New England Journal of Public Policy

Volume 13 | Issue 2

Article 3

3-23-1998

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Kotval, Zenia (1998) "Industrial Policy: Federal, State, and Local Response," *New England Journal of Public Policy*: Vol. 13: Iss. 2, Article 3.

Available at: https://scholarworks.umb.edu/nejpp/vol13/iss2/3

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Industrial Policy

Federal, State, and Local Response

Zenia Kotval, Ph.D., AICP

During the past twenty years, many economists and policymakers have strongly advocated that the United States formulate a national industrial policy to improve the competitiveness of American firms in the global marketplace. These proposals call for both direct and indirect assistance to specific industrial sectors. Some would contend that U.S. industrial policies are being challenged by newer growth theories that shift the focus from the nation as the basic unit of industrial geography to regions and municipalities. There is little argument about the need for industrial policies that tie national, state, and local initiatives together. However, confusion and disagreement exist as to what defines industrial policy and what its appropriate level should be. This article addresses the debate about national industrial policy and state and local responses to industrial policy and offers a summary of key themes in the current literature.

ver the past two decades, local planners have become increasingly aware of the changing character of the industrial base in their communities. The end of the cold war and concomitant closing of defense industries, the downsizing of industry as it becomes less labor intensive, the increased mobility of capital and international trade agreements are but a few of the factors that are influencing this change.1 Ann Markusen's study of industrial districts and how they succeed in an increasingly competitive world ("sticky places in slippery space") summarized the problem as follows: "Sticky places, then, are complex products of multiple forces—corporate strategies, industrial structures, profit cycles, state priorities, local and national politics. Their success cannot be studied by focusing only on local institutions and behaviors, because their companies . . . are embedded in external relationships. 2 Yet planners have been slow to analyze these impacts, among others, and to reflect on them in their proposals. Indeed, for the most part, industrial planning as a topic of scholarly and professional inquiry can be described as a black hole. A quick review of the recent programs of the annual conference of the American Planning Association shows that the word industry scarcely appears in the description of the sessions. Have we been ignoring a critical, swiftly changing, and complex issue that is likely to have major impacts on all our communities?

This article is designed to help overcome the lack of knowledge about industrial policy and planning by presenting and analyzing key scholarly works on the topic. I hope that academics and professional planners can gain increased understanding of the key issues that frame the topic and, at least in the case of practitioners, begin to react to them in

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their professional plans and projects. The first of three sections addresses the debate over national industrial policy and the second the state and local responses to industrial policy, while the third section summarizes the key themes in current literature and the missing elements of the debate.

The Industrial Policy Debate

Since the end of World War II, an explicit goal of U.S. economic policy has been to establish and maintain conditions that permit the free market system to work with minimal government intervention. Increasingly, however, advocates for industrial policy seek to involve the federal government in the domestic economy to an unprecedented extent, while opponents of industrial policy deplore the moves toward increased intervention at home and protectionism abroad.³ The fact of the matter is that U.S. national economic policies have evolved steadily since the Industrial Revolution. The changing role of the federal government in the affairs of the private economy has dictated much of what has occurred over the past two hundred years. This is a curious paradox given the U.S. government's laissez-faire, anti-interventionist philosophy concerning private enterprise.

Traditionally, the federal government became involved in the private economy only when it was deemed necessary to correct free market imperfections such as monopolies or negative externalities. Notable exceptions include U.S. intervention in the agricultural sector to maintain stable farm prices; its defense procurement policies, which directly affected the development of the shipbuilding, aerospace, telecommunication, and electric industries; and its antipoverty programs.⁴ In the international realm, the United States has focused its trade policy on lowering the barriers to free trade among nations under the umbrella of the General Agreement on Tariffs and Trade (GATT) and the North American Free Trade Agreement (NAFTA).

At the national level, the federal government has historically assumed a significant economic role by routinely engaging in regulatory and budgetary matters. These forms of interventions and macroeconomic controls were also put in place to ensure an efficient and unfettered free market system.

Not until the Great Depression did the federal government become directly involved with economic development matters at the state and local levels. The economic programs that were enacted as part of the New Deal legislation would profoundly influence the public's expectations of the federal government's role in the economic affairs of the nation.

