

Competitiveness and Incoherent National Policy

Keynote Speech

1989 National Academy of Public Administration

Spring Meeting

Friday, June 2, 1989

San Francisco, California

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**TRANSCRIPT OF KEYNOTE SPEECH BY ALLEN B. ROSENSTEIN****1989 NATIONAL ACADEMY OF PUBLIC ADMINISTRATION****SPRING MEETING  
(With Additions)****FRIDAY, JUNE 2, 1989**

I've been asked to talk to you about competitiveness. However, I also want to talk about the causes of our loss of competitiveness. More important, I'd like to discuss what we must do to address and eliminate the underlying causes for America's loss of competitiveness.

This morning I heard a description of your charter and it suddenly dawned on me that I had met the enemy and they are known as the National Academy of Public Administration. When we are through today, I trust you will be convinced that you have had a major hand in this nation's loss of competitiveness and that it's high time that the NAPA did something about it.

Analyses of the complex, multiple causes of the competitiveness crisis will be provided in the first part of this presentation. Changes required for long term, effective resolution will be developed in the latter portion.

**FORTY YEAR DECLINE**

For generations accustomed to thinking of the United States as the world's leading industrial power, something was lost when the U.S. became the world's largest debtor. Loss of industrial leadership did not come overnight. The data reveal that the United States is in the fourth decade of a continuing decline in trade competitiveness and relative life quality. It is the magnitude of the loss that is startling. Measuring corporate size by stock market value, only two U.S. corporations, IBM in third place and Exxon in sixth, remain among the ten largest corporations in the world, the rest are Japanese. Of the first 50 largest world corporations, 70% are Japanese and only 24% are American.

**NATURE OF THE PROBLEM**

Equally disconcerting is the realization that the decline in U.S. industrial competitiveness is almost entirely of our own doing. Industry operates in an environment created largely by government policies, laws, regulations, rules, etc. If that environment is hostile or indifferent, business will not flourish. Successful industrial nations consider their industry a vital national resource to be nurtured and encouraged. However, for generations,

America's past successes have caused us to take our industry for granted. At best, U.S. industry was subjected to benign neglect. At worst, it became a convenient whipping boy. As a result:

American industry has become thoroughly disadvantaged with respect to its trade competitors for essentially every significant determinant of trade competitiveness ranging from failed educational policy to obsolete capital formation processes, excessive interest rates and lagging technology procurement and deployment.

### **Basic Causes - Institutional Deficiencies**

The trade competitiveness problem which ultimately impacts the nation's life quality, is fundamentally a consequence of institutional and structural deficiencies. Many of the nation's time proven policies, strategies and institutions are obsolete. Unsited for the dynamics of a modern society they insure loss of competitiveness. Until these deficiencies are addressed, the forty year decline in U.S. competitiveness and life quality will continue to accelerate.

America's competitors have put in place modern institutions, policies and strategies that are industrially superior. It is not that our traditional approaches have become bad. They are good. In fact, they are still probably second best. If the United States is to regain economic and life quality leadership. Two basic and massive institutional deficiencies must be addressed:

1. The United States does not possess institutional means for creating the dynamic coherent national policy necessary to provide an environment conducive to industrial growth and competitiveness.
2. The United States does not have adequate institutional means to effectively identify, procure and deploy needed technologies in a timely fashion.

### **Role of National Policy**

The inefficiency and impracticability of centralized national planning has been reaffirmed by recent developments in Poland, Hungary, China and Russia. Large scale national plans take so long to produce and put in place that the dynamics of a modern industrial society render them obsolete before they can be implemented.

On the other hand, only the Government can take responsibility for

the creation and maintenance of coherent<sup>1</sup> national policy directed toward the national interest. An MIT study found that some fifty percent of significant business decisions are made in accordance with government policies, regulations, rules, etc. In other words, a society operates in a policy environment created by its government. Rational planning and investment by the private sector, individual or corporate, cannot exist independent of government policy. In reality, the very rationality of a business decision inevitably depends upon its consistency with national policy. Conversely, in the face of incoherent, inconsistent, conflicting or invisible national policy, private planning and investment become a high stakes gamble instead of a reasoned exercise.

