THE LAST TEN YEARS have been a time of troubles for most of the world's industrial economies. The growth of output and productivity has slowed. Both inflation and unemployment have averaged substantially higher than in earlier postwar years. And the decade has produced the two worst recessions of the postwar period.

In the United States, this experience has spawned two new economic doctrines, each purporting to explain the source of at least some of our economic ills and offering a plan of action to deal with them. These economic theories originated outside of the mainstream of professional economic thought. The first of them is supply-side economics, which is based on a vast exaggeration of the incentive effects of lower taxes. It has had a spectacular political success, and was installed in early 1981 as official U.S. government policy.

The second of these new theories—and the latest entry in the competition for the hearts and minds of political candidates—is a set of economic ideas and policy recommendations that goes by the name "industrial policy." It has been the subject of a growing stream of books and articles; it has been endorsed as a concept by the AFL-CIO; its precepts have been incorporated in a number of bills now before the Congress; and it is receiving a sympathetic hearing from many of the candidates for the 1984 Democratic presidential nomination.

The phrase "industrial policy" means somewhat different things to different people; it refers not so much to a single theory as to a loose collection of similar diagnoses and proposals. The diagnoses generally cluster around two basic propositions:

First, the United States has been "de-industrializing." The share of national output generated by manufacturing has been falling in recent years while the share attributable to services has been growing. Within manufacturing a number of essential heavy industries are in absolute decline, and the United States is no longer at the cutting edge of technological advance in the newer, high-tech industries. We are becoming increasingly uncompetitive in world markets. These are the symptoms of deep-seated structural problems; they will not be cured by macroeconomic measures aimed at overall economic growth. The private market is not directing investment to the right places; older manufacturing industries cannot find the funds they need to rehabilitate themselves, and promising new firms in the advancing sectors are often unable to secure as much venture capital as they need for growth. American labor finds it difficult to make the necessary transition from older, declining industries to newer ones with good growth potential and high value-added per worker; this is partly because investment is being directed to the wrong

Charles L. Schultze is a senior fellow in the Economic Studies program at Brookings. He was chairman of the Council of Economic Advisors from 1977 to 1980 and director of the U.S. Bureau of the Budget from 1965 to 1967. His books include The Public Use of Private Interest.

Charles L. Schultze
industries and partly because laid-off workers do not have the skills needed or are not in the right locations. And when these displaced workers eventually do get reemployed it is too often in low-skill jobs paying low wages. We are in danger of becoming a nation of hamburger joints and boutique shops.

Second, some other countries—Japan being the preeminent example—have developed governmental policies that successfully promote vigorous industrial growth. The Japanese government identifies potential winners in the competition for world markets and encourages their growth, while simultaneously protecting and easing the burden of adjustment for older but essential heavy industries. Farsighted officials in the Japanese Ministry of International Trade and Industry (MITI), working closely with cooperative Japanese business leaders and bankers, plan and organize, years in advance, such industrial achievements as the penetration of world automobile markets, the development of automated steel mills producing at water's edge for exports, the 256K memory chip, and now the ultimate supercomputer.

The various proponents of industrial policy offer a wide range of suggestions to deal with the structural problems they identify. Many of their proposals involve new or modified federal initiatives in traditional areas: expanded support for technical education; research and development; and programs to retrain workers. Whatever the merits of these ideas, they do not constitute a major new thrust in economic policy. What is new, however, is the proposal that government deliberately set out to plan and create an industrial structure, and a pattern of output and investment, significantly different from what the market would have produced. Two leading advocates of industrial policy, Ira Magaziner and Robert Reich, put the matter this way: "We suggest that U.S. companies and the government develop a coherent and coordinated industrial policy whose aim is to raise the real income of our citizens by improving the patterns of our investments rather than by focusing only on aggregate investment levels."

Industrial policy thus aims to channel the flow of private investment towards some firms and industries—and necessarily, therefore, away from others. The government develops, at least in broad outline, an explicit conception of the direction in which industrial structure ought to be evolving, and then adopts a set of tax, loan, trade, regulatory, and other policies to lead economic activity along the desired path.