Since the 1960s, regional and local economic development has assumed a more activist role. Planning efforts at the substate level began to focus more on the debilitating effects of failed national monetarist policies and the mounting wave of deindus-rialization. The domain of economic development planning activities was mainly two-fold: (1) the administration of federal and state programs to deal with the economic and social impacts of deindustrialization, and (2) the development of local and regional reindustrialization strategies that were aimed at expanding the economic base of communities. During this period, economic development efforts were extensively influenced by federal legislation and federal funding. Many of the federal programs specifically attempted to address the growing problem of structural unemployment through a myriad of programs aimed at creating jobs and expanding the economic base of cities and towns. Structural unemployment also developed a geographic aspect during the

1970s as scores of industrial plants closed and relocated to other parts of the country and throughout the world. Capital became much more mobile than populations and workers in the emerging global economy.⁶

Ironically, the enactment of more recent federal economic and community development programs and the infusion of funds to localities occurred in the absence of a national economic development policy. It has been argued that the federal initiatives were tantamount to a de facto national policy that effectively removed the federal government from economic and community development and instead passed the problems on to individual states and localities. Still others have commented that this wave of federal legislation and funding was but a piecemeal solution to the powerful forces that were reshaping local and regional economies.⁷

Many states and substate regions with more than their share of declining industries and job loss simply could not afford to wait for the national political climate to grow more hospitable toward a national industrial policy. The continuous evaporation and relocation of jobs in mature industrial sectors has prompted the need for state and local industrial policies. It has been argued, in fact, that state and local industrial policies may be more appropriate for state and substate regions that may want to target specific industrial sectors. Industrial regions and localities also have varied power structures among groups with stakes in the industrial policy and in their expectation in terms of cost benefits. Thus, it can be argued that locally authored industrial policy is better able than national policy to speak to the more defined political and economic interests of a particular region or locale.

National Industrial Policies

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. This definition closely fits industrial policy as it currently works in the United States, an approach consisting of short-term programs and projects without an overall framework. Robert Reich offers a more comprehensive definition:

Industrial policy focuses upon the most productive patterns of investment, and thus it factors 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 and relocate, it seeks to reduce the resistance to economic change likely to come from those who would be the hardest hit.¹³

Reich's definition includes almost all the elements of industrial policy that are being discussed at the national level. These are public incentives, industrial targeting, political involvement, international competition, infrastructure improvements, workforce development, worker training, balanced growth, and help for the displaced worker. Although there is no common agreement as to the scope of industrial policy, advocates generally focus on the needs discussed in the following sections.

Prerequisites for Industrial Policy

Attempts to forge an industrial policy face a twofold challenge, namely, to ensure that the policy is both analytically sound and democratically responsive. Liberals maintain that current industrial policies are partially hidden or implicit, contradictory and ad hoc.

The federal government should "tailor and coordinate the broad range of government programs in order to ensure that they facilitate growth in competitive productivity." ¹⁴

In addition to program coherence, a rational industrial policy also requires administrative coherence. There is no single entity presently accountable for all the implicit industrial policies of the United States; they are spread among dozens of competing agencies. Ira Magaziner and Reich advocated in 1983 that the president and Congress each establish an agency to evaluate the initial competitive consequences of all government policies and programs.¹⁵

Second, industrial policies formulated by various agencies must be consistent with one another and provide the same messages to all types of companies. There should be one voice to tie together the operational procedures and directives of the bureaucracy. Otherwise, efforts to create a workable industrial policy will be meaningless. ¹⁶

Third, government regulations and the capacity of industries to adhere to them should be cooperative. Any regulatory intrusion in the industrial marketplace should allow companies time and funds to react. The regulatory process should also include a commitment by the regulators to assist in finding solutions to critical problems.¹⁷

Fourth, there must be a commitment to long-term research and development activities. Current tax policies penalize companies that emphasize long-term research. Antitrust laws discourage competing industries from undertaking joint research projects.¹⁸

Last, industrial trade policies must be formulated in response to increased global competition and the growing interpenetration through trade among industrialized economies. The traditional economic development approach, which studies a region's natural resources, industrial mix, and economic base, must be expanded to develop an appreciation of the "international dynamics" of the industries involved.¹⁹

