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A TREND ANALYSIS OF CURRENT ACCOUNT DEFICIT AND ITS DETERMINANTS IN INDIA

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Abstract

The growing requirement of India getting more integrated with the worldwide economy is pushing India's engagement in International trade. India's external sector continued to be buoyant and robust in 2017-18, as witnessed in the Economic Survey 2017-18. The cross border uncertainty in the financial markets has transmitted through the various channels such as trade, finance, and confidence. Due to globalization, the developing countries like India experiences detrimentalpressure on its Balance of Payment (BoP). India's balance of payments situation, which has been relaxed since 2013-14, sustained to be so in the first half of 2017-18, in spite of some growth in the Current Account Deficit (CAD) in the first quarter, with a relatively lower CAD in the second quarter. India's CAD stood at US$7.2 billion (1.2 percent of GDP) in Q2 of 2017-18, narrowing sharply from US$ 15.0 billion (2.5 percent of GDP) in the preceding quarter. The objective of this study is to identify and analyze the factors that influence the country's Current Account Deficit. Research Methodology - This paper is based on secondary data, which is collected through various sources like report of RBI, IMF, and Economic Survey etc. This paper also explains the link between trade imbalances factors and its effect on current and capital accounts of Indian Balance of Payment.

Keywords
Current account deficit, balance of payments, foreign exchange rate, foreign exchange reserve.

INTRODUCTION

The current account is one of the two primary apparatuses of the balance of payments (the two components of BoP are Capital Account and Current Account). The Current Account, an important segment of BoP, consists of flows of merchandises, services, primary income andsecondary income between a country and rest of the world. While the "Goods and Services Account"are the major constituents of the current account, the primary income account replicatesamounts payable and receivable in return for rendering labour services,financial resources or non-produced non-financial assets (natural resources). Thesecondary income

account displaysreallocation of income between resident and non-residents, i.e., when resources for current purposes are swapped without economic valuebeing exchanged in return (transfers). The net effect of all the above mentioned transactions is known as the "current account balance".

The current account deficit is a significant indicator of competitiveness and the level of imports and exports. A large current account deficit typically implies some kind of disparity in the economy, which needs to be corrected. In the short-term, a current account deficit is mostly advantageous. However, in the long term, a current deficit is responsible for economic vitality. The current account deficit is also known as current account imbalance.

Developing countries may run a current account deficit in the short term to increase local productivity and exports in the future. But in long run this is a not desirable situation for a domestic economy.Developed countries, such as the United States, often run current account deficits while emerging economies often run current account surpluses. Extremely poor countries tend to run current account deficits.

Managing a Current Account Deficit

A country can manage its current account deficit by the way of increasing the value of its exports relative to the value of imports. A country can place restrictions on imports with application of tariffs or quotas, or it can emphasize policies that promote exports, such as import substitution, industrialization or policies that improve domestic companies' global competitiveness. The country can also apply the tools under monetary policy to improve the domestic currency's valuation relative to other currencies through devaluation, which reduces the cost of a country's exports.

Objectives of the Study

- To identify the determinants of current account deficit and to know their impact on current account balance in India.
- To study the trend and movement in India's current account balance.
- To analysis the impact of current account deficit on the economic growth.

Need of the Study

On the basis of previous studies researcher concludes that management of current account deficit is an important issue for a country because it affects the whole economy and depreciates in the value of its currency. At present Indian rupee

is struggling against dollar due to import of crude oil and gold worth of billions of dollar which is increasing amount of current account deficit. There is a strong need to identify different variables which are responsible for the movement of current account deficit.

Research Methodology

Source of data collection: Secondary data of Current Account Deficit, Foreign Exchange Rate, Foreign Exchange Reserve, Imports and Exports of India for ten years (starting from 2006 to 2017) has been taken from RBI official website.

Duration of Study: 10 years starting from 2006 to 2017.

Research Tool Applied: Dynamic Model through Multiple Regression Analysis

Data analysis and interpretation

This tables shows the value of different determinants (of 10 years) of current account deficit taken for the current study.

