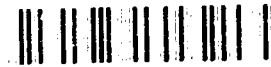


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ECONOMIC COMPETITIVENESS IN THE POST
COLD WAR ENVIRONMENT

BY

MR. WILLIAM N. GETHERS
Department of the Army

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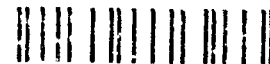
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ECONOMIC COMPETITIVENESS IN THE POST COLD WAR ENVIRONMENT

AN INDIVIDUAL STUDY PROJECT

by

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ABSTRACT

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The recent political changes that have taken place in the Soviet Union and Eastern Europe have apparently ended the Cold War between the East and West. With these changes, it appears that the importance of military power will diminish while economic power will become more significant. This paper will examine and discuss America's economic competitiveness in the post cold war environment. The introduction provides relevancy of the topic and a brief historical background of America's economic changes that have taken place. Specifically discussed are America's economic competitive position along with its challengers. The challengers include Japan, the East Asian countries of Singapore, South Korea, Taiwan, and Hong Kong, referred to as the "Asian Tigers", the European Community nations, and other rising economic powers. Economic competitiveness is reviewed primarily from a macro economic point of view with some micro economic issues included. The net assessment of the U.S. position relative to its challengers will be reviewed and conclusions provided. Recommendations for changes in U.S. economic strategy to become more competitive will be provided.

INTRODUCTION

With the dramatic changes that have recently taken place in the Soviet Union and Eastern Europe, it appears that the threat is significantly reduced for the United States and its allies. These political changes have resulted in a closer and more cooperative relationship between the U.S. and the Soviet Union, and between the NATO and former Warsaw Pact members. These changes have also resulted in the reunification of Germany, both economically and politically.

With these new relationships, there is less of a need to spend as much on defense. The USSR drastically needs economic development as well as the former Warsaw Pact countries. Western Europe can put more emphasis on economic development through the European Community (EC). The U.S. also can put more attention toward its economic problems. However, while the U.S. has been fighting the cold war, Japan, West Germany, and others have enjoyed significant economic prosperity. America now has to compete economically with Japan, other East Asian countries, and the EC.

It is generally recognized that there are three elements of national power - political, military, and economic. The U.S. was viewed as the one nation that possessed all three

elements. However, U.S. economic power may be declining at a time when the economic element of power is reaching new levels of importance, given the changes in the world military position. Chalmers Johnson contends that today "economic performance is the primary index of national power".¹ Shintaro Ishihara, a member of the Japanese Diet, shares this view and offers this position of the future, "In the years ahead, economic strength will supplant missile systems and nuclear weapons as the wellspring of national power and civilization".²

World War II changed the economic, political, and military status of many countries. France and Great Britain, once powerful nations, were severely weakened by the war. Germany and Japan were devastated. The USSR emerged as a military power, but not an economic power. Only America emerged as a major economic, political, and military power. In fact, America was the economic leader of the free world economy. Since the end of World War II, America has been the top GNP producer in the world economy, and has enjoyed the highest standard of living, with the largest per capita income. During the fifties, sixties, and early seventies, America led the world in manufacturing exports, and was the world's biggest creditor. Through the Marshall Plan, America forwarded more than \$12 billion to non-communist countries in Europe and more than \$3 billion to Japan.³ America built large trade surpluses. These surpluses were used for foreign aid and overseas investments. America's dominance was beyond question, and this continued through the mid-seventies.⁴

Since the mid-seventies, the U.S. economic dominance has been challenged, primarily by Japan and West Germany. Today, the U.S. has lost some of its economic dominance to Japan and the Asian Tigers. The EC also will present a challenge to the U.S. in the economic area. America must make certain changes to continue to be competitive and meet the increasing challenges these nations present. While America's economic position has declined since the mid-seventies, there have been some indications of a possible turnaround during the past several years. It is not clear whether this trend will be short lived or for the long term.

JAPAN

Japan's economy and infrastructure was in shambles after World War II. With significant U.S. assistance, Japan was able to concentrate on building its economy and infrastructure. However, since the mid-seventies, Japan's economy and businesses have significantly increased to the point of challenging the U.S. as the leading economic power. In some economic areas, Japan has surpassed the U.S. Japan is regarded by some as the premier economic power today. Chalmers Johnson described Japan as "the world's richest big nation in terms of per capita income, the major source of long-term capital on earth today, the financier of America's budgeting and trade deficits, the leader of a campaign of foreign direct investment in North America and Western Europe that is unprecedented in scope and velocity, and the master of many new areas of

technology such as telecommunications, semiconductors, robotics, nuclear power generation, and new materials".⁵ The Wall Street Journal noted that Japan is "a country that only a generation ago was disparaged as a producer of tiny transistor radios has turned itself into one of the wealthiest and most technologically advanced on earth, a transformation accomplished through sheer hard work and a social organization that is cohesive and centrally managed".⁶

Why has Japan been so successful economically? To begin with, since World War II, Japan has not had to be particularly concerned with its security. That has been primarily provided by the U.S. Japan has also not been interested in being a world power politically. Therefore, Japan concentrated on only one of the elements of power, the economic element.

To enhance their economic power, Japan concentrated on producing high quality products for exports. Their success is due in part to their management innovations. They instituted such practices as quality circles, flat organizations, and unparalleled cooperation among government and business. The Japanese businesses investment strategy have been based on long term capital gains rather than short term profits. Japanese manufacturers are more cost efficient and productive than the American companies. Japanese manufacturing facilities are newer and more modernized than American plants - ten years old, on the average, as compared to twenty years in the U.S.