Industrial policy typically has two aspects—"picking the winners" and "protecting the losers"—and proponents sometimes disagree as to the relative emphasis to be placed on each. "Picking the winners" involves identifying industries that are at the cutting edge of economic progress, with such characteristics as high growth potential and high value-added per worker, and then providing investment subsidies, research support, and other assistance to existing firms and new entrants in those industries. "Protecting the losers," on the other hand, involves supporting and presumably helping to rehabilitate major declining industries. The government measures that would be deployed for this purpose include creation of barriers against competition from imports, special tax breaks, subsidized loans, and selectively favorable regulatory treatment. In most versions of industrial policy, the government, in a switch from current practice, would require that labor and management in these declining industries accept major reforms—wage restraint, reduction of featherbedding rules, and improved managerial practices—as preconditions for assistance.

In addition to the two explicit propositions noted above—that America has been de-industrializing and that the government of Japan has successfully managed industrial adjustment—there are two implicit premises on which the case for a U.S. industrial policy rests. The first of these is that the government has the analytical capability to determine with greater success than market forces what industrial structure is appropriate, who the potential winners are, which of the losers should be saved, and how they should be restructured. The second is that the American political system would (or could) make such critical choices among firms, individuals, and regions on the basis of economic criteria rather than political pressures.

In fact, as we shall see, reality does not square with any of the four premises on which the advocates of industrial policy rest their case. America is not de-industrializing. Japan does not owe its industrial success to its industrial policy. Government is not able to devise a "winning" industrial structure. Finally, it is not possible in the American political system to pick and choose among individual firms and regions in the substantive, efficiency-driven way envisaged by advocates of industrial policy.

De-industrialization: A Nonexistent Trend

America has not been de-industrializing. Throughout the industrial world, economic performance in the 1970s did fall behind the record of the 1960s. But relative to the industries of other countries, American industry performed quite well by almost all standards. During the decade of the 1970s, before the current recession began, the United States was vastly superior to the major European countries and to Japan in the...
generation of new jobs. Total employment grew by 24 percent in the United States during that decade. The next best performer was Japan, with a 9 percent increase. Other countries were far behind; in Germany, for example, employment actually fell. Moreover, the United States was one of only three major industrial countries—Italy and Canada having been the others—with any increase in manufacturing employment. According to OECD data, manufacturing production in the United States, while rising less rapidly than production in Japan, grew faster than the European average and outstripped the gains made in Germany, a country that is usually mentioned, along with Japan, as a leading example of industrial strength.¹

Manufacturing production in the United States typically rises more in business cycle expansions, and falls further in contractions, than does total GNP. After adjustment for this regular cyclical pattern—and contrary to popular impression—the share of private domestic GNP produced by manufacturing industries did not decline significantly in the 1970s.⁴ The proportion of total U.S. employment accounted for by manufacturing has been falling throughout the postwar period, but this principally reflects the fact that productivity growth (output per person) has continued to grow faster in manufacturing than in most other parts of the economy.

The relatively good performance of the industrial sector in the 1970s was partly due to a very large increase during the decade—in fact, a doubling—in exports of American manufactured goods. This was a good bit less than the rise in Japanese exports, but substantially higher than the increase experienced by Europe. America's export strength was aided by a decline in the real exchange value of the dollar, from an overvalued level at the beginning of the decade to what many people believed was a somewhat undervalued level at the end. Since it is unlikely that the value of the dollar will fall steadily over the long run, the share of U.S. economic activity accounted for by the manufacturing sector could conceivably decline very slowly. That would be a natural development, however, in no way reflecting a structural malaise requiring new governmental policies.

The United States does have some old-line heavy industries with deep-seated structural problems—especially the steel and automobile industries. But they are not typical of American industry generally. There is no evidence that in periods of reasonably normal prosperity American labor and capital are incapable of making the gradual transitions that are always required in a dynamic economy, as demand and output shift from older industries to newer ones at the forefront of technological advances.

