2.1. Introduction:

On August 15, 1982, Mexico declared that it was no longer in a position to service its external borrowings from international commercial banks. With Mexico's declaration, a new pandora box was opened, and by the end of the 1980s about 40 countries were involved in rescheduling negotiations with international commercial banks. The expediency and immense scale of the financial crisis that followed the fairly small initial devaluation of the Mexican Peso in December 1994 led to a political debate, and an outpouring of academic literature. The financial crisis of East Asia in 1997 after the devaluation of the Thai baht found its way into South Korea, Taiwan, Malaysia and Indonesia making many writers re-paraphrase their words for these countries from "East Asian Miracles" to "East Asian Mirages". India was on the verge of default in 1991, and found refuge in the International Monetary Fund's (IMF) rescheduling package.

On the one hand, the Marshall Plan of the 1940s with goodies such as grants, aids and soft loans from the World Bank (WB) and IMF started drying up in the early 1970s. A number of developing countries, with a paucity of external finance, began knocking at the doors of the commercial banks. On the other hand, between 1970 and 1982, international commercial banks, eager to invest the substantial profit accumulated and deposited by the Organization of
Petroleum Exporting Countries (GPEC), lent irresponsibly to the third world countries both medium and long term loans. As Dooley (1994) argues, this excessive international lending by commercial banks was approved and implicitly backed by the governments of the industrial countries confident of their ability to rescue a large bank, should a general financial panic occur. Hence, in case of default, creditor governments, acting as collateral, were expected to acquire and then collect the bank's claims on developing nations.

During the years when debts started to grow steadily, the private capital flows were substantial and unrecorded. In this regard, Cooper (1982) asserts that capital flight almost matched the stock of external debt amassed by the developing countries. This explains the enormous resistance by commercial banks to negotiate bailout arrangements. In reviewing the enormous amount of literature that is available on External Debt, we may observe the following general trend: the commercial lenders, in favourable situations, indulged in "atomistic"1 behaviour by imprudently giving huge loans to poor countries, without paying attention to either their credit worthiness or their repayment capacity. As they were preoccupied with profit making agenda, they lacked prudential norms and supervisory regulations. However, when the situation

1. "Atomistic" behaviour is described as one in which each lender acts independently of other lenders.
turned unfavourable, they resorted to herd\(^2\) behaviour. The aim of this chapter is to comprehend the various issues converging around external debt.

This Chapter surveys the literature on external debt beginning with the Role of External Capital in Economic Development in section 2.2.1. Section 2.2.2 deals with the literature on the Role of Domestic Policy in Managing the External Debt in different countries around the world. Section 2.2.3 examines the available literature on the Causes for debt crises while section 2.2.4 propounds different theoretical approaches to an Optimum level of external Borrowing. A considerable amount of literature on Sovereign Debt, Country Risk and Repudiation is covered in Section 2.2.5 while section 2.2.6 pools together some of the literature on the Impact of Debt on Investment and Development. Section 2.2.7 deals with the literature on Debt Restructuring and Debt Relief. Some of the recent developments are surveyed in section 2.3, and section 2.5 concludes this chapter.

2.2. Literature Review:

2.2.1. Role of External Capital In Economic Development:

In the words of Meier (1976), Capital occupies a position so dominant in the economic theory of production and distribution that it is natural to assume that it should occupy an equally important place in the theory of economic growth.

2. "herd" behaviour is described as one in which one lender demands his loan back, all of a sudden for fear of losing his capital, and all other lenders follow the leader in recalling their loans.
Development is a function of investment, and investment which requires domestic savings is not sufficient to ensure that development takes place, unless it is complemented by resources from abroad. Harrod (1939) - Domar's (1946) growth model claims that external assistance is complementary to domestic savings, and leads to an increase in income and a resultant higher growth rate. In the developing countries, as Marginal Propensity to Save (MPS) is greater than Average Propensity to Save (APS), if foreign capital is injected into the economy at present, their domestic MPS will increase in the subsequent period, leading to greater investment and eventually to higher growth. Therefore, in the absence of sufficient domestic capital, inflows of external capital plays a complementary role paving the way for development.

Gamani (1994) argued that the concept of a dual resource gap - between domestic savings and investment needs, and between export earnings and import requirements for development - is a central issue in the platform of developing countries from the days of UNCTAD in 1964. The developing countries called for a change in the international economic framework which would enable this gap to be bridged whether by means of enhanced export earnings or larger flows of external resources from the outside world. The developing countries recognized the need for various kinds of external resource flows in addition to export earnings such as grants, foreign direct investment and external borrowing provided their terms and conditions were favourable.
Manzocchi (1997) analyzed the determinants of net external borrowing in ten transition economies during 1990-95 and assessed the impact of the outstanding stock of foreign liabilities on net financial inflows. He suggested that external finance can provide a positive contribution to the transition process and can enhance welfare in former centrally planned economies, especially when domestic saving has not fully recovered after the initial contraction.

Marcelo Selowsky (1987) developed a framework for the analysis of adjustment to adverse shocks in the presence of limited access to the international credit market, and demonstrated that restricted borrowing has three effects, namely, inter-temporal cost, contemporaneous reallocation cost, and dead-weight loss in the labor market. He concluded that capital flows and credit assistance can have substantial benefits in reducing the welfare cost of adjustment to adverse real shocks.

Kennedy and Thirwall (1971) explained that poor countries require external capital as they saved a lower proportion of their income. Rothgeb (1984), examined the contention that foreign investment is positively related to external public debt accumulation by Third World States. The results showed that stocks of investments in manufacturing were strongly related to borrowing only among American states, with the effects being immediate, and not long-term. Only African states were affected by flows, with these effects being long-term and positive.
In a related study, Van Elkan (1993) analyzed the transitional and steady-state effects of opening an economy to foreign technology and ideas. He pointed out that impediments to the flow of knowledge result in large opportunities for imitation of foreign knowledge when such barriers are removed. He argues that in the transition from autarky to integration, a country initially concentrates heavily on imitation, for which there exists a large catch-up opportunity. Subsequently, as the knowledge gap narrows and the stock of human capital rises, indigenous innovation plays a greater role and growth slows. Restrictions on foreign borrowing will prolong the adjustment toward the steady state and alter the time profiles of the many macroeconomic variables by diverting resources from investment to current production.

On the other hand, Griffin and Enos (1970) and Griffin (1970) contented that it is capital imports, and not external assistance, which will help a recipient country to achieve higher growth and development. According to them, there existed a negative correlation between the rate of growth of foreign aid and the consequent and subsequent rate of growth of saving. As a result, they argued, the greater the inflow of capital from abroad, the lower the rate of growth of the aid receiving country. Bardhan (1957) was pessimistic about Harrod-Domar's growth model.

McCabe and Sibley (1976) also pointed out the negative relation between domestic saving and external borrowings by inserting export revenue
uncertainty in a growth model. They were of the view that when revenue expenditure declines, the saving rate will also decline forcing the country to borrow more from external sources. Hence they pointed out that there is an inverse relationship between the rate of saving and external borrowings. Rahman (68), Areskoug (69) Weisskopf (1972), Papanek (1973) and Mosely (1980) also reasoned that since there is an inverse relation between domestic savings and external borrowings, and since most of the external borrowing is spent on consumption, external borrowing contributes mighty little to the economic growth of the recipient country.

2.2.2. Role of Domestic Policy in Managing the External Debt:
During the last three decades, a number of questions have been raised with regard to the efficacy and desirability of using monetary and fiscal policies to fine-tune the economy. In most of the developing countries, the problem of the aggregate supply - aggregate demand balance has been asymmetric. The domestic disequilibrium coupled with recessions and booms in the international market have made the monetary and fiscal policy measures more vulnerable to criticism. It is in this context that we need to look at the various monetary and fiscal measures which play a crucial role in managing the external debt. Thus, this section, first, reviews the role of various policy measures in managing external inflows, before looking at the literature on country-specific studies.
A number of developing countries, today, are ensnared in the three-gap trap. Beginning with the saving-investment gap, coupled with the budgetary gap, developing countries look for funds from their external sector, which again is marked by the export-import gap leaving a huge current account deficit. With an insignificant growth in the export sector and the falling share of tax revenues due to the political economy, countries indulge in borrowing from individuals, banks, other financial institutions, foreign governments and international institutions such as the IMF, the WB and the Asian Development Bank (ADB) for a variety of purposes. It is also palpable that developing countries borrow from foreign commercial banks to cover the persistent deficit on the revenue account which indicates that the government is unable to meet its current expenditures from its current revenue. In particular, the uncontrolled increase in non-plan expenditure or non-development expenditure makes the government allocate scarce resources to unproductive expenditures.

