

April 1987

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John R. Mullin

UMass Amherst, jmullin@provost.umass.edu

Jeanne H. Armstrong

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Recommended Citation

Mullin, John R. and Armstrong, Jeanne H., "National Industrial Policy and the Local Planner" (1987). *Journal of Planning Literature*. 10.

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National Industrial Policy and the Local Planner

Jeanne H. Armstrong
John R. Mullin

This article analyzes the debate concerning the problems, approaches, and intent of industrial policy as it relates to the working planner. It begins with a search for a definition. From there the authors set forth a rationale for such a policy and lay out the key characteristics typically proposed by its advocates. The critical dimensions in the debate are then reviewed. Finally, the potential impacts of various policy options upon local planners are discussed.

Over the past decade there has been an ever increasing recognition that the industrial base of the United States is undergoing a dramatic transformation that significantly affects every region of the country. While planners have long had some knowledge of this shift, due largely to the works of such scholars as Birch (1979), Harrison (1982), and Bluestone and Harrison (1982), the popular press through such writers as Halberstam (1986), Thurow (1986), and Reich (1983) now recognizes this change. Planners are reacting to this development by increasingly undertaking major efforts to insure that communities maintain a healthy industrial climate (Hodges 1985; Goldsmith and Jacobs 1982; Dotson 1983). Using tax abatements, low interest bonds, job training incentives, and infrastructural

assistance programs, among other approaches, planners have become active participants in virtually all phases of the industrial development process (International City Management Association 1984; Mier 1983). Whether or not these approaches are in the public interest remains to be analyzed (Goodman 1979). However, the fact remains that local planners are participating significantly in maintaining, enhancing, and expanding the industrial base of their communities.

Their efforts have been aided extensively by federal programs that constitute a de facto, informal, and disjointed national industrial policy (Thurow 1985). Both the successes and the failures of the federal government in intervening at the local level have fueled extensive discussion and debate concerning its role in fostering positive change. For example, Bendick and Ledebur (1982) outline four approaches: (1) the Industrial Neutral Approach, (2) the Cooperative Productivity-Enhancement Approach, (3) the Industrial Bailout Ap-

JEANNE H. ARMSTRONG is president of LandUse, Inc., Hadley, Massachusetts.

JOHN R. MULLIN is professor of urban planning at the University of Massachusetts/Amherst.

Journal of Planning Literature, Vol. 2, No. 2 (Spring 1987). Copyright © 1987 by the Ohio State University Press.

proach, and (4) the Backing Winners Approach. Others have recommended options that range from a formally adopted policy complete with incentives and sanctions to a noninterventionist position in which government does little beyond promoting industry on international markets. As Robert Kaus (1983) has humorously noted:

Felix Rohatyn, the New York banker, wants an "industrial policy" to invest in declining industries, Lester Thurow, the MIT economist, wants an industrial policy to invest in rising industries. Barry Bluestone, an economist further to the left, wants a "progressive industrial policy" aimed at "creating more hospitable, more interesting, less authoritarian and safer work environments." Bruce Scott, a Harvard Business School professor, wants an "industrial policy" to promote efficiency. Frank Weil, a former Commerce Department Official, wants his industrial policy to be made an "Industrial Fed" . . . Gary Hart . . . Walter Mondale . . . even John Connally wants an "industrial policy." All God's chill'un want "industrial policy."

Whatever approach emerges in the coming years will most likely affect the industrial base of virtually every city and town in the nation. Thus, planners should understand the state of the discussion and debate and how the options could affect their efforts (Windsor 1986; Fisher 1982). This article is intended to contribute to that understanding.

This article analyzes the current debate concerning the problems, approaches, and intent of industrial policy. It begins with a search for a definition and then sets forth the rationale for a national policy and lays out the characteristics of national policy typically proposed by key policy advocates. The critical dimensions in the debate concerning industrial policy are then reviewed. Finally, the potential impacts of various policy options upon the local planner are discussed.

IN SEARCH OF A DEFINITION

Industrial policy in its myriad forms raises many questions. These include how

to define it, who would oversee it, what it would control, and what its end results would be.

There is no commonly accepted definition of national industrial policy (Industrial Policy: Is It the Answer? 1983; Beauregard 1983). As Chalmers Johnson (1984) noted in summing up his own book on industrial policy: "Dichotomies, distinctions, definitional problems and deflations of quick fixes exist on almost every page."

In its simplest form, national industrial policy can be defined as public initiatives that influence and guide the development of targeted industrial sectors in society (Leviton and Johnson 1983-84). This definition closely fits industrial policy as it now works in the United States — an often "shotgun" approach consisting of short-term programs and projects without an overall framework. Goldstein and Bergman (1986) label this as simply "Pluralistic Policy Making." In fact, the approaches taken are often so disconnected or conflicting that the federal government is unable to take concrete actions designed to maintain and enhance the national industrial base. For example, for the past year the federal government decided to allow increased importation of Japanese automobiles, to further restrict the sale of high technology items to the Communist Block, and to increase free trade in the shoe industry. The rationale for these decisions was different in each case. The decision involving importation of Japanese autos was intended to send a message to the Japanese government that, as a *quid pro quo*, it should follow suit and increase its imports of American goods; the decision concerning the sale of computers was based largely on defense considerations; and the decision concerning the shoe industry was based largely on the need to keep the debt-ridden economy of Brazil from becoming worse. In each case there was a strong basis for the decision. Yet despite the rationale, local American industry was affected negatively. Detroit suffered from the decisions to allow increased importation of Japanese automo-

biles just as the Silicon Valley and Brockton, Massachusetts, suffered from the decisions regarding high technology and free trade in the shoe industry. Clearly, current *de facto* industrial policy permits political considerations to supercede industrial needs (Leone and Bradley 1981). Thus, industrial policy emerges partly as an indirect by-product of a range of political decisions — many of which are not intended to directly affect local industries. Local planning in such situations is extremely difficult.

