Department of Political Science
University of Toronto
100 St. George Street
Toronto, Ontario M5S 1A1

(416)-978-8220 (V)
(416)-978-5566 (Fax)

Please reply to: 7106 Bells Mill Rd.
Bethesda, MD 20817
(301)-365-5241

June 2, 1992

Dr. Duncan Luce
School of Social Sciences - Research Unit
in Mathematical Behavioral Sciences
University of California, Irvine
Irvine, CA 92717

Dear Dr. Luce:

Thank you for your letter and candor.

Would you be willing to discuss a rational, cost-benefit, analysis of whether the National Academy of Sciences should only give scientific advice that is perceived to be politically neutral? E.g., at what threshold might an expected cost to the country grow so great as to justify an exception to the decision rule and a whisper of criticism? Billions of dollars? Tens of billions? Hundreds of billions?

In the early 1980s, my conclusions might have been closer to your initial reaction. David Stockman and others with ideological theories, and a zealous sense of mission, would have perceived an initiative to develop new national indicators as a political threat by liberals, blocked it, and made the National Academy pay a high price if it persevered. Now - with forecasts of $400 + billion annual deficits for the remainder of the decade, and diminished rates of growth - I judge the price of continued silence is too high. Too many of our hopes for the future are linked to the performance of the economy.

I think you may mis-read my motives as partisan. In the early 1980's I conducted a major literature review, under an NSF grant, to study barriers to learning by our political institutions. The report identified the improved testing of all ideological beliefs as a critical investment to remove barriers. During the past decade, I have achieved a reputation in some locations as a "Reagan Admirer" for suggesting that Republicans have a serious model that should be tested. My recent letter emphasizes top-down censorship, and the growing alienation of the National Academy's leadership from most of its constituencies - it is not a

scientific judgment of whose views the evidence will support.

If you and your colleagues do conduct a critical evaluation of macro-economic growth policies in the light of existing scientific literatures, and recommend new indicators with fairmindedness to all a priori views, everyone will win.

These public silences by national scientific institutions, and other failures of leadership, are damaging to the social sciences. There is an impression that social scientists haven't any good ideas, or anything worthwhile to say. Political psychology (and the wider Lasswell traditions) are dying-out at a time when - as I think you appreciate - these inter-disciplinary admixtures may produce unexpected and serendipitous results.

Your letter's forecast was disheartening. I will take the liberty to share it with other political psychologists with whom I have discussed the problem of these barriers to national learning and how they might be removed. I hope a solution can be found.

With all best wishes.

Yours sincerely,

/s/

Lloyd S. Etheredge

cc: Philip Tetlock

Summer address: 7106 Bells Mill Rd.
Bethesda, MD 20817
(301)-365-5241

July 31, 1992

Dr. Duncan Luce
School of Social Sciences
University of CA, Irvine
Irvine, CA 92717

Dear Dr. Luce:

Thank you for your two letters and advice.

My basic criticism of the National Academy of Sciences arises because your panels serve key gatekeeper roles. They are believed to give the best advice of our most distinguished scientists on such matters as the creation of new national indicators and funding priorities for behavioral science. They give a degree of endorsement - and political protection - that can shape the decisions of foundations and government agencies. Any new line of investigation that depends upon new data series and significant funds to challenge orthodoxy - e.g., to evaluate and learn lessons from such quasi-experiments as Reaganomics - is dead without this support, especially as your panels and commissions give preferential endorsement for government and foundation funding to other (apolitical, to use your adjective) priorities.

I think we agree that your organization does not truly represent the best scientific advice of its members. Surely, as scientists, most of your members believe the Republican experiments to alter the modal personality of the American people and foster economic growth (reduce dependency, increase self-confidence and the work ethic, etc.) should be evaluated by the development of appropriate indicators.

I appreciate your organization's preference to avoid unnecessary political controversy. But there are creative ways to proceed, just as Surgeon Generals have moved, steadily but incrementally, to develop scientific studies concerning the effects of smoking on health. Or you could be oblique about raising critical questions, as in your new and inspired edited collection by Breslauer and Tetlock, Learning in U.S. and Soviet Foreign Policy.

I still think my original suggestion - of a sponsored competition to design new indicators and Michelson-Morley tests of a full range of untested ideological ideas - would be good for the country and science, fun, greeted with enthusiasm, and produce sufficiently long-term arguments about construct validity, data interpretation (etc.) to prevent a sharp and definitive political

challenge; and that there is only a low probability that John Ferejohn (for example) would be sent to the guillotine if he directed the project for the National Academy.

A team assembled by John Ferejohn probably could nail these questions by the end of the decade. I believe it would be a wise investment, and I hope you and other national leaders in the social sciences can bring it about.

Political independence - telling the truth without fear or favor, letting the chips fall where they may - will be healthier for science and the nation. A politically-neutered National Academy of Sciences is unworthy of free men and women.

May I suggest a nightmare scenario? Perhaps, all along, Congressional leaders and the public have truly wanted the best forthright, honest, and politically-independent advice of our best scientists? As a nation we go to great length to support the intellectual integrity of scientific institutions. The members of the Academy have academic tenure and are elected for life. Its institutional integrity is guarded by mechanisms stronger than we provide even our judges - rights to elect your members and officers. The Academy may acquire funds for projects, and its advising role, without a requirement to rely upon government appropriations. Yet our best political and social safeguards have failed. And perhaps, after a decade, the leaders of Congress, the public, and the social science community (and even President Bush) deeply wish that you had played a more independent role.

