CAPITAL ACCOUNT CONVERTIBILITY IN INDIA

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Today, as the world globalises rapidly, the issue of global integration of financial markets has become of paramount importance in the world of finance. And, full convertibility of capital account transactions is an important step in the direction of achieving such global integration.

This has, in fact, been supported by Fischer in 1998, when he said, "Capital Account Liberalisation is an inevitable step on the path to international development, which cannot be avoided and should be embraced".

Here, in this article, we aim to trace out the various events, debates and measures that have dotted the path to Capital Account Liberalisation in India.

This article is divided into four sections. In the first section, we set out the theoretical background. In the second section, we elaborate on the general pre-conditions, advantages and disadvantages of Capital Account Liberalisation, and its impacts, and implications on developing economies. In the third section, we look at some international experiences with Capital Account Convertibility and the lessons learnt from them. In the fourth section, we concentrate on the issue that we had originally set out to analyse, i.e., Capital Account Convertibility (CAC henceforth) in India. And, finally, we put forward some concluding remarks.

But, before we start with the elaboration of the processes of CAC, we first need to discuss certain basic concepts that form the crux of the article.

SOME CONCEPTS :

Capital Account Convertibility :

To define formally, it is the unfettered right of both residents and non- residents, of a country to convert domestic currency into foreign currency, and vice-versa, for capital account transactions involving changes in assets and liabilities in domestic and foreign currencies. This is also referred to as Capital Asset Liberalisation.

In other words, it is basically a policy that allows the easy exchange of local currency for foreign currency at low rates. This is especially beneficial for local traders as this enables them to conduct trans-national business, easily, without needing foreign currency exchanges to handle small transactions. Actually, CAC is mostly a guideline to changes of ownership in foreign or domestic financial assets and liabilities.

Tangentially, it covers and extends the framework of the creation and liquidation of claims on, or by, the rest of the world, on local asset and currency markets.

Current Account Convertibility :

Defining formally, this is the currency convertibility required in the case of transactions relating to the exchange of goods and services, money transfers and all those transactions that are classified in the current account.

Popularly, it is expressed as the freedom to buy and sell foreign exchange for payments due as interest on loans and as net income from other investments, moderate amount payments of amortization of loans for depreciation of direct investment, moderate remittances for familial expenses. It is also the freedom to buy and sell foreign exchange for international transactions consisting of payments due in connection with foreign trade and other current businesses, including services and normal short-term banking and credit facilities. In fact, authorised dealers may also provide exchange facilities to their consumers, without prior approval of the RBI, beyond the specified indicative limits. This is, obviously, subject to the fact that they are satisfied about the credibility of the application. Credible application may include business travel, participation in international conferences or seminars, study tours, medical treatment or check-ups and specialised internships.

SECTION 1 : *THEORETICAL BACKGROUND*

In the 1970s, the pegged exchange rates were replaced by a regime of floating exchange rates. A school of economists started to support this move citing the importance of free capital mobility in regard to the maximising of global benefits from international trade and investments. They argued that full CAC will bring about an equilibrium in the external sector of developing countries by bringing an inflow of capital, which, in turn will finance whatever current account gap that may result in, if only interest rate is put at a high enough level.

This argument is in line with the Mundell-Fleming Open Economy Model which extends the Keynesian Fix Price Model for well developed financial markets. And, thus, this forms the theoretical background here.

THE MODEL :

GNP on the Demand Side : $Y = C + I + G + X - M$ _ _ _ _ _ (1)

GNP on the Supply Side : $Y = C + Sp + T$ _ _ _ _ _ (2)

where, Y = GNP,
C = Consumption,
I = Investment,
G = Government expenditure,
X = Exports,
M = Imports,
Sp = Private saving,
T = Taxes.

Subtracting 2nd equation from 1st equation, we get,

$$(I - Sp) + (G - T) + (X - M) = 0$$

$$\Rightarrow \; M - X = (I - Sp) - (T - G)$$

Now, $T - G$ = Government Saving = Sg.

$$\Rightarrow \; M - X = I - Sp - Sg = I - (Sp + Sg)$$

Now, Private Saving + Government Saving = Total Saving = S.

$$\Rightarrow \; M - X = I - S$$

Thus, Trade Gap = Domestic Investment – Total Domestic Saving.

Here, $X - M$ = Surplus in Trade Account

Thus, Current Account of BOP = (X – M) + Invisible Trade + Unrequited Transfer Payment.

If, these receipts are assumed to be zero for simplicity, then,

Current Account Surplus = (X – M) = I – S
= Excess of Domestic Saving over Investment and Government Saving.

And, conversely, if there is a current account deficit, then that implies insufficient domestic saving relative to investment and government spending.

Now, a current account deficit implies capital account surplus. It also implies that an inflow of foreign fund is necessary to supplement domestic saving.

Thus, Current Account Deficit = Current Account Surplus + Drawing down of reserves or in other ways.
Therefore, Current Account Surplus = Change in Net Foreign Assets.

Thus, if a country has a current account deficit, it means that the country has spent more abroad than it has earned in that specified period, and, that has to be settled by international borrowing or seeking capital flows through Foreign Direct Investment (FDI) or Foreign Portfolio Investment (FPI) or by depleting reserve accumulation of foreign currency.

Thus, the decision to allow free flow of direct or financial foreign capital across national boundaries may have serious implications for the sovereignty of the country. A substantial inflow may distort the medium-run or long-rum fundamentals of an economy, as was seen in Mexico in 1995, East Asia in mid 1997 and Euro-Zones during 1999 – 2003. Even if the fundamentals, i.e, the real demand and supply forces, remain strong, the country may still be highly vulnerable to speculative attacks with high current account deficits.

Large capital inflows or outflows affect an economy in many ways.

In an economy with flexible exchange rate, capital inflows cause the domestic currency to appreciate, causing current account deficits to rise. While, outflows cause domestic currency to depreciate creating inflationary pressures which causes capital flight. Therefore, choices about exchange rate and controlling capital flows become crucial.

Also, maintenance of a high interest rate, in regard to inflows of FPI, can adversely affect productive investment and make public debt servicing more expensive. Therefore, the opening up of international portfolios may cause a country to stagnate, as FPI flows in when the BOP position of the country is good.

Thus, this was the reason behind the debate whether a country should go for implementation of Capital Account Liberalisation, and, how it should be done.

SECTION 2 : *IMPACT OF CAPITAL ACCOUNT CONVERTIBILITY*

I – *PRE – CONDITIONS FOR CAC :*

Before moving to full CAC, the authorities should ensure that certain pre-conditions regarding some sensitive, significant and important priority areas are fulfilled. Ensuring this will, in turn, ensure successful capital account liberalisation.