A review of some of the well known competitive factors will indicate why Japan is in its lofty position in world

economics. Japan economic rise began in the 1960's when it outproduced Britain in 1966 and France and Germany in 1967. By the 1980's, Japan's GNP was higher than the combined GNP's of Britain and France. Some historians predict that Japan's per capita income will surpass America's by 20% by the turn of the century.⁷ Japan is the leading spender on capital investment and also leads in high technology exports. Japan is second to the U.S. in research and development spending. Of the top 200 foreign companies spending on R&D in 1989, 78 were Japanese and 42% of the total spent was Japanese.⁸

Japan's share of world manufacturing exports in 1985 was 18.9% compared to 16.7% for the U.S. and 17.9% for West Germany. Japan also had the highest productivity output per hour in manufacturing.⁹ In addition, Tokyo's stock exchange is the largest in the world, and most of the top banks in the world are in Japan. Japan is the largest exporter of capital made possible by its \$1 billion a day savings rate and trade surpluses of \$85 billion annually.¹⁰ Japan's savings rate is 17% compared with 12% in Germany and only four percent in the U.S. Japan's share of the semiconductor market is increasing. A decade ago only two of the world's ten largest semiconductor producers were Japanese; today six are Japanese. Since 1980 America's share of this market has declined from 60% to 40%, while Japan's has doubled to 50%.¹¹

With the emergence of Japan as a financial power and leader in several key categories as demonstrated above, what impact does this have on the U.S? One view is that with

Japan's "deep pockets", they are spending and investing in American companies, securities, and real estate. This may be considered somewhat of an advantage for the U.S. It has been stated that since Japan has invested so much in America, they must be concerned with the well being of the American economy. "The more the Japanese invest, the more committed they are to the American economy", says John Welch Jr., chairman of General Electric Company.¹² However, during the past year, Japan has been divesting some of its U.S. investments. The trend appears to be a lower percentage of Japanese investment in the U.S.

Japan's economic success has not been due totally to their own development nor to fairness in trading. Much of Japan's success has been based on rapid commercialization of technology developed in America. In addition, Japan has flood the U.S. market while keeping their own market relatively closed to foreign goods. Japan has imposed quotas and special levies on rice, beef, and other food products. Some of this has been relaxed because of the GATT treaty, however, Japan still erects tariffs that restrict the import of certain items, while they flood the world market with cars, cameras, and cassettes on the basis of free trade.¹³

The projections are not all rosy for Japan. Some economic problems are surfacing in Japan. The Tokyo stock market declined by 48% in 1990 from its peak position to its lowest position, the second largest fall ever.¹⁴ Inflation is also becoming a problem in Japan. Consumer prices in January 1991 were 4.2% higher than in January 1990.¹⁵ Japan trade surplus

of \$64 billion in 1990 was down from its \$80 billion in previous years.¹⁶ Mr. Reed of Citicorp states that "I'd guess that the next decade may not be as favorable for Japan as this one has been. The costs of commodities Japan imports such as oil and coal have been low much of the 1980's, while the prices of Japanese exports like cars and computers have been relatively high. Besides, three-quarters of the \$90 billion swing in Japan's fortunes between 1980 and 1988 was due to currency realignments and only 25% to increase exports volume. If you think that what exist today is permanent and forever true, you inevitably get your head handed to you".¹⁷

Labor costs are now higher in Japan than before and is contributing to inflation. Like America a decade ago, labor costs are prompting Japanese industries to move to other countries like Korea, Singapore, and Taiwan. As Watarn Hiraizani, a member of the Japanese parliament stated, "Closing the gap with America was easy, now the race begins".¹⁸

With all its financial and economic success, Japan has not replaced the U.S. as the pre-eminent global power, and probably never will according to the Wall Street Journal. "This is the conclusion that emerges from talks with more than a hundred government officials, scholars and other experts in the U.S., Russia, Europe and Asia. There are dissenting voices, certainly, but the predominant view is that while Japan will wield greater influence especially economic, a broader global leadership will elude it. Japan's deficiencies are simply too great".¹⁹ Soviet deputy foreign minister Anatoli Adanishin

says "the Japanese will find out money isn't everything, just as we found out armaments aren't everything".²⁰ Jiro Tokmyana, senior adviser to the Mitsui Research Center states that "the U.S. is a land of opportunity and Japan is a land lack of opportunity. We close our market because opportunities are scarce and we don't want to share them with others. Already our college graduates don't have the same opportunities as those twenty years ago. Being closed is a weakness. This is our dilemma".²¹

In terms of a future outlook, Mr. Ding, the American expert at Shanghai's Institute of International Studies, probably states it best. "The next decade will be marked by competition between the U.S. and Japan rather than confrontation between the U.S. and the Soviets. But the world hasn't yet reached a point where military power isn't required to maintain global equilibrium. and that's America's task".²²

THE ASIAN TIGERS

In addition to Japan, there are other East Asian countries that are gaining economic power and providing competition for the U.S. and other industrialized countries. These countries have been referred to as the Asian Tigers and include South Korea, Taiwan, Singapore, and Hong Kong. These countries began improving by having lower labor costs. This caused several American and European industries to move manufacturing operations to these countries. This also resulted in an increase in employment in those countries. Current higher

labor costs in Japan is also causing Japanese industries to move certain operations to these "Asian Tigers".

These countries have worked hard to improve their industrial and technology base, and the results have begun to show. They all have high levels of education, high growth rates (eight percent over the last five years), they are among the top 20% of manufacturing exporters in the world, and their total exports are 80% of Japan's.²³ In addition, they all have trade surpluses with the U.S. In 1987, Hong Kong's trade balance with the U.S. was nearly \$7 billion, South Korea's was about \$10 billion, Taiwan's was more than \$16 billion, and Singapore's was over \$2 billion.²⁴ Other countries in the area such as Thailand, China, India, and Indonesia also have annual growth rates of more than five percent, and have great potential for economic growth.

With this prosperity, some of those countries are becoming more innovators. South Korea and Taiwan are spending significant amounts on research. They are finding ways of lowering costs and improving performance on such things as cars and appliances. Both countries have also jumped into mass production of advanced semiconductors and personal computers.

Taiwan began its major entry into high tech in the mid-seventies. They established the Industrial Technology Research Institute (ITRI) plus a high-tech industrial park. Now both government and private companies are spending significant amounts on research and development.²⁵ Currently, Taiwan has a \$72 billion foreign exchange reserve. Singapore

has followed suit with increased spending on R&D. South Korea is also spending additional funds on R&D in an effort to stimulate innovation. Its annual R&D outlays of \$3.5 billion rank it thirteenth in the world. According to Business Week, Korea needs to spend on innovation because it may be losing its competitive edge. "In its headlong race to industrialize and conquer global markets, South Korea has relied on hard work, low labor costs, foreign technology, and a cheap currency. Korea has probably modernized faster than any other country. But that very success has led to higher wages, a stronger currency, and the reluctance of foreigners to be so generous with their knowhow. The result is declining exports, a sluggish economy, and growing fears that Korea is losing its competitive edge".²⁶