Congress cannot require honesty and forthrightness from the Academy. But if Congress wishes independent scientific advice, perhaps this entire matter needs to be reviewed by its oversight committees. Not to assign blame for the fierce price the nation may have paid for a decade of unnecessary ignorance and self-created scientific silence, but to consider what changes might assure intellectually independent advice and a brighter decade ahead, with improved economic growth.

I hope we have a chance to meet in the future, and under less contentious circumstances.

Yours truly,

/s/

(Dr.) Lloyd S. Etheredge

cc: Kenneth Arrow
John Ferejohn
James Q. Wilson

Political Psychology, Vol. 5, No. 4, 1984
737-740

The Forum

President Reagan's Counseling

Lloyd S. Etheredge[1]

President Reagan's psychological model of economic behavior is a very different idea of how society operates than the individual rational choice models used by economists. It would be a major contribution to American public policy to develop direct measures of imagination and determine whether people do relate to government, as a higher presence, from within a larger-than-life drama.

KEY WORDS: political economy; mass psychology; leadership; imagination therapy.

For decades, economic policy has been the territory of economists, governed by their idea that we are a nation of rational choices. President Reagan has changed the assumptions. He is using ideas familiar to psychoanalysts and clinical psychologists to diagnose the problems of the American economy and design a course of treatment. He has posed a set of problems which political psychologists can solve with great benefit to the intelligence of national policy.

The president's idea is simple. He says our economy's lack of vitality is produced because government has become a powerful, substantial presence "above" us here in America. Over the past 30 years as, in our national imagination government became "bigger," we grew subjectively smaller to develop a national dependence. There was a "zero-sum" effect on each person's mind: As "it" (government) assumed more responsibility in national life, "we" (the people) took less. The work ethic disintegrated; productivity increases stopped; the economy stalled.

The president's economic policy follows logically. It is intellectually serious and urgent: He must provide national psychotherapy for a depressed, passive nation that expects its therapist to have a prompt and magical solution.

To effect the change he desires, our president-psychiatrist has designed a national psychodrama to inspire us, to create open space, and to reduce our idealized illusions. He is warm and supportive. He is cutting taxes and expenditures to make government above us "smaller." It may not be a cure we like, and there will be painful withdrawal symptoms, but we must again take responsibility for our own lives.

From personal experience, Dr. Reagan knows he is right. The dire predictions of his theory, made 30 years ago, appear correct to him. And in his autobiography, *Where's the Rest of Me?*, he sketches how he, too, was once dependent, in his case on the Hollywood studio system. He was well paid but unhappy, reading scripts written by others, never getting the leading dramatic roles he wanted to play. But then he became more assertive, struck out on his own. Once he became his own man, life started to work for him. He made a successful second marriage. Speaking his own ideas, he was elected Governor of California. Now he has *the* leading role in the country.

Other aspects of the president's life and experience confirm the same intuitive truth. He enjoys exhilaration, and a sense of freedom, when he rides the open range on horseback, the experience of the open range for free entrepreneurship he has told us we will regain in our national psychology by cutting back that "big government" in the sky. When he escapes to California from Washington and clears brush on his ranch, he feels recharged. He knows we will feel that way too, as the American Congress "stays the course" to effect the psychological transformation he wants.

To be sure, this is a closed system of beliefs. Evidence is always interpreted in the light of what the president calls his "basic principles." If the economic recovery is slow, it only means problems of dependency and addiction to big government are deep in our national psyche. So he is under an even greater obligation to persevere until we regain our independence and self-confidence and restart the economy. He has no choice.

From the president's perspective there is likely a second cause of a slow recovery, a cause psychoanalysts and clinical psychologists often cite: We are resisting. To an unprecedented degree, American news media refuse to discuss a national problem in the language a president uses. He has been stonewalled. *CBS News* has run nightly stories about the sufferings imposed by Reaganomics but has not yet discussed the real national problem, our psychology of dependency. It is as though the Eastern liberal news media are so addicted to the drama of an activist government, so psychologically dependent, so accustomed to demand that the president *do* something, that they will never admit even the possibility he could be profoundly right.

If Reagan is right, these skeptics slow the cure. The president can cut taxes and expenditures; these are actions in physical reality. But the stakes

are *psychological* reality. For the therapy to work we must agree—that the diagnosis of dependency is right, that big government is receding, that the therapist knows what he is doing.

It is also possible our actor-president is wrong. A powerful bond to government may be true of only 2% of the population: actors, intellectuals, reporters, the people who give money to political causes or end up in Washington. How can we tell?

The president has profoundly challenged the discipline of economics. His idea about how the economy works does not come from the hundreds of complex equations of their mathematical models. The basic problem, in his view, is simple: The economy is deeply *political*; we orient ourselves dependently toward government in a larger-than-life drama.

Lacking objective evidence, we now are adrift and debates about economic policy are decoupled, without intellectual integrity. Administration economists have given no evidence to support the intuitive psychological ideas about the economy the president uses to set policy. They have developed no national indicators for the substantiality of images of a "big" government in the sky, for changes in achievement motivation, for the alleged zero-sum allocations of responsibility.