The Challenge for Industrial Policy Development

Irrespective of ideology, most industry analysts would agree that in order for an industrial policy to be successful, it must clearly articulate competitive strategies aimed at improving the efficiency and productivity of U.S. manufacturers. While specific strategies differ according to ideological persuasion, each would need to focus on such factors as firm innovation, increased productivity, and market penetration.²⁰

Influential to the current debate on industrial policy and global competition are the conceptual frameworks put forth under the rubric of "new growth theory." These frameworks, purposely constructed for use by policymakers, renounce the current effectiveness of Keynesian macroeconomic and monetarist policies put in place by the United States in the post–World War II years. This discourse is a response to the new global competition and, more specifically, the interpenetration through trade of the industrialized economies. The changing competition has been brought about by a leveling of the playing field among industrial nations, continuous technological innovations, and the globalization of industry in general.²¹

Growth theorists would argue that U.S. industrial policy has taken on a bad connotation among economists and the public because it is normally associated with the federal government's propensity for bailing out "sick firms in dying industries." Criticism has also been leveled at the federal government for providing subsidies and tax breaks for corporations. This so-called corporate welfare as a means of government intervention has steered investment away from the training and development of the American workforce. The subsidization of industry by the federal government also has a direct bearing on state and local industrial policies. For instance, states have often used fed-

eral tax dollars to poach companies and jobs from other states.

The challenge for successful U.S. industrial policy, according to new growth theorists, is not to subsidize inefficient corporations in declining industries or simply to help stabilize the national economy. Rather, government policy must help to stimulate investment and innovation to match industry's evolving structure. Lace Successful industrial policy should also help serve the market and help create "organizational superiority" in strategic industrial sectors. Lace Successful industrial sectors.

State and Local Responses to Industrial Restructuring

The impacts of economic restructuring are experienced not at some abstract national level but at the state and local levels where people live and work.²⁶ This section describes economic development programs used by state and local governments to help replace lost jobs and tax revenues and to take advantage of new economic opportunities. It focuses on state and local practices rather than on ideologically based policy debates.²⁷

Ideological values do, however, play a role in the choice and critique of state and local economic development policies. Conservatives believe that a nation maximizes its potential by organizing its economic development activity through market forces with little or no government intervention. Liberals believe that market forces, though powerful and useful tools, need the government to channel and regulate the forces to ensure an equitable society. Progressives view market forces as but one aspect of an entire capitalist system that harms some to increase the wealth of others. The only way to improve conditions is to democratize decision making. Progressives believe that incremental reform can accomplish this goal while Marxists hold that only a full-scale revolution can achieve lasting reform.²⁸

According to this classification system, the state and local economic development policies that have evolved since the Great Depression, and especially those of the 1980s, generally fall within or close to the liberal approach. States and localities intervene in the market in numerous ways, through public financing as well as worker training. New Deal policies and programs of the 1930s represent what has been referred to as the "First Wave" of economic development activity in the United States.²⁹ The formation of the National Resources Planning Board during the New Deal era set the tone for the federal government's interventionist activity by promoting state and local economic development planning agencies. Although the National Resources Planning Board was short-lived, vestiges of its industrial development programs had already become entrenched in most states. The conservatism of the federal government through the 1980s was partially accountable for the increasing liberal interventionism of states and localities during that decade. By the early 1990s, virtually every state and large city had adopted a form of industrial policy.³⁰ Local government thus became more liberal in an effort to compensate for conservative federal power.³¹

Features of State and Local Industrial Policy

It is also evident that the ideologies at the national level have a clear, direct link to the states. The increased strength of conservatives in Congress has already had deep impacts on how the states determine priorities. For example, debt reduction, one of Congress's priorities, has resulted in fewer funds for transportation, infrastructure, and community development assistance. Welfare reform, in turn, means that the states and their localities must take action to either replace federal benefits or to turn their backs

on some of their citizens. Defense downsizing has already caused hundreds of military bases to be closed and a major restructuring of our defense industries. What is most interesting is that these federal initiatives are occurring as random acts. They are not connected by any set of policies, for example, toward cities, toward competition, or toward the poor. It is here that the states and their communities have had to focus their actions. In the broadest sense, they deal with recruiting new businesses, retaining and expanding the existing industrial base, and more recently, exporting local goods and services to national and international markets.

