

Military Spending and Development

Introduction

- Military spending influence beyond the resources it takes up
- Governments provide wages and salaries and cover other expenses for the armed forces and procure arms for them, data is on milex; arms take foreign exchange
- End cold war reductions in military expenditure, bottomed out and rising: not consistently across all regions.
- General trends do of course always hide more complex patterns.

Research Issues

- **Data Availability and Measurement Problems**
- Differences are particularly important for cross section analyses of countries, but not so much for time series data.
- Developing countries may also differ in the way in which they treat or define military related aid, the fungibility of aid, and the way in which arms sales are financed (Brzoska, 1994).
- In fact there is some evidence that arms imports may not even be included in military spending figures in many countries, (Omitoogun, 2006).

Research issues

- **Theoretical Considerations**
- Applied work this is usually restricted to economic growth rather than development because of the problems of defining and measuring development. Necessary but not sufficient
- A theoretical model is important for any empirical study but much of economic theory does not have an explicit role for military spending as a distinctive economic activity.
- The dominant neoclassical approach
- The Keynesian and Institutional approach
- The Marxist approach

Effects

- In empirical work the fact that there is no agreed theory of growth among economists means that there is no standard framework that military spending can be fitted into.
- Clearly, in developing countries military spending conflict, economic capacity (education, governance, institutions, natural resources) all interact to influence growth.
- The theoretical work has allowed the identifies a number of channels, the relative importance and sign of these effects and the overall impact on growth can only be ascertained by empirical analysis.

Channels

- **Labour:**
- **Capital:**
- **Technology:**
- **External relations:**
- **Socio-Political:**
- **Debt:**
- **Conflicts:**
- **Demand:**
- **Arms races:**
- **Identification:**
- Clearly all of these channels will interact and their influence will vary depending on the countries involved.

Empirical Work

- Once we move beyond a broad stroke theoretical understanding towards an empirical analysis it becomes necessary to be more specific about the questions to be addressed and the way in which they are to be analysed.
- There are choices to be made many of which will be conditioned on the theoretical perspective adopted and the data availability
- some confusion within the literature as a result of not recognising such differences in the nature of studies
- empirical results are likely to be very sensitive to
 - the measurement and definition of the variables,
 - the specification of the estimated equations (especially the other variables included),
 - the type of data used
 - the estimation method.

Empirical Work

- theoretical of developed countries applied to developing countries with some adjustments. Hardly the best way to undertake such an analysis.
- The resulting variety of studies does make comparisons rather difficult and explain some of the seemingly contradictory findings.
- Whether or not the overall impact of military spending on development is positive or negative depends upon the relative magnitudes and signs of these channels and in the absence of any theoretical consensus, this can only be determined empirically.

Empirical work

- Benoit (1973, 1978) purported to show that military expenditure and development went hand in hand.
- There were two responses
 - call for more detailed individual country case studies
 - argue that Benoit's empirical work was flawed

Empirical Work

- This led to a plethora of econometric studies.
 - Simultaneous equation systems.
 - Neoclassical single equation growth models:
 - "Granger causality" tests finding no dominant result.
 - non linear relationships and different effects at different levels of expenditure.
 - Opportunity cost of military spending, or the trade off
 - Large country macroeconomic models

Empirical work

- Other issues
- Arms production capabilities -effect
- arms procurement will need foreign exchange and this may well require borrowing and create debt.
- changes in the nature of conflicts. New wars; asymmetric conflict and Greed vs grievance: lively debate.

Empirical results

- **Previous surveys: refs in my paper**
- Chan (1986), who found a lack of consistency in the results,
- Ram (1995) who reviewed 29 studies, concluding little evidence of a positive effect of defence outlays on growth, but that it was also difficult to say the evidence supported a negative effect.
- Dunne (1996) covering 54 studies concluded that military spending had at best no effect on growth and was likely to have a negative effect, certainly that there was no evidence of positive effects and

Empirical Results

- Smith (2000) suggesting the large literature did not indicate any robust empirical regularity, positive or negative, though he thinks there is a small negative effect in the long run, but one that requires considerably more sophistication to find
- Smaldone (2006) heterogeneous, that variations can be explained by intervening variables. Negative effects tend to be wider and deeper in Africa and most severe in countries experiencing legitimacy/security crisis and economic/budgetary constraints.

Empirical results

- Dunne (2008)

| Type | Total No. | %Positive | %Negative | %Unclear |
|---------------|-----------|-----------|-----------|----------|
| Cross country | 63 | 19 | 38 | 43 |
| Case studies | 40 | 20 | 35 | 45 |
| Total | 103 | 20 | 37 | 43 |

- Summarising the result of our survey of 103 studies on the effects of military spending on economic growth, where case studies refers to single or small groups of countries and the unclear category, implies mixed or insignificant results.
- Overall, while there is no consensus on the economic effects of military spending the most common finding is that military burden has either no significant effect, or a negative effect on economic growth for developing countries.

Conclusions

- Military spending is an expenditure by governments that has influence beyond the resources it takes up, especially when it leads to or facilitates conflicts.
- Always opportunity costs,
- No theoretical consensus so empirical question

Conclusions

- There is not necessarily an automatic improvement in development as a result of arms and military spending reductions, it something that requires good governance, management and support (Brauer, 1990).
- An early influential study by Smith and Smith (1980) suggested that if there is a relationship between disarmament and development, it may be one that has to be constructed politically, not one that is pre-given by economic forces. It would appear from this survey that their conclusion remains relevant to the modern world.

Conclusions

- An interesting observation is that while the evidence from military expenditure to growth is weak (even if the link is negative), the opposite link is very strong: The best way to true security may actually be through economic development.
- It seems unfortunate that after 25 years of work or so, the findings of the review should be so hedged.

Conclusions

- The empirical analyses of the economic effects of military spending, including arms transfers, suggests that there is little or no evidence for a positive effect on economic growth and that it is more likely to have a negative effect, or at best no significant impact at all.
- Overall, these results suggest that reducing arms and military spending need not be costly and can contribute to, or at the very least provide the opportunity for, improved economic performance in developing countries.