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AN EMPIRICAL ANALYSIS ON RELATIONSHIP BETWEEN CURRENT ACCOUNT, CAPITAL ACCOUNT AND GROSS DOMESTIC PRODUCT IN INDIA

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ABSTRACT:

This paper examines the link between Current Account, Capital Account and GDP using pair wise Granger Causality Test. This study analyzed the trend and pattern of balance of payment during the before and after devaluation period. It is furthermore assess impact of devaluation on balance of payment using paired sample't' test. The result exposed that the one way causality rerunning from GDP to Capital Account. We also found that one way causality rerunning from Current Account to GDP. The result indicates that there is significant improvement in balance of payments during the pre- to post-devaluation period.

Keywords: *Current Account Capital Account, Gross Domestic Product.*

1. INTRODUCTION:

The balance of payments is a technique that countries use to observe all international money transactions at a particular point of some time. Usually, the BOP is calculated quarterly and particular period of time. All trades conducted the personal and public sectors unit account for among the BOP therefore one can see what amount of cash goes in and out of a country. If a country has received money, typically this can be often known as a credit, and, if a country has paid or given money, the dealing is counted as debit. On paper, the BOP needs to be zero, which suggests that credits and debits need to balance. But if follow typically this can be often rarely the case and, thus, the BOP can tell the observer if a country incorporates a deficit or a surplus and from that a vicinity of the economy the discrepancies unit.[1] The BOP is split into three main categories: Current Account, the Capital Account and monetary account. Among

[1] https://www.scribd.com

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these three categories unit sub-divisions, each of that accounts for a definite kind of international money dealings.[2]

The Current Account is utilized to mark the inflow and outflow of product and services into a country. The Capital Account is where all international capital transfers unit are recorded. This refers to the acquisition or disposal of non-financial assets (for example, a physical and like land) and non-produced assets, that square live needed for production but haven't been created, kind of a mine used for the extraction of diamonds. In the financial account, international money flows related to investment in business, realty, bonds and stocks unit documented.

2. OBJECTIVE OF THE STUDY:

1. To estimate trend and pattern of Current Account, Capital Account and balance of payment before devaluation
2. To estimate trend and pattern of Current Account, Capital Account and balance of payment after devaluation.
3. To grasp results of devaluation on Current Account, Capital Account and balance of payment.
4. To study a relation between Gross Domestic Product, Current Account and Capital Account.

3. HYPOTHESIS:

1. **HO:** There is no significant effect of devaluation on Current Account.
2. **HO:** There is no significant effect of devaluation on Capital Account.
3. **HO:** There is no significant effect of devaluation on balance of payment.
4. **HO:** GDP does not Granger cause to Current Account.
5. **HO:** Current Account does not Granger cause to GDP
6. **HO:** GDP does not Granger cause to Capital Account
7. **HO:** Capital Account does not Granger cause to GDP

[2] https://www.voiceofresearch.org.

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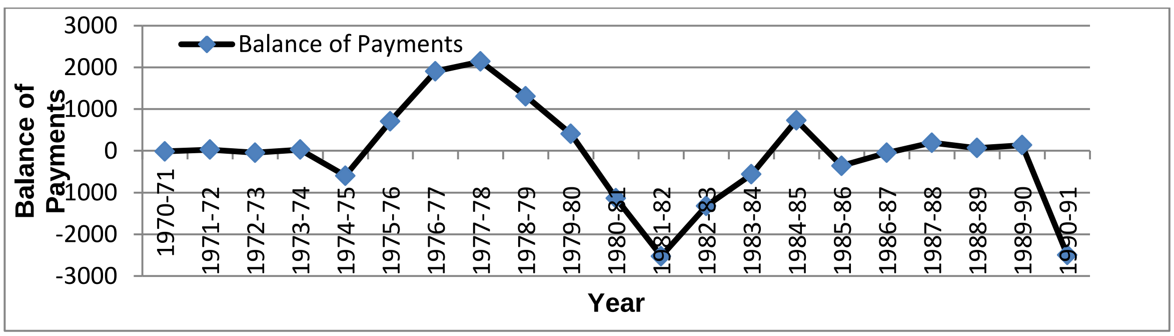
4. DATA SORCE AND METHODOLOGY:

