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THE IMPACT OF CURRENT ACCOUNT DEFICIT ON ECONOMIC GROWTH: AN ARDL APPROACH

ABSTRACT

In this study, we examine the linkages between External debt, Exchange rate, Current account deficit, and GDP at Factor cost for India over the period of 1975-76 to 2018-19 using the Unit root test and Autoregressive Distributed Lag (ARDL). The results of the unit root test reveal that GDP growth rate and External debt are integrated at the level I(0); while the Current Account deficit and Exchange rate are integrated at first order I(1). The results of the ARDL technique reveal that the current account deficit has a positive and significant impact on Real GDP. It clearly reflects the role of imports in accelerating the growth of a developing economy like India. There is also evidence that the external debt has a positive and significant impact on the Current account deficit while the Exchange rate does not have an impact on the Current account deficit. The authors opine that the external debt assists in a gradual reduction in the current account deficit and contributes to economic growth by narrowing down the saving-investment gap. As the demand for Indian exports is inelastic in the global market, the country has not benefitted from the depreciation of its currency. The authors stressed the need for focusing on further diversification of its export markets, creating a conducive environment for attracting longer-term FDIs, liberalization, promoting commercial services exports, and achieving exchange rate stability in the context of the USA-China trade war and stagnation in the world output growth. Huge untapped potential for IT-enabled services should be exploited to promote service trade. The authors point out the current account deficit in the range of 2-3 percent of GDP can be manageable.

Key Words: Current account deficit, External debt, Exchange rate, Real GDP, Autoregressive distributed lag

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INTRODUCTION

In the era of Globalization, gradually rising current account deficit has become a major concern for both developing and low-income economies across the world. The main components of the current account of the Balance of Payments are visible trade, invisible trade, and unilateral transfers. The current account is said to be in deficit when the outflows of the value of goods, services, income, and gifts between the home country and foreign countries are less than inflows. Total debits will always equal total credits as the balance of payments is a double-entry accounting system. If the current account registers a surplus, the capital and financial account must register a surplus.

The balance of payment position of India was most satisfactory during the first five-year plan (1951-56). Heavy import of Machinery and equipment in the second five-year plan (1956-61), rise in international oil prices by OPEC and large-scale import of defense equipment due to war with China and Pakistan have caused for growing imbalance between the value of export and import of goods and services. As a result, the current account deficit of India has increased from Rs. 42 crore in the first five-year plan to Rs.1951 crore during 1961-66. To avoid disequilibrium in the Balance of Payments Indian currency value was devalued in 1966. The factors like the Devaluation of the currency followed by government incentives to promote exports and a conducive environment in the world trade have contributed to the rise in export growth in the late 1960s and 1970s. However, the deficit in the current account was maintained at Rs. 2015 crore during the Annual plans (1966-69). The current account deficit of India had widened since the beginning of the sixth five-year plan.

The trade volume of the country has grown significantly during the post-reform period. The current account deficit had widened in 1997-98 owing to sluggish export growth. India's current account deficit came down to 0.6 percent of GDP in 2000-01 from 1.15 percent of GDP in 1999-2000 owing to a rise in export growth. In the entire post-reform period a surplus in the current account was recorded from 2000-01 to 2003-04 and displayed a reverse trend since 2004-05. The current account deficit of the country reached to the extent of 4.7 percent of GDP in 2012-13, then gradually declined to 1.8 percent of GDP in 2017-18 and again increased to 2.1 percent of GDP in 2018-19.

India had maintained a trade surplus with the USA and UAE from 2014-15 to 2018-19, whereas deficit with countries like China, Saudi Arabia, Iraq, Germany, Indonesia, Switzerland, Hong Kong, and Singapore. There is a consensus among the

Economists and Researchers that the current account deficit in the range of 2-3 percent of GDP is manageable by the Indian economy. It is regarded as a sustainable level of current account deficit.