Business Recruitment, Retention, Formation, and Expansion

Until recently, the practice of economic development was virtually synonymous with business recruitment, or "smokestack chasing." This approach consisted mainly of marketing a region's low taxes, low financing costs, and low wages. As competition increased, states and localities added numerous incentives to outbid each other.³²

These programs gained particular popularity in southern states where commerce departments were created to perform a variety of economic development functions that included industrial promotion and recruitment.³³ These agencies were also empowered to offer generous financial incentives to companies. The so-called First Wave policies, which were originally conceived as planning tools to assist distressed areas in building their capacity for value-added innovation, evolved into state strategies for capturing as much industry as possible from other regions and localities.³⁴ The model had a singular focus, which was to recruit manufacturing plants from outside the state by offering them "low-cost investment locations and public financial incentives."³⁵

Some argue that state and local economic development, based on business recruitment, often does not help the segments that need it most and that current state and local development practices, especially business recruitment approaches, are undemocratic. They claim that the process is elitist because public officials tend to identify with the interests of the business and development community that they are courting. Elected and appointed officials underplay the magnitude of the incentives they offer to firms and exaggerate the benefits in jobs and future economic growth that will come from an improved business climate.³⁶

The industrial recruitment model has lost little of its political allure. A large manufacturer's announcement of its intention to relocate to a community and bring a specified number of jobs remains a highly visible and newsworthy event.³⁷ Unfortunately, in too many cases it was learned that the motivations of large multinational firms were not necessarily compatible with the needs or interests of local communities.

What the recruitment strategies formulated by economic development agencies failed to consider were the factors and conditions that contributed to the demise of manufacturing jobs in the first place. For instance, there existed little understanding concerning the magnitude to which the emerging global economy and the use of new technologies had altered the geographical boundaries of industry. The increased mobility of capital greatly diminished the comparative advantage of individual cities and regions of the country.

This economic reality eventually gave birth to the "Second Wave" of economic policy in the United States. In the Second Wave, which unfolded during the 1980s, economic development planners began to experiment with a host of new global strategies to help foster local and regional economic growth. These tactics included the development of entrepreneurial environments, university-industry linkages, manufacturing

modernization, and regional industrial clusters.³⁸ Second Wave economic development did not entirely abandon the business attraction or industrial recruitment model. Rather, planners, realizing its limitations, changed their focus to "indigenous" economic development activities that would help existing firms improve their productivity. Local capacity building was key to the new economic development consciousness. There existed a newfound belief that the strongest magnet for economic growth is "an economic environment rich with the human, technological, financial, and infrastructure resources that support existing firms and entrepreneurship."³⁹

The economic policies of the Second Wave were nurtured by a hospitable political environment in the United States and abroad. The role and legitimacy of big government was being questioned by a neoconservative movement that had gained political power and strongly influenced public opinion. The conservative brand of Reaganomics practiced in the United States espoused the virtues of decentralized free markets, deregulation, small business, and entrepreneurship. 40 It could be argued, therefore, that Second Wave strategies were formulated more in response to an ideological persuasion than from a prescribed set of operational principles derived from a coherent national economic policy. The recipe for successful economic development bestowed on regions and communities was simply to build entrepreneurial environments in which business and industry could flourish with minimal government regulation and interference.

It was soon determined that Second Wave economic development thinking had also missed the mark. The major criticism was that Second Wave policies and strategies misread the dynamics of the evolving global economy. The transition from the First to Second Wave represented a policy change from industrial recruitment to internal or indigenous economic development. However, the emerging "Third Wave" has represented a growing recognition that in order to create the total economic environment envisioned by Second Wave proponents, new economic institutions and organizations would have to be developed. Third Wave economic development principles have been based on various state initiatives and experiments. They typically involve different forms of manufacturing network programs. The key elements or set of operational principles that have evolved from these state initiatives include (1) the application of government resources only to "demand driven" strategies, (2) a greater leveraging of public and private resources, (3) the encouragement of competition among resource suppliers, and (4) the creation of "automatic feedback loops" to determine program accountability and effectiveness. 41

Third Wave programs and initiatives continue to emphasize a limited role for governmental involvement. The underlying motivation is to create a new flexible business environment free of the existing maze of government regulation. The model manufacturing network would have a close spatial dimension and a knowledge-based production system with mutually supportive business firm relationships. Economic development planning in a knowledge-based manufacturing environment would also take on a more entrepreneurial identity. Planners would be expected to assume the role of facilitator in helping to create and nurture an environment that is conducive to economic growth and competition. Planners would also routinely be expected to provide targeted economic incentives, infrastructure improvements, and more flexible land use regulations.