Reich (1982) offers a more comprehensive definition:

Industrial policy focuses upon the most productive patterns of investment, and thus it favors business segments that promise to be strong international competitors while helping to develop the industrial infrastructure (highways, ports, sewers and skilled workforce) needed to support these elements. At the same time, by balancing regional growth and by assisting workers to retrain or relocate, it seeks to reduce the resistance to economic change likely to come from those who would be the hardest hit.

Reich's definition includes almost all of the elements of industrial policy that are being discussed at the national level. These are public initiatives, industrial targeting, political involvement, international competition, infrastructure improvements, work force development, worker training, balanced regional growth, and help for the displaced worker.

Approaches suggested to meet the goals of industrial policy are quite varied. Some supply-siders argue for the creation of new capital to fuel the economy. The "new class" advocates see the need to create better capital allocation methods. Industrial economists often argue for increased production incentives. Labor leaders push for increased worker protection and retraining. Congressional leaders argue for industrial targeting. Commerce officials want to fight Japan Inc. Naderites see need for a new corporate democracy (Scott 1982; Bowles, Gordon, and Weisskopf 1984; Barfield and Schambra 1986). Most of these approaches and positions have points that

overlap or contradict others. The point is that discussion is wide, positions are strongly held, and there is little common agreement on the proper scope or approach of a national industrial policy.

Despite the many major differences among the advocates regarding the form of national industrial policy, they generally agree on several points that have led to their positions. Above all is the notion that there is a need to increase the competitiveness of American industry in the world market (Rohatyn 1983; Business Week Team 1982; Wachter and Wachter 1981). There is a fundamental belief that America is losing its competitive edge and that without concerted government intervention the nation's industrial base will continue to erode. There is also a belief that the government through its various powers can provide the means to restimulate the industrial marketplace. Finally, there is a belief that governmental leadership in tandem with labor, management, and the banking community can make a difference in the quality of life of American workers and communities (Abernathy, Clark, and Kantrow 1981; Birch 1981; Committee for Economic Development 1984; Lawrence 1984; Shultz 1984).

RATIONALE FOR A NATIONAL INDUSTRIAL POLICY

Advocates for a national industrial policy most commonly rely on the grounds that there are major problems with American industry and that only governmental intervention can overcome these problems. Although there is no common agreement as to the scope of the problems, advocates generally focus on the following needs:

Improved systems of capital allocations. The current system provides few incentives for either companies needing assistance for retooling or those most likely to grow and prosper in the world marketplace (Blume, Crockett, and Friend 1981; Eckstein and Tannenwald 1981).

Improved infrastructure. Both at a national level and among the industrialized

states, there is an increasing reluctance to invest in the long-term projects necessary to support the industrial base (National League of Cities and United States Conference of Mayors 1983).

Promotion of growth in all regions of the country (Anton, Cawley, and Kramer 1981). For example, at present, government policies, particularly as they relate to defense procurement, are more apt to aid the coastal states than the unionized, rust-bucket Midwest (Markusen 1984a).

Retraining. There is extensive evidence of an increasing mismatch between the skills of workers and the types of jobs likely to be available in the future. As Thurow (1986) has noted: "Alone among industrial countries the United States does not have a system of skills training for the non-college bound."

Coherence of approach to research and development (R and D). Whether through taxation policy, antitrust concerns, profitability, or political attitudes (i.e., "If it can't be done in one term, it can't be done"), government regularly sends mixed messages to industry concerning its attitude toward new product development. The R and D issue is indeed complex. U.S. expenditures still are greater than Japan's (as a percentage of Gross National Product), and the number of U.S. scientists involved in research is higher than its competition. On the other hand, difficult technical breakthroughs, increasing emphasis on short-term profitability, inflation, and the move toward formalization of R and D efforts have discouraged firms from expanding their efforts. Above all, the federal government cutback on defense and space-related research efforts and its increasing regulatory procedures have been significant. Between the early 1970s and the start of the 1980s, total investment in R and D declined by approximately thirty-three percent (Reich 1983; Mansfield 1981).

Restructuring of industry. The changing industrial climate and increased pressure from foreign firms regularly results in the loss of tens of thousands of jobs annually. A call for protectionism, price supports, or targeted purchasing for the firms that are suffering inevitably results. At the same time, workers begin to clamor for assistance in finding comparable jobs at comparable

pay. How to help these firms and their workers is one of the most perplexing aspects of any industrial policy. The consequences of restructuring are also significant in terms of economic costs, social costs, psychological illnesses, physical sickness, death rates, and crime (Bluestone, Harrison, and Baker 1981; Hekman and Strong 1980; McKenzie 1984).