Table 1. Current Account Balance (% of GDP)

Country	2016	2017	2018
Singapore	17.50	16.37	17.87
Thailand	10.53	9.68	6.41
Switzerland	9.47	6.52	10.51
Germany	8.47	8.10	7.34
Denmark	7.76	7.80	6.97
Sweden	3.73	2.81	1.70
Malaysia	2.37	2.81	2.12
China	1.82	1.61	0.36
UK	-5.26	-3.49	-4.31
Australia	-3.40	-2.69	-2.07
Canada	-3.21	-2.82	-2.65
USA	-2.29	-2.26	-2.39
India	-0.53	-1.44	-2.41
Brazil	-1.35	-0.73	-2.22

Source: World Economic Outlook, IMF

A country-wise analysis of current account balance as % of GDP as delineated in Table 1 reveals that economies in developing Asia and some developed economies have been experiencing surpluses in their current account. The export-oriented industrialization strategy of most of the East Asian economies had contributed to surpluses in their current account from the second half of the 1990s. It can be observed from the above table that the current account surplus of Singapore was in the range of above 17 percent on average in the last 3 years. A huge current account surplus can also be observed in the case of Thailand, Switzerland, Germany, and Denmark. Economies like Sweden, Malaysia, and China have maintained a comfortable situation in their current account of Balance of Payments.

According to the World Economic Outlook Report of IMF, India's current account deficit gradually rose from 0.53 percent of GDP in 2016 to 1.44 percent in 2017 and further to 2.41 percent in 2018. UK maintained a huge deficit in the current account to the extent of 5.26 percent of GDP in 2016 which reduced to 3.49 percent in 2017 and

further increased to 4.31 percent in 2018. USA's current account deficit was in the range of 2.3 percent of GDP on average in the last 3 years.

As the current account deficit of the Balance of Payments is directly linked with economic growth, the high levels of current account deficit in recent years have become an important subject of analysis and debate, especially for developing and low-income economies. A central question is whether the current account deficit is good or bad for the health of the economy.

The general consensus among the academicians and researchers is that the emerging economies will have massive current account deficits than the slower-growing advanced economies. The Empirical evidence suggests that countries with huge deficit in current account have experienced lower economic growth as current account deficit tends to be sensitive to exchange rate fluctuations. As the current account deficit of the Balance of Payments is directly linked with economic growth, the high levels of current account deficit in recent years have become an important subject of analysis and debate, especially for faster growing developing economies like India. The consequences of a persistent current account deficit affect the macroeconomic variables such as foreign exchange reserves, external debt and Economic growth. A huge deficit in the current account will make the country a net borrower from the rest of the world. The raise in cost of debt service will have a negative impact on the economic growth of an economy. A central question is whether the impact of current account deficit on economic growth is significant or insignificant.

OBJECTIVES OF THE STUDY

The main objective of this study was to study the impact of Current Account Deficit on Economic growth in India for the period 1975-76 to 2018-19. The specific objectives were:

1. To study the trends in the growth of Current account deficit, External debt, Exchange Rate of Indian Rupee against Dollar and Real GDP for the period 1975-76 to 2018-19

