

**EMPIRICAL ANALYSIS OF USE OF FISCAL POLICY AS A
STABILIZATION TOOL IN INDIA**

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Submitted
*In fulfillment of the requirements of the degree of Doctor of Philosophy
to the*



INDIAN INSTITUTE OF TECHNOLOGY, DELHI

DECEMBER 2011

CERTIFICATE

Certified that Ms. Swati Yadav was permitted to work for her Ph.D. degree in Economics at the IIT Delhi, on the problem entitled “EMPIRICAL ANALYSIS OF USE OF FISCAL POLICY AS A STABILIZATION TOOL IN INDIA”. She has faithfully carried out her study under our guidance and supervision and the accompanying thesis is her genuine and original work.

The results contained in the thesis have not been submitted, in part or full, to any other University or Institute for the award of any degree or diploma.

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ACKNOWLEDGEMENT

I wish to express my sincere appreciation to Prof. V. Upadhyay for his effort and time to review this dissertation. He was always kind and accessible whenever I needed his assistance for the dissertation research as well as personal matters.

I am also grateful to Dr. Seema Sharma for her guidance and support.

I extend my thanks to all members of my Departmental Research Committee and staff of Department of Humanities and Social Sciences, IIT Delhi for their cooperation.

My family encouraged me at every difficult situation. I extend my gratitude to them as without their support this dissertation would not have been possible.

Above all I thank God and dedicate this thesis to my baby who is expected to arrive in January 2012.

I am solely responsible for remaining errors, if any, in the study.

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ABSTRACT

The main objectives of fiscal policy are to ensure efficient allocation of resources and fair distribution of income and wealth. The third major role of fiscal policy is the stabilisation of the economy. Even after sixty years Keynes emphasised on the use of fiscal policy as a stabilisation tool there is yet no unanimity on the basic signs of the effect of fiscal policy on the level of economic activity even if we overlook the magnitude of the effects. The global slowdown of 2008 saw the revival of Keynesian policies with large stimulus packages being implemented across the world. India has also used fiscal policy from time to time for stabilisation of its economy. With this background the study has analysed the role of fiscal policy as a stabilisation tool in India using secondary data.

The specific research objectives tackled in the study are to analyse the response of policymakers to cyclical fluctuations in the economy, effect of discretionary fiscal policy on the level of economic activity and the size of automatic fiscal stabilisers. To achieve these objectives study has used a number of statistical and econometric techniques ranging from the graphical analysis of to assess important trends in Indian public finance to complex time series innovation accounting technique by developing a SVAR model. Data covers two decades prior to economic reforms initiated in 1991 and approximately two decades of the post reform period.

Graphical analysis of fiscal data indicates that the important features of fiscal adjustment under discretion (Phase 1: 1990-91 to 2002-03) and rules (Phase 2: 2003-04 to 2008-09) in India are: firstly, it is revenue based, secondly, capital expenditure is bearing the brunt to meet fiscal targets, and thirdly, a large part of government spending is rigid. When fiscal adjustment is based on increasing revenue without a commensurate reduction in unproductive expenditure, its sustainability is doubtful. When revenues are increasing governments tend to relax and do not undertake to reduce unnecessary expenditures. Rather government spending increases, so the adjustment effort is undermined and the result is a larger government.

With regard to the response of policy makers to cyclical fluctuations the general result is that the fiscal policy is countercyclical in developed countries and procyclical in developing countries. Findings for the Indian economy are mixed. The DBB fiscal indicator shows that the

response of the policy has been mixed, countercyclical especially during the periods of downswings. Both non-parametric approaches – amplitude and pairwise correlations - suggest that government spending variables has behaved in a procyclical manner whereas tax revenues move with the business cycle increasing during good times and decreasing during bad times. The fiscal policy, it seems, does sometimes end up reinforcing the business cycle as far as government spending variable is concerned. The combination of monetary and fiscal policy used has also varied in response to the cyclical conditions existing in the Indian economy. While the government followed a tight fiscal stance in FY 1996 and FY 2002, monetary policy stance was comparatively loose. In the FY 1991 both fiscal and monetary policies were considerably restrained as a result of the BoP crisis of 1990.

The Forecast Error Variance Decomposition (FEVD) of the three variables baseline model indicates the movements in government spending fiscal variable are governed by policy objectives, which are largely exogenous in nature and not entirely dependent on macroeconomic conditions. Tax revenues in contrast are more endogenous in nature. The large variance responses of taxes to business cycle or output shocks make them good automatic stabilizers.

The impact of the government spending shock on output is positive with the peak output multiplier value of (1.14; Q4) and an impact value of 0.09. The cumulative output multiplier for the fourth quarter points to crowding out in the economy. On impact both current and capital spending positively affects output with the impact response in percentage terms is 0.11 for current spending and 0.04 for capital expenditure. Even after 12 quarters the increase in current government expenditure does not lead to equivalent increase in output. It shows some evidence of crowding out of private expenditure for the Indian economy. Whereas the 8th quarter cumulative multiplier for capital spending is 3.12, reflecting positive impact of public capital formation on the GDP levels. The impulse responses for a tax shock on private consumption show that the effect is significant and negative in the initial quarters. A positive shock in government spending variable on impact affects private consumption in a Keynesian manner. Overall, the response of private consumption to fiscal shocks generally mimics the output response.

The cyclical budget balance appears to move countercyclically in tandem with the output gap during both upward and downward phases of the business cycle. It seems that automatic stabilizers were allowed to operate in both up and down phases of the business cycle. On the

revenue front, the importance of taxes that are more sensitive to cyclical fluctuation is gradually increasing. The tax on income and profits are most sensitive to changes in GDP therefore with rise in share of such taxes in total tax revenue in post reform period correlation has also improved. The correlation coefficients and the elasticity values indicate that tax revenues have behaved in a procyclical manner thus have played a role in stabilizing the economy.

The major finding of the research study is that the impact of fiscal shocks on the Indian economy follows Keynesian tradition and the effect is felt even in the long run. Further, the results also suggest that quality of expenditure is more relevant as can be seen from the long run impulses of output responses to shocks to current and capital government spending variables. Declining share of capital expenditure in total expenditure is a serious matter requiring immediate attention as it can have adverse consequences for the future rate of growth of the Indian economy. With globalisation Indian economy has also become more susceptible to cyclical fluctuations. So to protect the most vulnerable sections of the society the government should try to develop automatic expenditure stabilizers that can work in both rural and urban areas by reviewing and remodeling the existing unemployment and poverty eradication programmes.

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