

# 10 Twenty Years Later: The Rise of Academic Earmarking and Its Effect on Academic Science

**James D. Savage**

It is difficult to believe that 20 years ago the issue of academic earmarking was first discussed in the high councils of the academic science community. At that time, concerns were expressed that earmarking might actually grow and become a serious alternative to the peer review process. Then, earmarking could be measured in the tens of millions of dollars; now it is measured in the hundreds of millions of dollars, and we know that it truly does serve as something of a parallel system.

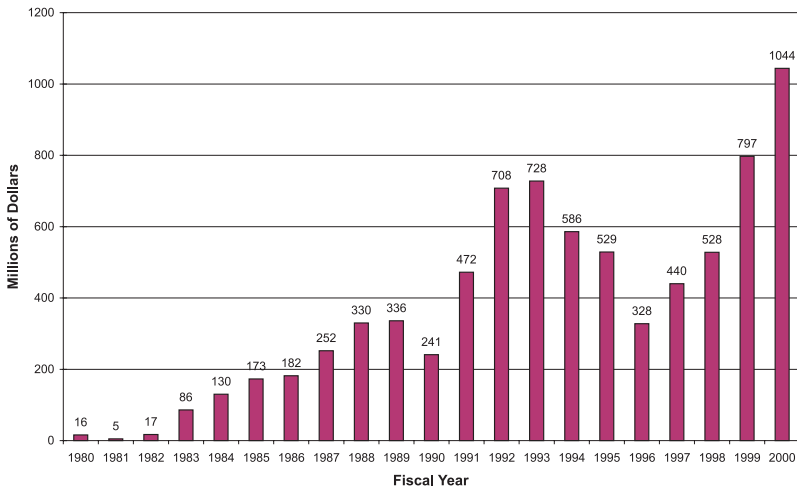
Let me describe the rapidly accelerating trend in earmarking. During the last 20 years, as shown in the accompanying table, there is clearly an upward, but scalloped curve, from \$16 million worth of projects in 1980, to \$1.044 billion in 2000. The curve is not exactly a straight line, as there were dips in the very early and mid-1990s. These deviations, however, appear to be temporary in nature. For example, the dip in the mid-1990s can be traced to the Republicans gaining control of Congress in 1994. That year, Rep. Newt Gingrich (R-GA) and his colleagues talked about how they were going to control pork barrel spending. Rep. Bob Livingston (R-LA), the new chair of the House Appropriations Committee, called a meeting with his appropriators, during which he brandished his alligator-skinning knives from Louisiana, declaring, "We're going to cut pork barrel spending just like we cut alligators down on the bayou." So, in 1994, there was a drop in earmarks that lasted for a few years. In addition, the federal government imposed a number

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of budget constraints, beginning in 1990, with the Budget Enforcement Act, which helps account for the dip that year. Those limitations on spending had a cumulative effect on the level of earmarks.

**Figure 1**  
**Academic Earmarks FY 1980–2000**



There are also a number of reasons for the long-term growth in earmarking, including the big earmarking numbers from FY 2000 (and I have heard of numbers in the range of \$2 billion for 2001). This is one result of Congress exceeding the budget caps on discretionary spending by about \$80 billion.

The first reason for the rise in academic earmarking is federal budgetary growth, which reflects the surplus of the last few years. You can see a strong correlation between the size of earmarking and the amount of spending allocated to the Appropriations subcommittees in their 302(b) allocations. There is a very powerful correlation between how much money Congress has to spend and the amount of earmarking.

Second, although the Republicans pledged to cut pork barrel spending in accord with their “Contract With America,” in 1995, Speaker Gingrich sent a memo to the Appropriations subcommittee chairs, saying that some of the Republican Members might need projects to help

them get reelected. So the “Contract With America” lasted only about nine months. From that point on, the Republican Party firmly embraced academic earmarking, as suggested by their control over the spending committees and the growth of these projects.

A third reason for the rise of earmarking is that there are fewer congressional “saints,” as political scientists call them. “Saints” are Members of Congress who oppose these types of parochial projects, and are willing to fight their colleagues’ projects despite their peers’ hostility. These Members struggle against the norm of earmarking, even though an institutional bias favors this type of activity in Congress. (I have never blamed earmarking on Congress; I think the blame, if there is to be blame, goes elsewhere.) With the death of Members such as representatives George Brown, Jr. (D-CA) and Bill Natcher (D-KY), there are fewer and fewer saints, and fewer of them are in positions of power to do anything about earmarking. One of most prominent saints left is, of course, Senator John McCain (R-AZ).

