collapse of the USD is imminent, and should they continue to defend the USD, they would be a long-term loser as the present arrangement has self-contained seeds of destruction. While everyone is conscious of the fact everyone seeks to postpone the inevitable, no one wants to bite the bullet as yet.

⁴ On March 23, 2006, the US Federal Reserve System decided to cease publication of the M3 monetary aggregate.

Obviously, the increasing imbalances in the current account positions across the globe are posing tremendous risks for the functioning of the international monetary system itself with hardly any solution in sight. The successful execution of correcting this global imbalance will require a mixture of macroeconomic policies in harmony across the globe - monetary, fiscal, and currency policies. And till such time the global economy runs the risk of a dollar collapse, followed by a recession in US and a possible global meltdown caused by currency holocaust.

It is in this connection that one has to understand the initiative of the IMF to correct global imbalances through what it calls the Medium Term Strategy (MTS). The Communiqué issued by the International Monetary and Financial Committee (IMFC), emphasizes on the fact that the correction of the present global imbalance is a shared responsibility of nations – those who have huge current account surplus and those who run the corresponding deficits. Key elements of the strategy towards orderly rewinding of this imbalance as suggested by the IMF are as follows:

- Raising national saving in the United States;
- Implementing structural reforms to sustain growth potential and boost domestic demand in other countries;
- Fiscal consolidation in Japan;
- Allowing greater exchange rate flexibility in a number of surplus countries in emerging Asia through an improved surveillance programme and
- Promoting efficient absorption of higher oil revenues in oil-exporting countries with strong macroeconomic policies.

From the above it would seem that that the IMF is prescribing an antidote to the much-touted Washington Consensus, which seems to have run its full course. In effect, what IMF seeks to advocate is to limit export of savings, encourage consumption through a consolidated process of allowing exchange rate flexibility, encouraging savings in US and simultaneously consumption in other parts of the world. Obviously, IMF has come to the conclusion that the current model that drives globalisation is unsustainable.

It is in this context that Dr. Manmohan Singh in his welcome address to the Board of Governors of the Asian Development Bank (ADB) at the 39th Annual General Meeting in Hyderabad, in May 2006, highlighted the importance of correcting global imbalances that plague the economy of both developed and developing countries. Dr. Singh stated, “While to some extent mismatches in current account positions are to be expected - and even desirable - in the global economy, large disparities raise concerns about un-sustainability and hard landings. The process of correcting imbalances can be disruptive if it is sudden and unexpected. The present level of global imbalance cannot be sustained forever. It calls for action both from countries having current account surpluses and those having current account deficits. A coordinated effort is necessary to correct the imbalances to prevent a sudden down turn.”

CHAPTER II- GLOBAL LIQUIDITY & GROWTH AS A TRIGGER FOR INFLATION

The net impact of all that has been stated above has resulted in undervalued currencies with a corresponding rise in Global Liquidity leading to increased commodity prices. Or is it the other way around?

Even since the US explicitly abandoned the gold standard in 1971, the US Dollar has been riding on the implicit backing of crude oil. After all, the tectonic shift in abandoning the Bretton Woods I coincided with the increase in the oil prices, which in turn gave rise to the “petro-dollar” phenomenon and an implied crude oil standard. Now even high crude prices alone is not sufficient to sustain the value of the USD. It requires multiple commodity standard to sustain the value of the USD.

Put differently, economists are coming to a conclusion that most of the currencies across the globe are highly undervalued vis-à-vis the USD, which requires a significant dose of devaluation. For instance, a consensus exists amongst economists and currency traders that the Yen is one of the most highly undervalued currencies (estimated at around 60%) along with the Chinese Yuan (estimated at 50%). This artificial under valuation of currencies in increasing global liquidity albeit artificially needs to be tackled upfront if inflation has to be tackled globally.

To explain the implications of this exchange rate mechanism adopted by various countries, let us examine the price of a Big Mac hamburger sold in various countries as demonstrated by the Economist magazine. The theory holds that a Big Mac in New York, for instance, is no different from a Big Mac in China. The Big Mac index, computed by the Economist, is based on the theory of purchasing-power parity (PPP). According to this theory, exchange rates should move towards levels that would equalise the prices of an identical basket of goods and services in any two countries. The “basket” of goods and services taken for comparison by the Economist is a McDonald’s Big Mac, which is produced in around 120 countries. The reasons for the same are obvious – the Big Mac is representative of various goods and services needed in an economy and serves as an appropriate tool for comparison.

Therefore, if the price of Big Mac in US is say 1 USD then one expects that price of the Big Mac in China to be 8 Yuan approximating to the official exchange rate of Yuan to the USD. Thus by comparing the prices of Big Mac across different countries, one can get an indication about the relative valuation of each country’s currency. If the price of the Big Mac is say 4 Yuan in China, then the Yuan is said to be undervalued and this would call for revaluation. In contrast, if the Big Mac were to be priced at 12 Yuan, then the Yuan would be said to be overvalued and would call for devaluation. Using this loose inference, the Economist compares the exchange values of the Asian currencies to the USD.

Table 1 explains the under valuation of various Asian currencies using the Big Mac reference price.

While this Table demonstrates the serious nature of the under valuation of the global currencies, the fact of the matter unless this asymmetry is remedied at the earliest, the world

runs a risk of an abrupt USD collapse. It is time to take “Burgeconomics” seriously and not brush aside its significance and pointers that emerge from it.

It is conceded that the Big Mac Index may not be the most scientific method of capturing the exchange rate mismatch in the global economy; the fact of the matter is that it is quite an indication of the things to follow. Nevertheless, the extant global imbalance was well captured in a Speech, by Mr. Rodrigo de Rato, the Managing Director of the International Monetary Fund, at the Economic Society of Singapore May 24, 2006, who stated “Global imbalances must eventually unwind⁵. The risk is that they will be unwound in an abrupt and disorderly way. For example, there could be an abrupt fall in the rate of consumption growth in the United States, perhaps triggered by a slowing housing market. Or a disorderly adjustment might be triggered by developments in financial markets. Trends in exchange rates in recent months are in the right direction to help aid the adjustment process and, so far, have been orderly. But if investors become suddenly unwilling to hold U.S. financial assets at prevailing exchange rates and interest rates, this could lead to an abrupt depreciation of the U.S. dollar and increases in U.S. interest rates. This could cause global financial market disruptions as well as a downturn, and both could affect the open, trading economies of Asia seriously.”

Excessive circulation of USD leads to global liquidity

It needs to be noted that while commodities – ranging from metals to food grains - have one common feature -- they are denominated and traded internationally in U.S. dollars. Naturally given the weak Dollar, prices of commodities have soared in the past few years when denominated in Dollar terms. In fact, if only these currencies had been revalued, global inflation would have been under check.

Commenting on the above phenomenon in Power and Interest News Report Jephraim P. Gundzik wrote the world growth “was hardly sufficient to be behind the further rise of commodity prices in the first five months of this year (i.e. 2006). Rather than demand pushing the value of commodities higher in the past 18 months, it has been the (impending) dollar’s devaluation against commodities that has pushed commodity prices to record highs. In other words, it is not zinc, copper and silver prices that are gaining.” Naturally, as the players fear the fall in the value of the dollar and reach out to various assets and commodities, the prices of these commodities and assets rise.

To get an idea of the enormity of world’s supply of dollars as argued by Gundzik let us calculate the dollar value of rising crude oil prices. In 2004, global demand for crude oil grew by a mere four percent. Nevertheless higher oil prices advanced by as much as 34 percent. Consequently, it is this factor that significantly contributed to increase the world’s dollar supply by about USD 330 billion. In 2005, international crude oil prices gained another 35 percent and global demand for oil grew by only 1.6 percent. Nonetheless, the world’s supply of dollars increased by a further USD 460 billion. Naturally, all this increased liquidity caused by excessive supply of USD is driving global inflation. But as the supply of USD increases, the financial markets across continents expect the value of USD to fall. This once again leads

⁵ The Global economy seems to be caught between a rock and a hard place – of an abrupt unwinding or an orderly correction of this imbalance. Either way it seems to be a choice between two decades or twenty years.

to a mad scramble for asset purchase. While one is unable to fathom the cause and effect relationship between the increase in the prices of one commodity and the other in the aggregate, the fact of the matter is that the increase in the value of commodities has sustained the value of the USD, which would have otherwise collapse given the gargantuan deficits of the US.

Of course, this excessive supply of dollars has also been pushed higher during the past two years by rising prices of other dollar-denominated commodities as mentioned above. Although some of the increase in the world's supply of dollars since 2004 has been reabsorbed into U.S. economy by the twin American deficits - current as well as budgetary, it is estimated that as much as USD 600-800 billions remains outside of U.S. Some of this money has undoubtedly found its way into the asset markets of other countries. Most of it has been parked in alternative investments such as commodities, stocks, real estates and other markets across continents, leveraged many times over. Needless to reiterate, the excessive USD supply too has fuelled this property and commodity boom across markets and continents.

The net impact of all these is that the global commodity prices have been hardening in the past few years. Though the weights for these individual metals are small while computing the national inflation, nevertheless the current rate of inflation is so high that the price increase in the commodity prices too is making a definitive impact on overall inflation in India. The domestic prices of these metals are being guided by international price movements as the price formula adopted by local manufacturers is import-parity based.

Obviously, despite all that is stated above what aids and sustains USD is a “suspended sense of disbelief” amongst countries about the value of USD. Yet, commonsense tells us that the excess supply will obviously result in a fall in the value of any product. The USD is no exception.

How the US army protects the USD

The late Iraqi leader Saddam Hussein was fully aware of this paradigm. Seeking to exploit the inherent weakness of the USD, Saddam wanted to trade his crude in Euros, which would have lead to a lower demand for the USD and thereby triggered a dollar collapse. And those were his “weapons of mass destruction - WMD”

And if some analysts are to be believed, Venezuela and notably Iran too possess the very same “WMD.” Naturally, it requires some specious arguments and military intervention to protect the USD. Never in the history of mankind has a national army protected the national currency so vigorously as the US army has done in the past decade or so. Put differently, if Japan had an army that were as strong as the US, the Japanese Yen would be as strong as the Dollar!

To digress further, what is bizarre to note here is that despite the fact that crude is produced mainly in Middle East; officially it can be purchased in Dollar terms from one of the two oil exchanges situated in New York and London. Obviously, should Iran carry out the threat to commence oil trade in Euros or better still an oil exchange, the USD would come under tremendous pressure. And so would be the case with Venezuela.

It is common knowledge that a currency, when not backed by anything precious is a piece of paper. When US abandoned the Gold standard in early 70's, countries habituated by then to USD under the Bretton Woods arrangement continued to accept USD as an international currency without demur as the world was not prepared for any alternative. Else, the global economy would have collapsed by 1971. But the diplomatic silence did not solve the problem. It had merely postponed it and that has come to haunt it.

Post-gold standard, by a tacit approval of OPEC and strategic manoeuvring, the US had ensured that its currency is implicitly backed by crude instead of gold. This explains the American “geo-political and strategic interests” in Middle East.