While the Asian Tigers are rapidly improving their economies and are competitors of the U.S., they do not appear to be a significant threat to American economic power. There has been discussions about forming an Asian common market similar to Europe, however, there appear to be too many problems for such an organization to succeed. There appear to be skepticism on the part of the other countries with respect to Japan's role in such an organization. According to Ding Xinghao, director of American studies at Shanghai's Institute of International Studies, "Japan's view is always a flying geese format with Japan as the head goose. Our memories are long, so we aren't about to fly in Japan's formation".²⁷ Korean economist Park Ungsuh says, "It's simply not possible

for Asian nations to be a viable bloc, because there is too much disparity between economies. You have one giant, Japan, and many peanuts".²⁸

Similar points are made by others in the region. Zhao Fusan, a vice president of the Chinese Academy of Social Sciences says, "The Japanese are an aggressive people, they exploited us in the '40s with force and now with finance. Asians have memories that can't be rubbed out with money".²⁹ Japan has acknowledged this problem. Mr. Tokuyama says, "We can sell cars and VCRs but who loves Japan or Japanese? We are winning the battle but losing the war".³⁰

America and its industries will continue to have a significant role in these countries. South Korea Foreign Minister Chi Kwang Soo says, "America is far more trusted than Japan. Japan harbors ambitions to be a major power, and that worries not just us but the Soviets and China".³¹

EUROPEAN COMMUNITY

A decade ago, Europe did not appear to be a major competitor in the world economic arena except for West Germany. While West Germany was growing economically, the others were floundering. Europe's overregulation and costly social welfare systems kept it from competing with the U.S. and Japan. However, two events indicate that Europe may soon be in a position to seriously contend economically. The two events are the unification of its markets beginning in 1992 with the European Community (EC), and the fall of communism in the East

resulting in the unification of East and West Germany.

If EC 1992 is successful, it will provide significant competition for both the U.S. and Japan. With EC 1992, Western Europe will become the largest unified market in the free world. The purpose of the EC is to eliminate internal barriers among the twelve EC nations, which will make their products more attractive to their consumers than imports. This will no doubt reduce American imports to those countries. The twelve EC nations are Britain, The Netherlands, Luxembourg, Germany, Italy, Denmark, Greece, Ireland, Portugal, Spain, France, and Belgium. These nations have a \$3.8 trillion economy. In addition to the twelve EC members, they also have some agreements with members of the European Free Trade Agreement (EFTA). The six EFTA members include Norway, Sweden, Finland, Switzerland, Austria, and Iceland. Those nations have a combined economy of \$640 billion. There are also five Eastern Europe nations that want to trade with the EC members. These are Poland, Hungary, Czechoslovakia, Romania, and Yugoslavia. Together they have an estimated \$425 billion economy.³²

A comparison of the EC nations to the U.S. and Japan indicates that the EC has a larger population, 324 million compared with 244 million for the U.S. and 122 million for Japan. EC nations produced 22% of the world's GNP compared to 26% for the U.S. and nine percent for Japan. The savings rate of the larger EC nations are approximately 12% compared with four percent for the U.S. and 17% for Japan.³³ In addition, EC nations already produces about 17% of the world's exports,

compared with 11% for the U.S. and 10% for Japan.³⁴ West Germany itself has per capita income which is about 84% of America's, enjoys a high savings rate and has the second largest trade surplus after Japan.

As can be seen, European countries possess considerable economic resources that if united in both theory and operation, can provide significant economic competition for the U.S. and Japan. The larger question is whether these countries can truly operate in unity and what is America's role in this process? The Wall Street Journal states that "while Europe seems likely to succeed at creating a unified trading market by 1992 or soon thereafter, even most ardent Europeanists believe the continent's prospects for becoming a major global power are dim. Deep-seated distrust and deeprooted nationalism make true political unity as elusive now as in centuries past. American ambivalence about whether to foster or foil European unity is a further obstacle".³⁵

One problem that the EC faces is the large amount of capital that is needed to rebuild East Germany and the other Eastern European countries that want to be a part of the West. Assisting these countries could affect the operation of the EC. Etienne Davignon, former EC commissioner and now chairman of Societe Generale de Belgique says that, "If we go too far too fast in accommodating Eastern Europe, we lose on both fronts, we could lose in our own integration, and we could lose them, too".³⁶

American companies and government officials are expressing

some concern about the European market. While EC 1992 rules state how the market will operate internally, it does not say anything about how Europeans will treat imports from outside EC nations. Gerald Greenwald, Vice Chairman of Chrysler Corporation says that the Chamber of Commerce is working to keep the concerns of American business community in front of the EC committee members. "We want to ensure that American companies doing business in Europe are treated as fairly as European firms doing business in America".³⁷ He further states that, "if the EC wants to show true world leadership when it knocks down the economic walls between its countries, it will not use those same bricks to build a new wall around the entire continent. The last thing the global economy needs right now is a 'Great Wall of Europe' or 'Fortress Europe'".³⁸ The Wall Street Journal echo the same and states that, "U.S. businessmen and officials are beginning to complain that the EC bureaucracies, in writing rules to remove internal trade barriers, are erecting external ones - a kind of wall around Europe. Business and government leaders generally reply that any new obstacles will be aimed at Japan, not the U.S."³⁹

With all the changes ongoing with EC 1992, it appears that economically, it will inevitably cause increased tension between America and Europe. This is due to the fact that Europe remains a larger trading partner for America than Japan and gets the largest share of American foreign investment. An example of this is the major disagreement between the Americans and the Europeans in the Uruguay round of GATT. The U.S. has

demanded a 75% cut in farm supports and a 90% cut in export subsidies over the next ten years.⁴⁰ The Economist stated that "the Uruguay round of trade negotiations broke up rancorously in Brussels in December after the EC refused even to discuss a compromise text on agriculture".⁴¹ However, Europe is America's major military ally and is very close culturally, and most expect that accommodations will be forthcoming. The Wall Street Journal noted that, "given all these rivalries, if America offers even marginally wise leadership, Europe is likely to continue to accommodate American desires. And the historical and cultural ties that link Europe and America seems likely to hold for at least another generation".⁴²

THE OTHERS

We have discussed the trends of the major economic competitors of the U.S. which include Japan, EC nations, and to a lesser degree the four East Asian nations of South Korea, Hong Kong, Taiwan, and Singapore, referred to as the "Asian Tigers". There are no other serious economic competitors, however, China and the Soviet Union are worth briefly mentioning because of the economic changes that are taking place in those countries.