Indeed, American industry successfully made some important and desirable structural adjustments in the 1970s, even though that was a decade of economic difficulties throughout the world. Thus, Robert Lawrence of Brookings reports that the U.S. international trade surplus in the products of high-tech industries grew from $12 billion in 1972 to $40 billion in 1979, while the trade deficit in other manufactured products rose from $15 billion to $35 billion over the same period. Yet, according to a study done for the National Commission for Employment Policy, displaced workers—defined as unemployed people whose last jobs were in declining industries and who had been out of work for more than eight weeks—amounted to only 0.4 percent of the labor force in March, 1980. In addition, although the total unemployment rate was higher in the United States than in most large European countries as the 1970s drew to a close, long-term unemployment was substantially lower.⁶

But even if it is true that the United States was not de-industrializing in the 1970s, has not the industrial sector performed very much worse than the economy in general during the past several years? Yes, it has. From 1981 through the fourth quarter of 1982—the trough of the recession—GNP declined by 2.2 percent while manufacturing production fell by 10.6 percent. But the outsized drop in manufacturing production occurred for two reasons having nothing to do with de-industrialization. First, as noted above, manufacturing production always falls faster than GNP during recessions, and rises faster during booms. In the first half of 1983, for example, as GNP began to recover at a 5.9 percent annual rate, manufacturing production jumped up at an 16.2 percent rate. Second, the huge rise in the real exchange value of the dollar over the last two years discouraged U.S. exports and encouraged foreign imports—a development that had an especially depressing effect on American manufacturing industries. But the overvaluation of the dollar was obviously not caused by structural deficiencies in American industry; it was principally the result of the combination of tight money and loose budgetary policy that gave us unprecedentedly high interest rates. What is needed is a better mix of macroeconomic policies, not a new government agency to influence the pattern of industrial investment.

What about the dramatic fall in the rate of productivity growth in the United States during the 1970s? Does that not reflect, at least in part, a major structural problem in U.S. manufacturing sector? The pace of productivity growth did, indeed, decrease. While the reasons for this decline are still something of a mystery, a few things are known. First, the decline was worldwide—and its magnitude in the United States was about mid-

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¹ The Brookings Review Fall 1983 5
The sharp decline in that growth, in manufacturing and elsewhere, is the most serious long-run problem facing the U.S. economy. But there is no evidence that this decline stems from a tendency for the private market system to allocate investment to the “wrong” places—away from the manufacturing sector or, within manufacturing, to the wrong firms or industries. The decrease in productivity growth in no way bolsters the case for an industrial policy.

A Closer Look at the Japanese Success

The postwar flourishing of Japan’s economy is frequently cited as the premier example of how successful an industrial policy can be. The Japanese do have a way of working cooperatively towards national economic objectives without getting strangled in bureaucratic red tape or dulling competition among business firms. But the contributions of MITI and of industrial policy to Japan’s postwar success have been far overstated. Other factors were primarily responsible for the phenomenal growth that the Japanese economy enjoyed until very recently.

First, over the past two decades, the Japanese saved and invested some 30 to 35 percent of their GNP, compared to 17 to 20 percent in the United States. Second, with an industrial plant technologically far behind those of the United States and Western Europe, Japanese business firms were able to put the huge savings to work at moderate risk and with good returns by upgrading their capital stock with known technologies. Countries that were much nearer to the technological frontier, like the United States, had to depend more heavily for their economic growth on the gradual advance of technical knowledge. Third, the Japanese appear to have developed a unique set of cooperative labor-management relationships that promote high quality work and rapid productivity growth.

Throughout the postwar period, the Japanese government in general, and MITI in specific, did act on a broad view of what was required for rapid economic growth in the particular circumstances facing Japan. For example, private savings and investment were encouraged by tax laws and other measures. Up through the early 1970s, macroeconomic policies were highly expansive, but with a combination of very stimulative monetary policies and large budget surpluses. Thus, the government endeavored to encourage the rapid expansion of both demand and supply. Since it needed to import virtually all of its fuel and raw materials, Japan discouraged the import of manufactured goods. Especially in the earlier part of postwar history, when it was still lagging behind other major countries in industrial technology, Japan protected large segments of its home market against import competition.

