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A PERFECT ECONOMIC STORM – THE AMERICAN CRISIS

America's successful trade competitors have declared economic war upon the United States.

> "The reality of today's exchange rate and currency manipulation policy is that China is gradually draining industrial strength of the West as surely as if they were bombing it's factories."
> L. Ronald Scherman, Washington Post, 12/30/09.

The convergence of undeclared economic warfare via *predatory exchange rates*, together with *obsolete U.S. uncompetitive federal legislative processes*, has created a Perfect Economic Storm that now engulfs the United States. The full extent of the storm and its spreading consequences, has not yet been perceived by many of our citizens, our leaders and our economists.

Two roots define the America crisis that must be addressed by our Government:

I. Economic Warfare – Predatory Exchange Rates
II. Uncompetitive Industry – Reform U.S. Legislative Processes

I. ECONOMIC WARFARE – PREDATORY EXCHANGE RATE

A brief U.S. exchange rate history is appended[1]. In less than a decade, the U.S. annual current account trade deficit went from $100 Billion to $747 Billion. In just seven years from 2001, the U.S. accumulated a $1.16 Trillion China goods deficit to produce a severely unbalanced U.S./China trade account [2].

To maintain an under priced currency in the face of massive trade surpluses, the Chinese Central Bank purchases large amounts of foreign exchange, mostly dollars. $430 Billion were purchased in 2007 with 2008 purchases projected to $600 Billion. For many years, Japan has followed the same practice of issuing yen to buy dollars in order to support its favorable exchange rate.

> "China's foreign exchange reserves continue to grow, while its management of the exchange rate has given it monopoly control on outward flows of investment. This strongly suggests that China will have a very substantial and long-term presence in the U.S. economy through equity stakes; loans; mergers and acquisitions; ownership of land, factories, and companies; and other forms of investment." [2]

[1] Ref. II R "Current Account Trade Balance"
[2] U.S./China Economic and Security Review Commission Annual 2008 Report

Exchange rate warfare requires suitable government counter measures. Five have been suggested. The first two have proven ineffective. The remaining three require early unilateral U.S. action. None can succeed unless ***America*** understands that *its* ***future as an independent sovereign nation is at stake***.

1. Negotiation: To avoid total world financial chaos, the United States declares that it can no longer sustain its current trade deficit. Notice should be given to China, Germany, Japan and other nations with *trade distorting exchange rates*, to immediately begin an orderly early adjustment of the exchange rates necessary to achieve balanced trade.

   Experience indicates few, if any, trade-prospering nations will, voluntarily, give up their profitable trade exchange rate cash cows. The past several months have been particularly humiliating. The President of the United States went to China with hat in hand to plead for trade relief. He was given a free photo-op on the Great Wall. He was no more successful with South Korea.

2. Litigation: Both U.S. Congressional bodies are considering bills calling for enforcement of international trade agreements. But, world litigation, followed by the usual appeals and enforcement delays, will take years that the U.S. can no longer afford. The Washington Post reported ". . . with Congress considering trade sanctions, China sent an unmistakable reminder that China has *the financial muscle to inflict major economic damage* on the U.S. if the status quo is not continued." [3]

The Following Requires Unilateral U.S. Action

3. Balanced Trade Policy: The U.S. Treasury should immediately begin the unilateral reset of individual predatory exchange rates to achieve balanced trade. This is the same unilateral action so carefully executed by our trade competition, to build the U. S. trade deficit and the decimation of U.S. trade industry.

4. Foreign Debt Buyback: The United States buys back all of its foreign debt – Treasury Bills, U.S. Agency obligations, etc. – with full value U.S. dollars. The argument will be made that this can be an inflationary act, but it would be trade neutral. The total U.S. fiscal obligations would remain unchanged. We would be relieved of debt service. However, while these dollars would not be allowed to purchase basic American national assets, such as ports, banks, key industries, etc., the dollar-enriched nations would be encouraged to purchase American goods: aircraft, construction projects, farm goods, green technology products, etc.