Responding to the policies of other industrial and industrializing nations. The nature of this response may be through trade talks, development of self-liquidating policies of protection, matching of subsidies to targeted U.S. firms, or the threat of sanctions. The partial successes of Japan, Germany, and even France in developing positive industrial policies have to be addressed (Zysman and Tyson 1983; Barfield and Schambra 1986).

In one sense, it is ironic that there should be a debate regarding whether the nation should have an industrial policy; for all intents and purposes the elements of such a policy already exist (Jonas 1986; Thurow 1985). They may not be articulated or comprehensively packaged as such, but they do serve in many ways to guide United States industrial production.

The elements can be found in many different government programs. For example, the United States has issued over \$200 billion in government loans to industrial firms. These loans, as Thurow has noted, in roundtable discussion with Kantrow (1983), really constitute "a back-door Reconstruction Finance Corporation (RFC)." Moreover, the government funds more than thirty-three percent of all industrial research and development activity, and directly or indirectly, thirty percent of the nation's scientists and engineers (National Science Board 1978; Magaziner and Reich 1983). The federal government even has had in the recent past, and continues to have, policies of particular interest to planners that target assistance to economically distressed geographic areas and to industries in need of a "quick fix" for a variety of reasons. The Area Redevelopment Act, Economic Development Administration

programs, Trade Adjustment Act, Community Development Block Grant Program, and Urban Development Action Grant Program are all examples of such targeting. Although the success of many of these programs is open to question, they continue to be popular at the local level. For example, the national municipal policy report of the National League of Cities strongly urges the continuation of targeting (National League of Cities 1986).

Above all, the government's role in setting an industrial policy is most clearly seen in the area of military procurement. Approximately half of all aircraft, radio, and television communications equipment, one-fourth of all engineering and scientific equipment, and one-third of all electronic tubes manufactured in this country are purchased through the federal government military budget (Magaziner and Reich 1983). As Markusen (1984a, p. 1) notes, the results of military procurement have increasingly served to create a *de facto* industrial policy: "Its remarkably planned nature and its successes demonstrate that the State is *not* averse or ill-equipped to pursue a targeted sectoral policy in the U.S."

In many ways, this defense procurement policy reflects how a comprehensive industrial policy could work in theory, fully recognizing that the Department of Defense (DOD) is far from a perfect institution. There is constant needs assessment; there are formal planning processes that must be followed (i.e., the Five Year Development Plan); there is informal industrial targeting; there is an emphasis upon research and development; there is a concern for quality and speed; there is an emphasis on innovation; and, finally, there is procurement over an extensive area of the country (with the exception of the "rust bucket"). It should also be noted, however, that DOD practices favor antiunion shops and exclude large segments of the American people from government largess (Markusen 1984a and 1984b).

BASIC ELEMENTS OF INDUSTRIAL POLICY

Four themes recur in the debate over national industrial policy. First, an overt policy must be *consistent* and provide the same messages to all types of companies. What good does it do to provide a Small Business Administration (SBA) loan for working capital to a struggling company when the Environmental Protection Agency is about to force the company to make major investments in a sewage control system? Examples of regulators such as the Occupational Safety and Health Administration or the Environmental Protection Agency directing one course of action while stimulators such as the Economic Development Administration, SBA, or the Department of Housing and Urban Development undertake another are far too numerous to be amusing. There should be one voice to tie together the operational procedures and directives of the federal bureaucracy. Otherwise, efforts to create a workable industrial policy will be meaningless (Lodge and Glass 1984).

A second major element centers on the notion of *complementarity*. The needs of government and industry are not often in concert. In fact, government will frequently seek to force a technical solution to a problem well before it has been found. Any regulatory intrusions in the industrial marketplace should allow companies time and funds to react. In brief, there must be a sense of "reciprocal consent" between government and industry along the lines of the Japanese experience (Tucker 1985).

The regulatory process should also include a commitment on the part of the regulators to assist in finding solutions to critical problems (Goldstein and Bergman 1986). For example, the Clean Air Act required auto manufacturers to modify their products even though they did not have the necessary technology. The rush to meet the new requirements resulted in enormous cost to both the companies and consumers. Such mandates, forcing action without aid-

ing in the solution, are hardly beneficial in terms of creating policies that call for cooperation.

Third, and tied to consistency and complementarity, there must be *commitment to long-term research and development activities*. Current tax policies penalize companies that emphasize long-term research. Anti-trust laws also discourage competing companies from undertaking joint research projects (Clark 1986). In short, individual regulatory policies that discourage long-term investment must be changed to reward research efforts.

Fourth, industrial policy must react to *increased international competition*. The American economy is increasingly tied to the world economy. What happens in the Pacific Rim nations, in the Common Market nations, and the oil-producing nations directly affects Main Street (The Hollow Corporation 1986). The need for an internationally oriented American economy raises several important questions. Under such an economy, can the United States continue to enact long-term protective tariffs, to insist on voluntary quotas, and to provide subsidies for noncompetitive companies? Will the United States allow local economic needs to determine international postures? How long will the government prop up a company unable to compete in the international arena? Although one can sympathize with the company harmed by international competition and with the displaced union worker who loses his job to a Southeast Asian worker, international competition will continue to increase. Given this, when and for how long should the government provide protection? When considering international competitiveness, emergency temporary aid for restructuring, retraining, and relocating can be justified — sustained tariffs and subsidies cannot.

