Nuclear consequences of the welfare state revisited: Danger in the data

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In Ayanian (1986) I presented evidence that the Soviet Union has followed a 'Parkinson strategy' of stockpiling nuclear weapons as U.S. federal non-defense budget claims on U.S. GNP have risen, since such claims increasingly pre-empt the resources required for a U.S. stockpiling response. That evidence, which was based on 1984 congressional testimony by the Secretary of Defense on U.S. and Soviet nuclear stockpiles, is in error. Subsequent testimony by the Undersecretary of Defense, Research and Engineering (to the 99th Congress, second session, 1986: III-20) updating the earlier testimony displays inconsistencies with the nuclear force levels reported in 1984, showing higher force levels than the earlier testimony. A still more recent Department of Defense (DoD) publication by Ikle' and Wohlstetter et al. (1988) contains figures which show still higher Soviet and U.S. nuclear force levels. Working from the 1988 figures I have produced the graphs presented here as Figures 1 and 2, covering the same period as the original graphs in my 1984 paper. The 1988 figures — which are more consistent with other published reports on U.S. and Soviet stockpiles — differ considerably from both congressional testimonies, showing far less relative disparities in the Soviet and U.S. nuclear force levels.

Reestimation of the Parkinson strategy model with this new data for 1965–84 reveals a positive, but now statistically insignificant, year to year relation between the Soviet to U.S. nuclear force ratios and the U.S. non-defense budget share of GNP. After discussion with Pentagon analysts and others, I believe that this data simply does not have the degree of accuracy required for reliable econometric estimation. This assessment of the data is supported by the recent ratification debate on the INF Treaty, where it was learned that the Soviets had reported the existence of a stockpile of 84 SSC-X-4 GLCM's totally unknown to U.S. intelligence, and that the U.S. had never seen an SS-20 missile, and does not know for certain how many the Soviets possess.

With the new data showing the Soviet to U.S. force imbalance to be less se-

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rious than that indicated by the congressional testimonies, the possibility of deliberate deception by the DoD arises. Two pieces of evidence, which I am inclined to accept, weigh against this however. One, a deliberate deception is unlikely to have produced the flow of inconsistent figures reported herein. Second, a fascinating thing happened in preparation of Figures 1 and 2. Using Lotus 1-2-3 to generate these graphs from force ratio measurements drawn from Ikle’ and Wohlstetter et al. (1988) produced — to my amazement — graphs which looked strikingly like the DoD congressional testimonies! The Lotus package had failed to routinely place the horizontal axis at zero. It is my strong suspicion that the suspect congressional testimonies were carelessly prepared from computer generated figures with similar scaling features. Public choice predicts not only self-aggrandizing bureaucracies, but inefficient ones. This latter prediction has, I believe, been borne out in the present case.