2. To understand the change in composition and direction of India's foreign trade

3. To study the impact of Exchange Rate and External debt on current account deficit for the period 1975-76 to 2018-19.

LITERATURE REVIEW

Mustafa Ozer, Jovana Zugic, and Sonja Tmas-Miskin (2018) in their work "The relationship between Current Account Deficits and Growth in Montenegro: ARDL Bounds Testing Approach" have attempted to examine the relationship between current account deficits and growth in Montenegro for the period from the third quarter of 2011 to the last quarter of 2016 using ARDL approach. The study reveals a bi-directional long-run and short-run causal relationship between current account deficits and growth. The results of the study also indicate a negative relationship in the short run, whereas a positive relation, in the long run, exists between these two variables. Bliss. J. Musisinyani, Thabani Nyoni, and Munyaradzi Nyoni (2017) have examined the impact of current account deficits on the Economic Growth in Zimbabwe for the period 1980-2013 using the OLS estimation technique. The study indicates a positive relationship between the current account balance and economic growth. The study also reveals a positive effect of other independent variables selected for the study (FDI, external Debt, and Foreign Aid) with economic growth. Funda Yurdakuland Bengisu Ucar (2015) have attempted to examine the relationship between current account deficit and economic growth in Turkey for the period 1999-2014 using Granger causality and VAR analysis. The results indicate a unidirectional causality from the growth rate to the current account deficit. Ch. B. V. L. Sudheer, E. Pranavi, and Ch. Venkateswarlu (2015) in their work "A study on current account deficit of India" have attempted to identify the factors responsible for the growing current account deficit in India using the Granger causality test. They found that Gold and Crude Oil import prices are causing significantly for growing current account deficit in India. Oshota, S. O. and Badejo, A. A. (2015) have examined the determinants of the current account balance using the ARDL model framework in Nigeria. The results of the study reveal that GDP per capita has a positive effect on the current account balance in the long run, whereas the real effective exchange rate has a negative and statistically significant effect on the current account balance in the long run. The study also reveals that investment has a positive effect on the current account balance in the short run. Fayaz Mohd and Sandeep Kaur Bhatia (2016) have studied trends, patterns of and determinants of current account deficit in India using the Johansen Cointegration approach and Vector Error Correction Model. The results indicate a long-run relationship exists between current account deficit and interest. The study also indicates a positive

effect of an increase in net foreign investment on the current account deficit. The study highlights that an increase in imports and volatility in the exchange rate affect the current account adversely. Yuksel Bayraktar, Taha Egri, and Furkan Yildiz (2016) have found a positive correlation between oil prices and GDP, while there was a negative relationship between oil prices and current account deficit. The results also reveal a bi-directional relationship between GDP and oil prices. Ibrahim Erem Sahin (2014) in his work "The effect of Current Account deficit on Economic growth: The case of Turkey", discusses the relationship between current account deficit and economic growth for the period 2002-2013 using time series analysis. The results indicate a negative effect of the current account deficit on economic growth.

It can be noticed from the review of literature that very few studies have been conducted with reference to India's current account deficit. The previous studies are not so such comprehensive and restricted to specific issues for a limited period. Moreover those studies have not taken into account the impact of major macro-economic indicators like external debt, Gross Domestic product at factor cost and exchange rate on current account deficit. The present study is an attempt to investigate in detail the impact of major macroeconomic indicators on current account deficit using Unit Root test and ARDL technique. This study attempts to fill the existing research gap.

METHODOLOGY

Current account deficit, external debt, Exchange Rate, and GDP at Factor cost are the variables employed in the study to analyze the above-stated objectives. The entire study is based on secondary data. The data is composed of Indian Public Finance Statistics, Handbook of Statistics on Indian Economy of RBI, World Economic Outlook of IMF, and Present& Previous Economic Surveys of the Ministry of Finance, and GOI. Using the Augmented Dickey-Fuller Unit root test to the data series, the variables employed in the study are tested for stationarity. To examine the long-run relationship prevailing among the variables the Autoregressive Distributed Lag (ARDL) approach was also employed in the study.

Model specification
Following the model of Ainabor, A.E., Shuaib, I.M. and Kadiri, A.K. (2014) this facilitates the determination of variables impact of Real GDP and Current account deficit