Third Wave case study examples include the "high performance" manufacturing zones popularized in the Midwest⁴² and new manufacturing network initiatives in Michigan, Indiana, and Ohio.⁴³ Battle Creek, Michigan, is viewed as a prototypical high-performance manufacturing zone because the city and the region were severely

impacted by a wave of deindustrialization during the 1970s and have since been revitalized through a proliferation of Japanese transplants. A number of other traditional manufacturing locations in the upper Midwest have also been targeted by Japanese foreign investors. In each case, the new economic development strategies focused on organizational restructuring, new delivery systems, innovative management practices, and more formalized worker training and vocational education programs. States and communities are increasingly focusing on business formation or growth from within. Regardless of its total accuracy, David Birch's point on the majority of new jobs being created by firms that are less than ten years old, employ fewer than twenty people, and manufacture a product is taken seriously in most states, especially in New England.⁴⁴ Many states and localities are paying equal attention to business retention and expansion strategies and realizing that they are more cost-effective than business recruitment.⁴⁵

Even if one accepts business retention approaches on ideological grounds, it does have several limitations as a development strategy. First, from the political standpoint, it is riskier and less glamorous than business recruitment, since politicians have nothing new to show for their efforts. Instead of being able to unveil a brand-new building or corporation, a politician is given the unenviable task of selling something familiar back to the constituents. ⁴⁶ Is it any wonder that politicians are reluctant to endorse such a strategy? Second, retention efforts work only in communities that already have a fairly healthy economic climate. If there are local shortages of labor, problems with workforce skills, land use problems, and high operational costs, all the retention efforts in the world will not work. Again, it could be argued that the very communities most in need are those which are too poor to afford this type of aid. Last, retention efforts are not immune to the state wars and interstate bidding games. ⁴⁷

What Does the Literature Tell Us? A Summary of Key Themes

Virtually all the books and articles reviewed point out that if the United States is to be competitive, it must compete globally. This is probably no surprise to the reader. However, what is striking is the difference of opinions on how best to improve our competitive posture. The debates over NAFTA and GATT illustrate the difficulty in coming to agreement.⁴⁸ What is most interesting, however, is the fact that business at the local level has, in many ways, ignored the debate and undertaken efforts on its own to become internationally competitive.

In second place is the need to stimulate research and development (R&D) and to move it away from its military orientation.⁴⁹ While opinions differ concerning how best to accomplish this, there are indications of some movement in this direction. The shift from Defense Advanced Research Projects Agency to Advanced Research Projects Agency, while partially a simple change in name, reflects the government's understanding of the need for this change. Also, the role of the National Institute of Standards and Technology in creating regional innovation centers is another positive step.

The third is the interest in industrial clustering.⁵⁰ The idea that regions have existing and emerging groupings of industry with linkages among labor, finance, and R&D is quite popular. While few argue for government to target clusters, most scholars see great merit in stimulating local strengths and opportunities.

As part of the industrial clustering, most industrial policy advocates see, as the fourth factor, the need to change corporate culture. More specifically, they are aware of

the necessity to develop industrial networks that share ideas and approaches. The age of totally isolated individual firms developing products totally from within has passed. They also argue for government to help stimulate business commitments for the long term. The quick return-on-investment strategies of many companies creates a climate of insecurity and instability at the local level.

The fifth focuses on education and training. The nation must effect an extensive shift in the way we educate and train our workforce.⁵¹ It is clear that lifelong education is a requirement for a healthy economy.