As Apte (1993) rightly summarises: the problem of simultaneous achievement of both internal as well as external balance requires a multi-pronged approach of using macroeconomic fiscal and monetary policies, trade policies and exchange rate policies. These policy measures are designed to moderate the fluctuations in the economy such as the rate of growth, inflation and full employment of resources. The monetary instruments include Open Market Operations, Bank Rate Policy, Cash Reserve Ratio, Statutory Liquidity Ratio etc., and the fiscal instruments include Taxation, Government spending, Deficit Financing and Public borrowing. However, one should keep in mind that there can be conflicts between the objectives of these different measures.
As Dornbusch and Fischer (1990) note: monetary policy is accommodating when, in the course of a fiscal expansion, the money supply is increased in order to prevent interest rates from increasing. Monetary accommodation is also referred to as monetizing budget deficits, meaning that the central bank prints money to buy the bonds with which the government pays for its deficit. Hypothetically, if we assume the status of a country, where there is unemployment and the current account imbalance is insignificant, any attempt to stimulate the economy by an expansionary monetary or fiscal policy will lead to increase in income and employment, but only at the cost of a worsening current account balance. If we assume another situation where there is both unemployment and a huge current account deficit, a tight monetary policy, by raising the interest rate, will keep the capital account in surplus by attracting foreign capital. Policy makers can use other policy tools which affect the relative price of foreign goods vis-a-vis home goods. An exchange rate devaluation would make home goods relatively cheaper for both foreigners and residents. If export and import demands are sufficiently price elastic this would improve the trade balance as import would decrease and export would increase. Another negative way of handling the same issue is by imposing tariffs on imports and subsidising exports. Each of these solutions requires certain conditions to be satisfied for them to succeed. For example, for a devaluation to succeed, it must be accompanied by measures to curtail total absorption or else the price advantage conferred by the devaluation would be nullified by
rising costs and prices at home. Tariffs, unless carefully structured can distort resource allocation and direct resources into activities in which the country has no comparative advantage. Tariffs and quotas also shield inefficient domestic industries from foreign competition.

A current account deficit, unless compensated for by a capital account surplus would lead to a contraction of foreign reserves and hence a contraction of the money supply. In such a situation the central bank, through its open market operation, can purchase securities, or by the use of its Bank Rate Policy, increase its lending to the commercial banks. Such countervailing action by the central bank is called “sterilization policy”. In the same manner, an increase in the foreign exchange reserves with the central bank would normally result in an expansion of the stock of high powered money and hence money supply. The effect of an increase in foreign exchange reserves on the money supply can be sterilized by a contractionary monetary policy.

In the Mundell (1963) -Flemming (1962) model of perfect capital mobility, capital flows equate the domestic rate of interest with the world rate. In a flexible exchange rate regime, an increase in the world interest rate precipitates capital flows from the domestic economy into the world economies. As the supply of the domestic currency in the foreign exchange markets increases, the exchange rate for the domestic economy depreciates, leading to increased net exports, and an increase in the domestic rate of interest.
In a political economy, as Dornbusch and Fischer (1990) point out policy issues are settled by political preferences. One may opt for tax cuts in a recession and cut on government expenditure in a boom. Others might prefer to increase government spending on education, environment, job training and rehabilitation. Growth-minded people and the construction lobby may argue for expansionary policies that operate through low interest rates.

Rangarajan (1998) argues that capital inflows do pose a problem to policymakers and monetary authorities. Exchange rate stability, free movement of capital and monetary autonomy are an impossible trinity. Hence, any strategy to deal with surges of capital must be based on likely permanence of the capital inflows, the desired evolution of the current account deficit and foreign exchange reserves, and accordingly the desired trajectory for the real exchange rate.

Agenor, Pierre-Richard and others (1991) review the developments in the theoretical and empirical analysis of balance-of-payments crises. They, first, develop a simple analytical model highlighting the process leading to such crises. Then they extend the basic framework to deal with a variety of issues, such as: alternative post-collapse regimes, uncertainty, real sector effects, external borrowing and capital controls, imperfect asset substitutability, sticky prices, and endogenous policy switches. They also examine the empirical
evidence on the collapse of exchange rate regimes, and they discuss the major implications of the analysis for macroeconomic policy.

Dornbusch (1998), insisting on the importance of the link between fiscal policy and monetary policy to address the question of debt burden, points out that large debts are seen as a standing invitation for a big inflation designed to reduce the debt burden. Large debts hamper the exercise of monetary policy. The higher the interest rate, the greater the snowballing debt as interest adds to the debt. When private debt comprises the larger part of the total debt, monetary policy might be sidetracked from a narrow price stability objective to be enlisted as a tool of financial engineering. A higher interest rate, in the course of monetary restraint, might actually be expansionary as a higher interest rate leads to a raise in disposable income and thus higher aggregate spending.

Aizenman (1986), formulates the policy response in terms of the country's risk, as embodied in the elasticity of supply of credit facing the borrower. The analysis also shows that if the level of external borrowing is substantial, cost-minimizing domestic policies call for instituting a two-tier exchange rate system.

The optimal lending strategies to sovereign countries may not be achievable by competitive private lenders. Financial markets are characterized by incomplete
information about the creditworthiness of borrowers, and about future economic trends. As a result, private lenders are heavily influenced by the herd instinct, even if decisions are rationalized in analytical terms. In favourable circumstances, it is difficult to prevent excessive growth of lending to favoured sectors or customers including sovereign borrowers. The private lenders at unfavourable situations, left to themselves, may precipitate a financial crash by recalling loans when debtors are in no position to repay. Hence Hirsch (1977) argues his case for strong domestic policy measures for the stabilization of the financial system through the Central Bank's intervention and restraint on competition.

Analysing the East Asian crisis, Kochhar, Loungani and Stone (1998) point out that prudent macroeconomic policies and an outward orientation are essential. Proper bank supervision and data transparency are imperative. Strong governance is needed to ensure the free play of market forces. Capital account liberalization requires a healthy domestic financial sector; and external debt must be managed prudently. Finally, crises are prevented by pragmatic policy that recognizes and addresses problems early, even when the going is good.

Dornbusch (1998) suggests the use of monetary policy to deal with the external sector, and the use of fiscal policy for the stabilization of the domestic sector. In the light of suggestions by various economists for the effective and timely
use of monetary and fiscal policy measures, this study limits itself to literature pertaining to specific country studies.

Rudnick (1992), is of the view that Hungary's foreign exchange reserves have reduced its external borrowing needs and efforts are now directed towards new markets, particularly, the U.S. Hølsen (1997), suggests that Non-Oil middle-income countries have the ability to maintain a reasonably high rate of growth over the medium term, while progressively reducing their reliance upon external borrowing as their exports expand. Success will depend upon the internal policies of these countries, and trends in the world economy.

Agenor (1997) used an inter-temporal optimizing framework to examine the contagion effect. The Tequila effect is then modeled as a temporary increase in the autonomous component of the risk premium that domestic private borrowers must pay on world capital markets. Under the assumptions that the degree of inter-temporal substitution is not too large, and the shock is perceived to be of a sufficiently long duration, the model is shown to be capable of reproducing some of the main features of Argentina's economic downturn in 1995, an increase in domestic interest rates, a reduction in foreign borrowing,

3. Contagion effect is synonymous to "herd behaviour" explained earlier.

4. Tequila effect is defined as weak peso and slow industrial production leading to a sluggish economy
a sharp drop in official reserves and the monetary base, a reduction in bank credit, a contraction in output, an increase in unemployment, a fall in consumption, and an improvement in external accounts.

Ahmed, Shaghil; Rogers, John H (1995) test whether long-term data from the United States and the United Kingdom are consistent with the government budget constraint and the external borrowing constraint, both individually and simultaneously. The data also indicate that the present value constraints continue to play their role, following events that cause a structural break in the short-run dynamics.

Kapur and Mensbrugghel (1997) found that many Baltic countries, Russia and other CIS states have been increasingly borrowing on the international capital markets - a development that reflects their success in achieving financial stabilization. However, the rapid increase in external debt suggests that consideration also needs to be given to the risks from too high a dependence on foreign savings by altering domestic policies.

Cline (1995) describes how the debt crisis of the 1980s was overcome. He points out that the 1994 Mexican crisis reflects a policy error on excessive reliance on the "exchange-rate anchor" to fight inflation, with a resultant overvalued exchange rate and an excessive current-account deficit. Large current-account deficits are no problem if they are not caused by a large fiscal
deficit. One broad lesson from Mexico is that an economic crisis must be answered with more painful reforms, not less. The real worry about Mexico remains the question of growth. Growth should be led by exports. What Mexico cannot afford is a big fiscal expansion. Caution and austerity are the only sensible course.

Laurens and Cardoso (1998) review the recent experience of Chile in managing capital flows. In response to the financial crisis of the 1980s, the authorities embarked on a program of economic reforms that resulted in a restoration of market confidence and eventually in sustained capital inflows. Policy responses involved sterilization, controls on capital inflows, liberalization of capital outflows, greater exchange-rate flexibility, and an enhanced prudential framework. In particular, a non-remunerated reserve requirement on short-term external borrowing was introduced to enhance monetary policy autonomy so that the effects of a tight monetary policy on the exchange rate would be minimized. Results from empirical tests suggest that it had no long-term effect on total inflows, the exchange rate, or domestic interest rates. Prudential considerations were also a driving force in policy design. The reserve requirement was designed to support efforts in enhancing Chile's prudential framework by discouraging potentially volatile inflows while maintaining a liberal environment for foreign direct investment.
Cashin and McDermott, (1998) compare the evolution of the Australian current account balance over the period 1954-94 against an optimal current account derived from a consumption-smoothing model. The findings indicate that the Australian current account was not used to smooth consumption optimally in the period prior to the relaxation of capital controls in the early 1980s.