COMPONENTS OF A NATIONAL INDUSTRIAL POLICY

A sound contemporary national industrial policy should have several main components. Literature on industrial policy ex-

PLICITLY recognizes the need for some of these and suggests the need for others. Still other studies and information point to the difficulties involved in formulating and implementing an industrial policy that incorporates some of these components.

A Platform for Building Public Consensus

The importance of building public consensus is almost unanimously recognized. The only argument is how best to gain it. Some insist on the need to develop a tripartite board of business, labor, and government leaders consisting of people of the caliber of David Rockefeller's Trilateral Commission (Rohatyn 1983). Some argue for the creation of a high-quality professional network of civil servants who have the required skills and interests to work with the private sector (A Cautious Nod to Industrial Policy 1984). Others argue for strong worker participation (Wolff 1984) or for the creation of a social model of the community in which "the losers, the targets, and the victims of the economic policy making establishment are in the driver's seat" (Bowles, Gordon, and Weisskopf 1984). The first two approaches are clearly top-down while the third is just as clearly bottom-up. Above all, there is an overwhelming belief that industrial policy can only work if parochialism, self-interest, and "bleeding heart" responses are kept to a minimum. This is no easy task. However, the supporters of industrial policy believe that it will work with broad-based support from the industrial community and the American people as a whole.

Formation of a Compact Among Participants

The United States government is much like an elephant: it is both slow to move and slow to stop. Dramatic change is rare. Thus, a workable national industrial policy cannot be extreme. It cannot be totally supply-side, totally monetarist, or totally social democratic. Within the middle of the triangle formed by these approaches will be found an acceptable approach to industrial policy,

and that approach requires a compact among government, management, labor, and banks, all of which should participate and aid in the development of strategy.

The most common approach put forth by the mid-range advocates of national industrial policy is corporatism. Corporatists recognize that the market does not work perfectly, that governmental participation in the economy is both essential and inevitable, and that unregulated competition can lead to waste of both financial and human resources. They thus argue for governmental intervention that aims at rationalizing production, meeting human needs, and maintaining a fair degree of profitability (Bergman and Goldstein 1983).

Corporatists see a significant need for consensus building among key participants since implementation of the corporatist approach requires all participants to sacrifice. For example, corporatists call for investment over consumption (Bowles, Gordon, and Weisskopf 1984). Such a shift would cause extensive hardship for those who cannot save and for businesses that rely on impulse markets. Corporatists emphasize production of capital goods over quality-of-life improvements, and this means that infrastructural improvements for industry or the government's absorption of the cost of acid rain reduction may take precedence over parks and libraries. It would also require large government subsidies for retraining workers and bringing potential and dropped-out workers into the workplace. This would be extremely costly and would require a dramatic policy shift by the present conservative government.

Perhaps most important, corporatists call for targeted investment planning. Working with labor, industry, and the financial community, along a pattern similar to a wartime agency, the government would directly allocate capital to fast-track companies that are capable of rapid job expansion, have innovative products, and have the means to compete internationally (Bowles, Gordon, and Weisskopf 1984).

Some elements of the corporatist approach have been employed by the French National Government, with mixed results, in its efforts to revitalize the French national economy. One element, called "Indicative Planning" (as opposed to "Imperative Planning"), calls for negotiations between key industries and the government regarding how the goals of each could be met. The procedure is nonbinding, and business in no way surrenders any more of its independence to government. In short, indicative planning derives its power from open persuasion rather than coercion. The French, however, have as large an arsenal of government powers as does the United States. That these powers *could* be used is in itself a compelling argument for industries to participate (Graham 1976; Cohen 1977).

Can corporatism work? Examples of corporatist policies can be found in various forms at the city and state levels. The bailout policy for New York City relied on a corporatist strategy (Watkins 1981). The social contract of the late 1970s between the Commonwealth of Massachusetts and the Massachusetts High Technology Council was part of a corporatist-type strategy that called for changes in state taxes, a commitment to assist in the development of infrastructure needed by high technology firms, and a commitment to educate and train new workers for growth industries. The Commonwealth, recognizing the power of its industrial firms, has continued to apply the "compact" approach. Most recently the Mature Industries Commission urged the development of a compact to "cushion the impact of plant closings" (Governor's Commission on the Future of Mature Industries 1984). The recently defeated Rhode Island Greenhouse Compact also used a corporatist approach to help resolve the declining industrial base of that state (Rhode Island Strategic Development Commission 1983). Its failure, in this instance, was not due to the concept so much as to fears that the same political/bureaucratic structure that had done little to revive the state's economy over the past decade would be in charge of

the program. Despite its defeat, the Compact is still alive in concept, and many of the proposals are now being discussed separately in the Rhode Island legislature (Simon 1984).

Whether the New York City, Massachusetts, and Rhode Island approaches could be replicated at the federal level remains to be seen. There is far less consensus on approaches at the federal level than at the city or state levels. Indeed, viability of any corporatist approach at the federal level would ultimately depend on what each region gets and what each region pays. Clearly, the approach would have to promise extensive gains for all regions of the country before such a national policy could be implemented. It would also require the agreement of labor (a highly pluralist and splintered set of organizations), industry (many of whose members stand to lose), the banking community (already heavily involved in industries that could suffer), and Congress (with its parochial viewpoints). The task appears overwhelming.