The required pre-conditions are :

1. *Fiscal Consolidation* :

   The proportion of Gross Fiscal Deficit to the GDP should be reduced over time. The fiscal deficits of the Centre as well as the States should also be reduced over time. The amount obtained through fresh borrowing should not be used to finance the amortization of the market loans of the government. In fact, to achieve fiscal consolidation, the Tenth Finance Commission also recommended the establishment of a Consolidated Sinking Fund for public debt. And, finally, it is required that the level of transparency rises through the implementation of globally comparable methods of fiscal accounting, and, here, the Fiscal Responsibility Act of New Zealand may be taken as an example.

2. *Control of the Inflation Rate* :

   Appropriate measures to create a specific commitment on the inflation rate are necessary. To effectively control the inflation rate, it is also required that the Parliament approves of a medium term mandate on inflation that can be altered only by the Parliament following clear and unambiguous guidelines. And, the Central Bank should be given the freedom to use its instruments independently to attain this medium term inflation target.

3. *Financial Sector Reforms* :

   These reforms are necessary because a well developed financial sector can handle the structural changes emerging from CAC. Thus, measures to increase the strength and the transparency of the sector should be implemented. Full deregulation of the interest rate should be ensured without any formal or informal controls. Also, Non-Performing Assets, especially, of public sector banks, should be significantly reduced within a time period of five years. And, the CRR of banks should also be brought down progressively.

4. *Exchange Rate Policy* :
   The exchange rate should be fully flexible to maintain the viability of free capital mobility. The Central Bank should not intervene when Real Effective Exchange Rate doesn't exceed the Monitoring Exchange Rate Band. The exchange rate policy should be properly managed to raise the level of transparency in CAC.

5. *Adequate Foreign Exchange Reserves* :
   Foreign Exchange Reserves should be maintained equivalent to six months of exports. This is because, capital flows from free capital mobility has significant impact on the BOP of the country. Therefore, traditional indicators in terms of import cover cannot be used as an indicator of adequacy of reserves. Thus, adequate foreign exchange reserves are necessary.

II – *ADVANTAGES OF CAC* :

There are certain benefits of implementing CAC in an economy. They are :

1. CAC opens up the possibilities of global trade and financial markets and helps to effectively integrate the domestic economy with the global community.

2. CAC helps to increase the rate of economic growth of a country by making larger amounts of foreign capital available to supplement domestic resources.

3. CAC allows people to hold a globally diversified portfolio. This helps people to gain from trade in international financial assets by reducing volatility of income stream and wealth of domestic shocks. It also allows lower funding costs for borrowers and higher returns for savers.

4. CAC also prevents tax evasion to a certain extent of domestic agents, and capital flight. This is because, it provides a stimulus for the domestic tax regimes to be modified to a global taxation framework.

5. CAC makes domestic policies more disciplined. It also raises the effectiveness of the fiscal policy by raising real interest rate for public sector borrowing. It also creates an optimal combination fo taxes and reduces crowding out effects of access of funds. Thus, it helps to channelise capital flows to the more productive sectors of the economy.

6. CAC raises the effectiveness of allocation, and this provides a strong stimulus to innovation, which improves productivity and maximises welfare. Also, the positive externality of spill-over of global technology, skills and new goods into the economy also raises the effectiveness of domestic markets.

7. It provides a strong impetus to the government to reduce fiscal deficit. Thus, it makes the government more responsible on fiscal balances.

8. Implementing CAC implies inflow of more foreign capital. And, this helps countries to maintain an excess of investment over saving.

9. And, it is indeed very difficult to maintain controls in an economy that is getting more and more integrated with the global economy.

But, unfortunately, all these advantages may not hold under all circumstances, as evidence to the contrary can be seen globally. The argument that CAC promotes economic growth stood refuted during the East Asian Currency Crisis of 1997-98. During this time, Malaysia did not implement CAC, but still escaped from the crisis. While, Thailand, Indonesia and South Korea couldn't escape the crisis in spite of implementing CAC. This raised serious doubts as to whether CAC can indeed bring about economic growth. Also, the argument that CAC implies larger inflow of foreign capital was refuted when it was seen that even when China got a huge inflow of capital, the currency was still not convertible on even the current account. This event showcased the fact that economic and individual performance matters, not CAC. Table I showcases some empirical evidence that has been obtained on CAC and the effect it has had on the economic growth performance of economies.

III – *DISADVANTAGES OF CAC :*

There are also certain problems associated with the implementation of CAC. They are :

1. Volatile short-run capital movements, caused by CAC, may cause macroeconomic instability in the economy.

2. Implementation of CAC comes with the risk of huge capital outflows. And, these outflows have certain negative externalities associated with them, which may turn out to be harmful for the economy.

3. Implementation of CAC also implies the export of domestic savings. And, this is very harmful for countries, especially the developing and under-developed economies, as they are naturally capital-scarce and export of domestic savings means a drain of invaluable capital form the country.

4. There is a disincentive for the government as well to implement CAC as then the ability of the government to tax domestic financial activities gets significantly reduced.

5. In case the domestic economy doesn't perform well, then will a liberalised capital account, the money may flow out of the country, i.e, capital flight takes place. And, this turns the already bad situation worse.

IV – *IMPACT OF CAC ON AN ECONOMY:*

Implementation of CAC has certain vital impacts on an economy. This impact is felt in various important sectors of the economy.

Impact on Investment and GDP:

CAC causes a two-way movement of capital and higher inflow of capital into the economy in the form of Foreign Direct Investment (FDI) of Portfolio investment by Foreign Institutional Investors. And, these may cause the interest rate to fall significantly. This helps the investment and GDP growth rates to rise, thereby, helping in the overall economic development of the country.

Impact on Banks and Financial Institutions:

Here, corporate restructuring through mergers and consolidation may be necessary, especially, for the small banks, to survive and grow amidst stiff global competition. Also, they would have to raise their efficiency and productivity significantly. Reducing Non-Performing Assets and operation costs, and introduction of modern and updated technology would also become necessary. If the currency slides down, then the banks that are borrowing overseas would face serious problems. In such a situation, active intervention of the Central Bank of the country and taking proper precautions would be necessary. But, then again, banks will get the advantage of borrowing at relatively low costs. Now, looking at financial institutions, if they are treated at par with banks, then they stand at a pretty disadvantageous position. This is because, if they have to operate within the boundary of SLR requirements and priority sector lending, their profitability may be affected to a great extent.

Impact on Stock Exchanges :

CAC would cause inflows to rise on the stock market and investments would rise if these funds are invested in the infrastructure industries. Also, liquidity in the stock market would increase, leading to the opening up of a wide range of choices to investors. But, before, any of these happen, first, the market efficiency should be increased by the introduction of modern valuation techniques and sophisticated information technology. The accounting and disclosure norms should be in accordance to global standards. Also, a wide range of financial derivatives should be introduced to reduce volatility and raise the liquidity of the markets. And, most importantly, market transactions should pertain to global norms of transparency.

