In describing the methodology used in our forecasts, we noted the flaw involved in neglecting possible interactions among the five countries. Paradoxically, our forecasts might turn out to err because of feedback effects of forecasts that were initially accurate. For example, Japan’s military spending and military investment might increase above the magnitudes indicated by our forecasts if rapid progress occurred in military modernization in China and Korea. Either of these developments, and a fortiori their joint occurrence, could have significant effects on Japan, thereby invalidating our forecasts for Japan. Thus, our estimates, or at least some of them, might turn out to be “self-preventing” (or “self-correcting”), in contrast to “self-fulfilling” forecasts.\(^1\)

Despite this inherent shortcoming, use of the same methodology in previous RAND work resulted in prescient forecasts. The prior work produced forecasts of economic and military trends in Japan, Russia (then the Soviet Union), and Germany for the 1990s that were reasonably accurate, as well as contrary to the consensus prevailing when these earlier estimates were made.\(^2\) However, we acknowledge that

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\(^1\)See the discussion of “self-preventing” versus “self-fulfilling” forecasts, Wolf et al., 1995, pp. 19–20.

\(^2\)Wolf et al., 1995; Wolf et al., 1989; and unpublished RAND research by Gregory Hildebrandt, Joseph Nation, et al., on economic and military trends through 2010 in Germany, Japan, and the U.S.S.R.
our previous work did not anticipate the financial crisis in East Asia in the 1997–1998 period, nor the continued division between South and North Korea.

Quite apart from the problems presented by possible interactions among the five countries, another question arises: How can the separate country estimates be related to and associated with one other, so as to draw inferences concerning security issues in the region?

Two approaches to answering this question are adopted in this chapter: regional indexing and the formulation of alternative future security environments in the Asian region.

**REGIONAL INDEXING**

One way of assessing the security-related balance of forces implied by our forecasts is to focus on the GDPs and military capital stocks as crude, aggregate indicators of economic and military power, respectively, among the five countries. It is self-evident that each of these measures conveys only partial and limited elements of the corresponding dimensions of national power.

GDP provides a very broad measure of an economy’s total output. It says nothing about the net resources above essential consumption requirements that an economy disposes of, nor about the capacity of fiscal and other institutions to mobilize these resources to further national purposes. GDP does not convey anything about the technological and skill capabilities that are nested within this aggregate measure, nor about environmental damage or other nonmonetized public injuries that an economy may be incurring.

In an analogous sense, a country’s aggregate stock of military capital (i.e., its holdings of military equipment, communications, bases, and supporting facilities) conveys only a very limited measure of military capabilities. These depend to an equal or greater extent on other factors, including human, organizational, and technical ones. The human and organizational factors that military capital does not embrace include the leadership, training, morale, and skills of its armed forces. The excluded technical factors encompass command, control, communications, and intelligence functions, as well as logistic support capabilities. And, of course, military capital conveys nothing about
the regional alliances or adversarial circumstances that may respectively enhance or diminish a country’s military capabilities.

Granted these limitations, GDP and military capital have some utility in conveying a sense of the changes in the relative balance of forces implied by our forecasts.

Toward this end, Tables 12 and 13 and Figures 21 and 22 present indexes of the GDPs and military capital stocks of Japan, China, India, Korea, and Indonesia between 2000 and 2015, reflecting the forecasts summarized in preceding chapters. The respective indexes use our estimates for Korea in 2000 as the regional numeraire, scaling the other four countries to this base.

Tables 12 and 13 and Figures 21 and 22 are based on PPP conversion rates for GDP, and the PI rate for military capital, to convert constant-price time-series data in local currencies into 1998 U.S. dollars.

Several points emerge from these regional indexes:

• Japan’s relative economic and military power in the region diminishes appreciably from 2000 to 2015, vis-à-vis both China and Korea.

• Consequently, the value that Japan will place on its security alliance with the United States is likely to rise, and/or Japanese efforts to reform and liberalize its economy, and to enhance its independent military capabilities while attenuating its alliance connections, might ensue.

• China’s economic and military power diminishes somewhat relative to that of India. However, the absolute gap between the levels of China’s GDP and military capital, on the one hand, and those of the other principal countries, on the other, grows substantially. The point highlights the importance of the U.S. role in the region’s security balance.

