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A STUDY OF EXTERNAL DEBT ON ECONOMIC GROWTH – EMPIRICAL EVIDENCES FROM INDIAN ECONOMY

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Abstract
Current Account is an important component of Balance of Payment which represents country's foreign transactions. A Current Account Deficit indicates negative sales abroad. A country undergoing Current Account Deficit results into foreign liabilities and debts with rest of world. This further leads to payback of valuable foreign exchange reserves. Substantial amount of foreign exchange are spent on paying out these debts. One important drawback of increasing external debt is decline in value of nation's domestic currency. Payment of foreign debts results in increase in demand of foreign currencies. This leads to devaluation of domestic currency and thus, enhances problems of foreign exchange crises. There are various factors which influence country's External Borrowings as well as Foreign Exchange Rates. One such important factor is Current Account (Trade Balance) Deficit. There is a need to study the impact of Current Account Deficit of India on its External Borrowings as well as on Foreign Exchange Rates. The present study tries to study trend of India's Current Account Balance and External Debt of India over a period of two decades i.e. from 1990 – 91 to 2012 –13. Study also covers analysis of components of India's Total External Debt that includes long term debt and short term debt. Finally, study determines correlation between India's Current Account Balance with External Debt, its components, and selected Foreign Exchange Rates that includes US Dollar, Pound Sterling, Japanese Yen & Euro Dollar.

Keywords: Current Account Deficit, External Borrowings, Foreign Exchange Rates.

Introduction
Current Account as a part of Balance of Payment includes all the transactions (other than those in financial items) involving exchange of economic value which takes place between resident and non-resident entities. Current account records all flows of goods, services and transfers. Current account is broadly divided into two parts. First is Balance of Trade (BOT) which deals only with exports and imports of merchandise or visible items. Second is Balance of Invisibles (BOI) that records net receipts on invisible items like dividends, interests, royalties, travels, insurance, banking, transportations and unilateral transfers. Current Account as an important component of Balance of Payment highlights a country's foreign transactions of a period of time. It is the sum total of Balance of Trade (i.e. net revenue from exports minus payments for imports), factor income (earnings on foreign investments minus payments made to foreign investors) and cash transfers. As a measure of nature of country's foreign trade, Current Account equals to the change in net foreign assets. Positive sales abroad (exports greater than imports) contribute towards current account surplus. This surplus is possible only when an economy is consuming and spending less than what it is producing. The resulting savings are then invested abroad and thus, foreign assets are being created. If an economy is running into current account deficit, it means that domestic consumption, spending and investments are more than what it is actually producing. This will lead to rising foreign liabilities and decline in foreign asset.

The term Debt refers to sum total of a government's financial obligations, measures the state borrowings from its population, from foreign organizations, from foreign governments and also from international institutions. Higher debt liability results in higher uncertainties in economic policies. External debt refers to the amount owed by one country to outside agencies, institutes and foreign governments. External debt results when a government borrows money from foreign lenders.

Each currency has geographical jurisdiction to function as legal tender in settlement of debt. Foreign exchange includes foreign currency, balances kept abroad, instruments payable in foreign currencies and instruments drawn abroad but payable in Indian currency. Foreign exchange is earned by exports and is spent on imports. The rate at which one currency is converted into another currency is the rate of exchange between concerned currencies. Exchange Rate is the price of one country's currency expressed in another currency. In simple words, exchange rate is the rate at which one currency can be exchanged for another. This exchange rate for a currency is known from the quotation in foreign exchange market. Similar to any commodity or stock market, rates in foreign exchange market are determined by interaction of forces of demand for and supply of foreign exchange. As this demand and supply are affected by number of factors, the exchange rates keep on changing frequently. One of the important factors affecting exchange rate is the amount of external debt and its composition.

