INTRODUCTION

George Bush's trip to Japan is over. Whether his attempts to gain greater access to the Japanese market for American industries will yield results has yet to be seen. What is unfortunate is that much of the American government's criticism of Japan distracts attention from reforms in America that have been making America more competitive. Some American firms, for example, are beginning to adopt business strategies long used by many Japanese companies. One in particular, called strategic alliances, links suppliers and producers in an attempt to increase the competitiveness of both.

While Japanese law allows and the Japanese government even encourages such relationships, America remains generally inhospitable to them. American companies seeking such strategic alliances often are threatened with lawsuits for violating federal antitrust laws. Yet these alliances can increase American competitiveness. They also have been very successful as tools to break into the Japanese market—without help from the United States government and without any grudging favors from Japan. Bush and Congress thus should consider amending or scrapping those antitrust laws that discourage strategic alliances.

Impact on Innovation. American companies tend to purchase their supplies from the cheapest source, which keeps short-term costs down and profits up. While this often is the best way for companies to remain competitive, in some cases this discourages American suppliers and producers from developing the sorts of long-term relationships that spur innovation. Without some guarantee of future purchases, many suppliers cannot or will not invest either in modernizing production or in developing new goods or services for their customers. The result: innovation is slowed or stopped. The Radio Corporation of America (RCA), for

This study updates Bryan T. Johnson, "Increasing American Competitiveness Through Strategic Alliances," Heritage Foundation Backgrounder No. 857, September 26, 1991.
example, invented the video cassette recorder, but found no American suppliers willing to invest in the new manufacturing techniques needed to mass produce tape heads and other essential electronic components. The result: Japanese firms gained production advantages because of their interlocking network of suppliers and producers and Japan now controls the VCR market. This and similar competition from overseas has been forcing many American firms to seek strategic alliances even if it has meant risking legal action under the antitrust laws. U.S. antitrust laws can be used by competitors or by the federal government to prevent companies from engaging in these alliances. Yet strategic alliances are a valuable way for American firms seeking to improve their competitiveness. Recent examples of such strategic alliances:

**American Telephone and Telegraph (AT&T)—Zenith Radio Corporation**

Development of the next generation of television, called high-definition television (HDTV), has been an all-out race between American and Japanese rivals. In the U.S., there have been constant calls from electronics manufacturers for direct U.S. government subsidies. But with very few handouts coming from the federal government, some firms linked resources to develop and produce HDTV. This November, AT&T, based in Murray Hill, New Jersey, and Zenith Electronics Corporation, headquartered in Glenview, Illinois, announced the development of the world’s first all digital HDTV. Japanese firms have developed their HDTVs using the older “analog” transmission signals instead of the new “digital” transmissions. In effect, the American firms “leapfrogged” Japanese designs, without help from Washington.

**International Business Machine (IBM) Corporation—Intel Corporation**

For ten years, IBM, headquartered in Armonk, New York, had a “working relationship” with the Santa Clara, California-based Intel Corporation, a manufacturer of the semiconductors used in various electronic equipment including computers. The relationship was ill-defined and lacked most of the qualities of more recent strategic alliances. Last month, however, IBM and Intel announced a new ten-year arrangement to allow them to work together to design and produce the central processing units (CPU) which are the brains of modern computers. Thus, as IBM develops the next generation computer, it will work with its CPU supplier at each stage of the process to make certain that CPUs are high quality, low cost, and most appropriate for the end product. The alliance will allow both companies to create new products and bring them to market more quickly than if they worked on their own.

**INTERNATIONAL BUSINESS ALLIANCES**

Strategic alliances between American and Japanese firms have helped American firms not only become more competitive but to penetrate the Japanese market as well. Recent examples:
America's inability to gain access to Japan's electronic component parts market has been the subject of much debate between the two country's negotiators and policy makers. Yet some American businesses wisely are not waiting for government action. This October, Alcoa of America, headquartered in Pittsburgh, Pennsylvania, and Kobe Steel of Japan established an alliance that will produce tubing for photocopiers and other products. A $5.3 million plant, to be built in Charlotte, North Carolina, will be paid for equally by the two partners. The alliance will give Alcoa access to Japanese production techniques for manufacturing specialized component parts for precision instruments and products. The companies expect to have total annual sales of $22.8 million by 1993.