V – *IMPLICATIONS OF CAC FOR DEVELOPING SOCIETIES:*

Implementation of CAC has some very special implications, both positive and negative, for developing societies, like India.

Capital Account Liberalisation provides resource constrained developing economies an access to a pool of global savings. This would lead to the bridging of the Saving-Investment gap in such economies and boost productivity and growth. International diversification of portfolio promotes risk spreading and maximises risk adjusted returns. It, also, smoothes out the consumption pattern.

Existence of asymmetric information in the market as well as a "herd mentality" may even reduce welfare at times. But, the formation of such asymmetric information cannot be prevented in any financial market. Thus, to prevent the negative impacts of the formation of such asymmetric information, the development of proper institutional mechanisms are absolutely essential. Again, presence of non-information market distortions may lead to capital flight. And, the presence of trade distortions may lead to the country adopting an incorrect factor intensive method of production. That, is a labour abundant country, as developing societies usually are, may end up selecting a capital intensive technique of production. And, naturally, it will end up harming the economy immensely.

CAC also narrows down the tax base of developing economies as it is very difficult to tax overseas earnings. It constrains the level of the rate of interest in the economy, and, thus, creates problems in the effective conduct of the macroeconomic policy.

For the implementation of CAC, a floating exchange rate regime is more preferable. And, this requires that the Central Bank of the country be given a certain degree of freedom. This is something that developing societies can hardly afford. The problem is aggravated further with the fact that the growth enhancing effect of CAC has not yet been proved for developing economies.

It is also essential that Capital Account Convertibility comes after Current Account Convertibility, as the speed and sequence of the liberalisation process is very crucial. This is because, the asset markets react faster, than the goods markets, to the liberalisation process. As a result, an inflow of capital would lead to the exchange rate appreciating, thus, negating to a certain extent, the benefits of trade liberalisation of the current account convertibility process.

Also, the assurance that CAC would attract Foreign Direct Investment and Foreign Portfolio Investment, and, thus, help raise growth and reduce poverty of developing societies is a debatable issue. In fact, the effect of Foreign Direct Investment can only be felt after the building up of proper institutions and the liberalisation of goods markets.

SECTION 3 : *INTERNATIONAL EXPERIENCES :*

Now, before we move on to CAC in India, we may pause for a moment and look back to some international experiences with CAC and the lessons that history taught the world about Capital Account Liberalisation.

In Argentina, CAC was implemented in two stages. The first phase was in 1976 through 1981. And, the second phase was during the period 1989-91. In the first phase, Argentina, in fact, implemented CAC even as the economy suffered from a severe macroeconomic disequilibrium along with an acute shortage of foreign exchange and negative net foreign reserves. Also, a high rate of inflation prevailed in the economy during the time. Fortunately, the experience of the economy in the second phase turned out to be much better. The country managed to register a proper level of fiscal discipline and was able to control the rate of inflation to a certain extent. Also, by reporting a surplus in the current account and by building up a significant level of foreign exchange reserves, the economy was able to strengthen its BOP position.

Indonesia implemented CAC in spite of the prevalence of weak conditions in its domestic economy. Also, the capital account was liberalised before the current account. This, true to the possible impact of the faultiness of the sequence of implementation of CAC on developing

societies, affected the Indonesian economy rather adversely. It hampered the growth performance of the economy significantly. The domestic rate of saving declined. In fact, it was reported to be negative in 1966-67. The rate of inflation went well above 100% in 1988. Also, the BOP position of the economy weakened considerably and the foreign exchange reserves were completely eroded. But, after this, there was an oil boom in the seventies, and Indonesia benefited greatly from that. During this period, CAC played a crucial role in accelerating financial and real sector reforms and greatly facilitated in the improvement of the confidence level among global investors. Thus, Indonesia's experience with CAC was of a pretty unique nature.

Mexico undertook the process of liberalising its capital account selectively since 1989. Here, the implementation of CAC was done in a beneficial environment of stability and growth. Thus, the country benefited immensely from the liberalisation of its capital account. It has made significant progress in its financial sector reforms. It has also been able to control its rate of inflation to a great extent and has been able to achieve a desirable level of fiscal consolidation. Thus, Mexico's experience with CAC has been pretty satisfactory.

Thailand initiated the process of implementation of CAC in the nineties, as it emerged as a rapidly growing industrialised economy. But, due to strong capital flows, a surplus developed in the overall BOP, but the current account of the BOP registered a deficit. Also, an increasing overvaluation was happening in the economy due to a fixed exchange rate regime, and the country was facing all the constraints associated with infrastructural development. And, all these occurrences together resulted in the country's failure to move effectively towards free capital mobility.

A major phenomenon that the world witnessed in the late nineties was the East Asian Currency Crisis. The Crisis began in July 1997 and raised worldwide fears of a global financial meltdown due to a contagion effect. The worst hit economies were those of Indonesia, South Korea and Thailand. In fact, the crisis started in Thailand following the collapse of the Thai baht. Hong Kong, Malaysia, Philippines and Laos were also significantly hurt by the Crisis. The lesser affected economies were those of India, China, Taiwan, Brunei, Singapore and Vietnam. During this time, the entire region suffered from a major lack of demand and confidence.

Until 1997, Asia attracted almost half of the total capital inflow to developing countries. The economies of Southeast Asia, in particular, maintained high interest rates that were attractive to foreign investors looking for a high rate of return. As a result the region's economies received a large inflow of money and experienced a dramatic run-up in asset prices. At the same time, the regional economies of Thailand, Malaysia, Indonesia, Singapore, and South Korea experienced high

growth rates, 8–12% GDP, in the late 1980s and early 1990s. This achievement was widely acclaimed by financial institutions including the IMF and World Bank, and was known as part of the "Asian economic miracle".

But, soon, this miracle evaporated. Thailand's economy developed into a bubble fuelled by "hot money". And, in spite of implementing CAC, Thailand turned out to be one of the worst hit economies. A similar type of situation developed in Malaysia and Indonesia, which had the added complication of "crony capitalism". Thus, Indonesia, too, turned out badly hit although it had implemented CAC. But, Malaysia, with its system of controls, escaped with lesser injuries. South Korea, too, with its liberalised capital account couldn't escape the Crisis. This was largely due to the fact that the banking sector in the country, at that time, was overburdened with non-performing loans, as its large corporations were funding aggressive expansions in a bid to compete on the global arena. Many businesses, ultimately, failed to ensure returns and profitability. The South Korean conglomerates, more or less completely controlled by the government, simply absorbed more and more capital investment. Eventually, excess debt led to major failures and takeovers.