Significance of Study
There are various factors which influences foreign exchange rates of an economy. One such important factor is the Current Account Deficit and thereby resulting increasing external liabilities and debts. Rising trade deficits creates additional burden

on domestic currency for any nation. At the same, payment of external borrowings including both principal loan as well as interest burden is usually paid in foreign currencies. This involves transfer of scare financial resources from domestic country to foreign countries. One important drawback of continuous increasing trade deficit is decline in value of nation's domestic currency as it results in increase in demand of foreign currencies. This leads to depreciation / devaluation of domestic currency, making it poorer in foreign exchange markets and enhancing the problems of foreign exchange crises. India as a developing economy faces the obstacle of continuous and huge deficits in its Current Account Balances over a period of time. This prolong deficits leads to various problems like overvalued real exchange rates, inadequate foreign exchange reserves, unfavourable terms of trade, higher interest rates, lower growth rate, etc. Hence, there is a need to study trend and relationship between India's Current Account Deficit and External Debt of India. Also relationship between India's Current Account Deficit and major foreign exchange rates needs to be determined.

Research Methodology
A. Objectives of Study

- To study the trend and movement in India's Current Account Balance
- To study the trend and components of External Debt of India
- To determine relationship between Current Account Deficit with External Debt of India and selected Foreign Exchange Rates

B. Scope of Study
The present paper tries to study trend and movement of India's Current Account (Trade) Balance as well as External Debt of India over a period of two decades i.e. from 1990 – 91 to 2012 – 13. Study covers analysis of components of India's Total External Debt that includes long term debt and short term debt. The study points out percentage-wise currency composition of India External Debt. Finally, the study determines correlation between India's Current Account (Trade) Balance with India's External Debt, its components and selected Foreign Exchange Rates. Foreign exchange rates covered under study includes US Dollar, Pound Sterling, Japanese Yen and Euro Dollar. This correlation is determined for a period of two decades i.e. from 1990 – 91 to 2012 – 13. Euro Dollar currency is considered from the year 1999 when it was first introduced.

C. Methodology

a) **Type of Data:** Secondary data has been collected and used for the present study.
b) **Sources of Data:** Secondary data was collected from internet, reference books, articles, publications, etc related to India's Current Account (Trade) Balance, External Debt of India and Foreign Exchange Rates.
c) **Tools for Data Analysis:** Graphs, Percentage, CAGR and Correlation
d) **Duration:** Study covers trend and analysis of India's External Debt and Foreign Exchange Rates over a period of two decades i.e. from 1990 – 91 to 2012 – 13

Data Analysis and Interpretation

Table 1: Table showing India's Current Account Balance (Net) p.a. from 1990 – 91 to 2012 – 13

Year	Current Account Balance
1991	-17,366
1992	-2,235
1993	-12,764
1994	-3,634
1995	-10,583
1996	-19,646
1997	-16,282
1998	-20,883
1999	-16,789
2000	-20,331
2001	-11,598
2002	16,426
2003	30,660
2004	63,983
2005	-12,174

2006	-43,737
2007	-44,383
2008	-63,535
2009	-1,27,621
2010	-1,79,708
2011	-2,10,110
2012	-3,76,078
2013	-4,79,653

Source: Reserve Bank of India (RBI)

Interpretation : The above table and graph illustrates trend and movement of Current Account (Net) Balance of India over a period of two decades i.e. from 1990 – 91 to 2012 – 13. It can be seen that since beginning current account balance p.a. was negative (in deficit), indicating outflow more than inflows. Over the period, this deficit has increased considerably at a CAGR of 15.521%. During first decade under study, this deficit underwent substantial fluctuations every year. However, from 2001 – 02 to 2003 – 04, current account showed surplus balance which also kept on rising continuously. But from 2004 – 05, current account balance turned negative and this deficit grew constantly year after year. The rate of growth in deficit has accelerated tremendously after March 2007 as it has rose nearly 11 times since then.