This December, Japan's Canon Ltd., announced an alliance with IBM to produce jointly notebook computers to be sold under IBM's brand. Canon will make the liquid crystal displays for the product and IBM will make most of the other components. This will allow IBM to work with Canon to produce state-of-the-art notebook computers. Similar arrangements are being considered by Canon with Hewlett Packard Company of Palo Alto, California, and Texas Instruments Incorporated of Dallas, Texas.

Most consumer electronics equipment such as toasters, refrigerators, and video cassette recorders require what is called “applications specific integrated circuit,” or ASICs. These circuits follow a specific set of instructions each time they are activated. Cadence Design Systems, Inc. of San Jose, California, announced in October, that it would enter an alliance with Fujitsu of Japan to manufacture ASICs. Fujitsu will make the intricate designs and Cadence will manufacture the product. Both companies will work on new types of ASICs for next generation consumer electronic products.

American computer chip companies have lost market share to Japanese companies in the dynamic random access memory (DRAM) chip, used to store the information that the computer uses to run various programs. Since 1986, ostensibly to help beleaguered American firms, the U.S. government has managed the imports and exports of semiconductors through a bilateral agreement with Japan. Yet there has been no significant increase in American exports of DRAMS to Japan. But this November, without U.S. government help, Texas Instruments and Hitachi of Japan announced a joint venture to design and manufacture 64-meg DRAM chips, one of the most advanced computer chips of its kind. The alliance will give Texas Instruments access to Hitachi’s innovative designs, manufacturing techniques, and the Japanese market.
A growing number of companies are positioning themselves as suppliers for high definition television (HDTV). LSI Logic Corporation, an American firm headquartered in Milpitas, California, last year announced an alliance with Japan's Matsushita Electronics to manufacture semiconductor components for HDTVs. The alliance allows LSI Logic access to superior Japanese production techniques, thus improving LSI Logic's ability to participate in this growing industry.

In a related partnership, Micron Technology, Inc., an American electronics manufacturer headquartered in Boise, Idaho, announced last July that it would enter a joint production venture with Sanyo Electric, a Japanese subsidiary of Sanyo Corporation. Their alliance will manufacture memory chips for computer graphics hardware and notebook computers. The product will be sold in Japan, through Sanyo's distribution channels, thus increasing Micron Technology's access to the Japanese market.

As mobile and cordless telephones become increasingly popular, new products are being designed that will require components that are not yet manufactured. In an attempt to cut research and development time and enhance production capacity, Mitsubishi Electric of Japan and AT&T last October announced an alliance that will manufacture new kinds of gallium arsenide computer chips that could be used in mobile and cordless telephones. If successful, the two companies working together will be able to produce the new chips more quickly than if each worked on its own. AT&T, meanwhile, will gain important experience in computer chip production from Mitsubishi, one of Japan's biggest electronics producers.

While American auto parts manufacturers complain about their inability to break into the Japanese market, one American firm has found a way to do so. An alliance announced last October, between Mitsui of Japan and America's Alumex is a 50-50 partnership to develop a new automotive parts production process. The process will involve innovative techniques to produce low-cost, high quality parts. The alliance will then license the process to manufacturers in both Japan and the U.S.

Many American companies are attempting to enter new product lines. Yet research and development costs for new technologies are extremely high. Some American companies deal with this situation by establishing strategic alliances with companies already manufacturing these products. AT&T, for example, announced earlier this month an alliance with NEC of Japan to manufacture DRAM
chips for computers and other products. NEC will share its DRAM chip designs with AT&T. The two companies then jointly will produce these chips allowing AT&T to break into this new product area much more cheaply than if the company had to start from scratch.

### NKK Corporation—Integrated Device Technology (IDT), Inc.

Some firms successfully design new products yet find it difficult to manufacture the product because of inefficient production techniques. In recent years, American firms often have been the better designers but have turned to foreign partners for help in production. Some Japanese companies also seek foreign help in producing Japanese-designed products. An alliance announced last September between NKK of Japan and IDT of Santa Clara, California will produce microprocessors for computers. NKK will supply the designs and IDT will manufacture the microprocessors. This will allow IDT access to new designs.

### Oki Electric, Ltd.—AT&T

AT&T stopped producing cellular phones several years ago, unable to compete with other American and some foreign firms. Yet an alliance, formed last year, with Oki Telecom, a division of Japan’s Oki Electric, could bring AT&T back into the profitable cellular telephone market. Under the alliance, Oki will provide AT&T with cellular phones to be sold in the U.S. under AT&T’s brand name. The deal will allow AT&T access to new technologies in the cellular phone industry.