Basic methodology adopted throughout this study area is trend analysis. The study applies paired sample't' test take a glance at for impact of devaluation on balance of payment. The relationship between variables is examined by Pair wise Granger Causality test. In this study annual data is utilized from 1970-71 to 2011-12. All the data are collected from HAND BOOK OF INDIA (RBI).

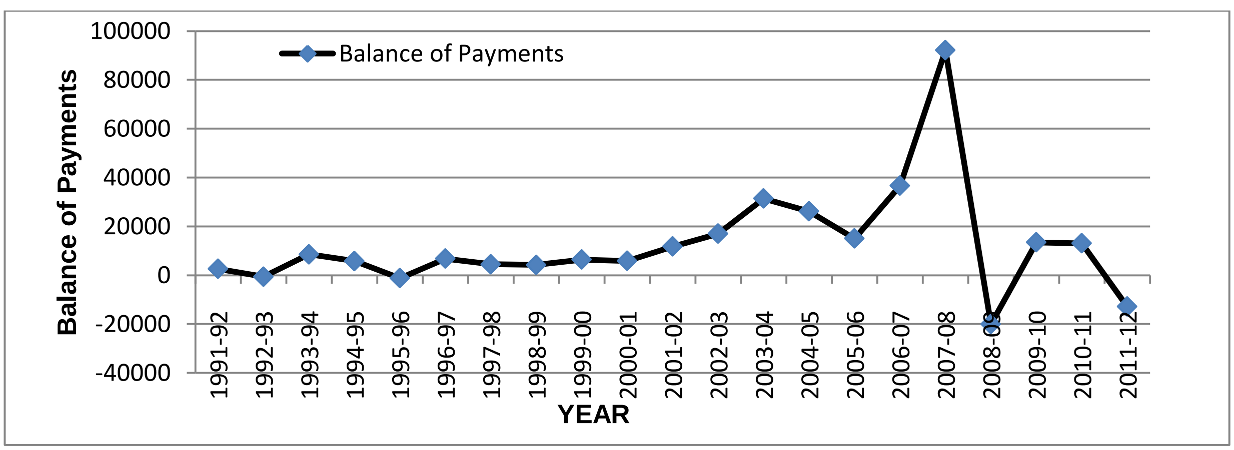
5. EMPIRICAL ANALYSIS:

Before the devaluation of money it's was observed from the below graph no. one there was really fluctuation in balance of payment, In 1970's the position of balance of payment is satisfactory, In 1980's the balance of payment was adversely affected due to trade deficits. It can observe from the graph that balance of payment declines sharply in 1990-91 due to domestic political developments which affected confidence abroad in Indian economy.

Graph 1: Trend of India's Balance of Payments throughout the Before-Devaluation quantity



Graph 2: Trend of India's Balance of Payments throughout the After-Devaluation quantity