[3] The Washington Post, February 5, 2007

5. <u>Default on Foreign Debt</u>: A draconian measure, in total or on a selected basis, would bring the entire problem into focus. Argentina, a small nation, repudiated its debt, and within a few months, began a strong economic recovery. In five years, Argentina advanced to 30th place among all nations with a positive trade surplus.

There could be other constructive alternatives. Doing nothing is not one of them.

Abetted by unrelenting predatory exchange rates, American industry and jobs have taken a merciless competitive beating. Collapse of the once-dominant U.S. automotive manufacturing industry is but one sign of pervasive industrial dry rot. Industry cannot recover without exchange rate correction. Yet, even with equitable rates, America cannot compete without modernization of its Legislative decision-making, resource-allocation process.

II. UNCOMPETITIVE INDUSTRY - REFORM LEGISLATIVE PROCESSES

Restoring U.S. competitiveness requires a level trade-playing field, investment in manufacturing productivity, and the cooperation of industry, government, labor, academia, and national and public laboratories that, in earlier days, created the U.S. Land Grant Agriculture miracle. Low-cost labor is an illusion. Japan and Germany, two of the three top international trading countries, are not low-labor cost nations.

The first of the following two pages describes the now well-recognized Legislative ***structural problem***. The second page outlines the essential change and function of a ***rational solution*** recommending:

<u>The National Policy and Technology Foundation Act (NPTF)</u>

To build a time-proven base for the NPTF, an intensive in-depth study was undertaken of the U.S. Land Grant/Agriculture Extension System, Japan's MITI, Germany's Technology Delivery System, and the U.S. National Science Foundation. Shortly after WWII, devastated Japan and Germany reinvented and modernized the U.S. Land Grant/Agriculture Extension System to serve all their industry.

PROBLEM

America's five-decade decline and loss of technological, financial, manufacturing, economic, life quality and competitiveness leadership, flows from our obsolete 200-year old, fundamental Federal legislative decision-making process.
Warnings were periodically published.

In 1980, John Kemeny, Chairman of the President's Three-Mile Island Commission, after studying that disaster was forced to conclude that the fault lay more with obsolescence of U.S. institutions, than with reactor operators. Kemeny wrote:

> **"The present system does not work. It was designed for a much earlier and simpler age. The only way to save American democracy is to change the fundamental decision-making process at the Federal level, so it can come to grips with the enormous and complex issues that face the nation."**

Twenty-eight years later, Harvard's Professor Michael F. Porter, member of the Council on Competitiveness, was moved to write in "Business Week," November 10, 2008:

> **". . . the U.S. has no long-term economic strategy. . . no coherent set of policies to ensure competitiveness over the long haul . . . America's political system almost guarantees an absence of strategic planning at the federal level."**

In "Democracy," Fall 2009 issue, Stephen Ezell and Howard Wial describe America's competitiveness Achilles heel.

Ezell **"Unfortunately, the United States, practically alone among the world's leading economies, conspicuously lacks a national innovation strategy and an institution to advance one."**

Wial **". . . the problem was structural: Almost uniquely among economically advanced nations, the United States has no government agency or program responsible for innovation as a whole, either for a particular industry or for the entire U.S. economy."**

In Summary:

> **Unlike our trade competitors, the U.S. congress simply does not have the tools to cope with the far-reaching complexity of modern international society. Without means to anticipate crises before they become critical, recognize opportunities before they are lost, develop an adequate database, formulate and assess policy alternatives and, in particular, generate the national consensus necessary for public acceptance of proposed policies, the nation will continue to dissipate its considerable resources and stagger from one avoidable crisis to another.**

SOLUTION

A large UCLA Ford Foundation Study, 1955-68, recognized the genesis and magnitude of the continuing U.S. decline. From 1973-1987, 8 bills were introduced into the Congress.

