Chapter Six

SHOULD THE UNITED STATES WORRY ABOUT LARGE, FAST-GROWING ECONOMIES?

This report represents an initial investigation into the relationship between economic growth and military expenditures for candidate great powers. On the basis of three hypotheses about that relationship—“ambition,” “fear,” and “legitimacy”—we have undertaken two types of empirical tests: a statistical analysis of the ambition and fear hypotheses, and historical case studies of all three hypotheses. While our statistical analysis is ambiguous with respect to the ambition and fear hypotheses, the case studies provide some evidence in support of both.

Overall, the evidence offered by this report suggests that large and fast-growing economies are likely to devote an increasing, but not disproportionately increasing, share of their growing national resources to their militaries. Since circa 1870, four of the five great powers we examined increased their military expenditures as they experienced dramatic transformations in economic growth, with significant consequences for international politics. However, the direction of causality between military expenditures and economic growth has not been established, and perhaps more important, the motivations behind military expenditure growth probably include complex combinations of ambition, fear, and to a lesser extent, legitimacy.

The critical question at this juncture, therefore, is whether the United States ought to be concerned about the prospect of increased military expenditures on the part of large and rapidly growing economies? As a first cut, the answer to this question must undoubt-
edly be “yes,” for the simple reason that increased military expenditures on the part of candidate great powers could forebode consequential alterations in the global balances of power. This conclusion, however, applies most strongly to those countries that have the obvious potential to become significant powers in international politics. The “size” of the candidate power—which may be measured along multiple dimensions—is obviously the first variable conditioning our judgment, so that a China or an India merits greater attention than, say, a Malaysia or New Zealand. A second variable that should also be relevant is the location of the entity concerned. Rapidly growing countries that are strategically located and could use their increased national military capability to constrain American access to critical areas of the globe also merit close attention.

The conclusion that the United States ought to be concerned about the prospects of large and rapidly growing economies increasing their military expenditures is intuitively defensible as a “first cut.” But a more considered response must be based on deeper judgments about why such military expenditure growth is occurring in each case. Simple quantitative evidence about rising military expenditures in a given country must be supplemented by more detailed analysis of the internal patterns of these expenditures. In particular, it is important to know how increased expenditures are ultimately being reflected in terms of force structure and operational competencies. Unfortunately, we could not quantitatively analyze the history of these variables for the five powers examined in this report, mainly because of the paucity of data. Fortunately, it should be easier to undertake such analysis in the context of prospective great powers because contemporary military expenditure data is more easily available and, even when unclear, can be supplemented by estimations based on other currently available factors.

The hypotheses identified in this report are particularly relevant for emerging powers because, given the availability of quantitative and qualitative data, it becomes possible to distinguish between them and so define judicious policy responses to each challenge of military expenditure growth. All three of the motives we hypothesize may require certain common responses at some level—such as developing equalizing or countervailing capabilities—because the military instruments created by other states represent tangible coercive assets that could be used to undercut larger American interests. But
the urgency and magnitude of these responses could vary considerably depending on which motive is predominant. Military expenditure growth driven by ambition, for example, calls for countervailing strategies that heavily emphasize deterrence, whereas expenditure growth driven by fear may require responses that emphasize reassurance.

Understanding why prospective great powers are increasing the share of national resources devoted to the military is crucial for the making of sound policy. This understanding will require as fine-grained internal detail about foreign military expenditures as possible, but, more important, even these data must be contextualized by a larger understanding of the target country’s political goals, the pattern of its state-society relations, and the character and competencies of its military forces. This effort will require much more involved analysis than that carried out in this study, but the latter should at least serve the purpose of, first, demonstrating that most great powers since the last century did increase their military burdens inexorably as a result of rising economic growth, and, second, that they did so for complex combinations of ambition, fear, and legitimacy—the exact mix of which unfortunately cannot be investigated quantitatively today because of, inter alia, the paucity of good and detailed historical statistics.

AVENUES FOR FUTURE RESEARCH

Given the limited data presented in this report, it is difficult to tell which of the hypotheses actually explain why states devote more resources to their respective militaries. In this section we discuss some avenues for future research. Specifically, we suggest what kind of evidence might help us determine which hypotheses are more helpful in understanding the behavior of states experiencing rapid economic growth. Below, we present the individual components of each hypothesis and sketch the evidence that might confirm the causal logic of the hypotheses in either a statistical or case study analysis.
The Ambition Hypothesis

The ambition hypothesis contends that states experiencing economic growth accumulate greater foreign ambitions that motivate them to increase their military expenditures. The relevant variables for testing this hypothesis include measures of economic growth, government centralization, ability to tax, and aggressive foreign policies.