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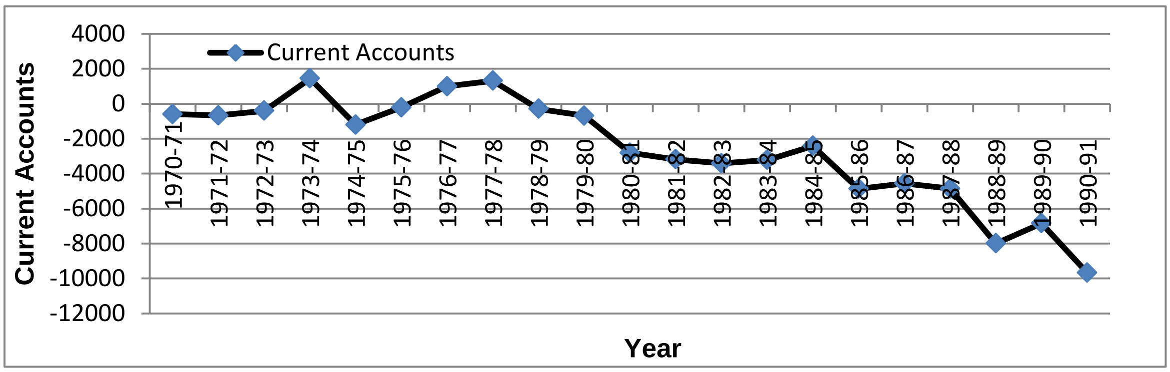
The analysis of balance of payments pattern indicates that on an average there was considerable increase during the period. It accounted from US dollar 2599 million in 1991-92 to US dollar -12832 million in 2011-2012. There was a shortage in this account in 1992-93, 1995-96, 2008-09 and 2011-2012. (Graph 2)

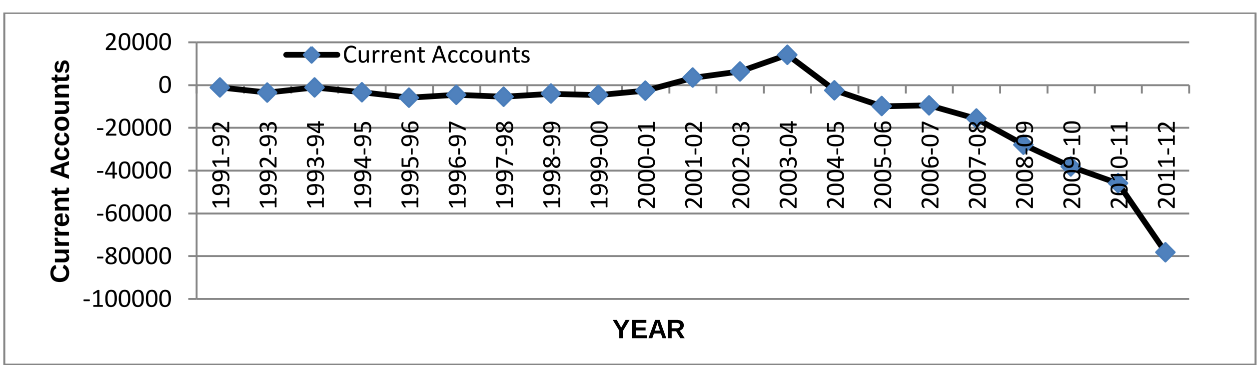
The analysis of pattern of Current Account situation of India's balance of payments shows that the deficit of this account was increased considerably during the before-devaluation period in absolute US dollar value. It has gone from 290 million during 1978-79 to 9680 million during 1990-91. It is mostly due to nonstop decline of surplus in the invisible account in this phase. (Graph 3)

Graph 3: Trend of India's Current Accounts throughout the Before-Devaluation quantity



The Current Account place of India's balance of payments shows a growing trend throughout the after-devaluation period. In absolute US dollar value, the deficit of this account has gone up from 1178 million in 1991-92 to 78155 million in 2011-2012. From the below graph it can be shown that there was an excess on Current Account in 2001-02, 2002-03, 2003-04. It is the first time in after independent phase that there was a Current Account excess for three repeated years. (Graph 4)

Graph 4: Trend of India's Current Accounts throughout the After-Devaluation quantity



