

Keeping in mind the many data problems that were outlined above, the treatment of the available statistical evidence is informal, and thus no complex statistical manipulations have been performed on the data.¹⁶ Within each regional case study, five basic types of analysis are shown. First, changes in the level of military expenditures over the period from 1983-1993 are given. These can be scrutinized in light of developments in the regional and internal security environment of states in order to determine the nature and possible causes of the shift. Second, the levels of military spending as a percentage of GNP are compared, in order to identify those regional states that are *prima facie* "outliers."¹⁷ This identification of "outliers" in this and other cases is *not* based upon a formal statistical analysis; outlier status is determined purely by visual means, supplemented with occasional contextual observations concerning recent regional or local trends.

The third, fourth and fifth indicators (all given in graphical form) are meant both to illustrate different levels of military burdens and to compare these with different indicators of social, economic and political development. The third indicator compares levels of military spending per capita with levels of combined public health and education spending (in same-year dollars), in order to determine the relative weight of both in government spending priorities, and any possible tradeoff between the two. If there were a clear tradeoff, higher levels of military spending would be associated with lower levels of spending on health and education. Likewise, by comparing the *ratios* of military to social welfare spending, those states that are far from the regional norm can be identified, and a tentative attempt to determine the reasons for this can be identified. When states with similar socio-economic and political structures are also compared, the "best scoring" state in a region can also serve as an illustration of what can possibly be achieved in a region.

The fourth indicator compares the average percentage of GNP devoted to the military (1983-93) to the average rate of economic growth over a similar period (1980-1993). It attempts to illustrate any trade off between economic growth and the foregone investment represented by security expenditures. A strong relationship would associate a high average level of military spending with a lower level of economic growth. Obviously, in this case, however, there are many confounding factors (such as changing raw material export prices, or economic cycles) that will affect any results. Hence the figures are purely meant

¹⁶ In addition, the small sample size available in most regions makes the most common statistical techniques inappropriate, hence, for example, regressions have not been run on the data.

¹⁷ Although the term "outlier" has a precise statistical meaning, in this report it is used in its ordinary language sense (Outlier: "an outlying portion or member of anything, detached from the main mass or body, or system to which it belongs.." *Oxford English Dictionary*).