

Impact of Defence Expenditure on Economic Growth and Development in Sri Lanka: The Trade off Effect on Economic Services

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Introduction

In Classical Economics, expenditure on national defence can be interpreted under the “gun vs butter” (defence vs civilian goods) argument (Harrison, 2010; Benoit, 1973), with a simple production possibility frontier allowing for mutual trade-offs. Even given this trade-off, countries still allocate substantial amounts of expenditure on national defence.

The intensity of defence expenditure would vary depending on the scale of domestic and/or external threat faced by the country and its legitimate government. In the case of Sri Lanka, the economy has been spending significantly high amounts of resources on national defence, particularly since the 1980s, and it is argued that such expenditure has hindered the country’s economic growth and development (Grober, and Gnanaselvam. 1993; Arunatilake, N., S. Jayasuriya and S. Kelegama. 2000).

As defence plays a crucial role in establishing political stability and because of its linkage with the political economy, neoclassical economics, treated national defence as one of the important priorities of governments (Acemoglu, 2005). However, a crowding out effect, or a trade-off effect, if it exists, could negatively affect the economy. This study proposes evaluating whether such a trade-off effect of defence expenditure has prevailed in on Sri Lanka, with defence expenditure adversely affecting the government’s ability to spend on economic services.

Methodology

In Neoclassical Economics, the government is thought to be a rational actor that balances benefits of national security against that of other public services, to best

achieve national interest. This is a prime role that the government is expected to play, in view of meeting the requirement of maximising social welfare in an economy. National security is a pure public good and is often a priority, given the political conditions prevailing in a country (Agostino, Dunne, and Pieroni 2012).

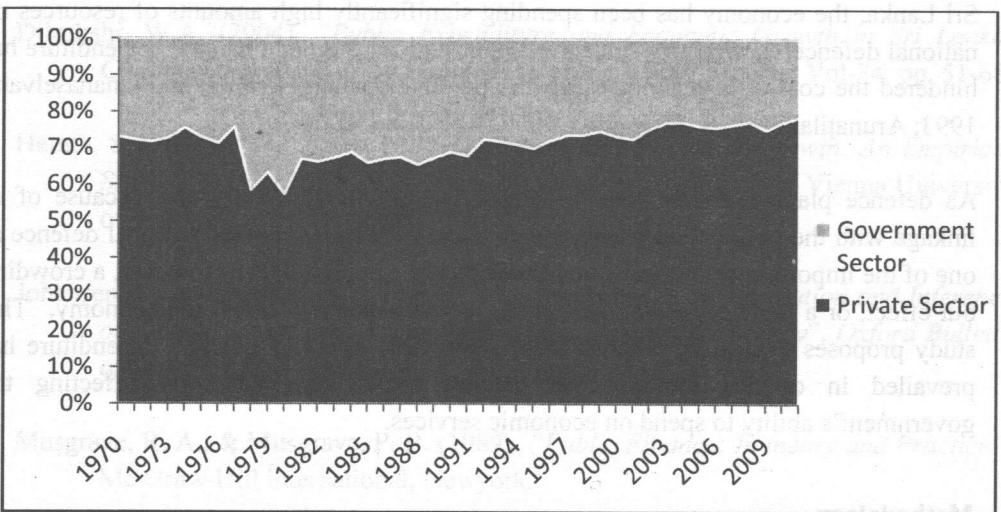
The expenditure on national defence, however, needs to be effective and efficient, from a long run perspective to ensure maximization of national benefits from such expenditure. (Jayawardena, 2011)

This study used macroeconomic data to evaluate the impact of defence expenditure on the economy during the period between 1970 to 2011. Whether there has effectively been a trade-off between the two expenditure variables: defence, and economic services, was examined using Granger causality analysis. The results are interpreted using descriptive statistics, while focusing on the political economy of national defence.

Results and analysis

The relative share of the government, as a component of the economy, has been fluctuating over the last 30 years, depending on the policies in place. In the post 1980s, for example, the size of the government was restricted with the expansion of market related economic policies (see Figure 1).

