

CHAPTER 7 DEFENSE ECONOMICS

Defense economics is the allocation of scarce resources to meet spending and policy goals concerning military organizations, weapons industries, and procurement. This chapter addresses defense spending trends, the sustainability of spending relative to the economic strength, the accuracy and completeness of budgets, and the decision to make vs. buy weapons.

Spending Sustainability. The sustainability of a budget is a function of the health of the economy and the degree of defense spending. Figure 7-A illustrates the defense spending share of GDP for selected countries. These countries saw GDP growth exceeding defense spending growth, with a gradual downward trend in the share. With the Asian economic downturn of 1997, defense spending programs also dropped as budgets were put on an austerity basis. For these countries the defense share is under 4% of GDP. The International Institute for Security Studies estimates that in 1999 the country average for East Asia, Australia, New Zealand and the Pacific Islands was 3.7% of GDP and for the more contentious South Asia was 5.3% of GDP. North Korea is a severe outlier, with a defense share of 14.3% of GDP.

Defense Spending

Many Asian governments embarked on military modernization programs in the decade up to the 1997 Asian financial crisis. Nevertheless, when measured in constant dollar terms, defense expenditures were only modestly increasing at about 2% annually.¹ (See Figures 7-B and 7-C.) Asian countries with high long-term real growth in defense expenditures over the period from 1991 to 2000 were Singapore (8% annual increase), India (5 percent) and, using Stockholm International Peace Research Institute (SIPRI) figures, China (6 percent). Consequently it appears that the growth and direction of Asia's military spending was normal. The trend bears further scrutiny at the country-level, however.

Figure 7-A: Sustainability

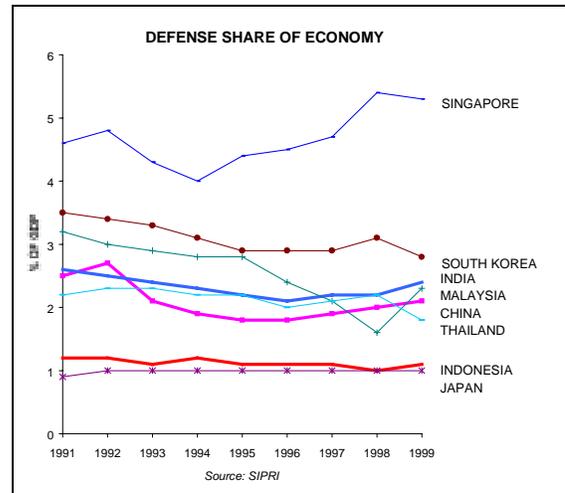


Figure 7-B: Southeast Asia Spending

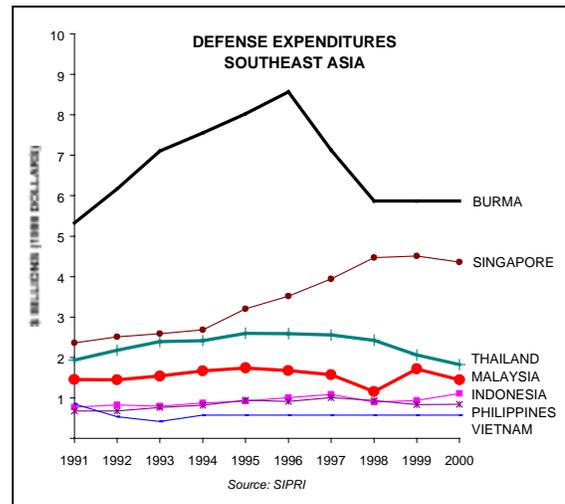
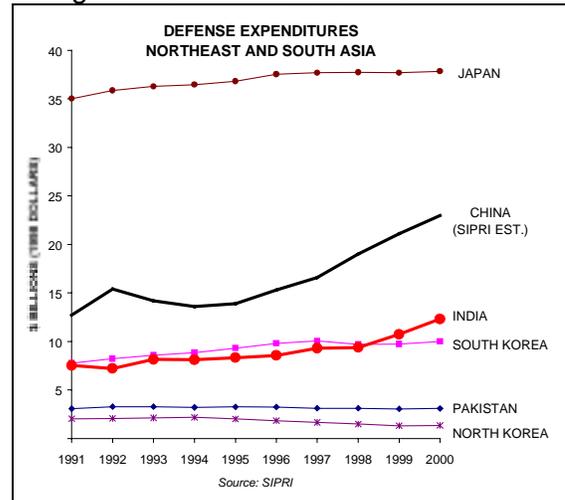


Figure 7-C: Northeast and South Asia



North Korea. The numbers alone indicate that all efforts are needed to rationalize North Korea's governance to the extent possible. North Korea has the fifth largest armed force in the world to defend such a minor populace. Such mismanaged spending contorts the sustainability of the budget and the economy, creates social stresses, and threatens regional security in the process.