The sixth is the need to improve our infrastructure.⁵² This is not simply a matter of roads and bridges but ensuring that our telecommunications systems are state of the art and meet the requirements of all regions of the nation. It means that our water must be pure and deliverable to regions that lack it. And it means that our sanitation needs must be environmentally appropriate and that our people are protected.

Finally, regulatory reforms have to be addressed.⁵³ These include, as examples, anti-trust laws at the national level, unemployment and workers' compensation laws at the state level, and zoning laws at the local level. Putting all these together is no easy task!

Missing Elements

What is the debate lacking? The first element is the link between industry and the environment. Yes, we see an increased concern over protecting the environment. Yes, we see higher and higher standards that govern environmental hazards. And yes, we have noted increased environmental awareness at the local level. But beyond this, we see little attention being paid at the federal level to industrial site recovery. It is ironic that the Environmental Protection Agency is responsible for the "brownfields" initiative. EPA's mandate is not to attract industry to brownfields, it is to stimulate the cleanup of the polluted industrial landscape. This action is "stove piping" at its worst. EPA should not own this problem at the federal level but should share it with the departments of Housing and Urban Development and Commerce. Few industrial policy advocates or analysts, except George Lodge, have picked up on this issue. It clearly needs to be addressed.

Second, industrial policy advocates have steered away from place-specific programs. Little current literature calls for the creation of an Appalachian-type commission in some region of the country. This represents a fundamental shift in the position of advocates in the 1970s and early 1980s. Perhaps the current advocates no longer see the need for such agencies, perhaps the inherent policy of the nation to redistribute wealth across the country is working, or perhaps there are newer, less bureaucratic methods to undertake regionally assisted development. The fact remains that the literature underplays the desirability of regionally directed approaches.

Third, relatively little attention is being placed on cities. Beyond Michael Porter's call to make cities more competitive, Robert Beauregard's perspective that the negative sides of urban life have been exaggerated, and Ann Markusen's call to use some of the mythical peace dividend for urban restructuring, mighty few advocates are looking at linking industrial policies and urban revitalization. It is as if our cities are to sink or swim on their own merits.

Finally, the increasing independence of the world's large companies is underaddressed. These companies are virtually free of commitment to nations and exist increasingly as global entities of their own. They are quickly responsive to the initiatives of Japan Inc., NAFTA, GATT, and the European Union in terms of the impact on the company rather than on their workers or on their home nation. Given the mobility of capital, varying labor costs, and the internationalization of markets, they have little choice. In light of this phenomenon, it is essential that industrial policy confront this issue and strive to create approaches which create increased stability and worker security before any public investment occurs. Otherwise our communities will be involved in risky business.

A Final Word

Even as we debate and adopt, reject, or compromise on various visions of national industrial policy, the global economy itself continues to change rapidly. As multinational corporations divide and multiply their operations throughout the globe, engaging in joint ventures for research and production with other corporations and governments, they create an increasingly complex web of relationships that supersedes the borders of the nation-state and stretches the balance of political-economic theory and policy.⁵⁴

It is tempting to assume that these developments will continue unchecked, gradually pushing protectionism aside until the world becomes one big market. We must, however, avoid such simple assumptions. National nontariff barriers are increasing in significance, as are regional trading blocs. Indeed, the division of the world economy into a yen bloc in the Pacific, a dollar bloc in the Americas, and a mark-dominated bloc in Europe has, to some extent, already occurred. It is therefore important that we make conscious choices among the industry and trade policy options before us, mindful of their consequences not only for the world output and income, but for each nation's worker, consumer, and community income and well-being.

Furthermore, states and localities have experienced the effects of economic restructuring in different ways, some as economic and social disasters, others as mere disruptions, yet others as opportunities for new growth and expansion. In response, localities have established increasingly sophisticated economic development programs to replace lost jobs and tax revenue. Owing in part to the retreat of the federal government from their affairs through the 1980s, local regions have focused their energies on competing with one another for jobs through their business recruitment policies. They are also using more deliberate analysis and planning procedures to establish appropriate development goals and strategies.⁵⁵

With or without a change in federal priorities, several trends seem irreversible. States and localities are rapidly acquiring the expertise to understand regional and economic forces and developing increasingly sophisticated tools to promote their own economic prosperity. Yet the ultimate success or failure of the state and local economic development efforts also depend on the development of global economic forces as well as that of other national governments. The task ahead for states and localities, and for the federal government, is to generate mutually cooperative policies that promote equity and human welfare.

