Twin Deficit or Twin Divergence in India: An Econometric Enquiry

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ANIL KUMAR GOYAL**

Abstract

The study focuses on twin deficit which is trade deficit and fiscal deficit for economic performance. Direction of causality is tested and main focus is given on impulse response function and decomposition. The experiential study is based on the secondary data. Two variables i.e., current account and budget deficit are used. Research period is from 1990 to 2018. For the fulfillment of the objective econometric models such as Stationarity and Cointegration, the VAR Model, Impulse Response and Variance Decomposition have been used. The observations from the variance decomposition depict no causal connection between two deficits in the study period 1990-2018. Granger causality test also supports the non-causality between the variables concerned. As no apparent causal relation was found, these research findings hold the Ricardian Equivalence Hypothesis which refuses any involvement between trade deficit and the fiscal deficit.

I. Introduction

LIKE OTHER DEVELOPING countries India has been facing fiscal deficit. Fiscal deficit has been varying during the last 30 years. On the contrary trade deficit has varied between 0% and 6.8% in the same period. It is necessary to reduce the two deficits. There is a close relation between two deficits. Since these two deficits are behind the primary reason for poor economic health of an economy, empirical study on causal connection between the variables is a concerned research area in the Indian economy.

According to the argument of Mundell-Fleming enlargement of budget deficit put pressure on the interest rate. High interest rate compare to world interest rate creates a situation to inflow capital and trade deficit takes place. On the other hand Ricardian theory assumes that fiscal deficit has no pressure on real rate of interest and finally on trade balance.

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4.2 Overall Findings with Concluding Remark and Policy Implication:
This article focused on the usefulness of well-known two-deficit phenomenon in developing India. The data observed over the period 1990 to 2018. Sophisticated econometric tools like Unit root test, VAR, Impulse response functions and variance decomposition were used in this article. From the VAR study it is inspected that there is no connecting association between two deficits during the period of investigation. From impulse response function we came to know that any shocks transmitted from trade deficit will not have any momentous impact on budget deficit. In opposite, any shocks produced from fiscal deficit will have less important shock on trade deficit.

The observations from the variance decomposition depict no causal link between the deficits concerned over the period 1990-2018. Granger causality test also supports the non-causality between the variables concerned.

As no apparent causal relation was found these research findings hold the Ricardian uniformity Hypothesis which declines any involvement between trade deficit and in the fiscal deficit. The empirical evidences support the RE hypothesis. It recommends that the fiscal policy did not follow during the period of study had not been harmful to generational wellbeing.

4.3 Further Scope of research
As there are other variables such as interest and inflation that are responsible for twin deficit hypothesis these variables should be included in further research to get better result when twin deficit proposition would be applied in the economy of India.

References


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**Annexure**

**Table A 1.1**

<table>
<thead>
<tr>
<th>Lag</th>
<th>LogL</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SC</th>
<th>HQ</th>
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<td>0</td>
<td>-18.357</td>
<td>NA*</td>
<td>0.0164*</td>
<td>1.565*</td>
<td>1.662*</td>
<td>1.593*</td>
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<td>2</td>
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<td>2.121</td>
<td>0.0262</td>
<td>2.024</td>
<td>2.508</td>
<td>2.163</td>
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</table>

Note : * indicates lag order selected by the criterion
Source: Self Computed

**Table A 1.2**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Coefficients</th>
<th>Standard errors</th>
<th>‘t’ Statistics</th>
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<td>Constant(α)</td>
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<td>(0.0983)</td>
<td>2.118</td>
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<td></td>
<td>BD&lt;sub&gt;-1&lt;/sub&gt;</td>
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<td>(0.210)</td>
<td>-0.028</td>
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<td>-0.2812</td>
<td>(0.212)</td>
<td>-1.320</td>
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<tr>
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<td>TD&lt;sub&gt;-1&lt;/sub&gt;</td>
<td>-0.0169</td>
<td>(0.124)</td>
<td>-0.136</td>
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<td>-0.0426</td>
<td>(0.112)</td>
<td>-0.377</td>
</tr>
<tr>
<td></td>
<td>R&lt;sup&gt;2&lt;/sup&gt; = 0.085</td>
<td>F-stat = 0.492, Log likelihood = -2.059, AIC = 0.543</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TD&lt;sub&gt;1&lt;/sub&gt;</td>
<td>Constant(α&lt;sub&gt;1&lt;/sub&gt;)</td>
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<td>(0.157)</td>
<td>[2.278]</td>
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<td>TD&lt;sub&gt;-1&lt;/sub&gt;</td>
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<td>(0.198)</td>
<td>-0.539</td>
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<td>(0.180)</td>
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<td>-0.0800</td>
<td>(0.340)</td>
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</tbody>
</table>

Notes : R<sup>2</sup> = 0.064831, F-stat = 0.363957, Log likelihood = -14.26437, AIC =1.481875
Source: Self Computed