But over time even this was found to be insufficient and consequently the oil standard of the 70's gave way to an implicit multiple commodity standard of today. Naturally the commodity price including crude has soared in the past few years. Unfortunately, this arrangement too is failing the US. No wonder, the USD increasingly resembles the promissory note of a defunct finance company.

It is no coincidence that global trade in most commodities including oil are denominated in USD as the respective international exchanges are located in US. To what extent are the prices of these commodities manipulated to protect the USD is anybody's guess. However it may not be out of place to mention that a barrel of oil is estimated to cost less than 10 USD to produce is sold approximately at 70 USD, in the international market.

But as traders across continents lose their faith in the USD, commodity prices soar and this has lead to inflation across the globe. No wonder, countries are forced to increase their interest rates to fight inflation. This has triggered an interest rate hike across continents and the US is finding it extremely difficult to sustaining its current borrowing programme. In the alternative they have to resort to appreciation of their domestic currency.

Growth of China & India to fuels global Inflation

Another reason attributed by economists to this phenomenon of global inflation caused by the increase in the prices of these commodities is due to the fact that both India and China have been recording excellent growth. In fact, both India and China have had approximately double-digit growth in the past few years. Naturally, given their sizes, an increase in the domestic demand within these two countries has naturally impacted the global demand-supply position leading to the increase in prices of these commodities. It has to be noted that China and India have a combined population of 2.5 billion people, about 37% of the world's population. It may be noted that as the growth rates in these two Asian giants increase, more people would be coming out of poverty and thereby making additional demand on resources.

For instance, given this size of population even a modest 100 USD increase in the per capita income of these two countries would translate into about USD 250 billion in additional demand for commodities. This has put in extraordinary demand on various commodities, which include, Copper, Nickel, Tin, Iron, Steel besides crude. Table 2 details the price movements of various primary commodities since 2004.

What is interesting to note here is that India and China are not exceptions to the recent paradigm of a robust global growth. On the contrary, it has to be noted that the global growth rate has been consistently recorded robust rates during the previous few years – averaging above 4.5% in 2006. Even Africa, according to press reports has been growing in excess of 5.5% per annum in 2006. All these mean:

More and more people are benefiting out of global growth (read increased prosperity) and this rise in the commodity prices has benefited many countries exporting primary commodities. This increased earnings across countries has fuelled increased demand leading to higher global inflation. Naturally supply constraints emerge and it is in turn impacting the global commodity prices. However, one has to hasten to add that the rise in the prices of these commodities has been disproportionately larger than the recorded global growth. We will revert to the issue of supply side constraints in the domestic context shortly.

To Summarise:

- Currencies across the world are highly undervalued against the US Dollar
- Conversely this means that US Dollar is overvalued
- And this arrangement is protected by the US army
- Nevertheless, both these factors have cumulatively triggered excessive global liquidity
- This in turn has lead to increase in commodity prices globally
- This once again is further fuelled further by the spectacular growth in many countries, notably China and India leading to increased demand and supply side constraints

CHAPTER III – THE JAPANESE CONNECTION

A WEAK YEN FUELS GLOBAL MONETARY EXPANSION BY ALLOWING YEN CARRY TRADE – ALL OF THESE HAVE AN IMPACT ON INDIAN LIQUIDITY

That leads us to another dimension to the inflation that is currently confronting global economy. The net impact of the Yen carry trade caused by low Japanese interest rates that have implicitly caused excessive liquidity globally. It has to be noted that Japan has a huge foreign exchange surplus in excess of USD 900 billions – caused primarily by a weak Yen. Under the Yen carry trade scenario investors borrow the Yen at low funding costs and then purchase currencies or equities in other regions, particularly those in emerging markets that yield a higher return. The Yen carry mechanism is to borrow Yen at virtually zero rates, (currently the Japanese Rates are set to 0.5%) from the Japanese Banks, convert them into USD and then to purchase US treasuries at about a 3-4% interest rate gain net. This would work as long as the Yen does not appreciate against the USD. Since the Japanese have consistently a policy of a weak Yen, this carry trade system works as the Japanese hedge the players against any exchange loss. Further, the US treasuries so purchased are further leveraged by Hedge Funds and others several times over and invested in the various markets across continents – in stock markets as well as real estate markets.

Press reports suggests that there are literally trillions USD of yen carry trade positions scattered amongst various countries and across markets. The phenomena is so widespread and has gone on so long, that not many central bankers including the BIS seem to have data on the known net amount of Yen carry trade. In effect, the Bank of Japan has been acting like a Central Bank for the world through the Yen carry trade, as its decisions to raise or lower interest rates could change the liquidity flows, even under a static Yen exchange rate. And should Yen appreciate or interest rates rise in Japan, it would naturally accentuate the flows from other markets into Japan and could be a self-fulfilling prophecy. But since Japan is wedded to a weak Yen and a low interest rate regime, one can say with some authority that this is only hypothetical.

Nevertheless, as interest rates in Japan are still low at about 0.5% and with the Japanese still pursuing a policy of a weak Yen, it still makes sense to enter into this Yen carry trade. And this huge sum as it flows into one market within a country would naturally lead to the liquidity flows into other markets. Obviously this leads to liquidity driven asset appreciation in all markets. For instance, in India the appreciation in the value of stock markets in the past few years has lead to appreciation in the value of assets as well as domestic commodity markets. It is but natural that the liquidity driven boom in one market cannot be contained and quarantined.

Indian Liquidity Position

Inflation in India as explained initially has a tradition in supply-side factors. However, thanks to the excessive global liquidity as explained above, it facilitated buoyant growth of money and credit in 2005-06 and 2006-07. For instance, the net accretion to the Foreign Exchange Reserves aggregates to in excess of USD 50 billions (Approximately Rs 225,000 crores) in

2006-07. The RBI's strategy of sterilization (through which RBI sucks out excessive money) to control excess liquidity seems to have its own limitations (primarily because sterilisation has its own costs).

Crucially, this incremental flow of foreign exchange into the country has resulted in increased credit flow by our banks. While GDP growth accelerated from 7.5 % to 9% between 2004-05 and 2005-06, the corresponding acceleration in growth of broad money (M3) was from 12% to 17%. Year-on-year, M3 grew by 21% on January 19, 2007 coupled with an equally impressive overall credit growth. Naturally this is another fuel for growth.

In order to deal with the extraordinary credit growth and inflation from early-August 2006, on October 31, 2006, the RBI announced certain monetary measures to stem inflationary expectations. Unlike the previous occasions, when both the repo and the reverse repo rates were raised by the same 25 basis points, thereby keeping their spread constant at 100 basis points, on October 31, 2006, only the repo rate was raised by 25 basis points. With a repeat of this policy move on January 31, 2007, the repo rate reached 7.5% with a spread of 150 basis points over the reverse repo rate. The ostensible purpose was to make credit overextension that much costly.

Further, the RBI increased the cash reserve ratio (CRR) by 25 basis points on December 23, 2006 (5.25%) and January 6, 2007 (5.5%) and followed it up with a further increase of 25 basis points, which was effected on February 17 and March 3 respectively where the CRR was hiked to 6% and then subsequently to 6.5% in April 2007. The net impact of the hike in the CRR is slowly beginning to impact money supply in the economy. The money multiplier or the ratio of broad money (M3) to reserve money (RM), which had steadily risen from 4.33 in 2000-01 to 4.76 in 2005-06 before peaking at 4.93 on November 10, has since fallen to 4.69 for the week ended February 16. Table 3 chronicles the increase and decrease in money multiplier in the Indian economy over the past few years. It is hoped that the rise in CRR would have a dampening effect on money circulation in India and thereby control inflation.

To summarize,

- The primary cause for global liquidity is the Japanese Yen and the Japanese near Zero interest policy that allows players to indulge in the Yen carry trade, virtually making Japan the central banker for the entire world
- This in turn has a profound impact on the liquidity flows across continents and impacts asset prices, which in turn fuels inflation of all commodities across markets.
- This asset led lending has lead to global inflation. India with her economy linked to the global markets cannot escape this related fallout. Naturally, the inescapable fallout of this excessive liquidity facilitates speculative activities. A demand-supply gap, excessive liquidity and information asymmetry between players are a perfect recipe for excessive speculation in various markets.
- While it leads to boom in asset markets (and thus is generally welcomed by one and all) it is termed as inflation in the commodity markets (and is usually unwelcome).

CHAPTER IV – UNDERSTANDING GLOBAL POLICY RESPONSES

Understanding the quantum of global inflation as well as policy responses in major countries

The above mentioned monetary policy intervention of the RBI through increase in CRR is not an exception. But it is a rule globally. Consequent to the rise of crude oil prices as well commodities as explained above, headline inflation in major advanced economies remained firm since the middle of 2006 till March 2007 for which authentic data is available at a global level. According to the RBI “Amongst major economies, headline inflation in the US rose from 3.4 per cent in March 2006 to 4.3 per cent in June 2006. Although it has since moderated to 2.8 per cent in March 2007, it remains at elevated levels. In the UK, CPI inflation increased to 3.1 per cent in March 2007 from 1.8 per cent a year ago. In the euro area, inflation remained above the target of below but close to 2.0 per cent till August 2006, and moderated thereafter to 1.9 per cent in March 2007. Notwithstanding some moderation in headline inflation, core inflation still remains firm in major economies. CPI inflation (excluding food and energy) was 2.5 per cent in the US in March 2007 (2.1 per cent a year ago) and 2.1 per cent in the OECD countries in February 2007 (1.6 per cent a year ago). Many central banks have, therefore, continued to tighten monetary policies in order to contain inflation and inflationary expectations, especially in view of continued strength of demand and possible stronger pass-through of past increases in oil prices.”

After having raised its target federal funds rate by 425 basis points since the tightening began in June 2004, the US Fed has paused at each of the meetings held since end-June 2006. Nevertheless it has indicated that future policy adjustments will depend on the evolution of the outlook for both inflation and economic growth, as implied by incoming information. In Europe, notwithstanding some easing in inflation since August 2006, risks to the price outlook are seen on the upside due to the possibility of further oil price rises and additional inflation. The European Central Bank (ECB), therefore, raised the key policy rate by 25 basis points each on five occasions during 2006-07⁶ (June 2006, August 2006, October 2006, December 2006 and March 2007).

In view of strong economic activity, limited spare capacity, rapid growth of broad money and credit, rise in asset prices and expectations about inflation remaining above the target in the near term, the Bank of England too raised its policy rate by 25 basis points each in August 2006, November 2006 and January 2007 to 5.25 per cent. The Bank of Japan (BoJ), after maintaining zero interest rates for an extended period, raised the overnight call rate by 25 basis points each on two occasions - July 2006 and February 2007 - during the year to 0.50 per cent. Amongst other major advanced economies, central banks in Australia, Norway and New Zealand raised their policy rates during 2006-07. Obviously, while the inflation worries continue to haunt central bankers, their policy responses have been “uniformly similar.”

The following table⁷ captures various indicators of global inflation as well as the policy responses from various central banks.