Varman-Schneider (1991) examines capital flight from developing to developed countries which took place at the same time that external debt of LDCs reached peak levels in the 1970s and early 1980s. He argues in favor of country-specific models to explain capital flight and estimates the magnitude of capital flight in India and the Philippines. He also examines the role of external borrowing in explaining capital flight.

Zanny Minton-Beddoes (1995) argues that the economic reforms of the past decade have transformed Latin America. However, they have not yet conquered the region's inherent instability. Several ingredients seemed novel: the speed with which capital fled the country as investors cut their losses and ran; the knock-on 'tequila effect' that rippled through all emerging markets, sent shock waves through much of Latin America and a tidal wave over Argentina. As a capital importer, Mexico has always been sensitive to changes in foreign interest rates and the fickleness of foreign financial markets. The causes are said to be an exceptionally wide income inequality, and the colonial legacy of
centralised state bureaucracy combined with short-termism. Corruption was rife, and long term planning was impossible.

Ledic (1984), attempts to evaluate the past debt experience of Yugoslavia to determine whether the Yugoslav problem is one of liquidity or solvency. This study projects the external debt and debt service till 1990, and discusses the consequences of present debt renegotiation for future borrowing.

Montiel and Haque, (1991) argue that Pakistan's fiscal deficit remains high because of the government's inability to mobilize new resources or to cut current expenditures. Yet, unlike other developing countries with high fiscal deficits, Pakistan has experienced neither hyperinflation nor debt rescheduling. This can be attributed to high growth, and to the availability of concessional external financing and domestic non-bank borrowing.

Silard (1984), remarked on the viability of utilizing certain kinds of controls on external borrowing for the prevention of disturbances in an economy's foreign financial relations, without resorting to exchange restrictions in the sense of the IMF Articles of Agreement. If such controls are in place, and work as desired, "the country's external debt problem should not get out of hand", even though external conditions may change.
2. 2. 3. Causes of External Debt Crises:

Although there could be some overlapping, the literature in this section is pooled together under causes of external debt crises due to (1) external factors, (2) internal factors and (3) institutional factors. As Kamin (2001) points out, the real exchange rate, the export growth, the current account-to-GDP ratio, and FDI etc. occupy an ambiguous status. On the one hand, these variables certainly are affected by domestic economic policies and conditions; on the other hand, they also are affected by international capital flows, commodity prices, movements in the foreign exchange value of the U.S. dollar, and other global conditions. For this reason, although sufficient care is taken to classify the literature, a certain amount of overlapping of literature is unavoidable.

2. 2. 3. 1 External Factors:

Fernandez-Arias (1994) found that the fall in U.S. returns was the key cause of the change in capital flows in the 1990s in Latin America. Frank (1984) argues that it was the 1979-1982 recession in the advanced industrial countries, which led to rupturing of the debt bubble. To the extent that the macro linkages between the industrial nations and the debtor economies are strong, this has a bearing on whether the industrial countries can escape responsibility for the debt build up in developing countries, thus precipitating a crisis.

Kreuger (1987) through a quantitative assessment remarks that a number of countries borrowed money in an unsustainable manner in the 1970s due to
exogenous factors. However, she concludes that no generalization can be made for the developing countries as a whole.

Similar studies by Kochhar, Loungani and Stone (1998) dealing with the East Asian crisis point out that the crisis was triggered by external shocks, especially exchange rate shifts and terms of trade declines, but was then spread throughout the region by the shared vulnerability to external shocks, trade and capital linkages, and investor herding behaviour.


McFadden and others (1985) also attributed the cause of currency crises to an overvalued real exchange rate. Flood and Marion (1995) developed a model to test the size and the timing of devaluations focusing on the trade-off between the cost of realigning and the cost of a misalignment. They emphasized two indicators, namely, the drift of the real exchange rate and variance of the real
exchange rate. Edwards (1989) included net foreign assets / M1 ratio, central bank foreign assets / base money ratio etc. to understand the causes of devaluations.

By using the Error Correction Model to determine whether overvaluation contributed to the crisis, Cerra and Saxena (2002) found that the Indian rupee was over-valued at the time of the crisis in 1991. In addition to devaluations, Eichengreen, Rose and Wyplosz (1995), Sachs, Tornell and Velasco (1996) and Kaminsky and Reinhart (1999) include episodes of speculative attacks which were averted at the cost of a large increase in domestic interest rates and a sizable loss of international reserves.

Cline (1984) was of the view that the debt problem as a world phenomenon has its roots in the first oil price shock of 1973. At a time when real interest rates were low and inflation was high, many developing countries borrowed from external sources. With the oil price shocks, interest rates increased making external borrowing costly. Cline (1985) again argued that it was basically the external shocks that had a negative impact on export earnings, causing the balance of payment problem. He was of the view that the external debt was the fallout of a global economic depression, and not of any domestic factors.

Most of the econometric studies that were undertaken in 1993 - 1994 on the causes of renewed large capital inflows into Latin America and East Asia in the early 1990s concluded that external factors were a major cause. For example,
Calvo, Leiderman and Reinhart (1993, p. 136-137) found that “foreign factors account for a sizable fraction (about 50%) of the monthly forecast error variance in the real exchange rate, and also account for a sizable fraction of the forecast error variance in monthly reserves.” They warned that “The importance of external factors suggests that a reversal of those conditions may lead to a future capital outflow.”

Dolley, Fernandez-Arias and Kletzer, (1994) studied the determinants of the increase in secondary debt prices of 18 countries since 1986, and concluded that “International interest rates are the key underlying factor.” Senhadji (1997) is of the view that developing countries borrowed heavily on international financial markets based on the perception that the favourable external environment (low world interest rates and increasing commodity prices) of the 1970s would last. However, the expectation of a commodity boom was short lived, and the period of low interest rates ended by the early 1980s.

Gerlach and Smets (1994) argue that even if the fundamentals in a country are strong, devaluation by one country can lead to a devaluation by its trading partners, in order to avoid loss of competitiveness, thus causing a contagion effect. Calvo and Reinhart (1996) point out that contagion effects also may arise if investors pay little heed to the countries’ economic fundamentals, and thus do not properly discriminate among countries.
Cardoso and others (1997) investigated the determinants of capital flows to Brazil and constructed an index of capital controls that included restrictions on both outflows and inflows. Using monthly capital flows data, they found that foreign interest rates and contagion effects are important in explaining capital flows to Brazil, confirming debt problems are linked to external factors.

Darity (1985) argued that the commercial banks of the advanced industrial countries, with surplus funds and unable to find domestic borrowers which could be profitable enough, practically pushed loans on to developing country borrowers. As they were preoccupied with a profit making agenda, they did not adequately take into account the credit worthiness of the borrowing country or the possibility of default while deciding on loans. They behaved as salesmen, persuading countries to borrow amounts much greater than what the borrowing countries planned to borrow. Echoing Darity's views, Guittentag and Herring (1985) expressed that external commercial banks advanced money imprudently without sound prudential and supervisory strictures, thus precipitating a debt crisis. They argued that imprudent borrowing is not possible without imprudent lending. Goldstein (1996) also emphasized the boom in bank lending as the most important cause of crises.

Tanzi (1998) tries to find out as to what happens to an economy's current account position if there is an adverse shock to its terms of trade. According to the Harberger-Laursen-Metzler (HLM) effect it deteriorates, because a deterioration in the terms of trade will decrease real income and savings. This
study, using data from five OECD countries between 1970 and 1995, undertakes the generalized method of moments estimation of Euler equations derived from an inter-temporal optimizing model of consumption. The results indicate that terms of trade shocks induce large and significant intra-temporal and inter-temporal substitution effects, which operate to offset any associated income effects on private saving decisions and the current account position. Greene (1989) was of the view that an increase in the international interest rate compounded the cause for a domestic crisis.

Cerra and Saxena (2002) conclude that econometric evidence supports the view that current account deficits played a significant role in the 1991 currency crisis in India. In their view, a confluence of exogenous shocks led to a loss in investor confidence and to escalating debt-service burdens that erupted in a currency crisis. Cuddington (1989) finds that all the countries which faced external debt difficulties encountered similar characteristics such as overvalued exchange rates, inward looking trade policies, jumbled political structures etc. He was of the view that achieving trade surplus is a must for any country to avoid a debt burden.