Even during this time of crisis, India and China, with their restrictive capital account regimes, managed to stand strong. And, as a result, these economies ended up being highlighted as the saviour, with their approach to capital account liberalisation becoming an important subject of international policy discussions. In fact, these economies paved the way for a dramatic change in the attitude towards policy thinking in the post-Crisis period. Unlike the pre-Crisis period when capital controls were viewed as a taboo, many emerging economies slowed down their pace and content of liberalisation of capital controls in the post-Crisis period, with a view to limiting their vulnerability to crisis.

Now, based on the experiences of the countries that were hit by the currency crises in the past, three generations model is used by economists to analyse the global experience with CAC. The First Generation model is based on the currency crisis of Latin American countries in the seventies. These models isolate the macroeconomic fundamentals as the root cause of reverse capital flight and collapse of the exchange rate peg. The Second Generation Model is based on the Mexican problem in 1994. This is a multiple equilibria model based on rational self-fulfilling expectations where these expectations switch a good equilibrium to a bad equilibrium depending on the market sentiment. The Third Generation Model came up to specifically analyse the East Asian Crisis, as it couldn't be explained by the other models. In the first version, the model showed that implicit government guarantee encouraged financial intermediaries to over-borrow in an unhedged foreign currency, a typical moral hazard problem. Huge investments real estate and asset purchases led to an asset price bubble. Bursting of this bubble led to increased capital outflow. In the second

version, with implicit guarantee and in the absence of proper regulation in the banking and financial system, along with a weak corporate sector, funds were channelled into risk ventures. A liquidity crisis, triggered by an exogeneous shock, created widespread panic and induced herd behaviour among investors. This led to a craze to withdraw funds that resulted in an insolvency crisis that further aggravated capital flight.

A very important lesson that currency crises teach us is that CAC without a proper framework would lead to an external crisis. Thus, to benefit from CAC, domestic financial sector reforms and corporate financial structure reforms to cope with capital inflow and outflow are crucial. Also, a move to market determined interest rates, prudential norms and adequate monitoring and proper development of the government securities market are essential.

Another crucial lesson learnt is that CAC must be preceded by the establishment of sound macroeconomic fundamentals, emphasising on fiscal sustainability, suitable monetary policy and price stability. This would require a low inflation rate, a balanced budget and an independent Central Bank. Also, a flexible exchange rate regime is absolutely necessary for proper implementation of CAC. This is mainly because, fixed exchange rate regimes do not allow for inflation differentials and convert returns into foreign currencies on a one-for-one basis.

SECTION 4 : *CAPITAL ACCOUNT CONVERTIBILITY IN INDIA :*

I – *CAC DEBATE IN INDIA :*

In India, convertibility on capital account for non-residents was available all along. The idea behind CAC was to integrate the domestic capital market with the global capital market. This would eliminate controls, and, thus would, in the process do away with the various resultant policy-induced distortions. And, informational asymmetries would also be done away with, and arbitrage conditions would prevail in the capital account transactions.

Now, presently, India is not in a position to go for full CAC as the rupee is still not freely floated. This would go on to create problems for exchange rate management. This is because, in this case, large capital flows would lead to an unsustainable appreciation of the rupee. The appreciation would be unsustainable as any sudden capital outflow would

immediately trigger off an uncontrollable depreciation of the rupee. This is one important contention that has been put forward by a school of economists and policy-makers arguing against CAC in the debate that has been going on in India.

The occurrence of the East Asian Currency Crisis that caused a severe breakdown of international finance and resulted in costly adjustments for the affected economies also strengthened the case of the critics. They argued that hasty implementation of CAC will lead to speculative attacks on the exchange rate. They further validated their stand by citing the example of the countries affected by the Currency Crisis. Another important argument against CAC in India was that inadequate liberalisation in the domestic financial and banking sectors may lead to increased volatility. Also, implementation of full CAC may put an excessive amount of pressure on the balance of trade of the economy.

A sudden withdrawal of foreign funds invested through foreign financial institutions may be triggered by a rise in the interest rate structure of the economy. In fact, it is now being apprehended that reserves mobilised through the Mutual Funds in India may actually have been channelised into the share market, without adequate preparation. And, this has eventually caused an artificial upward trend in the share prices. Thus, it may be said that, this may, very well, have been a major reason behind the instability and crash of the share market.

The school of thought against the motion may also have been haunted by India's past memories of an acute shortage of foreign exchange. Capital outflows by overseas deposits by Indian investors will fetch a lower return and a currency risk for Indian investors. On the other hand, large capital inflows may lead to the real appreciation in exchange rate and cause a decline in the effectiveness of the domestic monetary policy. Also, an open capital account puts a tremendous amount of pressure on the domestic financial system and ends up aggravating further the weaknesses present in the system.

Critics cited the example of the Currency Crisis in Latin America, to further strengthen their case, where large capital outflows ended up pushing a number of economies into a debt trap, and thus, towards "casino capitalism". They also argued that in the absence of suitable complementary macroeconomic policies, full liberalisation of the capital account holds out a lot of danger for the Indian economy, as has been elaborated through the above contentions. They even went on to state that these were some dangers that the Tarapore Committee too failed to comprehend while putting forward their recommendations.

II – *POSSIBLE ADVANTAGES TO INDIA :*

Through the debate, certain distinct benefits or advantages that would be derived by the Indian economy, if CAC is indeed implemented, got highlighted. The school of thought, in the debate, that was in favour of going in for full liberalisation of the capital account in India helped point out all these possible advantages. The advantages that would be derived by India, if CAC is implemented, are as follows :

a. The Indian resident will be able to use the global capital market for risk diversification and maximise the return on their resources.

b. Convertibility would ensure the optimisation of aggregate saving and investment.

c. The large inflow of capital, due to the liberalisation of capital account, would result in a fall in the cost of capital.

d. It has been observed that over a period of time capital controls turn ineffective and expensive. In fact, they may even cause distortions in the economy. Thus, CAC is required.

e. Free inflow and outflow of capital give rise to certain gains. Therefore, Indian residents, banks, mutual funds and corporates would be able to significantly raise their earnings by investing a part of their money and resources.

f. The availability of a large amount of capital at international prices would help to supplement domestic resources. And, large capital inflows, due to CAC, would relieve the pressure on the exchange rate and the monetary aggregates up to a great extent. Consequently, the effectiveness of domestic policy would be largely enhanced.

g. Implementation of CAC would lead to increased competition. That would induce a rise in the efficiency of the system, essentially, by stemming the spread of financial intermediaries.

h. Tax levels would have to come down to international levels, due to CAC. As a result, tax evasion and capital flight would also get arrested to a significant level.

i. The cost of government borrowing would decline sufficiently due to the prevalence of a low rate of interest. Thus, ultimately, the fiscal deficit of the economy would fall significantly.

j. Capital outflows would compel the Indian authorities to initiate certain corrective macroeconomic policies to ensure that Indian interest rates and stock prices are extremely attractive such that Indians holding foreign financial assets abroad would find it attractive enough to invest in India.

