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**COVER** Battleship Promontory in the Convoy Range, southern Victoria Land, Antarctica. The surface of the rugged sandstone rocks is colonized by crypto-endolithic microorganisms that cause extensive weathering on the surface. The characteristic weathering pattern may be preserved as trace fossil when changes in the environment result in the death of the community. See page 703. [E. Imre Friedmann, Florida State University, Tallahassee, FL 32306]

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## The Trade Deficit

**T**he failure of the United States to compete successfully in world trade is emerging as a hot political issue. Recognition of the growing trade deficit was slow in coming, and a cure for it may not be quick or easy. It has been estimated that changes in the value of the dollar will lead to a reduction of the 1986 \$170-billion trade deficit by \$30 billion in 1987, with another \$30-billion drop in 1988. That is not enough.

In the meantime, C. Fred Bergsten, writing in the spring issue of *Foreign Affairs*, has asked some pointed questions. "Can the world's largest debtor nation remain the world's leading power? Can the United States continue to lead its alliance systems as it goes increasingly into debt to the countries that are supposed to be followers? Can it push those countries hard in pursuit of its economic imperatives while insisting on their allegiance on issues of global strategy?"

Bergsten projects that by the end of this decade the net indebtedness of the United States will exceed \$500 billion, and this country will be paying huge sums in debt-servicing costs. In addition, costs of imported oil will be mounting. To achieve balance by 1990, the United States must improve the rest of its annual current-account performance by approximately \$200 billion. Most of this improvement would have to come in trade in manufactured products, an area of competition in which we have been weak lately. Japan would have to accept a decline of \$100 billion in its annual trade balance. Japan and West Germany, which are big exporters, have been under political pressure to stimulate internal consumption. But will they? In particular, Japan, defeated in World War II, is winning the global economic conflict. Why should it change its way of doing business? Japan is deficient in natural resources and must manufacture and export to survive. Its manufacturing capacity is designed to serve an international market, not a domestic one.

Bergsten points out an important psychological factor in the relations between the United States and Japan. The United States, the world's largest debtor, continues to think like a "creditor—dispensing advice to the rest of the world (particularly the other, largely Latin American debtors) while its own budget remains in huge deficit. Japan is the world's largest creditor, but continues to think of itself as a debtor, seeing itself as a vulnerable island nation."

In a talk on Japanese science policy at the AAAS R&D Colloquium on 9 April 1987, Ezra F. Vogel provided insights that are relevant to estimates of future developments. He pointed out that the Japanese are not supermen, but that Westerners tend to underestimate what the Japanese can do when they are determined. They are a proud and strongly patriotic people who formulate important national goals and then work patiently to achieve them. They now have a goal to excel in scientific research, and they have the resources necessary to implement a major effort. They are likely to succeed and thus reinforce their technological capabilities.

In our relations with the Japanese, we set a pattern shortly after World War II that persists to this day. To facilitate economic recovery in Japan we did not object strenuously to protectionist measures on their part. They have been skillful in erecting intricate import control restrictions on all kinds of goods and services and especially those of high technology. We have not erected barriers of anywhere near comparable magnitude. One is reminded of a coin-flipping game in which "heads I win; tails you lose." The Japanese act as if the existence of these historic asymmetrical trade policies are guaranteed. They are skilled at promising changes and in avoiding substantive implementation. One of the side effects of the Japanese tactics is that these are being adopted by other countries such as Korea and Taiwan.

Aroused public opinion is likely ultimately to result in tough measures against Japan and other countries that have large trade surpluses with us. We should not identify them as scapegoats and count on protectionism as a sole cure for our problems. Rather, we should move vigorously to correct some of our deficiencies of foresight and policy such as in education, the chronic budget deficit, and the current practice of many companies to emphasize short-term goals over long-term objectives.—PHILIP H. ABELSON