The Soviet Union is trying to make the transition from a rigid socialist system to some form of free market economy. It is a difficult process and some doubt that it can be accomplished. Some suggest that communism has so dominated its past that a conversion to a market based economy may be

impossible. The Wall Street Journal noted that, "Not only does Russia have no tradition of individual economic enterprise, but with its communist revolution now 72 years old, memories of anything other than Marxism are gone".⁴³

China is somewhat different in that they have been converting to a market economy during the past decade, and the prospects of them succeeding appear much better than the Soviet Union. China also has not been under the communist system as long as the Soviet Union. During the past decade, "China's GNP has more than doubled, while defense spending has decreased from 11.5% to 4.4% of GNP."⁴⁴ As a result, China's per capita income has more than doubled, although it is still very low compared to Western countries. Li Shenzhi of the Academy of Social Sciences in Beijing says, "there is only one economic theory that works-market theory. There is only one market, and it is dominated by the West. China is determined to enter this market, so it must stay open to the West".⁴⁵

At this point, it is highly unlikely that either China or the Soviet Union will challenge the U.S. economically in the near future. The Soviets are currently ahead of China economically, however China is making the change to a market economy much faster and will probably be a major economic competitor in the next generation.

U.S. COMPETITIVE POSITION

As stated earlier, the U.S. dominated the world in economic power from the end of World War II to the

mid-seventies. While America was dominant, it built up large trade surpluses and did not worry about budget deficits, national debts, inflation, productivity, etc. Since then, the U.S. power has slipped, but some of this was expected since most other nations were rebuilding their economies and infrastructures from the devastation of the war. Was the U.S. decline the natural effect of other nations rebuilding or has the U.S. lost its competitive edge? Japan, Europe, and several other nations are now or will be competitive in the near future. Business Week states that, "America is still the envy of the world. Its investment in basic research far exceeds that of any other nation. Yet in the market place, the U.S. is being tested as never before. Wave after wave of imported memory chips, cars, and consumer electronics has battered U.S. industry. Wrenching political changes around the world are bringing new opportunities and fresh risks. And while the wrangle over policy continues in Washington, the competition in global markets is growing fiercer by the day".⁴⁶ This probably accurately states the current condition.

Before endorsing that assessment, let's review some important statistics on the U.S. position. The U.S. GDP of \$5.2 trillion in 1989 is still the world's largest compared to \$4.4 trillion for the EC nations, \$2.7 trillion for the Soviets, and \$1.9 trillion for Japan. The GDP growth rate of 3.0% equals that of the EC, but is less than Japan's at 4.8%. The U.S. remains the largest exporting nation with \$364 billion of exports in 1989 compared with \$274 billion for Japan. The

U.S. is also the largest importing nation with \$493 billion compared with \$210 billion for Japan in 1989. This left the U.S. with a net trade imbalance of \$129 billion, while Japan maintained a surplus of \$64 billion in 1989.⁴⁷ The U.S. trade imbalance improved to \$100 billion in 1990, while Japan's surplus remained at \$64 billion.⁴⁸ The U.S. share of world GNP is 26% compared with 22% for the EC, 14% for the Soviet Union, and 9% for Japan.⁴⁹ The U.S. leads in per capita income of \$20,890 compared with \$15,530 for Japan and \$13,420 for the EC in 1989.⁵⁰ In total productivity (measured in output per employed person in 1988) the U.S. led with \$41,281 compared with \$29,678 for Japan and \$33,605 for West Germany.⁵¹

As indicated by the figures, by almost any measure, the U.S. is still the leader in economic competition. The U.S. is the leader in world exports, has the highest living standards of any nation measured by its wealth per capita, and is the leader in total productivity. The primary concern is that the U.S. is rapidly losing its lead in some key areas. One key indicator is that the U.S. has not maintained its productivity growth rate, and is now behind both Japan and Germany. As noted by Louis Richman, "In a country's long run pursuit of well being, the single most important objective, the one that should guide all other economic policies is higher productivity growth. Do you want more goods, more services, more leisure? Higher productivity gives you the resources to make the choices".⁵² Some of the reasons for this change will be examined.

America's problem in productivity appears to be in the manufacturing area. Services now account for a large share of all production and the U.S. appears to be doing well in this area. It is not the same in manufacturing. From 1960 to 1985, American manufacturing productivity increased 2.7% annually, compared with Japan's 8% and West Germany's 4.8% growth.⁵³ The U.S. share of manufacturing exports is now 16.7% compared with 17.9% for West Germany and 18.9% for Japan.⁵⁴ Japan is now the most productive manufacturer in the key exporting industries of steel, autos, and consumer electronics. America, once the leader in mass production has now been surpassed by Japan. The net effect of the relative loss in productivity is that the U.S. share of global products decreased by 6% over the past 15 years, while Japan's rose by 15%.⁵⁵ This is not a trend which is in America's best interest. Why has this occurred? Some say America took for granted the advantages provided it after World War II. Robert Cole, a University of Michigan researcher on work organizations says that, "In an economy where you succeeded almost no matter what you did, management confused its success with its ability to manage. Quantity not quality became the norm of postwar American management".⁵⁶

Another factor contributing to low productivity growth is that technology innovation, of which Americans are well known, do not last very long. The ability to copy American products overseas has taken away some of the competitive advantage. Lester C. Thurow of MIT point out that "profit margins were once thought to be higher on new, unique products than old,

competitive ones. While this may have been true in the past, it is now clear that with foreign competition, higher profit margins on new products do not last anywhere near as long as they used to. As the Japanese have shown, the long-term profits go to those with the lowest production costs, not to those who make the original discovery".⁵⁷

Another factor contributing to the change in productivity is education. Differences in education between the U.S. and Japan are frequently cited as one of the reasons that the American workforce is becoming less competitive. The high school graduation rate is 90% in Japan compared with 80% in the U.S. However, the real difference appears to be that Japan prepares their high school graduates better for technical jobs than the U.S. The U.S. does a good job in preparing students for college, but those who do not go to college are not well trained. A large number of Japanese students who do not go to college are provided technical, vocational, or semiprofessional schooling as preparation for industrial jobs.