Effective Job Retraining

Effective job retraining does not mean a return to the Comprehensive Employment Training Act with its heavy emphasis on make-work and public service jobs. Nor does it mean training for fast-food counter jobs. Rather it means providing people with skills that enable them to secure long-term employment with upward mobility. The scope of the problem can be noted quite vividly when one realizes that only eighteen thousand of the 674,000 mill workers displaced in New England between 1958 and 1975 found work in the region's booming high technology firms (Bluestone and Harrison 1982).

Improved Data Collection and Analysis

Some advocates of national industrial policy believe we have too much data, while others simply believe it is too scattered and unusable (Reich, as quoted in roundtable discussion with Kantrow 1983). Presently, various federal census reports (i.e., on pop-

ulation, housing, manufacturing, retailing, and agriculture) provide a significant amount of data relevant to national industrial policy. This information is supplemented by various state, regional, and local censuses and the findings of such private companies as Standard and Poor, Polk, and Dun and Bradstreet.

The data available from these sources often do not yield a clear picture of industrial production. For example, do the data show what the American citizens *need*? They show how citizens spend their money but not whether they are able to obtain the necessities of life. Do the data show how well firms are meeting the demand for goods and services? Again, they show which firms are producing what products, but at present there is no means at the federal level for determining if demand is being met and whether there is too much or too little production. Finally, can such data be collected and used in a timely fashion so as to benefit industry? Industries themselves know how they are doing, but for various logical reasons, they are not going to tell the public the moment that business begins to sour. Even annual and quarterly reports rarely tell the entire story. Government, on the other hand, can determine the relative health of a firm or a group of firms. If, for example, a national input-output model shows that steel fabrication production is slipping dramatically, government can analyze why and propose mechanisms to help this industry retain an internationally competitive edge before markets collapse, banks begin to be hesitant about providing loans, and stockholders become concerned. The technology, techniques, methods, and data sources essential to such an approach presently exist. For example, Data Resources Incorporated, an econometric firm, publishes weekly data on trends concerning key industries in New England. A review of this information at this writing (March 1987) shows that traditional manufacturing (non-computer, non-defense related) is eliminating jobs at an alarming rate. (This information is published every Tuesday in the

Boston Globe under the heading of "The Extra Index." See, for example, "The Extra Index," *Boston Globe*, March 3, 1987, p. 47.) This fact should become known to local public officials who, in turn, could begin to take actions to either help their own manufacturing firms or anticipate plant closings.

In brief, there is no reason why the smokestack cities of Youngstown, Allentown, Weirton, and Homewood, for example, had to face the closing of major industrial plants without a long lead time to adjust. In most cases, the evidence of disinvestment in these cities was readily available. Better information and quicker dissemination of findings are relatively easy steps to take in forging a workable policy (Northeast-Midwest Institute 1982).

Development of a Mobile Labor Force

Since the government cannot control in any meaningful fashion where jobs will be created, national industrial policy must encourage and help workers to relocate. It must move "people to jobs rather than jobs to people" (James and Blair 1983; President's Commission for a National Agenda for the 1980's 1980). But this is no easy task. Relocation causes extensive disruption of families and communities. Moreover, despite the image of America as a nation of transients, workers do not easily give up roots. The impact of the Trade Adjustment Assistance Program that provided displaced workers with funds to travel to new areas in search of jobs vividly illustrates this point. Between 1974 and 1979, of the more than five hundred thousand eligible workers, less than three thousand visited distant job sites and less than two thousand actually chose to relocate (Magaziner and Reich 1983). Americans may move frequently but they give up their roots begrudgingly, and many workers may perceive that they have no choice but to stay in a decaying region which offers little opportunity for growth. In short, the government can stimulate and regulate, but not dictate, mobility of the labor force.

Aid in Restructuring Industry

National industrial policy must recognize the role government can play in aiding troubled industries to take corrective measures. For example, if the government adopts a short-term protectionist posture to help a company compete better in the future, it should follow through and insure that the funds are so used. Unfortunately, to date the government has rarely insisted upon an accounting of the corrective measures taken by companies.

The remnants of a "throw away" society are clearly visible across the country. Abandoned textile plants in the East, steel plants in the rust belt, tobacco barns and granaries in the farm belt, and port and rail facilities in the Sun Belt illustrate the waste caused by the present system. How to reduce and recycle this waste are critical points to consider in industrial restructuring.

Perhaps the most difficult part of this restructuring is the timing of government participation. At what point should restructuring mechanisms be triggered? For example, the authors know of four paper companies in one Massachusetts city that are now making a healthy profit and appear stable but are most likely to start losing money next year. Should government assistance be granted now, or must the company be in absolute decline — when bankers and investors would rather flee than reinvest? This question recalls the need for accurate information. Clearly, an early warning system must be a crucial part of the administration of an industrial policy.

Maintenance of the Infrastructure

Investment in street, water, sewer, port, and rail systems in the United States has declined steadily over the past two decades (Choate and Walter 1981). Between 1965 and 1977 alone there was a drop of twenty-one percent in public investment in constant dollars (Massachusetts Taxpayers Foundation 1984). Thus, the country's infrastructure is falling behind that required to serve both industry and the gen-

eral public. If the United States is to be competitive in the international arena, its national industrial policy should favor a strong infrastructure support system (Barker 1984; Choate and Walter 1981).

