

Lecture 3

Military Spending and Development

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Context

- Really interested in militarism, but problems of defining and measuring: focus on aspects – military spending
- Military is important topic with influence beyond the resources it takes up
- Changed international security environment
 - End of Cold War: changed geopolitical environment
 - Reductions in Military Spending: bottomed out and increasing
 - Shifting economic power?
 - In most cases increases not result of obvious strategic needs, but internal pressures?

SIPRI: World and organizational military expenditure estimates, 1996–2005

Figures are in US \$b., at constant (2003) prices and exchange rates. Figures in italics are percentages. Figures do not always add up to totals because of the conventions of rounding.

Organization/ income group ^a	2000	2001	2002	2003	2004	2005	Change 96–05 (%)	Military expenditure 2004	
								per capita	% GDP
<i>Organization</i>									
ASEAN	11.1	11.7	12.4	13.3	13.3	13.1	+8.2	24.3	<i>1.5</i>
CIS	16.4	17.9	19.7	21.1	22.1	24.1	+50.4	89.5	<i>3.4</i>
EU	196	196	199	206	219	212	+11	473.8	<i>1.9</i>
NATO	539	541	585	642	687	706	+34.5	793.9	<i>2.9</i>
NATO Europe	207	207	211	217	224	217	+10.5	416.2	<i>2.0</i>
OECD	622	625	670	727	768	789	+29.6	706.1	<i>2.5</i>
OPEC	37.1	39.6	36.3	38	42	46.7	+72.4	81.5	<i>3.8</i>
<i>Income group (by 2003 gross national income per capita)</i>									
Low	24.3	24.6	25.4	25.6	28.3	29.5	+64	12.4	<i>1.9</i>
Lower middle	90.5	99	105	109	114	122	+59	43.4	<i>2.5</i>
Upper middle	42.2	45.2	42.5	43.9	46.7	51	+48	137.3	<i>2.3</i>
High	627	631	678	736	780	799	+29	810.1	<i>2.6</i>

GDP = Gross Domestic Product

- general trends always hid more complex patterns
 - Some increased because of local insecurity
 - Encouragement of push for arms exports
 - Rising oil and other commodity prices
- Continued use of economic arguments to justify security expenditures –important to deal with these
- Is it an economic driving force for an economy or a deadweight?
- Issues are important for Africa in particular

Trends in military spending in Africa (SIPRI, 2010)

- Estimated total military expenditure in Africa in 2009 was \$27.4 billion (\$10.0 billion in North Africa and \$17.4 billion in sub-Saharan Africa).
- Spending increased by 6.5 per cent in real terms over 2008 and by 62 per cent compared to 2000 (107 per cent in North Africa and 42 per cent in sub-Saharan Africa).
- The regional increase was partially offset by a substantial fall in Chad, from an unprecedented high level in 2008, due to oil revenues.
- The trend in Africa is overwhelmingly determined by five major-spending countries: Algeria, Angola, Morocco, Nigeria and South Africa.
- Increases in 2009 by these major spenders continue longer-term trends: over the decade 2000–2009 military spending rose in real terms by 127 per cent in Morocco, 105 per cent in Algeria, 101 per cent in Nigeria, 53 per cent in South Africa and 40 per cent in Angola.
- Oil and gas revenues are a significant factor behind the spending in many countries.

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).
- 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

Military Spending and the Economy: Theories

- Have already discussed these so will summarise:
 - Neoclassical:
 - New classical: transitory and permanent shocks: war permanent and can be negative.
 - Keynesian: Military one component of government spending; effective demand/multiplier effects; Positive economic effect
 - Institutionalist: Predicated on existence of MIC; internal pressures for increases independent of threat; creates inefficiencies in economy; negative economic effect.
 - Marxist: Marx little to say: Overall unclear what effect would be.
 - Monopoly Capital: Baran and Sweezy.
- Relevance for developing countries?

- Could fall back on complex understanding: Marx's method/Hegelian interpretation.
 - Historical process: specific
 - Contingent rather than deterministic
 - Complex dialectical process
 - Contradictory: imp but econ cost
 - Wouldn't expect simple economic relation and don't find it
- Have to undertake empirical analysis that recognises historical specificity of any likely impact of military and changing nature of the military economy.
- Can identify post WW2 examples of combinations of military burden and growth
 - High burden high growth: Taiwan, South Korea
 - High burden low growth: USSR, UK
 - Low burden high growth: Germany, Japan
 - Low burden low growth: Parts of SSA?

Empirical work:

- Clearly, in developing countries military spending, conflict and economic capacity (education, governance, institutions, natural resources) all interact to influence growth.
- More specifically 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:

- Keynesian demand side effects
 - Supply side effects –crowding out, externalities
 - Labour:
 - Capital:
 - Technology:
 - External relations:
 - Socio-Political:
 - Debt:
 - Conflicts:
 - Arms races:
- Empirical impacts can be positive or negative and all of these channels will interact and their influence will vary depending on the countries involved.

Political

- Military as nation-builder or military as instrument of repression, shoring up corrupt rulers
 - Military may act as rent-seeking institutions, controlling civilian businesses and taking profits - e.g. Indonesia
 - Military may protect developmentally destructive projects
- Military governments are often not very good militarily
- Problems: lack of democratic control of military, no transparency in military spending

Econometric Studies:

- Single equation reduced form growth models
 - Feder Ram
 - Growth models
- Simultaneous equation systems
 - Deger and Smith
- Macroeconometric models
 - Peace Dividend book
- Ad hoc approaches
 - Benoit
- Case studies vs general studies

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.
- Often use theoretical models 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 and arguments that Benoit's empirical work was flawed
- This led to a plethora of econometric studies.
 - Simultaneous equation systems.
 - Neoclassical single equation growth models: exog and endog
 - "Granger causality" tests finding no dominant result.
 - non linear relationships and different effects at different levels of expenditure.
 - Large country macroeconometric models
- Little support for Benoit's original finding, but considerable debate

Surveys of Empirical results

- 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
- 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.

- Dunne and Uye (2009)

▪ 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
- 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.

- 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.
- But have increasing amounts of data and improved techniques with which to investigate it, so we may be able to develop more of a consensus.
- The identification issue remains as does the signal noise and the varying quality of the empirical contributions.

Complicating Factors:

- Lack of Transparency and accountability
- Interrelations with natural resources
- Prevalence of conflict
- Role of army can vary
- Importance of arms industry
- Trade in arms/foreign exchange/pressures from exporters
- Development aid
- Role of international community: peacekeeping; governance
- Still large numbers of conflicts: changing nature of conflicts (civilians) (Kaldor)

Evidence are getting:

- Increasing recognition of the problems of post conflict reconstructions
- Increasing recognition of the role economic factors play in conflict (Collier)
- Increasing recognition of importance economic and human security
- Increasing recognition of importance of planning and transparency

Still a long way to go