Unfortunately, unlike its trade competitors, the U.S. Congress does not possess the tools to create the coherent national policy required for international trade competitiveness. Without the means to anticipate pending crises before they become critical, develop an adequate data base, formulate and assess policy alternatives and, in particular, to generate the national consensus necessary for public acceptance, the United States is left with reactive national policy that is too frequently counterproductive and/or conflicting. The list of incoherent national policies often appears endless.

Particularly significant however, are the following nine examples:

1. Educational Policy that has lost its way.
2. Inefficient R&D Policy - R&D vs. D&R.
3. Conflicting Micro or Macro policies.
4. Uncompetitive Costs of Capital.
5. Uncompetitive Capital Formation.
6. Incompatible and Uncompetitive Tax Policies (Consumption vs. Savings).
7. Uncompetitive Monetary Policies.
8. Adversarial Regulatory Policy and Practice.
9. Obsolete Anti Trust Policy.

Consider briefly the implications for industrial competitiveness of the above list beginning with the first item. This nation was built upon an advanced educational policy. Slowly that vision has been eroded and lost. Today, in a competitive era requiring a highly educated work force, twenty percent of our people are functionally illiterate.

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<sup>1</sup> Coherent national policy is defined as policies that are mutually consistent, compatible and non-conflicting and which together advance the national welfare.

For the second example, America's conventional R&D wisdom is inefficient and as a consequence, uncompetitive. National policy subscribes to the myth of what may be called "Research Driven Technology". This paradigm holds that pouring resources into basic research will insure technological competence leading to industrial efficiency and ultimately trade competitiveness. Our successful competitors have an entirely different strategy which can be recognized as "Market Driven Technology". They believe in identifying a market opportunity, acquiring the best possible technology to secure the market and doing only that research necessary to advance the required technology.

Market driven technology has proven to be more efficient and effective than research driven technology. With each country pursuing very different technology paradigms, the United States since 1950, has become the world leader both in Nobel Science Awards and international trade deficits, while Japan has received very few Nobel Science Awards but is emerging as the world's dominant economic power.

Starting with an almost "Alice in Wonderland" maze of conflicting micro and macro policies, the next five examples provide what might be called industry's "Genghis Khan" or "scorched-earth" effect. Uncompetitive capital costs, capital formation, tax and monetary policies, in combination have sapped the financial strength of American industry. With the addition of adversarial regulatory policies and obsolete anti-trust laws, the nine incoherent policy sets provide in themselves, a reliable formula for the ultimate demise of U.S. industry.

#### **INCOHERENT NATIONAL POLICY**

The pervasive effects of incoherent national policy are impossible to comprehend in the abstract. However, U.S. inflation control policy provides a concrete example of the economic and industrial devastation wrought by incoherent national policy. Our inflation policy, among other things, has been a major factor in contributing to an acceleration of the loss of U.S. competitiveness, American de-industrialization, massive trade deficits, destruction of the U.S. Savings and Loan industry, U.S. financial destabilization and Latin American political instability.

#### **Inflation Control**

Prolonged high inflation is generally considered detrimental to the economic health of a nation. Classical economics teaches that inflation is caused by too much money pursuing too few goods. If the classical view is accepted, two basic strategies or a combination thereof, are obvious:

1. Reduce the scarcity of goods.
2. Reduce the availability of money.

By its very nature, inflation control requires policy initiatives at the national level. The strategy of our more successful trading competitors has been to anticipate inflation by instituting long term national policies that stimulate both domestic production and the national savings necessary to finance the expansion of production. In contrast, U.S. inflation policy is almost entirely reactive. Current economic philosophy holds that inflation is best controlled by restricting the money supply. The economy is to be cooled off by increasing the cost of money to induce a mini-recession. It is a rather cold-blooded policy since a recession always brings increased unemployment. Employment figures are carefully monitored, for a decline in unemployment is viewed as a precursor of inflation.

#### **A TEN YEAR SCENARIO: 1979-1989**

Back in the late 1970's during President Carter's administration, the economy began to heat up. Threats of inflation appeared. Instead of putting the excess purchasing power to work in building production capacity or instituting tax policies to make savings more attractive than consumption, the Federal Reserve Board, in accordance with conventional wisdom, had no choice but to reduce the availability of money. The Fed's hard money policy achieved its goal. Interest rates climbed, a mini-recession was induced and unemployment increased.