Now, as we "stay the course," we navigate blind, on faith alone. Congress has applied no rules of evidence. The *Report* of the U.S. government's Council of Economic Advisers is intellectually irrelevant; it would be rejected as a test of the president's theories by any psychology department.

If the president is right, good national psychological indicators will tell us. And, refining our understanding, they might improve the president's policy. John F. Kennedy cut taxes and the economy leaped ahead—but Kennedy also talked about achievement—a New Frontier, a man on the moon by 1970. If psychodrama is needed, perhaps these are the themes to emphasize.

The president is not speaking in metaphors. He believes he is talking about our reality: solid, strong constituents of a national imagination, constituents so powerful in their effects as to destroy the health of a multitrillion dollar economy and our national spirit. His theories reflect ideas many psychologists have voiced seriously in the past: Psychoanalysts have told us that, via transference, many people relate to government authority, in our "mass psychology," the way as children they regarded their magically powerful parents; David McClelland of Harvard explained the economic rise and fall of civilizations by changes in the imaginations of citizens.

Currently, empirical evidence bearing upon the president's fundamental assumption is indirect and inconsistent. Self-report attitude measures seem to deny his model: Americans say they blame *themselves* for economic hardship. Yet macrolevel studies of election results, and individual-difference measures of self-interested and "socio-tropic" voting, suggest Reagan is correct and responsibility for management of the economy is assigned to the party in power.

Such measures of attitudes and voting are open to different interpretations as reflecting either rational and secular or psychodramatic processes. Alone, they cannot dispel the fog. The deeper question is the psychological nature of American government, and what is needed is that our public debates begin to be informed by evidence, from appropriate, clinically derived measures, of the location and substantiality of citizens' experience of government and the nature of the emotional bonds to it.

A Breakdown Crafted by Silences:
Scientific Mismanagement and National Policy Error[1]

by
Lloyd S. Etheredge

Our country is entering a period of risk because of deficient economic data and derailed progress of the social sciences in a changing world. On August 1, 2002, for example, news stories revealed serious errors in US economic data for 1999-2001 (Attachment 1). The signs of key indicators were the opposite of what policymakers, the private sector, the public, and Congress were told. Bad data apparently led Alan Greenspan and the Federal Reserve to mistime their policy interventions, mistakes that increased the damage and continuing cost of the recent recession.[2] I appreciate your invitation to discuss these concerns about mismanagement.

Because of your responsibilities, I also want to bring to your attention Attachment 2, which provides information about the role of the Committee on National Statistics

---

[1] Briefing for the Inspector General's staff, National Science Foundation, September 10, 2002. This testimony partly reflects work as Director of the Government Learning Project at the Policy Sciences Center Inc. in New Haven CT, a public foundation. Dr. Etheredge's background includes teaching research design and statistics at the graduate level at MIT and Yale. Comments welcome: lloyd.etheredge@yale.edu; URL: www.policyscience.net.

[2] Alan Greenspan still maintained, in the spring of 2001, that his policies were working and that a recession could be avoided, when we now know that the economy already was in recession. The monetary policy error is discussed in David Leonhardt, "New Report Shows U. S. Economy Slowed Significantly for Quarter." The New York Times, August 1, 2002, C1, C7. Alan Krueger reports that fiscal policy "could well have been different" with timely and accurate data, especially the back end of the $1.4 trillion tax cut: Alan B. Krueger, "When the Economy Hits a Turnaround, Conspiracy Theories Abound," The New York Times, August 22, 2002. Online at www.nytimes.com.

(CNSTAT), which NSF oversees for a consortium of government agencies. This Committee was established in 1972 to assure state-of-the-art national data systems, supervised by our best scientific minds, and rapid scientific progress for evidence-based economic and social policy. Dr. Bruce Alberts et al. at the National Research Council run and (poorly) supervise CNSTAT for you: the description in Attachment 2, from its website, accurately describes the role that the Committee is supposed to play, with references to its broad mandate, the expectation for initiative, and the role to monitor federal data systems. The system designed in 1972 is broken.

The Importance of Fixing the System

I have the highest regard for the National Science Foundation's leadership and effectiveness in the physical sciences. However, there have been serious problems with the social sciences. While they are a small fraction of the NSF budget with marginal representation on the National Science Board, and a minute fraction of the national science budget, the impact of breakdowns in the management of a $10 trillion economy can be brutal and damaging to people and institutions throughout the country. These problems of mismanagement need to be fixed quickly.

For example, the recent recession has been affecting businesses, individual lives and investments (including retirement assets) throughout the country, with devastating effects in the communications and computer industry. Dr. Colwell's home state of Maryland now faces a $1 billion shortfall in revenue and the requirement to defer many projects in the public interest. Every member of the National Science Board will view similar stories of continuing costs in their local newspapers.

I. Background

My Observational Viewpoint

As a professional social scientist, let me begin by explaining my observational viewpoint and the steps that bring me to this meeting.

In the late 1970s, as a junior faculty member at MIT, I received an NSF grant to begin the study of government learning and develop options to accelerate learning rates in public policy. During this original NSF grant I used my background in political psychology to develop a new framework to understand and engage ideological disagreements. The new framework was exciting because it outlined better measures that could evaluate competing assumptions, and support evidence-based dialogue that was likely to improve social and economic policy.[3] This new framework came before national agenda-setting committees operated by the National Research Council in the mid 1980s and again in 1990. It created political panic and door-slamming; these agenda-setting committees also were in the process of crafting civically-withdrawn/politically neutered research priorities.