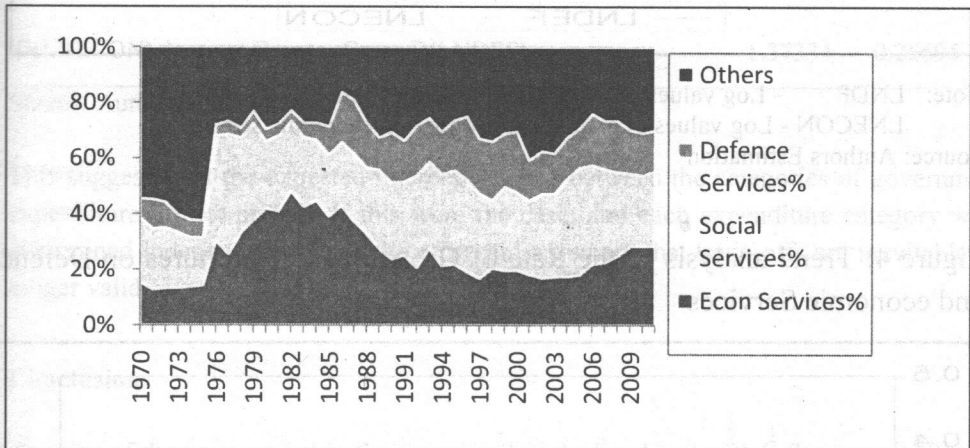
Figure 1 : Comparative Size of the Government and Private Sector of the Economy of Sri Lanka



Sources: Economic Progress of Independent Sri Lanka, Economic and Social statistics of Sri Lanka 2006 and 2011, Central Bank of Sri Lanka

The decline in the size of the government has promoted competitiveness among different elements in the basket of government services (see Figure 2). Economic services (such as agriculture, irrigation, industrial sector, infrastructure, transportation, electricity, gas and water supply) more than other services are associated with growth in the country's GDP. Social services are important in uplifting wellbeing of the general public and linked with economic growth in the long run. Social services include components such as education, health and other welfare services. National defence as a service is coming under public administration. This is not theoretically sound, given its strong economic linkages but results in defence being treated as a pure public good (Agostino, Dunne, and Pieroni 2012). Allocations for the different services are interdependent so clearly trade-off effects are inevitable (see Figure 2).

Figure 2: Comparison of Defence Expenditure with other Government Expenditures

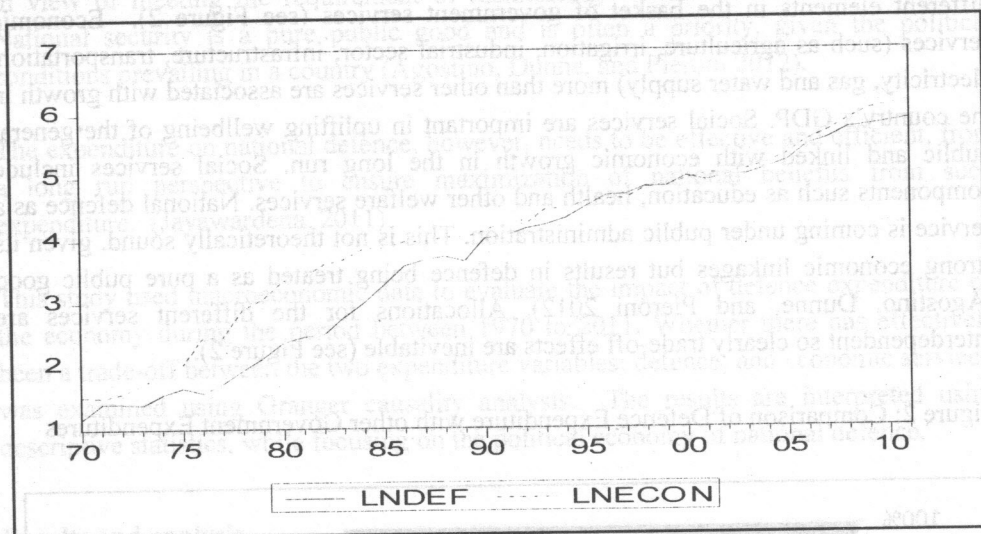


- Sources: 1. Economic Progress of Independent Sri Lanka, Economic and Social statistics of Sri Lanka 2006 and 2011, Central Bank of Sri Lanka
2. Annual Estimates, General Treasury of Sri Lanka

During the period from 1976 to mid of 1980s the expenditure on economic services has increased drastically (see Figure 3 and 4). Thereafter, the rate of increase in defence expenditure has been comparatively high from the mid 1970s until 2009. Since the conclusion in 2009 of the internal disturbances, economic services have increasingly regained their momentum.

The graphical analyses (Figures 3 and 4), witnesses the trends of intensity of defence expenditure verses expenditure on economic services.