Table 2: Table showing Total External Debt of India from 1990 – 91 to 2012 – 13

Year (March End)	Total External Debt of India (Rs. In Crores)
1991	1,63,001
1992	2,52,910
1993	2,80,746
1994	2,90,418
1995	3,11,685
1996	3,20,728
1997	3,35,827
1998	3,69,682
1999	4,11,297
2000	4,28,550
2001	4,72,625
2002	4,82,328
2003	4,98,804
2004	4,95,459
2005	5,86,305
2006	6,20,522
2007	7,51,402
2008	8,97,290
2009	11,42,125
2010	11,78,638
2011	13,66,292
2012	17,67,702
2013	21,19,620

Source: Reserve Bank of India (RBI)

Interpretation: The above table and graph shows trend and movement of Total External Debt of India over a period of two decades i.e. from 1990 – 91 to 2012 – 13. It can be seen that external debt of India kept on increasing significantly during the period at regular intervals. It has increased at a CAGR of 11.799%. This external debt rise to three times till March 2004. However, since then its rate of growth accelerated significantly and this debt rose more than 4.25 times from 2004 – 05 to 2012 – 13.

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Table 3: Table showing Classification of India's Total External Debt into Long Term debt and Short Term debt from 1990 – 91 to 2012 – 13

Year (March End)	Long Term Debt		Short Term debt	
	(Rs. In Crores)	%	(Rs. In Crores)	%
1991	1,46,226	90	16,775	10
1992	2,32,268	92	20,642	8
1993	2,60,942	93	19,804	7
1994	2,79,043	96	11,375	4
1995	2,98,237	96	13,448	4
1996	3,04,091	95	16,637	5
1997	3,11,674	93	24,153	7
1998	3,49,753	95	19,929	5
1999	3,93,160	96	18,137	4
2000	4,11,388	96	17,162	4
2001	4,55,706	96	16,919	4
2002	4,68,932	97	13,396	3
2003	4,76,624	96	22,180	4
2004	4,76,208	96	19,251	4
2005	5,08,777	87	77,528	13
2006	5,33,367	86	87,155	14
2007	6,28,771	84	1,22,631	16
2008	7,14,409	80	1,82,881	20
2009	9,21,469	81	2,20,656	19
2010	9,42,450	80	2,36,188	20
2011	10,76,143	79	2,90,149	21
2012	13,67,740	77	3,99,962	23
2013	15,93,689	75	5,25,930	25

Source: Reserve Bank of India (RBI)

Interpretation: The above table and graph exhibits components of Total External Debt of India that includes Long Term Debt and Short Term Debt. It highlights the trend of long term and short term debt over a period of two decades from 1990 – 91 to 2012 – 13. It can be seen that value of both long term debt and short term debt kept on increasing over the entire period under study. Both long term and short term debt increased with a CAGR of 10.944% and 16.160% respectively. However, it can be seen that proportion of short term borrowings in total debts kept on decreasing constantly till 2003 – 04. But this proportion of short term debt rose tremendously from 2004 – 05 and since then, kept on increasing frequently at regular intervals. Proportion of long term debt which was 90% of total debt in the year 1990 – 91 enhanced upto 97% in a period of one decade (by 2001 – 02) and later decline to 77% in another decade (i.e. 2011 – 12). Thus, by March 2013, 1/4th of country's external debts comprise of short term borrowings.

Table 4.1: Table showing correlation between India's Current Account Balance and Total External Debt of India from 1990 – 91 to 2012 – 13

Year (March End)	Current Account Balance (Deficit) (Rs. in Crores)	Total External Debt of India (Rs. in Crores)
1991	-17,366	1,63,001
1992	-2,235	2,52,910
1993	-12,764	2,80,746

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1994	-3,634	2,90,418
1995	-10,583	3,11,685
1996	-19,646	3,20,728
1997	-16,282	3,35,827
1998	-20,883	3,69,682
1999	-16,789	4,11,297
2000	-20,331	4,28,550
2001	-11,598	4,72,625
2002	16,426	4,82,328
2003	30,660	4,98,804
2004	63,983	4,95,459
2005	-12,174	5,86,305
2006	-43,737	6,20,522
2007	-44,383	7,51,402
2008	-63,535	8,97,290
2009	-1,27,621	11,42,125
2010	-1,79,708	11,78,638
2011	-2,10,110	13,66,292
2012	-3,76,078	17,67,702
2013	-4,79,653	21,19,620
Correlation Coefficient		**-(0.9424)**