Subsequently, Dr. David Hamburg organized an off-the-record session of the Carnegie Commission on Science, Technology and Government where former national science advisers and several of our most distinguished research scientists met with the bad actors to urge that the National Research Council continue to support honest broker research and the social integrity of science. Later, I contacted Presidents and Provosts at our leading research

[3] The new measures of the distribution and properties of vivid hierarchical images are discussed in documents on www.policyscience.net. Reaganomics became an immediate focus, but there are a broader range of new measures for the potential insights/validity of liberal, radical, authoritarian (etc.) ideas.

universities and testified to the (Ryan) U. S. Commission on Research Integrity; Jack Peltason, head of the University of California system, contacted the Clinton White House to express concern about the neutered role and damage to our national research capabilities.[4]

I include the history here because earlier corrective efforts failed. As I will discuss below, there is an established pattern of restricting data that are scientifically (mathematically) required for economic forecasting - and the same door slammers continue to control the non-agendas of CNSTAT.[5] Also, because of Establishment continuity, there are members of the National Science Board who know part of this inner-circle history at first-hand, and who can discuss their estimates with their colleagues.[6]

Given my background and professional interests in science-based policy learning, my comments today will have, in part, the character of field notes. There are more compact summaries of the behavior I will describe (Plato, The Republic, Book VII: 514-520 - a reference for political science and humanities students) and perhaps - someday, by someone else - there will be a book-length study detailing how a happy ending was achieved for the nation and for science. Today, however, the immediate next step in resolving this break-down is the investigation and report of your office as advisers to Dr. Colwell and the National Science Board, and I will be pleased to help in any way that I can.

---

[4] Part of this history will be known to you, via earlier submissions and discussions with Dr. Catherine Ball.

[5] These activities are under the control of the Commission on Behavioral and Social Sciences and Education (now, a Division). The names of the participants are included in earlier material in the possession of NSF.

[6] For example, President Peltason spoke with Dr. Joyce Justus at OSTP who was, if my memory is correct, the deputy of Dr. M. R.C. Greenwood, one of the current members.

II. Discussion

> "All three groups of forecasters - CBO, the Administration, and the *Blue Chip* survey - made exceptionally large mis-estimates when forecasting for periods that included turning points in the business cycle [recessions] and for the past few years . . . "
>
> - Congressional Budget Office (2002)[7]

> " . . . the uncertainty about the next few years may be larger than indicated by the average mis-estimates of the past two decades."
>
> - ibid.[8]

Repairing this science advising system quickly is urgent. There are two problems: a.) bad descriptive data of reality, and b.) CNSTAT's bottleneck performance in limiting data for scientific progress, especially forecasting.

A. Urgency and bad data

- We must assume, unless there is contradictory evidence, that current economic data are as unreliable as the 1999-2001 data. Possibly, the 1999-2001 data errors were extreme outliers - but we cannot prudently make the assumption.[9] We cannot assume that our best

---

[7] "CBO's Economic Forecasting Record" (February, 2002) online at www.cbo.gov/showdoc. cfm?index=3285&sequence=0., p. 6 (Attachment 4).

[8] p. 2.

[9] An unsettling rate of data error (e.g., esp. recessions/turning points) has been characteristic of this system.

scientists are monitoring the system and taking initiatives - Attachment 3 shows the agendas of the mismanaged CNSTAT in recent years and their disengagement from these issues.

Government professionals at the Congressional Budget Office (CBO) have noted their concern with the unreliability of current government data and the limited (and worsening) capacity of existing models to forecast economic variables for policy making. (See, for example, the summary of CBO's data analysis at the beginning of this section, p. 5, above. and the complete study, Attachment 4.) CBO also expresses the view (p. 5, above) that the composition and behavior of the American and world economies are changing more quickly than new theory and new theory-derived measures are becoming available. Other thoughtful observers of the economy made similar points 18 months ago: Alan Greenspan recommended (in March, 2001) that it was time to get new kinds of data, rather than seek to understand the current functioning of the economy by the diminishing returns of more intensive analyses of established statistical datasets.[10] Richard Berner, President of the National Association of Business Economists, testified to Congress in April, 2001 and expressed the perception of his members that reality is changing and we need better thinking to give us new data: "research and development are sorely needed to expand the scope and improve the quality of our statistics so they remain relevant to a rapidly changing economy."[11]

---

[10] Quoted in J. Steven Landefeld, "Importance of BEA Data," online at ww.nabe.com/publib/stat0110.htm., p. 1

[11] Richard B. Berner, "Testimony" (April 5, 2001). Online at www.nabe.com/publib/bernertest.html. Among other changes, electronic connectivity may make some markets adjust faster; the causal economic impact of knowledge may be poorly modeled; and there are structural changes in the domestic and international economy.

- There also is urgency because, in America, everyone - all government agencies and CEA, Congress and CBO, the private sector, academic researchers - relies upon a single source of basic data. I.e., whose standards for state-of-the-art scientific design, reliability, and steady improvement were entrusted to NSF/CNSTAT thirty years ago.