Emphasis on Innovation

America's firms compete both domestically and internationally. Every indication is that the international forum will be the real test of a company's ability to survive (Lodge and Glass 1984). Most industrial policy advocates recognize the need to protect, enhance, and stimulate expansion of these firms as they grow (Allen and Levine 1984; Birch 1979). National defense spending has done this to a degree for many aircraft, semiconductor, computer, and telecommunications firms, but not with the direct goal of stimulating competitiveness in the world marketplace.

CRITICAL QUESTIONS FOR NATIONAL DEBATE

Proponents of a strong national industrial policy generally argue for their various approaches on the premise that increased governmental intervention will improve both industrial production and the quality of life for American citizens. They see the need for public consensus; for agreement among banks, management, labor, and government concerning a common direction; and for the national government to provide the education, training, and infrastructure essential to a strong industrial base capable of competing in a world market. Meeting these needs requires extensive proactive government involvement. Anti-policy advocates, on the other side, believe that the industrial base is capable of readjusting itself without the heavy and cumbersome hand of government and that the trade balance and international competitiveness of this country's industries can best be addressed by business itself (Fielecke 1985). This debate must address six critical questions.

Where Are the Experts?

Virtually every proponent of industrial policy states that the task of developing and implementing such a policy will require people of the highest professional, intellectual, and political caliber (Bower 1983). Yet very few of these people are connected to government work. From time to time government service does attract the "best and the brightest," but they inevitably view this as a tour of duty and not a career (Aldrich 1986). They see government service either as a starting point in their work lives or as a means to temporarily smooth rough edges as they move up corporate or academic ladders. The effect is that there is little long-term commitment to excellence in government service and little reward for the risk taker or innovator (Kantrow 1983).

Who Can Predict Market Place Changes?

Twenty years ago could any expert have predicted the rise of a Digital, Prime, Wang, or Apple? Who can understand the success of the Bath Iron Works Shipyard, on one hand, while the Fore River Shipyard, less than one hundred miles distant and backed by the giant General Dynamics Corporation, failed? The point is that there are many firms that have all the earmarks of failure (i.e., Rockport Shoes and Converse Rubber in New England) but which for some reason survive and prosper. Similarly, there are firms that have all the earmarks of success (i.e., Osborne, RCA computers) that for some reason or another fail. Planners can predict general trends such as the slow collapse of the United States shoe, ship, and textile manufacturing base, but they cannot predict which firms within these industries will decline, when, and to what degree. The marketplace, in short, is often a mystery (Bhide 1983).

Who Would Back the Risk Takers?

Bureaucracies deal best with known people and companies. Indeed, anyone who has worked with the federal government knows how difficult it is to break into feder-

al contracting. It is no wonder that so many of the companies doing business with the federal government have former bureaucrats as their points of contact (i.e., Greater Washington's Route 495 "Beltway Bandits"). It often appears that one must be part of the system in order to partake of its largess.

Given the nature of bureaucracies, critics maintain that any industrial policy would constantly favor the safe, secure, steady, industrial approach over the venturesome risk taker. They also note that it is far easier to work with one large firm than twenty smaller companies, and it is no surprise that the eight-hundred largest conglomerates control seventy percent of all economic activity while the remaining fourteen million control thirty percent (Bergman and Goldstein 1983). The Tennecos and the General Dynamics of the nation have a clear advantage.

Finally, as the economist Joseph Schumpeter (1966) has noted, the national economy is regularly buffeted by "waves of innovation and gales of creative destruction." With recessions, stagflation, inflation, protectionism, and other major market fluctuations seemingly occurring at an increasingly rapid rate and with technological advances influencing the industrial marketplace at an ever faster pace, the waves and gales will be higher and more forceful.

Even if we had the means to predict when major industrial changes would occur it is questionable whether efforts should be taken to influence them. The creation of new firms designed to compete with mature firms serves to sort out weak, noncompetitive firms. In theory, as the older firms collapse, they are replaced by more efficient organizations. Thus, the creation of new firms helps to insure competitiveness. In the final analysis, it may not be simply a question of predicting change, but a question of how we should handle change and whether we have the nerve to let the "waves and gales" work as they will. Economist James Howell (1985) goes one step further, suggesting that "hurrying history along"

may be a positive approach. In effect, success will come when we allow decaying industries to leave or close while stimulating new growth. This will be no easy task.

Who Would Handle Congress?

Which public agency is going to announce that textiles in South Carolina, paper pulp in Oregon, or toolmaking in New England will no longer be supported as targeted industries? How long would it be before deals, however honest, are struck (Badaracco and Yaffie 1983)? In late 1985 there were more than two hundred bills in the United States Congress asking for quotas, trade agreements, and tariffs on products ranging from petrochemicals to water-bed liners (Dropping the Other Shoe 1985). Nowhere can the protectionist sentiment be better noted than in the proposed Trade Emergency and Export Promotion Act which calls for Japan and such emerging countries as Brazil, Taiwan, and Singapore to cut their trade surpluses by five percent within one year or risk a twenty-five percent duty on their exports.

The reality is that each congressional representative is at least partially obliged to work for the short-term economic stability of his or her district. For example, in 1983, Adams Print, a major employer in the Berkshire Hills of western Massachusetts, was on the brink of bankruptcy. The firm had all the characteristics of companies that had been "fleeing" New England for the past two decades. Yet the local congressman immediately petitioned for an emergency loan from the Small Business Administration to keep the company afloat. The loan was granted. Six months later the company went into receivership and the loan was never repaid. Who gained? The local congressman gained because the electorate saw him as responding to their need. Similarly, the company and its employees gained six more months of productive work. But the federal government lost its money and other companies with less political clout but a greater likelihood of recovery lost the "opportunity" to recover. Thus, the question

remains as to who is going to oversee Congress to ensure that federal monies are directed to those companies with the greatest chance of becoming or remaining competitive.