Source: Reserve Bank of India (RBI)

Table 4.2: Table showing correlation between India’s Current Account Balance with Long Term and Short Term External Debt of India from 1990–91 to 2012–13

Year (March End)	Current A/c Balance (Rs. in Crores)	Long Term External Debt (Rs. in Crores)	Short Term External Debt (Rs. in Crores)
1991	-17,366	1,46,226	16,775
1992	-2,235	2,32,268	20,642
1993	-12,764	2,60,942	19,804
1994	-3,634	2,79,043	11,375
1995	-10,583	2,98,237	13,448
1996	-19,646	3,04,091	16,637
1997	-16,282	3,11,674	24,153
1998	-20,883	3,49,753	19,929
1999	-16,789	3,93,160	18,137
2000	-20,331	4,11,388	17,162
2001	-11,598	4,55,706	16,919
2002	16,426	4,68,932	13,396
2003	30,660	4,76,624	22,180
2004	63,983	4,76,208	19,251
2005	-12,174	5,08,777	77,528
2006	-43,737	5,33,367	87,155
2007	-44,383	6,28,771	1,22,631
2008	-63,535	7,14,409	1,82,881
2009	-1,27,621	9,21,469	2,20,656

2010	-1,79,708	9,42,450	2,36,188
2011	-2,10,110	10,76,143	2,90,149
2012	-3,76,078	13,67,740	3,99,962
2013	-4,79,653	15,93,689	5,25,930
Coefficient Correlation		**– 0.9265**	**– 0.9671**

Source: Reserve Bank of India (RBI)

Table 4.3: Table showing correlation between India's Current Account Balance and Foreign Exchange Rates from 1990 – 91 to 2012 – 13

Year (March End)	Current A/c Balance (Rs. in Crores)	Foreign Exchange Rates			
		US Dollar	Pound Sterling	Japanese Yen	Euro Dollar
1991	-17,366	17.943	33.193	0.128	Not in Existence
1992	-2,235	24.474	42.515	0.184	
1993	-12,764	30.649	51.686	0.246	
1994	-3,634	31.366	47.206	0.291	
1995	-10,583	31.399	48.821	0.316	
1996	-19,646	33.450	52.353	0.348	
1997	-16,282	35.500	56.365	0.316	
1998	-20,883	37.165	61.024	0.303	
1999	-16,789	42.071	69.551	0.331	
2000	-20,331	43.333	69.851	0.391	44.791
2001	-11,598	45.684	67.552	0.414	41.483
2002	16,426	47.692	68.319	0.382	42.181
2003	30,660	48.395	74.819	0.397	48.090
2004	63,983	45.952	77.739	0.407	53.990
2005	-12,174	44.932	82.864	0.418	56.552
2006	-43,737	44.274	79.047	0.391	53.912
2007	-44,383	45.285	85.727	0.388	58.111
2008	-63,535	40.241	80.802	0.353	56.991
2009	-1,27,621	45.917	78.449	0.461	65.135
2010	-1,79,708	47.417	75.886	0.511	67.084
2011	-2,10,110	45.577	70.885	0.533	60.218
2012	-3,76,078	47.923	76.391	0.607	65.894
2013	-4,79,653	54.409	85.971	0.659	70.069
Coefficient Correlation		**– 0.4518**	**– 0.3921**	**– 0.7725**	**– 0.7694**

Source: Reserve Bank of India (RBI)