The National Policy and Technology Foundation Act – 1987 submitted by George E. Brown, Jr. (D) and Claudine Schneider (R) had fifty-four bipartisan cosponsors. Details of the NPTF are available. In particular, the Bill would correct the Federal legislative void that ensured U.S. lack of competitiveness for the past five decades.
NPTF highlights include:

- National Information Office provides a comprehensive international database supplying a reliable factual information foundation for American decision making; individual, corporate, labor, business, industry, technology, science, trade, customs, etc.

- National Office of Policy, Analysis and Assessment offers comprehensive analysis of U.S. policy structure and structural interrelations. Functions of the highly successful Office of Technology Assessment and ARPA, would be included to restore Congressional technology vision. The Policy office would offer an early warning system to identify emerging national and sectorial problems, opportunities and needs, such as energy independence and global warming. Alternatives would be subjected to impartial analysis and assessment to determine feasibility.

- A World-class Technology Delivery System, building upon the U.S. Land Grant/Extension system tradition, would be created to identify, procure and deploy industrial/commercial Winners. Appropriate consortia of participating industry, government, academia and national laboratories would be established. Adequate financing would be provided for the entire delivery process of initial exploration through production and distribution. Particular consideration would be given to small and medium business. Japan's modernization of the U.S. Land Grant/Extension through MITI (now METI), transformed (in just 18 years) its war-ravaged country to the second largest international economy.

- Councils serving as deliberative public forums for National Policy, are the crucial links to the public and the keys to successful functioning of the Foundation. Essentially, every major Congressional decision-making, resource-allocating responsibility would have a standing nonpartisan Public Council.

    Our Nation's commitment to its citizens' future life quality is embodied in three great societal entitlements: Health delivery, Social Security and Education. The current Health delivery debate would have benefited from the 1992-1993 "National Commission on Social Security Reform." That commission's proposal extended Social Security for an additional thirty years to about 2013, when it must be reset, again. This process should be followed for all NPTF Councils, including societal entitlements.

I have this recurring nightmare of standing in a station watching the most frightening economic train wreck in history thundering toward a grizzly climax. The pending wreck is very clear. A succinct description of its cause and its cure is available. The ultimate solution lies with the Congress. Congressman Henry Waxman has cosponsored the NPTF in the past. Since he has been consumed by the present Health Legislative battle a year has been lost.

Please excuse the venting about a train wreck. If we are ensuring a spectacular wreck, we should, at least, be prepared to enjoy the fireworks. However, it would be better to correct predatory exchange rates and reform the legislative process before we have an irreversible meltdown.

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Over the past five decades, understanding of the complex American dilemma has been shaped by the writings and/or conversations with a number of unusually talented individuals that include:

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Charles H. Blum

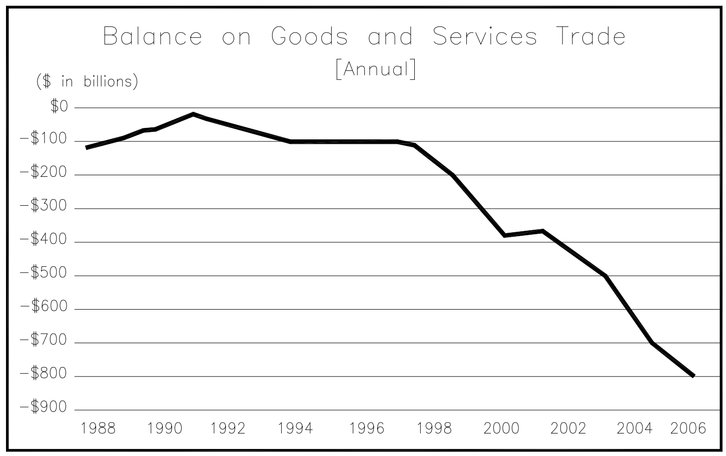
CURRENT ACCOUNT TRADE BALANCE

- **Currency Exchange Rates**
- **Economic Driver: R & D vs. D & R**

Whatever the definition of competitiveness, current account trade balances are outcomes that cannot be ignored. Economics 101 would hold that no nation could continue to run annual $¾ trillion deficits without eventual bankruptcy. For all its inherent wealth, the United States cannot be an exception. Eventually, our nation must seek a long-term solution or face an unacceptable life-quality consequence. Domestic and international statistics provide practical insights.