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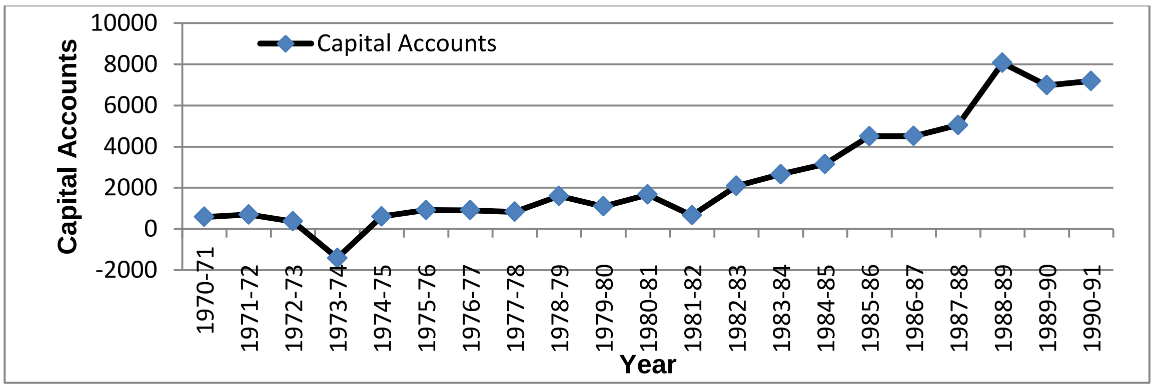
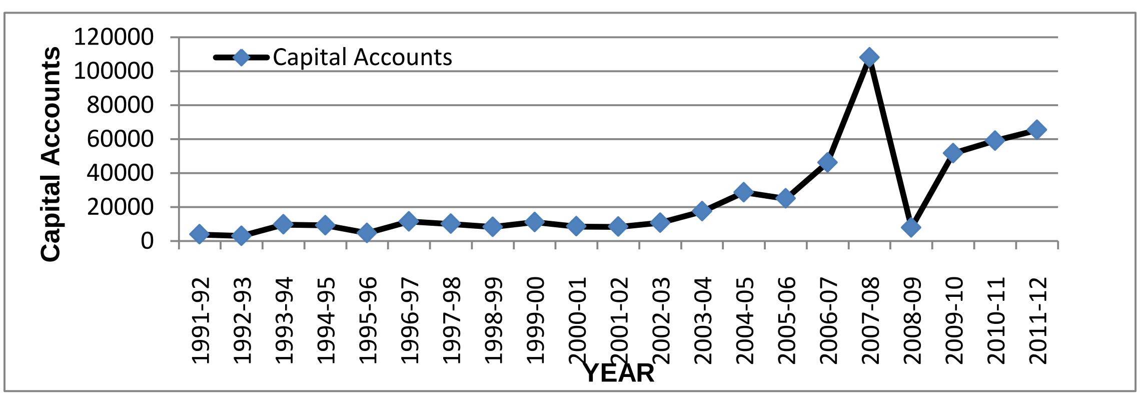
It may be seen from the below figure that there was a substantial increase of capital surplus. The trend of the account shows Associate in nursing upward movement throughout the number. It may be determined that the Capital Account has enlarged from l580 million in 1970-71 to US dollar7188 million in 1990-1991. There was a high rate of growth of accounting as compared to the enlargement rate of Capital Account of the balance of payments throughout the before-evaluation quantity.

Graph 5: Trend of India's Capital Accounts throughout the Before-Devaluation quantity



The analysis of Capital Account pattern indicates that on a mean there was vital increase throughout the number. It may be determined that the Capital Account has enlarged from US dollar 377 million in 1990-91 to US dollar 65324 million in 2011-2012. It is observed from the upper graph that Current account inflows decline sharply in 2008-2009 due to recession foreign institution withdrawal their resources. (Graph 6)

Graph 6: Trend of India's Capital Accounts throughout the After-Devaluation quantity



The analysis balance of payment deficits in before and after devaluation periods shows that there was an increase from North yank country buck -68.95 million among the before devaluation quantity to North yank country greenback 12696.61 million among the after