⁶ Subsequently raised to 4% by June 2007

⁷ Source RBI

Global Inflation Indicators in Per Cent								
Country/ Region	Key Policy Rate	Policy Rates (As on April 18, 2007)	Changes in Policy Rates (basis points)		CPI Inflation (y-o-y)		Growth (y-o-y)	
			Since end- March 2005	Since end- March 2006	2006 (Mar.)	2007 (Mar.)	2005 (Q4)	2006 (Q4)
1	2	3	4	5	6	7	8	9
Developed Economies								
Australia	Cash Rate	6.25 (Nov. 8, 2006)	75	75	2.8	3.3	2.7	2.8
Canada	Overnight Rate	4.25 (May 24, 2006)	175	50	2.2	2.0	2.9	2.3
Euro area	Interest Rate on							
	Main Refinancing							
	Operations	3.75 (Mar. 8, 2007)	175	125	2.2	1.9	1.7	3.3
Japan	Uncollateralised							
	Overnight Call Rate	0.50 (Feb. 21, 2007)		50	-0.1	-0.2	4.0	2.3
UK	Official Bank Rate	5.25 (Jan. 11, 2007)	50	75	1.8	3.1	1.8	3.0
US	Federal Funds Rate	5.25 (June 29, 2006)	250	50	3.4	2.8	3.2	3.1
Developing Economies								
Brazil	Selic Rate	12.50 (Apr. 18, 2007)	(-)675	(-)400	5.3	3.0	1.4	3.8
India	Reverse Repo Rate	6.00 (July 25, 2006)	125	50	4.9	7.6	9.3	8.6
	Repo Rate	7.75 (Mar. 30, 2007)	175	150				
			(150)	(150)				
China	Benchmark 1-year	6.39 (Mar. 18, 2007)	81	81	0.8	3.3	10.4	11.1
	Lending Rate		(300)	(300)				
Indonesia	BI Rate	9.00 (Mar. 6, 2007)	50	(-)375	15.8	6.5	4.9	6.1

Israel	Key Rate	4.00 (Feb. 26, 2007)	50	(-75)	3.1	0.8	4.8	3.7
Korea	Overnight Call Rate	4.50 (Aug. 10, 2006)	125	50	2.0	2.2	5.3	4.0
			(80)	(80)				
Philippines	Reverse Repo Rate	7.50 (Oct. 20, 2005)	75	0	7.6	2.2	6.1	6.5
Russia	Refinancing Rate	10.50 (Jan. 29, 2007)	-250	-150	10.6	7.1	7.0	7.7
			(150)	(150)				
South Africa	Repo Rate	9.00 (Dec. 8, 2006)	150	200	3.9	5.7	4.5	6.1
Thailand	14-day Repurchase Rate	5.00 (June 7, 2006)	275	50	5.7	2.0	4.7	4.2
	1-day Repurchase Rate	4.00 (Apr. 11, 2007)	-	(-94)				

Note:

1. For India, data on inflation pertain to CPI for Industrial Workers.
2. Figures in parentheses in column (3) give the date when the policy rates were last revised.
3. Figures in parentheses in columns (4) and (5) give the variation in cash reserve ratios during the period.

Source: International Monetary Fund, websites of respective central banks and the Economist.

To Summarise:

- Various advanced countries have been affected by this phenomenon of global inflation and have resorted to fighting inflation through monetary policies – especially through the increase of interest rates
- The approach of the central bankers across the world has been uniformly similar in their interventionist approach
- India too has been using the monetary policy as interventionist tool to fight inflation
- Nevertheless, the monetary policy as a tool to fight inflation in India has its own limitations.

CHAPTER V- UNDERSTANDING SUPPLY SIDE CONSTRAINTS

Food grains short fall – Domestic as well as Global – leading to supply side constraints and core inflation

Having examined the monetary aspects, let us now turn to the supply side issues and understand its impact on inflation in India. With a shortfall in domestic production and a simultaneous hardening of international prices (again due to the fact that global demand has outstripped global supply), prices of primary commodities, mainly food items, mainly comprising of wheat, pulses, edible oils, fruits and vegetables, condiments and spices have been on the rise in 2006-07 so far. As much as 39% of the overall inflation in WPI on February 3, 2007 fall within the primary commodity. Within the primary group, the mineral sub-group recorded the highest year-on-year inflation at 18%, followed by food articles at 12% and non-food articles at 12%. Nevertheless it has to be noted that food articles have a higher weight of 15% in the WPI basket, while minerals do not have a significant weight. Including manufactured products such as sugar and edible oils, food articles contributed as much as 27% to overall inflation of 6.7% on February 3, 2007.

There are three points to note on the inflation trends:

- The significantly higher rate of inflation this year is stemming from primary foods and manufactured goods;
- Inflation in primary food items is outpacing that in manufactured goods by a big margin for the third year in a row; and
- The price pressure from energy during this fiscal year is much lower than it has been in either of the previous two years. Nevertheless, the pressure overhang of yesteryears remains.

A detailed examination of the increase in food grains prices during the current fiscal reveals the fact that the prices of wheat and pulses have risen by a higher amount. The increase in price of wheat at WPI levels has been in excess of 10% and that of pulses 21%. However this has been partially offset by a slower pace of increase in rice (paddy) price, which also has a much larger weight in the WPI basket. In fact, the increase in prices of wheat and pulses had continued after the policy measures adopted by the Government during the year, Viz., allowing imports of food grains into India, first at substantially lower tariffs and then at Zero Tariffs. For instance, in comparison to the price level at the end of June 2006, price of wheat is higher by approximately 15% and that of pulses by 12%.

What actually compounds the problem for India is the fact that the lower harvest world wide, specifically in Australia and Brazil, and the overall strength of demand vis-à-vis supply and low stock positions world over, global wheat prices have continued to rise. Wheat demand is expected to rise, while world production is expected to decline further in the coming months, as a result of which global stocks, already at historically low levels, may fall further by 20%. Table 4 provides details of global production, consumption and stocks of wheat, maize and that of aggregate food grains. These global trends have put upward pressure on domestic prices of wheat and are expected to continue to do so during the course of this year. No wonder the recent attempts of the Agriculture Ministry to procure

wheat from the international markets have been virtually abandoned, as the international prices of wheat are far higher than what is prevailing in the national markets.

Wheat is not an exception; in fact, it is merely the rule. It may be noted that the availability of pulses has fallen to half the level of the 1960s, though pulses remain the primary protein source for a large section of the Indian population. While the demand of pulses has been growing steadily with increasing population, there has been a shift away from cultivation of traditional staples and towards cash crops, as well as a sharp decline in per capita food grain production and absorption to the lowest levels last seen in the last century or so.

The following Table gives some idea of the extent of such decline in both per capita food grain output and its availability over the period since the early 1990s. From the above it is evident that both output and availability have fallen, but the decline in per capita availability has been even sharper than the decline in output, and that too it has been marked for both cereals and pulses.

Per capita output and availability of food grain

Average of triennium ending March	Net per capita output (kg)		Net per capita availability (kg)		Per capita total food grain availability	
	Cereals	Pulses	Cereals	Pulses	Kg per year	Grams per day
1992	163.43	15.34	162.8	14.2	177	485
1995	166.74	14.85	160.8	13.5	174.3	478
1998	162.98	13.93	161.6	12.6	174.2	477
2001	164.84	12.87	151.7	11.5	163.2	447
2002-03 only	161.63	11.67	144.5	10.6	155.15	425

Source: Based on a research paper by Mr. V Shunmugam, Chief Economist, Multi Commodity Exchange of India Limited (MCX)

Table showing production of certain essential commodities, population and per capita income

Year	Total Pulses Prod	Total Cereals prod in lakh tons	Wheat Prod in lakh tons	Total Oil Seeds Prod in lakh tons	Population in million	Per capita Income in Rs
1991-92			550	186	846	4934
1992-93	120.147		580	201.066		
1993-94	128.145		600	214.955		7690
1994-95	133.048	177.46	650.77	213.367		8857
1995-	141.167	168.11	620.1	221.061		10149

96						
1996-97	123.099	185.19	690.35	243.843		11564
1997-98	142.439	179.29	660.35	213.247	967	12707
1998-99	129.793	188.7	710.29	247.482		14396
1999-2000	149.073	196.39	760.37	207.155		15625
2000-01	134.183	185.74	690.68	184.369		16555
2001-02	110.756	199.48	720.77	206.624		17823
2002-03	133.681	163.65	650.76	148.384		19040
2003-04	111.25	198.28	720.15	251.863		20989
2004-05	149.052	185.23	680.64	243.535		23241
2005-06	133.9	195.2	690.35	279.779		
2006-07	145.2*	194.65*	720.5*		1114.4	
CAGR	1.271%	0.714%	1.702%	2.759%	1.737%	11.706%

Source: Department of Agriculture Co-operation, Census bureau and RBI.

It has to be noted that India's pulses production ranges between 12-15 million tons while domestic consumption is estimated at 16-17 million tons. Obviously, India has to import the rest of its needs. Further, Pulses production has registered a CAGR of mere 1.271% in the last 15 years where as India's population and per capita income during the same period has registered a CAGR of 1.74% and 11.71% respectively. It is a similar case with cereals and wheat, which have registered a CAGR of a mere 0.71% and 1.7% respectively.

It is obvious that with the increasing population and higher income levels of the people, the twin factors of supply push and demand pull price increase, are putting enormous pressure on the prices of all commodities in general. In short, the fact of the matter remains that the farm growth in India has not kept pace with the developments with the increase in the population or their increase in income levels.

As grains are diverted for bio fuels, grain prices harden world over

Another dimension to the entire issue is that this trend of falling food production is not an isolated Indian phenomenon only. In an article titled Agricultural commodities - Biofuelled in its June 21st issue, "The Economist" pointed out that the grain prices – dubbed agflation - were going the oil price way. The article points out to the fact that the price of orange juice has risen by a quarter over the past year, eggs by a fifth and milk by roughly 5%.

Crucially, according to the Economist the sharp increase in the prices of grains such as corn (maize) and wheat, both of which recently hit ten-year highs is caused by the growing use of grains to make biofuels, such as ethanol.

According to the Economist, the amount of corn used to make ethanol in America has tripled since 2000; ethanol distilleries now consume a fifth of the country's corn crop. And America is only one of 41 countries where governments are encouraging the use of biofuels to reduce oil consumption. As a result, demand for grains has accelerated. During the 1990s, when oil was cheap and biofuels unheard of, demand grew by 1.2% a year, according to Goldman Sachs. But in recent years, it has increased by 1.4%, and over the next decade, Goldman projects, it will rise by 1.9% annually.

Moreover, even to produce as much corn as they are now, farmers are growing less soya and wheat, and so pushing up the prices of those crops too. With all the main grains to feed poultry and livestock becoming more expensive, the cost of meat and eggs is rising, and so it goes on.

As supply is unable to keep demand the cost of grains soars. Since high oil prices and generous government subsidies ensure that biofuels are profitable, any extra grain will be used to make more of the stuff. While that will not dent oil prices, since the volumes remain tiny compared with global oil consumption, it is observed by experts that instead, the price of biofuels has risen to that of petrol. For grain prices to fall, experts argue, either governments must pull the plug on biofuels programmes, or the oil price must fall.