A 1983 report by the National Commission on Excellence in Education, entitled "A Nation at Risk", alluded to a rising tide of mediocrity in our schools.⁵⁸ The result from the report included a number of reforms and enhanced educational requirements. Despite this effort, a follow-up report five years later concluded that little improvement was noted. Of particular relevance to the issue of productivity, science and math curricular were noted as remaining weak. America produced fewer college graduates in science and engineering in 1983 than

in 1973. Conversely, with only half the population of the U.S., Japan graduated more engineers in 1982 than the U.S. (74,000 compared to 68,000).⁵⁹ With the current U.S. education system, one of every five adults is functionally illiterate.⁶⁰ While there are educational problems, all is not bad. Some American advantages are not exhibited by statistics. Japanese education tends to emphasize learning by memorizing by routine or repetition, while the American system encourages inventiveness. The different philosophy shows up in the two countries industries, where American interest has been in inventing something new, while Japan's has been in better producing someone else's invention.

Another problem related to competitiveness and productivity is the short term investment strategy of most U.S. businesses. American companies have been criticized for taking a short term view of company profits while Japanese companies concentrate on making long term commitments to gain market share. According to Sarah Glazer, "surveys of business executives indicated that Japanese executives are most interest in making their companies global leaders while American managers place most emphasis on increasing the value of their company's shares".⁶¹ This suggest that to be competitive, American companies have to settle for lower rates of return and less attractive dividends to their stock holders in the short term, and increase investment in plants and research and development for the long term.

Another problem is the low savings rate of Americans.

Americans are getting the tag of being spenders not savers. Savings are considered a primary source for capital investment. In the sixties and seventies, the U.S. savings rate was 7% of after tax income. That rate declined to 4% in 1986 and to only 3.8% in 1987, the lowest annual rate since 1947. By contrast, the Europeans saved about 10% and the Japanese 17% of after tax income.⁶² Compounding the problem of low savings rate is the huge budget deficits which has caused the government to compete with corporations for the available investment dollar. This has caused interest rates to rise. The result is that the higher the interest rates, the higher the cost of capital, and less new capital available for investment in long term projects. Recently, the interest rates have increased in Japan and Germany while decreasing in the U.S.

The final factor that could be a problem is free trade. American industrial companies have charged that there is collusion between foreign governments and their industries to place barriers to American products in their markets, and to invade American markets with below cost pricing. An example is the semiconductor market where it is alleged that Japanese chip makers operate at a loss in order to seize market share from existing competitors.⁶³ In addition, Japan has imposed quotas and special levies on food as well as other products. Also, the Japanese distribution system is a roadblock to American exports to Japan. The Japanese add distribution costs that increase the price of American products by 180 to 300% as opposed to 60% for Japanese products.⁶⁴ In fact former U.S.

Commerce Secretary William Verity has called Japan's distribution system the "ultimate trade barrier".⁴⁵ American businesses are pushing for more protectionist legislation to deal with these problems. Whether protectionism works or not, it appears that something is needed in this area.

CONCLUSIONS

A brief history of American economic condition since World War II in which America was without question the dominant economic power of the world has been reviewed. During a period in the 1950's, America accounted for nearly half of the world's GNP. Now America is still one of the leaders but is no longer dominant as it once was. Several countries are challenging America in economic power. Some say America is no longer the leader. Japan, the Asian Tigers, the Europeans, and others are striving for economic strength and growth. After reviewing the current economic conditions and trends in those countries, several conclusions can be reached with respect to America economic competitiveness in the world market.

The first is that Japan is America's primary economic competitor and will remain so for the foreseeable future. Japan has been extremely successful in increasing its share of manufacturing exports primarily by producing quality products, long term investment strategies, educating and training its population, and a robust research and development program. However, Japan also has problems. While they are good at mass production and marketing, they do not produce great innovators

as the U.S. The Japanese also have trade barriers that inhibit free trade, and several countries may reciprocate in the future. Japan is still not trusted by its Asian neighbors and many others in the world. The Japanese also depend a great deal on raw materials from other countries. Chung Hoon Moi, President of Hyundai Construction, note that, "Japan is like a thin bottom pan on a hot fire - very vulnerable to external forces".⁶⁶ Recently, Japan's stock market declined by 48%, inflation is becoming a problem, and the trade surplus decreased by 20% in 1990.

The Asian Tigers of South Korea, Singapore, Taiwan, and Hong Kong are emerging with strong economies and are very much in the competitive market. However, they are not a major threat to America competitiveness and are not expected to seriously challenge in the immediate future. These countries value they trade and relationship with the U.S. and views America as the economic leader instead of Japan. The Wall Street Journal noted that, "America's most enthusiastic cheerleaders are the emerging nations of the Pacific, often cited as the new center of global gravity and sometimes simplistically seen as Japan's economic vassals. There, America remains the preferred leader and Japan the distrusted and often detested neighbor".⁶⁷

The European Community scheduled to be implemented in 1992 with free trade among its twelve member nations has the potential for additional membership from east and west countries. The EC's total economic resources do rival that of

the U.S. and has the potential to be very competitive. With this vast potential, the biggest question is will there be unity among its members. Many believe that European nations are so diverse and in some ways distrustful of each other, that they will never be true unity. Others point out that to be unified, Europe must have a strong leader, and none is visible at this point. If Europe can have true unity in economics, they will present a formidable competitor for America.

The other countries reviewed were primarily the Soviet Union and China. These former communist countries, while being militarily powerful, are both far from being an economic power. They are both recovering from the economic disaster of communism and have a long road ahead to reach the industrialized countries. Of note is that while the Soviets have more resources, China appears to be better focused for economic change.