Mexico’s experience of the 1994 crisis suggests that although foreign capital can help developing countries to grow faster, it leaves them with less room to make mistakes. By itself, a large current account deficit is not a sign of
economic failure. If a country runs a capital surplus account it must, by definition, run a current-account deficit. The inflow of foreign capital allows developing countries to invest more than they save, and thereby to grow faster. In principle, and provided the capital is invested wisely, a current-account deficit need not cause alarm. In the case of Argentina, Dornbusch (1985) pointed out that the foremost cause of the Argentinian crisis was due to private capital flight.

2. 2. 3. 2. Domestic Factors:

Krugman (1979), initially, stressed that crises were caused by weak "economic fundamentals," such as excessively expansionary fiscal and monetary policies, which resulted in a persistent loss of international reserves that ultimately forced the authorities to abandon the parity. His model shows that, under a fixed exchange rate, domestic credit expansion in excess of money demand growth leads to a gradual but persistent loss of international reserves, ultimately, to a speculative attack on the currency.

Dornbusch, Goldfajn and Valdes (1995), focused on the common patterns that prevailed in Argentina, Brazil, Chile and Mexico preceding the currency crises. They studied ten indicators, namely, (a) credit growth, (b) foreign exchange reserves, (c) GDP, (d) real exchange rate, (e) real interest rate, (f) debt / GDP ratio, (g) fiscal deficit / GDP ratio, (h) current account / GDP ratio, (i) trade

Kaminskey and Leiderman (1995) studied monetary shocks, fiscal shocks, and past inflation to find the probability of crisis. Krugman (1979), Flood and Garber (1984) illustrated the collapse of an exchange rate peg under monetization of government deficits that led to the currency crisis in many countries.

Moreno (1995), studying the East Asian countries, uses ten macroeconomic variables to test if the behaviour of macroeconomic variables differs dramatically between the speculative period and the normal period. On the other hand, Krugman (1996) focused on the high level of external debt precipitating a crisis.

Dornbusch (1985) attributed the cause for debt crisis to inappropriate domestic policy measures manifesting themselves in large budget deficits and overvalued exchange rates. After studying the Brazilian external debt crisis, he pointed out that a loose fiscal policy coupled with a large increase in interest payments resulted in a massive deterioration of the current account.

Greene (1989) was of the view that had government's policies laid more stress on export promotion, the debt crisis could have been avoided. Instead,
government framed policy measures to improve infrastructure and long term development projects. It is due to inappropriate domestic policies that the fiscal deficit kept rising, resulting in a higher inflation, and an overvaluation of exchange rates.

Blanco and Garber (1986), Cumby and Van Wijnenbergen (1989) and Herrera (1991) found domestic credit growth as the chief indicator of the probability of a financial crisis. In a related study, Calvo and Mendoza (1995) in their study for Mexico concluded that the M2 / Foreign exchange reserve ratio, the central indicator for the stock imbalances and maturity mismatches in the financial sector, led to the crisis.

Kaminsky, Lizondo and Reinhart (1998) identified the domestic factors - international reserves, the real exchange rate, domestic credit, credit to the public sector and domestic inflation - as primarily responsible for the currency crises. They also include variables such as money growth, real GDP growth and fiscal deficit which, if unchecked, lead to currency crises.

Doroodian, Khosrow (1990) established a quantitative relationship between the foreign borrowing of seven heavily indebted Latin American countries and some major external and internal factors during the period 1971-1986. The results suggest that while the external factors play a large role in the debt
accumulation, internal factors are also important, implying that the domestic authorities can use fiscal and monetary policy to control the debt volume. Sachs (1985) points out that it is ultimately the domestic policy choices that led some countries into the debt trap.

Frank and Cline (1971), and Sargent (1977) using discriminant analysis, Feder and Just (1977), Feder, Just and Ross (1981) using logit analysis identified a number of debt servicing capacity indicators such as debt service ratio, import / GNI ratio, import/Reserve ratio, Amortization / External debt ratio, etc. which were responsible for the debt crises.

2. 2.3.3. Institutional Factors:

Alesina and Tabellini (1989) examine the implications of political uncertainty when two governments with conflicting distributional objectives alternate in office. The first government may recognize the possibility of a different type of future government which will have to service the debt. To the extent that the future cost of debt servicing is not fully internalized in the borrowing decision, the result will be an above-optimal level of borrowing. Political uncertainty can lead to over-borrowing, capital flight and low domestic investment. Berg and Sachs (1988) observe that political parties may indulge in huge spending with the borrowed money without having to incur the political costs of higher taxation or the inflationary costs of money financed deficits.
Chen and Khan, (1997) focus on the cost of financing and show how capital flows are affected primarily by the level of financial market development and the growth potential of recipient countries. The theoretical model developed in this study offers a simple unifying framework to explain the various patterns of capital flows. The model predicts positive excess returns on foreign portfolio equity investment in countries exhibiting a suitable combination of financial market development and growth potential.

Eichengreen, Rose and Wyplosz (1995) considered certain political indicators such as elections, change of governments, left-wing governments, new finance ministers etc. in their list of twenty five variables to examine the significant changes in devaluations. Edwards and Santaella (1993) include political indicators such as democracy, political violence, ideology, the number of coups etc. Klein and Marion (1994) included indicators such as trade concentration, regular executive transfers, irregular executive transfers etc. to identify the causes for currency crises.

Ghosh (2000) argues that countries are forced to accept the liability for private debt contracted by private parties, which is contrary to the "market theory" where the defaulting borrowers are not allowed to go bust, with a corresponding price paid by "greedy" lenders who lend money at a high rate of interest in order to increase their profit quickly, and the burden of repayment falls on the shoulders of the government and ultimately, on its people. While the IMF has been preaching free market operations in the international market for capital,
objecting to all government intervention in the matter of capital flows, IMF has a different set of rules for private borrowers and lenders setting their private disputes entirely in favour of external lenders. He quotes the examples of such behaviour of the IMF towards Thailand, South Korea and Indonesia.

2.2.4. Theoretical approaches to the Optimum Level of External Borrowing:
Philippopoulos, Apostolis (1991) investigates the optimal external borrowing in an open economy that faces an imperfect world capital market. As the country expands its indebtedness, it must pay higher real interest rates. The focus on the role of interest rates is justified by the fact that they have increased the debt-servicing burden for developing countries. Under this structure, he studies the endogenous dynamics of borrowing, current account, output, and consumption from the point of view of solvency. He also examines the response of these dynamics to policy changes in developing countries that put an upward pressure on world interest rates. Dornbusch (1991) discusses the optimal time path of consumption and external borrowing in the dependent economy model.

Selowsky, (1988), develops a simple traded / non-traded sector model with lagged elasticity response along with an application of an optimal borrowing theory to derive a quantitative relationship between the magnitude of the external shock and the optimal amount of external borrowing.

Bardhan (67) and Bade (1972) dealt with an inter-temporal optimisation problem. Bardhan was of the opinion that if left to the borrowers, borrowing
from abroad will tend to be excessive. Private individual borrowers will not consider the impact of excessive external borrowing and the consequent disutility to the nation as a whole. Private individual borrowers will keep on borrowing till marginal productivity of capital at home equals the rate of interest in the international capital market. In their optimization model, the optimal path is obtained when the marginal cost of external borrowing equals the marginal productivity of external capital. Given the supply function of external finance, this condition ascertains the optimum quantity of debt at each point of time. Gemmel (1988) through a macro model points out that optimal borrowing is linked with interest rates at the international market, productivity of borrowed capital and the availability of external capital.

Ostry (1997), used a model of optimal external borrowing and lending to estimate an actual time series of the optimal consumption-smoothing current account of five ASEAN countries: Indonesia, Malaysia, the Philippines, Singapore and Thailand. He predicted that the current account acts as a buffer to smooth consumption in the face of the transitory shocks to national cash flow, defined as output net of investment and government expenditures. The time series of the optimal current account generated by the model serves as a benchmark against which to judge the actual data. The analysis suggests that excessive external borrowing for private consumption (defined as an actual deficit above the level generated by the model) has not tended to characterize the experience of any ASEAN country in recent years, except to a small degree in Indonesia and Malaysia. This contrasts with the findings of a similar model for Mexico and other countries in Latin America, where the evidence of excessive consumption was much stronger. The paper concludes that even

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when the external position appears sustainable, there is a case to reduce current account deficits over time in order to minimize risks that may arise from such factors.

Addison (1989) argues that the Revised Minimum Standard Model (RMSM) was originally created in 1973 to ensure a consistent approach to World Bank projections. Its primary purpose, like the original two-gap models, is to show the user what levels of investment, imports, and external borrowing will be required to reach the targeted real GDP and export growth rates. But the RMSM cannot provide guidance on the policies or prices that are needed to reach such levels.

Cashin and McDermott (1998) examine whether Australia's pattern of international borrowing in its post-capital-controls period (1984 - 98) was optimal, by comparing it with the pattern of borrowing predicted by an optimizing model of inter-temporal consumption smoothing. They also discuss the differing implications for national creditworthiness of the concepts of national solvency, the sustainability of current account imbalances, and the optimality of international capital flows.