Poor supply chain management leads to higher retail prices in India

Another factor that is peculiar to India and perhaps to other large developing countries is the huge geographical distances between different markets and the poor communication channels between various market participants, who in most cases functioned as if they remained in a vacuum. Naturally prices were determined by a handful of traders who leveraged the information asymmetry of various market participants. In the Indian market system, particularly in respect of products, which were produced in few pockets of the country while consumers were spread throughout the country, it was observed that there was a poor price relationship.

For instance, it was clearly found that over-supply in a producers' market often had no or little effect on the consumer's market or vice-versa. Hence in the spot markets of the country, this had led to an anomalous situation wherein the middlemen by virtue of their knowledge about market fundamentals and more importantly its functioning remained as the "price setters" – not the demand or supply of the products as would be expected - to their maximum benefit ignoring the overall fundamentals and other stakeholders in the market. Crucially, it is these middlemen who not only profit exorbitantly in ordinary times but also leverage the panic of the ordinary people to extraordinary lengths during shortages.

The following is a value chain analysis of the some pulses between the farm gate and Mumbai Retail market that could throw light on the matter.

Value Chain Analysis of Tur from Jalgaon to Mumbai Retail Market⁸

Urad Dhal

1.	Consumer's Price	Rs 5,600/qtl
2.	Farmer's Price	Rs 3,000/qtl
3.	Marketing Cost (1-2)	Rs 2,600/qtl
	a. Processing Cost	Rs 488/qtl (18.76%)
	b. Transportation cost	Rs 145/qtl (5.57%)
	c. Taxes & Cess (including Brokerage)	Rs 31.38/qtl(1.20%)
	d. Middlemen	Rs 9.85/qtl (0.38%)
4.	Net Margin	Rs 1,925.77 (66.68%)
	a. 1 st Broker's margin	Rs 228.9/qtl (11.88%)
	b. Trader/Miller's margin	Rs 670/qtl (34.79%)
	c. Canvassing agent's Margin	Rs 97.87/qtl (5.08%)
	d. Wholesaler's margin	Rs 628.63/qtl (32.64%)
	e. Retailer's margin	Rs 300/qtl (15.57%)

Tur Dhal

1.	Consumer's Price	Rs 3,200/qtl
2.	Farmer's Price	Rs 1,600/qtl
3.	Marketing Cost (1-2)	Rs 1,600/qtl
	a. Processing Cost	Rs 630/qtl (37.5%)
	b. Transportation cost	Rs 145/qtl (9.06%)
	c. Taxes & Cess (including Brokerage)	Rs 34/qtl (2.12%)
	d. Middlemen	Rs 10/qtl (0.625%)
4.	Net Margin	Rs 800 (50%)
	a. 1 st Broker's margin	Rs 212/qtl (26.50%)
	b. Trader/Miller's margin	Rs 175/qtl (21.8%)
	c. Canvassing agent's Margin	Rs 58/qtl (7.25%)
	d. Wholesaler's margin	Rs 153.65/qtl(19.20%)
	e. Retailer's margin	Rs 200/qtl (25.00%)

From the above it is seen that nearly Rs 2,600 in case of Urad Dhal (90%) and Rs 1,600 in case of Tur Dhal (100%) is the value addition made beyond the farm gate. This is exorbitant as well extortionist. Perhaps nowhere in the world do the retailers pay approximately 50% of the final price as value addition costs beyond farm gate. While it is admitted that the persons involved in the value chain add value to the products and perhaps deserve the same for the risks and labour undertaken by them, it has to be noted that the systemic inefficiencies are finally loaded to the retail price of the product concerned which in turn leads to increased

⁸ Based on a research paper by Mr. V Shunmugam, Chief Economist, Multi Commodity Exchange of India Limited (MCX) published in mid-2006

inflation. It is no wonder India is witness to a strange paradox – of farmers committing suicides and the country facing high inflation!

To Summarize:

- There are supply side constraints caused by low production of farm products – both in India and abroad.
- The growth in farm products has not kept pace with the increase in per capita income of Indians as well as the growth in our population.
- Importing food grains or vegetables into India is virtually impossible given the size of our population
- As grains get diverted for bio-fuel the coming days shall witness greater grain shortages and the consequent hardening of grain prices
- Weak distribution channels mean that middlemen exploit information asymmetry of the market participants and leverage the same leading to very high retail prices

CHAPTER VI – BUT IS INFLATION CORRECTLY MEASURED IN INDIA?

Inflation in India understated by a reference to Wholesale Price Index (WPI) and not the Consumer Price Index (CPI) ⁹

Since, inflation indicates an increase in the price of a basket of goods and services, which is representative of the economy as a whole, lets dig little deep into the way inflation is measured in India. The main issue confronting economists today in measuring inflation is which are the prices that are to be considered for calculation of the index i.e. whether inflation should be computed at wholesale or the retail price levels. Either way it may be noted that the WPI / CPI is an index used to measure change in price levels over time.

Inflation using indices are computed by comparing the change in the wholesale prices of a fixed basket of goods sampled on a regular basis. The constitution of the basket of commodities is done considering whether changes are to be measured at the wholesale level or retail level. Currently, in India separate series of index numbers are compiled to track the price movements both at wholesale level and the retail level, while the index number at wholesale level is termed as 'WPI', the same done at the retail level is termed as 'CPI'.

In India the Government computes inflation at the Wholesale level (WPI). The obvious question that follows it is whether WPI is the right indicator of inflation. WPI, as the name indicates, provides the price movement at wholesale level, while leaving out the impact of inflation on retailers, who fall under the last stage of the value chain. The only official reason why WPI is preferred more prominently in India over CPI is due to its shorter lag period in collection, compilation, and publication, which is of 2 weeks as compared to CPI that has a lag period of around 2 months. The other major advantage of WPI usage is relatively easy to calculate as compared with CPI, since only certain major markets are considered as a source for collecting prices.

Considering people's life style and fast changing consumption pattern, there is a need to review the CPI for improvisation to make it a more appropriate tool to measure inflation. Further it is also suggested that the index must be flexible enough to capture the various consumption patterns of our consumers and reflect not only the change in prices but also the change in preferences. For instance, in Spain, the index covers even the cost of 'Tummy Tucks', and 'Nose Jobs' as the Government in Spain extended the scope of the index to capture the price movement of frequently sought commodities or services. This helps the policy makers to keep a track of the expenditure and consumption pattern of people, which facilitates them in their decision-making related to inflation management, liquidity in the system, etc. While the governments in the other parts of the world are ensuring that their consumer price inflation index is in line with the market trend, it is time that our policy too ensures appropriate changes in our inflation indices.

Needless to emphasize, it is obvious that CPI reflects the prices at retail level that has more relevance while measuring inflation and is best and most well known indicator of inflation.

⁹ Based on a research paper by D G Prasad and V Shunmugam, Chief Economist, Multi Commodity Exchange of India Limited (MCX).

In fact, it is acting as the barometer for fiscal and monetary policies for most of the developed nations. Put bluntly, using WPI as a tool to measure inflation could result in understanding inflation, as it does not capture the entire length of the value chain.

Basically, the role of any central bank or government is to control inflation and at the same time sustain the economic growth. As a part of this, they keep a close tab on the inflation on a regular basis. But the most effective way of controlling the spiralling inflation is by framing effective policies at present taking stock of future prices i.e. controlling in a way the inflationary expectations as well. Since, food articles and energy products constitute major portion of the total weightage of all items in the CPI, it is of utmost importance for the policy makers to foresee the prices of these commodities and take appropriate fiscal and monetary measures to better manage inflationary pressures.

The following table gives out the core inflation measures used by Central Bank of various countries

Table: Core Inflation Measures used by Central Banks of Various Countries			
Countries	Index used for measuring Inflation	Commodity Groups Covered	Frequency of change in items of commodity basket
Australia	CPI (less mortgage interest payments, government controlled prices and energy prices)	NA	NA
Japan	CPI (less fresh foods)	Living Expenditure Food Housing Fuel, light & water charges Furniture & household utensils Clothes & footwear Medical care Transportation & communication Education Reading & recreation Other living expenditure	Five years
Germany	CPI	The basket used for determining price indices in Germany at the moment includes about 750 goods and services.	Five years
France	CPI (less change in taxes, energy prices, food prices and regulated prices)	NA	NA

UK	Retail price index (less mortgage interest payment)	650 representative consumer goods and services Food, Catering Alcoholic drinks, Tobacco Housing, Fuel and light Household goods and services Clothing and footwear Personal goods and services Motoring expenditure Leisure goods & Services	Annual
US	CPI (less food and energy items – due to seasonal price effects that it would bring in)	8 main groups, each with a different weightage: Housing, Transportation, Food, Medical Care, Education and Communication, Recreation, Apparel, and Other Goods and Services.	Managed based on expenditure surveys
India	WPI	Food and Non-food articles, Minerals, fuel, power, lubricants, and other manufactured products	No Periodical Changes

To Summarize,

- Inflation in India is computed by using WPI
- WPI may not be a representative index as it fails to capture the inflation post wholesaler levels till the final consumer
- Many advanced countries use Consumer Price Index (CPI)
- Further, the basket of goods and services are dynamic enough to capture the changing tastes and demands of consumers and we need to move towards a dynamic WPI

CHAPTER VII- UNDERSTANDING RBI'S RESPONSE

Technically called as sterilization, it has remained as a preferred policy intervention of the RBI till date. Nevertheless this policy has its own limitations.

Before we proceed further on this discussion let us at the outset take a look at the evolution of the Foreign Exchange Reserves of India since 1991 till date. From the low of less than a Billion US Dollar, the FE Reserves of Indian has burgeoned to well over 200 Billion USD by end of June 2007. The composition of these reserves is a mixture of NRI deposits, inflows on account of portfolio investment, FDI inflows and surpluses on the current account. There could also be some net inflow of aid. Current trends show that the Rupee, which was around Rs 26.9 in March 1991, fell to around 49.08 to a dollar in May 2002, and is now at around the Rs 40-41 mark and has been hovering around this value for over three months now.

However recently this trend of strengthening of the Rupee, which was Rs. 45 per US dollar at end-March 2007 appreciated by approximately 8-10% in the following weeks causing apprehension in the mind of analysts and our exporters. The recent appreciation of the Rupee against the US Dollar is the cause of concern in some section of our economy and comes in the way of understanding the movement of the Rupee over a long term. However the Rupee as at end June 2007 stands at approximately Rs. 41.

The Reserves Build-Up

On the whole, the Indian economy has been swamped with more dollars than it requires - thanks to the recent phenomenon of a surplus in the current account, the rush of capital inflows from various sources including the traditional flow of Dollar deposits and remittances from the NRIs. These dollars are not being adequately absorbed in the economy because of a variety of reasons that includes sluggish imports, capital controls and a conservative exchange control policy of the RBI. The consequence of all these has been that while the Indian FE Reserves has swelled with no corresponding Rupee appreciation against the US Dollar for many years. In fact the Indian Rupee has had a benign movement against the US Dollar (both appreciation and depreciation) for over a few years with no significant gyrations recorded during the past few years.

