The Causes of the Deteriorating Trade Balance

The trade deficit cannot be attributed to any single cause. The rising value of the dollar, for example, is behind some of the deterioration in the trade accounts, but what caused the dollar's value to rise and remain high for such a long time? And how do we explain the fact that merchandise trade deficits –albeit modest ones, from the perspective of 1987 –were becoming routine in the 1970s, during which time the dollar's value fluctuated? Teasing apart the various factors behind the trade deficit is like untangling a plate of spaghetti. A complex of forces, acting together, created the situation we have now. These can be divided into two basic categories: macroeconomic forces and the declining competitiveness of U.S. manufacturers.

The Macroeconomic Forces

The role of macroeconomic factors in shaping U.S. trade has been and will continue to be enormously important. Note that the emphasis here is on macroeconomic forces – there are many. Many analyses have seized upon one factor – the U.S. federal budget deficit, for example, or the overvalued dollar – as *the* explanation. This kind of analysis implies (and some state) that making the needed change in the one variable would solve the trade deficit.

Undoubtedly, the rise of the dollar and its persistently high value during much of the early 1980s was important. Similarly the Federal budget deficit was an important part of the chain of events and actions that led to the dollar's ascent. Focusing exclusively on either of these factors, however, is like identifying two strands of spaghetti as the whole meal.

To understand the complex of macroeconomic factors behind the trade deficit, it is important to remember that the current account deficit must be matched by a capital account surplus. In effect, the United States has been able to consume more goods than it has produced since 1981 (or run a current account deficit) by borrowing from abroad (or run a capital account surplus). That the United States was able to attract so much capital was unexpected. Before the 1980s, conventional economic wisdom, based on previous experience, held that consumption in excess of production was a transitory phenomenon; the current account deficit would set in motion a series of events (primarily, currency devaluation) that would eliminate the deficit. To understand why these events did not happen – or more precisely, have not happened yet – we must look at a series of actions, in the United States and abroad, in the 1980s.

One of the most significant changes effected by the Reagan administration in its early months was a shift to a more expansionary fiscal policy. The tax cuts for individuals and businesses were intended as a stimulus. It is doubtful that the primary purpose of the other major shift — an increase in government spending, primarily in defense —was fiscal stimulus, but combined with the tax cuts, that was the result.

Between 1981 (when the Economic Recovery Tax Act was passed and the administration's fiscal policies began to take effect) and 1987, Federal government purchases of goods and services increased by 7.8

percent annually; total government purchases of goods and services (including purchases by State and local governments) rose at an annual rate of 7.7 percent. Expenditures for defense dominated the increase in Federal purchases. They rose at an annual average rate of 9.9 percent; nondefense expenditures increased at an annual rate of 2.3 percent.[15] Significantly, government purchases of goods and services grew at a faster rate than the GNP, which rose at the annual rate of 5.9 percent.

While government expenditures were rising at a relatively rapid pace, receipts grew sluggishly. Federal government receipts — including personal tax and nontax receipts, corporate profits tax accruals, indirect business taxes, and contributions for social insurance —went up only 5.3 percent per year between 1981 and 1986. That difference of 3.3 percentage points per year between government expenditures and receipts inexorably deepened the Federal government deficit, which increased from $64 billion in 1981 to $205 billion in 1986–the largest peacetime Federal deficit ever. In 1987, the gap was narrowed, as expenditures stayed almost flat while receipts rose over 10 percent; the resulting deficit was still $152 billion.

What happened to the other components of GNP, while the Federal government's share was increasing? GNP can be disaggregate in a variety of ways, but the basic formulation is this: GNP equals the sum of government expenditures for goods and services, gross private investment, personal consumption, and net exports. All government expenditures for goods and services — which, in terms of its percentage of GNP, has been on a general downward trend over the postwar period –began to increase from its low point in 1979 (about 19 percent of GNP) to reach its current level, about 20.5 percent in 1987. The increase is disproportionately a result of Federal government spending for goods and services, whose share of GNP increased from about 7 percent in 1979 to about 9 percent in 1987 (figures 7 and 8).