Model: 1

GDP = f (CAD)

$$GDP = \alpha_0 + \alpha_1 CAD + \text{€}$$

where

GDP= Gross Domestic product is as a proxy for economic growth of the country

CAD = Current account deficit

€ =stochastic term

Model: 2

$$CAD = f(ER, ED)$$

$$CAD = a_0 + a_1 ER + a_2 ED + \text{€}$$

CAD = Current account deficit

ER= Exchange Rate

ED = External Debt

€ =stochastic term

TRENDS IN COMPOSITION AND DIRECTION OF INDIA'S FOREIGN TRADE

Composition of India's foreign trade

India's foreign trade in terms of both composition and direction has undergone a significant change since independence. As far as the composition of exports is concerned, there has been a decline in the share of agriculture & allied in the total export earnings whereas the share of manufactured goods increased substantially. The share of agriculture & allied in the total export earnings declined considerably from 44.2 percent in 1960-61 to 11.8 percent in 2018-19. The share of manufactured goods in the same period increased from 45.3 percent to 70.3 percent. The share of crude & petroleum product also raised considerably from 1.1 percent in 1960-61 to 14.5 percent in 2018-19. The share of ores & Minerals has declined substantially from 8.1 percent to 1.8 percent during the same period (Economic Survey, 2019-20). In terms of the composition of imports, the share of food & allied products in the total import spending has declined from 19.1 percent in 1960-61 to 3.2 percent in 2018-19. There has been a substantial rise in the share of fuel from 6.1

percent to 32.5 percent during the same period. The share of capital goods in the total import spending declined considerably from 31.7 percent to 13.8 percent in the same period.

Table 2. Gdp, export and import of goods & services- growth (in %)

Period	GDP (%)	Export of Goods& services (%)	Import of Goods& Services (%)
1951-52 to 59-60	3.73	9.03	20.80
1960-61 to 69-70	3.91	9.62	13.53
1970-71 to 79-80	3.02	18.19	20.62
1980-81 to 89-90	5.58	16.90	15.21
1990-91 to 99-00	5.85	20.97	21.01
2000-01 to 09-10	7.22	20.01	20.64
2010-11 to 18-19	5.81	14.04	13.71

Source: Economic Survey 2019-20

The above table 2 presents decadal average annual growth of GDP, Exports, and Imports. The average annual decadal growth of GDP which was 3.73 percent during 1951-60 marginally raised to 3.91 percent in 1961-70 and then declined to 3.02 percent during 1971-80. During the entire pre-reform period the rate of growth of GDP was at high (5.58 percent) in the 1980s. The decadal average annual growth of GDP stood at 5.85 percent during the 1990s. The same rate has improved to 7.22 percent during the 2000s and then declined to 5.81 percent from 2010-11 to 2018-19.

The average annual growth of exports of goods & services gradually increased from 9.03 percent during 1951-60 to 9.62 percent in the 1960s and 18.19 percent in the 1970s and then declined to 16.90 percent in the 1980s. In the entire pre-reform period the average rate of growth of exports of Goods & Services was high in the 1970s. In the entire post-reform period, the rate of growth of exports was highest (20.97 percent) in the 1990s.

The average rate of growth of imports of goods & services stood at 20.80 percent during 1951-60. The heavy industrialization strategy adopted during the second five-year plan (1956-61) necessitated importing capital equipment in large quantities. The same rate declined to 13.53 percent in the 1960s and again rose to 20.62 percent in the 1970s and then declined to 15.21 percent in the 1980s. In the entire pre-reform period the average rate of growth of imports of Goods & Services was highest (21.01 percent) in the 1990s. Trade liberalization measures introduced during the first half of the 1990s in India have contributed to a rise in the growth of both exports and imports of goods & services in the

1990s. The current account of Balance of payments has witnessed incredible changes owing to continuous changes in the composition and direction of trade.