Dornbusch (1983) was of the view that optimal borrowing models, which include non-traded sector variables such as the exchange rate, play a crucial role for optimal borrowing decisions. Shishido, (1987) analyzes the impact of anticipated and unanticipated external shocks on the evolution of macroeconomic variables, particularly foreign borrowing, and on steady-state stocks of capital and debt.
Gupta (1994) points out that if one makes an inter-country comparison, one will notice that among 30 major developing countries, all had an external debt ratio to GNP higher than that of India in 1991. The concern, therefore, should not be for the ratio of the level of debt to GNP. Alternatively, it is the debt-service ratio of a country that conventionally measures its repayment abilities, and this should be considered for the optimum level of borrowing.

Identifying the desirable debt level is the general object of most of these models. Kharas (1988) used a social welfare function to examine inter-temporal allocation, and depicted economies as progressing towards a stable equilibrium characterised by equality between the marginal productivity of capital, the social discount rate and the marginal cost of funds.

2. 2. 5. Sovereign Debt, Country Risk and Repudiation:

2. 2. 5. 1 Sovereign Debt:

Adam Smith (1776) believed that a country can go bankrupt. He wrote, “When it becomes necessary for a state to declare itself bankrupt, in the same manner as when it becomes necessary for an individual to do so, a fair, open and avowed bankruptcy is always the measure which is both least dishonourable to the debtor, and least hurtful to the creditor”. However, forgetting what Adam Smith said three centuries ago, the widespread belief during the 20th century, particularly before 1980s, was, “Nations don’t go bankrupt” (Walter Wriston, Citicorp Chairman), indicating that the question of a country’s ability-to-pay does not arise.
The International debt crises of the 1980s and 1990s initiated the debate on whether a particular crisis is centred around the problem of Ability-to-Pay or Willingness-to-Pay. If a country faces a liquidity problem on account of its current debt servicing commitments, then it has the ability-to-pay problem in the short run. However, if a borrowing country has the resources for repayment but finds it optimal not to repay keeping the economic gains to be made by discarding its financial liabilities, then it is not illiquid or insolvent but it is insouciant. Eaton, Gersovitz and Stiglitz, after surveying the theoretical literature until 1986, emphasize that what is more common is the willingness-to-pay nature of the problem. Arora (93) observes that the Debt/GDP ratio might understate the magnitude of the ability-to-pay problem. A level of debt that appears low relative to the GDP may actually be high when examined in the context of the government's budget constraint, especially after taking into account political and structural considerations. Besides, to the extent that a country's trade balance is a more accurate indicator of its debt-servicing ability than the GDP, it is necessary to look at the fraction of output composed of tradable goods rather than at the aggregate GDP.

Cline (1983) and Krugman (1985) reasoned that the present crises are a short term problem of illiquidity and not a long run problem of insolvency. If the present value of a country's current and future income is less than its debt obligations then the country is insolvent. If a country is solvent, but does not have the cash money to service its debt obligations, then it is said to be illiquid. It was argued that if the problem is one of illiquidity then it can be solved by new lending, which helps nations tide over current, transitory repayment problems. However, Arora (1993) maintains that it is incorrect to argue that a country is
currently insolvent but will “become solvent” at some time in the future. Insolvency by definition means that the net present value of the country’s net income stream, less repayment obligations taken over the whole future, is negative. Krugman (1990), believes that the crisis is one of insolvency on a dramatic scale. However, Eaton (1990) cautions that the nature of the crisis varies across countries, solvency in the case of sub-Saharan Africa, illiquidity in the case of Latin America.

Traditional concepts of insolvency and illiquidity cannot encompass the sovereign debt problem. Since sovereign debt cannot be legally enforced, the primary consideration in lending to a country should not be just the size of the sovereign country’s assets but also the fraction of those assets that lenders expect will be devoted to debt servicing. This is related to the uses to which borrowed resources are put, the extent to which this decision can be influenced by lenders, and the penalties that lenders can inflict in the event of a default. The sovereign country’s debt repayment decision may be looked at as an assessment of the costs and benefits of debt repudiation.

2.2.5.2. Country Risk:
There has been considerable debate on the type of variables which must to be considered in projecting the performance of borrowing countries. Alder (61) and Gulhati (1967) discussed the parameters which play a pivotal role in determining the debt servicing capacity of a country. Kaminsky, Lizondo and Reinhart (1998) examine the empirical evidence on currency crises and propose a specific early warning system. The indicators that have proved to be
particularly useful include international reserves, the real exchange rate, domestic credit, credit to the public sector and domestic inflation. Other indicators that have received support include export performance, money growth, real GDP growth, and the fiscal deficit. Their proposed warning methodology involves monitoring the evolution of several indicators that tend to exhibit an unusual behaviour in the periods preceding a crisis. Every time that an indicator exceeds a certain threshold value, this is interpreted as a warning signal that a currency crisis may take place within the following 24 months. The variables that have the best track record in anticipating crises within this approach include exports, deviations of the real exchange rate from the trend, the ratio of broad money to gross international reserves, output, and equity prices.

Dooley and Svensson (1990) observe, the cost of a temporary suspension of debt service is that the debt continues to grow at the rate of interest. The present value of the repayment stream, calculated by using the debtor's discount factor, is lower if the discount rate is greater than the interest rate. The debtor thus gains by postponing repayment indefinitely into the future unless there is a penalty.

Klein (1990) provides a brief survey of some recent developments in the valuation of country risk. The basic setup distinguishes three concepts of debt service: total contractual debt service, debt servicing capacity, and actual debt service. Based on observations of stylized facts of rescheduling, it is assumed
that under insolvency the debtor country receives debt relief proportional to the
difference between contractual debt service and debt servicing capacity. A
number of studies on country risk include Eaton and Gersovitz (1981a),
Sebastian Edwards (1985), Smith and Cuddington (1986), and Bulow and
Rogoff (1986), and they have made significant contributions in this regard.

2.2.5.3. Repudiation:
Frank and Cline (1971) examined the quantitative aspects of default probability
using discriminant analysis, while Feder and Just (1977) used logit analysis.
Dhonte (1975) used the Principal Component Analysis to probe the debt
servicing capacity of a country. Mc Fadden, Eckaus, Feder, Hajivassilson and
O'Connell (1985) found that lenders were reluctant to roll over the principal due,
which leads to creation of pressure on liquidity when principal payments were
high. Vasudevan and Prasad (1991) found that money supply, Terms of Trade
and Trade Deficit were the key variables to deal with the debt repayment
problem.

Lenders are “atomistic”, and the only cost that lenders can inflict on the
sovereign country is to deny it access to future loans. In the absence of an
international regulatory authority to monitor and enforce international debt
repayment and its smooth transactions, there are bound to be serious financial
problems between countries. If such mechanism exists, then the volume of
international finance could be regulated by effective punitive measures and any
default of repayment on the part of the borrowing country could be
circumvented.
A country's "reputation" lies in its ability to use its current actions to influence lenders' expectations of its future debt servicing behaviour. The cost to the borrower of a debt repudiation is a loss of reputation which will come in the way of future loans. The benefits of repudiation consist of the real value of the outstanding debt. However, a default that follows an adverse shock does not result in a loss of reputation. The threat of autarky provides an incentive for borrowers to validate lenders' expectations for repayment and to maintain a trustworthy reputation for debt servicing. Ndikumana, and Boyce (1998) point out that during the dictatorship of Mobutu Sese Seko, the Congo accumulated a public external debt of roughly $14 billion. At the same time, Mobutu and his associates extracted wealth from the country. By 1990, with imputed interest earnings, the accumulated stock of Zairian capital flight was nearly $18 billion. Congo's successor governments may be able to repudiate liability for the Mobutu regime's debts. But creditors could then seek to recover their losses by identifying and impounding capital flight which was extracted from the country.

Bulow and Rogoff (1989a) and (1989b), Lindert and Morton (1989) point out that as long as a country has access to international capital markets, the country would find it optimal to use its resources to buy a portfolio of assets, rather than to repay its debt, for example, treasury bonds, whose payoff is negatively correlated with the country's output, so as to allow risk shifting. Since the country is willing to pay with its resources, it should be able to obtain these assets. This, however, amounts to an "unjustifiable repudiation" of its debt servicing obligation, and the country loses its reputation and access to future loans. Hence, the important penalties for default are the trade sanctions
imposed by creditors, which force the defaulting country to forfeit its gains from trade.

However, Lindert and Morton (1989) argue that countries which defaulted on their debt obligation were often not punished by their creditors either with direct sanctions or with discriminatory denial of later credit. Eichengreen (1989) also finds that lending to defaulting countries was usually resumed after a few years. Cardoso and Dornbusch (1989) and Jorgensen and Sachs (1989) also document the "negative externalities" arising from default in terms of reduction of capital flows to all indebted countries.