This is ostensibly due to the fact with many countries including China following an interventionist mercantile policy resulting in weaker currencies across globe, the Government of India and the RBI believe that a strong rupee could wreck the competitiveness of Indian exporters. So the RBI has been intervening in the foreign exchange market to prevent the rupee from appreciating too fast. And while the Chinese have "pegged" the Yuan to a Dollar the RBI has allowed the Rupee to move within a narrow bandwidth. To this end, it has bought up dollars from the market and sold rupees in return. But this has caused an over supply of Rupees in the economy resulting in excessive liquidity.

The FE that the RBI has been buying and subsequently holding have in turn swelled the foreign exchange reserves of India. With increased global intercourse countries maintain

some foreign exchange in reserve as an insurance against sudden financial panic, especially in the FE markets. The critical question is how much of FE exchange reserves are adequate for India, given her import requirements and the Foreign investments into India. For instance, if imports were to shoot up or if foreign investors were to suddenly pull their money out of the stock market, the central bank needs to have enough FE Reserves to meet their dollar demands. Otherwise, the rupee would go into a tailspin. In effect, what should be the extent of such insurance? There are various experts who have opined differently on this matter. However notwithstanding the above, the three most common sets of parameters used by economists are

- Whether there is enough foreign exchange to fund future projected imports
- To meet sudden withdrawals of short-term capital and
- Reserves as a percentage of select measures of money supply.

In fact, the RBI itself admits its fixation with building up Reserves in its Report of October 2004 when it states “Adequacy of reserves has emerged as an important parameter in gauging its ability to cushion external shocks. At end-March 2004, the import cover of reserves was about 17 months. The ratio of short-term debt to foreign exchange reserves declined from 146.5 per cent at end-March 1991 to 4.2 per cent at end-March 2004. The ratio of volatile capital flows (defined to include cumulative portfolio inflows and short-term debt) to reserves declined from 146.6 per cent at end-March 1991 to 36.0 per cent at end-March 2004.”

A research paper by economist Ila Patnaik of Indian Council for Research on International Economic Relations clearly demonstrates that India's reserves are more than adequate on all these above-mentioned three counts. What this means in reality is that the RBI is still intervening in the market to buy up dollars, not because it needs those dollars, but because it is trying to keep the rupee from appreciating. The central bank's exchange rate policy is the driving force; the increasing reserves are a mere consequence.

But holding FE Reserves involves an opportunity cost — measured by the difference between the rate of return on the official portfolio and the return available from alternative notional investments.

Analysis of the RBI's policy

And this is where the analysis of the RBI's policy begins. To understand that we need to figure out what happens to the Indian economy when the Central Bank injects rupees into the economy for the Dollar Reserve it holds. This results in a rather disturbing situation of too much Rupees chasing too few goods - the classical situation for inflation. To precisely prevent this, the RBI has been selling the government securities it holds to suck out the Rupees released into the economy. This operation of the RBI – of sucking the extra Rupees in the economy through the sales of government Securities - is called “sterilisation”. And this explains the manner in which the RBI has formulated its policy of intervention on the FE markets over the past few years. While allowing temporary and minor fluctuations around the 45 Rupee mark till March 2007, the RBI has repeatedly intervened to ensure a relatively stable exchange rate for the Indian Rupee.

The impact of the flow of FE into India is best illustrated when we examine the impact on the economy caused by Foreign Institutional Investors who have invested substantially in the Indian stock exchange. This has significantly impacted the stock prices in India and the BSE Index has more than doubled in the past two years. Obviously, the increased liquidity in the stock markets caused through FE flows is the cause; the rise in stock prices the effect. Surely one can comprehend the larger impact on the Indian economy, more specifically on the overall inflation in the economy, caused by surging and sustained capital inflows from abroad.

The Sterilisation process would work as long as the RBI had enough government securities in its portfolio. With continued intervention in the Forex markets accompanied by a selling of government securities, the portfolio of RBI has considerably shrunk. The RBI held Rs. 140,000 crores of government securities in January 2002. By January 2004 its portfolio had shrunk to Rs. 35,000 crores. Since then this has been virtually exhausted so much so that the central bank has introduced a new security, which it uses to sterilise excess liquidity. In fact, apart from these new securities issued by the RBI, it has been forced to increase the Cash Reserve Ratio (CRR) clearly points out to the excessive liquidity prevailing within the economy causing inflationary pressures.

Unfortunately, this interventionist policy has its own limitations as the sterilisation process by itself becomes increasingly costly as a country accumulates reserves. It may be noted that the returns on the FE reserves held by RBI are typically lower than what it has to pay on the sterilization bonds it has issued, with the differential interest costs to be absorbed by it.

What is important to note is the economic consequence of the sterilisation process and the costs involved. For instance, if the net inflow of capital continues as witnessed in India in recent times, then sterilisation will become endless and this could result in inflation with continuous upward pressure on interest rates. Such increase in interest rates will only attract more Forex flows and add to the upward pressure on the rupee to appreciate. The recent appreciation of the rupee, albeit mildly, in spite of large accumulation of official reserves is unambiguously signaling that the RBI is caught in a capital inflow - interest rate rigidity - rupee appreciation cycle. Surely there is a catch-22 situation for the RBI.

This leaves the RBI on the horns of a policy dilemma. If it shies away from buying dollars, the Indian rupee will appreciate fast and exporters will raise a hue and cry. If it makes large-scale purchases in the market, as it has been doing hitherto, money supply will increase causing inflationary pressures. While this will dampen the appreciation of the rupee, it would definitely impact interest rates. In order to check inflation if the RBI increases the interest rate, it could well lead to a greater inflow of foreign funds. Surely, under these circumstances, at one point in time in near future, the RBI has to allow the Rupee to appreciate.

To conclude, a managed-float of the Rupee as well as FE Reserve accumulation caused by relatively weak domestic absorption of foreign capital has resulted in a significant challenge to the RBI on the monetary management front. Though RBI has been highly effective in effectuating its sterilization program in moderating the control over the money supply within the economy, sterilization costs are indeed becoming an issue. Further, the buoyant growth witnessed in recent years in Indian economy had fuelled a demand for increased commercial

credit, which has eased the pressure on monetary management in a significant manner. In fact, thanks to the dexterous management of the situation by the RBI one feels that India had virtually achieved the mythical trinity of having capital flows, maintaining exchange rates and managing its monetary situation.

Nevertheless, some economists have repeatedly argued that the recent surge in capital flows is in response to positive return on investments in the face of a stable exchange rate. Yet others are of the view that high reserve policy has run its course and must be abandoned in favour of a flexible exchange rate regime. It has to be noted that every economy has to pay some (implicit) costs while integrating with the global economy. While those that have been explored by RBI Viz. sterilisation are costly and those unexplored Viz. free float of the Rupee risky, the only viable, sensible and durable alternative would be to allow the gradual appreciation of the Rupee.

A word of Caution

With a foreign exchange Reserve of more than 200 billion USD the R.B.I is in for tough times. If the rupee appreciates by around 10% (from its pre-March levels of Rs 45 to an USD) the Central Bank loses around Rs 90,000 crores in rupee terms as the rupee value of the reserve will plummet. Although this loss is notional it has the severity of creating major disturbances in the Central Bank's Balance Sheet. On the other hand the Govt. of India will gain tremendously as the rupee value of its external obligations in Rupee terms will fall. Crucially, these will be made at negative rates of interest (the annual rupee appreciation will out weigh the interest obligations). With the Fiscal position of the Government in a precarious state, such an increase in the valuation of the Rupee against the Dollar will be most welcome to the Government's finances. More over already the RBI is reported to be investing its reserves in non-dollar denominated bonds especially the Euro to hedge itself against the fall in the value of the Dollar, both against the Rupee and other major currencies, notably the Euro. This is reflected in the fact that the RBI has been showing "revaluation gains."¹⁰

It may be noted that this idea is corroborated by the figures provided by RBI for the period ending March 2007. This was when the RBI had not yet formally allowed the Rupee to appreciate. Be that as it may, it seems that the RBI had virtually migrated to a non-USD reserve. It may be recalled that while the Rupee appreciation began only from April 2007, other currencies, notably the Euro and GBP have been appreciating against the USD for the past year or so. Naturally, the RBI has prepared the necessary headroom for sufficient policy intervention in the coming months by allowing the Rupee to appreciate vis-à-vis the USD.

¹⁰Valuation gain, reflecting the appreciation of major currencies against the US dollar, accounted for an increase of USD 10.9 billion in total reserves during 2006-07. Taking into account the valuation gain of USD 10.9 billion, foreign exchange reserves recorded an increase of USD 47.5 billion during 2006-07 (an increase of USD 10.1 billion during 2005-06) – Source RBI

CHAPTER VIII - WHAT NEEDS TO BE DONE – A COMPLETE RELOOK AT OUR ROOT ASSUMPTIONS GOVERNING THE ECONOMY.

To fight inflation we need to have a re-focus on issues pertaining to revaluation of currencies – on the monetary side while improving domestic supply to meet domestic demand consumption.

The solution lies in ensuring that the Asian countries boost their domestic consumption as a means to sustain their economic growth as well as to correct the present global imbalance. Production for consumption by other countries i.e. exports had a merit, but this economic model, it seems, had run its course. It seems that countries, especially in Asia are revisiting their export-led economic model and in contrast to the popular belief have begun to concentrate on domestic consumption. It may be noted that a potentially weak USD, imbalances caused to the global economy by the present model where a set of countries are continuously exporting for the west to consume have become unsustainable and other allied factors have caused this re-think.

Re-examine the root assumptions governing the Indian economy

Obviously, the first and foremost challenge in tackling the issue lies in the Exchange rate management, which in the context of a complex economy like India, calls for skilful management. To amplify, further the Reserve Bank of India (RBI) has to strike a subtle balance between sudden surge of inflows and outflows. Further, it has to fine-tune its policy approach by ensuring that external sector management is intertwined with internal sector management on diverse issues such as inflation, liquidity, investment policy and others.

Keeping these in mind the RBI for the past decade or so has been following a policy of having a Monitoring Exchange Rate Band of +/- 5 per cent around the neutral Real Effective Exchange Rate (REER) and intervenes as and when the REER is outside the band. Consequently, the RBI would not intervene when the REER is within the band. In fact, the Tarapore Committee (Mark II) recently constituted by the RBI to look into the issue of Capital Account Convertibility has endorsed this policy.

However, the dissent note of Dr. Surjit S. Bhalla on the recommendations of the Tarapore Committee has pointed out to the “obsession” of the RBI in managing the exchange rate. Pointing out to the “absurdity” of this policy the dissent note states, “What the Committee is implicitly assuming, given the pattern of exchange rate movements, is that the exchange rate selected in 1993/94 is sacrosanct and was a perfect 10 i.e. the nominal (real) exchange rate conceived in 1993/94 is appropriate for all time to come! In a globalised world, competitor exchange rates are also relevant; and over the last decade, the Indian rupee has appreciated relative to the Chinese Yuan, and consequently, Indian competitiveness has suffered. Part of the large success of the Chinese economy can be attributed to a very undervalued (“cheap”) exchange rate. In this environment, to be fixated on our 1993/94 level of the real exchange rate, is inappropriate, and without reason, or empirical support.”