But while a broad strategy along these lines did guide Japanese economic policy during the postwar period, that strategy did not dictate the detailed structure of Japanese industry. The major decisions about where funds would be invested were made by Japanese business leaders, not by MITI. Hugh Patrick, professor of Far Eastern economics at Yale, has put forward this assessment:

Indeed, looking at Japanese industrial development as a whole in the postwar period, I think the predominant source of its success was the entrepreneural vigor of private enterprises that invested a good deal and took a lot of risks. The main role of the government was to provide an accommodating and supportive environment for the market, rather than providing leadership or direction. Unquestionably government planning bodies were important in a few industrial sectors, but not in many others, which flourished on their own.9

The Japanese government, through its Fiscal Investment and Loan Program (FILP), does control substantial investment sums, amounting in 1980 to some $80 billion in direct investments, subsidized loans, and loan guarantees. Such a large investment budget does seem to offer potential leverage for carrying out an industrial policy. In fact, however, as Brookings’ Philip Trezise carefully documented in the Spring, 1983, issue of the Review, the government’s investment portfolio is spread across a wide range of enterprises in response to regional, political, and special interest pressures. In 1979, the FILP budget was allocated among some fifty separate agencies, plus a number of local governments. The local governments, together with four agencies (a housing loan corporation, two small business financing entities, and the Japanese National Railways), got a total of 60 percent of the funds. Another 27 percent went to such entities as the Ex-Im Bank; the Japan Highway Corporation; the Japan Housing Corporation; the Agriculture, Forestry, and Fisheries Corporation; and the Japan Development Bank.

The Japan Development Bank (JDB), in turn, seems a likely candidate for the role of financing an industrial
policy aimed at building up major growth industries. The facts belie this conjecture, too. In the first twenty years of the JDB’s life, according to Trezise, three-quarters of its funds went to merchant shipping, electric utilities, and regional and urban development. The burgeoning steel industry, on the other hand, received during these two decades less than one percent ($110 million) of the JDB’s financing. Since 1972, in Japan as in the United States, public investment has emphasized energy and pollution control—and the JDB budget reflects this trend. But JDB investment in the development of new technologies outside of the energy industry has averaged only $331 million a year over the past decade.

Thus, in Japan as in any other democratic country, the public investment budget has been divvied up in response to diverse political pressures. It has not been a major instrument for concentrating investment resources in carefully selected growth industries. Indeed, if one changed the institutional labels, the Japanese government’s investment budget looks remarkably like what might have emerged from a House and Senate conference committee on public works in the United States Congress.

All of this is not to suggest that MITI had no influence on the direction of Japanese industrial investment. For example, MITI is widely, and probably quite correctly, cited as having played a major role in organizing the very successful Japanese penetration of the memory chip segment of the world semiconductor market. As Paul Krugman has pointed out, however, the relevant question is whether this particular use of Japanese savings generated a higher return for the nation than would have been earned had the market allocated the funds. It may have done so, but we do not yet know the answer.

MITI has also had some major failures. For instance, MITI tried very hard—and, as is evident, to no avail—to keep Honda out of the automobile business and to consolidate Japanese auto production into a few giant companies. MITI also attempted to get a major commercial aircraft industry going in Japan, but the banks failed to follow MITI’s lead and would not provide the necessary capital. Those who attribute Japan’s economic success principally to MITI’s industrial policy seem to be suggesting that without MITI the huge 30 to 35 percent of GNP that the Japanese invested in the past several decades would have gone mainly into such industries as textiles, shoes, plastic souvenirs, and fisheries. This is sheer nonsense. Given the quality of Japanese business executives, those massive investment funds probably would have wound up roughly where they actually did. And to the extent that there would have been differences, there is no reason to believe that MITI’s influence, on balance, improved the choices in any major way.

The combination that worked so well for Japan—a huge saving rate, aggressive business leaders, and a backlog of modern technology waiting to be exploited—may now be faltering. In particular, as Japan has caught up to the technological frontier of other Western countries, the potential for large returns from investment in known technologies has been reduced. The propensity to save remains high, but investment opportunities appear to have dwindled. Partly for this reason, Japanese economic growth, while still above that in other advanced countries, fell from an average of 9.9 percent a year between 1960 and 1973 to 3.5 percent a year between 1973 and 1983.11

Identifying the “Right” Industrial Structure

Despite the lack of evidence that the United States has been de-industrializing or that the key to Japan’s economic success has been its industrial policy, advocates of an industrial policy for the United States nevertheless propose that the federal government play a much enlarged role in determining the structure of American industry. The centerpiece of an industrial policy is some kind of a development bank—a new Reconstruction Finance Corporation—with authority to do some or all of the following: provide loans, loan guarantees, and subsidies to business firms and regional development bodies; certify firms as being eligible for special tax breaks; recommend measures to protect domestic industries against competition from imports; and negotiate restructuring agreements with labor and management in firms and industries that are in trouble and are candidates for assistance. In many versions of industrial policy, the new RFC would be governed, or at least be advised, by a tripartite body made up of representatives from business, labor, and government. The powers of the Corporation would be exercised in pursuit of explicit industrial objectives designed to achieve some combination of the two broad goals—stimulating the emergence and growth of new high-tech industries and protecting and rehabilitating older industries.