On the other hand Ozler (1993) finds empirical support for the argument that previous defaults have a significant impact on the current terms of credit. She points out that countries with repayment difficulties were subsequently charged a higher interest rate than others. As Arora (93) points out, this presumably reflects the high initial costs of information, and leads to the issue of information asymmetries. Atkeson (1991) studies a model of international lending with a moral hazard (i.e. asymmetric information about the actions of borrowers). The moral hazard problem arises since lenders are unable to ascertain the relative amounts of debt used for consumption and investment.

5. Moral hazard refers to the situation where the very provision of insurance raises the likelihood of the event being insured against taking place. This is due to the fact that insurance reduces the incentives for the insured party to take preventive actions. For example, the IMF’s role as a lender to countries in financial crisis actually encourage borrowers and leaders to behave in a way which precipitates a crisis.
Cole, Dow and English (1989) argue that the defaulting country need not be excluded from capital markets for a fixed length of time. If a country can signal to lenders that the type of government has changed, it will be able to resume borrowing before the fixed punishment period has elapsed. A typical practical observation can be made from the lending provided to Pakistan by President George W. Bush as a reward for Pakistan's support to "war against terrorism". Arora (1993) observes that International banks that lend, invest, and provide trade finance, and large multinational corporations that invest and trade in goods and services, are the ones who can inflict the largest penalties for debt repudiation as a "cost of default" (i.e. negative effect on the welfare of the borrowers as a consequence of default). Banks can withhold loans and trade finance to a country in default while multinationals can lower investment or withdraw completely from the country. While banks are concerned about the profitability and timely repayment of loans, multinationals are mainly concerned about the growth prospects of the country and the security offered to foreign investors. If sanctions are imposed, the debtor and creditor countries both forfeit their gains from trade. A government's decision to retaliate is as much a political as an economic one. Gale and Hellwig (1989) point out that the larger the penalty, the less likely would the borrower tend to default. However, as Eichengreen and Portes (1986) point out, in practice penalties do not appear to be very heavy and default is not something that is unusual.
Debt repudiation patterns by developing countries have been captured in a number of models in the light of the possible credit risk which alter the behaviour of both creditors and borrowers. Sachs and Cohen (1982) and Sachs (1984) explain that the presence of sovereign risk can help to explain credit rationing, debt rescheduling, conditionality and the maturity structure of international obligations.

Corsetti, Giancarlo; Pesenti, and Roubini, (1999) present an interpretation of the Asian meltdown focused on moral hazard as the common source of overinvestment, excessive external borrowing and current account deficit. They point out that to the extent that foreign creditors are willing to lend to domestic agents against future bail-out revenue from the government, unprofitable projects and cash shortfalls are refinanced through external borrowing. While public deficits need not be high before a crisis, the eventual refusal of foreign creditors to refinance the country's cumulative losses forces the government to step in and guarantee the outstanding stock of external liabilities. Jeanne and Zettelmeyer (2001), Lane and Phillips (2000), and Dell' Ariccia, Godde, and Zettelmeyer (2000) attempt to test out moral hazard issues in the international bailout programme.

Alesina and Tabellini (1989) argue that the costs of debt repudiation also may fall unequally across the population, thereby affecting the incentive of the
government to repudiate its debt. For example, if one of the penalties for repudiation is the seizure of private assets held abroad, then repudiation is less costly for the government that represents the interest group holding fewer such assets. Townsend (1978) and Gale and Hellwig (1989) point out, the normal practice of debt contracts does not allow for debt repudiation and renegotiations. It is assumed that the contracts are carried out as written. However, actually, as we observe all over the world, renegotiations are a common feature in many developing countries.

2.2.6. Effects of Debt on Investment and Development:

Bajpai (1994) correctly observes that there is a broad consensus among economists about the theoretical possibility of a debt overhang which can damage the prospects of both creditors and debtors by way of discouraging private investment and economic policy reform. Experts with diverse views now tend to agree that domestic policy reform, foreign direct investment, and returning flight capital, together with modest and voluntary debt reduction have not succeeded in restoring growth and creditworthiness in the debt distressed countries.

As Rogoff and Zettelmeyer (2002) point out, one of the major developments in the mid-1980s was the recognition that high levels of debt could lead to inefficiently low levels of growth because the need to repay the creditors acted
like a tax on investment. Taker to the extreme, this implied that debt forgiveness might benefit not only debtors but also creditors if the write-off of nominal claims is more than offset by an increased likelihood that the country might repay its remaining debt. Sachs (1986) propounding the debt-overhang argument on the effect of external debt burden on investment and growth, observes that beyond a point, high external debt acts as a marginal tax on investment. He points out that a fraction of the gain in output resulting from increased investment finds its way to creditors in the form of debt repayment. High indebtedness can therefore lead to low investment, low growth, and ultimately to low repayment.

A country has a debt overhang problem when the expected present value of a potential future resource transfer is less than its present debt. Sachs (1988b) is of the view that a high level of debt could act as a tax on a country's domestic investment strategy. It is argued that a high debt burden would reduce the incentive to adjust since most of the benefits from the increased output would have to be repaid to the creditors. Sachs (1984) and Krugman (1985) point out that there could be conflicts between the creditors' individual and collective interests, and that free-rider problems could restrain new lending. Bandera, and Lucken (1985), investigate how the debt services on inherited and new foreign indebtedness could act as constraints on the debtor's rate of growth, especially when new external borrowing is subject to certain conditions. Deshpande (1995), through a mix of micro theoretic and empirical work points
out that the debt overhang hypothesis which postulates a negative relationship between high levels of external debt and investment, is valid. Through an empirical estimation exercise, she finds that for Mexico, the Philippines and South Korea there exists an inverse U-shaped relationship between the investment ratio and the debt ratio for each country. Thus, she suggests that a critical debt to the GDP ratio can be worked out at which the investment to the GDP ratio peaks, beyond which the investment ratio starts declining. She concludes that high levels of external debt are seen as a tax on investment due to repayment compulsions.

Eaton (1990) objects to Krugman's Laffer curve by arguing that if such a Laffer curve exists it means that creditors, being rational, have knowingly taken losses for a number of years. He also observes that the overhang is largely responsible for slow growth pointing that both exogenous shocks and domestic policy are central to the crisis. Bulow and Rogoff (1990) point out that much of the slowdown of growth in Latin America occurred between 1980 and 1983, when these countries were required to make large repayments. However, general observation points to the fact that investment and growth have indeed been lower in severely indebted countries.

Warner (1990) presents an empirical analysis that raises further skepticism about the argument that the debt overhang was empirically significant in explaining low investment. Aizenman and Borensztein (1989) show that, in a strategic investment framework, the effect of the overhang on incentives to investment are ambiguous. In particular, there are conditions under which the overhang acts as a subsidy (i.e. increases the incentives for) investment. If a
debtor is unable to meet its repayment obligations then the level of repayment is determined by a bargaining game. The argument is that if domestic capital is a good substitute for imported inputs then the threat of autarky is less potent than if it were a poor substitute. Thus, it is possible that an increase in investment strengthens the country’s bargaining position and therefore reduces its level of repayment. In such a case the incentives for investment are increased with high indebtedness. Cohen (1992) finds that although the debtors experienced a marked slowdown in growth rates in the 1980s, the slowdown did not seem to be a function of variables such as stock of debt and the flow of net repayments that were highly correlated with the debt crisis. The collapse of growth rates in most of the heavily indebted countries in the 1980s, and the realization of an insolvency problem, could make full repayment of the current outstanding debt impossible despite any incentives.

2.2.7. Debt Restructuring and Debt Relief:

Debt reduction typically takes the form of debt relief or debt restructuring. Arora (93) observes that from the point of view of creditors, the case for debt relief is based on the incentive considerations in the debt overhang argument and on the contention that debt relief directly increases the likelihood of repayment.

6. Restructuring or rescheduling old loans is nothing but changing the conditionalities on old loans, in terms of providing a longer period of time to repay, and/or reducing the higher interest rate that was agreed upon at the time of contracting an old loan to a lower interest rate, thereby reducing the cost of servicing it. However, this restructuring is accompanied by certain conditions on implementing a package of economic policies designed by economic advisors and experts of the IMF, usually known as Structural Adjustment Programmes (SAP). SAP includes the privatisation of state-owned companies, a cut in the budget deficit, a reduction in government spending, the removal of subsidies and sops, the abolition of tariffs, the removal of protection provided to local industries, and the devaluation of the local currency.
The basic difference between Baker and Brady debt-reduction plans was precisely that Baker treated the crisis as a short-term liquidity problem that could be solved by new lending, while Brady recognized the possible existence of a solvency problem that called for debt relief. The objections to debt relief are based on the “precedence” problem and the free rider problem. The “precedence” problem states that providing debt relief to one debtor weakens the bank's bargaining position vis-a-vis the remaining debtors. The free rider problem arises because when a country receives debt relief the market price of its remaining debt increases. Since holders of this debt receive a capital gain each creditor has an incentive to refrain from providing debt relief but gains if other creditors do so.