#### **Competitiveness, De-industrialization and Deficits**

Unfortunately, there were serious unanticipated side effects. The United States was part of a world economy. Higher interest rates made the U.S. dollar more attractive in the world money markets. Demand distorted the exchange rate. As the exchange rate soared, American goods became uncompetitive in world markets. The U.S. dollar went from four french francs to ten francs to the dollar and the price of American goods increased 250% in France.

To survive, U.S. manufacturers moved abroad. American factories, manufacturing "know how" and technical skills were lost - sometimes forever. With recession at home and financing scarce and expensive, American manufacturers put aside plans to increase domestic capacity. Foreign competitors such as the Japanese semiconductor corporations with readily available, low cost capital continued to expand manufacturing capacity to capture world market share.

Loss of trade competitiveness created a massive trade deficit. In a few years the United States went from the world's largest creditor to the largest debtor. With exquisite timing, the trade deficit was coupled with new counterproductive tax policy to insure a concurrent, burgeoning budget deficit. Record deficits and declining domestic savings then demanded continuation of high interest rates to attract the foreign investors needed to finance

the budget deficit.

With the trade deficit climbing and U.S. industry reeling, the dollar was finally devaluated. But it was too late. The trade deficit ignores classical economic theory and remains stubbornly high. Domestic U.S. industry is no longer in place to take up the slack. During our self induced recessions, U.S. industry has not expanded and in many instances, does not now have competitive, domestic production capacity to serve enlarged world markets. Consumer electronics is long gone. A host of other industries are dying. Semiconductors and computers are under siege.

### **Capital Formation**

The long term economic health of a nation depends upon its capital formation ability. U.S. industry has traditionally built its capital structure upon equity financing. But the high interest rates induced by inflation policy have combined with U.S. tax laws to render traditional industrial equity financing obsolete and non-competitive. Incoherent inflation and tax policies have made debt financing through 14% junk bonds more rational to corporations and investors than equity financing that typically offers a 5% to 10% return.

In contrast to U.S. equity financing, Japan and Germany have traditionally used debt financing to build their industry. Further, with a long term inflation control policy directed to savings and to production stimulation, German and Japanese industry borrow money at only 3% to 4%, compared to 14% for U.S. junk bonds. American companies must therefore, forego long range planning, product development and research to service a crushing debt load.

The financial disadvantage of U.S. industry does not stop at interest. The substantially greater amounts of capital available through low cost debt financing give Japanese industry a nine to one (9:1) or greater capital formation advantage over equity financed U.S. industry. In other words, for every dollar earned Japanese companies can borrow nine times as much money as their American competitor. With this much financial leverage it is not surprising that 70 percent of the first fifty largest world corporations are Japanese and only 24 percent are American.

The United States has lost the capitalization race. As incoherent national policies drove the U.S. to become the world's biggest debtor, Japan became the world's largest creditor. The 18 largest world banks are now all Japanese. The consequences for world leadership are slowly becoming apparent. International policy and politics have always been dictated by creditor nations who control the purse strings. It is a bitter lesson that America has not yet relearned.

## **U.S. FINANCIAL SYSTEM AT RISK**

The consequences of incoherent inflation policy do not stop with the mere impairment of industrial competitiveness. Attempts to control inflation have put at risk the integrity of the entire U.S. financial system including S&L's, banks and pension funds. The financial well being of the United States today appears to rest firmly on:

1. The security of junk bonds issued by corporations struggling to pay exorbitant interest rates while coping with increasing competition, and;
2. Less developed nations facing mounting political instability aggravated by high interest that depletes the very capital needed to repair their economies and repay their international debts.

### **Savings & Loan**

For generations the nation's savings and loan industry has placed 30-year, low rate fixed interest loans on American real estate, principally homes. With the abrupt, increase of interest rates, the S&L's found themselves paying 8% to 12% on deposits for which they were receiving a 4% to 6% return on 30 year loans. The massive failure of S&L's was guaranteed. The bailout cost to the tax payer of the S&L debacle is estimated at \$200 billion and continues to rise.

The \$200 billion is a total loss to the government and therefore the tax payer. Consider what \$200 billion could have done for future U.S. competitiveness. It is enough money to fund over 200 SEMATECH and HDTV consortia.