Direction of India's trade: Exports & imports

In 1950-51, both the UK and the USA have accounted for 52 percent of total export earnings and 39 percent of import spending of India. India's trade relations with USSR were expanded in 1960-61. India's dependence on the UK for imports has declined significantly as trade relations with Japan, West Germany, and USSR had widened. The USSR has occupied a prominent position in India's foreign trade until its dissolution in 1991. India has obtained maximum imports from America in the era of the planning process as a whole. In 2004-05 country-wise the major trading partners of India are SA, UK, Germany, Japan, Switzerland, Hong Kong, China, and Singapore. China occupied the first position in India's imports in recent years. In 2019, the USA emerged as the largest trading partner of India followed by the UAE, China, Hong Kong, Singapore, and the UK. So far Region-wise share in India's exports is concerned, the share of the OECD group consisting of the European Union, North America, Asia, and Oceania, and other OECD countries accounted for 66.1 percent of total export earnings of India in 1960-61, but its share gradually declined to 35.22 percent in 2014-15 and again rose to 38.83 percent in 2018-19. The share of OPEC in India's total export earnings has increased from 4.1 percent in 1960-61 to 18.1 percent in 2014-15 and then declined to 14.77 percent in 2018-19. Eastern Europe share in India's exports declined from 7 percent in 1960-61 to 1.1 percent in 2014-14 and then to 1.06 percent in 2018-19. The share of developing countries consisting of Asia, SAARC, Africa, and Latin American countries in India's export earnings grew substantially from 14.8 percent in 1960-61 to 44.18 percent in 2014-15 and then to 44.38 percent in 2018-19. Among the developing nations, Asia occupied a prominent place in terms of raising its share in the export earnings of India.

The share of OECD countries as a group in India's imports gradually declined from 78 percent in 1960-61 to 26.86 percent in 2014-15 and again rose to 28.18 percent in 2018-19. The share of OPEC in India's imports gradually increased from 4.6 percent in 1960-61 to 30.61 percent in 2014-15 and then declined to 26.56 percent in 2018-19. The share of Eastern Europe in India's imports has increased from 3.4 percent in 1960-61 to 13.5 percent in 1970-71, but since then its share gradually declined to 1.72 percent in 2014-15 and then marginally increased to 1.84 percent in 2018-19. The share of

developing countries in India's imports grew substantially from 12 percent in 1960-61 to 30.33 percent in 2014-15 and then finally to 43.38 percent in 2018-19.

TRENDS IN EXCHANGE RATE EXTERNAL DEBT AND GDP AT FACTOR COST

The trends in macro-economic variables like current account deficit, External debt, Exchange rate and GDP at factor cost for the period 1975-76 to 2018-19 are presented in the Graph.

Figure 1. Trends in the growth of external debt, exchange rate, current account deficit and GDP at factor cost
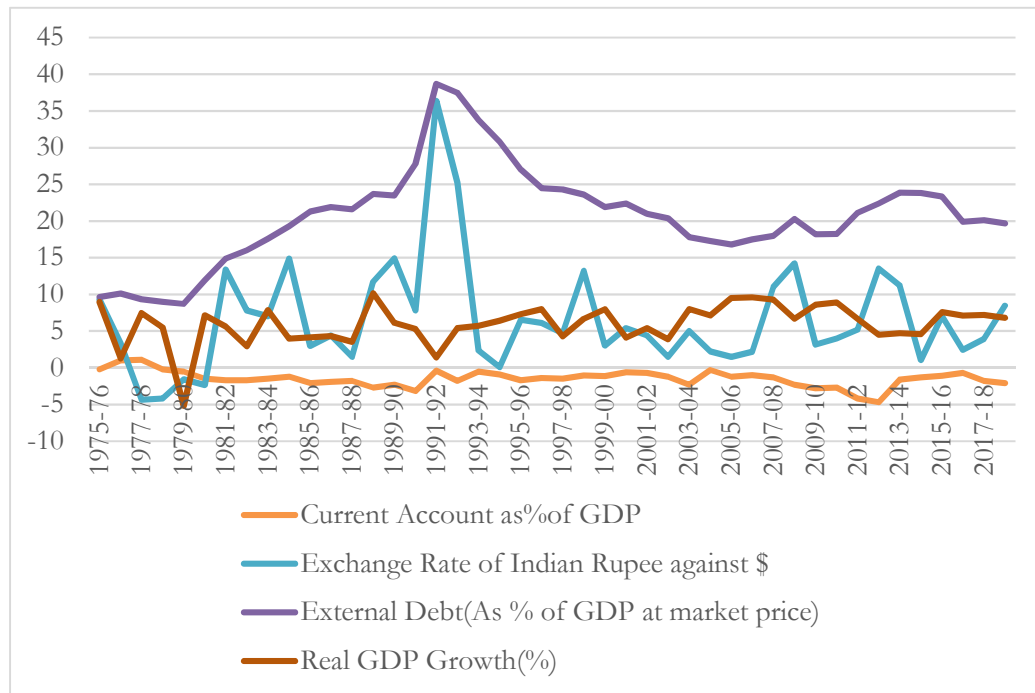
Source: Economic Survey 2019-20