The disincentive to invest, on the part of a borrowing country, due to its enormous debt-overhang could, therefore, be overcome by market based debt relief schemes as well as debt forgiveness. Froot (1989) found that countries which are severely constrained by liquidity were more likely to be on the wrong side of the debt-relief Laffer curve. Hence he proposed the optimal relief package which includes new lending as well as partial debt forgiveness.

Sachs (1988a) proposed an "incentiveness" argument in favour of debt relief and points out that debt relief adjustment efforts will raise the capacity of a borrowing country to better design its investment strategy which in turn will raise its capacity to repay its adjusted debt. Krugman (1988) illustrates this point through his debt-relief "Laffer Curve". The debt-relief "Laffer Curve"
explains that if the level of indebtedness is high enough then reducing the face value of an outstanding debt will increase the present value of repayment. Hence he postulates that beyond a certain point, the disincentive effect of additional debt is so huge that the repayment from the country begins to decline, and consequently debt repudiation is inevitable. He suggests that debt forgiveness provides a sure gain to the debtor country as it minimises the foreigners' claims on domestic resources.

2.2.7.1. Debt Restructuring:

As a solution to the sovereign debt problem of a country to boost its repayment capacity and to provide encouragement to repay its debts, Helpman (1988), and Krugman (1989) propose market based "buy-back" schemes and "exit bonds" in terms of "debt-equity swaps". However, Dooley (1988b), (1988c) shows that there is no general structure of benefits associated with a buy-back. Bulow and Rogoff (1988a) based on their study on Bolivian buy-back experience show that buy-backs typically harm the debtor country unless accompanied by direct debt relief. This is because of the difference between "average" and "marginal" debt. In a buy-back, the country pays the full market price for its debt. (That is, it retires the marginal debt at the price of the average debt). The lowering of the outstanding debt is meaningful only if the country is going to be in a position to service all of its debt. If not, then buying back at the margin does little to change the market value of outstanding debt and is "essentially a gift to creditors". If Bolivia could have retired all of its debt with the buy-back then of course such a move would have made sense. However, the
repurchase of a fraction of its debt hardly changed the market value of the country's obligations or its ability to reduce the debt burden.

Helpman (1989) provides an analytical discussion on debt-equity swaps. In a debt-equity swap, lenders' sell the debt at a discount to a third party, who in turn first redeems the loan paper for domestic currency from the central bank of the debtor country, and then acquires an equity claim on a firm in that country. The discount implies that, for the investor, the transaction is more favourable than a straight foreign exchange market transaction.

Van Wijnbergen (1990) argues that reserves have an "insurance value" for the debtor. If a country uses its own foreign exchange reserves for the buyback, then the debtor's degree of risk aversion would be greater than that of its creditors. After the buyback, if the debtor decides to devote resources to consumption then it loses its reserves too.

Dooley (1988a) and (1988c) shows that there is no general structure of benefits associated with a buyback. Each case depends on the alternative use of funds. For example, a buyback that is financed by the sale of assets does not result in a rise in the market value of a country's debt. In fact, Froot and Krugman (1990) caution against self-financed buybacks by "cash starved countries" since the shadow value of reserves for a country with a liquidity problem is greater than its face value. They also argue that buybacks are not a realistic solution to the crisis because it is unlikely that there will be deep discounts on the debts of those debtors who have the resources to make large repurchases. All of this
suggests that one ought be to skeptical of overly general answers to the buyback question.

In case of a borrowing country experiencing insolvency, Dooley and Helpman (1992) propose to provide tax credits to creditors in exchange for debt reduction. Debtors see the removal of disincentives for investment and have a lower contractual amount of debt to repay. Creditors receive tax incentives for investment, since future investments will be susceptible to lower tax rates than they would have been without the tax credits. If a particular creditor does not wish to continue to invest in a particular country, it could sell its tax credits to a third party. A tax credit scheme can be implemented unilaterally by the debtor country government, thus avoiding the bargaining problem inherent in other debt relief plans. In their bargaining theoretical model, Bulow and Rogoff (1988) consider multilateral dimensions of a developing country as debt rescheduling.

However, Arora (1993) observes, if a country is insolvent then additional borrowing merely pushes the debt-servicing problem into the future. He suggests that buybacks can be part of a package of debt reduction, in which additional financial flows may be induced by the availability of a broad menu of assets with different contractual characteristics. According to him, the buybacks that occur in an agreement between debtor and creditors, such as those following the Brady plan, can be conducted at a price that is agreed upon ex ante. This circumscribes the free rider problem that would otherwise arise amongst creditors and allows the country to retire more of its debt than would a repurchase at the ex post price. Cohen and Verdier (1992) point out that if
buybacks are conducted "secretly", through a third party, then it can permit reductions in the debt with no rise in the market price.

Deshpande (1995), expressing her views against the current debt adjustment strategy, argues that to the extent that the results regarding loan pushing are valid, it can be argued that if the debtors benefitted from the lending boom, so did the creditors. Fairness then requires that both be made to bear the cost of adjustment.

Carlson, Husain and Zimmerman (1995) argue in favour of debt reduction based on a debt overhang hypothesis. They argue that debt reduction could potentially increase future repayments by improving the debtor's incentive to invest. They analyze a series of debt contracts in which contingencies for debt rescheduling and forgiveness are part of the contractual agreement. The analysis indicates that the contract that allows the highest debt ceiling, and hence the highest welfare is the one with contingencies for both rescheduling and forgiveness. Under this contract, if the debtor country experiences an adverse output shock, part of the debt due is repaid, a portion is forgiven, and the remainder is rescheduled. At the same time, there is a net new lending to the debtor country.

Claessens (1990) through empirical assessment finds that although the present value of repayment, measured by the secondary market price, is concave with respect to the face value of outstanding debt, there are very few cases in which it actually begins to slope downward. Corden (1988b) propounds the "debt-
forestalling" argument. He is of the view that sufficient relief may discourage default; and repayments after relief may be greater than after a partial default.

Cooper and Sachs (1985), Krugman (1985) and Gersovitz (1985) focussed on creditors' confidence. According to them, at a high equilibrium level the developing countries could roll-over their debt at ease. However, Helpman (1988), (1989), Cordon (1988a), (1988b), Frost (1989), Krugman (1988), (1989) and Sachs (1988a), point out that this way of reasoning has little substance to prove that debt relief could lead to public welfare.

According to Oechsli (1981), sovereign debt restructuring under the status quo suffers from several problems. Negotiations take too long, and their outcome is too uncertain, harming the debtor and delaying the rehabilitation process. Moreover, they may be insufficiently focused on "an LDC's basic development as a means to strengthen the country's credit and debt service capacity". He points out that this is due to the "lack of established procedure" and poor creditor coordination. By poor creditor coordination, he means that primarily a lack of coordination between classes of creditors negotiating separately, in particular, the private and official sectors, rather than across individual private creditors.

Bulow and Rogoff (1990) argue that "far from speeding compromise, the presence of official creditors has tended to ossify the negotiating position of the banks and countries. Dooley (1994) and Eichengreen and Portes (1995) make similar points. The IMF's policy of lending into arrears, which was formally adopted in 1989, can be viewed as a response to that problem. The three-way
negotiation framework (between creditor, private creditor, and official creditor) of Bulow and Rogoff (1988) proved useful not only in understanding the ex post inefficiencies that Oechsli was concerned with, but also in analyzing the potential moral hazard problem ex ante facing creditor country governments and international financial institutions. In the Bulow and Rogoff (1988) framework, knowledge that creditor country governments have a stake in the continued smooth flow of trade, and no way credibly stay out of debt-rescheduling negotiations, leads private creditors to charge lower risk premia to sovereigns than they might otherwise. Wells (1993), Bhattacharya and Detragiache (1994), and Klimenko (2001) used a similar bargaining - a theoretical approach to rescheduling issues.

2.2.7.2. Debt Relief:
Ajayi (1997) presents the policy implications of capital flight and international efforts to deal with the high levels of external debt in conditions of extreme poverty and of stagnant or declining exports which exist in sub-Saharan Africa. He proposes a review of the theoretical foundation of the external debt strategy which he points out is based on four assumptions, namely, (a) the external debt of debtor countries is a liquidity problem, (b) given a buoyant international economy, debtors will grow out of debt through increased exports, (c) there is no debt overhang, and (d) and the strategy applies a one-size fits all countries approach. He pleads for debt forgiveness rather than rescheduling and suggests that policies need to be designed for sub-Saharan Africa with flexibility to address country-specific problems and situations.

On the similar lines, Boote and Thuçge (1997) argue that heavily indebted poor countries (HIPC's) continue to have difficulty in paying their external debt-service obligations, largely because of exogenous factors, imprudent debt-
management policies, and the lack of sustained adjustment or implementation of structural reforms. Many HIPCs will continue to need concessional external assistance given their high levels of poverty and limited domestic resources. Besides, many face serious infras-structural problems, and some also need to address problems of governance, particularly as they influence investor confidence. They call for a new paradigm in international action.