A fourth reason for the ascendancy of earmarking is the failure to enforce sanctions. Back in the mid-1980s, a number of the higher education associations and scientific societies passed resolutions and moratoria against academic earmarking. None of these has ever been enforced. No school or university president or principal investigator has ever been thrown out of any association for earmarking. Never has any sort of penalty been exacted for earmarking. Earmarking is really nothing less than a “free-riding” activity, where you get all the rewards with no penalty to be paid. The associations failed to enforce their own rules and their own dictates. In fact, if you look at the membership requirements for the Association of American Universities (AAU), some of the requirements measure the size of federal research dollars. If an institution earmarks, it actually enhances its prospects for joining AAU, and several of the recent members of AAU have been prolific in their earmarking. This presents AAU with an interesting ethical problem.

A fifth reason for the growth in earmarking is the number of elite universities, including AAU institutions, which are willing to earmark. We also have a contagion effect. A growing number of presidents have learned how to earmark in the last 20 years. They are learning how to do it, in part, because lobbyists are asking to be their clients. Consequently, the leading justification for earmarking is simply, “Everybody else does it.” Where once earmarking was defended because it would help develop better research universities, earmarking is now taking place even at the junior college level, and at schools such as the California state

colleges, which are prohibited by the state's "Master Plan" from issuing doctorates.

Chapter 11 in this volume, by John Silber, I know, very articulately presents the case in favor of earmarking, so I will present some of the reasons to oppose it.

First, earmarking undermines the peer review process. We talk about the value of peer review, not just in allocating research funds, but as an important and valuable part of the culture of the academy. We rely upon peer review to help us make decisions about promotion, tenure, publishing, and the distribution of many academic rewards and honors. Those who have opposed earmarking have generally claimed that one of its consequences is to delegitimize the peer review process in total.

Second, if peer review is biased and concentrates resources, as those who argue against peer review claim it does, so too does earmarking. In fact, although the top ten university recipients of federal research funds receive 22 percent of the total via peer review, the top ten earmarking schools receive 21 percent of the total earmarked dollars. The top 20 recipients of peer reviewed funds get 37 percent of the total, but the top 20 earmarking schools get 32 percent of the earmarked total. If peer review is biased and concentrates resources, so too does earmarking. It is not an egalitarian process. Earmarking is not about remedying some bias of peer review; earmarking creates its own biases. This is because neither scientific merit nor political influence is equally distributed. Powerful Members of Congress are relatively few in number, which is a definition of power, and they help their own universities, not someone else's.

Third, earmarked funds are wasteful and ineffectively spent. That is rather a broad charge, and is somewhat incorrect. Because in an absolute sense, when a school receives earmarked dollars, presumably it puts them to some use. The issue, though, is relative. What is the relative value of the use of this money? Could those funds have been put to better use at a more qualified institution with more qualified researchers? These questions have to do with how we measure the scientific value of earmarked dollars.

This is a critical question, because part of the argument justifying earmarking is that it creates a multiplier effect. As schools earmark research facilities and research projects, these attract better scientists, and they will in turn successfully compete for peer reviewed grants. Yet, when George Brown held his earmarking hearings in the early 1990s, he asked approximately 50 earmarking universities to send him information on what they were doing with their earmarked funds. Virtually no school

provided any information on the quality of what they were doing. Nobody offered information on the standard indicators of quality (such as patents produced, new journal articles and books written, Ph.D.s awarded, the number of women and minority graduate students added, etc.) in defense of their earmarking.

So I tried to establish a measure of quality and competitiveness. It combines the amount of federal research and development (R&D) obligations a university received the first year they earmarked at least \$1 million, its federal research rank that year as ranked annually by the National Science Foundation (NSF), and that institution's research rank in 1998. I wanted to see what happened over a period of time to a university that has received earmarked dollars. Had that school in fact been able to follow through on the argument that once it obtained those funds, a multiplier effect would indeed take place?