EMPIRICAL DATA

EXCHANGE RATE INCREASE vs. UNITED STATES			
NATION	YEAR	+ RATE	INCREASE %
China	1993	5.7796	49%
	1994	8.6397	
Germany	1995	1.4321	23%
	1998	1.7597	
Japan	1995	93.96	39%
	1998	130.99	
Mexico	1994	6.447	48%
	1999	9.553	
So. Korea	1994	778.89	79%
	1998	1400.40	
Sweden	1996	6.7082	52%
	2001	10.3425	



CURRENT ACCOUNT BALANCE – EXCHANGE RATE – "D & R" vs. "R & D"				
Current Account Standing 2006	**Nation**	**Current Account Balance U.S. $ 2006**	**Exchange Rate Change vs. U.S. $ 1994-2001[1]**	**DLC/Jan. 2009 R & D Expend c. 2007**
1	China	+ $363,300 M.	+ 49%	$85 B. *
2	Japan	+ $201,300 M.	+ 39%	$130 B.*
3	Germany	+ $185,100 M.	+ 23%	$85 B.*
Subtotal		**+ $749,700 M.**	**Subtotal**	**$300 B.**
13	Sweden	+ $30,190 M.	+ 52%	$17.6 B*
30	Argentina	+ $5,810 M.		
38	South Korea	+ $2,000 M.	+ 79%	$38 B.*
161	U.K.	- $111,000 M.		$35 B.
163	United States	**- $747,000 M.**		**$370 B.**

* Market/Technology Development driven economy – i.e. largely "D & R"

- The total $300 Billion D & R effort of China, Japan and Germany was more efficient in producing a trade *surplus* of $749,000 Million than

- The larger $370 Billion U.S. R & D expenditure was in creating a $747,000 Million trade ***deficit***

The empirical data would give useful answers. For years, economists have written about comparative advantage. (Paul Krugman received a Nobel Prize for describing comparative advantage shortcomings.) Certainly, natural resources (including energy) can provide an economic advantage. Oil producing nations are 50% of the top 30 trading nations. However, Japan has very few natural resources – especially oil. China and Germany are also oil poor. Plentiful cheap labor is often cited, but Japan, Germany and Sweden have relatively high labor costs.

The United States also believes that a Scientific Research Driven economy will prevail in international trade. Yet, something is very wrong. America, with a $370 billion R & D budget has the world's largest 2006 current account deficit of $740,000 million. The three most successful trading nations, with a total R & D of only $300 billion had a 2006 total $749,700 million trade surplus ($2,700 million greater than the U.S. deficit).

Looking for causes, we can rule out socio-economic systems. The successful trading countries have prospered under communism, capitalism and socialism. Safely ensconced at the bottom of the trade competition are the UK and USA – two democracies practicing capitalism.

The data offers at least two outstanding differences between trade winners and losers.

First – Currency Exchange Rate

> The winners know that a sovereign nation has the right to change its exchange rate to allow its products to compete in world markets.
>
> > In 1949, Japan was given a very favorable exchange rate to aid its recovery from the devastation of WWII. Japan's manufactured goods costs were greatly reduced to the U.S. and U.S. products were correspondingly more costly. Japan prospered, but today, Japan actively resists any exchange rate adjustment, frequently buying dollars with yen to maintain the artificial rate.
> >
> > The U.S. current account remained positive from 1957 to 1981. Beginning in the 1980's, the Federal Reserve reduced money availability and increased interest rates. The high interest rates of the 1980's toppled a string of economic dominos. By 1985, the exchange rate had been driven up a total of 62.6%. The current account was then out of control with a $112 billion deficit. Enough U.S. industry was forced offshore to institutionalize the massive trade deficit that continues to this day. **In just two years, between 1983 and 1985, the United States went from the world's largest creditor to the greatest debtor.**
> >
> > Through the remainder of the 1980's and until the mid-1990's, the U.S. trade deficit on goods and services remained stable about $100 billion. In 1994 China pegged its currency to the dollar and unilaterally changed the exchange rate by 45%. Within four years, five other nations followed suit. The U.S. current account deficit ballooned to nearly $3/4 trillion by year 2006.
>
> This right is not the exclusive privilege of the larger nations. In 2001, Argentina adjusted its overvalued currency to give a stable and competitive exchange rate. By 2006, Argentina with a + $5,810 million current account balance had climbed to 30th position among all nations. The transition took only 5 years.