Years	Current Account Deficit	Foreign Exchange Rate	Foreign Exchange Reserve	Import	Export
2006-07	-9565	43.165	-1636.34	185735.24	126414.05
2007-08	-15738	39.98	-3696.89	251654.01	126415.05
2008-09	-27915	50.61	971.14	303696.31	126416.05
2009-10	-38181	44.825	-642.36	288372.88	126417.05
2010-11	-48053	44.525	-594.51	369769.13	126418.05
2011-12	-78155	50.955	685.02	489319.49	126419.05
2012-13	-88163	54.285	-207.02	490736.65	126420.05
2013-14	-32296	59.965	-960.54	450199.79	126421.05
2014-15	-26859	62.43	-3779.25	448033.41	126422.05
2015-16	-22151	66.255	-1158.3	381006.63	126423.05
2016-17	-15296	64.86	-1442.34	384355.56	126424.05

Source: RBI official website

Regression Model of the Current Account Deficit

The following table shows the descriptive of selected variables defining current account deficit. The variables taken for the study are foreign exchange reserves, exports of india, imports of india and foreign exchange rate.

Descriptive Statistics

	Mean	Std. Deviation	N
CAD	-36579.2727	25567.19782	11
FRX	-1132.8536	1519.08971	11
EXP	242968.9718	67689.81555	11
IMP	367534.4636	100306.80617	11
FRXR	52.8959	9.32803	11

Rationale of the selected variables:

The selected variables have direct or indirect impact on current account deficit. Foreign exchange reserves have direct bearing on the value of rupees making exchange rate cheaper or dearer. The exchange rate will make imports and exports increased or decreased. Whenever exports and imports are decreasing or increasing because of foreign exchange rate then it will have direct impact on current account deficit.

Other variables taken for the study are exports and imports which are the constituents of current account under balance of payment account. So exports and imports of the country are the direct determinants of current account deficit.

Study of correlation among the variables:

We can observe that FRXR i.e. Foreign exchange rate has a weak correlation with CAD i.e. Current Account Deficit .Import (IMP) has moderate (negative) correlation with CAD of

-.683. FRX and EXP are almost equally correlated to CAD with -0.543 and -0.516 respectively

Correlations

		CAD	FRX	EXP	IMP	FRXR
Pearson Correlation	CAD	1.000	-.543	-.516	-.683	.057
	FRX	-.543	1.000	.102	.228	-.039
	EXP	-.516	.102	1.000	.974	.715
	IMP	-.683	.228	.974	1.000	.609
	FRXR	.057	-.039	.715	.609	1.000
Sig. (1-tailed)	CAD	.	.042	.052	.010	.434
	FRX	.042	.	.382	.250	.454
	EXP	.052	.382	.	.000	.007
	IMP	.010	.250	.000	.	.023
	FRXR	.434	.454	.007	.023	.
N	CAD	11	11	11	11	11
	FRX	11	11	11	11	11

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	FRXR, FRX, IMP, EXP[b]	.	Enter

a. Dependent Variable: CAD

b. All requested variables entered.

Creation of the Model

The current model shows the factors influencing the Current Account Deficit in India. The equation for the current model can be presented as under:

$$CAD = f\,[FRXR, FRX, IMP, EXP]$$

$$CAD = \beta_0 + \beta_1 FRXR + \beta_2 FRX + \beta_3 IMP + \beta_4 EXP$$

Where FDI= foreign Direct Investment

TTRADE= Total trade of India

EXRATE= Exchange Rate

FRESERVE= Foreign exchange reserve

CAD= 13852.9+1096.56FRXR-2.14FRX-0.634IMP+0.616EXP

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.973[a]	.947	.912	7577.60208	.947	26.961	4	6	.001	2.208

a. Predictors: (Constant), FRXR, FRX, IMP, EXP

b. Dependent Variable: CAD

From the multiple linear regression model summary adjusted R^2 of our model is 0.912 with the unadjusted R^2 0.947 that means, the linear regression explains 91% of the variance in data. Unadjusted R^2 shows that all subsets of predictor variables will have a value of multiple R that is smaller than 0.947.