- I also draw to your attention the work of Prof. Paul Krugman at Princeton (and a New York Times columnist). Krugman - who has been ignored by CNSTAT's agenda-setters - believes that key coefficients that affect policymaking also may be changing.[12] If so, getting new measures online quickly is essential: economists use linear regression analysis of quarterly time series data to estimate (historically averaged) coefficients for forecasting. If key coefficients are changing, new (and more creative) types of convergent measures will be required to detect the changes and estimate their magnitude.

- Urgency also arises from another direction. In an electronically-connected world, financial markets react quickly. We have seen recent meltdowns in Asia and among several large American corporations as bad accounting became known. Right now foreign journalists are being non-alarmist about the fact that US economic policy makers have been out-of-touch with reality. Yet this could change quickly, especially if there is an impression that the system is broken and nobody has acted quickly and responsibly to correct the problems.

I think most scientists would agree that the problem of timely and accurate data can be solved. NSF-supported astronomers secure data on a cosmic scale from distances of millions of light years, and NSF-supported physicists have designed, recommended, and constructed

[12] The suggestion is based on recent experience of the Japanese Central Bank. See "Japan: still trapped" on www.wws..princeton.edu/~pkrugman/

instruments to measure reality on a subatomic level, both with astonishing precision many places to the right of a decimal point. The unreliability of economic data for policy making surely is the worst of any NSF-supported scientific field. I think you will find that Dr. Alberts et al. have the brainpower to design and recommend a measurement system that is timely and accurate - but have failed to do so.[13]

B. Limited Data/Neutered Scientific Progress

Let me turn to a second requirement for good government data systems: (reliable) data must be available to evaluate relevant variables, to permit a creative process, and to develop better theories to improve understanding, forecasting, public discussion, and policy.

Concerning this second requirement, CNSTAT has been operated as an institution that, by its silences and (designed) lack of initiative, has slowed scientific progress and undercut the scientific integrity of forecasting.[14] Evidence for the lack of progress (and recent erosion) in forecasting models is available from CBO (cited above and Attachment 4.)[15] In brief, the

---

[13] For comparison, our national banking system processes the transactions for the entire economy (not merely samples) with minimal lag. Our largest retailer, Wal-Mart, has complete and detailed, product-by-product, national sales data within 24 hours.

[14] Other government agencies are not equipped to be innovative research scientists, but are consumers of existing datasets.

[15] E.g., www.cbo.gov and "CBO's Economic Forecasting Record" online at www.cbo.gov/showdoc.cfm?index= 3285&sequence=0, op. cit. Note that CBO also believes that shared inaccuracies "probably reflected limitations that confronted all forecasters." p. 1. Orthodox economic theory also defines/constrains the data which government collects, and all forecasters use the same theory-derived data, ibid.

In observing economic forecasting errors, one should keep in mind that a reported 1% error is a very large number for a $10 trillion dollar economy, and that the difference between a 1% prediction by a model and a 1.9% result is a 90% error. There are not enough data points (e.g., for N=24, 2-year forecasts), relying upon annual data, to learn a great deal

scientific ability of economic models to make reliable longer-term forecasts of most key dependent variables remains lackluster and has been getting worse in recent years. Even the short-term forecasts to foresee a recession in time for optimal counter-cyclic policy miss the recessions - the leading Wall Street/New York forecasting models, for example, missed all of the past three recessions. And - again - the world now may be changing because of unmeasured variables that are a common constraint on all data users: several days ago, for example, the Congressional Budget Office suddenly shifted its forecast of government deficits through 2005 from the prediction of a surplus to a prediction of big deficits, in part because tax revenues unexpectedly dropped 6.6% below forecast, the largest one-year drop in nearly half a century. ("Nobody knows why," taking known and currently-measured variables into account, according to the Director of CBO.)[16]

To any alert observer, an obvious hypothesis is that, as Establishment economists have spent several decades working & reworking the same orthodox model and its limited set of orthodoxy-specified variables, and are not getting better scientific (and/or policy-relevant) results - perhaps you should investigate if there are other variables and causal mechanisms at work?

I want to discuss three elements of this mismanagement of scientific progress in more detail: 1.) The bottleneck role of CNSTAT; 2.) Establishment capture and imposed stagnation; and 3.) Missing variables and disregard for basic scientific integrity.

---

about forecasting error via time series analysis - i.e., without new and different kinds of data to triangulate upon the true value of key coefficients and to control for missing variables.

[16] Edmund L. Andrews, "Budget Office Forecasts Shift From Surplus to Big Deficits," The New York Times, August 28, 2002. Online at www.nytimes.com.

1.) The Bottleneck of CNSTAT

To understand the deadly bottleneck/stasis-maintaining role played by CNSTAT it is important to understand the sociology of the economics profession. Usually, economists do not study the world apart from government-created datasets. Scientists from other fields might make the mistaken assumption that the scientific study of economic behavior operates by "keen observation and shrewd generalization," in a phrase used by the economist Robert Solow[17] - but that is precisely, as Solow records, what does not occur. Rather economists are only "modelers," using the statistical data developed via the Committee on National Statistics. By now, Solow observes, "people are recruited whose talent is for just these activities, whose interest is more in method than in substance."[18] Unless new thinking and measures are in the government datasets, they are not in the models or the research literature. When CNSTAT is silent and does not recommend new measures/ideas, there is no competition, and no progress.