Implicit in the argument of Dr. Bhalla is that the Rupee must be allowed to weaken (as it is relatively strong when compared to other currencies, notably the Yuan) and it is the

intervention of the RBI that is holding the Rupee at its current levels which is having a debilitating effect on the Indian economy.

Simultaneously, as the Tarapore Committee was deliberating these issues, Mr. S Gurumurthy, Columnist and well-known Chartered Accountant, argued in his characteristic style through a series of article in the New Indian Express in June 2006¹¹ against RBI's intervention – albeit for a diametrically opposite reason – that the intervention of the RBI was deliberately to keep the value of the Rupee down! Passionately pleading for a stronger Rupee Mr. Gurumurthy opined that “It is not a well-kept secret that in the post-reform period, whenever the rupee rose against the dollar, the Government intervened to support the dollar against the rupee and kept the rupee in the market at lower than its real value.” This explains as to how the RBI, keeping in flavour of its times, build-up FE reserves while simultaneously keeping the Rupee value down.

Mr. Gurumurthy went one step ahead and analysed that a weak Rupee, contrary to the popular belief, was eroding India's competitiveness. Pointing out to the limitations of a weak Rupee in the Indian context he wrote that we are “Obsessed with the export-driven growth model of East Asian economies, the fashion then, the Government had opted for this strategy (of a weak Rupee). As a crisis management formula for a while it was okay. But, on durable basis, this is unsuitable to an economy like ours, which largely works on domestic activity. Moreover, with the unprecedented dollar cost of fuel it is devastating the domestic economy now.”

What must baffle an ordinary person is that with the same set of arguments and logic, two eminent experts have come to contrasting conclusions. Needless to emphasize, the boon or a bane answer to a strong or a weak Rupee depends on where you sit. It is obvious that as an importer or as a consumer one would surely plead for a stronger Rupee. On the contrary, theoretically speaking a weak Rupee it is presumed would hamper our exports, erode our competitiveness and cause increased imports that could hurt domestic industry.

Nevertheless, Mr. Gurumurthy taking a macro view of the issue pointed out that the Chinese or the Japanese route of aiding exports through weak currency is unworkable in the Indian context as China imports less than a third of its crude requirements while India imports more than two-thirds of its requirements. Consequently, he pointed out to the risk of the Indian economy turning uncompetitive because of high fuel costs being twice as high as China's if rupee is undervalued. And that lends an entirely new dimension to the debate – is the extant value of the Rupee aiding or eroding India's export competitiveness?

Crucially, what is missed in the melee is that much as their conclusions are divergent, the essential issue that has been raised by these two men of extraordinary calibre is rather profound - whether the economic model designed more than a decade ago is a perfect one for all time to come. Or does it need a revisit?

¹¹ Taking a contrary position to the line espoused by Mr. S Gurumurthy, the former governor of RBI, Mr. Venkitaramanan, had written an article in the Hindu Business Line titled **Dearer rupee, cheaper India**, dated 26th June 2006 in which he had concluded, “Practical policy considerations are against Mr. Gurumurthi's suggested solution. Japan rose to its heights on the strength of a weak yen rather than a strong currency. Can India too be strong on the back of a weaker, rather than a stronger, rupee?”

It may be noted that Mr. Edwin M. Truman, Senior Fellow at the Institute of International Economics, Washington, has stated that it is in India's interest to allow Rupee to appreciate. Similarly, noted economist Mr. Kenneth Rogoff, when he visited India couple of years back suggested that India must stop accumulating reserves and let Rupee appreciate against the US Dollar. In fact, Mr. Rogoff suggested that East Asian Countries needed to revisit their policy of a weak currency facilitating an export driven growth and resulting in huge accumulation of Foreign exchange Reserves. It may be noted the present export driven economic model has caused huge imbalances to the global economy where a set of countries are exporting to a few to consume and accrue the resultant export surplus. This model is now seemingly unsustainable and hence increasingly under scrutiny.

What is imperative to note here is that export driven model had merit at one point in time, but the said economic model seems to have run its course. Naturally, the fundamental assumptions of modern economies are being tuned on their head with countries, especially in Asia are revisiting their export-led economic model.

In short, the end of export as a chief drive of economic growth is yet to be formally announced one has surely to think of life after that. It is time that we recognise this tectonic shift in global economic thinking. In the early 90's it was a standard slogan – export or perish. Now it may not be as yet to announce export and perish, yet it seems that globally export driven economies are having a revisit of the fundamental assumptions governing their economy and notably on the export driven economic model. Consequently, internal demand and domestic consumption are fast emerging as the engine of growth and development.

All these call for reworking the fundamental assumptions of our economic policy. A stronger Rupee, an important coordinate in this complex matrix, could just be one of them. Whether it is maintaining the Rupee within a REER band (as questioned by Dr. Bhalla) or whether a weak Rupee is eroding our competitiveness (as argued by Mr. Gurusurthy) or whether we need to concentrate on domestic consumption (which includes a whole range of policy initiatives of which a strong Rupee is an important subset) needs to be widely debated. Economics is the most dynamic of social sciences. Naturally, ideological fixation must give way to ruthless pragmatism. Templates for management of the economy prepared even a decade ago may no longer be relevant, especially in a globalised and dynamic world. Designing a new template calls for fresh thinking and thorough understanding of the extant issues, especially from within the establishment. The moot question is - are we prepared for an extensive debate?

From export led growth to domestic consumption lead growth

These developments have to be viewed in the context of a well-critiqued document published by the Asian Development Bank titled "Export or Domestic Led Growth in Asia" in May 2005, the authors Jesus Felipe and Joseph Lim analyse strategy adopted by countries in the post East Asian FE crisis. Pointing out to the fact that as part of the "package of solutions" to reinvigorate these economies post the exchange crisis of the late nineties, a number of policymakers in the region proposed shifting (some of them more openly, e.g., Thailand, and some others less so, e.g., Malaysia) to a "new development paradigm" based on domestic demand-led growth. In fact, the recently ousted Prime Minister of Thailand Mr.

Thakshin announced upon taking the helm of government in January 2001 that he was determined to move the country away from mass manufacturing for exports into domestic demand-led growth through a series of policies.

The country's policymakers made big efforts toward shifting economic policy to reduce the country's over dependence on external demand and foreign capital. The high growth rates achieved by Thailand in recent years seem to vindicate their new approach. In effect Mr. Thakshin's approach was to seek a transformation from export-led growth into domestic demand-led growth. Mr. Thakshin's objective was to alter Thailand's production structure with a view to reducing the country's dependence upon exports. The key was to create demand among households and businesses without creating another bubble.

In August 2004, the Thai government published a white paper entitled "Facing the Challenge: economic Policy and Strategy", explaining clearly the economic agenda that Mr. Thakshin had been trying to implement since he came into office on January 2001. The idea was to balance past excessive dependence on external demand, urban-based mass manufacturing, and unproductive asset-building on one hand; with structural development in domestic demand, traditional sectors (e.g., agriculture, SMEs, and rural households) and entrepreneurs, and improvement in the pricing power of Thai goods and services on the other.

In effect, Mr. Thakshin's plan was to revive domestic demand (by boosting private consumption), in addition to exports. This is what has been referred to as a dual track strategy, as opposed to the single-track model followed by many countries in the region, namely, producing for exports. The net effect of this strategy is that slowly but steadily, countries especially in Asia are concentrating on domestic consumption and investment to engine their growth. As a net effect they are not in any way over-dependent on exports for their growth. (See Table 5 Annexed)

In fact Thakshin's growth strategy is fallout of economists who have hypothesized that the East Asian crisis had very different roots. After several decades of being presented as the optimal growth strategy, the export-led growth model that the East Asian countries followed ultimately gave in and even harmed its growth prospects. Some economists have put together a critique of the export-led growth model and proposed a shift toward domestic demand-led growth. Most of them have argued that the emphasis on export-led growth of most East Asia countries had a series of negative effects, which are listed as hereunder:

- First, it prevented the development of domestic market growth.
- Second, it put developing countries in a "race to the bottom" among themselves.
- Third, it put workers in developing countries in conflict with workers in developed countries.
- Fourth, there is a relationship between export-led growth and financial instability by creating over investment booms.
- Fifth, due to the emphasis placed on global goods and commodity markets, this model has aggravated the long-trend deterioration in developing country's terms of trade.
- Sixth exports especially fuelled through a weak currency and unless counterbalanced by appropriate monetary intervention could be inflationary. Since the global

- Finally and most importantly, export led growth has reinforced the dependency of developing countries on the developed world, thus becoming vulnerable to slowdowns in the latter's markets

Export-oriented economies are extremely dependent on foreign (mostly Western) demand. The problem is that any economic recessions in Europe, Japan, or US translate into slow growth in the developing world. To sum up these economists argue that the export-led growth model followed by East Asian countries for several decades is not an optimal strategy any longer and it is risky and dependent on the consumption pattern of others.

Blecker, a celebrated economist summarizes his views as follows: “the current emphasis on export-led growth in developing countries is not a viable basis on which all countries can grow together under present structural conditions and macroeconomic policies” (Blecker 2003). Palley (2002), another noted economist, has gone further and contends that the export-led growth model followed by many developing countries during the last few decades was part of the so-called “Washington consensus” emphasis on trade liberalization. As a solution, Palley proposes a new development paradigm based on domestic demand-led growth.

It is in this connection one would like to quote from the speech of Mr. Ma Kai, Chinese Minister, National Development and Reform Commission. Explaining the Chinese philosophy that governed the preparation of the 11th plan approach paper, which incidentally was to rely on the expansion of the domestic demand as an economic model and growth strategy for China in the next five years. Mr. Kai stated recently “we will promote development by relying on the expansion of domestic demand, take the expansion of domestic demand, especially consumption, as a major driving force, and transform economic growth from being driven by investment and export to being driven by consumption, investment, domestic and foreign demand combined in a balanced manner.

This transformation is targeted at solving the problem that China's economic growth has relied on investment and export excessively and domestic consumption does not play its due role. During the 10th Five-Year Plan period, the domestic capital formation rate increased from 36% to 44.8%, while the consumption rate decreased from 61.5% to 50.7%, and foreign trade dependency rose from 39.6% to 63.9%. If such kind of growth continues, though successful in short-term fast expansion, it will lead to a more extensive growth mode and instability of the economy. In the 11th Five-Year Plan period, we will adjust the relationship between investment and consumption, rationally control total investment, and strengthen the driving force of consumption in economic growth. We will adjust residents' income distribution, raise the income of urban and rural residents, and enhance the consumption capacity of residents, particularly rural residents and low-income population in urban areas. We will speed up the transformation of foreign trade growth mode, and promote the switch of the dominant feature of foreign trade from volume expansion to quality improvement.”