By most indicators, the U.S. remains the leading economic power in the world, despite its negative trade balance and budget deficits. The U.S. trade deficits appear to be improving, while the budget deficits are getting worse. The U.S. GDP was \$5.2 trillion for 1990, compared with \$1.9 trillion for Japan. On a per capita basis, after adjusting for purchasing power, Japan's income amounts to about 75% of U.S. income. In absolute terms, the U.S. still leads the world in productivity.⁶⁸ Former West German Chancellor Helmut Schmidt noted that, "America is the most vital nation in the West and will remain so".⁶⁹ After considerable research, the Wall

Street Journal concluded that, "the picture that emerges is clear, if surprising; whether America relishes the role or not, it is the pre-eminent power in the world today and will remain so for at least the next generation - and probably longer".⁷⁰

But the rest of the world is gaining on us, and no country quite so rapidly as Japan. Where America is slipping is in productivity growth. From 1973 to 1989, annual gains in output per hour averaged 5.5% in Japan, compared with 2.6 % in the U.S.⁷¹ Increases in productivity provide growth in output, incomes, and ultimately, living standards. Business Week noted that, "The issue for America isn't whether it remains out front in the global race but whether it can restore to its citizens a sense of well-being and the promise of better times".⁷²

More recent economic statistics indicate that the U.S. position has been improving in the global market. The trade deficit has decreased from around \$175 billion in 1987 to \$100 billion in 1990.⁷³ The Department of Commerce noted that exports have accounted for more than one-third of overall growth in the U.S. since 1986.⁷⁴ Between 1985 and 1989 America's exports of manufactured goods rose in value by 70%, from \$168 billion to \$287 billion.⁷⁵ One reason for these improvements may have been the devaluation of the dollar. The Economist states that, "America's exports are steaming ahead, buoyed by a weak dollar and a new prowess among American manufacturers. The unanswerable question: if the dollar strengthens, will the growth continue?"⁷⁶

The current recession may also change the economic

outlook, and offset some of the export gains. The economy declined by a 2.1% annual rate in the fourth quarter of 1990.⁷⁷ This has caused the employment rate to rise to 6.2% in January 1991, resulting in the loss of significant numbers of jobs. Car sales are down, new construction is down, and productivity growth is down. Business Week noted that, "Clearly, export-led manufacturing is not the economic savior that some had foretold. The accumulating weakness in domestic demand is overwhelming the export gains, resulting in a manufacturing recession that is as deep and as broad as many past downturns".⁷⁸

In the last section several reasons were mentioned why productivity growth was down and subsequently caused problems of competitiveness. These include quality of product, technology innovation, education, investment strategy, savings rate, and free trade issues. Recommendations for improvement in these areas will be provided next. The overall conclusion is that America is still very competitive economically, but changes are needed to remain on top.

RECOMMENDATIONS FOR CHANGES IN U.S. ECONOMIC STRATEGY

Global economic competitiveness in the 1990's and beyond will require the U.S. to employ a much more aggressive approach. To successfully compete, the U.S. must make changes in several areas. It is clear that today's economic problems are too complex to be solved by any one sector of the economy alone. A comprehensive approach must be developed which

includes government, educators, business, and labor.

Improvements should be made in several areas to include product development, education, investment strategy, cooperation, and trade policies.

The first change needed is for American industrial companies to improve the quality of their product. There is a perception that American products are inferior in quality. One of the reasons Japan was able to gain market share in such industries as automobile, television, stereos, and other consumer items was the quality of the product. Shintaro Ishihara advises that, "the trade deficit with Japan will fall when U.S. products regain their reputation around the world for quality and design".⁷⁹

We need to develop policies which will provide an incentive to improve quality products. We should also encourage the development of those industries that are high technology, with high growth potential such as semiconductors, genetic engineering, solar energy, optical fibers, and ceramics. According to the National Science Foundation, the high-tech industries contribute far more to the economy than low technology industries.⁸⁰ Providing a quality product will help reduce trade deficits. Of note is that the trade deficit has declined, however it is not known how much the cheap dollar has contributed to this change. The U.S. also needs to continue to pursue free trade policies through organizations such as the General Agreement on Tariffs and Trade (GATT), and through negotiations with individual countries and regions.

The next change necessary is to improve the education of the workforce. As noted earlier, one of every five adults in the U.S. is functionally illiterate. In addition, we are producing fewer college graduates in the engineering and science field which is critical to high-tech industries. To improve this area, the U.S. must provide more incentives for students to enroll in, and obtain degrees in the engineering and science field. This may include scholarships, grants, and student loans specifically for engineering and science students. Secondary school education must also be improved. This should include establishing and maintaining tougher standards for all schools. Additional school time for students may be appropriate.

More emphasis should also be placed on better preparing the students that will not go to college for industrial skilled jobs. Many companies are forced to provide remedial training to its employees. Motorola determined that employees should have at least fifth grade math skills and seventh grade reading skills to work in its plants. They discovered that half of the employees needed remedial training to reach that level.⁸¹ Improved education is critical to U.S. companies competitiveness in the global market.

Another area that require change is the investment strategy. This involves several approaches. First is that our corporations must adjust to investing in long term capital projects instead of continuously looking to take advantage of short term profits. Currently the high cost of capital makes

it more difficult for corporate investment in long term projects. Interest rates have recently fallen, but it remains to be seen if this will have an impact. To provide more capital for investment, the U.S. needs to reduce the budget deficit. The deficit has been over \$200 billion in recent years and is projected to be \$318 billion in fiscal year 1992. The high costs of servicing the debt takes away capital from private investment because the government is competing with industry. With a reduced deficit or balanced budget, more capital would be available for plant expansion.

Additional investments are also needed in civilian research and development. While the U.S. spends more total dollars (\$65 billion) on R&D than other countries, the portion of GNP is lower. America spends approximately 1.8% of GNP on civilian R&D, while Germany spends 2.6% and Japan spends 2.8%.³² The U.S. also lags behind Japan in getting research into production. Shintaro Ishihara notes that, "Unless U.S. business can integrate the research lab, assembly line and boardroom, the country will be unable to shape the emerging civilization of the 21st century".³³ One possible means of increasing investment in R&D and capital projects is through tax incentives. This is not an endorsement of the capital gains tax reduction, but some incentive in this area may be necessary. Investment in R&D provides for future innovation, which improves competitiveness.

Additionally, some incentive is also necessary to improve the personal savings rate. As pointed out earlier, America's

savings rate is at an all time low, and well below other industrialized countries. Such things as the reinstitution of higher IRA deductions, or a personal savings program. Another consideration to free up investment for private industry is to change current legislation to allow the surpluses of trust funds such as social security to invest in commercial securities instead of treasury securities. The portion allowed to be invested in private securities could be limited such as the current Federal Employees Retirement System (FERS). This would be similar to private retirement funds and insurance funds. Adequate regulation should be in place to minimize the risk.

Another area that needs improvement is the cooperation among business, labor, and government. The MIT commission on Industrial Productivity concluded with a recommendation to, "urge more cooperation in all aspects of business--within companies, between companies and their suppliers and customers, and among companies in the same industry".⁸⁴ There is some consensus for this cooperation which would provide for government to stop hindering and begin helping business; for business to stop union busting and actively involve labor in workers' councils and decision making; for labor to exercise wage restraints in return for job security, and increased investment in future jobs.⁸⁵ The Japanese possess this key advantage in today's environment. Some more study on this is necessary to determine the impact on current laws of collusion, antitrust, etc. This may be fundamentally incompatible with

American political tradition.