The first problem for the government in carrying out an industrial policy is that we actually know precious little about identifying, before the fact, a “winning” industrial structure. There does not exist a set of economic criteria that determine what gives different countries preeminence in particular lines of business. Nor is it at all clear what the substantive criteria would be for deciding which older industries to protect or restructure.

Originally, comparative advantage and international
specialization among countries were thought to derive principally from the relative abundance or scarcity of the factors of production—labor, capital, and various natural resources. The United States and other advanced industrial countries do in fact have a broad advantage in the production of those goods that are research-based and technologically sophisticated, and that require for their production an educated labor force. It is also demonstrably the case that the availability of certain kinds of natural resources can play an important role in determining comparative advantage. But beyond these very broad principles, there are no general criteria that allow one to predict the industries in which a country will be particularly successful.

Advanced industrial countries both export and import a wide range of goods that covers almost the entire spectrum of their manufacturing industries. Exports are not concentrated in one set of selected industries and imports in another. One study has shown, for example, that in major countries very few industries, classified at a medium (three-digit) level of detail, had less than 30 percent of their international trade as intra-industry trade—i.e., in most categories of industrial goods, international trade involved significant volumes of both exports and imports, rather than exclusively one or the other. The distribution among advanced nations of the production of various manufactured products is not principally a function of some broad set of national characteristics, but arises in large part from quite different causes.

In an insightful article on industrial policy, Assar Lindbeck of the University of Stockholm has analyzed the origins of industrial specialization among advanced countries. He argues that what a country will specialize in is determined by a combination of historical coincidence and momentum. Individual entrepreneurs search for a niche in the market. Once one or more firms in a country successfully establish a foothold in the market for some special product, forces come into play that can heighten, at least for a while, that country's comparative advantage in the manufacture of that product. A growing market leads to economies of scale for the original producers. Ancillary firms spring up to supply the new industry's special needs. Workers and managers acquire skills and know-how. Success tends to breed success.

In short, the winners emerge from a very individualistic search process, only loosely governed by broad national advantages in relative labor, capital, or natural resource costs. The results of which cannot be identified on the basis of abstract criteria. As Lindbeck points out, there is nothing in Swedish natural resources or national character that would have foreordained that Sweden would be preeminent in the production of ball bearings, safety matches, cream separators, and automatic lighthouses. Nor, it might be added, is there a basis in observable national characteristics to have predicted Japanese dominance in the motorcycle industry or the American success in pharmaceuticals and the export of construction management and design.

There are, of course, overall policies that government can pursue to create the kind of environment in which a decentralized search process is most likely to be fruitful. What government cannot do—except perhaps in a country that is far behind the leaders and simply trying to catch up by imitating them—is to identify in advance the particular lines and products in which its country will be successful.

Some have argued that a new industrial policy should particularly seek to reallocate investment towards industries with high value-added per worker and away from those with low value-added. The argument for such a reallocation implicitly assumes (1) that there are large numbers of skilled American workers trapped in low-paying jobs in industries with low value-added per worker; (2) that there are large untapped markets for the products of high value-added industries employing skilled workers; and (3) that this situation exists because of a propensity for declining older industries. No one seriously suggests a policy of indiscriminate aid to all such industries, so some criteria for choice are necessary. One litmus test that is proposed is the importance of an industry to the national defense; that, however, is always open to question.
most always a red herring. The national defense/essential industry argument is usually presented in an all-or-nothing mode, as though, in the absence of import protection, the affected industry would disappear. In fact, what is almost always at stake is a much less dramatic change in the industry’s fortunes, of a magnitude that is irrelevant to national defense. Whether, for example, the domestic steel industry meets 80 percent of the nation’s peacetime needs, as it does now, or only 60 percent is of no significance to the nation’s security.