The managers of CNSTAT also play a wider inhibiting role to kill the creative contribution of other social sciences. While it might seem that individual social scientists could apply to NSF to secure funds and develop new ideas and better models, this is not a realistic option. In psychology, for example, an individual researcher working alone - even if assured of funding - might need to spend a decade to assure that a single new measure was sufficiently reliable.[19] Even if measures are available, national sampling frames are expensive - in

[17] Robert M. Solow, "How Did Economics Get That Way and What Way Did It Get?" Daedalus 126:1 (Winter, 1997), pp. 39-58, p. 56.

[18] op. cit., p. 57.

[19] This is the amount of time involved for the Kohlberg moral reasoning scales and the Loevinger ego development scales, for example.

political science, for example, there are sufficient funds only for one, and the funds are owned de facto by the American electoral politics field. Congress and NSF recognized these economic restraints on innovation thirty years ago when they created CNSTAT as a mechanism for the scientific community to develop data systems.

2.) Establishment Capture and Imposed Stagnation.

Economists have achieved a brilliant and interconnected mathematical framework, sometimes called the neoclassical synthesis, that functions like the too-simple but elegant Bohr model of the atom in the history of physics. In physics, however, anomalous data have forced intellectual movement beyond this model, with a continuing quest to understand complex real-world processes and develop a new general theory.

The mathematical elegance of the neoclassical model depends upon a restrictive assumption of rational and autonomous individuals with maximum motivation for profit. However, as a practical matter, most politicians - probably, most Americans - are more psychological in their thinking about life and the economy than these stylized mathematical caricatures. President Reagan, for example, wanted to cut back and change what he imagined to be a psychology of the welfare state that produced too much dependency, passivity, and shifting of personal responsibility to the government. But, as I suggested above, the National Research Council's hierarchy via CNSTAT stonewalls any new measures of processes and variables: it is a continuing problem of "missing variables" in the datasets, as all Administrations (including the Bush Administration) and members of Congress are drawn to use a wide range of psychological ideas/mechanisms to affect economic behavior.[20] [21]

[20] The Republican perception that social scientists are liberal, and their partisan mistrust, partly is a misperception: orthodox economists have stonewalled all competing ideas. While it is true that social scientists tend to be politically liberal, and most would

- By "Establishment Capture" I refer to a well-known phenomenon of blocked paradigm shifts, analyzed by Thomas Kuhn in his The Structure of Scientific Revolutions and others.[22] Initiative - for better data, scientific competition and creative ferment, and better theory - has been unwisely handed-over, de facto, to a set of the most distinguished scientists (members of the National Academy of Sciences, who are part of the self-governing process of the National Research Council) who built their careers and status within the old neoclassical paradigm and are satisfied with the monopoly and have no motivation for change (thus, silence.)[23]

---

probably have preferred Reaganomics to be wrong, the actual empirical work has been honest (for example, the findings that evidence did not support the effectiveness of many Great Society programs to solve social problems.)

[21] For example, efforts to calm or reassure investors/financial markets; beliefs that self-confident, optimistic and/or liberal activist Presidential leadership energizes the economy; the (partially measured) beliefs that consumer confidence plays an important role; arguments that a "traditional values" cultural values package is mutually reinforcing - work ethic, "family values," more old-fashioned teenage music, religious faith, etc. There is an extraordinary and interesting list, which would enrich our understanding of how a pluralist society actually works, whether or not findings become (through democratic processes) bases for public policy.

[22] Thomas S. Kuhn, The Structure of Scientific Revolutions (Chicago, University of Chicago Press, 1996). Originally published in 1970.

[23] It is likely that a serious research program with alert, motivated researchers could begin to identify new variables quickly. Professional economic forecasters appear to know or sense more about the economy than they are yet able to articulate within their mathematical models. For example, even when models predict continued growth, an "anxiety index" reporting modelers' subjective concerns that their model could be wrong, appears since 1968 to be an excellent predictor of a forthcoming recession - i.e., far superior to the orthodox models themselves - when the computed index passes 30%. This appears to be true despite bad data. See David Leonhardt, "Forecast Too Sunny? Try the Anxious Index," New York Times, September 1, 2002. Online at www.nytimes.com

3.) Missing variables: Disregard for scientific integrity

Regression analysis of time series data is the foundation of economic forecasting. As Dr. Alberts et al. know, it is always deficient science to fail to control relevant variables in a causal analysis. But it destroys the integrity of a regression analysis to accept bureaucratic stonewalling, ignore missing variables since the 1980s, and trust the validity of the coefficients that are being estimated.[24] The technology partitions variances due to the missing variables and their interactions, as best it can, among the independent variables available. Thus, the true values of coefficients may be larger, smaller, or even of a different sign (and the forecasting errors will become larger.) It is a fundamental rule of science to wash test tubes and - of regression analysis - that the results are uninterpretable (you do not know the true values of coefficients) until you measure and include the missing variables.[25]

Thus, by excluding any larger list of measures of relevant variables - (in this case, "relevant" being established when the Administration itself, with a loud megaphone, and Congress seek to use such variables as the main effects for macroeconomic policy) - the imposed silences and credibility of CNSTAT have functioned to destroy the integrity of economic research for future years and created an upper bound for the accuracy and reliability of forecasts for the US economy. I.e., as a consequence of mismanagement by Dr.