How high rates of indirect taxes hamper consumption in India

In short, the death of Washington consensus – especially that of export driven growth model - is yet to be formally announced one has surely to think of life after that. As usual, the Government of India is yet to recognise this tectonic shift in global economics. In the early 90's it was a standard slogan – export or perish. Now it may not be as yet to announce export and perish, yet it seems that globally export driven economies are having a revisit of the fundamental assumptions governing their economy and notably on the export driven economic model. Consequently, internal demand and domestic consumption are fast emerging as the engine of growth and development.

All these mean that this changing paradigm calls for a re-look at domestic markets by exporters in particular and business in general. Crucially, to aid domestic consumption, the Government too has to play its part. One factor that inhibits domestic consumption is the high incidence of indirect taxes – we end up paying 16% to Central Government and another 12.5% as VAT to State Governments aggregating to approximately 30% or one fourth of retail prices. This is one of the highest in the world. Obviously indirect tax reforms are crucial to boost domestic consumption.

Pointing out to such high incidence of indirect taxes on the final retail prices the report of the National Manufacturing Competitiveness Council states in its report on the National strategy for manufacturing “Domestic indirect taxes are often singled out as a major reason why Indian manufacturing is uncompetitive. For instance, many studies argue that total taxes on manufactured goods are 25 to 30% of the retail price in India, compared to 15% in China. Indirect taxes contribute 50% to the difference in retail prices between India and other low-cost countries. Lower duties would also boost the domestic market and permit synergy (exploitation of economies of scale, attracting FDI) between domestic and export markets. Therefore, there is a case for reduction of domestic indirect taxes both from the point of boosting domestic demand as well as improving export competitiveness.” This is the only way to lower inflation in India, boost consumption and in turn ensure a consumption driven manufacturing boom in India.

It may not be out of place to note that the current definition of poverty line in India is defined on the basis of whether a person can afford to consume 2,400 calories of food in rural India or 2,100 calories of food in urban India per day. This can by itself be considered to be inadequate. This definition ignores the other bare minimum necessities for a decent living, such as access to clothing, shelter, sanitation and education. If one were to consider a more realistically defined poverty line, the number of poor in India could be far in excess of the 30 crores that the Government wants us to believe. As a nation with higher growth aspirations, India needs to gradually move to a more realistic definition of poverty line in the coming years, which would also imply increased consumption.

With FE Reserves in excess of 200 Bn, India needs to control dirty money

Another dimension to this vexatious problem, which has not yet been fully understood, has been the issue of allowing free capital flows into the economy. As a subset of the policy on FDI, it may be recalled that India allowed investments by Foreign Institutional Investors (FIIs) directly into stock markets, provided these FIIs register with SEBI and be subjected to

its rules and regulations. India is estimated to have attracted approximately 50 billion USD on this count since liberalisation. Of this, 50%, that is, 25 billion USD, is estimated to have come to India as Participatory Notes (PNs).

Readers may be aware that PNs are derivative instruments issued by FIIs to foreign investors (individuals or corporates) who want exposure to Indian equities but do not want to register with SEBI. Further, FIIs are not allowed to issue PNs to Indian nationals, Persons of Indian Origin or Overseas Corporate Bodies (a majority of which are controlled by NRIs). Thus it is a contract between a foreign institution and a foreigner for investing into India. However, the underlying securities of PNs are Indian stocks.

In contrast to the stringent Know Your Customer (KYC) norms laid out for resident Indians even for opening a bank account (this is correctly done to prevent money laundering while simultaneously ensuring a trail for tax and other authorities), the norms for PNs are relatively lax. But foreigners have to be treated differently in India.

Ergo: KYC norms do not strictly apply to these investors of PNs. That makes transactions relating to PNs incomprehensible. The net result: Indian regulators do not know the names of such investors, the origin and sources of such funds. Crucially, they can do precious little.

Obviously, suspicions about terrorists operating from some tax haven and routing their investments into the Indian stock market remain. The irony is that if such investments are routed through Mauritius, the Indo-Mauritius DTAA ensures that even short term capital gains are tax free — both in India and Mauritius — again a benefit denied to resident Indians. Consequently, not only is the identity of the investor a secret but also the investment is insulated against any forms of taxation. What more could a terrorist want?

Further, another criticism against PNs is that these are predominantly round-tripping of Indian capital, moved out and routed back through the Hawala route, taking advantage of the tax-breaks provided by the Indo-Mauritius DTAA. Given this background, the Finance Ministry had constituted a high-power committee comprising senior officials and experts from the Ministry as well as from SEBI and RBI in 2005 to look into these issues. In this connection “The Report of the Expert Group on Encouraging FII Flows and Checking the Vulnerability of Capital Markets to Speculative flows” was submitted in November 2005, precisely dealing with these issues.

The report had listed out concerns arising from the anonymity afforded by the PN route. Crucially the “first” concern of this group was that “some of the money coming into the market via PNs could be the unaccounted wealth of some rich Indians camouflaged under the guise of FII investment.” Associated with these concerns was that the capital flows might even be tainted and linked with illegal activities viz., narco-terrorism. Interestingly, despite such apprehensions, the conclusion of the expert group was to allow investments through PN route.

However, RBI, which was a part of this Committee, held a contrary view. In a dissenting note to the expert group, it had stated, “The Reserve Bank’s stance has been that the issue of Participatory Notes should not be permitted. In this context we would like to point out that the main concerns regarding issue of PNs are that the nature of the beneficial ownership or

the identity of the investor will not be known, unlike in the case of FIIs registered with a financial regulator.”

Further RBI apprehended “Trading of these PNs will lead to multi-layering, which will make it difficult to identify the ultimate holder of PNs. Both conceptually and in practice, restriction on suspicious flows enhance the reputation of markets and lead to healthy flows. We, therefore, reiterate that issuance of Participatory Notes should not be permitted.”

Subsequently, the Tarapore Committee, set up by RBI in 2006 to recommend steps to usher in Capital Account Convertibility, reiterated its earlier views of banning PNs. In this connection, the report stated, “In the case of Participatory Notes (PNs), the nature of the beneficial ownership or the identity is not known unlike in the case of FIIs. The Committee is, therefore, of the view that FIIs should be prohibited from investing fresh money raised through PNs. Existing PN-holders may be provided an exit route and phased out completely within one year.” Needless to emphasise, the Finance Ministry did not find this idea appealing for obvious and not so obvious reasons.

The net result is that even SEBI is unable to details of PNs from FIIs. Readers may recall that when the UPA Government took office in May 2004, a huge fall in the stock markets greeted it. In view of this crash SEBI examined the dealings in securities by various entities. It was found by SEBI that one FII – UBS Securities Asia Limited – was one of the important players responsible for the said crash. During the course of investigation, SEBI called for information from UBS relating to its major PNs’ clients in terms of their addresses, the names of their directors, fund managers, major shareholders and top “five” investors. Strangely, UBS did not furnish the complete information citing client confidentiality to SEBI.

What further added fuel to the fire has been the divergent opinion of two men at the helm of affairs – the National Security Advisor (NSA) Mr. M K Narayanan and SEBI chief Mr. Damodharan. Speaking at the 43rd Munich Conference on Security Policy in February 2007, Mr. Narayanan highlighted eleven common methods employed by terrorist outfits to generate funds. Dwelling on the seventh method – viz., stock markets he stated: “Isolated instances of terrorist outfits manipulating the stock markets to raise funds for their operations have been reported. Stock Exchanges in Mumbai and Chennai (India) have, on occasions, reported that fictitious or notional companies were engaging in stock-market operations. Some of these companies were later traced to terrorist outfits.”

The crucial issue to note here is that the NSA’s apprehension were not hypothetical. Rather they seemed to be based on hard facts and experiences. Importantly, the language used clearly indicates a temporal link between past, present and future. In direct contrast, responding to the queries of an anxious press the SEBI chief is reported to have summarily dismissed the views of NSA. Stating that the NSA’s remarks were used by the media out of context he opined: “We do not have any evidence that money raised from the Indian capital market has been used for terrorist activities,” and went on to compound the confusion by adding, “His comments were not country-specific.”

To conclude, while the terrorists angle to the investments in stock exchanges is merely a context to this entire discussion encompassed in this paper, the fact of the matter is that the

uninterrupted flow of money with unclean origins is well and truly creating macroeconomic imbalances in the Indian economy. What is worrying economists is that the uninterrupted flow of dirty money across the borders – like PNs – it has the potency to inflate asset prices – read stock market and real estate boom. This in turn fuels general inflation within the economy. Naturally, this leads to intense speculation on the prices of various classes of assets. With easy exit routes facilitated by the government for PN holders, one fears that the day is not far off for such dirty money to exit India, especially given the asset boom in India. While that may indeed bring down asset prices and with it the rate of inflation, is it the most desirable way to control inflation in India?

CHAPTER IX- A BIO-ENGINEERED SOLUTION?

Need to revisit the root assumptions of the economy

All these call for a complete revisit of the fundamental assumptions governing the Indian economy since reforms. For long we have held export to be the chief drive of our economy, completely ignoring the fact that this is a country with a market of a billion plus. Foreign players have a choice of ignoring India, albeit at a tremendous cost. The Government of India or the players from India do not have that luxury. It is time that we recognize this fundamental verity in formulating policies for the country. It is time that we think of boosting domestic consumption as a fillip to the Indian economy. An export led model may as yet suit smaller countries like Taiwan, Singapore and Hong Kong. But when larger countries like Thailand, Malaysia and even China are having a rethink, it is time for India too to have a rethink.

Thus it is pertinent to note that the inflation triggered in the domestic markets is a by-product of higher domestic demand with trade policy intervention, especially imports at lower tariffs, becoming increasingly irrelevant due to higher international prices and global production shortfall. The only way out, as the recent announcement of the Hon'ble Finance Minister seems to suggest is that India has to produce its food grains for itself and cannot expected to be dependent on imports for her needs. This is a significant policy announcement. Crucially it has also to be noted that the FM had further confessed in his post budget interviews that that he did not have a magic wand to deal with inflation caused through supply side constraints especially on the food grains side. It would seem that the Government had exhausted all policy interventions and it is hoping for the rain gods to deliver on this matter. Surely there is no way out in meeting out supply side constraints.

To conclude, the current bout of inflation is caused by a multiplicity of factors. Monetary as well as trade policy responses alone would be inadequate to deal with the extant issue effectively. Rather, it seems that the inflation rooted as it were to supply side constraints is increasingly becoming structural rather than seasonal while inflation arising out of monetary side is rooted to the global imbalances. Policy responses have to change accordingly. A stock market boom, a real estate boom and a benign inflation in the food grains market in untenable. Rather the commodity markets will mirror the boom in these markets. Added to these, it has to be noted that the Indian market is structurally suited for leveraging shortages rather effectively. Added to this is the information asymmetry among various class of consumers as well as between consumers on one hand and producers and consumers on the other.

