

Arms or butter: The economic effect of an increase in military expenditure[☆]

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Abstract

This paper analyzes the economic effects of increasing military expenditure, a requirement in the Republic of Korea. The effects of military expenditure are examined with various scenarios concerning financial resources from an endogenous growth perspective. The dynamic Computational General Equilibrium (CGE) model is employed in order to measure the aggregate effect of changes in military expenditure. Raising the indirect tax rate is the best for GDP, but a corporate income tax rate increase is the best for gross output. The differences between short-term and long-term effects are verified by the dynamic change in each indicator. © 2015 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.

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1. Introduction

It is a very important but difficult task to balance national security and economic growth. National security is the first priority in every country, but huge military expenditures can be a large burden for government and detrimental to the welfare of the people. Therefore, an effective budget plan for military spending is required.

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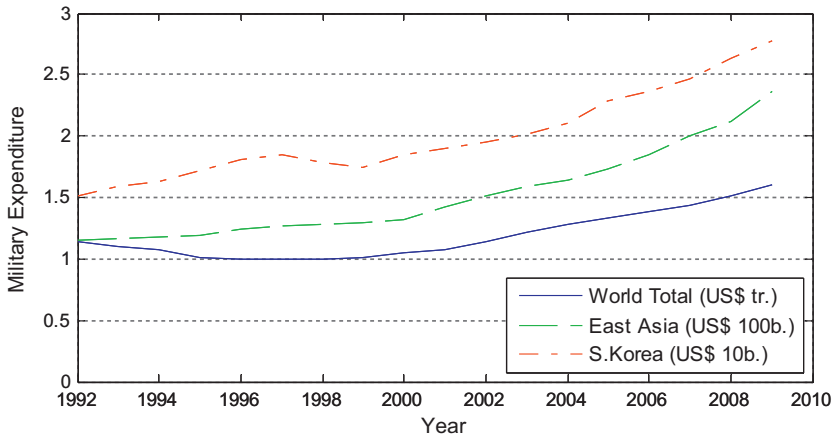


Fig. 1. Military expenditure trends.

Source: SIPRI (2012) Military Expenditure Database.

Although military spending was temporarily decreased after the end of the Cold War, it has risen again since the 1990s. Moreover, this trend is continuing in spite of the global economic crisis during the last 10 years. This trend demonstrates that, in most countries, security principles are considered more important than economic conditions. In particular, a country such as South Korea, which is facing military conflicts and tensions, prioritizes security issues (Fig. 1).

Therefore, this research focuses on the economic effect from additional military spending and on methods of effective military budget procurement in South Korea. For this objective, our research analyzes the dynamic changes in the principal economic indicators by using a Computable General Equilibrium (CGE) model with an endogenous growth perspective.

A review of the relevant literature is presented in the next section. The following section describes our CGE modeling, followed by an explanation for the scenarios. We next present simulation results and, finally, conclude with the policy implications.

2. Literature review

Most of the defense economics literature on the relationship between military spending and economic growth were mainly focused on the causality analysis,¹ where the direction of causation between two variables is examined and linkage identification, where the strengths of the identified casual patterns are estimated.² Also, a large body of empirical literature investigating the economic effects of military spending has little consensus as to what these effects might be. However, given the complex nature of defense expenditures affecting national growth through direct and indirect channels, it is not surprising. In this regard, it can provide useful

¹ For recent studies, see Abu-Bader and Abu-Qarn (2003), Kollias, Manolas, and Paleologou (2004) and Dunne and Smith (2010).

² See Looney (1997) for major categories of defense economics studies.

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