Gross private investment is composed of investment in nonresidential structures, producers' durable equipment, residential investment, and change in business inventories. In the past 40 years, gross private investment has fluctuated without any discernible long-term trend. Investments in producers' durable equipment, however, has been trending slightly upward since the early 1960s, and maintained a share of GNP well within the recent historical range of variation during the 1980s. The tax cuts of the Economic **Recovery** Tax Act of 1981 (ERTA) affected both businesses and individuals. ERTA made it more profitable for businesses to invest, particularly in buildings and equipment. As a result, private investment increased 5.8 percent per year between 1981 and 1986. This rate of growth is slight-

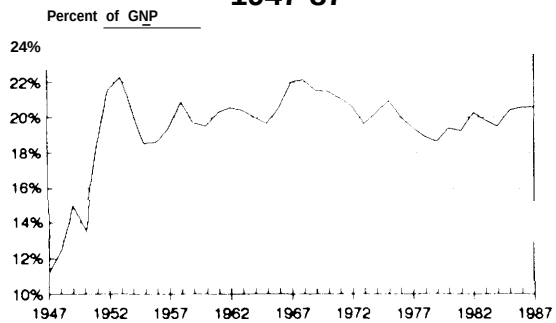
15 U.S. Department of Commerce, Bureau of Economic Analysis, "National Income and Product Accounts Tables," Survey of Current Business, June 1987; and U.S. Department of Commerce, Bureau of Economic Analysis, The National Income and Product Accounts of the United States, 1929-1982 Statistical Tables (Washington, DC: U.S. Government Printing Office, September 1986).

16 This does not include transfer payments, such as Social Security, Medicare, welfare payments, and Medicaid. Transfer payments have risen greatly during the postwar period. In the GNP accounts, transfer payments are included in personal consumption.

17 No trend is discernible in nominal dollars. Although GNP disaggregations are available in deflated dollars, many of the constant-dollar series show trends that seem to belie other well-established data and evidence. For example, in deflated (1982) dollars, net exports in the national income and product accounts were negative (implying trade deficits) during much of the 1960s, but positive during much of the 1970s. OTA is currently investigating how constant-dollar series are generated, in order to understand the apparent anomalies of constant-dollar figures. For now, trends m components of GNP over time are reported in nominal dollars.

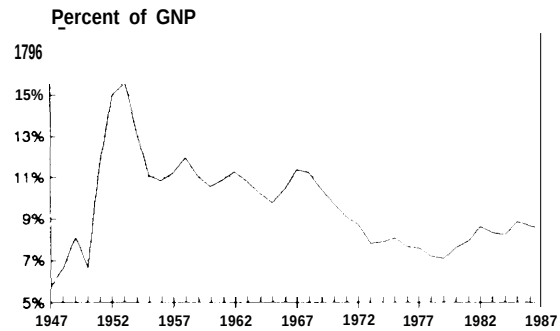
18 Stephen A. Meyer, "Trade Deficits and the Dollar: A Macroeconomic Perspective," Federal Reserve Bank of Philadelphia Business Review, Sept.-Oct. 1986.

Figure 7.
All Government Purchases, Percent of GNP
1947-87



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts, Table 1.1, electronic data, 1987.

