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## Federal Support of Graduate Education

In principle, the U.S. government has at its disposal the resources of men and money to attain great and worthy objectives. The government can recruit the services of most of the best intellects of the nation. The financial power of the Treasury towers above all other sources of funds.

Rarely, however, does the government come anywhere near achieving its potential. The failure is usually not that of parsimony or failure to employ good minds for short terms. Some of the worst failures came from an inability to pursue steady, consistent policies over the long term. When the power of government is employed capriciously, damage can result. An example is the harmful consequences of government's actions in graduate education.

In the early 1960's the government's financial power was directed toward expanding the output of graduate schools. A large number and variety of fellowships and traineeships were made available.

Fellowship winners had considerable freedom in attending the school of their choice. Students selected institutions having excellent reputations—the so-called Cartter schools. There they received good training and the stimulus of interaction with a sufficiently large group (critical mass) of their peers.

Assuming that the government would be steadfast in its avowed eagerness to foster graduate education, many universities made large capital expenditures to provide expanded facilities and entered into costly contracts for computer services. At some universities, essentially all graduate students in the sciences were supported, about half or more with federal funds. University administrations found themselves under pressure to accord to all graduate students the kind of support that students in the sciences were receiving, and at a number of schools such a policy was implemented, although it strained university resources.

When the cutback in the flow of federal funds occurred, many of the private universities, being overcommitted, were highly vulnerable, and almost all incurred large deficits. Particularly painful was the drop in fellowship and traineeship programs. In 1971, funds for such support were at about a third of the 1967 level.

As a group, the Cartter schools felt the cuts most keenly and were forced to reduce the size of the entering class in their graduate schools. In 1969, the entering class at Harvard was 840; in 1971 it was 544. Comparable decreases occurred at Yale, Princeton, and Stanford. Wisconsin, Berkeley, and the University of Washington also experienced sizable reductions. At the same time, enrollments in the non-Cartter schools have been increasing. These schools can provide teaching assistantships and other financial support. Thus, an important consequence of the cuts in federal funds has been a change in the pattern of higher education in the sciences such that fewer students are now attending centers of excellence.

One of the excuses recently offered for continued withholding of graduate fellowships has been unemployment among scientists. Most of the best schools report that they have been able to place their science Ph.D.'s. The big drop in recruitment has occurred at the lower-ranked schools.

Federal meddling in higher education has weakened many of our best universities, and capricious actions in withdrawing fellowship support can only result in a lowering of the quality of American science.

—PHILIP H. ABELSON