**Economic growth.** A state’s economic wealth represents the first part of the causal chain of the ambition hypothesis. Indicators for this variable are readily available. In this report we measure economic well-being by examining two different measures of a state’s industrial capacity. When possible, we use a state’s gross domestic product. For states like Russia where accurate estimates of GDP seem unreliable, energy consumption as well as iron and steel production are used as measures of economic growth.

**Centralization.** By centralization, we refer to whether states possess a highly centralized policymaking authority. It seems reasonable to construct a scale to measure the degree of centralization in a state’s form of government. For example, tsarist Russia represents a state with a highly centralized government. All of the state’s political power rested in the hands of the government in St. Petersburg. As an autocracy, the tsarist regime represents the clearest example of a centralized government. Japan would also seem to lie on this part of the scale. With its regional governments, Germany probably lies in the middle of the scale. The United States, with its federal system and representative form of government, might illustrate the most decentralized government on the scale.

Whether a government is more or less democratic does not capture the logic of centralization. In other words, centralization is not a proxy for regime type. For example, Britain in this period possessed a democratic system of government that was also highly centralized. The concept of centralization captures the notion that states with powerful central governments are better able to translate economic wealth into military power.

**Extraction.** States vary in their ability to transform their economic capabilities into military capabilities. Some states might experience rapid economic growth but remain incapable of marshaling that
wealth for increasing government expenditures. We rely on the concept of extraction to measure the unequal variation of economic resources available to different governments. One possible way to measure extraction is to examine a state’s taxation capabilities.

**Aggressive foreign policies.** If the ambition hypothesis is accurate, states that experience economic growth should embark on aggressive foreign policies. Two possible indicators of aggressive foreign policies exist. First, we can examine a state’s diplomacy. States with expansionist foreign policies tend to practice brinksmanship diplomacy. They believe that the best way to succeed in international politics is not through cooperation but through coercion. One observable outcome of an aggressive foreign policy is the number of foreign diplomatic crises a state instigates.

Second, states with aggressive foreign policies should seek territorial expansion. Greedy states should attempt to either establish colonies or extend their spheres of influence by undertaking greater extended deterrence commitments. A cheap way of acquiring territory is by forcing weak states to become allies. For example, in the late nineteenth century, the United States consolidated its sphere of influence in the Western Hemisphere through the Monroe Doctrine. For the United States in the early part of this century, American security did not depend on dominating its weak neighbors to the south. Researchers should see greedy states expand their international commitments for the sole purpose of controlling a region. Perhaps the easiest measure of aggressive foreign policy would be to count the number of wars started against weak neighbors.

**The Fear Hypothesis**

The fear hypothesis argues that states will increase their military spending when they perceive heightened threats to their security. The relevant variables for testing this hypothesis are the threat indicators states consider when evaluating their security environment, including the aggregate capabilities of neighbors, national geography, the offense-defense balance, and perceptions of neighbors’ intentions.

**Aggregate capabilities of neighbors.** The term aggregate capabilities refers to a state’s economic and military power. Measurements of
these capabilities are readily available. Indicators of economic capabilities include gross domestic product, energy consumption, iron and steel production, as well as population size. Ascertaining a state’s military power is somewhat more difficult. However, the problem is not insurmountable. Measurements of military power might include the number of military personnel per state as well as a state’s military expenditures. To control for population size, future researchers might examine per-capita military personnel.\footnote{For more on this issue, see Tellis et al. (2000).}

**Geography.** When assessing their strategic situation, states gauge whether their own geography makes conquest easy or hard. A future research project might create a scale to indicate how geography abets or diminishes a state’s security. For instance, large bodies of water typically make conquest difficult. Because amphibious landings are difficult, in the past such countries as Britain and the United States possessed greater security than the great continental European powers. Germany, for example, has constantly faced the possibility of a two-front war against France and Russia. Moreover, researchers should consider using geography as an interaction term with aggregate capabilities. Put a different way, states that possess few geographic barriers to conquest and face powerful neighbors are likely to feel insecure. Again, the German case seems a good example of this type of security problem captured by such an interaction term.