These recommendations provide a framework for improving American economic competitiveness. America appears to be focusing more of its attention in this area. American usually respond to challenges when necessary. As Winston Churchill once said, "In the end, Americans will always do the right thing, after exhausting all other alternatives".⁸⁶ A review of American economic and overall strengths compared with others indicates that if America wants to be the leader, it can be. Former Secretary of State George Schultz observes that, "We have a winning hand, we just have to play it".⁸⁷ This sentiment is similarly echoed by our major competitor. Seizaburo Sato, a Japanese political scientist and adviser to former Prime Minister Nakasone, noted that, "The 20th century was the American century, and 21st century will be the American century".⁸⁸ Let's hope he is correct.

ENDNOTES

1. Chalmers Johnson, "Japan, Their Behavior, Our Policy," National Interest, Fall 1989, p. 20.

2. Shintaro Ishihara, "Warning From Japan: Trust Yourself, Not Your Leaders," The Washington Post, 7 October 1990, p. D5.

3. Abu K. Selimuddin, "Will America Become #2," USA Today, September 1989, p. 14.

4. Gerald Greenwald, "America's Stake in the New Global Economy," USA Today, November 1989, p. 26.

5. Johnson, p. 20.

6. Karen Elloitt House, "World Leadership," Wall Street Journal Centennial Series, January/February 1989, p. 19.

7. Selimuddin, p. 15.

8. Emily Smith and James B. Treece, "Glimpsing The Future In The Numbers," Business Week, 15 June 1990, p. 195.

9. Sarah Glazer, "Industrial Competitiveness," Congressional Quarterly, 20 March 1987, p. 128.

10. Selimuddin, p. 15.

11. Ibid., p. 16.

12. House, p. 22.

13. Johnson, p. 7.

14. "Into Idle," The Economist, 9 February 1991, p. 36.

15. Ibid., p. 41.

16. "Economic and Financial Indicators," The Economist, 23 February 1991, p. 112.

17. House, p. 24.

18. Ibid.

19. Ibid., p. 20.

20. Ibid.

21. Ibid., p. 21.

22. Ibid., p. 24.

23. Selimuddin, p. 15.
24. House, p. 20.
25. Dori Jones and Stephen Hutcheon and Joyce Quek, "Is Asia Breeding A Whole Pack of Tigers?," Business Week, 15 June 1990, p. 153.
26. Robert Neff and Larimi Nakarmi, "Will An R&D Scramble Get Korea's Edge Back," Business Week, 15 June 1990, p. 158.
27. House, p. 23.
28. Ibid.
29. Ibid.
30. Ibid.
31. Ibid., p. 24.
32. Bianca Riemer and Gail E. Schares and John Templeman and Jonathan Kapstein, "One Big European Economy Seems Less Like A Dream," Business Week, 13 November 1989, p. 43.
33. House, p. 21.
34. Johnson, p. 22.
35. House, p. 35.
36. Riemer, p. 43.
37. Greenwald, p. 28.
38. Ibid.
39. House, p. 38.
40. "Dancing from Bad to Worse," The Economist, 17 November 1991, p. 25.
41. "The Other Brinkmanship," The Economist, 5 January 1991, p. 20.
42. House, p. 40.
43. Ibid., p. 31.
44. Ibid., p. 29.
45. Ibid., p. 32.

46. "Innovations 1990," Business Week, 15 June 1990, p. 43.
47. CIA, Handbook of Economic Statistics 1990, August 1990, p. 30.
48. "Economic and Financial Indicators," The Economist, 23 February 1991, p. 112.
49. House, p. 38.
50. CIA, p. 30.
51. Peter Petre, "Lifting American Competitiveness," Fortune, 23 April 1990, p. 59.
52. Louis S. Richman, "How America Can Triumph," Fortune, 18 December 1989, p. 58.
53. Glazer, p. 131.
54. Ibid., p. 128.
55. Jacques Attali, "Lines on The Horizon: A New Order in the Making," New Perspectives Quarterly, Spring 1990, p. 6.
56. Glazer, p. 128.
57. Ibid., p. 130.
58. Pearl M. Kamer, The U.S. Economy in Crises, p. 108.
59. Ibid., p. 100.
60. Daniel F. Burton and Victor Gotbaum and Felix G. Rohatyn, Vision For The 1990s, U.S. Strategy and the Global Economy, p. 112.
61. Glazer, p. 130.
62. Kamer, p. 115.
63. Glazer, p. 133.
64. Greenwald, p. 28.
65. Ibid.
66. House, p. 20.
67. Ibid., p. 8.
68. Karen Pennar, "Yes, We're Down. No, We're Not Out," Business Week, 17 December 1990, p. 62.

69. House, p. 8.
70. Ibid.
71. Pennar, p. 62.
72. Ibid.
73. "Economic and Financial Indicators," The Economist, 23 February 1991, p. 112.
74. "Anchors Away, My Boys," The Economist, 12 January 1991, p. 118.
75. Ibid.
76. Ibid.
77. James C. Cooper and Kathleen Madigan, "On Recession's Battlefield, The Economy is Losing Ground," Business Week, 18 February 1991, p. 27.
78. Ibid., p. 28.
79. Ishihara, p. D5.
80. "Is American Competitiveness Slipping," Made in U.S.A., p.
81. Petre, p. 62.
82. Ibid., p. 58.
83. Ishihara, p. D5.
84. "How to Regain The Productive Edge," Fortune, 22 May 1989, p. 93.
85. Made in U.S.A., p.
86. House, p. 46.
87. Ibid., p. 45.
88. Ibid., p. 16.