### Radio Shack Incorporated—Matsushita Electric Industrial Company

American computer and electronics manufacturers have had difficulty bringing new types of “notebook” or “laptop” computers to market. These lighter, portable versions of desktop computers require smaller, more rugged components than their larger versions. To date, Japanese companies have been the principal suppliers of such components. Some American firms are entering the notebook component market through strategic alliances. Matsushita of Japan, has announced a $1.4 million alliance with an American company, Tandy, a division of Radio Shack, to produce advanced notebook computers for sale under the Radio Shack name brand. The production facility will be located in Fort Worth, Texas.

### Toyota Heavy Industries, Ltd.—IBM Corporation

Japanese automobile manufacturers use a computerized production management system to keep quality high. Computers for these systems require the kind of sophisticated software programs best made by American firms. IBM, for example, announced last October that it would enter negotiations with Toyota of Japan to supply IBM software for Toyota’s production computers. If completed, the alliance will allow an American company to participate in this area of the Japanese automobile industry.
Toshiba Corporation—Applied Materials, Inc.

The U.S., last year, imposed a 65 percent tariff on Japanese flat panel display screens used in notebook computers. The International Trade Commission, an agency of the federal government recommended the tariff, arguing that the Japanese were dumping the screens into the U.S., thus harming American producers. Yet in some cases there are no U.S. producers of certain kinds of flat panel displays. The Commission decision forced Japanese companies like Toshiba to move their U.S.-based notebook production facilities, which require the flat panel screens, to other countries, with no such tariff. Many American workers lost their jobs in the process. Toshiba already has an alliance with IBM to produce such displays, but the new tariff has hindered IBM’s ability to bring the screens into the U.S. for its notebook computers. Despite U.S. government trade retaliation, Toshiba is seeking to include American companies in the production of flat panel display screens. Thus, last September, Toshiba and Applied Materials, headquartered in Santa Clara, California, announced an alliance to manufacture equipment used to produce flat panel color display screens. This will allow Applied Materials access to Toshiba’s technology, thus improving Applied Materials’ ability to compete in this product area.

Toshiba Corporation, Siemens A.G.—Integrated Device Technology

As computers become faster and more “intelligent,” the microprocessor, or “brain” of the computer must be redesigned significantly. An alliance announced last October establishes a joint effort between Toshiba of Japan, Siemens A.G. of Germany, and Integrated Device Technology, headquartered in Santa Clara, California, to produce new generations of microprocessors. With the different strengths of each company focused on specific parts of the design and production process, they may bring the product to market sooner than if each company was working on its own.

American–Japanese Steel Alliances

The U.S. steel industry has complained for years that it needs trade protection to give them time to improve their competitive position. Yet two decades of U.S. trade barriers have only slowed modernization and addicted the U.S. industry to federal government favors and protection. A number of American steel companies, however, are finding ways to boost their competitiveness through strategic alliances with Japanese companies. These alliances give American firms access to superior Japanese production techniques. As a result, the U.S. companies become more cost efficient and productive. There are currently twelve major alliances between U.S. and Japanese steel companies. Examples: Nippon Steel Corporation of Japan and Inland Steel Industries of Chicago, Illinois, have a 50-50 alliance called I/N Kote to produce galvanized coating line, a special steel tubing product, Kobe Steel Limited of Japan and USX Corporation of Pittsburgh, Pennsylvania, a 50-50 alliance to manufacture steel tubing. Kawasaki Steel Corporation of Japan and Armco Steel of Parsippany, New Jersey, an alliance to produce special hot and cold rolled steel sheets.
CONCLUSION

The cooperation between suppliers and producers demonstrates the importance of strategic alliances. The trouble is that American firms engaged in such alliances face potential indictment under U.S. antitrust laws. Larger American firms have been forced by international competition to risk legal action by engaging in strategic alliances in order to remain competitive. But smaller firms, unable to afford the risk of huge fines, usually avoid such alliances.

Reforming Antitrust Laws. Congress and the Bush Administration have criticized Japanese businesses for strategic alliances, even as American firms are seeking such arrangements to improve their competitiveness and access to foreign markets. American policy makers, rather than criticizing Japan, should work to reform U.S. antitrust laws so that all American companies will have the option of improving their competitiveness and access to Japanese technologies and markets through strategic alliances, without the threat of legal retaliation.

Bryan T. Johnson
Policy Analyst