Figure 8.
Federal Government Purchases, Percent of GNP



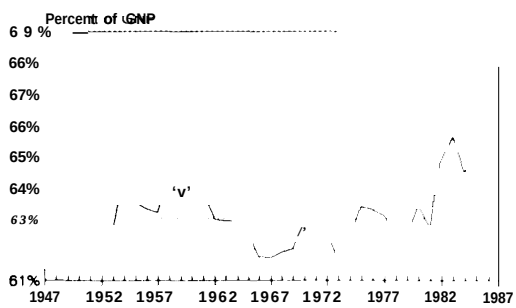
SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts, Table 1.1, electronic data, 1987,

ly slower than the rate of growth of GNP, but this is partly a result of the fact that gross private investment was already quite high in 1981, compared with any previous year or with 1982 and 1983. If 1980 is chosen as the starting point, the rate of growth of private investment was 7.8 percent annually; if 1979 is the starting point, the rate of growth was 6 percent. In short, private investment roughly kept pace with GNP in the 1980s, and fluctuated within a range that was normal for the postwar period. What is surprising about this, however, is that investment maintained its share of GNP during a period of high (by historical standards) real interest rates.

Personal consumption is composed of expenditures on durable goods, nondurable goods, and services. Personal consumption, as a percent of GNP, has risen sharply in the 1980s. The percentage share fluctuated without much sign of a long term trend from the 1950s through the 1970s, varying between about 62 percent of GNP and 64 percent (figure 9). In 1982, after the recession, personal consumption expenditures shot up to about 65 percent, and rose again in 1984 to two-thirds of GNP. According to many economists, consumer spending has buoyed the economic recovery since the 1982 recession.

The story is different for net exports. From the 1950s until 1983, net exports' share of GNP fluctuated within historical norms. After 1983, as would be expected from the performance of other trade accounts, the percentage share plummeted, becoming a drain on-GNP to the tune of nearly -3 percent per year by 1987.

Figure 9.
Personal Consumption, Percent of GNP



SOURCE: International Monetary Fund, International Financial Statistics, 1987 Yearbook, and Vol. 41, No. 4, (Washington, DC: International Monetary Fund, 1987, 1988) p. 229, 299, 523.

In sum, the three largest components of GNP –government spending, consumption, and investment — continued at normal or higher-than-normal rates, while the Federal government deficit mushroomed. The large budget deficits increased the demands on capital and raised interest rates, particularly relative to interest rates in other developed nations (figure 10). Rather than crowding out private investment, though, the high interest rates unexpectedly served to draw in capital from other countries. At about the same time, around 1982, the growth of U.S. investment abroad slowed (figure 11).

As noted, this sequence of events was quite unexpected. International interest rates have diverged before without causing the massive and sustained inflow of foreign capital that the United States experienced in the 1980s. One important difference with past periods was that, in contrast to the United States, most developed nations were pursuing different macroeconomic policies, contracting their national budget deficits and easing the pressure on capital. In the rest of the OECD nations, the public sector budget deficit rose only 1 percentage point of GNP between 1979 and 1982, while in the United States it rose 5.5 percentage points. Moreover, there were surplus savings in the other OECD nations during the recovery from the 1982 recession.[20] Since these surplus savings were not needed in these nations to finance their own deficits, and U.S. interest rates were high, the United States became an attractive place to invest foreign savings.[21]

The demand for dollars to invest in dollar-denominated assets pushed the dollar's value up relative to the currencies of most of our trading partners.[22] By 1981, the real exchange value of the dollar was headed upward, and the rising trend persisted until the first quarter of 1985.[23] Overall, the dollar appreciated 49 percent, in real terms, against the deflated currencies of major trading partners of the United States, between 1980 and 1985. Imports were cheaper, exports became more difficult to sell, and the trade accounts of the U.S. plunged into deep deficit.

The macroeconomic forces responsible for this situation were multiple. The combination of fiscal stimulus in the United States and contraction abroad, rising consumption and rapid recovery of investment after the 1982 recession, changes in tax law, rising interest rates in the United States and relatively constant interest rates abroad, and the slow recovery of investment in other OECD nations all played apart. In addition, the debt crisis in countries such as Brazil and Mexico

19 OECD is the Organization for Economic Co-operation and Development, and its member nations are Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

