Honorable John McCain, Chair Senate Commerce, Science and Transportation Committee 508 Dirksen Office Building Washington, DC <u>20510</u>

## Dear Mr. Chairman:

I am writing to bring to your attention an Op Ed piece from the <u>Financial Times</u> (November 13, 2003) by Dr. Lee Bollinger, President of Columbia University; and to request an opportunity to testify about the national breakdowns in macroeconomic forecasting and the reforms of NSF and scientific agencies that are necessary.

Dr. Bollinger diagnoses the national problem of academic economics as "intellectual solipsism." He recommends adding new faculty positions. My concern is that unless other dimensions of the problem (e.g., data systems) are corrected, the new faculty positions will be absorbed into a larger, malfunctioning system.

So much of what we want to accomplish as a nation, domestically and internationally, depends upon the performance of the economy. And the data problems and failures of the 53 dysfunctional mathematical macroeconomic models used to forecast GDP, government revenues, and time counter-cyclic interventions are not going to be self-correcting.<sup>1</sup>

In part, the problem is that there is too much money involved in national science policy and too many agencies and advisory panels have been captured by the academic scientific world. Patterns of scientific mismanagement - that already will be familiar to you from the investigation of NASA and the Challenger accident - also are present and uncorrected on a large scale.

I have followed these issues for twenty-five years, since I was awarded an NSF grant (as a member of the junior faculty at MIT) to begin a scientific study of government learning rates. I also have tried to prevent part of the erosion and, although I have failed, I think that I can provide a useful perspective for your Committee's oversight review.

At this point, let me simply update earlier correspondence and mention two related misperceptions that should be brought to your committee's attention:

1.) "NSF does peer-reviewed science. Sometimes it works, sometimes it doesn't."

In reality, peer-reviewed science (independent anonymous reviews and copies returned to the author for reply or revision and resubmission, etc.) stops below the level at which the most important scientific decisions are made. NSF's infrastructure initiatives for new data systems (for example, to permit or kill competition to challenge established (and now-failing) economic models) are made behind closed doors by unknown processes, without appeal.

For example, the last two rounds of planning (a Luce-Smelser report via the National Academy of Sciences/NRC for the 1990s and the new NSF infrastructure report published last spring), share serious limitations and biases whose causes are unknown to the wider scientific community. The Luce-Smelser project was apparently hijacked by a small elite group that killed-off scientific competition in key areas and secured funds for themselves. This NAS/NRC process (with NSF funds) received submissions from 600+ researchers, but the decisions were made behind closed doors, and its list of winners was ratified without reviewing the scientific justification for designating winners and losers. The NAS panel also failed to disclose that key members were serving their self-interests in their recommendations - both directly, and by killing research programs whose ideas challenged and competed with their own. Following sharp criticism of the 1990s round, NSF - this time, in 2002-2003 - became even more obscure.<sup>2</sup>

## 2.) Destroying competition and monopoly payoffs

In physics, the ideal is competition between theories. Even last-generation theorists welcome experimental tests that could dethrone their work as confidence grows in theories that pass such challenges. But in macroeconomics, the small group of economists who operate the National Academy of Sciences/NRC advisory systems and other disciplinary watchdog groups have locked-in a monopoly for their last-generation ideas by derailing recommendations for new data systems to test new and competing theories and paradigms. By now, it may surprise you to learn, the number of academic economists, and especially younger economists, doing full-time basic research in the field of macroeconomic modeling and forecasting has fallen almost to zero because - although there is a changing world and clear erosion of the last-generation ideas - it is impossible to make intellectual progress with the flaws and limitations of current data systems.<sup>3</sup>

The self-serving destruction of scientific competition has been egregious. The self-electing members of the last-generation economics Establishment in the National Academy of Sciences can merely announce that they are "uninterested," or not bother to participate, or be unmotivated to have their life's work be subjected to rigorous, competitive tests by younger scientists or scientists from other disciplines - and they win lifetime sinecures of prestige and extraordinary (monopoly) academic salaries even as the intellectual foundations erode and there is damage to

the country<sup>4</sup>. And now, despite more than a decade of legitimate criticism, Dr. Bruce Alberts continues to lie: in his Presidential address last spring he still claimed that his organization's work represents "scientific consensus" and that all points of view are represented in the process of their ex cathedra reports and architectural plans. But the enclosed letter from Dr. Robert Reischauer (former head of CBO and a member of the Executive Committee of Harvard's Board of Overseers) has a scientific authority about these data matters that vastly exceeds Dr. Alberts' and the door-slammers of his Establishment with its (now, quantified) scientific failures. And President Lee Bollinger at Columbia is expressing a widely-shared view in universities - that the "intellectual solipsism" of academic economists has made them dysfunctional and incapable of self-correction. Neither Dr. Reischauer's views, nor President Bollinger's, nor my own (nor the legitimate criticisms of other social scientists) are fairly represented in this government (NSF) funded process.

Sincerely,

## Dr. Lloyd S. Etheredge

- 1. Even the recent demotion in the status of the Council of Economic Advisers (discussed in the enclosed Op Ed piece from the <u>Financial Times</u> of October 30, 2003), while it sends the right message, is unlikely to be successful.
- 2. I outlined a half-dozen projects for example, to measure missing variables and improve the statistical reliability of economic forecasting and challenge some ideological assumptions; to establish Centers for comparative foreign policy research in a dozen countries identified by the historian Paul Kennedy as emerging "pivotal states" in the 21<sup>st</sup> century; for Centers abroad to conduct low-cost cross-national comparisons of psychological experiments to determine whether government-funded social psychology research merely has given us a literature about changing American culture and/or undergraduate psychology (i.e., undergraduates provide the existing subject pools) rather than universal truths. But I have no idea about what has happened to them nobody knows what happens to innovative ideas.
- 3. In the latest infrastructure planning round, a staff economist provided a liaison from the National Research Council/National Academy of Sciences to NSF. The recommendations have never been published, but to judge from the draft NSF infrastructure report they were minimal. (The <u>published</u> version of the NSF planning report after sharp criticism, during the comment period, of the alarming, minimal investments contemplated for experimental and prototype macroeconomic data systems actually removed the table with details.)
- 4. The danger of self-serving scientific Establishments is familiar from Kuhn's <u>The Structure of Scientific Revolutions.</u>