### **Junk Bonds**

In an attempt to increase the return on their capital, pension funds as well as Savings and Loans have bought junk bonds. Congress, concerned over further S&L failures, is considering legislation that would restrict S&L investment in junk bonds. Savings and Loans forced to increase their capitalization must now liquidate their junk bond investment at discounts that only add to S&L losses.

Much of the financial security of the average citizen is dependent upon his pension and insurance. Business Week reports that pension funds hold 15% of all junk bonds issued while insurers have purchased 30%.

Leveraged buy outs through junk bonds depreciate the market value of the most conservative blue chip bonds. When a major corporation takes on a substantial junk bond obligation, the older bonds paying lower interest rates have no more security than new high interest junk bonds.



## **Latin America**

The two oil shocks of over a decade ago caused an unprecedented flow of wealth to undeveloped middle eastern countries. Unable to spend the new found riches or quickly find suitable investments, their finance ministers prudently deposited surplus cash into interest bearing accounts with American banks. American banks given the task of recycling such large sums, made substantial loans to emerging nations including most of Latin America. The loans were made in dollars subject to current U.S. interest rates.

When U.S. inflation policy abruptly increased interest rates, debt service costs of Latin American loans exceeded national earning capacity. Since 1982, Latin America's indebtedness has increased by \$50 billion while paying \$235 billion in interest. Debt service has depleted the capital of Latin America and seriously eroded its standard of living. Mexico, for example, cut its allocation for education and health services nearly in half. It is estimated that reduced health care results in the death of an additional 1.2 million Latin American children every year.

Loss of economic progress compromises the political stability of America's hemispheric allies. Loan default is almost inevitable. At the same time, many of the nation's largest banks have a significant percentage of their net worth in loans to Latin America.

## **HISTORY REPEATS ITSELF**

Beginning in 1986, the prime interest rate increased 53% as the Fed again attempted to control the threat of inflation. High U.S. interest rates once more worked their magic upon the exchange rate. For the first six months of 1989, the U.S. dollar increased 13% against major currencies and reached a new 2-year high.

U.S. goods were now 13% more expensive in world markets. The trade deficit, which had been declining modestly, began to turn up. Business indicators turned down and the first signs of the desired recession appeared. By July of 1989, interest rates had begun to drop as the Fed was expected to reverse course and stimulate the economy. Unemployment rates were climbing. The stock market reacted to the "good" news by going up.

U.S. inflation policy is purely reactive and inherently unstable with little built in institutional memory. Economic improvement, unemployment decline and price increases, are accepted precursors of inflation. These signals prompt the Fed to manipulate monetary policy and induce a mini-recession. When the same indicators signal that recession has been successfully resurrected, the Fed increases the availability of money to re-stimulate the economy.

By its very design, inflation policy must cause the economy to

continuously oscillate between recession and recovery. A roughly four-year cycle can be seen repeating itself over the past two decades. If the U.S. economy were self contained and unaffected by world competition, the system might be acceptable. Unfortunately, the restrictions of incoherent policy upon business investment coupled with the reality of aggressive international competition, insure that U.S. competitiveness must ratchet downward during each self induced recession.

The results have been shattering for production and non-supervisory workers who comprise more than four-fifths of all wage and salary employees. During the past seventeen years their real earnings (1988 dollars) have declined on an average of 0.5%/year. This is unprecedented for the 20th century. Even during the 1929-1937 Depression, real earnings increased an average of 0.54%/year.

#### **INSTITUTIONAL MEANS TO IDENTIFY AND DEPLOY NEEDED TECHNOLOGIES**

While the United States does not have institutional means to effectively identify, procure and deploy needed technologies in a timely fashion, its competitors, Japan and Germany - early understood the dominant role of technology in the realization of national policy. Essentially all important aspects of the cooperative industry-government system that have made U.S. agriculture so effective have been adapted and refined for Japanese industry. Japan has long operated sixteen national industrial laboratories devoted entirely to promoting the technology of Japanese industry. Nineteen new Japanese national industrial laboratories were authorized six years ago at a cost of \$2 billion each. The first lab is to be operating in 1990. These national laboratories are in addition to Japan's Fifth Generation Computer or Opto-electronics laboratories, which have been created by industry-government consortia. In contrast the only U.S. national industrial laboratory is the former Bureau of Standards, NIST, which is not yet funded for its new task.