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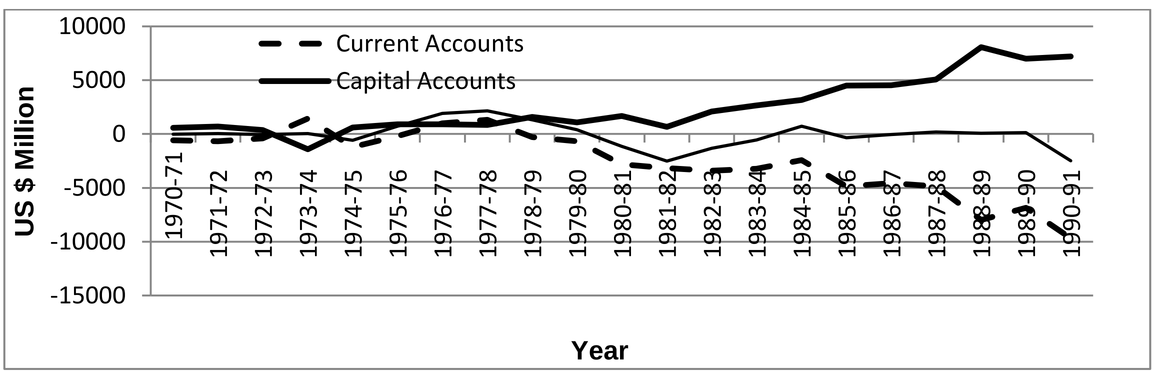
devaluation quantity. It's fascinating to check that such a mean increase of balance of payment deficit from before to after devaluation quantity is statistically vital at 5 per cent level as a result of the results of 't' worth depicts. Further, the analysis of accounting indicates that on a mean the account indicates in nominal terms has enlarged from the before devaluation to after devaluation periods. It accounted to merely regarding US dollar -11462.14 million among the after devaluation quantity as against the US dollar -2576.52 million among the before devaluation quantity. The results of 't' confirm that the change of accounting between before and after devaluation periods is vital at 5 per cent level of significance. This case has not been totally different to the case of Capital Accounts. The results of 't'' advocate that there was collectively vital increase among the Capital Accounts in Associate in Nursing absolute term from before devaluation to after devaluation quantity.

Graph 7: Trend of India's Current Accounts, Capital Accounts and Balance of Payment throughout the Before-Devaluation quantity



Graph 8: Trend of India's Current Accounts, Capital Accounts and Balance of Payment throughout the After-Devaluation quantity

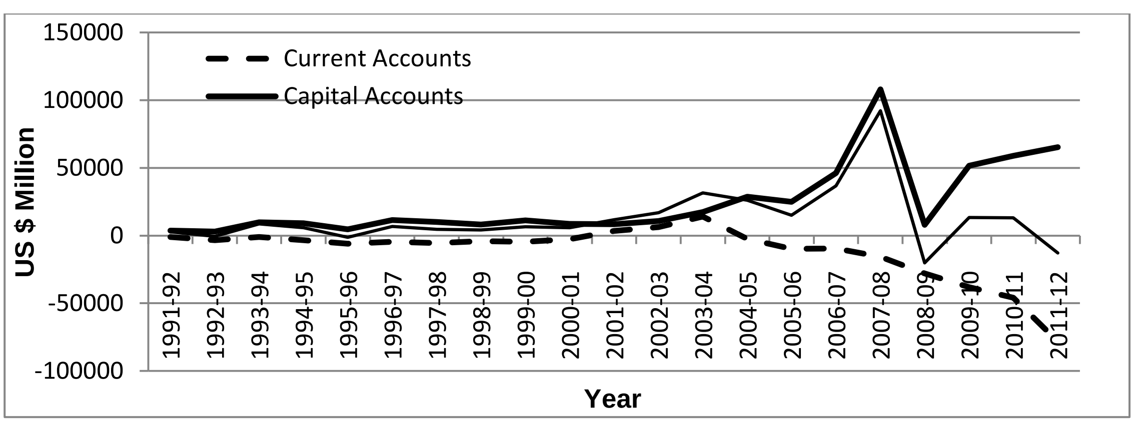


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Table 1: Trend of India's accounting, Capital Account, and BOP Before - Devaluation quantity