• Indonesia’s relative and absolute stature in the region recedes.
Table 12

Linking the Forecasts: Indexing GDPS

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2015</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP (PPP)(^a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>100</td>
<td>225</td>
<td>(100)</td>
</tr>
<tr>
<td>Japan</td>
<td>395</td>
<td>488</td>
<td>(217)</td>
</tr>
<tr>
<td>China</td>
<td>804</td>
<td>1,672</td>
<td>(742)</td>
</tr>
<tr>
<td>India</td>
<td>402</td>
<td>896</td>
<td>(398)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>101</td>
<td>187</td>
<td>(83)</td>
</tr>
</tbody>
</table>

\(^a^{\text{Indexed on Korea's GDP in 2000, forecasted at }}\)
\(^{\text{$744$ billion in PPP 1998 U.S. dollars; forecasted to rise }}\)
\(^{\text{225 percent by 2015 to $1.6 trillion. Figures in parentheses are}}\)
\(^{\text{indexed on Korea's GDP in 2015.}}\)

Figure 21—Linking the Forecasts: Indexing GDPS
Table 13
Linking the Forecasts: Indexing Military Capital

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military capital (PI)(^a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>100</td>
<td>185 (100)</td>
</tr>
<tr>
<td>Japan</td>
<td>187</td>
<td>194 (205)</td>
</tr>
<tr>
<td>China</td>
<td>393–450</td>
<td>799–1,033 (421–559)</td>
</tr>
<tr>
<td>India</td>
<td>204</td>
<td>514 (277)</td>
</tr>
<tr>
<td>Indonesia</td>
<td>63</td>
<td>77 (42)</td>
</tr>
</tbody>
</table>

\(^a\)Indexed on Korea’s military capital in 2000, forecasted at $61 billion in PI 1998 U.S. dollars; forecasted to rise 185 percent by 2015 to $113.5 billion. Figures in parentheses are indexed on Korea’s military capital in 2015.

The divided bars for China reflect the assumption that China’s annual military spending may vary between 2 percent and 3 percent of GDP.

Figure 22—Linking the Forecasts: Indexing Military Capital
FUTURE SECURITY ENVIRONMENTS

A more qualitative, as well as more comprehensive, way of relating the forecasts for the five countries to one another is to construct two sharply different scenarios to bracket a wide range of future possibilities. In formulating these contrasting alternatives, we use as building blocks some aspects of our forecasts for the individual countries, while introducing several other considerations not addressed in these forecasts, such as assumptions or conjectures about the status of alliance relationships in the region, as well as possible regional military contingencies.

The two scenarios do not exhaust the possibilities for the region’s future security environment. However, they suggest some quite plausible and different alternatives with correspondingly different policy implications.

The two scenarios are (A) “Chinese Preponderance” and (B) “Sustained Intraregional Balance.”

Scenario A: “Chinese Preponderance”

The components and indicators of this scenario include the following:

- China sustains a high annual GDP growth rate (greater than or equal to 5 percent per year), equivalent to the “Sustained-Growth” Scenario A in the previous forecasts.
- China’s aggregate military share of its growing GDP is assumed to move toward the upper end of the 2–3 percent range used in our forecasts.
- Japan, Korea, and other countries in the Asia-Pacific region maintain low defense shares of their slower-growing economies.
- India’s economic growth and defense modernization progress slowly.
- U.S. alliances with Japan and Korea are attenuated, and forward-based U.S. forces are reduced.

If the circumstances summarized in this scenario ensue, it is plausible that the resulting preponderance of Chinese power in the region
might be asserted by China’s enforcement of its national claims in the Paracels, Spratlys, and Taiwan—more likely in sequence than simultaneously.

**Scenario B: Sustained Intraregional Balance**

A very different future security environment would include the following components and indicators:

- China’s economic growth slows to that reflected in our “Disrupted-Growth” Scenario (B)—two percentage points below the 5 percent annual growth foreshadowed in China’s Scenario A; its military spending share in GDP remains at 2 percent or less, and its military modernization progresses quite slowly.

- Japan resumes appreciable economic growth within two or three years and maintains or raises its defense spending above the 1.1 percent of GDP in recent years. Also, Japan’s military modernization is further stimulated by its growing concerns about North Korea’s unpredictable long-range missile-testing and delivery capability.

- South Korea resumes substantial economic growth and maintains its defense share of GDP, because of continued uncertainty about the North Korean threat.

- India’s economic growth and defense modernization progress significantly.

- U.S. alliances and forward-based forces are sustained in the region.

The resulting balance of forces implied by Scenario B, including an implicit assumption that Taiwan’s own military as well as economic capabilities are maintained, would provide a constraining security environment, although not one that automatically assures regional stability. Indeed, stability in the Asia-Pacific security environment will be affected by internal political and societal developments in the region, especially in China, no less than the external developments encompassed by the illustrative two scenarios.