It has also been suggested that we assist those particular older and troubled industries that other governments are heavily subsidizing. The industries we would end up supporting under this decision rule would most likely be those with worldwide excess capacity, in which the returns to investment are unusually low, since those are the ones most apt to be getting help from other governments. A systematic reallocation of investment away from other American industries towards these would lower the growth of national output and real wages.

Ironically, the systematic provision of import protection to various industries, in an effort to "restructure" them, would indirectly weaken the most dynamic and progressive sector of American industry. Import protection would initially worsen the trade balances of the countries against whom it was directed. As a result, their currencies would tend to depreciate against the dollar. In turn, this would impair the competitive position of American export industries, which, by their very nature, are likely to be at the leading edge of economic progress. We would trade jobs and output in the leading sectors for jobs and output in the losing sectors.

In practice, the motivation behind most existing efforts to protect the losers is not so much to improve economic performance as to lessen the pains of economic change. Almost by definition, a dynamic economy is one in which change is continually at work—change in technology, in tastes, and in world markets. And while change creates new opportunities, it also forces some firms, workers, and communities to make painful adjustments.

A decent concern for the human costs imposed by economic change is one hallmark of a compassionate society. But society can act to reduce those costs in two quite different ways. First, it can short-circuit market forces and try to slow the pace of change through subsidies, trade protection, and regulations designed to prop up declining firms. Second, it can attempt to accommodate and ease the transitions dictated by changing economic conditions through the provision of reasonable unemployment compensation, relocation assistance, and generous training opportunities to those facing major adjustment problems. Neither approach will fully insulate workers and communities from the pains of economic change. But systematic application of the first approach, while preventing some pain for some people, will over time sap the economy of dynamism and hold down growth in living standards.

The second option is far from perfect, but it offers the potential of reducing transition costs with much less impairment of the dynamism that generates economic growth.

### Industrial Policy and the American Political System

Not only would it be impossible for the government to pick a winning industrial combination in advance, but its attempt to do so would almost surely inflict much harm.

There are many important tasks that only governments can do—and, with constant effort and watchfulness, they can do those tasks passably well. But the one thing that most democratic political systems—and especially the American one—cannot do well at all is to make critical choices among particular firms, municipalities, or regions, determining cold-bloodedly which shall prosper and which shall not. Yet such choices are precisely the kind that would have to be made—and made explicitly—for an industrial policy to become more than a political pork barrel.

The government can, and continually does, adopt policies that have the indirect consequence of harming particular individuals or groups. But a cardinal principle of American government is "never be seen to do direct harm." The formal and informal institutions of the political system are designed to hinder government from making hard choices among specific individuals, rewarding some and penalizing others.

The formal and informal institutions of the political system are designed to hinder government from making hard choices among specific individuals, rewarding some and penalizing others.
One does not have to be a cynic to forecast that the surest way to multiply unwarranted subsidies and protectionist measures is to legitimate their existence under the rubric of industrial policy.

In fact, this argument makes little sense—even if the examples cited are indeed blunders. It might very well be bad policy to spend five times more on R&D for commercial fishing than for steel. The U.S. tax code provides almost $750 million a year in tax breaks for the timber industry, but only a small fraction of that amount for semiconductors. We now provide substantial import protection for the carbon and specialty steel industries (an illustration presumably adduced on the grounds that with an industrial policy we would be able to extract more competition-oriented reforms from labor and management in the favored industries).

Some Assistance Would Be Available

One of the most frequently heard arguments for industrial policy is that it would bring a much-needed coordination to government policy-making. Those who make this argument begin by pointing out that the government already has in place many individual policies that affect the industrial structure, often in illogical, contradictory, or harmful ways. They go on to ask why we do not, therefore, adopt a positive and coherent industrial policy in place of the current ad hoc array. These advocates often cite examples of the foolishness that ad hoc assistance decisions lead to:

- The U.S. government now spends five times more on research and development for commercial fishing than for steel.
- The U.S. tax code provides almost $750 million a year in tax breaks for the timber industry, but only a small fraction of that amount for semiconductors.
- We now provide substantial import protection for the carbon and specialty steel industries (an illustration presumably adduced on the grounds that with an industrial policy we would be able to extract more competition-oriented reforms from labor and management in the favored industries).

