

Chapter 15

The Opportunity Costs of Military Expenditure

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ABSTRACT

The defense or military expenditure is a vital necessity to any nation insofar as the roles of internal peace and immunity against foreign aggression in ensuring progress of a nation in all relevant fronts are concerned. In this chapter, it has been observed that the relationship between military expenditure and the growth rate GDP is nonlinear in the sense that at first with increase in the military expenditure the growth rate rises and after reaching the peak it declines with the further increase. There are also significant opportunity costs of military expenditure both in terms of GDP and economic development as a step-up in the military expenditure leads to the decline in the other forms productive expenditures like that in health, education, infrastructure inter-alia. This implies the necessity of military expenditure needs to be lowered which can be made possible by improving international harmony and imparting more bonhomie among the nations particularly amongst those which are close neighbors.

INTRODUCTION

The defence or military expenditure is a vital necessity to any nation so far the roles of internal peace and immunity against foreign aggression in ensuring progress of a nation in all relevant fronts are concerned. It is also unanimously true, particularly for the developing nations, that the responsibility of funding defence expenditure largely vests on the state authority or the Government as seen from the economic and strategic viewpoint. However, there are several other realms like infrastructure, health, education, research and innovation deserving primacy for achieving economic development and therefore need Government intervention and funding. This ergo leads to a situation of trade-off between two primordial aspects pertaining to economic development: political stability and capability creation and thereby evokes the issue of optimal allocation of public expenditure between defence and non-defence

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sectors. To make it differently given the indispensability of a well-knit defence force to any country, the emphasis on defence expenditure should be kept at the level where its opportunity cost is minimum. Thus the current literature is based on the motivation of enumerating the opportunity cost military expenditure from various aspects namely the economic growth and development. Here the opportunity cost has been treated in the tradition sense which deals with the how much of benefit needs to be forgone when a given amount is used for some activity. Therefore the opportunity cost of military expenditure in this case purports to amount of GDP or the degree of economic development that could have been generated otherwise if the resources were directed towards the development of health, education and expansion of infrastructure that far more productive than military spending. The empirical analysis dealt in this paper begins with investigating into the potential casual effect of military expenditure on GDP followed by the estimating the correlation of military spending with expenditure on health and education. Besides, attempt has been made to trace out the impact of military expenditure on the potential of a country for being in the higher order of economic development. The study also seeks to throw light on the manner in which the evolution of military expenditure over time varies with income and spatial differences.

OBJECTIVES OF THE STUDY

The present study aims:

1. To highlight on the nature of the relation between military expenditure intensity and the growth in GDP.
2. To enumerate the extent of opportunity cost imposed by the military expenditure in terms of GDP and the level of economic development, given the trade-off between military expenditure and other forms of expenditure like those on health and education.

METHODOLOGY

The present analysis rests on the sample of 158 countries observed over the period spanning from 1990 to 2015 and is primordially based on the regression approach where we have used both linear and non-linear regression models as what follows.

In order to unfold the pattern of relationship existent between military expenditure and GDP growth we have employed two models with Annual Growth rate of GDP (gdpg) as the dependent variable and Military Expenditure as the percentage of GDP (milexp) as the independent variable as and u as the structural error:

Next, we move to looking for the degree of opportunity cost associated with military expenditure with respect to the GDP and level of economic development in the sense that how much would have been the net increase in GDP if the military expenditure as proportion of GDP was lessened by 1 percent and reallocated to health and education and for economic development what would be the possibility of being in the higher rungs of economic development if the same reallocation was made.

Now to estimate the case of opportunity cost measured in terms of GDP we have fitted a log linear regression model with log transformed GDP (lngdp) as the dependent variable and expenditures on health and education as the proportion of GDP (hexp and eexp) as the independent variables as described below: