

Are Industrial Policy and Corporatism Compatible?

LANE KENWORTHY* *Sociology, University of Wisconsin, Madison*

ABSTRACT

As intense international competition along with rapidly changing product markets and technology have come to dominate the economic environment for firms, industries, and nations, government pursuit of a coordinated, proactive industrial policy has increasingly been viewed as a key to national economic success. Owing largely to its utility in generating consensus-formation, corporatist concertation has been suggested by a number of commentators as an ideal mechanism for implementing industrial policies. However, the legitimacy of corporatism as a mode of interest intermediation rests on the capacity of interest group representatives to win benefits for all their members, while industrial policy decisions are by nature selective or discriminatory. This feature of industrial policy casts doubts upon its compatibility with corporatism. The postwar policy-making experiences of Japan, Sweden, and West Germany support this skepticism.

The economies of Japan and Sweden have received well-deserved praise for their performance success during the post-World War II period. This success has been owed in significant measure, arguably, to extensive use of industrial policy in the former case (Johnson 1982; Komiya et al. 1988; Magaziner and Hout 1980; Zysman and Tyson 1983) and corporatist concertation in the latter (Cameron 1984; Heclø and Madsen 1987; Katzenstein 1985; Wilensky and Turner 1987). Can these two performance-enhancing strategies be pursued in concert? More specifically, can an industrial policy be implemented via a corporatist arrangement?

Most advocates of industrial policy stress that its potential for success depends upon achievement of some degree of consensus between the state, business, and labor. Corporatist concertation of some sort is often

* I am grateful to Leon Lindberg, Joel Rogers, Wolfgang Streeck, the editor, and two anonymous referees for helpful comments on earlier drafts.

suggested as an effective mechanism for forging such consensus (Atkinson and Coleman 1985; Gray and Lowery 1990; Peters 1986; Reich 1982; Rohatyn 1983). Yet there appears to be a logical contradiction in the notion that a corporatist structure can effectively make industrial policy decisions; for these decisions typically discriminate among sectors or firms, while the legitimacy of corporatism as a mode of interest intermediation lies in its capacity to secure benefits for all of its participants.¹ If an encompassing organization engages in negotiations which favor the interests of some of its members over those of others, the members not privileged have reason to dissociate themselves from the organization, or at least from the bargaining process. But the stability of corporatist concertation rests on the ability of the representatives engaged in the negotiation to secure the consent of those they represent to whatever decisions are reached. Hence, there is reason to suppose that corporatist concertation – while perhaps well suited for income and labor market policies – cannot be a stable, effective mechanism for industrial policy formulation.

This paper offers some preliminary considerations on this tension. Section 1 outlines some reasons why industrial policy is increasingly crucial for national economic success. In the second Section I explore the incompatibility of industrial policy and corporatism in theoretical terms. Section 3 provides some empirical references, based on the post-war experiences of Japan, Sweden, and West Germany. In Section 4 I consider some implications of the findings.

1. *Why does it matter? The need for industrial policy*

Industrial policy consists of governmental action that intentionally alters (1) the market allocation of resources among sectors, or among firms within a sector, or (2) the structural composition of a sector. A key feature of industrial policy is that it is *selective*; it *discriminates* among sectors or firms. Typically the aim is to promote the international competitiveness of the firms or industries. Measures used toward this end include subsidies, tax incentives, or loans to encourage investment in research and development, capital, or training; export promotion; government procurement; import restrictions; and the encouragement of cartels or industrial concentration. In some instances the goal of industrial policy is to accelerate or ease the transfer of resources out of a sector.

Three broad economic changes precipitated an avalanche of concern with industrial policy during the past decade. One is the increased international competition faced by all advanced capitalist economies. The free trade regime imposed upon the Western bloc by the United