China. China's defense spending is by no means transparent. For many years, much of the reported annual increases in China's official budget was absorbed by high inflation rates. However, the largest problem in estimating defense spending arises from inadequate accounting methods by the Peoples Liberation Army (PLA). Budgeted functions are hidden under construction, administrative expenses, and under state organizations such as the Commission on Science, Technology and Industry for National Defense (COSTIND), which mix PLA and other state activities. Further sources of income outside the national defense budget include official local and regional government expenses for local army contributions, pensions, militia upkeep and off-budget income from PLA commercial enterprises and defense industries, as well as income from international arms sales and unit-level production (e.g., farming). For 1995, the official Chinese defense budget was one-fourth the International Institute for Strategic Studies' (IISS) estimate and one-eighth the U.S. Arms Control and Disarmament Agency (ACDA) estimate. Therefore, according to some estimates, China is the biggest spender on defense in the region.

Japan. Japan has the second highest level of defense spending in the region, even though it is politically committed to maintaining its defense spending at no higher than 1% of GDP. This parameter is not to be confused with Japan's year-to-year increase, which averaged 1.4% annually from 1990 to 1998.

Vietnam. Defense spending declined during the 1980s, but since 1990 shows an annual 14.9% increase. Even during the regional prosperity of the mid-1990s, Vietnam had the tenth largest armed force in the world. Vietnam's defense share of GNP declined from 19.4% in 1985 to 3.1% in 1999 and is comparable to the average for Southeast Asian countries.

Singapore. Although the defense budget is fairly accurate and complete, some parts are not made public and quasi-defense corporations, such as Singapore Technologies are not included. Singapore strongly promotes management reengineering, unlike others in the region.

Thailand. Discrepancies exist between the budgeted and on-board numbers of soldiers. The budget does not include paramilitary functions or covert programs.

Philippines. The ambitious modernization program is off-budget. Figures intermingle humanitarian assistance, disaster relief, civic-action and nation-building programs.

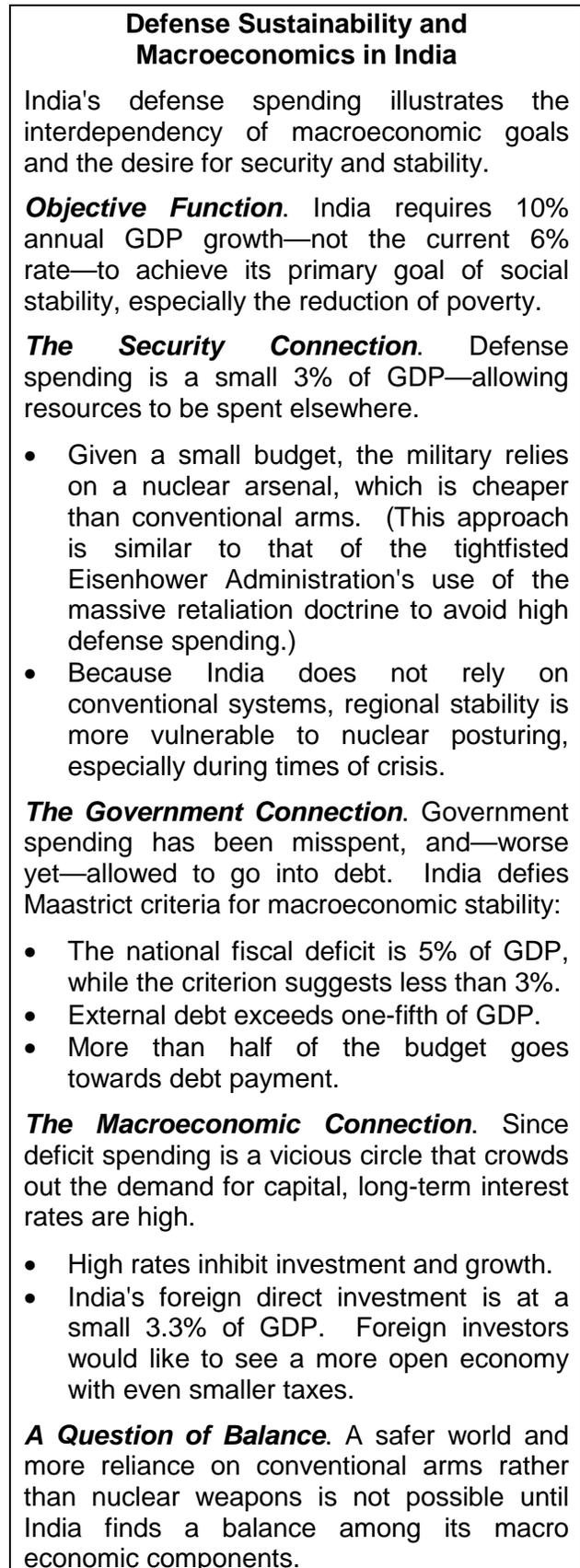
Indonesia. In the early 1990s, Indonesia embarked on an ambitious program to obtain submarines and frigates. However, typical of a procurement binge, it did not calculate the sustainability of the gear in terms of maintenance, facilities, and operations.