For example, has the University of Hawaii, which has benefitted from \$300 million in earmarks for whatever projects it desired, improved its federal research ranking since 1983, the first year it received at least \$1 million in earmarks? Hawaii's federal research rank that year was 70, based on NSF's ranking of 1 through 100. That university actually dropped nine ranks by 1998, despite having \$300 million to do with as it pleased. This situation is even more disconcerting if one understands that NSF's data on obligations count not just peer reviewed money, but all sources of federal obligations, including earmarks. Hawaii, like all earmarking schools, received a "double-bump" in the rankings by adding peer reviewed and earmarked dollars. Despite all of that, Hawaii still fell nine ranks.

When I wrote my book on earmarking (*Funding Science in America: Congress, Universities, and the Politics of the Academic Pork Barrel*, Cambridge University Press, 1999), I found that 35 universities had received at least \$40 million between 1980 and 1996. Using 1994 as the baseline for comparison, 13 schools had a positive increase in ranking from the time they received their first \$1 million earmark, and ten schools had lost ranking. The remaining institutions were unranked by NSF, so no clear comparison could be made.

Of the 13 schools that increased their ranking, only eight increased by five or more ranks, which suggests the improvement of these eight schools is more than just chance fluctuation in the rankings. Updating these data by using 1998 as the baseline, something very interesting emerges. Instead of 13 universities increasing their ranking, only eight had by 1998. Moreover, where ten schools registered a decline in rank-

ing, by 1998, that number grew to eleven. Where eight schools improved by more than five ranks by 1994, by 1998, that number fell to just six institutions.

The bottom line is that after \$8 billion of earmarking over a period of 20 years, we can identify only six institutions that by 1998, have improved their NSF rankings by five or more positions: Georgetown, Oregon Health Sciences, Rutgers, Boston University, and Indiana University. This is the big payoff from academic earmarking, the disruption of peer review, and the increased politicization of academic science: Just six universities managed to improve their research capabilities. Meanwhile, during this same period these 35 schools showed an overall lack of improvement, and seven institutions actually experienced a loss of five or more ranks: Hawaii, Oregon State, Michigan State, Maryland, Illinois, Wisconsin, and Miami.

So the question is, what do these universities do with all the money? Why are they unable to improve their rankings when they basically can use the money for any projects they desire? Why did the University of Pittsburgh get \$162 million in earmarks and still fall four ranks? What this demonstrates is the complete lack of accountability associated with academic earmarking.

The fourth complaint about earmarking is that it creates an opportunity cost. We do not know how much money was diverted away from peer reviewed accounts due to earmarking, but clearly some diversion is taking place. Recall the original earmarks that touched off the entire controversy in 1983, where Catholic and Columbia universities gained earmarked funds from the Department of Energy budget by taking peer reviewed funds away from Yale and the University of Washington. There is no way to measure the total opportunity cost created by earmarking. Nevertheless, even if only one-eighth of the total \$8 billion earmarked over the past 20 years was diverted from peer review research, that is \$1 billion lost to scientists applying for normal peer reviewed projects.

Fifth, and last, earmarking promotes hypocrisy in academic science. Part of this hypocrisy stems from the fact that university presidents, the ethical leaders of our campuses, have passed a number of resolutions and moratoria against earmarking, and then they have almost unanimously violated their own resolutions. Can you imagine them tolerating that same type of behavior in the faculty? Another part of this hypocrisy stems from the creative budgeting and gimmickry that university leaders have engaged in to accommodate their earmarks.

One example is provided by Harvard University, the premier institution by which so much of higher education and academic science is judged, a university whose motto is “truth.” In 1989, President Derek Bok wrote to one of his scientists concerning a subcontracted earmark. In this letter, President Bok said, “I believe that Harvard should not try to avoid the regular peer review procedure for evaluating the merits of scientific proposals. Hence, I would be very concerned if representatives of the University solicited Members of Congress to earmark funds for us as line-item appropriations. On the other hand, if money is given to another university which wants us to collaborate in a worthy scientific or research enterprise, I would have no objection.” In other words, if some other school went out and did the dirty work—hired the lobbyists and handled the politics—and got the earmarked money, Harvard would be willing to take its share as a subcontract. If Harvard is willing to take this path, what should we expect from other institutions?

The March 2001 issue of *Prism*, the publication of the American Society for Engineering Education, says it best in its article on earmarking: “On the one hand, university presidents and academic organizations condemn the practice on a theoretical level, but on a practical level, they hire lobbyists, chase down the money, fawn over politicians, and cash the checks.”

Until something is done to reverse the trend in academic earmarking, I am afraid this is how the system is going to work.