The role of the government and Japan's Ministry of International Trade and Industry, MITI, is that of facilitator, co-funder and partner to industry. The success of the Japanese strategy hinges upon free and voluntary industry participation. The government seldom provides the bulk of the funding, or personnel. The speed with which Japan can put together a cooperative industry-government group to work on industrial opportunities is literally breathtaking.

Japan has institutionalized through MITI, the process for the effective identification, procurement and deployment of important technology. Nine years ago, the Massachusetts Institute of Technology came up with the concept of the fifth generation computer. An analysis of the technical challenge was published but there was no organized response in this country. The Japanese read the literature. It took them only 7 months to establish their

### Fifth Generation Computer Project.

In recent years Japan has further improved that nation's means for recognizing and pursuing industrial opportunity. On February 15, 1987, the University of Houston announced a breakthrough in superconductors. The call to Japan came through at 3 a.m. in the morning. Within 4 days, the Ministry of International Trade and Industry (MITI) announced its intent to bring together a consortium of Japanese companies, universities and national laboratories. Seven days later, the superconductor consortium was in place with a substantial budget. As a result, the Japanese have already succeeded in thoroughly papering over our initial advantage with application patents that will insure commercial dominance.

Japan required only eleven days to create and fund a superconductor consortium. Again by contrast, it has taken nearly three years for U.S. industry and Congress to form a semiconductor consortium known as SEMATECH to advance U.S. semiconductor technology. With no formal civilian agencies in place to promote the nation's technology, SEMATECH had to be funded through the Department of Defense.

While technology policy is admittedly a subset of national policy, both the speed of response and the magnitude of the resources required to be a serious player in world trade demand that the nation possess first rate institutions for the early recognition, procurement and deployment of the nation's next generation of technology.

### **COMPETITIVENESS CRISIS RESOLUTION**

Since the basic competitiveness problem is structural and institutional, effective resolution requires institutional change. Answers can be found only by modernizing the nation's institutions to successfully compete in the international market place. If the change premise is accepted, then the questions of the changes to be made and the instruments for that change must be addressed.

The two basic institutional deficiencies restricting U.S. competitiveness have been identified as the lack of means to create coherent national policy and the lack of means to effectively advance America's technology. The competitiveness issue will not be resolved until these deficiencies are eliminated. At the same time, the debate over the proper initiatives to improve our national institutions must originate from respected, experienced public and private bodies.

## **COHERENT NATIONAL POLICY**

Our competitors have long understood the role of coherent national policy. Much of Japan's success can be attributed to first rate institutions that monitor world wide markets, technology, science, economies, et cetera; analyze and assess policy alternatives and then provide information, analysis and assessments for standing private-public Councils. The Councils in turn, initiate the public forums which create the public consensus needed for legislative action. Legislation of coherent national policy thus requires institutional means to obtain a comprehensive data base, in depth policy analyses and assessment and finally public consensus on the equitable distribution of sacrifices and rewards anticipated from policy.

The creation and maintenance of coherent American national policy waits upon three institutional advances:

### **1. National Information Office**

Present U.S. Government information systems are too frequently incomplete, difficult to access and correlate, enormously expensive, inefficient and unequal to those of our trading partners. The U.S. needs a world class information system, providing a current, comprehensive, readily accessed, international information base.

The National Information Office would provide the information and data required for informed, effective operation by the Nation's public and private policy makers. The basic factors influencing the national economy and life quality would be continuously monitored including United States and foreign economies, trade, production, market and industrial trend indicators, customs, tariffs, regulations, commodities, energy, market opportunities, technological innovation, scientific advances, industrial competitiveness, industrial policy and strategy, government and business policies, educational policies and resource allocation strategies.

A national computer network with remote terminals would provide ready access to the national data base by both public and private users.

### **2. National Office of Policy, Analyses and Assessment**

Although the Omnibus Trade and Competitiveness Act of 1988, calls for "Competitiveness Impact Statements" to accompany national legislation, institutional means are not available to provide such statements.

This office would provide a vehicle for an ongoing examination of

U.S. policies and policy structure. Interrelationship of existing and proposed national policies including life quality, societal, economic, industrial, monetary, et cetera, policies and their combined impact upon the nation's standard of living, international competitiveness, industrial competence and technological development would be continuously evaluated. Particular attention would be given to conflict and inconsistencies between and among micro and macro policies.