Interpretation: The above tables highlight correlation between India's current account deficit with total external debt of India, components of external debt and selected foreign exchange rates. Table 4.1 shows that relationship between India's Current Account Deficit and Total External Debt of India is very strong. It can be seen that the Correlation Coefficient determined is – (0.9424) which is significantly high. Even though, Current Account Deficit is a negative indicator, but it ultimately results in increase in country's external debt. Hence, it can be inferred that both Current Account Deficit and Total External Debt of India have a strong positive relationship between each other. Table 4.2 exhibits relationship between India's Current Account Deficit with components of External Debt of India that includes long term debt and short term debt. It can be seen that current account deficit again has strong relationship with long term debt and short term debt (Correlation Coefficient found – (0.9265) and – (0.9671 respectively) which is also significantly huge. Table 4.3 shows relationship between India's Current Account Balance with selected foreign exchange rates that includes US Dollar, British Pound, Japanese Yen and Euro Dollar. It can be observed that current account trade balance as compare to US Dollar and British Pound has healthy negative relationship with other two currencies i.e. Japanese Yen and Euro Dollar (Correlation Coefficient is – (0.7725) and – (0.7694 respectively). However, relatively current account has weak negative relation with US Dollar and British Pound (Correlation Coefficient is – (0.4518) and – (0.3921 respectively).

Findings

- Current account net balance since beginning was negative i.e. in deficit, indicating outflow more than inflows. This deficit has increased at a CAGR of 15.521%. The rate of growth in deficit has accelerated tremendously after March 2007 as since then, it has rose almost 11 times.
- Total external debt of India increased significantly at CAGR of 11.799% from 1990 – 91 to 2012 – 13. However, this growth rate accelerated particularly since 2004 – 05.
- Since beginning, amount of long term debt exceeded tremendously as compared to amount of short term debt. However, proportion of short term debt in total debt kept on rising constantly, further indicating that volume of risk also kept on rising each year.
- As the share of short term debt in total external debt increased, there has been more upward pressure on the currency rate with the result that Indian Rupee has been declining rapidly with the rise in short term debt.
- India's Current Account Balance has a strong positive relationship with External Debt, Long Term Debt and Short Term Debt. This further indicates that rise in current account deficit puts additional pressure and results in increases the amount external borrowings of India (both long term as well as short term debts).
- India's Current Account Balance comparatively has a strong negative relationship with Japanese Yen and Euro Dollar. However, this relationship is quite weak with US Dollar and Pound Sterling.

Suggestions

There have been a number of reasons for the increase of India's external debt for a period of time since the process of Liberation, Privatization and Globalization began in 1991. For example: the huge fuel import and gold import bill are major reasons for the increase of external debt. In recent months, the Government has imposed increased duties and restrictions on import of gold. This has lead to softening of current account deficit. But has lead to other social problems like smuggling and also economic problems of reduction in the total custom duty collected because of increased rate of custom duty on gold. One can say that this has been an effective short term measure, but it is essential to focus on long term measures. This paper would like to study only two important factors which had an adverse impact on the external debt in the long run.

1. Treatment to foreign investments through various agreements / trades both Multilateral and Bilateral In its eagerness to attract foreign capital, India like many other developing countries has entered into various agreements. India has signed Bilateral Investment Promotion and Protection Agreements (BIPAS) with almost 82 countries. It is only recently, that it has woken up to the disproportionate protection extended to foreign investments which helps to keep out Government intervention. Foreign capital has exploited these agreements for its own benefits. Thus, there is a need to properly review this agreements so that foreign and local capital are treated at par and the Indian public interest is kept as the objective of entering into various agreements rather than just protecting foreign investments.
2. Illegal capital flight or illegal financial flows Illegal capital flight is no more a mere social problem related to corruption. It is first and foremost an economic problem responsible to a great extent for the bulging external debt faced by India and other developing countries. It has been observed that the illicit outflows have increased faster in the post reform period leading to the increase in the external debt of the country. These illicit outflows are carried out in different ways especially through export under invoicing and import over invoicing by Indians in trade and industry. Also abusive transfer pricing has been responsible to a large external for the illicit flows. The external debt increase has become a core economic imbalance and it is true that there are no short term answers to fix this problem. The problem of external debt is further compounded by the problem of inflation. Inflation leads to further increase in the national debt of the government. This paper does not claim to give detailed solution to the problem of external debt; but has highlighted two major problems responsible for the ever increasing foreign debt and the urgent need to tackle them.

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