Therefore, the advocates of the motion have argued that India just cannot afford to remain isolated in a world that is fast globalising and integrating into one global community. This is because, if India does stay isolated by choice, even then the rest of the world will not wait, but will integrate in such a manner that ultimately, India will have no control over global events and will have to stay on the sidelines of activity as a mere spectator. Thus, the school of thought for the motion, i.e, agreeable to the implementation of CAC in India, have stated that the question is really not whether India should adopt convertibility or not, but rather whether the transition from controls to convertibility should be in a proper and organised fashion or in a haphazard and disorganised fashion.

III – *POSSIBLE RISKS TO INDIA :*

Through the debate, certain distinct risks that the Indian economy would be possibly exposed to, if CAC is indeed implemented, got highlighted too. The school of thought, in the debate, that was not in favour of going in for full liberalisation of the capital account in India helped point out all these possible risks or disadvantages. And, later, it was also pointed out by the critics that some of these risks were not fully comprehended or taken into account by the Tarapore Committee when they put forward their recommendations. The possible risks that India may be exposed to, if CAC is implemented, are as follows :

a. *Currency Risk* : This is the possibility of a sudden and precipitous devaluation of the domestic currency in an economy. This risk is especially high if the process of liberalisation is initiated without proper safeguards in place. In this case, the reserves of the country may turn out to be insufficient in the event of a significant outflow of investment, and, also, the country's ability to manage multilateral currency rescue operations might become severely limited.

b. *Capital Flight Risk* : This is the phenomenon that occurs when the non-resident holders of liquid financial assets suddenly start selling off their holdings en masse. That is, a kind of herd behaviour takes place among the foreign investors. One major reason behind this kind of herd behaviour is the "safety in numbers" syndrome that is a result of a widespread lack of trust in the reliability of the

macroeconomic information emerging from the EMEs. Another important reason is that foreign investors mostly assess the extent of risk in terms of a region as a whole. Thus, in most cases, they fail to distinguish between different EMEs in the same region. As a result, the EMEs become really vulnerable to the phases of general capital flight.

c. *Fragility Risk*: This risk arises when the borrowers, i.e, corporates and banks, become especially vulnerable to internal or external shocks. The major reasons behind the development of such fragility among the borrowers are, essentially, maturity mismatch, which is the phenomenon of financing long-run obligations with short-run credit, non-transparent over-borrowing or over-investing, that is made possible by the growing derivatives and futures markets, and, foreign currency denominated debts, that are, obviously, subject to changes in value under a floating exchange rate regime.

d. *Sovereignty Risk*: CAC may also give rise to this type of risk where the domestic government may become severely constrained in its ability to pursue independent national policies in case of a crisis. Here, foreign governments and multilateral institutions may force the domestic government to adopt contractionary policies to reduce and, ultimately, prevent capital flight. Also, following a crisis, the domestic government may have to put forward explicit guarantees on monetary, trade or fiscal policies, often against its wishes, to woo back reluctant foreign investors. Sometimes, the investors may even want to see guarantees on certain specific sectors of the economy, before taking their investment decisions, and, these may turn out to be pretty troublesome for the domestic government. And, finally, implementation of CAC may render economies, especially, small open economies, unable to pursue counter-cyclical policies if their business cycles go out of sync with business cycles of the major economies.

e. *Contagion Risk*: This is the risk associated with the possibility of a country coming under a crisis threat following a crisis in another economy. This risk is especially pronounced if the domestic economy has close trade, investment and financial ties with the economy undergoing the crisis. Here, the critics cited the example of the East Asian Currency Crisis to showcase the exact magnitude and gravity of this risk.

Therefore, the critics refuted the stand of the advocates of CAC by explicitly showcasing all the various risks and their exact magnitude. They refuted the opinion the advocates that in a world that is rapidly globalising, India just cannot afford to "stand and stare", by explicitly illustrating how the country may actually end up losing its basic sovereignty in its bid to integrate with the global economy. They also

showed that it is actually better for the country to be on the sidelines of activity rather than be dragged into a crisis, through the contagion effect, or be forced to face all the other risks associated with CAC.

Taking all these arguments, both for and against, into account, India finally started walking on the path towards full liberalisation of the capital account in 1991. In the next sub-section, we are going to trace out the path that India took while moving from a system of exchange controls to a system of full convertibility.

IV – *INDIA'S MOVE FROM EXCHANGE CONTROLS TO FULL CONVERTIBILITY :*

Capital controls have conventionally been used, the world over, to deal with situations of weak balance of payments. Over time, capital controls have also been, increasingly, viewed as an instrument of monetary and exchange rate autonomy. In a number of countries, application of capital controls allowed the authorities to manipulate the interest rates and exchange rates so as to attain the objectives of internal and external balance. The Impossible Trinity also validated a role for capital controls in countries operating with fixed or managed flexible regimes. Subsequent analyses, based on asymmetric information and herd behaviour in financial markets, suggested that capital controls may help in dealing with market failures more effectively, especially those arising from volatility in short-term capital flows and exchange rates.

Following this argument, India has had in place stringent policies for licensing of imports, imposition of high duties and strict foreign exchange controls, since 1950. This reflected an import-substituting self-reliant attitude that was prevalent in India in the period 1950-80. But, unfortunately, this attitude didn't help too much when it came to improving the quality of life of the vast majority of our people.

Therefore, policy changes were initiated in the early and mid eighties. These changes were mainly in the form of relaxation of import controls, enhanced export initiatives and reduced controls on selected industries. A flexible exchange rate regime was also implemented. Thus, these modest changes marked the beginning of the process of economic liberalisation in India.

During the nineties and beyond, the exchange rate regime has undergone a lot of changes. It started from a managed floating system under which the exchange rate was officially determined, and,

subsequently passed through several phases before finally reaching a market-based system. The rupee has been convertible on the trade account since March 1993, and, the exchange rate of the rupee has been determined by the market forces, i.e., the forces of demand and supply, in the inter-bank market. Current Account transactions have also been freed of exchange control regulations, while controls over several transactions on the capital account have been eased to a great extent. RBI still intervenes in the foreign exchange market, but that is, essentially, to prevent volatility and instability in the market.

Now, exchange controls are, in fact, just the instrument that encourages black market transactions and corruption among enforcement officials. Thus, for a country with a weak system of enforcement, it is especially, preferable to make the currency convertible on the current account. This is because, that is an effective tool to reduce all such illegal and corruptive activities. And, this was precisely the reason behind the rupee being made convertible on the current account in 1994. Therefore, keeping exchange controls that encourage currency smuggling and black money and a rise in Bhagwatian "DUP" activities make no sense at all. This was an important reason behind India's move from exchange controls to convertibility.