Economic policy rests in the triumvirate of Fiscal, Monetary and Trade policies. Theoretical understanding of economics meant that these policies are interdependent and compensatory. Also one needs to understand that growth naturally comes with its own costs and consequences. While these policies are usually interlinked, intertwined and usually compensatory, one has to really understand that the issues with respect to inflation cannot be subjected to conventional wisdom in the era of globalisation. One policy route yet unexamined in the Indian context by the Government is the exchange rate mechanism of the Indian Rupee, especially revaluation of the Rupee as an instrument to control inflation. It

is time that we think about a revaluation of the Indian Rupee as a policy response to the complex issue of managing inflation, while simultaneously address the constraints on the supply side on food grains. Simultaneously, we need to work out policy responses to increase domestic consumption, viz., bringing down indirect taxes on goods. This may call for substantial reforms in indirect taxes and even an accelerated migration to the Goods and Service Tax regime. Times are changing and so are the influences on the domestic economy by the global economy. Along with the benefits of globalisation, we need to appreciate that it would have its own downsides. After all there is nothing that is unalloyed good or bad in macroeconomics.

To Conclude:

- A weak Rupee has meant that we could have inadvertently allowed import of inflation
- This needs to be corrected through by allowing the Rupee to strengthen gradually
- The Weakness of the USD is a global phenomenon and we need to prepare for the fall of the USD – Nevertheless there is very little of policy alternatives for the government to tackle the extant situation
- Simultaneously we need to improve the supply side constraints, more particularly on the farm front
- We also need to reform our indirect taxes and reduce these rates significantly
- Unclean money flow, especially on the capital account through the PN route needs to be controlled as a way to control asset inflation.

Table 1



	Big Mac prices in dollars*	Implied PPP† of the dollar	Under (-)/over (+) valuation against the dollar, %
United States [‡]	3.41	-	-
Argentina	2.67	2.42	-22
Australia	2.95	1.01	-14
Brazil	3.61	2.02	+6
Britain	4.01	1.71 [§]	+18
Canada	3.68	1.14	+8
Chile	2.97	.459	-13
China	1.45	3.23	-58
Czech Republic	2.51	15.5	-27
Denmark	5.08	8.14	+49
Egypt	1.68	2.80	-51
Euro area**	4.17	1.12 ^{††}	+22
Hong Kong	1.54	3.52	-55
Hungary	3.33	.176	-2
Indonesia	1.76	4,663	-48
Japan	2.29	82.1	-33
Malaysia	1.60	1.61	-53
Mexico	2.69	8.50	-21
New Zealand	5.89	1.35	+73
Peru	3.00	2.79	-12
Philippines	1.85	24.9	-46
Poland	2.51	2.02	-26
Russia	2.03	15.2	-41
Singapore	2.59	1.16	-24
South Africa	2.22	4.55	-35
South Korea	3.14	850	-8
Sweden	4.86	9.68	+42
Switzerland	5.20	1.85	+53
Taiwan	2.29	22.0	-33
Thailand	1.80	18.2	-47
Turkey	3.66	1.39	+7
Venezuela	3.45	2,170	+1

*At current exchange rates †Purchasing-power parity; local price divided by price in United States
[‡]Average of New York, Chicago, Atlanta and San Francisco †§Dollars per pound
 **Weighted average of prices in euro area ††Dollars per euro
 Sources: McDonald's; The Economist

Table 2

Table 28: International Commodity Prices												
Commodity	Unit	2004	2005	2005		2006			2006			
				Oct-Dec.	July-Sep.	Oct-Dec.	May	Jun.	Sept.	Oct.	Nov.	Dec.
1	2	3	4	5	6	7	8	9	10	11	12	13
Energy												
Coal	\$/mt	53.0	47.6	39.6	50.3	46.6	52.6	52.4	47.1	44.1	46.0	49.8
Crude oil (Average)	\$/bbl	37.7	53.4	56.6	68.8	59.0	68.7	68.3	62.1	57.9	58.1	61.0
Non-Energy Commodities												
Palm oil	\$/mt	471.3	422.1	438.3	492.7	542.8	440.0	437.0	497.0	507.0	547.0	574.3
Soyabean oil	\$/mt	616.0	544.9	558.7	620.3	662.2	588.0	601.0	602.0	615.0	675.0	696.7
Soyabeans	\$/mt	306.5	274.7	258.9	263.9	289.4	266.0	267.0	257.0	273.0	300.0	295.3
Rice	\$/mt	237.7	286.3	281.6	312.4	300.3	308.0	312.5	309.2	301.0	296.3	303.7
Wheat	\$/mt	156.9	152.4	164.5	196.1	208.7	193.2	195.2	196.0	212.1	209.7	204.3
Sugar	c/kg	15.8	21.8	26.3	30.6	26.0	37.1	34.0	26.6	25.7	26.0	26.5
Cotton A Index	c/kg	136.6	121.7	126.1	128.0	127.6	120.2	121.5	131.0	125.8	126.5	130.5
Aluminium	\$/mt	1716.0	1898.0	2076.0	2482.0	2724.0	2861.0	2477.0	2473.0	2655.0	2703.0	2814.0
Copper	\$/mt	2866.0	3679.0	4302.0	7670.0	7068.0	8046.0	7198.0	7602.0	7500.0	7029.0	6675.0
Gold	\$/toz	409.2	444.8	485.6	621.5	614.5	675.4	596.1	598.2	585.8	627.8	629.8
Silver	\$/toz	669.0	734.0	808.0	1169.0	1263.0	1337.8	1077.4	1160.0	1162.0	1298.0	1330.0
Steel products index	1990=100	121.5	137.9	138.6	135.8	132.1	125.2	131.2	135.8	133.7	131.5	131.0
Steel cold-rolled coil/sheet	\$/mt	607.1	733.3	750.0	700.0	658.3	600.0	650.0	700.0	675.0	650.0	650.0
Steel hot-rolled coil/sheet	\$/mt	502.5	633.3	650.0	600.0	558.3	550.0	575.0	600.0	575.0	550.0	550.0
Tin	c/kg	851.3	738.0	643.2	865.3	1033.5	883.7	789.6	903.9	976.8	1007.9	1115.9
Zinc	c/kg	104.8	138.1	164.0	336.3	420.4	356.6	322.6	340.3	382.3	438.2	440.5

\$: US dollar c : US cent bbl : barrel mt : metric tonne kg : Kilogram toz : troy oz.
 Source: World Bank.

Table 3 – Source The Hindu Business Line dated 12th March 2007

Outstanding money supply			
	Reserve Money	Broad Money	Money Multiplier
2000-01	3,03,311	13,13,220	4.33
2001-02	3,37,970	14,98,355	4.43
2002-03	3,69,061	17,17,960	4.65
2003-04	4,36,512	20,05,676	4.59
2004-05	4,89,135	22,51,449	4.60
2005-06	5,73,066	27,29,535	4.76
2006-07*	6,01,177	29,65,786	4.93
2006-07+	6,69,357	31,42,000	4.69

* November 10; + February 16.

Table 4

Source: World Grain Report

Tightening World Grain Supplies Push Prices to Decade-High Levels

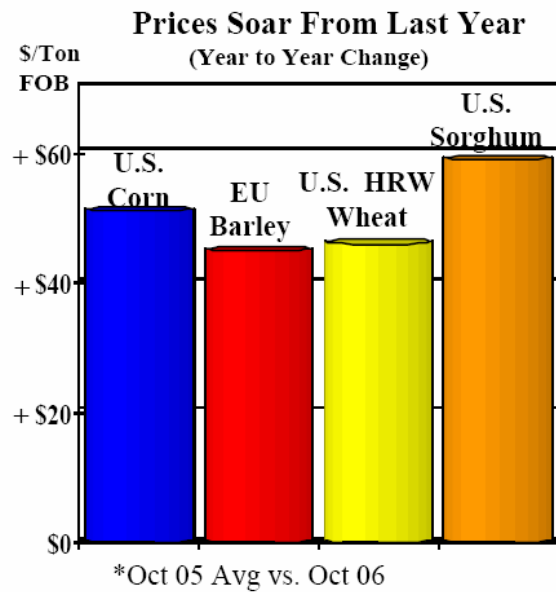
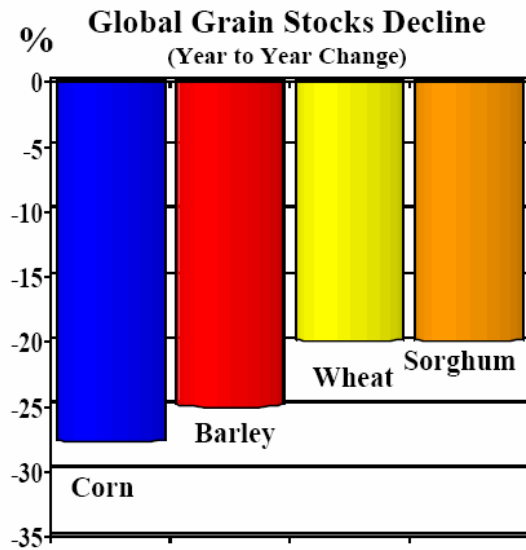


Table 5

TABLE 1
SHARES OF EXPENDITURE COMPONENTS IN REAL GDP (1990 PRICES)

		DOMESTIC DEMAND (1)= (2)+(3)+(4)	PRIVATE CONSUMPTION (2)	GOVERNMENT CONSUMPTION (3)	GROSS DOMESTIC CAPITAL FORMATION (4)	NET EXPORTS (5)=(6)-(7)	EXPORTS OF GOODS AND SERVICES (6)	IMPORTS OF GOODS AND SERVICES (7)
1973	PRC	99.1	55.7	9.4	34.1	0.9	5.0	4.1
1983		100.2	54.3	12.1	33.7	-0.2	13.2	13.4
1993		100.8	49.1	13.1	38.6	-0.8	18.6	19.3
2003		94.2	39.6	12.0	42.6	5.8	24.4	18.6
1973	India*	101.6	70.8	9.1	21.7	-1.6	6.7	8.4
1983		103.1	71.8	10.3	21.0	-3.1	6.5	9.6
1993		102.8	68.7	11.9	22.2	-2.8	8.6	11.5
2002		101.1	62.8	12.0	26.4	-1.1	16.7	17.9
1973	Korea	100.5	64.1	15.7	20.7	-0.5	16.4	16.9
1983		96.7	55.1	12.8	28.8	3.3	27.7	24.4
1993		100.2	52.3	10.5	37.4	-0.2	33.9	34.1
2003		94.3	52.9	12.2	29.2	5.7	45.7	40.0
1973	Philippines	100.4	69.0	11.4	20.0	-0.4	19.0	19.5
1983		102.3	63.0	9.8	29.6	-2.3	21.9	24.2
1993		107.2	74.8	10.0	22.4	-7.2	31.3	38.5
2003		105.7	73.8	9.2	22.7	-5.7	39.3	45.0
1973	Thailand	114.4	68.7	10.0	35.7	-14.4	17.1	31.5
1983		109.5	63.5	13.1	33.0	-9.5	19.6	29.1
1993		105.9	55.1	8.7	42.0	-5.9	39.6	45.5
2003		85.3	55.4	8.7	21.2	14.7	65.7	50.9

* India's 2003 data not yet available as of November 2004.
Sources: UN Statistics Division, *Key Indicators* (ADB 2004).