Notes

 Helzi Nopponen, Julie Graham, and Ann R. Markusen, Trading Industries, Trading Regions (New York: Guilford Press, 1993).

- Ann R. Markusen, "Sticky Places and Slippery Space: The Political Economy of Post War Fast-Growth Regions," Working Paper #79 (New Brunswick, N.J.: Center for Urban Policy Research, 1994).
- 3. Kevin P. Phillips, "U.S. Industrial Policy: Inevitable and Ineffective," *Harvard Business Review* 70, no. 4 (1992), 104–112.
- 4. John J. Accordino, *The United States in the Global Economy: Challenges and Policy Choices* (Chicago: American Library Association, 1992).
- Barry Bluestone and Bennett Harrison, The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry (New York: Basic Books, 1982).
- John E. Ullman, The Anatomy of Industrial Decline: Productivity, Investment, and Location in U.S. Manufacturing (New York: Quorum, 1988).
- 7. Bennett Harrison, Lean and Mean: The Changing Landscape of Corporate Power in the Age of Flexibility (New York: Basic Books, 1994).
- 8. Margaret E. Dewar, "The Industrial Policy Dilemma," *Economic Development Quarterly* 6, no. 2 (1992): 211–219.
- Michael Porter, in collaboration with Monitor Company, Inc., The Competitive Advantage of Massachusetts (Cambridge: Monitor Company, 1991).
- 10. Harvey A. Goldstein, ed., *The State and Local Industrial Policy Question* (Chicago: American Planning Association, 1987).
- 11. David Osborne, Laboratories of Democracy: A New Breed of Governor Creates Models for National Growth (Boston: Harvard Business School Press, 1990).
- Sar A. Levitan and Chalmers Johnson, "The Contradictions of Industrial Policy," Journal of the Institute of Socioeconomic Studies 7, no. 4 (1983–1984): 48–63.
- 13. Robert Reich, "Why the United States Needs an Industrial Policy," *Harvard Business Review* 60, no. 1 (1982): 74–81.
- 14. Ira Magaziner and Robert Reich, *Minding America's Business: The Decline and Rise of the American Economy* (New York: Harcourt Brace Jovanovich, 1983).
- 15. Robert Kuttner, "Facing Up to Industrial Policy," New York Times Magazine, April 19, 1992, and Phillips. "U.S. Industrial Policy."
- George Lodge and William Glass, "U.S. Trade Policy Needs One Voice," Harvard Business Review 61, no. 3 (1983): 75–83, and Michael M. Weinstein, "A Stealth Industrial Policy," New York Times, February 24, 1993, A14.
- Harvey Goldstein and Edward Bergman, "Institutional Arrangement for State and Local Industrial Policy," Journal of the American Planning Association 52, no. 3 (1986): 265–276; Virginia D. McConnell and Robert M. Schwab, "The Impact of Environmental Regulation on Industrial Location Decisions: The Motor Vehicle Industry," Land Economics 66, no. 1 (February 1990): 67–81; and Keith Schneider, "Rules Easing for Urban Toxic Cleanups," New York Times, September 20, 1993, A12.
- Edward J. Malecki, Technology and Economic Development. (Essex, England: Longman Scientific & Technical; New York: Wiley, 1991).
- 19. Porter, *The Competitive Advantage of Massachusetts*, and Robert B. Reich, "Clintonomics 101: And Why It Beats Bush-Reagan," *New Republic* 207, no. 10 (August 31, 1992): 23–24.
- Porter, The Competitive Advantage of Massachusetts, Michael Best, The New Competition: Institutions of Industrial Restructuring (Cambridge: Harvard University Press, 1990), and Reich, "Clintonomics 101."
- 21. Porter, The Competitive Advantage of Massachusetts.
- 22. Best, The New Competition.
- 23. Reich, "Clintonomics 101."
- 24. Porter, The Competitive Advantage of Massachusetts.
- 25. Best, The New Competition.
- 26. Nancey Green Leigh, Stemming Middle-Class Decline: The Challenges to Economic Development Planning (New Brunswick, N.J.: Center for Urban Policy Research, 1994).
- 27. Osborne, Laboratories of Democracy, and Brian J. Berry, Long Wave Rhythms in Economic Development and Policy Behavior (Baltimore and London: Johns Hopkins University Press, 1991).