States after World War II has, despite flurries of protectionism from all sides, considerably opened up the markets of these nations to competition from abroad (Baldwin 1984, p. 6; Magaziner and Reich 1983, p. 204). Several rounds of GATT-administered multilateral negotiations lowered tariffs on traded goods from an average of over 40 per cent to about 5 per cent by 1973 (CCTC 1988, p. 65). The fate of the United States itself perhaps best illustrates the point. Between 1960 and 1980 exports and imports as a share of United States manufacturing output increased from 14 to 42 per cent. In 1960 only 20 per cent of goods produced in the United States were in active competition with foreign products; by 1980, 70 per cent were. In 1979 the United States imported 14 per cent of its steel, 21 per cent of its cars, and 50 per cent of its televisions, radios, tape recorders, and phonographs, whereas in 1960 imports accounted for less than 6 per cent in each of these product categories. And between 1950 and 1980, the United States share of world trade dropped from 20 to 11 per cent.²

The second major development is a significant acceleration in the rate at which technology changes. The microelectronics revolution is only in its infant stages, yet the state-of-the-art products in many important input fields – from machine tools to computers – are now outdated within less than a decade. As capital stock must be replaced more frequently, the importance of firms' access to financing and of the time horizons under which they operate is accentuated. A third development is a dramatic increase in the volatility of product demand. This necessitates continuous technological and product innovation on the part of firms, and may in some instances require rapid shifts of resources among sectors.

Although the debate is contentious and far from resolved, there is good reason to think that industrial policy is a key to successful industrial performance in an interdependent world economy (Grossman 1990; Itoh et al. 1988a, 1988b; Johnson 1984; Krugman 1986; Kuttner 1987, ch. 3; Magaziner and Reich 1983; Phillips 1984; Reich 1982; Scott 1985a; Strange 1988; Thompson 1987; Thurow 1984; Zysman 1983; Zysman and Tyson 1983). It can play an important role in each of four stages in the life cycle of an industry: growth, stability, transition, and decline. In each case industrial policy compensates for some type of market failure, in the sense that market processes yield suboptimal outcomes. Industrial policy interventions aim to increase allocative efficiency and social benefits, particularly in the form of employment, by preventing or correcting such failures.

In the growth stage industrial policy can be essential to the development of internationally-competitive firms. New companies or existing firms moving into a new product line may lack sufficient funds for large-

scale capital and R&D investments, and capital markets may not provide such funds. Even if they do, they may not permit a firm enough time to develop its product and to succeed in marketing it; firms forced to rely primarily on equity sales for finances face the constraint of shareholders' notorious short-term focus (Ellsworth 1985; Friedman and Miller 1984). This problem may be remedied without direct state action via a financial system in which large banks hold significant equity stakes in firms and thus develop a close, long-term relationship with them, as in West Germany (Dyson 1986; Ellsworth 1985; Zysman 1983, pp. 251-65). But otherwise, industrial policy may be required.

Japan's success in industries such as automobiles (Magaziner and Hout 1980, pp. 67-79; Mutoh 1988), consumer electronics (Millstein 1983; Staelin et al. 1990; Yamamura 1986), machine tools (Collis 1988; March 1990b; Sarathy 1989), semiconductors (Borras et al. 1983; Clausen et al. 1990; Okimoto et al. 1984, chs. 4-5), and steel (Borras 1983; Flemings et al. 1990; Yamawaki 1988) has been owed to a large extent to the ability of Japanese companies to sell their products at very low prices in foreign markets for a considerable period of time. This has allowed them to gain a foothold in these markets and to lower costs by moving down the learning curve and achieving scale economies. These firms have been able to follow such a strategy in part because they have received subsidies and preferential loan treatment from the Japanese government, and in part because they have been able to make up losses on export sales by charging high prices in their domestic markets, which have been protected from foreign competition. State action has been similarly instrumental in the success of the United States aircraft (Bluestone et al. 1981, ch. 7; Hooks 1991; March 1990a; Mowery and Rosenberg 1982), computer (Flamm 1987, 1988; Katz and Phillips 1982), and semiconductor (Hooks 1991; Levin 1982) industries. In these sectors' early stages the United States government, particularly through the Defense Department, provided substantial amounts of funding for R&D and a guaranteed market, thus making possible risky, long-term research projects.

The formation of multifirm consortiums for pooling research efforts is another effective mechanism for developing a competitive industry. Knowledge interaction effects can be exploited, risk pooled, and wasteful duplication of effort avoided. The highly successful Very Large Scale Integration project among Japanese semiconductor and computer producers, which was induced and partially funded by the state, is a classic example (Borras et al. 1983, pp. 208-14; Ouchi 1984).

The second phase of an industry cycle is normally one of relative stability, in which the principal challenge facing firms is the maintenance and/or expansion of market share and profits for a standardized

product. Proactive state support would appear to be less crucial here than in other stages, yet as Michael Atkinson and William Coleman (1989, p. 62) have noted, strategic reasons for planning comprehensive policies for an industry may exist. 'When this occurs, emphasis will probably be laid on regulatory instruments. These will be used to stabilize the price of inputs and other operating costs, maintain product quality, and restrict the entry of new firms and ensure domestic political stability. Research and development support emphasizing product improvement and production efficiency will continue to complement these regulatory systems. . . . Finally, competition policy may be relaxed to afford industry the opportunity to construct mergers for export purposes or resist the intrusion of foreign firms'.

When an industry is in a transition stage, industrial policy may be necessary to encourage adaptation by already-competitive firms to new technological innovations. Firms which hold an established position in the world market for a particular product may lack the funds to adopt new technologies needed to remain competitive. Or they may prefer to utilize their resources to make slight adaptations to existing technology, to shift production abroad, to diversify into other products, to lobby for protection, or simply to advertise massively. This sort of reaction can result from the time-horizon constraints imposed by capital markets, simple managerial short-sightedness, or the attractions of 'paper entrepreneurialism'.

The United States steel industry is a classic case in point (Borras 1983; Eichengreen 1988; Magaziner and Reich 1983, ch. 13). In the 1950s a new and more efficient technology for processing steel, the basic oxygen furnace process, became available. But the major United States producers, who held a dominant position in the world market, opted to stick with the existing open-hearth process. Japanese firms, with government incentives and support, adopted the new process and soon challenged and overcame the preeminence of the United States companies. In the 1960s a similar development occurred with continuous casting. Several United States producers spent significant quantities of money on new capital during that decade, but mostly in the form of piecemeal additions to existing plant and equipment rather than on replacement with the newer, more efficient technology. As a result, the competitiveness of these firms was little enhanced. By the end of the decade, realizing that their half-hearted catch-up attempt had failed, these companies turned toward protectionist lobbying and some began to shift their assets out of steel altogether.

Again, government funding or backing of private loans, cooperative research ventures, state procurement, and in some cases import restrictions can help encourage the needed investment on the part of firms in

this type of situation. Targeted government subsidies and creative linkages between the state, industry, and educational institutions have kept West German, United States, and Japanese producers at the technological forefront among international competitors in machine tools (Herrigel 1989; March 1990b), agriculture (Evenson 1982; Tweeten 1970, chs. 4–5), and textiles (Berger et al. 1990), respectively.

Another mechanism which may help to deal with the need for continual technological modernization is the formation of 'rationalization cartels'. This has been widely used by the Japanese economic bureaucracy, as Kozo Yamamura (1982, pp. 84–85) explains:

... the most fundamental reason for rapid growth of the Japanese economy was a continued large capital investment. Of course, its leaders were the large firms in major industries. . . . As they continued to invest in newer technology, taking advantage of its ready availability, their total productive capacity continued to increase rapidly. . . .

... by producing more (i.e., by making the best use of the newly adopted technology), each firm could achieve more rapid cost reduction and gain a competitive edge over other firms in the same industry that were slower in increasing output and sales. Producing more, then, meant more sales and profits. Or, maximizing one's market share also maximizes one's profit. . . .

Maximizing market share to maximize profits, however, is not a strategy that can be pursued by all firms in a market. If they all choose to maximize their market share, the total productive capacity of the industry and the quantity of products supplied to the market will quickly exceed the demand and some firms will be forced to drop out of competition by being absorbed or bankrupted. . . .

However, even in a market economy, there is a way to let all large firms grow profitably with a minimum of risk to their investment: it is the 'arrangement' with a 'coordinator' to arbitrate the race for investment and market share competition with an appropriate carrot and stick. MITI [the Japanese Ministry of International Trade and Industry] quickly began to guide the firms to coordinate their investment plans. The goal was to increase the capacity of each large firm roughly proportionate to its current market share. Among those firms selected to join the investment race, usually by virtue of their current size, none was to grow so rapidly as to bring confusion to the market. 'Orderly growth', assuring everyone's steady growth and profits, was the catchword of the day.