Figure 3: Trend analysis of Expenditures on Defence and economic Services

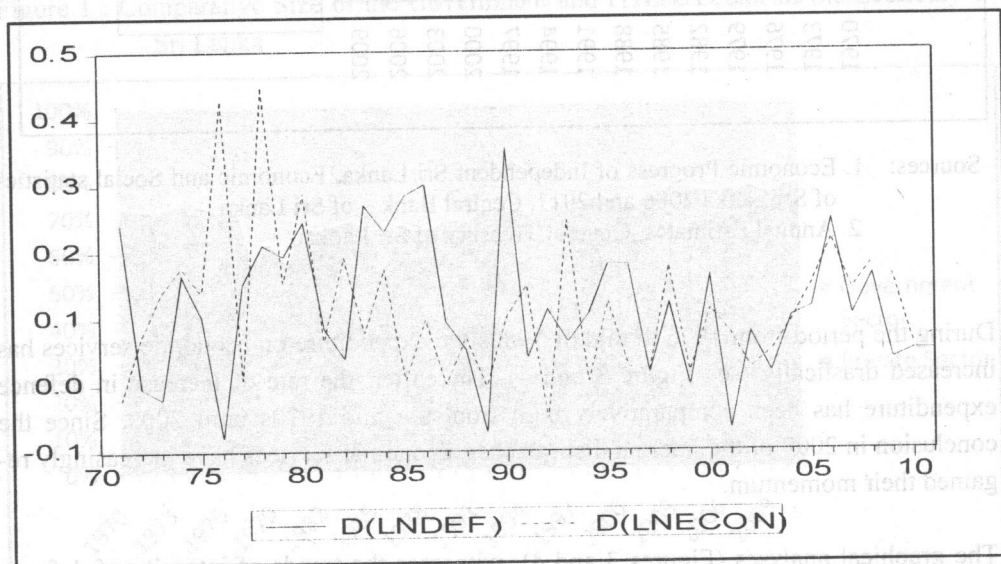


Note: LNDEF - Log values of annual defence expenditure

LNECON - Log values of annual expenditure on economic services

Source: Authors Estimation

Figure 4: Trend analysis of the Rate of Growth of Expenditures on Defence and economic Services



Note: D(LNDEF) - Growth rate of annual defence expenditure

D(LNECON) - Growth rate of annual economic services

Source: Authors Estimation

According to the Granger causality test, the null- hypotheses have been accepted which means there is no meaningful relationship between defence expenditure and economic service expenditure (see table 1).

Table 1: Granger Causality Between Expenditure on Defence and Economic Services

Pairwise Granger Causality Tests			
Date: 11/05/12 Time: 05:43			
Sample: 1970- 2011			
Lags: 2			
Null Hypothesis:	Observations	F-Statistic	Probability
D(LNDEF) does not Granger Cause D(LNECON)	39	2.21285	0.12490
D(LNECON) does not Granger Cause D(LNDEF)		1.37334	0.26695

Source: Authors Estimation

This suggests that the expected interdependence between the categories of government expenditure do not prevail. If this were the case, and each expenditure category were determined independently, then the aforesaid argument that trade-offs are inevitable no longer valid.

Conclusion

The size of the government in the economy has declined and with it the competition for allocations of expenditure for different government services has increased. Defence expenditure has increased since the mid of 1980s in the face of national security threats. While there may be instances of short term trade-offs between defence expenditure and the expenditure on economic services, no significant long-run relationship between these two variables could be perceived through the trend analyses or through the Granger causality analysis.

Therefore, we could conclude that there is no significant trade off effect between national defence and economic services. With the peace dividend the defence expenditure generated, enabling pursuance of economic activities without disturbance, the findings of the present analysis could be considered as supporting the hypothesis that the high level of defence expenditure in Sri Lanka had not hampered GDP growth in spite of isolated occurrences of Government expenditure trade-offs.

References

Acemoglu, Daron (2005) Politics and economics in weak and strong states. *Journal of Monetary Economics* 52 (2005) 1199–1226

Agostino, G., P. Dunne, and L. Pieroni, (2012) Assessing the effects of Military Expenditure on Economic Growth. *The Oxford Handbook of the Economics of Peace and Conflict*. edited by Michelle R. Garfinkel and Stergios Skaperdas. OUP USA.

Arunatilake, N., S. Jayasuriya and S. Kelegama. 2000. *The Economic Cost of the War in Sri Lanka*. The Institute of Policy Studies. Colombo, Sri Lanka.

Benoit, E. (1973) *Defense and economic growth in developing countries*. MA, Lexington Books,

Grober, L. M. and S. Gnanaselvam. 1993. *The Economic Effects of Sri Lankan Civil War. Economic Growth and Development and Cultural Change*. Vol. 41. No. 1: 395-405.

Harison, Todd (2010) *The new gun vs butter Strategy for London*. CSB, pp1-11

Jayawardena M. M. (2011) *Economic Implications of National Defence*. PhD Thesis, University of Colombo

Smith, R. P. (1977) *Military expenditures and capitalism*. *Cambridge Journal of Economics*, 1, pp. 61-76