Second – Economy Driver

A major difference between winners and losers lies in their very different R & D practice. The United States believes in the Scientific Research Driven Economy, i.e. Research leading Development. China, Japan and Germany's so-called R & D is really D & R, Development leading Research i.e. a Market/Technology Development Driven Economy.

One has only to examine the speed with which our trade competitors bring new technologies to market trade domination i.e. robotics, plasma screens, commercial electronics, etc. to realize the superiority of the Market/Technology Development Driven Economy.

For a final competitiveness comparison, we look for an all-encompassing structural difference that allows winners to rapidly adapt to a changing future as typified by the two preceding examples. The structural gaps and deficiencies in America's basic making legislative institutions have been recognized by many thoughtful citizens.

NOTE:

1. The urgency of the Trade Deficit calls for immediate action, including Exchange Rate reform.
2. The National Policy and Technology Foundation Act's "Office of Policy, Analysis and Assessment" along with the "Public Policy Councils" would seek to balance America's commitment to R & D and D & R, in order to meet the challenge of international competitiion.

Allen. B. Rosenstein, Ph. D.

<u>R & D vs. D & R</u>

Conventional wisdom has a linear manufacturing process beginning with a scientific accomplishment leading to industrialization and production, i.e. R & D. This is simply not correct. See the following three examples.

1. Without depreciating the stunning contributions made by modern science, the myth that technology follows science is not borne out in fact, and indeed, the opposite is true. Professor Harvey Brooks ("Science," Pp 360-400, April 26, 1968) in writing about the history of physics since World War II discusses this myth as follows:"

> **"It seems to me noteworthy, in this history, that, contrary to some of the mythology concerning the relationship between basic and applied science, the *big stimulus to research in an area followed rather than preceded an invention*. The basic science was motivated by the necessity to generate ancillary technology to feed the development and exploitation of an initial invention, rather than vice versa. . . *Nevertheless, we must note that in almost every case a technological invention preceded much of the explosive growth in many subfields of physics."***
> (Italics added for emphasis by Dr. Brooks.)

2. Dr. Christopher T. Hill, Congressional Research Service Library of Congress, September 1986 study for the House Committee on Science and Technology concluded:

> "**Among the countries that have hosted Nobel prize winning Science and in physics and chemistry since 1945, there is actually a tendency for nations that have hosted fewer prizes per capita to have better economic performance as measured by average rates of growth of either gross domestic product or manufacturing labor productivity."**
>
> **"There is actually a negative relationship between national economic performance and the hosting of Nobel Prize winning research in physics and chemistry."**

3. United States' conventional wisdom holds that Scientific Research Driven Economy will prevail in international trade. Our trade competitors believe just the opposite. James C. Fletcher, head of NASA, in discussing the rapid industrial development of Japan with business members of the Japanese Keidarnen, was told:

> **" . . . it was very simple. We made a conscious decision after WWII to develop new technology wherever we could find it; if we had to borrow it, fine; of if it made sense to develop it ourselves, that was also quite acceptable. We did this at the expense of the more basic sciences. As a result, you will notice that the Nobel prizes all went to the United States, whereas the new technology was nearly always <u>applied</u> first, or at least best in Japan."**

Japan put in place national policy for industrial competence and trade competitiveness.