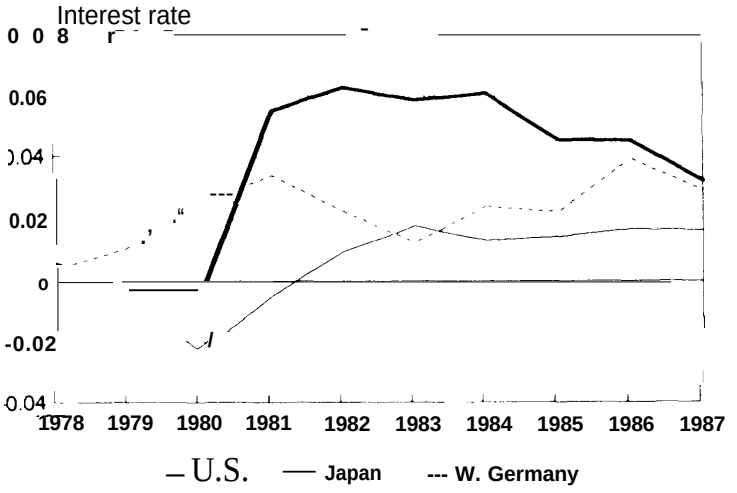
20 Stephen Marris, Deficits and the Dollar: The World Economy at Risk (Washington, DC Institute for International Economics, December 1985), pp. 8-11.

21 Another explanation that was advanced for the strong flow of foreign investment funds to America was that the United States represented a safe haven in a troubled and uncertain world. This argument, while popular, is not particularly persuasive. First, inflows of foreign capital were much the same in 1979-80, when the U.S. economy was perceived as unstable, as in 1983-84, when a strong recovery led to perceptions of a safe haven in America. Furthermore, the pull of high real interest rates is probably a sufficient explanation for the inflow of foreign capital. See Marns, op. cit., pp. 28-9, and William H. Branson, "Causes of Appreciation and Volatility of the Dollar," NBER Reprint No. 785 (Cambridge, MA: National Bureau of Economic Research, Inc., 198S).

22 Canada is something of an exception; the Canadian dollar was already weak relative to the American dollar, but became weaker. Some of the Asian NICs' currencies did not depreciate very much, in some cases because they were pegged to the dollar.

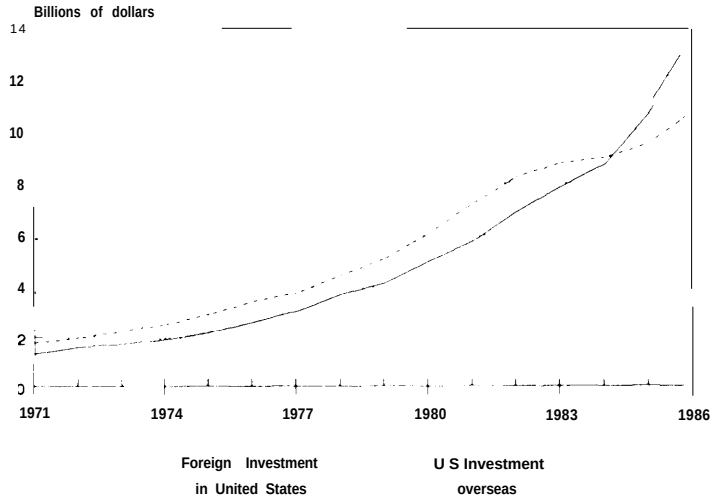
23 See, for example, Paul R Krugman and Richard E. Baldwin, "The Persistence of the U.S. Trade Deficit," Brookings Papers on Economic Activity, 1:1987; and Meyer, op. cit. Meyer also points out that the dollar's value rose by 18 percent relative to Canadian dollars, 18 percent against the Japanese yen, 89 percent against the German mark, 117 percent against the British pound, and 149 percent against the French franc between 1980 and its peak in 1985.

Figure 10.
Short Term Real Interest Rates, United States, Japan, and West Germany



SOURCE: International Monetary Fund, International Financial Statistics, 1987 Yearbook, and Vol. 41, No. 4, (Washington, DC: International Monetary Fund, 1987, 1988) p. 229, 299, 523.