**Offense-defense balance.** The notion of the offense-defense balance refers to how military technology affects the probability of success in warfare. When military technology makes conquest easy, offensive strategies dominate. However, finding appropriate indicators for this concept is difficult. One potential way of measuring the offense-defense balance is to perform net assessments. Research might examine whether states face neighbors capable of achieving a quick and decisive victory against them. The ratio of forces arrayed against a state can also serve as an indicator of the offense-defense balance. A force ratio of greater than three-to-one typically implies that the offense is dominant.
Perception of a neighbor’s intentions. Measuring perceptions about the intentions of neighboring states is perhaps even more difficult. One possible variable might be a measure of ideology. Presumably, neighbors with similar ideologies are more likely to establish amicable relations, while states with hostile ideologies are unlikely to be allies. For example, ideology was probably a strong factor behind the Marxist Soviet Union’s inability to coordinate its security policy with capitalist Britain and France in the 1930s.

The Legitimacy Hypothesis

The legitimacy hypothesis argues that governments faced with domestic threats to their security embark on aggressive foreign policies and increase military spending to garner support at home. The relevant variables for testing this hypothesis include the threats to a regime’s legitimacy, the prevalence of security myths and propaganda, and the type of governmental regime.

Threats to a regime’s legitimacy. Various measures of a government’s legitimacy exist. Although there is no consensus on which of these are best, we suggest a few that might make future research more fruitful. One possible measure of a state’s legitimacy might stem from public opinion polls. The problem with this approach is that such data are not available for the period we examined. Another approach involves an examination of the level of political violence a state encounters. Evidence for “illegitimate” regimes include the frequency of assassination attempts, worker strikes, or revolutions. This information could be compiled as an index measuring political instability.

Security myths and propaganda. Security myths are used by governments to justify aggressive foreign policies. They are employed by insecure regimes to convince their political constituents that security threats exist—and that only expansionist foreign policy will improve the country’s strategic situation. One measure of the use of security myths would involve looking at civil-military relations. Past research suggests that societies with militaries lacking civilian oversight are more susceptible to security myths. Researchers might produce a dummy variable to account for states with poor civil-military relations.
**Regime type.** This concept refers to the type of government a state possesses, in particular whether it is democratic or authoritarian. In general, the less democratic a state’s government, the greater the probability that it will react to concerns about its legitimacy by pursuing an expansionist foreign policy. Democratic governments find it more difficult to propagate security myths or other forms of propaganda.

Because of the numerous political histories available, researchers should find it easy to code the types of governments states possesses over time. Again, adding a simple dummy variable to control for undemocratic states might serve as an adequate research strategy.

What steps should future research take? First, we need to examine the causal mechanism of each hypothesis more closely. The case studies used here only sought to determine if correlations existed between the factors identified in each hypothesis and the dependent variable, military spending. A better use of case studies might be to test the causal mechanism through process tracing. Such an analysis asks whether policymakers (or any other relevant actors) behave and think in the ways our hypotheses predict. These questions point to the unique predictions made by each hypothesis. Process tracing offers the researcher the opportunity to test these unique predictions of a hypothesis and differentiate among alternative explanations. To process trace, a future study would need to conduct, at the very least, a survey of the secondary historical research for each case or examine primary source materials.

Second, another possible step involves a more systematic test of the hypotheses. While case studies are best at testing a causal mechanism, statistical methods are best at testing the background conditions of a hypothesis and determining the independent effects of its individual variables. An ideal research design would include case studies as well as statistical analyses. The problem facing statistical methods in this study is that operationalizing the variables in the three hypotheses is difficult. In other words, we need better measures or indicators of the variables that we suggest may explain military spending.

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2 On process tracing, see the explanation provided by Van Evera (1997). For the first discussion of process tracing, see George and McKeown (1985, pp. 21–58.)
Lastly, the case studies suggest that our analysis probably overlooked some important features of a state’s domestic politics. The legitimacy hypothesis posited only one possible way in which internal political struggles might influence a government’s decision about military spending. Given the lack of explanatory power offered by the legitimacy hypothesis in our first-cut case studies, a better approach might consider testing for variation by looking at a state’s political institutions.