Year	Current Accounts	Capital Accounts	Balance of Payments
1970-71	-594	580	-14
1971-72	-669	697	28
1972-73	-403	360	-43
1973-74	1444	-1416	28
1974-75	-1198	600	-599
1975-76	-206	913	707
1976-77	1001	905	1905
1977-78	1313	828	2141
1978-79	-290	1597	1308
1979-80	-685	1090	405
1980-81	-2804	1665	-1140
1981-82	-3179	657	-2523
1982-83	-3407	2087	-1319
1983-84	-3216	2655	-561
1984-85	-2417	3147	730
1985-86	-4867	4506	-361
1986-87	-4560	4512	-47
1987-88	-4852	5047	195
1988-89	-7997	8064	68
1989-90	-6841	6977	136
1990-91	-9680	7188	-2492
Average 1970-71 To 1990-91	**-2576.52**	**2507.57**	**-68.95**
Trend of India's Current Account, Capital Account, and BOP After - Devaluation Period			
Year	**Current Accounts**	**Capital Accounts**	**Balance of Payments**
1991-92	-1178	3777	2599
1992-93	-3526	2936	-590
1993-94	-1159	9694	8535
1994-95	-3369	9156	5787
1995-96	-5912	4690	-1222
1996-97	-4619	11412	6793
1997-98	-5499	10010	4511

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1998-99	-4038	8260	4222
1999-00	-4698	11100	6402
2000-01	-2666	8535	5868
2001-02	3400	8357	11757
2002-03	6345	10640	16985
2003-04	14083	17338	31421
2004-05	-2470	28629	26159
2005-06	-9902	24954	15052
2006-07	-9565	46171	36606
2007-08	-15737	107901	92164
2008-09	-27915	7835	-20079
2009-10	-38180	51622	13441
2010-11	-45945	58996	13050
2011-12	-78155	65324	-12832
Average 1991-92 To 2011-2012	**-11462.14**	**24158.90**	**12696.61**
t – value	**2.207**	**-3.934**	**-2.607**
S.E	**4026.60**	**5504.08**	**4895.82**
Source: Handbook of Statistics on Indian Economy. Reserve Bank of India 2013.[3]			

Table 2: Pair wise Granger Causality Test[4]

Null Hypothesis	T-Statistic	Prob.	Result
GDP does not Granger cause Capital Account	6.17576	0.0050	Uni directional Causality
Capital Account does not Granger cause GDP	1.74563	0.1894	
GDP does not Granger cause Current Account	2.79388	0.0749	Uni directional Causality
Current Account does not Granger cause GDP	6.75631	0.0033	

From the table no 2 we can conclude that there is one way relation running from Gross Domestic Product to Capital Account it means Gross Domestic Product cause Capital Account but Capital Account doesn't cause Gross Domestic Product. Result collectively prove that there is one way

[3] Handbook of Statistics on Indian Economy. Reserve Bank of India 2013.
[4] Granger (1969): Investing causal Relations by Econometric Models and Cross Spectral Methods. Econometrica

relation running from Current account to Gross Domestic Product there to means Current account cause Gross Domestic Product however Gross Domestic Product does not cause Current account.

6. CONCLUSION

This study examines the link between Current Account, Capital Account and Gross Domestic Product using data 1970-71 to 2011-12. Further, the study collectively analyzed the trend pattern of assorted components of balance of payment like Current Account and Capital Account. The mean test of balance of payments, Current Account and Capital Account established the upgrading of balance of payments, Current Account and Capital Account from before-devaluation period to after-devaluation period.

There is unidirectional causality running from GDP to Capital Account it means GDP lead to Capital Account but Capital Account does not lead to GDP. There is unidirectional causality running from Current Account to GDP which means Current Account guide to GDP but GDP does not guide to Current Account.

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