Another major reason was that the presence of too many controls successfully scares away foreign investment, especially, since there are other countries today that do provide much greater and freer facilities to foreign investors.

A very important lesson that history taught policy-makers formed the next reason behind India's move from controls to convertibility. It was observed that during the trade and exchange control regime, India had not been able to maintain a healthy export growth until the late seventies and eighties. Per capita export and export to GNP percentage both turned out to be pretty low when compared to some other Asian economies like, China, Indonesia, South Korea, Malaysia and Thailand. It was also noticed that controls on exchange transactions resulted in an overvalued exchange rate. This resultant exchange rate effectively dissuaded exporters to reap the benefits of export earnings into the country. This overvalued exchange rate also succeeded in dampening the domestic savings. Further, India lost billions of dollars through the processes of under-invoicing of exports and over-invoicing of imports. And, all this propelled the policy-makers to shift from controls to convertibility.

And, the final important reason was that a market-based exchange rate and a well-functioning exchange market provides a proper benchmark for prices of goods and services, and, also, domestic economic efficiency. This effect may especially be observed when currency convertibility is done along with trade liberalisation.

Taking all these reasons into account, India initiated the process of implementation of CAC in 1991. In August 1994, India accepted the obligations under Article VIII of IMF's Articles of Agreement, and, thereby, adopted the present form of CAC. In fact, CAC has been implemented in India in two stages. In the first stage, the process of CAC was initiated step by step. In the second stage, the recommendations of the Tarapore Committee, that submitted its report in 2006, were essentially followed.

India's approach towards capital account liberalisation, over the years, has essentially been gradual and calibrated. Particularly, the Indian policy towards capital flows has laid emphasis on encouraging larger non-debt and longer-maturity debt flows, since, the benefits associated with such flows may clearly outweigh the costs. On the other hand, the policy has retained controls on short-term debt inflows and also on capital outflows involving residents. Today, the policy challenges for India arising from capital account liberalisation broadly fall under two categories : (a) management of the surge in capital flows, and
(b) achieving preconditions that could create room for further liberalization of the capital account.

V – *TARAPORE COMMITTEE :*

The Tarapore Committee was set up under the chairmanship of S.S. Tarapore shortly before the East Asian Currency Crisis of 1997. It was appointed to set up a roadmap for the achievement of full Capital Account Convertibility in India. In fact, this was the first Committee that was appointed to analyse the issue of CAC in India. This Committee was also known as Tarapore I, and, was required to put forward recommendations to achieve full CAC in India.

The basic objectives of the Tarapore Committee were :

a. Facilitating economic growth through higher investment by minimising the cost of equity and debt capital.
b. Improving the level of efficiency of the financial sector mainly through raising competition and minimising intermediary costs.
c. Providing opportunities for diversification of investments by residents.

But, soon after the Committee was set up, the Currency Crisis hit most of the East Asian countries in July 1997. Although, India survived the Crisis with minor injuries, the issue of CAC in India got a whole new perspective. But, it was not long before India started registering high

growth rates, and, the issue of full liberalisation of the capital account was taken up once again by the government.

Again, a new Capital Account Convertibility Committee was formed under the chairmanship of S.S. Tarapore, along with many "champions" of CAC on board. This Committee was also popularly referred to as Tarapore II. This time, after the Currency Crisis, the Committee was required to put forward its recommendations, as well as some safety guidelines, to achieve full CAC in India. This time around, the Committee formulated a much more ambitious plan through which it intended to guide India through towards the achievement of almost full CAC. The plan was actually to take India to almost full CAC in three phases, that would span the time period of an entire Plan , i.e., five years : Phase I – 2006-07, Phase II – 2007-09 and Phase III – 2009-11. In fact, this plan almost coincided with our Eleventh Five Year Plan (2007-12). This Committee submitted its Report on "Fuller Capital Account Convertibility" on July 31, 2006. The Report was placed in public domain on September 1, 2006.

Now, first, the Committee set out some pre-conditions that the Indian economy would have to fulfil. Then, it put forward its recommendations, implementing which the country could expect to achieve full CAC. And, finally, the Committee set out some safety guidelines for the economy as well. We are going to look at each of these in the following sub-sections.

VI – *PRE-CONDITIONS FOR CAC IN INDIA:*

The Tarapore Committee put forward a set of necessary pre-conditions that was crucial for the achievement of full CAC in India. The pre-conditions were :

- **i.** Reduction of Gross Fiscal Deficit to GDP ratio from a budgeted 4.5% in 1997-98 to 3.5% in 1999-2000.
- **ii.** Establishment of a Consolidated Sinking Fund to meet the government's debt repayment needs financed by RBI's profit transfer to the government and disinvestment proceeds.
- **iii.** Inflation rate should remain at an average 3-5% for the three-year period 1997-2000.
- **iv.** Reduction of gross Non-Performing Assets of the public sector banking system to 5% by 2000.
- **v.** Average effective CRR should be brought down to 3%.
- **vi.** RBI should have a Monitoring Exchange Rate Band of plus minus 5% a neutral Real Effective Exchange Rate.

vii. External sector policies should be redesigned to increase receipts to GDP ratio and bring down the debt servicing ratio from 25% to 20%.

viii. Foreign Direct Investment and Portfolio Investment and Disinvestment should be governed by comprehensive and transparent guidelines, and, prior RBI approval at various stages must be dispensed with subject to reporting by ADs.

ix. Banks and financial institutions fulfilling well-defined criteria may be allowed to participate in gold markets in India and abroad and deal in gold products.

x. Participants on the spot market could operate in the forward markets. All Indian financial institutions fulfilling requisite criteria could become full-fledged ADs. Currency futures may be introduced. Participation in money markets may be widened, market segmentation removed and interest rates deregulated.

xi. RBI should withdraw from the primary market in government securities. The role of primary and satellite dealers should be increased. Fiscal incentives should be provided for people investing in government securities. And, the government should set up its own office of public debt.

xii. Forex reserves of at least six months of imports cover should be maintained.

Table II illustrates the actual position of the Indian economy in 2005-06 in comparison to the pre-conditions set out by the Tarapore Committee.