- 28. Accordino, The United States in the Global Economy, and Phillips, "U.S. Industrial Policy."
- Doug Ross and Robert E. Friedman, "The Emerging Third Wave: New Economic Development Strategies," in Local Economic Development: Strategies for a Changing Economy, ed. Scott R. Fosler (Washington, D.C.: International City Management Association, 1991), 125–138.
- 30. Goldstein, The State and Local Industrial Policy Question.
- 31. Richard D. Bingham and Robert Mier, eds., *Theories of Economic Development* (Newbury Park, Calif.: Sage, 1993), and Robert A. Beauregard, *Voices of Decline: The Post War Fate of U.S. Cities* (Cambridge, England: Basil Blackwell, 1993).
- 32. David Friedman and Joel Kotkin, "Begging as an Economic Development Strategy: Let Other States Do It," Los Angeles Times, April 18, 1993, M6.
- 33. Stuart A. Rosenfeld, Competitive Manufacturing: New Strategies for Regional Development (New Brunswick, N.J.: Center for Urban Policy Research, 1992).
- 34. Fosler, Introduction to Local Economic Development, xiii–xxix.
- 35. Ross and Friedman, "The Emerging Third Wave."
- 36. Timothy J. Bartik, Who Benefits from State and Local Economic Development Policies? (Kalamazoo: W. E. Upjohn Institute for Employment Research, 1991).
- 37. Fosler, Introduction.
- 38. Richard Florida and Timothy McNulty, "High Performance Economic Development," Economic Development Commentary 19, no. 1 (1995).
- Jeanne Armstrong and John R. Mullin, "National Industrial Policy and the Local Planners," Journal of Planning Literature 2 (Spring 1987): 119–135, and Ross and Friedman, "The Emerging Third Wave."
- 40. Harrison, Lean and Mean.
- 41. Ross and Friedman, "The Emerging Third Wave," and AnnaLee Saxenian, Regional Advantage: Culture and Competition in Silicon Valley and Route 128 (Cambridge: Harvard University Press, 1996).
- 42. Florida and McNulty, "High Performance Economic Development."
- 43. Walter H. Plosila, "Technology Development: Perspectives on the Third Wave," in Local Economic Development, 48–55, and Ross and Friedman, "The Emerging Third Wave."
- 44. David Birch, *The Job Generation Process* (Cambridge: MIT Program on Neighborhood and Regional Change, 1979).
- 45. Friedman and Kotkin, "Begging as an Economic Development Strategy."
- 46. John M. Levy, Economic Development Programs for Cities, Counties, and Towns, 2d ed. (New York: Praeger, 1990).
- 47. Osborne, Laboratories of Democracy, Accordino, The United States in the Global Economy, and Peter S. Fisher, "The National Consequence of Decentralized Industrial Policy in the United States," paper presented at the Association of Collegiate Schools of Planning Annual Conference, Austin, Texas, October 1990.
- 48. Max Holland, When the Machine Stopped: A Cautionary Tale from Industrial America (Boston: Harvard Business School Press, 1989).
- 49. Alex Mintz, ed., The Political Economy of Military Spending in the United States (New York: Routledge, 1992), and Ann Markusen and Joel Yudkin, Dismantling the Cold War Economy (New York: Basic Books, 1992).
- 50. Manuel Castells and Peter Hall, Technopoles of the World (London: Routledge, 1994).
- 51. William J. Wilson, When Work Disappears: The World of the New Urban Poor (New York: Knopf, 1996).
- 52. James W. Harrington and Barney Warf, *Industrial Location: Principles, Practice, and Policy* (London: Routledge, 1995).
- 53. Michael L. Dertouzos, Richard K. Lester, and Robert M. Solow, *Made In America: Regaining the Competitive Edge* (Cambridge: MIT Press, 1989).
- 54. According, The United States in the Global Economy.
- 55. Bingham and Mier, Theories of Economic Development.