---

[24] The question of missing variables has been raised periodically across different political climates (e.g., with NCR/DBSS&E professional staff and correspondence on www.policyscience.net). So far as I am aware, Dr. Alberts et al. have never permitted the question of statistical controls to appear on the agenda of CNSTAT, where I would expect the professional statisticians to assign it a high priority. It may be unfair for NSF to attribute deficient performance of CNSTAT to its members.

[25] I should make a similar point about measurement errors, which do not "even out" in regression analysis. In the bivariate case, for example, even random measurement error in the independent variable always biases estimated coefficients toward zero. Regression analysis can be highly sensitive to measurement errors.

Alberts et al., the current forecasting coefficients estimated from the past twenty years of data are uninterpretable.

III. Implications

Let me make three concluding comments and discuss three implications:[26]

A. Concluding Comments

1.) A Single Standard for NSF

As this is a written document, on the public record, may I express my hope that NSF will deal with the mismanagement issues of NRC/CNSTAT in at least the same way in which it would deal with a lower-status grantee with this record of negligence, or that did not wash test tubes? Arguably, Dr. Alberts et al., should be held to a higher standard. Regardless, the standard affirmed by the handling of this breakdown will establish a public precedent.

Equally, I hope that you will expect the same high standards from social science researchers as you expect from the natural sciences. If the federal government spent thirty years trying to send a probe to Mars and kept missing by hundreds of millions of miles - because of bad data and poor models[27] - I think you would make sharp judgments about Dr. Alberts et al. as the supervisors of the project. I hope you will apply the same standards as if Dr.

---

[26] May I also suggest that you review which economic research, underwritten by NSF, should be redone in light of seriously erroneous data from 1999-2001? (I think the National Science Board might find it informative to review whether significant errors in the estimated coefficients of these NSF-supported studies actually make enough difference that they should be redone.)

[27] And if (the CBO, quoted above, p. 5) their results are getting worse.

Alberts et al. received funds to monitor and accelerate AIDS research but decided - for whatever reason - not to control for relevant variables or wash test tubes, and persisted despite blunt private warnings from leading scientists; and continued medical (policy) errors that damaged patients (the nation) through negligence.

2.) The Professional Staff is Unlikely to Be the Problem

I am prepared to believe that the professional staff at the NRC and CNSTAT are perfectly agreeable people who will write capable, inoffensive literature reviews about whatever topics are requested and paid for by others. And the panel members appear to be fine statisticians. The problems of mismanagement arise at a higher, agenda-setting level, and the powerful evidence of mismanagement are the silences: failures of initiative, monitoring, and engagement of our best scientific minds. And a broken system that does not produce good results for its broader intended purposes. You are witnessing a system crafted by silences.

3.) On Being Too Close to Washington

One of the deeper concerns, especially for institutions and researchers outside Washington, is the likelihood that the senior management circle of the National Research Council is too close to Washington, with its work affected by political action moods rather than the requirements for rapid and sustained scientific accomplishment. This is a failure of public management: sociologists will tell you that societies often create specialized institutions to embody their better judgments and instincts and/or for specific tasks and expect these institutions to do these jobs while other institutions are preoccupied elsewhere. [Even if most Americans are satisfied with their quality of health care, Congress nevertheless establishes and funds scientific institutions and biomedical research to improve it. Even if most Americans are indifferent to the quality of data necessary to monitor and engage issues

of global warming - and some ideologues want to treat the issue as a conspiracy of the political Left - NSF is funded to conduct the research.]

There can be a slight drunkenness to political behavior, and it is a reasonable hypothesis that Dr. Alberts et al. have been contaminated by the temporary preoccupations (and indifferences) of Washington-based legislative politics and moods and forgotten their independent responsibilities. So long as Dr. Alberts et al. receive NSF/public funds for initiatives, monitoring, and their best scientific advice for accomplishing evidence-based economic policy, this is the standard for the advice they should be giving.[28]

B. Implications

1. Is NSF Part of the Problem?

NSF has the responsibility to supervise, and the authority to correct, breakdowns of scientific integrity and mismanagement. It should not be necessary for the Carnegie

---

[28] CNSTAT was created with a double guarantee of political independence, administered via NSF and also through the NRC system operated by the self-governing National Academy of Sciences and other two Academies. These organizations, in turn, have the strongest safeguards of political independence that we can create, with the right to select their own lifetime members without outside review. Painfully, in the case of the social sciences, there has been selective and uncorrected mismanagement/abandonment of this honest broker role of giving politically independent scientific advice.

A basic point from Civics 101: Notwithstanding that politicians are engaged in political arguments and political activity, they also have a strong and consistent desire to know the best, independent scientific advice even if they respond to and adjudicate a range of other considerations. The Congressional Budget Office, for example, was created to assure reliable, non-partisan advice and the Bureau of Economic Analysis in the Commerce Department (which collects data) has always been expected to be non-partisan. More to the point, the Federal Reserve System was established as an independent agency to operate in the best interest of the economy, on the basis of the best data available, without being enmeshed in the political moods and preoccupations with which elected politicians deal professionally.

Commission to do NSF's job; nor for the head of the University of CA system; nor - if I may say - should it be my job. It should not require mistimed government policy and a damaging recession to repair breakdowns when alert reading of newspapers forewarns of perpetually-unreliable and perpetually-revised data and perpetually-unreliable forecasting models.