Drawing upon the data banks of the National Information Office, the Policy Office would provide an early warning system to identify emerging national and sectorial problems, opportunities and needs before they assume crisis proportions. In cooperation with existing Federal policy groups and other concerned public and private bodies, critical issues would be evaluated. Alternative policies and programs to resolve national problems, needs and opportunities would be assessed and furnished to the appropriate Councils for public reevaluation and debate. The evaluations and assessments of the Office of Policy would serve as points of departure for the public deliberations so necessary to the formation of the public consensus essential to an orderly legislative process.

### **3. Public Consensus - Councils**

The American legislative process has literally broken down at both the state and national levels. Major issues such as trade competitiveness, budget and trade deficits, acid rain, et cetera, go unresolved year after year. The questions have become so complex and far reaching that large, well organized, articulate, sectors of the society are inevitably compelled to espouse or defend conflicting but entirely legitimate self interests. Without means to assess alternatives and reach public consensus, our elected representatives are unwilling to take positions that must alienate a significant percentage of their constituents. Legislative gridlock is ensured.

Until the public consensus and legislative gridlock issue is resolved, the United States will continue to dissipate its considerable resources and stagger from one avoidable crisis to another. It is just this type of non partisan structural problem involving the very future of the nation that could benefit from the experience and expertise of independent respected institutions such as the National Academy of Public Administration.

In recent years the consequences of the Nation's institutional deficiencies have become more evident. Failure of the national policy making systems have finally culminated in the Gramm-Rudman-Hollings Act. Gramm-Rudman represents a massive breakdown of the legislative process. The act was passed by a frustrated Congress unable to cope with a runaway budget crisis. But Gramm-Rudman is not the first nor will it be the last of major national issues for

which the Congress and the administration will be unable to provide adequate national policy. Gramm-Rudman flows basically from structural and institutional deficiencies and not from a lack of dedication or the desire to perform by the Congress or the administration.

The nation's leading trade competitors have long enjoyed well established institutional means for developing national policy and obtaining the necessary public consensus. Germany's Stability and Growth Act of 1966, established a tripartite consultation process among labor, business and government. Japan's MITI has 35 associated independent councils with over 200 standing committees that insure the effective participation of every segment of Japanese society. Contrary to U.S. perceptions, MITI is not a central planning organization. MITI and its associated councils provide the public forum which enable Japan to reach a public consensus on national policy.

Several years ago, the Young Commission recommended that "Government can be strengthened significantly by providing a forum in which consensus can be reached on the facts of an issue and in which tradeoffs among policy options can be made explicit". On occasion, such as the social security crisis of five years ago, independent councils have been successfully utilized by the President to provide the public forums and consensus necessary to resolve legislative gridlock.

Whether as a free standing structure responding to the Congress or the President, or associated with a new or existing institution, the time has arrived to create a formal system of standing independent councils. Council membership would be drawn from leaders in concerned industry, labor, general consumers and experts from a wide spectrum of society including academia, mass media, finance, government, environmentalists and the professions.

Independent public councils utilizing the data, evaluations and assessments of the Policy Office and other sources, would respond to requests from the President, Congress or they would act upon their own initiative. Councils would provide public forums that openly debate and redefine national policy issues. With public recognition and acceptance of the equity of the tradeoffs and sacrifices inherent in any major public policy, the Congress and the President will have renewed flexibility to create and legislate consistent, coherent national policy in the national interest.

#### **TECHNOLOGY - IDENTIFICATION, PROCUREMENT, DEPLOYMENT**

Successful implementation of coherent national policy must inevitably depend upon the success of the nation's technology policy and its ability to identify, procure and deploy needed technologies in a timely, efficient fashion. But the nation's technology policy facilitatory agencies are incomplete. Although

the Federal Government now provides substantial funding for science, and technological support for selected industries such as agriculture, aviation and commercial fisheries, we presently lack the institutional capacity and civilian agencies to focus programs upon the competitive performance of our economy as a whole. Congress has responsibility for designating the appropriate agencies to implement national policies. In practice, however, implementation of important policies may languish for lack of an existing competent agency to pursue them. In the broadest sense, the nation does not possess for its technology needs the equivalent of the National Science Foundation or the National Arts and Humanities Foundations, nor does the United States possess the technology facilitating institutions of Japan and Germany.