India. India's budget accuracy is open to question, since only expenditures are reported. Supplemental budget requests are made from time to time, illustrating the budget planning problems. The budget is incomplete, as nuclear weapons and research development programs are not included. India initiated defense management reforms as a result of the 1999 fighting in Kashmir.

Figure 7-D



Figure 7-E



Make vs Buy: Industries and Trade

Prudent defense budgets will link the decision to make or buy arms with strategic ends. Wasteful budgets can be avoided by combining an internal program of strategic management with an external program that participates in an open arms trade dialog.

Indigenous Industries. In a study of available world-wide company data, SIPRI estimates 13 of the Top 100 Arms-Producing Companies are in Asia: Japan (7 companies), India (3), Australia (2), and Singapore (1).² Equally important is the issue that industry data is not transparent for China, South Korea, and Taiwan.

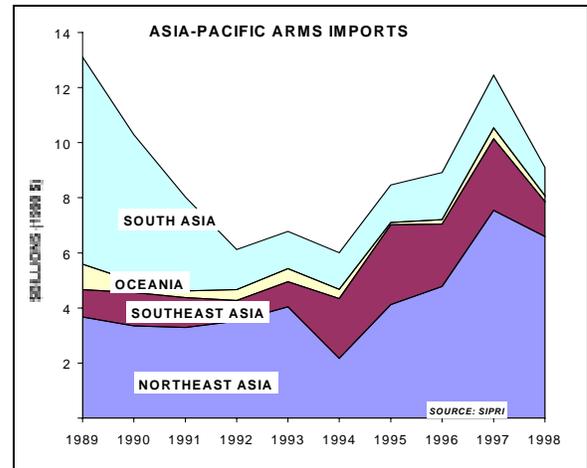
Questionable Motives and Agendas. Certain Asian arms producers are criticized for their proliferation of arms or components that are proscribed internationally, such as weapons of mass destruction (WMD), and long-range missiles. Others, such as China and Singapore, are criticized for promoting insurgencies and civil disorder by selling small arms.

India. In an effort for self-reliance after the 1962 confrontation with China, India created a widespread defense industry that includes 39 ordnance factories and eight defense public sector undertakings, such as Hindustan Aeronautics and Bharat Electronics.³ Its missile and nuclear production facilities are a contentious point in international relations.

China. State enterprises are found under many departments of the central government. Defense-related enterprises exist directly under PLA military organizations and also as separate defense enterprises usually connected with the research, development, and production of weapons systems.

Buying Arms. Asia was the world's largest arms market in 1998, with a 41% share, followed by Europe (28%) and the Middle East (24%). In the mid-1990s the decline in Asian arms imports paralleled global arms markets. Later, imports rose, were stymied by economic crisis, and now are resuming as economies strengthen. (See Figure 7-F.)

Figure 7-F



Conclusion. Budget managers across Asia find it difficult to identify a steady-state for calculating equipment needs and operational costs. Bad calculations may derive from false signals due to the combination of internal civil stresses and external challenges from neighbors. Ultimately, budgets need to be fully rationalized using a building block-approach that links ends, ways, and means. Although the United States military may not be exemplary in this regard, it is wise enough to see the merit of a region-wide dialog on promoting efficient and effective budgets. (Chapter 9 pursues some of the issues of defense governance in more detail.) The relationship of defense establishments to industry, technology, and trade also is fertile soil for study.

Endnotes

- 1 Stockholm International Peace Research Institute (SIPRI), "The SIPRI Military Expenditure Database", (projects.sipri.se/milex/milex/mex_database1.html). See also Department of State, *Annual Report on Military Expenditures, 1999*; Commonwealth of Australia, Defence Intelligence Organization, *Defence Economic Trends in the Asia-Pacific 1999* (www.defence.gov.au/dio); International Institute for Strategic Studies (IISS), *The Military Balance*; U.S. Department of State Bureau of Verification and Arms Control, *World Military Expenditures and Arms Transfers, 1999-2000* (http://www.state.gov/tvvc/rls/rpt/wmeat/99_00/).
- 2 SIPRI, "Arms Production" and "Arms Transfer" (projects.sipri.se).
- 3 India Ministry of Defence, "Defence Production & Supply," (mod.nic.in/product&supp/welcome.html).