

Security, Military Expenditure and Development: Linkages and Existing Evidence

Traditionally, arms acquisitions and military spending have been examined through two different optics: that of "economic development," and that of "inter-state conflict." In the first, the goal has been to determine, through rigorous statistical analyses of economic data, the relationship between such factors as:

- levels of (or changes in) military expenditure and economic growth;
- the opportunity cost of military spending in terms of other public expenditure, such as education or health care;
- the relationship between arms acquisitions and external debt;
- the possible role of external financing (development assistance and military aid) in facilitating the diversion of resources to military spending.⁷

In the second, the goal has been to determine if competitive arms racing (or military buildups) between states has led to or exacerbated conflicts and wars. The strong version of this argument, the *spiral model*, argued that there was a direct causal link between armaments and conflicts, such that increased levels of armaments (or a more rapid rate of acquisition) exacerbated insecurities and/or increased the potential for misperception to lead to war.⁸ The weak version, the *tinderbox model*, argues that the exact causal relationship between armaments and conflict is irrelevant: "arms races do not necessarily cause wars, but they do create an inflammable situation between the racing nations where even the slightest spark can push a blaze to war."⁹

The reasons why both economists and political scientists expect to find some relationship are straightforward. For economists, defense expenditure is "unproductive," since it generally represents a diversion of resources that could otherwise be invested to generate future growth. In most models, higher ratios of defense expenditures to GNP (or GDP) means a lower investment ratio for the economy, which

⁷ See, for a summary of this material, Lamb with Kallab, *Military Expenditures and Economic Development*; Saadet Deger, *Military Expenditure in Third World Countries: The Economic Effects* (London: Routledge, 1986).

⁸ As Robert Jervis analyzes it, "the spiral model of conflict sees the [resulting] action-reaction dynamic as accelerated by each side's inability to understand the other or to see how the other is interpreting its own behaviour. These processes generate and magnify conflict, leading to unnecessary wars." "Arms Control, Stability and Causes of War," *Political Science Quarterly*, 108:2 (Summer 1993), 244.

⁹ James Morrow, "A Twist of Truth: A Reexamination of the Effects of Arms Races on the Occurrence of War," *Journal of Conflict Resolution*, 33 (September 1989), 502. For a review of this literature, see Randall Siverson and Paul Diehl, "Arms Races, the Conflict Spiral, and the Onset of War," in Magnus Midlarsky, ed., *The Handbook of War Studies* (Boston: Allen & Unwin, 1990).