...
more economic decisions to the same political system. One does not have to be a cynic to forecast that the surest way to multiply unwarranted subsidies and protectionist measures is to legitimize their existence under the rubric of industrial policy. The likely outcome of an industrial policy that encompassed some elements of both "protecting the losers" and "picking the winners" is that the losers would back subsidies for the winners in return for the latter's support on issues of trade protection.

The argument is also made that we do provide assistance to individual firms, on occasion and in a very ad hoc way; the Chrysler and Lockheed bailouts are usually cited as examples. Should we not, therefore, regularize and rationalize this procedure, rather than making these assistance decisions on a case-by-case basis? In fact, the ad hoc approach is precisely the right approach. To every rule there are exceptions. It may very occasionally be in the public interest to supersede the market's judgment and to prevent the bankruptcy of some major firm. But it is a virtue that a special law is now needed for each case. It is a virtue that each case is, in fact, treated as an exception. Only very exceptional cases are likely to muster the support needed to enact a special law, and the government's bargaining power, to impose needed and painful reforms on management and labor, is consequently enhanced. Should this process of decision by exception be supplanted by an ongoing authority to initiate bailouts, the result would almost surely be a politically vulnerable fund, available to help avoid or delay politically sensitive plant closings.

**Some Real Problems**

To say that industrial policy is a dangerous solution for an imaginary problem is not to say that the United States has no serious economic difficulties. It has a number of them.

Our most immediate set of problems is macroeconomic in nature. Recovery from the deepest recession of the postwar period has just begun. Having paid a very high price for partially wringing out a stubborn inflation fifteen years in the making, we—along with every other industrial country—will have to walk a very fine line to sustain an economic recovery vigorous enough to make substantial inroads on unemployment, but not so buoyant as to risk a resurgence of inflationary pressures or inflationary expectations.

In addition, we in the United States face the special problem of a political impasse that threatens to perpetuate very sizeable federal budget deficits even as the economy recovers towards full utilization of its resources. Since the Federal Reserve is most unlikely to accommodate these high employment deficits with large and inflationary increases in the money supply, failure to break the impasse with tax increases and spending cuts would extend today's high real interest rates—or, more likely, even higher ones—into the indefinite future. This outcome would have particularly serious consequences for the health of America's industrial structure. High interest rates would tend to perpetuate overvaluation of the U.S. dollar, and would continue to penalize American exports and encourage imports. At home, the high interest rates would especially depress purchases of durable manufactured goods. Finally, the ability of new and young enterprises, at the frontiers of technological advance, to raise new capital could be seriously impaired to the extent that the actuality and the expectation of continued high interest rates depressed stock market values.

Getting America's monetary and fiscal policies in order is far more important for the health of the nation's industrial structure than any conceivable set of new industrial policies. What now seems to be serious problems of industrial structure would quickly shrink and become far more manageable with a few years of balanced economic recovery at lower real interest rates.

After the achievement of a sustained and balanced recovery, the prospects for which depend heavily on how the government uses its macroeconomic tools, the next most important factors influencing industrial performance are mainly beyond the government's control—such things as the pace of technological progress, the course of labor-management relationships, and the stability of world markets. There is, however, a variety of governmental microeconomic policies that can affect, favorably or unfavorably, the vigor and adaptability of American industry. Choices among alternatives in this area sometimes pose very difficult tradeoffs between economic efficiency and other social goals. For example, environmental considerations compete with the objective of keeping industrial costs low. The provision of generous tax incentives for risk bearing has to be balanced with the objective of a more equal distribution of income. Additional federal support for scientific and technical education would conflict with the goal of budget expenditure control. In other cases, what is at issue is not a tradeoff among competing national objectives, but the reform or elimination of provisions in tax or regulatory codes that distort the pattern of investment among different industries. The 1981 liberalization of depreciation allowances, for example, was desirable in the aggregate but very arbitrary as among investments of different types. It sharply skewed rates of return and distorted investment incentives among industries. Determining the federal government's
stance on these and other thorny issues will continue to provide grist for the legislative and political mills in the years ahead. How they are settled will have an important, even if not overwhelming, influence on the behavior of American industries.