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Dear Allen,

Your *A Perfect Economic Storm -- The American Crisis* not only takes key economic challenges facing the country but provides a rich menu of action items. I do have reservations about some items or would suggest different priorities, but there is a great deal that I find on target. Hats off to you for not only focusing on key issues but also for continuing to be at the barricades.

Below, I will comment on different aspects of your plan.

I: <u>Economic Warfare -- Predatory Exchange Rates:</u>

Your review of the major countries with large current account surpluses is right on target. The history documents how long we have accepted a dangerous pattern of current account and trade deficits that turned us into the world's largest debtor -- the largest in world history.

China, Germany, Japan and others are pursuing the own national interest. Their principal focus is building their own strength -- not necessarily driving our weakness.

Why have we failed to effectively respond to the large deficits and growing mountain of debt? Why have we turned a blind eye to the erosion of our industrial base and potential weakening of our innovation system? I think there are three reasons:

> First, much of America's public and private leadership thinks the United States is still effortlessly on top of the economic world; that it is still 1960.
>
> Second, the United States is and sees itself as a world leader. To our historical credit we helped rebuild Europe and Japan. Our current challenge is that we are ignoring the economic implications and the economic costs of our foreign policy priorities. You touch on this when you mention the policy of allowing Japan to peg its exchange rate as part of effort to help rebuild the country.
>
> Third, for thirty years our national leadership, key parts of the academic world, and much of the public at large has embraced what many call 'market fundamentalism.' It was as if national government and national growth strategies simply did not exist.
>
> There is a complementary strand of thinking that is quick to put the blame for U.S. failings on U.S. fiscal profligacy and a kind of shopping mania that has driven U.S. savings

(in 2008) into negative territory. There are elements of truth in this explanation-- but they neglect the impact of a flow of foreign capital on longer-term interest rates low and the dollar at levels that made many U.S. goods uncompetitive in international markets.

You are also right to raise the possibility, I would say prospect, of heavy Chinese investment in the U.S. economy. In strictly economic terms, China should diversity out of dollars and into other currencies and hard assets. They are also concerned about access to raw materials that fuel the growth that is critical for social stability and the achievement of national aspirations. Buying oil, iron ore, coal, and other raw materials serves both those purposes.

Buying technology is the likely alternative target. Hummer, Volvo, and other troubled assets are useful for the technologies they bring more than for their existing plants.

POSSIBLE SOLUTIONS

You dismiss negotiations and litigation. Sad to say, you have a good deal of history on your side.

Negotiations: In terms of presentation, I think you should briefly review the 1985 Plaza Accord. Faced with a Congress that was demanding action on an overvalued dollar and a large (by the standards of the day) trade deficit, Secretary Baker used that Congressional pressure to persuade the other key finance ministers (France, Germany, Japan, and the United Kingdom) the surplus countries had to act – or the Congress would. Eventually the dollar and the trade deficit declined.

You might also mention an earlier situation in which surplus countries (European in the 1960s) were unwilling to adjust. President Nixon responded by imposing a six month import surcharge. The result was the move to flexible exchange rates.

In each case, surplus countries did, eventually negotiate, but only after pressure or the credible threat of pressure.

I think it would also be useful to provide a one paragraph history of the recent attempts to negotiate. The Bush Administration, at least publicly, urged China to adjust. The Obama administration has made similar appeals. The G-20 has endorsed the need to adjust surpluses and deficits to assure a stable international system. As yet, there has been no actual action.

Litigation: The IMF has jurisdiction over misaligned currencies and the WTO has rules barring the use of exchange rates to gain an edge in international trade. The advantage of seeking redress through either or both bodies would keep the United States on the high ground. As you point out, however, even successful complaints would take years to litigate.

To make the point about the costs of delay, you could point to the years it took Brazil to prevail in its suit over U.S. cotton subsidies and the added years to settle on a remedy. You could also point to the costs in terms of added deficits, deeper debt, enfeebled industrial base, and weakened innovation system that would follow even if the outcome was eventually outcome.