The Durbin Watson d= 2.208 which is between two critical value of 1.5< d < 2.5 and thus it can be concluded that there is no first order linear auto-correlation in our multiple regression data.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	6192295726.131	4	1548073931.533	26.961	.001[b]
	Residual	344520320.051	6	57420053.342		
	Total	6536816046.182	10			

a. Dependent Variable: CAD

b. Predictors: (Constant), FRXR, FRX, IMP, EXP

The linear regression F-test has the null hypothesis that there is no linear relationship between the variables or we can say that $R^2 = 0$. As per the table p-value ≤ 0.05, we shall reject the null hypothesis. At $\alpha = 0.05$ level of significance, there exists enough evidence toconclude that at least one of the predictors is useful for predicting CAD. Thus the model is useful for us.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	-13852.910	18242.576		-.759	.476	-58490.885	30785.066					
	FRX	-2.142	1.972	-.127	-1.086	.319	-6.966	2.682	-.543	-.405	-.102	.640	1.562
	EXP	.616	.249	1.632	2.474	.048	.007	1.226	-.516	.711	.232	.020	49.503
	IMP	-.634	.154	-2.486	-4.126	.006	-1.009	-.258	-.683	-.860	-.387	.024	41.316
	FRXR	1096.566	449.110	.400	2.442	.050	-2.367	2195.500	.057	.706	.229	.327	3.056

The above table indicates that the predictor variables are not highly significant in predicting the values of CAD as the p value in all the cases is more than 0.05 except foreign exchange reserve. Also there is an evidence of multicollinearity as the variance inflation factor (VIF) has very high values in case of exports and imports.

Coefficient Correlations[a]

Model			FRXR	FRX	IMP	EXP
1	Correlations	FRXR	1.000	-.215	.559	-.671
		FRX	-.215	1.000	-.579	.535
		IMP	.559	-.579	1.000	-.978
		EXP	-.671	.535	-.978	1.000
	Covariances	FRXR	201700.050	-190.202	38.564	-75.079
		FRX	-190.202	3.887	-.175	.263
		IMP	38.564	-.175	.024	-.037
		EXP	-75.079	.263	-.037	.062

a. Dependent Variable: CAD

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	FRX	EXP	IMP	FRXR
1	1	4.354	1.000	.00	.01	.00	.00	.00
	2	.592	2.712	.00	.59	.00	.00	.00
	3	.042	10.168	.19	.07	.01	.01	.01
	4	.011	19.936	.33	.02	.00	.01	.54
	5	.001	79.816	.48	.31	.99	.98	.44

a. Dependent Variable: CAD

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-80949.2578	-2802.1711	-36579.2727	24884.32383	11
Residual	-8449.74121	10768.21484	.00000	5869.58534	11
Std. Predicted Value	-1.783	1.357	.000	1.000	11
Std. Residual	-1.115	1.421	.000	.775	11

a. Dependent Variable: CAD

Conclusion and Suggestions

In the era of globalisation, the countries have both opportunities and threats in going global. The international trade among nations can bring trade deficit for a particular country. Export and import are the two substantial factors for trade inequities. The adverse gap between exports and imports of a country generates trade deficit. Trade deficit is directly related to current account deficit of a country. Due to factors like exchange rate volatility, currency devaluation, economic disequilibrium, global crisis the current account deficit gets wider. The study explains different elements of current account deficit. The study also explains that in order to reduce the deficit in the current account, earnings from invisibles trade should be further increased as the trends of the invisibles trade indicate huge improvement, particularly in services and transfers, throughout the study period.

The study found aadverse relationship between exchange rate and current account in the long-run. It implies that despite the reduction of Indian exchange rate, its exports are not taking advantage in the market, indicating misalignment of exchange rate. Thus, in order to mitigate this misalignment, competitiveness of exports is certainly required.

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