VII – *Recommendations of Tarapore Committee :*

The Tarapore Committee put forward certain recommendations, implementing which the Indian economy would be able to achieve full capital account convertibility. The recommendations were :

1. Removal of overall ECB (External Commercial Borrowing) ceiling of US$22 billion and the removal of restrictions on the end-use of ECBs. *This has been fully implemented.*

2. Limits on corporate investments abroad be doubled from the current limit of 200% of net worth. *This has been fully implemented.*

3. Indian banks be allowed to borrow overseas up to 50% of paid up capital and reserves in Phase I, up to 75% in Phase II and up to 100% in Phase III. *This has been largely implemented.*

4. Allow individuals to remit payments abroad annually up to US$50,000 in Phase I, up to US$ 100,000 in Phase II and up to US$ 200,000 in Phase III. *This has been fully implemented.*

5. Allow all non-residents, Indians or otherwise, to invest in companies listed on Indian stock exchanges, through SEBI registered entities like mutual funds and other portfolio management schemes. *This has been disallowed by the government.*

6. Prevent FIIs from raising money through participatory notes. Although, this was not a unanimous decision within the Committee, *it was still implemented as it had serious implications for national security, as it could provide a safe conduit for the movement of terrorist funding*.

7. Exchange earners be allowed 100% retention of earnings in Exchange Earners Foreign Currency accounts with complete flexibility in operation, including, cheque writing facility in Phase I. *This has been fully implemented.*

8. Indian Joint Venture/Wholly Owned Subsidiaries be allowed to invest up to US$ 50 million in ventures abroad at the level of Authorised Dealers in Phase I with transparent and comprehensive guidelines set out by the RBI. The existing requirement of repatriation of the invested amount within a period of five years may be removed. *This limit currently stands at US$ 100 million.*

9. Residents be allowed to have foreign currency denominated deposits with corporates and banks. *This has been allowed by the government subject to certain restrictions.*

VIII – *SAFETY GUIDELINES OF TARAPORE COMMITTEE :*

Following the East Asian Currency Crisis, all the members of the Tarapore Committee recognised that in order to effectively implement all the recommendations of the Committee, an extensive safety network was absolutely required. Therefore, the Committee chalked out extensive measures for the money market, corporate bond market, government securities market and forex market.

But, later, after proper analysis of the suggested measures, it was observed that most of them were actually accompaniments to CAC, rather

than safety measures. The Committee was almost silent on the instruments designed to insulate financial markets and the economy from the destabilising effects of large capital inflows. And, most importantly, it was noticed that many of the suggested measures seemed to be specifically designed to weaken the existing regulatory mechanisms in important parts of these markets.

IX – *Coping with Capital Inflows:*

Now, with India going in for CAC, the issue of management of capital inflows assumes great importance in the economy. (Table III shows the amount of capital inflows that India has received up to 2005-06.) Here, one rational policy response may be to adopt a set of capital account restrictions that will significantly reduce the probability of a financial crisis of the stature of the East Asian Currency Crisis of 1997. A few such proposals have been put forward by various economists. Here, we shall examine a few such proposals.

A - *Tobin Taxes :*

This was suggested by Tobin (1978) in an influential article. It had its origin in Keynes' "General Theory". This was, essentially, a transaction tax where the burden of the tax is inversely related to the length of the holding period. Thus, this tax was expected to reduce the returns to short-term speculation. This was intended to work as a double – edged knife that would, simultaneously, reduce the volume of speculative hot money and the amount of forex volatility. Also, it was expected to generate a substantial amount of revenue that could be used for development purposes.

But, in spite of the strong intellectual appeal, this tax failed in reality, mainly due to the fact that it would require global agreement and coordination. In the absence of this, funds would simply migrate to countries that would opt out of the tax agreement. And, ultimately, no country would have the incentive to implement this tax. This tax would also lead to a severe distribution problem with most of the revenue of the tax accruing to the developed countries. Finally, if the tax is not applied to both spot capital flows as well as to derivative instruments, then one may get substituted for the other.

B – *Trip Wires – Speed Bumps Approach* :

Here, certain basic indicators (TWs) are defined. When these indicators deteriorate below a pre-determined critical threshold value, certain safety measures, related to capital account transactions, are "triggered off". Therefore, TWs are, basically, some simple indicators that help to warn policy-makers of impending risks. Some of the most popular TWs are ratio of official reserves to total short-term external obligations, ratio of foreign currency denominated debt to domestic currency denominated debt, ratio of short-term debt to long-term debt and ratio of total cumulative foreign portfolio investment to gross equity market capitalisation.

When the TWs cross the critical threshold level, various SBs are called into play. The various forms of SB may be requirements on borrowings to unwind positions involving locational or maturity mismatches, curbs on foreign borrowings, restrictions on certain types of FPI and import curbs which are implemented only in exceptional circumstances.

C – *The Chilean Model* :

Chile is generally looked upon as an example of a country that successfully liberalised its economy financially. Now, the Chilean success story is largely attributable to the fact that extreme caution was exercised while conducting the programme between May 1992 and October 1998. Also, Chile formulated and followed an ingenious combination of the Tobin and the TW-SB methods, along with an extremely flexible model of regulation of capital flows.

Chile tackled the Currency Risk by adopting a crawling peg arrangement complemented by inflows management. The risk of Capital flight was minimised by discouraging those inflows that carried the maximum risk, with the reserve requirements acting as a type of Tobin tax on these investments. The Contagion Risk was managed by enforcing a minimum resident requirement on FDI that reinforced long-term investments. At the same time, entry of short-term flows disguised as FDI was barred from the economy. All these controls helped to protect the Chilean economy from the global crisis of the nineties. Also, Chile ended up receiving a larger proportion of external finance relative to GDP, as compared to the rest of the economies of the region. Although, this model had to be abandoned in 1998, following the Currency Crisis, it still deserves a special consideration as it really did help Chile in its liberalisation programme.

X – *MEASURES TOWARDS CAC IN INDIA IN THE RECENT TIMES :*

In the recent times, a large number of important measures have been implemented in India that have helped to move the economy more towards attaining full CAC. Here, we shall look at some of the more important steps.

All deposit schemes for NRIs have been made fully convertible and they have been allowed to repatriate in foreign currency their current earnings in India. NRIs are also permitted to buy or sell shares and debentures of an Indian firm through a registered broker on a registered stock exchange under certain conditions. Indian citizens have been permitted to maintain foreign currency accounts out of foreign exchange earned or retained from travel expenses. Moreover, Indian firms have been allowed to access ADRs or GDRs markets through an automatic route, subject to specific norms and post-issue reporting requirements, without the approval of the Ministry of Finance. Also, FDI has been allowed up to 100% on the automatic route in most sectors subject to sectoral rules and regulations. Investment in overseas financial sector has been permitted, subject to certain terms and conditions.

The policy announced in January 2004 raised the ECB ceiling under the automatic route from US$ 50 million up to US$ 500 million for ECBs with average maturity of over 5 years, and, up to US$ 20 million for ECBs with average maturity between 3-5 years. On the other hand, Mutual Funds have been permitted to invest in ADRs or GDRs of Indian firms and rated debt instrument in overseas market, after getting proper permission from SEBI. They also have the permission to invest in equity of foreign companies, subject to the conditions applicable. RBI has even raised the limit on overseas investment by Mutual Funds from US$ 5 billion to US$ 7 billion. Banks fulfilling certain criteria have been given permission to import gold and accept gold under the Gold Deposit Scheme.