Figure 11.
U.S. International Investment Position Cumulative, 1971-86



SOURCE: U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, June, 1986, U.S. International Transactions, table 1,

curtailed U.S. exports to those countries. It is tempting to zero in on one thing—most commonly, the value of the dollar or the budget deficit –but this kind of oversimplification is misleading when it comes to choosing the policies necessary to remedy the situation, and raises false hopes of a single silver-bullet solution.

It is equally wrong to focus on macroeconomic causes of the trade deficit, and macroeconomic solutions, ignoring the competitiveness issue. Far too much analysis has been devoted to trying to prove that either macroeconomic factors *or* competitiveness is the root of the trade deficit, without recognizing the interplay and synergism between them.

The Declining Competitiveness of U.S. Manufacturing

Several features of the trade picture in the past two decades indicate that the United States – more specifically, U.S. manufacturing – has lost competitive prowess. Since the 1970s, it appears that the United States has been able to keep its international trade accounts out of the red only when the dollar is declining. The strength of the dollar in the 1980s was not a unique occurrence in our history: by some measures, the dollar's peak value in 1985 was comparable to its exchange-rate value in 1970. But in 1970 the United States had a current account surplus of $2.3 billion, compared with deficits of $107 billion in 1984 and $116 billion in 1985.[24]

It is noteworthy that U.S. current account and manufacturing trade performance began deteriorating *before* the rise of the dollar (see figures 1 and 2). When agricultural exports and petroleum imports — the two largest sources of nonmanufactured items in the merchandise trade account–are subtracted from merchandise imports and exports, the picture that emerges is one of deepening U.S. trade deficits since the early 1970s. Significantly, the few years of surplus — 1974, 1975, 1980 and 1981 –were associated either with serious recessions (which generally jampen demand for imports) or with an exceptionally low dollar.

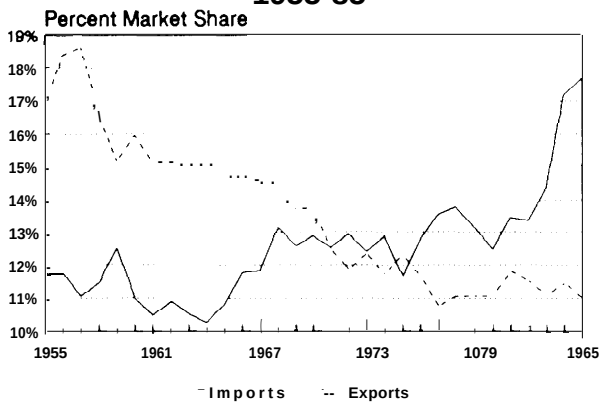
The trends in U.S. share of world markets tell much the same story. American manufacturers have been losing their share of both domestic and foreign markets for some time. Between 1970 and 1980, the U.S. share of world imports rose slightly, from 12.1 to 12.5 percent, but its share of world exports dropped from 13.6 percent to 10.9 percent (figure 12).[25] Between 1980 and 1986, American exporters' sales of manufactured items fell 15 percent, while countries outside the United States were increasing their imports from all sources by 22 percent (in volume terms).[26] Another calculation shows a general drop in the world market share of U.S. manufactures after 1975 (interrupted only by a brief rise at the end of the decade when the dollar fell), and then a steep

24 Krugman and Baldwin, op. cit., pp. 2-S. These authors present evidence suggesting that the real value of the dollar that would bring our trade into balance has declined over the long term.

25 United Nations, 1980 Yearbook of International Trade Statistics, Volume I: Trade by Count T, Department of International Economic and Social Affairs Statistical Office, (New York: United Nations, 1981).

26 Rimmer De Vries and Derek Hargreaves, "The Dollar's Decline and Trade: Mission Accomplished?" Challenge, January-February 1987, p. 39.