Identification of needed U.S. industrial technology would be advanced by the industry, university and public members of appropriate Councils. Procurement and deployment of that technology will require development of technology institutions as extensive and effective as those put in place by our competitors or by the U.S. to create a world class farm industry.

The spectrum of instruments needed to nurture competitive industry can be understood by considering technologically advanced U.S. agriculture. American agriculture enjoys the support of an extensive, well funded system to identify, procure and deploy information and technology. Included are satellites reporting on world agriculture, national and university field stations and laboratories, long term product development programs and extensive information delivery systems such as agricultural extension.

## **STRUCTURE**

There are a number of avenues available to develop responsive mechanisms for coherent national policy and competitive technology. At least three feasible institutional structures and combinations should be considered as a means of overcoming the limitations of the present national policy and technology process. The structure chosen is not as important as the functions to be provided.

First, independent offices answering either to the Congress or the President can be created. In the case of the Office of Information, the Office of Policy Analyses and Assessment and the Councils, stand-alone offices might be the most expeditious strategy to forestall conflict with presently established departments.

A second, more traditional, approach would build upon existing institutions. MITI was at one time Japan's Department of Commerce. The U.S. Department of Commerce is an obvious candidate for the proposed functions and responsibilities. In fact, the Omnibus Trade and Competitiveness Act of 1988, took small but important steps in this direction.

Finally, and consistent with the emerging concept of industry led competitiveness strategy, a typically American solution would be the creation of a suitable National Foundation. National Foundations such as the NSF are expected to be operated in the national interest by their constituencies. To provide a comprehensive solution to the coherent national policy and competitive technology question, the National Policy and Technology Foundation Act, HR2165, was introduced before the 100th Congress with 55 co-sponsors. A very brief outline of HR2165, its offices and their functions is appended.

#### **CONCLUSION**

The economic and competitiveness regression of the United States has steadily progressed for nearly 40 years under the stewardship of both political parties. At this point there is no simple, overnight cure. The data demonstrate that the United States is in the midst of a long term decline resulting from 200-year old structural limitations that now render its institutions incapable of discharging the policy and technology responsibilities of a modern society.

Failed inflation policy is but one of a host of mutually inconsistent and incoherent national policies that have disadvantaged American industry in world competition. Until Congress institutes the institutional reforms needed to provide coherent national policy, America's industry and living standard will continue to decline.

The very passage of Gramm-Rudman-Hollings and its uncertain implementation brings in question the ability of Congress to effect the required modernization without substantial outside support and public approval. Institutional and structural changes have been proposed to provide a national policy environment as supportive of U.S. industry as are the policy instruments provided by our trade competitors to secure a better future for their children.

Most thoughtful observers, both public and private, do not question the need for change. The issue inevitably turns to the speed in which institutional change can be reasonably effected and the forces available to move for change. The National Academy of Public Administration should be among those bodies to consider its role in contributing to the current institutional problem and its potential contribution to the problem resolution.



### References

1. Japan's Policy Implementation System, Allen B. Rosenstein, December, 1983.
2. National Policy and Technology Foundation Act of 1985, HR2165, 100th Congress.  
(Some language from the Act has been used in the text of this article.)

## APPENDIX

THE NATIONAL POLICY AND TECHNOLOGY FOUNDATION  
HR2165**POLICY**

- Data Base for Policy Making
  - **The National Information Office**
- National Policy, Analysis and Assessment
  - **The Office of Policy, Analysis and Assessment**
- Public Policy, Debate and Consensus
  - **Councils**

**TECHNOLOGY**

- Identification, Procurement and Deployment
  - **National Institute of Standards and Technology - NIST**  
(Former Bureau of Standards)
    - National Industrial Laboratories
  - **The Office of National Programs**
    - Large Scale, Cooperative, Industry-Government national programs - example: SEMATECH.
  - **Office of Institutional and Human Resource Development**
    - Generic technology, human resources, feasibility of Government mandated environmental regulations - example: acid rain.
  - **The Office of Small Business**
    - Small business support including Technology Extension Service.
  - **The Office of the Professions**
    - Multi-discipline, multi-profession issues, public professions R&D.
  - **Office of Intergovernmental Technology and Professions Delivery Systems**
    - State and local government technology and delivery systems problems - example: solid and toxic waste disposal.
  - **The Patent and Trademark Office**
    - Intellectual Property Promotion and Protection