The most critical and vexing structural problems that American society will have to face in the coming decade have little to do with the issues raised by industrial policy. Even with a return to prosperity, unemployment among America's black youth will remain scandalously high. Large parts of American central cities will continue to be afflicted by serious financial constraints, social problems, and physical decay. And, if recent studies are to be believed, the quality of American education has been deteriorating for a number of years. Unfortunately, no one yet seems to have a very clear idea of exactly how the federal government can best play a constructive role in fundamentally reversing these very troubling structural trends. But we must keep searching for solutions—and where federal outlays are required to experiment with promising approaches, these are the areas, unlike most others, where the benefit of the doubt ought to be given a little more rather than a little less funding.

In sum, there are changes in in federal fiscal and monetary policies that could help the economy generally, and industry in particular, attain a more satisfactory level of economic prosperity. There are microeconomic policies that we know could contribute to an environment that is favorable to the creation of new and rapidly expanding lines of business and to the adaptability of American industry. In many cases, formulating these policies requires making some very difficult choices among competing national objectives.

In addition, there are a few very important structural problems for which, at the moment, no convincing solutions are in sight. Yet it is absolutely essential that we keep searching and experimenting to try to solve them.

One structural problem, however, that does not exist is the de-industrialization of American industry. And one set of government measures that we do not need is an industrial policy under which the federal government tries to play an important role in determining the allocation of resources to individual firms and industries.

We have enough real problems without creating new ones.

2. In a forthcoming Brookings book, Robert Z. Lawrence documents in substantial detail the absence of any trend toward de-industrialization in the United States during the 1970s and, in particular, the fallacy of the proposition that international trade has contributed to depressing output and employment in American manufacturing. This section of the paper owes much to his work.
3. To reduce distortions caused by cyclical influences (U.S. recessions in 1970 and 1980), average output in 1969-70 and 1979-80 was used to make the decade output comparisons. The European average was held down by the very poor performance of the United Kingdom, but even if the United Kingdom is excluded from these calculations, the growth of manufacturing output in the United States still exceeded that of the rest of Europe as reported by the OECD data. The U.S. Bureau of Labor Statistics produces an alternative set of manufacturing output measures for selected countries; according to these data, the United States outperformed Germany and the average of eight European countries, but grew less than the European average (33.5 versus 36 percent) if the United Kingdom is excluded.
4. During the cyclical peak of the Vietnam war boom, 1965-69, the constant-dollar manufacturing share averaged slightly higher (30 percent) than it did in both the early years of that decade (28.2 percent) and the last years of the 1970s (28.6 percent), but by no more than can be explained by the strength of the boom. In a regression equation fit to data from 1955-80 that linked the manufacturing share to a cyclical variable and a time trend, the time trend did have a very small negative coefficient of marginal statistical significance. The trend was so slight that it would require some thirty years to reduce the share by one percentage point. There was no evidence that the trend became larger in the 1970s.
5. Marc Bendick, Jr., and Judith Radlinski, "Workers Dislocated by Economic Change: Do They Need Federal Employment and Training Assistance?", National Commission for Employment Policy, Seventh Annual Report, Appendix B.
6. Long-term unemployment rates (percent of the labor force) in 1979 were: United States (1.14), United Kingdom (1.92), France (4.41), Germany (3.35). The long-term unemployment definition—fifteen weeks or longer for the U.S., fourteen weeks for the U.K., and three months for France and Germany—does bias the U.S. rate down relative to the others, but not by enough to account for those differences. Economic Report of the President, January, 1981, p. 127. These findings were confirmed by a later OECD analysis reported in Economic Outlook, July, 1983, p. 46 (Table 15).
8. Based on OECD estimates of gross fixed capital formation as a percent of gross domestic product (GDP), Economic Outlook 1960-1980, Table R-3. The difference between GDP and CNP is small and does not affect the basic comparison between the United States and Japan.
11. 1983 growth as forecast by the OECD, Economic Outlook, July, 1983.
14. The chief executive of a firm producing semiconductors has recently argued that his industry does not need special government help—only a "Buy America" provision for its products.
External and Internal Causes of Industrial Sickness: Industrial sickness has become a major problem of the Indian corporate industrial sector. Of late, it has assumed serious proportions. A close look reveals that there are, at least, five major causes of industrial sickness, viz., promotional, managerial, technical, financial, and political. The causes of industrial sickness may be divided into two broad categories: 

External Causes: Changes in the policy of the Government relating to movement of goods from one place to another within the country, or the Government’s export-import policy. 

Internal Causes: The primary one seems to be the lack of experience of the promoters in the line of activity.