Had these cartels not been formed, such industries would likely have developed in one of two directions: either all but a few firms would have been forced into bankruptcy, or the existing firms would have colluded to not dedicate large quantities of funds to new investment. The MITI-sponsored cartels encouraged such investment while maintaining a sufficient number of firms in the sectors to provide a healthy level of competition.

Industrial policy may also prove important when demand for a product is in long-term decline. The state can pursue either of two strategies in this situation. One is to ease the shift of resources out of the industry,

typically accomplished by directing the orderly withdrawal of the most inefficient firms and reduction of output by remaining firms to a level that meets existing demand. Aid may also be supplied to these firms in order to increase their efficiency. Alternatively, the government may attempt to quicken the shift of resources (both capital and labor) out of the declining sector and into others. Firms in such industries may be able to hold on in the market for longer than is desirable in terms of allocative efficiency, thus wasting valuable resources which might otherwise contribute to the development of a rising industry.

Finally, perhaps the most compelling consideration in favor of industrial policy is simply that noninterference in the market is not a plausible alternative. As Ira Magaziner and Robert Reich (1983, p. 6) note: 'To a significant degree, the governments of all industrialized countries, regardless of political ideology and rhetoric, inevitably affect the pattern of investment in their economies through procurement, tariffs and quotas, guarantees, and various selective tax breaks and subsidies'. The real choice is between a coordinated, anticipatory industrial policy and an ad hoc, reactive one.

2. *Industrial policy and corporatism*

Corporatist concertation consists of regularized bargaining over substantive policy issues between representatives of the state and of peak associations of one or several societal interest groups.³ Such arrangements have two components: (1) the organization of one or more interest groups into associations whose delegates have the authority to engage in negotiations on behalf of their memberships; and (2) the institutionalized participation of these representatives in the making of policy decisions.⁴ For expositional convenience, in the remainder of the essay I use the terms 'corporatist concertation' and 'corporatism' interchangeably.

Like industrial policy, corporatist concertation has several attractive features. Most generally, it offers a means by which major economic decisions can be made in a democratic and cooperative, rather than anarchic and competitive, fashion. Tripartite corporatist arrangements have several more specific payoffs. They provide workers with a significant amount of influence over some of the decisions which vitally affect their quality of life – in particular, decisions about wages and job conditions – and enable them to pursue strategies that decrease inequality among wage-earners.⁵ They also appear to have contributed to macroeconomic performance success in the form of relatively high growth, low unemployment, and low inflation (Calmfors and Driffill 1988; Cameron 1984; Castles 1987; Crouch 1985; Hicks 1988b; Katzenstein 1985;

Kenworthy 1991; Lange and Garrett 1985; Schmidt 1982; Wilensky and Turner 1987).⁶ Finally, tripartite corporatism is associated with low overall societal inequality (Freeman 1989) and may be a key ingredient in the well-demonstrated link between labor movement strength and high levels of social and welfare spending (Castles 1978; Esping-Andersen 1985; Hicks and Swank 1984a, 1984b; Korpi 1989; O'Connor 1988; Stephens 1979).

Certainly industrial policy is compatible with some sort of concertation between organized interest groups and the state. Indeed, this would appear to be a precondition for successful pursuit of industrial policy, for as Chalmers Johnson (1984, pp. 9–10) has rightly observed, industrial policy 'does not depend on the displacement of the market by bureaucratic fiat, but instead reflects cooperative efforts by the public and private sectors to understand the nature of technological change and to anticipate its likely economic effects'. But what is distinctive about *corporatist* concertation is not just the fact that policy formulation is conducted via some kind of bargaining among the state and one or more societal interest groups. In corporatist concertation arrangements the interest group(s) involved are organized into hierarchical bodies which are granted authority to make decisions on the membership's behalf, and the negotiation is conducted by representatives of these bodies in the membership's name.