Who Would Handle the Pressure Groups?

There is no logical reason for the United States to protect and finance its merchant fleet. Although the reason regularly given is that this fleet will be needed in time of war, the Navy itself states that these ships will be worthless to the war effort. Yet the federal government continues to finance these ships at \$450 million per year. Clearly, pressure groups from naval protection associations to stevedores have an interest in keeping this fleet active (Bower 1983). And so it is done.

The self-interests of industrial trade groups have become so pronounced and these pressure groups so active that in the overly dramatic words of Under Secretary of Commerce S. Bruce Smart, they have collectively created a fire storm of concern on Capitol Hill (Dropping the Other Shoe 1985). According to some experts, the net result of these pressures could be updated reenactment of the Hawley-Smoot Tariff Act of 1930. This act was one of the leading causes of the worldwide depression of the 1930s (Kilborn 1985). As Levitt has noted in discussion with Kantrow (1983), "Those being hurt have clout."

What Will Be the Criteria for Aiding an Industry?

If such decisions are made purely upon economic grounds, who will handle the equity issues? If equity issues are considered, will we not be at least partially subsidizing plants that should die a natural death?

This dilemma is especially evident in the Blackstone Valley of Massachusetts and Rhode Island, the birthplace of the American Industrial Revolution. In community after community the remnant firms of the once robust textile industry have continued to manufacture cloth through a steady cycle of economic decline (Central Massachusetts

Regional Planning Commission 1982). In the 1950s and 1960s, these companies were often purchased by multinationals and holding companies quick to realize that American textiles could not survive in an international market and who stripped the purchased company of all tangible assets and typically sold the business at a "paper loss" to local owners. These owners, in turn, turned to government for financial assistance (e.g., tax write-downs, industrial bonds) and asked employees to take pay cuts. They would prosper for a short period until, faced with an economic downturn, they would slide into receivership while the bank found a new owner. Once such a person or group was found, the cycle would continue again. In short, while these firms and communities were attempting to remain stable, they were being increasingly victimized by national and international trends (Phillips 1984; Phillips and Vidal 1983).

Efficiency considerations dictate that these plants should not be supported. Yet, if equity becomes a driving force in an industrial policy, then such firms would continue to gain support. In such cases death is only prolonged. In other words, one person's fair share is often another person's "rip-off." For example, the decision by the President to deny a tariff on shoes will mean that thousands of American jobs will be lost. In one sense, the people who hold these jobs are sacrificed to national needs. To them, the decision is highly inequitable, and their lobbying groups and their congressional representatives will make this point clear again and again in Washington. If these lobbyists and congressional representatives are successful in overturning the President's decision then a multifaceted question of equity is triggered. If these jobs are protected, then American consumers will pay fifteen percent more for shoes. Moreover, it has been estimated that the net result of shielding shoe manufacturing will cost the consumer \$50,000 per protected job (Feldstein and Feldstein 1985). Finally, as another example, the Federal Reserve

Bank of New York reports that restrictions on autos, sugar, and clothing alone last year cost consumers \$228 per family (Dropping the Other Shoe 1985).

These critical questions clearly indicate that the federal government is not presently capable of developing a meaningful comprehensive industrial policy. Issues concerning equity, prior policies, short-term political horizons, how to meet the specific needs of individual congressional constituencies, budgeting fluctuations, bureaucratic intransigence, the avoidance of risk, and the power of lobbying groups would have to be resolved first. Critics believe these issues to be so overwhelmingly a part of the United States political system that an effective industrial policy cannot be developed. Proponents, on the other hand, argue that despite these issues, the government can still create an effective industrial policy.

THE LOCAL PLANNER'S ROLE

The traditional American Planning Association description of what planners typically do suggests that local planners will be little more than passive observers of national industrial policy (Goldsmith and Jacobs 1982; Dotson 1983). In fact, many planners state emphatically that industrial development is not one of their major concerns. However, our evidence based upon working studies of more than forty New England cities and towns suggests that the planner is now, and will be, playing an increasing role in industrial development. Our evidence, based upon a review of the influence of current national industrial policies on small cities, also suggests that the creation of a formal policy or the extension of existing policies will directly affect the quality of life and future well-being of American communities — clearly two areas of major concern to the practicing local planner. The important questions are how can planners become involved in national industrial policy and what can they contribute to its formulation and development?

Clearly, it is in the best interest of local communities for planners to assemble data

on the state of local industry — well beyond that which is typically collected for an industrial base study. This data would be an important ingredient in an early warning analysis, in ascertaining the relative health of local industry, and in preparing applications for government grants designed to assist communities in meeting local industrial needs.

Part of this data collection effort would include collecting information on labor skills, needs, and changes. Most communities currently rely on state labor market area data. This would most likely not be sufficient — particularly since meaningful local level labor training and retraining are critical components in virtually all industrial policy options. The collected data would become the critical information base for the development of a skilled labor force.