Part of the problem may be that NSF's management information system has disconnected the alarms. It permits glowing reports for the National Science Board, and others, without mentioning the derailment, mismanagement, and failures of progress in economics and other social sciences.

All government agencies select management systems, and these often change with Administration. Examples include Planning, Programming, Budgeting (PPB), Zero-Based Budgeting (ZBB), and Management By Objectives (MBO). During the Clinton-Gore Reinvention process NSF adopted its own system, which might be called Management-Of-Process (MOP). This seeks to measure success by proxy indicators of how efficiently paperwork and grant-making (etc.) proceed.

Like any management system, there are strengths and risks that depend, in critical ways, on the nature of the organization and people, the tasks, and - often - the sociology of other institutions and systems in society. The MOP system does not produce progress in the social sciences, nor in their applications to public policy.[29] And using this system, another step

[29] In the case of economics, there are obvious goals that could be managed: the accuracy of data, the new ideas (and ideas that shape public debate) that are tested to improve forecasting R^2 and accuracy, etc. See, for example, CBO, "Measuring the Quality of Forecasts" in its report, cited above, pp. 5-6

down this road, NSF Program Officers can "forget" that NSF is supposed to achieve higher-level results.

2.) Democratic Accountability and Public Hearings

Second, I doubt the problem can be solved without public hearings by the National Science Board. There is a broader system-level breakdown, damage to the country, and, alongside the wider information that can be learned by public hearings, there needs to be a public process by which elites decide whether to reconstitute a commitment to the social sciences.

I emphasize the need for public hearings because none of the problems we are discussing would have occurred if Washington-based institutions truly thought that the social sciences should be online and making rapid progress to inform public policy. One working hypothesis, I think, is that Washington-based institutions perceive an emotional consensus to marginalize the social sciences and impose a "Do Not Disturb" constraint on innovation.

Public hearings also are essential, in my view, to get the full story onto the public record and reestablish democratic accountability. For example, to a political scientist the tenacity with which Dr. Bruce Alberts and the governance structure of the National Academy of Sciences/National Research Council have used their positions to constrain social science, including enforcement of the tawdry "no test tube washing/ignore missing variables" regime, is astonishing. It suggests that there were unwise agreements between a core group of our science Establishment and David Stockman in the early Reagan years to produce this neutralization, at a time when David Stockman and his Deputy, Don Moran, sowed fear by

their clever strategy to launch a pre-emptive strike to zero-out all behavioral research funds in the federal budget. Such an agreement, if it were made and enforced, would likely have been illegal - for example, the National Academy of Sciences/National Research Council does not have the legal right to decide the civic role of our research universities without public knowledge and due process - and a great deal of legitimate public controversy. Such an agreement would have implicated NAS/NRC in a de facto conspiracy to deprive many research scientists of due process rights.[30] I think that the National Science Board and the public need open hearings to begin to learn the truth. Are Dr. Alberts et al. still living in their past?

3.) The Virtue of Competitive Grants

An unsettling phrase that I have heard is "I Am Sure That Everybody Would Like to Help the Social Sciences, But . . ." There are abundant problems within the social sciences, but one of the most damaging effects has been underlying demoralization, cynicism, and despair that have resulted from top-down Washington decisions, using NRC/CNSTAT mechanisms, to block research that informs the public and public policy.

Usually, NSF gets good results from competitive grants. It is not my purpose here to outline the several solutions that I think might be needed, or to substitute a technical solution for the more powerful sociological benefits of well-prepared public hearings. Yet

[30] The unresponsive letters written to foundations that added financial support to the original Luce-Smelser/NSF project, and later raised critical questions, suggest that lawyers have become involved. Legal issues may be one reason that Dr. Alberts et al. do not participate in civic or scientific dialogues about these issues - for example, they declined to appear before the Ryan Commission when concern about their conduct was on the agenda. This withdrawal from civic and scientific accountability, with advice from lawyers, would be added reason that a public inquiry is required by the National Science Board.

the bad outcomes have occurred by using noncompetitive mechanisms, like giving the National Research Council a monopoly contract. I think that a good working hypothesis is that the breakdown and Establishment Capture/neutering of CNSTAT also reflect a prestigious institution that has enjoyed a monopoly for thirty years, without competing centers that can outperform them, and without any need to face outside review panels who can hear criticisms.[31]

[31] The ability to develop innovative Centers might be especially attractive if the grants supported national sampling frames for each Center's researchers.

Attachments

1. News stories
   - Peronet Despeignes, "Data Show US Recession Was More Severe Than First Thought," Financial Times, August 1, 2002, p.3.
   - David Leonhardt, "New Report Shows U. S. Economy Slowed Significantly for Quarter," The New York Times, August 1, 2002, pp. C1, C7. Online.

2. CNSTAT - Mandate and Role (from www.nas.edu Website)
   - About CNSTAT
   - Committee on National Statistics (CNSTAT) (description from Alphabetical Listing)
   - About DBSSAE (the Division which manages CNSTAT)

3. CNSTAT - Activities (from www.nas.edu Website)
   - Current Projects and Current Joint Projects
   - CNSTAT Completed Projects

4. "CBO's Economic Forecasting Record" (February, 2002)