Figure 12.
U.S. Share of World Import and Export Markets
1955-85



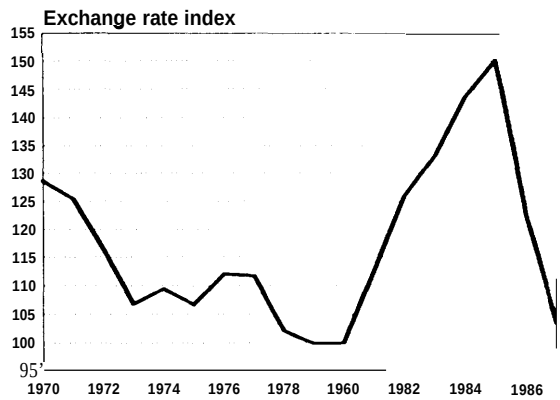
SOURCE: United Nations, International Trade Statistics Yearbook (United Nations: New York), Volume 1, table A, various years 1962-84.

decline of 8 percentage points from 1980 to 1985.[27]

Even U.S. exports of high-technology products–from the very sectors in which American firms are supposed to shine – have lost market share. Often high-technology sectors, only two – office, computing and accounting machines, and agricultural chemicals – gained in share of world exports between 1965 and 1980. Seven high-technology industries (engines and turbines, professional and scientific instruments, electrical equipment and components, optical and medical instruments, drugs and medicines, plastic and synthetic materials, and industries chemicals) lost shares of world exports, and one (aircraft and parts) remained about the same. These losses of market share occurred *before* the rise of the dollar in the 1980s. Since the dollar's fall after 1985, America's high technology trade picture has improved somewhat. Following a deficit in 1986, high technology goods trade showed a small surplus of $600 million in 1987.

Another indicator of a decline in competitiveness is the remarkably slow response of U.S. imports and exports to the dollar's fall. From its peak in the first quarter of 1985, the dollar has fallen back to the lows of the late 1970s (figure 13). But the trade deficit has

Figure 13.
Index of Effective Exchange Rates for the U.S. Dollar, 1976-86
1980 = 100



27 Paul R Krugman and George N. Hatsopoulos, "The Problem of U.S. Competitiveness in Manufacturing," New England Economic Review, Jan./Feb. 1987, p. 20. Krugman and Hatsopoulos have adjusted U.S. world market share data to eliminate two extraneous factors, First, the adjustment screens out the effects different economic performance of different regions or countries. For example, an economic slump in Europe might curtail European imports, thus reducing the American manufacturers' share of world markets without reflecting a fundamental improvement in competitiveness. Second, the adjustment includes the U.S. market is included in the world market,

28 Global Competition: The New Reality, Report of the President's Commission on Industrial Competitiveness (Washington, DC: U.S. Government Printing Office, January 198S), p. 6.

only just begun to fall substantially. In 1987, over 2 years after the dollar began to fall, the merchandise trade deficit set anew record of $159 billion.

That trade deficits should continue to rise for a time after a drop in the dollar's value is not unexpected. Since firms buying from overseas suppliers tend to make extended commitments, U.S. importers would normally continue to buy from offshore suppliers even after the dollar's adjustment. At the same time, importers must pay more for foreign-made goods when the dollar is falling, thus making imports more expensive. The case of exports is parallel. Even after the dollar's fall, U.S. firms wishing to sell offshore have to make special efforts to overcome buyer-supplier relationships built during the time when U.S. product prices were higher, and such efforts take time. This accounts for the usual and expected lag– known as a J-curve –between the adjustment of currency value and and a turnaround in the trade deficit.

However, a lag of 3 years since the dollar peaked before seeing any really significant turnaround is unusual and surprising. The merchandise trade deficit abated somewhat in early 1988, but the deficit was still running at an annual rate of well over $100 billion. In contrast, the response to the dollar's rise — a rise in imports of manufactured goods and a drop in exports – was much swifter than the opposite adjustment when the dollar fell. This fact, in combination with others, suggests that U.S.-made goods are less attractive than foreign-made goods, the price effects of currency adjustment aside. In some cases, the attractiveness of foreign products reflects very low labor costs or government subsidy; in other cases it arises from high quality and reliability.

