



Fiscal Multipliers in Odisha State Finance

The role of **fiscal multiplier** has been given due importance in the debate of fiscal stimulus and consolidation. It mainly reflects the short run effects of a unit change in tax or government spending on economic activity. Various taxation and government spending measures have been adopted with the belief that these measures could achieve the desired goals. There was dearth of studies analyzing the impact of such fiscal stimulus measures on stimulating domestic demand.

Objective: A few studies (i.e. Bose and Bhanumurthy, 2013; Jain & Kumar, 2013) systematically estimated the size and effectiveness of fiscal multipliers for India. **However, to the best of our knowledge, no study has attempted to estimate fiscal multipliers in the context of Odisha till date. Hence, the present study estimates fiscal multipliers for Odisha under the framework of VAR (Vector Auto-regression) model.** We estimated different values for various fiscal multipliers like commercial tax multiplier, capital outlay multiplier and revenue expenditure multiplier for Odisha during 1980-81 to 2014-15.

Results and Analysis: The estimated results are depicted in the following table.

Table 1: Estimated Fiscal Multipliers

Variables	Multipliers
CEFT ESTIMATE	
Commercial Tax Multiplier (Odisha)	-1.02
Capital Outlay Multiplier (Odisha)	1.03
Revenue Expenditure Multiplier (Odisha)	1.01
NIPFP ESTIMATE¹	
Commercial Tax Multiplier (All States)	-1.08
Capital Expenditure Multiplier (Centre and all States)	2.45
Revenue Expenditure Multiplier (India and all States)	0.99
RBI ESTIMATE²	
Capital Outlay Multiplier (Centre and all States)	1.29
Capital Outlay Multiplier (All States)	2.13
Revenue Expenditure Multiplier (Centre and all States)	0.37

Both the capital outlay multiplier and revenue expenditure multiplier are hovering around unity, while the commercial tax multiplier is close to minus one.

A value of 1.03 for capital outlay multiplier implies that Rs.1 crore increase in state government's capital spending would raise the GSDP by 1.03 crores by the end of the year. Similarly, GSDP will increase by Rs. 1.01 crore with Rs. 1 crore increase in revenue expenditure. On the other hand, GSDP will decline by Rs. 1.02 crore with the rise in commercial tax by Rs. 1 crore. The estimated results are in confirmation with the earlier works (see Table 1).

The negative commercial tax multiplier may work in following way. A positive shock to commercial tax causes commercial tax revenue to rise. However, it will reduce private consumption by lowering personal disposable income. Consequently, private investment will fall with the decline in the overall level of GSDP.

Policy Implications: The estimated results suggest that an increase in GSDP can be brought about both by an expenditure expansion or a cut in commercial tax rates, though with different degrees of effectiveness.

Further, the study reveals a higher value of capital outlay multiplier as compared to the revenue expenditure multiplier. **Hence, the thrust of expansion in government expenditure has to shift in favor of capital outlay.** On the other hand, **a tax rate cut combined with an increase in tax base and tapping the existing escaped tax base,** may be beneficial for the state economy.

Reference

Bose, S. & N.R. Bhanumurthy. 2013. Fiscal Multipliers for India, *Working Paper* No. 125, NIPFP, New Delhi (September)

Jain, R. & Prabhat Kumar. 2013. Size of Government Expenditure Multipliers in India: A Structural VAR Analysis. *RBI WPS (DEPR)*: 07/2013.

¹NIPFP(No.002), May 2014(Data: 1990-91 to 2011-12)

² RBI(WPS,DEPR), July, 2013(Data: 1980-81 to 2011-12)