BIBLIOGRAPHY

- "Anchors Away, My Boys." The Economist, Vol. 318, 12 January 1991, pp. 59-60.
- Attali, Jacques. "Lines on The Horizon: A New Order in The Making." New Perspectives Quarterly, Vol. 7, Spring 1990, pp.
- Bergsten, C. Fred, America in the World Economy: A Strategy for the 1990s. Washington, DC, Institute for International Economics, 1988.
- Bostian, David B. "Paradigms for Prosperity." The Futurist, Vol. 24, July/August 1990, pp. 33-35.
- Brown, Harold. "The United States and Japan: High Tech is Foreign Policy." SAIS Review, Vol. 9, 1989, pp. 1-16.
- Burgess, John. "Flood of Money Into U.S. Slows to a Trickle." The Washington Post, 7 October 1990, pp. H1-H5.
- Burton, Daniel F.; Gotbaum, Victor; and Rohatyn, Felix G. Vision For The 1990s, U.S. Strategy and The Global Economy. Cambridge, Massachusetts: Ballinger Publishing Company, 1989.
- Carson, Robert B. Economic Issues Today, Alternative Approaches, New York: St. Martin's Press,
- Cooper, James; and Madigan, Kathleen. "Our Recession's Battlefield, The Economy is Losing Ground." Business Week, 18 February 1991, pp. 27-28.
- Corey, John. "The Myth that America Can't Compete." Business Week, 15 June 1990, pp. 44-48.
- Currie, Malcolm R. "U.S. Must Adjust Its Competitive Attitude, Strategy to Meet New Market Challenges." Aviation Week & Space Technology, 7 May 1990, pp. 99-101.
- "Dancing From Bad To Worse." The Economist, Vol. 317, 17 November 1990, pp. 25-26.
- Detorizos, Michael; Lester, Richard; and Solow, Robert. Made in America, Regaining the Competitive Edge, Cambridge, Massachusetts: MIT Press, 1989.
- Ebel, Robert D.; and Marks, Laurence. "American Competitiveness in the World Economy." Intergovernmental Perspectives, Winter 1990, pp. 5-9.

- "Economic And Financial Indicators." The Economist, Vol. 318, 23 February 1991, pp. 111-112.
- Farrell, Christopher; Weber, Joseph; and Schroeder, Michael. "Why We Should Invest In Human Capital." Business Week, 17 December 1990, pp. 88-90.
- Glazer, Sarah. "Industrial Competitiveness." Congressional Quarterly, Vol. 1, 20 March 1987, pp. 126-135.
- Greenwald, Gerald. "America's Stake in the New Global Economy." USA Today, Vol. 118, November 1989, pp. 26-28.
- Hailstones, Thomas J.; and Mastrianna, Frank V. Contemporary Economic Problems and Issues. South-Western Publishing Company,
- Central Intelligence Agency, Handbook of Economic Statistics 1990. August 1990, pp. 30-34.
- Heilbroner, Robert L.; and Thurow, Lester C. Economics Explained. New York: Touchstone, 1987.
- Hoerr, John. "Sharpening Minds For A Competitive Edge." Business Week, 17 December 1990, pp. 72-78.
- Hoerr, John; Spiro, Leah Nathans; Armstrong, Larry; and Treece, James. "Culture Shock At Home: Working For a Foreign Boss." Business Week, 17 December 1990, pp. 80-84.
- Hormats, Robert D. "The Economic Consequences of the Peace-1989." Survival, Vol. 31, November/December 1989, pp. 484-499.
- House, Karen. "World Leadership." Wall Street Journal Centennial Series, January/February 1989, pp. 7-48.
- "How To Regain The Productive Edge." Fortune, 22 May 1989, pp. 92-104.
- "Innovations 1990." Business Week, 15 June 1990, p. 43.
- "Into Idle." The Economist, Vol. 318, 9 February 1991, pp. 36-41.
- "Is American Competitiveness Slipping?" Made In U.S.A.,
- Ishihara, Shintaro. "Warning From Japan: Trust Yourself, Not Your Leaders." The Washington Post, 7 October 1990, p. D5.
- Johnson, Chalmers. "Japan, Their Behavior, Our Policy." National Interest, Vol. 17, Fall 1989, pp. 17-27.

- Jones, Doris; Hutcheon, Stephen; and Quek, Joyce. "Is Asia Breeding A Whole Pack of Tigers?" Business Week, 15 June 1990, pp. 152-155.
- Kamer, Pearl M., The U.S. Economy in Crises, Adjusting to the New Realities. New York: Praeger Publishers, 1988.
- Kapstein, Jonathan; Maremont Mark; Comes, Frank; and Schares, Gail. "Writing The New Rules For Europe's Merger Game." Business Week, 6 February 1989, pp. 48-49.
- Landau, Ralph. "Capital Investment: Key to Competitiveness and Growth." The Brookings Review, Summer 1990, pp. 52-56.
- Mandel, Michael. "A New Way To Look At The U.S. Economy." Business Week, 17 December 1990, p. 70.
- Mandel, Michael; and Bernstein, Aaron. "Dispelling The Myths That Are Holding Us Back." Business Week, 17 December 1990, pp. 66-70.
- Nasar, Sylvia. "Preparing For A New Economy." Fortune, 26 September 1988, pp. 86-96.
- Neff, Robert; and Nakarmi, Larim. "Will An R&D Scramble Get Korea's Edge Back?" Business Week, 15 June 1990, pp. 158-159.
- Pennar, Karen. "Yes, We're Down. No, We're Not Out." Business Week, 17 December 1990, pp. 62-63.
- Pennar, Karen. "Ask Not What Your Economy Can Do For You..." Business Week, 17 December 1990, pp. 92-93.
- Petre, Peter. "Lifting American Competitiveness." Fortune, 23 April 1990, pp. 56-66.
- Port, Otis. "Why The U.S. Is Losing Its Lead." Business Week, 15 June 1990, pp. 34-39.
- Rapoport, Carla. "Japan's Growing Global Reach." Fortune, 22 May 1989, pp. 48-56.
- Richman, Louis. "How America Can Triumph." Fortune, 18 December 1989, pp. 52-66.
- Rierner, Bianca; Schares, Gail; Templeman, John; and Kapstein, Jonathan. "One Big European Economy Seems Less Like A Dream." Business Week, 13 November 1989, pp. 43-45.
- Selimuddin, Abu K. "Will America Become #2." USA Today, Vol. 118, September 1989, pp. 14-16.

Smith, Emily and Treece, James." Glimpsing The Future In The Numbers." Business Week, 15 June 1990, pp. 194-196.

Stokes, Bruce. "High-Tech Tussle." National Journal, 2 June 1990, pp. 1338-1342.

"The Other Brinkmanship." The Economist, Vol. 318, 5 January 1991, p. 20.

Thomas, Rich. "Now, the Task is Economic Containment." Newsweek, Vol. 116, 16 July 1990, p. 30.