The trade picture outlined above is certainly not what one would expect of a nation whose manufacturing industries are holding their own in international competition. While trade and market share figures do not indisputably prove the case for loss of competitiveness, they are signs of trouble – especially since manufacturing trade slipped into deficit in the 1970s, with surpluses appearing thereafter only when the dollar's value dropped, or in recession years. And behind the aggregate trade figures are the experiences of individual industries: American manufacturers of consumer electronics, steel, automobiles, and semiconductors successively lost out to competitors who offered better quality goods or lower prices, and these losses began well before the damaging rise of the dollar.

Other indicators as well point to loss of competitiveness in manufacturing. There is evidence that the share of the manufacturing sector in the U.S. economy has declined, while consumption of manufactured goods, as a share of total spending, is greater than ever – the difference, of course, being made up by imports. Productivity growth of American manufacturing has lagged, especially behind Japan's. In addition, there are signs that American leadership in technology-the foundation for high productivity and excellence in manufacturing – is eroding. Further discussion of these trends and indicators appears in the following sections.

29 It is important to note, however, that while exports have risen since the drop of the dollar, imports have not fallen.

To put the different indicators into perspective, it is useful to define competitiveness. For a firm, competitiveness is the ability to design, develop, manufacture, and market products at home and in other nations, in competition with other firms.[30] For a nation, it means doing all this without a decline in the real standards of living of its citizens.[31] This means, for an advanced nation like the United States, exploiting technology, in its broadest sense, to provide the rising productivity and superior product quality that make goods from high-wage nations attractive and affordable.[32] Even with the dollar's fall, most nations have lower wages than the United States. Moreover, the range of products low-wage nations make is rapidly expanding. It is very risky — in fact, probably infeasible – to limit our production to only the most knowledge-intensive goods and services and jettison traditional sectors where low-wage nations have production cost advantages. We must compete effectively in many product lines with low-wage nations, and with producers from developed nations who have excellent records in product design and performance.

Not all the signs are negative. Some American industries perform much better than others; the United States is by no means at the bottom of the list among nations in competitive performance and some of the signs (e.g., growth in manufacturing productivity) have recently improved. Nor is it necessary for the United States to outstrip everyone else. Economic growth and rising living standards in other countries are inevitable and desirable. However, a relative decline in U.S. performance is a matter of concern, for that is the road to second-class economic status.

We have to recognize that it is difficult for a high-wage, highly productive nation like the United States to make the cost-saving, productivity-enhancing, quality-improving adjustments necessary to stay at the cutting edge. Despite the difficulties, it is necessary, in view of the efforts many developed and developing nations are making to catchup in technology and penetrate the American market – the richest, largest, and one of the most open in the world. Catching up is not easy, but is often a more straightforward and manageable proposition than staying ahead. Moreover, development aid and parts of the international trade regime (e.g., the Generalized System of Preferences, allowing special exemptions from tariffs to developing countries) are intended to help the process along. Policies of individual countries also have an important effect. Many nations –developed, less developed, and newly industrializing – have trade and industrial policies aimed at promoting exports while keeping their home markets relatively protected.[33]

30 U.S. Congress, Office of Technology Assessment, International Competitiveness in Electronics, OTA-ISC-200 (Washington, DC: U.S. Government Printing Office, November 1983), p. 4.

31 Global Competition, op. cit. p. 13.

32 Technology is here used to mean not only hardware and machinery, but also the software, human skills, and managerial know-how to put together all the elements of production effectively.

33 The conduct and performance of policies aimed at industrial development and competitiveness in several nations, including Japan and newly industrializing Asian countries, will be explored in **the full assessment of Technology, Innovation, and** U.S. Trade.