In the pre-reform period, India's current account deficit in the Balance of payments remains within the manageable limit at less than 2 percent of GDP on an average. The deficit had widened from 0.1 percent of GDP on an average in the first five-year plan to 2.3 percent of GDP in the second five-year plan, which declined to 1.8 percent in the

third five-year plan. The same rate again rose to 2 percent of GDP on an average in the Annual plans (1966-69) and declined to 0.3 percent, 0.1 percent, 1.5 percent during the fourth, fifth and sixth five-year plans respectively. In the seventh five-year plan (1985-90) the same rate again rose to 2.2 percent of GDP. The deficit widened to 3.2 percent of GDP in 1990-91 from 2.3 percent in 1989-90. India has witnessed a severe deficit in Balance of Payments during 1990-91 owing to a raise in international oil prices and an acute shortage of foreign exchange reserves. In the entire post-reform period, except for two years i.e., 2011-12 and 2012-13, India's current account deficit remains within manageable limit due to huge invisible earnings. The current account deficit widened to 4.2 and 4.7 percent of GDP during 2011-12 and 2012-13 respectively. The current account deficit on an average was registered at less than 2 percent of GDP in the entire post-reform period. The growth in GDP at factor cost is more in the post-reform period as compared to the pre-reform period. It shows that higher growth in international trade had contributed to a rise in GDP growth.

India's External Debt consists of both short-term and long-term in nature. India's external debt as a percent of GDP at market price grew significantly from 11.9 percent of GDP in 1980-81 to 28.7 percent in 1990-1991 and 38.7 percent in 1991-92 and then started declining in the consequent years. The same rate was registered at 18.23 percent in 2010-11. Since 2011-12 India has witnessed a gradual rise in external debt in terms of GDP at the market price. In 2018-19 India's external debt stood at 19.7 percent of GDP. The annual average growth of External debt which was 9.3 percent of GDP in the fifthfive-year plan (1974-79) has increased to 15.94 percent in the sixth five-year plan (1980-85) and 22.4 percent in the seventh five-year plan (1985-90) and then to 33.25 percent during the Annual plans (1990-92). In the era of the post-reform period, the average annual growth of external debt has declined from 22.64 percent of GDP in the eighth five-year plan (1992-97) to 17.96 percent in the ninth five-year plan (1997-2002) and then rose to 19.16 percent in the eleventh five-year plan (1997-2012) and finally to 22.67 percent in twelfth five-year plan (2012-17).

The average Exchange Rate of the Indian Rupee against US$ in the 1975-76 financial year was Rs.8.68. The Indian currency was depreciated against American Dollar continuously from 1975-76 to 2018-19 except for four years i.e., from 1977-78 to 1980-81. During the pre-reform period, the average exchange rate of the Indian Rupee against US$ depreciated from 8.97 in 1976-77 to Rs.10.34 in 1983-84 and Rs.17.94 in 1990-91. The same trend has continued even in the post-reform period also. Again Indian currency

exchange rate against American Dollar depreciated from Rs.24.47 in 1991-92 to Rs.42.07 in 1998-99 and Rs.60.50 in 2013-14 and then finally to Rs.69.92 in 2018-19. Depreciation of the Rupee in percentage terms was highest in 1991-92 (36.4 percent) and 1992-93 (25.21 percent) as the Indian Rupee was devalued against the Dollar to reduce the deficits in the Balance of Payments.