Following the recommendations of the Tarapore Committee, inflation fell from 7% in 1997 to under 4% in 2005. Proportion of NPA has fallen from 13.7% in 1997 to 5.2% in 2005. Quotas on imports of consumer goods have been successfully phased out. However, progress on the issue of fiscal discipline has been pretty limited. Public sector deficit has risen from 7.3% of GDP in 1997-98 to 7.7% of GDP in 2005-06. Ratio of public debt to GDP has gone up from under 65% to over 83%. But, interest rates, especially, bank deposit rates, provident fund rate and long-term interest rates are still administered in India. And, it is still not immediately possible to give unlimited access to short-term ECBs and give domestic residents unrestricted freedom to convert their domestic bank deposits and idle assets in response to market developments.

Epilogue :

Thus, in conclusion, we may say that implementation of CAC comes with its share of advantages and risks, as we have already elaborated before. Also, certain pre-conditions, mainly in the form of strong macroeconomic policy framework and efficient financial markets and systems, are necessary for the successful implementation of CAC. The efficient management of the external sector, through the adaptation of a flexible exchange rate regime, sustainable current account deficit and an extremely restrictive approach to short-run debt, is also an important requirement. Now, after these requirements are met, CAC must be implemented in steps and the success or failure of that step needs to be scientifically analysed. This is because, such analysis would help the economy to progress further on the path to attaining full CAC.

However, if we were to judge the implications of CAC in India, independent of its general pros and cons, CAC may not be such a good idea in the near future. The instability in the international markets due to the sub prime crisis and fears of a US recession are adversely affecting the entire world, including India. Moreover, rising oil prices which touched US$100 a barrel recently are also fuelling inflationary pressures in the economies, worldwide. Not only is there an immense instability in the international arena, but, India's domestic economy is, also, going through several ups and downs. The rising prices and the appreciation of the rupee are adversely affecting India's exports and Balance of Trade. Moreover, the fiscal deficit has been highly underestimated by ignoring the deficits of individual states and through issuance of oil bonds to the public sector oil companies, making severe losses due to the heavy subsidies on oil. The government is yet to compensate these companies and these deferred payments have been left out from the deficit. Also, corruption, bureaucracy, red tapism and a poor business environment in general, are discouraging the inflow of investment. And, poor infrastructure and socio-economic backwardness act as major deterrents to FDI inflow.

Hence, India still needs to work on its fundamentals of providing universal and good quality education and health services and also empowering marginalized groups in various ways. The growth strategy needs to be more inclusive. There is no point trying to add on to the clump at the top of the pyramid if the base is too weak. That will only result in the collapse of the pyramid. Thus, before opening up to financial volatility through the implementation of FCAC, India needs to strengthen its fundamentals and develop a strong base.

But, as we see through Table II, India has already fulfilled most of the pre-conditions set by the Tarapore Committee. In fact, the process of CAC has also been initiated in the economy. But, to successfully attain full CAC, India would have to follow a carefully planned supervisory regime that would help in focussing on the warning signals and monitoring the weaker entities properly. A proper Risk Management System and an updated Management Information System would also be essential tools to ensure successful implementation. And, finally, the true participation of talented individuals and experts is absolutely crucial to ensure that India's move towards full CAC is a smooth transition.

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Table I : Capital Account Liberalisation and Growth

Study	*No. of countries in sample*	*Openness Measure used*	*Results*
Quinn, 1997	58	Δ(CAL 2)	CAC beneficial for per capita income growth
Klein & Olivei, 2000	67	CAL 1	CAC beneficial for per capita income growth if accompanied by financial deepening
Edwards, 2001	55	CAL 2 & Δ(CAL 2)	CAC beneficial for high income countries but not for low income countries, in terms of per capita income growth.
Arteta, Eichengree & Wyplosz, 2001	51	CAL 2 & Δ(CAL 2)	CAC beneficial if CAL 2 is used as liberalisation measure.
Bekaert, Harvey & Lundblad, 2001	30 EMEs	Official dates of stock market liberalisation	CAC beneficial with this measure of liberalisation, though most of the benefits are concentrated in the early years.
O'Donell, 2001	94	CAL 1 & Volume	CAC beneficial if Volume is used as liberalisation measure, but not with CAL 1.
Grilli & Milesi-Ferretti, 1995	61	CAL 1	No evidence for CAC being beneficial for per capita economic growth.
Rodrik, 1998	100	CAL 1	No evidence for CAC being beneficial for per capita economic growth.
Kraay, 1998	117	CAL 1, Volume & CAL 2	CAC beneficial if Volume is used as liberalisation measure, but not with CAL 1 or CAL 2.
Edison et. al, 2002	89	CAL 1, CAL 2 & Dates of stock market liberalisation	CAC beneficial for high-income countries and East Asian economies, but not for developing economies.

Source : BIS : Triennial Central Bank Survey of Foreign Exchange & Derivatives Market Activity, 2005-06.

Table II : Pre-conditions for CAC (Tarapore Committee)

Item	*Pre-condition*	*Position (2005-06)*
Gross Fiscal Deficit (as % of GDP)	< 3.5%	4.1%
Inflation	3% to 5% (3-year average)	4.6% (3-year average)
Gross NPAs (as % of total advances)	< 5%	5.2% (as of 2004-05)
Average effective CRR	3%	5%
Current Account Deficit (as % of GDP)	< 2%	> 3%
Debt servicing ratio	< 20%	10.2%
Forex reserves	> 6 months imports cover	11.6 months imports cover

Source : Handbook of Statistics on Indian Economy, RBI, 2005-06.

Table III : Capital Inflows into India (US $ billion)

	2001-02	2002-03	2003-04	2004-05	2005-06
A. FDI (I+II+III)	6130	5035	4322	6051	7752
I. Equity (a+b+c+d+e)	4095	2764	2229	3778	5820
a. Government	2221	919	928	1062	1126
b. RBI	767	739	534	1258	2233
c. NRI	35	-	-	-	-
d. Acquisition of Shares	881	916	735	930	2181
e. Equity capital of Unincorporated Bodies	191	190	32	528	280
II. Reinvested Earnings	1645	1833	1460	1904	1676
III Other Capital	390	438	633	369	256
B. FPI (a+b+c)	2021	979	11377	9315	12492
a. GDRs/ADRs	477	600	459	613	2552
b. FIIs	1505	377	10918	8686	9926
c. Ofshore funds & others	39	2	-	16	14
Total Investment (A+B)	8151	6014	15699	15366	20244

Source : Handbook of Statistics on Indian Economy, RBI, 2005-06.