2.2.3. Recent Developments:
Haldane and Kruger (2001) propose IMF-endorsed payments moratoria as the centrepiece of a structured crisis resolution mechanism, in which large bailouts are avoided except as a last resort in crises that threaten the stability of the international financial system. They think of the IMF endorsed unilateral standstill as a mechanism to deal with both liquidity crises and debt crises. They are of the view that the IMF can create incentives for debtor-good behaviour by offering the “carrot” of the IMF lending into arrears. It would be required by the IMF to attach conditionality to lending into arrears, and would include good faith7 bargaining with creditors during the standstill, equal treatment of creditors, giving seniority to new money, transparency8, and a time limit to the standstill.

However, their proposal lacks protection against litigation, and a provision to impose agreement on a dissenting minority. Eichengreen’s (2000) main argument is that attempts to limit “the moral hazard caused by IMF bail-outs”

7. Good faith is defined as not seeking debt reduction beyond what is necessary to establish medium-term debt sustainability.

8. Transparency is understood as information provision to creditors is not abridged.
are not credible, and will not be effective, so long as the international community does not find alternative ways to resolve sovereign debt crises. Going by the views of Haldane and Kruger, he argues in favour of a non-statutory approach to debt crises. Lerrick and Meltzer (2001) propose an IMF-supported debt workout mechanism, motivated along lines very similar to Eichengreen (2000). Their view is that repeated large-scale crisis lending “creates a moral hazard and subverts incentives”; consequently, some other way must be found to address the market failures that generate pressures for bailouts in the first place. They propose (a) an IMF-endorsed moratorium on debt payments, (b) debtor-creditor negotiation during the moratorium, and (c) IMF financial support by unconditional lending for a limited time period, to place a floor below secondary market debt prices at 80 - 85 percent of the fraction of debt that is deemed sustainable. The sole purpose of this form of IMF financing would be to prevent debt prices falling below “reasonable” levels during the restructuring period.

2.4. Conclusion:

Investigating the past three decades of prevailing knowledge and wisdom on external lending and borrowings, resulting in debt servicing problems of many developing countries, one may observe that they are centred around the following issues:

1. The Marshall Plan of the 1940s with goodies such as grants, aids and soft loans from the World Bank (WB) and the IMF for the development of Europe has disappeared from the face of the earth. The external finance strategy adopted by these agencies has been one of a sales technique, historically, for they began with a good number of free gifts, grants, concessions and the rest. However, once their customers, mainly the poor countries, got hooked on to
their capital, they stopped the freebies and began showing their true colours by imposing harsher terms and conditions. It is evident from the experience of many developing countries that the type of globalization, liberalization and structural adjustments etc. that these agencies propagate are more beneficial to the developed countries than the capital borrowing countries. Hence there is a need for a modified Marshall plan, and at best a new paradigm for the poor countries to master the art of fighting inequality within the country and between its different regions by better management of its finances.

2. The External capital, Tropital (explained in the previous chapter), in the name of external grant and assistance, has robbed the nations around the world, and has burdened the poor countries over the years with a huge amount of external debt hung around their necks. This is amply visible, especially, in the external borrowing experience of Sub-Saharan Africa. It must be noted that as the wrappers on this gifted Tropital began to peel off, since the 1980s, the real picture of this Tropital became more visible, and one could easily identify it as the commercialization of capital (Compital!). This commercialization of capital has widened the gap between the rich and poor nations, as the poor countries had to pay back the richer countries a substantial amount of interest along with the Tropital. Therefore, the higher the interest charged on the Tropital, the wider the gap, thus making the poor nations poorer.

3. Although, the literature pertaining to external borrowings refers to imprudent borrowing by poor countries, it should be noted that both borrowing and lending are indicators of a basic disequilibrium. A number of developing countries, especially India and Mexico which are the focus of this study, have a perennial problem with their current account balance. The current account deficits in
these countries, as shown in chapter three, have their link with their external borrowing requirements. Borrowing from abroad to handle the day-to-day financial needs is a highly inappropriate solution, for the borrowed funds find their way into a bottomless pit without any economic return. Therefore, there is nothing like imprudent lending and imprudent borrowing, for all borrowing to finance a deficit should always be considered imprudent. The donor country does not pay attention to the purpose and the use of the borrowed capital, and much worse, it does not envision the repayment capacity of the borrowing country. On the other hand, the current government does not consider how it can repay the past borrowings contracted by its predecessor/s, but is busy with how, how much, and from where it can add to the existing debt and get away with it; for its major concern is how it can keep its vote bank in good humour so that it can come back to power once again.

Our political leaders do not seem to realize that the national debt owed to another country does not serve the purpose of its citizens. If they do realize the implication of a huge external debt, then they try to cover it up successfully by diverting the attention of its citizens to other issues to keep them emotionally charged, thus constraining everyone to live in a fool's paradise.

Common citizens have no say in how much, and on what terms and conditions the country should borrow. Who makes the decisions on behalf of the people, and what are the revealed efforts? If imprudent lending is one side of the same coin, as imprudent borrowing, then International Financial Institutions such as the IMF and the WB need to play a prudent role in educating both the lenders and borrowers to equally share the burden of debt. If these institutions cannot
remain neutral, then there is a need for drastic surgery to give them a human face.

4. Domestic policies are very important in shaping the economy with its new and evolving problems of growth and development, as revealed in the experience of Japan, Germany and other countries. Foreign policies are made in relation to the external environment, depending on external prices, demand and supply etc. Therefore, while dealing with external borrowings, putting the blame on external factors for the domestic mess projects only a partial picture of the growing problem. Various suggestions, based on the experiences of different countries, with regard to the use of monetary, fiscal, trade and exchange-rate policies have emerged in order to fine-tune the economy according to a country's specific requirements. Institutional factors such as politics, religion, unfair interference by the IMF, a weak banking sector, etc. have also played their role in precipitating the crises.

5. The approach of an optimal level of external borrowings considers the endogenous dynamics of borrowing, current account, output, and consumption from the point of view of solvency. The purpose of finding an optimal level of external borrowing is linked to levels of investment, imports, and external borrowing which are linked to the targeted real GDP and export growth rates. Along these lines, chapter 4 deals with the importance of determining the optimal level of interest rates on external borrowing that is compatible with domestic growth through a theoretical economic model.

6. There is a broad consensus among the economists about the theoretical possibility of a debt overhang which can damage the prospects of both creditors
and debtors, and discourage private investment and economic policy reform. High levels of external debt lead to inefficiently low levels of growth since the need to repay the creditors acts like a tax on investment. Besides, a high debt burden reduces the incentive to adjust since all or most of the benefits from increased output would have to be repaid to the creditors.

7. Most of the developing countries face an Ability-to-Pay rather than a Willingness-to-Pay problem. Traditional concepts of insolvency and illiquidity cannot encompass the sovereign debt problem. To the extent both creditors and debtors jointly decide on the use of the credit, conflict in the event of default must be shared by both. Therefore, the lesson that a country must learn is to borrow less, manage the finances intelligently, and look towards development.

8. Various schemes such as “buy-backs”, “exit bonds”, “debt-equity swaps”, are essentially attractive gift wrappers, but basically a gift to creditors. Foreign exchange reserves have an “insurance value” for the debtor. If a country uses its own foreign exchange reserves for the buyback, and if the debtor decides to devote resources to consumption then it loses its reserves too. It would amount to throwing the baby out with the bath-water. Buybacks are a realistic solution of the crisis if the country consistently generates a surplus in its current account, and then captures some of the surplus for its reserves. Besides, each case depends on the alternative uses of funds, and hence no generalization is possible. Tax incentives and the provision of selling tax credits to a third party avoids the bargaining problem inherent in other debt relief plans.
9. If a country is insolvent then additional borrowing merely pushes the debt-servicing problem into the future. Therefore, buybacks can be only part of a package of debt reduction, in which additional financial flows may be induced with different contractual characteristics. The phrase, “loan pushing” seems to have its genesis in the Adam and Eve story where Adam blames Eve, and Eve in turn blames the snake. However, to the extent loan pushing is valid, fairness requires that both partners be made to bear the cost of adjustment. Debt reduction based on the debt overhang hypothesis could potentially increase future repayments by improving the debtor’s incentive to invest. Debt forgiveness could be part of the contractual agreement, at the time of borrowing. The highest welfare can be achieved when there are contingencies for both rescheduling and forgiveness. “Debt-forestalling” by sufficient relief may discourage default. However, debt restructuring suffers since negotiations take too long, and their outcome is too uncertain, harming the debtor and delaying the rehabilitation process.

10. While dealing with the external debt, a nation must be able to offensively deal with the productivity of the external credit and generate surplus in its current account, and defensively through efficient taxation and other revenues. This calls for a new paradigm, which is discussed, and empirically brought to light with the help of a theoretical economic model in chapter 4.

It is with this background that chapter 3 undertakes an analysis of the trend in India’s external borrowings, and tries to verify the nexus between external liabilities and the current account deficit, in relation to Mexico and a few sample countries.