One could also expect the planner to become increasingly involved in efforts to assist in restructuring of industry. This might mean helping firms obtain temporary local concessions on taxes and environmental controls, or relief from other regulations. It might also mean preparing applications for grants to improve local industrial facilities or to obtain low-interest loans. Many of these tasks are already undertaken by local planners (e.g., Industrial Revenue Bonds, Urban Development Action Grants). However, if a comprehensive policy is ever adopted, then one could expect that the workload would increase and that programs would be more carefully integrated.

Local planners would not likely play a direct role in the research and development aspect of national industrial policy. However, communities would benefit from promoting close ties between local industry and nearby colleges and universities. Our research in New England regularly points out that universities attract industry and that industry, in turn, is attracted to the laboratories, research facilities, and knowledge base found on campuses. Thus, a close tie between academia and industry serves as a means of stimulating research and meeting local needs.

Planners could also play an active and important role in infrastructure planning. Part of their job would be to help provide a climate that encourages a potentially fugitive industry to stay at home. Infrastructure that meets present and projected demand and is modern, efficient, and environmentally safe will stimulate industries to stay in place and also attract new firms. In this instance, we would expect a rebirth of the long moribund local capital improvements planning program and a renewed public commitment to infrastructural planning and development.

Planners would have to become interested participants in how their communities promote replacement economic activity. If America is no longer attracting jobs from overseas and if plant shifts to other regions of the country are occurring less frequently, it follows that the homegrown industrial base will become increasingly significant. How and where the homegrown starter industries are nurtured or incubated should be a major concern for planners.

Planners can also take steps to assure that the quality of life in their communities is of such a positive nature as to attract and keep competitive industries. In mature industrial towns with their aged millhousing, sootied appearance, high social costs, and pro-union patina this will be quite difficult. For example, despite the working class community roots of Digital, Data General, and Wang, there is a much stronger pull in these firms toward communities with a high quality of life. They are far more likely to be located in suburban towns than in traditional industrial communities.

What would happen if a policy of picking winners and losers was developed? Most likely it would mean that government assistance would be made available to those firms considered critical to the nation's well-being. It would also mean that the communities where these firms are located would inevitably benefit from increased jobs, a greater tax base, a sense of security, and an improved psychological feeling of well-being. Planners in such communities

would likely focus more on growth management issues than on trying to stop decline.

Since most industries likely to be so considered are on the fringes of cities (and in many cases the most healthy cities), such a policy would clearly aid those communities that are already prosperous. The classic example would be the IBM town: with the exception of its noble experiment in Bedford-Stuyvesant, IBM picks locations for its plants that are considered to meet the quality-of-life goals of its workers. Inevitably this has meant areas that are prosperous, clean, middle-class, well-managed, that have good schools, and that are near cultural or recreation attractions. In short, backing winners would mean backing winning communities (Lugar 1984). The Silicon Valleys, Route 128s, Austins, and Golden Triangles would win while the Garys, Youngtowns, and Allentowns would lose.

In a community laced with mature industries that have not been picked for special help ("losers") the potential for further disruption would be quite high. The loss of jobs, security, and image, as well as the decline of the community's economic base, paints a portrait of a community in need of major transformation. Here the planner can also play a critical role. Likely tasks include reducing performance standards, preparing early warning system planning, developing "starter industry" programs, and obtaining job retraining assistance.

Planners have a strong role to play in responding to national industrial policy. Collecting more pertinent data on local industry, insuring suitable land for expansion, helping to organize retraining efforts, writing grant applications in support of local industry, creating early warning systems, promoting local spin-offs, and guiding efforts to insure the attractiveness of the community are all likely tasks. What is most remarkable is that planners are already performing many of these tasks to a large degree. What is equally remarkable is that they are neither coordinated nor integrated. In the final analysis, however, if a national industrial policy is developed,

planners will have an important role in maintaining, protecting, and enhancing the industrial well-being of their communities.

WHERE DO WE GO FROM HERE?

What would we have after all is said and done? We would have a government that has a popular mandate and a clear direction concerning retraining, that has better data and analytical techniques, that has helped the worker to move to meaningful jobs, that stimulates research and development, that helps growing companies, that coordinates interagency policies, and that provides first-rate infrastructural support for industry. What we would have, in brief, is a means by which to be competitive in the world marketplace. But the price would indeed be high.

National industrial planning is, at the moment, moving toward a period of quiet hibernation. Will it revive? Indications are that the nation needs increased federal involvement in the industrial marketplace to remain competitive. Presently, little comprehensive and coordinated attention is being paid in either the private or public sectors to the growing industrial might of emerging nations, and this alone ultimately will cause a shift in government posture. Potential disparities between the skilled and the unskilled, the educated and the uneducated, and the various regions of the country will also cause the federal government to intervene. National industrial policy, whether formal, informal, or loosely segmented, will become an integral part of planning activities.

The time will come when as practitioners, planners will be involved with national industrial planning in much the same fashion as they presently are with environmental protection. Planners will have to reconcile themselves to the irreconcilable. In the words of Arthur Okun (1975):

A democratic capitalist society will keep searching for better ways of drawing the boundary lines between the domain of rights and the domain of dollars. And it can

make progress. To be sure, it will never solve the problem, for the conflict between equality and economic efficiency is inescapable. In that sense, capitalism and democracy are really a most improbable mixture. Maybe that is why they need each other — to put some rationality into equality and some humanity into efficiency.

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