RESULTS AND DISCUSSION

Unit root test

Table 3.Real GDP

Null Hypothesis: Real GDP has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.255330	0.0000
Test critical values:	1% level	-3.592462	
	5% level	-2.931404	
	10% level	-2.603944	

Source: Author's own calculations

In the above table ADF test statistic value is -6.255330 and the associated 'p' value is less than 0.01. It indicates that Real GDP has no unit root or it is stationary at its level form.

Table 4. Current account deficit

Null Hypothesis: Current account deficit has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.291944	0.0214
Test critical values:	1% level	-3.592462	
	5% level	-2.931404	
	10% level	-2.603944	

Source: Author's own calculations

In the above table ADF test statistic value is -3.291944 and the associated 'p' value is more than 0.01. It indicates that current account deficit has unit root or it is non-stationary at its level form.

Table 5. Exchange rate

Null Hypothesis: External Rate has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.570991	0.0006
Test critical values:	1% level	-3.592462	
	5% level	-2.931404	
	10% level	-2.603944	

. Source: Author's own calculations

In the above table ADF test statistic value is -4.570991 and the associated 'p' value is more than 0.01. It indicates that Exchange rate has unit root or it is non-stationary at its level form.

Table 6. External debt (1)

Null Hypothesis: External Debt has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.858866	0.0587
Test critical values:	1% level	-3.592462	
	5% level	-2.931404	
	10% level	-2.603944	

Source: Author's own calculations

In the above table ADF test statistic value is -2.858866 and the associated 'p' value is more than 0.01. It indicates that external debt has unit root or it is non-stationary at 5% level, so first differencing is done in the next output.

Table 7.External debt(2)

Null Hypothesis: External Debt has a unit root
Exogenous: Constant
Lag Length: 2 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.168178	0.0000
Test critical values:	1% level	-3.605593	
	5% level	-2.936942	
	10% level	-2.606857	

Source: Author's own calculations

In the above table ADF test statistic value is -7.168178 and the associated 'p' value is less than 0.01. It indicates that external debt has no unit root or it is stationary.

The values of variables were transformed into logarithmic values and tested for stationarity. The results of the ADF show that there was non-stationarity in the level for Current Account Deficit, Exchange rate. The value of test statistics was less than the absolute value of 5 percent critical value. However, Real GDP and External debt were stationary at level data 1(0). It indicated that the series was integrated of different levels, such that the ARDL test approach is a method for analysing the relationship between the data.

Table 8. Result of ARDL

(Dependent variable: Real GDP)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
REAL_GDP(-1)	0.274662	0.161177	1.704105	0.0981
REAL_GDP(-2)	-0.114646	0.158372	-0.723902	0.4744
REAL_GDP(-3)	0.341860	0.152586	2.240433	0.0321
REAL_GDP(-4)	-0.330343	0.153524	-2.151738	0.0391
Current Account Deficit	-1.003537	0.509528	-1.969542	0.0576
Current Account Deficit (-1)	1.321648	0.569081	2.322424	0.0267
Current Account Deficit (-2)	-0.682890	0.466209	-1.464774	0.1527
C	4.391940	1.586990	2.767466	0.0093
R-squared	0.302821	Mean dependent var		5.985500
Adjusted R-squared	0.150313	S.D. dependent var		2.710819
S.E. of regression	2.498791	Akaike info criterion		4.846348
Sum squared resid	199.8067	Schwarz criterion		5.184124
Log likelihood	-88.92696	Hannan-Quinn criter.		4.968477
F-statistic	1.985607	Durbin-Watson stat		1.793165
Prob(F-statistic)	0.088210			

*Note: p-values and any subsequent tests do not account for model selection.
Source: Author's own calculations

Based on ARDL, the results of the estimates of factors affecting the Real GDP are presented in the above table 8. The results of the Error Correction indicate that coefficient for the current account deficit is statistically significant at the 5% level and the coefficient of error correction term ECM (1) is positive and highly significant indicating that changes in the current account deficit associated with real GDP. The Current account deficit revealed a significant impact on Real GDP. It can be observed that the variable current account deficit has a positive and significant impact on Real GDP.