Balanced Trade Policy, Foreign Debt Buyback, Default on Foreign Debt:

__Balanced Trade Policy:__ We should set balanced trade and current account deficits as key U.S. goals. If we pursued that goal -- taking the five year time line you suggest -- we could restore manufacturing, strengthen the innovation system, and create millions of better paying jobs. If anything we should have a strategy of running a current account surplus -- paying down our debt, strengthening the economy, and giving us greater freedom of action.

The deeper challenge is the lack of a 21st century economic strategy.

However, neither the U.S. Treasury nor any U.S. administration would reset exchange rates right away. To persuade the public leadership to move in this direction, they will have to believe that trade balance is critical to national security, achieving the American Dream, and maintaining the ability to provide international leadership.

__Manufacturing:__ Too often manufacturing (see the editorial in the latest issue of *The Economist*) has been discussed as if the national concern were focused on low-skilled jobs that have been lost to overseas competition (apparel) or to automation/robots. You make a very good effort to emphasize the role of manufacturing in innovation and long-term growth. The distortions caused by record current account and trade deficits are hardly a product of long-term comparative advantage.

__Comparative Advantage:__ The economics profession is justly proud of Ricardo's insight developed some two centuries ago. However, the English advantage in textiles and Portugal's advantage in wine have little to do with a 21st century economy. The key question is how does the United States have a comparative advantage in bio-technology, nano-technology, advanced machine tools, high-resolution medical equipment, and other advanced products.

THE NATIONAL POLICY AND TECHNOLOGY FOUNDATION ACT – 1987:

The Rosenstein proposal seems even more needed today than it was when first introduced. To some extent, popular and congressional thinking have shifted in your direction. The America Competes Act included an advisory body that neither the Bush nor Obama Administrations have chosen to establish.

__National Information Office:__ We need just the kind of information that you single out. The political opposition has, I believe, been concentrated on the fear that if the government identified a problem they would want to do something about it, which would go against the grain of those favoring a small government-large market approach.

You might think about where such an office might go if there is resistance from established agencies. You could assign the function to the Under Secretary of Commerce for Economic Affairs, who oversees the Census Bureau and the Bureau of Economic Analysis. This is not a full substitute – you would need someone in the White House to make sure that the efforts of other key agencies such as Labor, Energy, and Transportation are included.

__National Office of Policy Analysis and Assessment:__ Another vital function. The OTA could be restored with a clearer definition and this specific assignment in addition to allowing for added requests from the Congress. White House coordination could be conducted by OSTP and the National Economic

Council while resources would have to come from the agencies. Legislation mandating the new requirements should include periodic reports to the Congress.

I would not, however, fold DARPA into a new agency if there is one. I am hoping that having ARPA like organizations in other agencies such as eAARPA in Energy will be able to replicate some of DARPA's many successes.

A World-class Technology Delivery System: I think the place to start is with the widely acclaimed green technologies. If, for instance, the Department of Energy was tasked with developing an approach to make the United States a world leader in battery technology and production, they would have to cover many of the steps you are suggesting without running into the predictable opposition to something like an American METI.

A parallel effort should be made to identify best practices. A renewed OTA or a properly funded Commerce Department could ask and answer how the United States became a leader in semi-conductors, aerospace, and pharmaceuticals. The answer would show the complicated and complementary roles of the federal government, state governments, universities, venture capitalists and so forth. A similar effort should be made to identify how Japan became a leader in autos, Germany in machine tools, or Brazil in ethanol.

Councils: Your proposal for advisory councils for congressional decision making could be an effective complement to oversight – which is frequently lacking. I think, however, that the Congress would prefer time limited, issue targeted advisory bodies.

You may want to revisit the 1982-83 Greenspan Commission that successfully adjusted Social Security. There was a similar commission that would have allowed President Bush 41 to take steps on deficit reduction, but he was captive of his 'read my lips no new taxes' commitment. In each case, however, these were time limited and issue specific commissions.

Alan, again hats off for continuing to think through some of the critical problems that we face. I hope the above comments prove useful.

Very best to you and Betty for the New Year,

Sincerely,