Table 9. Result of ARDL

(Dependent variable: Current account deficit)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
Current Account Deficit (-1)	0.612474	0.152602	4.013532	0.0003
Exchange Rate	0.009934	0.019746	0.503074	0.6177
External Debt	-0.006405	0.017848	-0.358848	0.7216
C	-0.595670	0.262707	-2.267428	0.0290
R-squared	0.371126	Mean dependent var		-1.500000
Adjusted R-squared	0.322751	S.D. dependent var		1.102864
S.E. of regression	0.907603	Akaike info criterion		2.732390
Sum squared resid	32.12602	Schwarz criterion		2.896222
Log likelihood	-54.74638	Hannan-Quinn criter.		2.792806
F-statistic	7.671873	Durbin-Watson stat		2.141955
Prob(F-statistic)	0.000380			

*Note: p-values and any subsequent tests do not account for model selection.
Source: Author's own calculations

Based on ARDL, the results of the estimates of factors affecting the current account deficit are presented in the above table 9. The results of the Error Correction indicate that coefficient for the exchange rate is statistically significant at the 5% level but external debt is not statistically significant and the coefficient of error correction term ecm (-1) is negative and significant indicating that changes in the exchange rates are associated with current account deficit but not associated with external debt. Accordingly, External debt revealed a significant impact on the current account deficit but the Exchange rate had not shown a significant impact on the current account deficit. It can be observed that the variable external debt has a positive and significant impact on current account debt but the Exchange rate does not have an impact on the Current account deficit.

CONCLUSION ANDPOLICY IMPLICATIONS

The paper focused on the linkages between External debt, Exchange rate, Current account deficit, and GDP at Factor cost for India over the period of 1975-76 to 2018-19 using the Unit root test and Autoregressive Distributed Lag (ARDL). The results of the unit root test reveal that GDP growth rate and External debt are integrated at the level I(0); while the Current Account deficit and Exchange rate are integrated at first order I(1). The results of the Error Correction indicate that coefficient for the current account deficit is statistically significant at the 5% level and the coefficient of error correction term ECM is positive and highly significant indicating that changes in the current account deficit

associated with real GDP. It clearly reflects the important role of imports in accelerating the growth of a developing economy like India. Since independence, India has depended heavily on some of the critical imports like machinery and equipment, fuel and fertilizers which have contributed to a rise in the output of different sectors of the economy.

There is also evidence that the external debt has a positive and significant impact on the Current account deficit while the Exchange rate does not have an impact on the Current account deficit. It clearly reflects that the external debt raised by the government facilitated a gradual reduction in the current account deficit and contributed to economic growth by narrowing down the saving-investment gap. As the demand for Indian exports is inelastic in the global market, the country has not benefitted from the depreciation of its currency. The government should concentrate on further diversification of its export markets, creating a conducive environment for attracting longer-term FDIs, capital account liberalization, promotion of commercial services exports, and achieving exchange rate stability in the context of the USA-China trade war and stagnation in the world output growth.

The measures like simplifying the procedure concerning raising funds from abroad by manufacturing firms, encouraging capital flows for financing current account deficit, limiting the non-essential imports, continuation of export promotion policies and deflationary policies to make exports more competitive would facilitate to promote exports and to maintain the current account at the desired level. There is a need to encourage service exports like transport, financial, travel, and construction. Huge untapped potential for IT-enabled services should be exploited to promote service trade.

These finding would help the policymakers formulating a rational macroeconomic policy that aims at promoting exports and wipe off deficits in the current account of the Balance of payments. Understanding the relationship between current account deficit and other macroeconomic indicators is very important in formulating rational economic policies. The effective policies of the government should contribute to achieve consistency between current deficit and other macroeconomic objectivities.

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