The prototypical corporatist structure is one in which the bargaining occurs between the state and *national-level* peak associations of business and/or labor. Can industrial policy decisions be formulated in such a fashion? Or perhaps corporatist concertation is better suited for implementing industrial policy at the *sectoral* level.⁷ Michael Atkinson and William Coleman (1985, p. 28), for instance, contend that 'industrial policies of the positive adjustment or large-scale restructuring sort will almost inevitably entail severe economic and social dislocation for some capitalists and, even more likely, for some groups of workers. Thus these policies hold out the prospect of discontent and perhaps severe social conflicts. In sectors which are deemed to require such policies, corporatist political structures therefore become a serious option for the state'. The idea here is that state intervention into the resource allocation or structural composition of an industry can be facilitated by negotiation with sectoral-level peak associations of employers and/or labor.

Organizational considerations suggest that corporatist concertation is not well suited for implementing industrial policies at either level. A precondition of a corporatist bargaining process is that the representatives of the interest groups involved be able to guarantee acceptance by (all) their members to agreements they may make. Yet if agreements

discriminate among members of the interest groups – as industrial policy decisions do by definition – there is good reason for those not favored to dissociate themselves from the bargaining process.

With regard to employers at the firm level the reasoning here is straightforward. Since firms within the same industry compete against one another, aid to one or several puts the others at a relative disadvantage. Thus, we should not be surprised to find that sectoral-level corporatist arrangements designed to implement industrial policy tend to be unstable. An instructive example is 'crisis cartels' created to facilitate the transition of resources out of declining industries. Some firms within an industry may well feel they can survive, and thus are being pulled down unfairly. Martin Rhodes (1985, p. 201) found that in the West German steel industry, where such a cartel was attempted, 'the more dynamic individual steel firms have fallen back on their own organized resources and are unwilling to participate in state-sponsored plans which aim to save the weak by combining them with the strong. The healthier firms . . . have a greater interest in lobbying individually for state aid than in collective action and hope that those firms in greater difficulty will be allowed to collapse, thereby surrendering their market shares and easing the overall problems of excess capacity'.

For employers at the sectoral level the logic is less clear. State policy which selectively promotes certain industries is not inherently zero-sum; sectors do not compete directly against each other in the way that firms within a sector do, so helping one does not necessarily hurt others. The incentive for industries not favored to break off from the bargaining process stems chiefly from simple jealousy. If interest group organizations are to legitimize their participation in a decision-making process, that participation must yield material payoffs for *all* members. However there are also material costs to the sectors not promoted. When subsidies or tax advantages or below-market credit is provided to an industry, firms in other sectors must make up the difference by paying more taxes or for finance than they would in the absence of such measures. These costs may be small, since they are spread across many firms, but they are nonetheless real. A potential solution to this dilemma would be an industrial policy which promotes all sectors. This, however, is extremely unlikely and in any case belies the intent of industrial policy.

A similar logic applies to trade unions. As Wolfgang Streeck (1981, p. 157) has noted: 'The units in which the interests of workers are represented typically include a wide variety of different 'sectional' groups. To get access to representation, group interests have to be either so general that they appeal to all important groups within the constituency or they have to ally themselves with other special interests and enter into a political coalition. Special interests that do not lend themselves to

generalisation or coalition-building are filtered out and remain unrepresented'. One of the principal purposes of union organizations is to promote cooperation among workers and to pursue strategies which overcome the sort of zero-sum employment context which pits workers against each other. Nevertheless jobs are always limited, and to the extent that skills are relatively narrow, job mobility is greatly constrained. Workers are thus invariably set in a position of de facto competition with one another. In this context, industry- or national-level union federations should find it difficult to adopt policies which favor some interests over others.

Dissociation by various members of the organizations participating in corporatist negotiations would be likely to cause a breakdown of the concertation process, since interest group representatives could no longer guarantee the acquiescence of their members to the bargain. It seems reasonable to hypothesize, then, that corporatist concertation is not compatible with industrial policy formulation.

3. *Three cases*

Can corporatist concertation arrangements *at a particular level* (national or sectoral) formulate policy which discriminates among the entities which compose that level? In other words, can a national-level corporatist structure make decisions that discriminate among sectors? Can a sectoral-level arrangement be used to make decisions which are selective among firms within that particular sector? The theoretical considerations outlined above suggest not. In this Section I examine three national cases in order tentatively to assess the empirical validity of this view.

For the reasons suggested in Section 2, we should, in surveying national policy-making patterns, expect not to encounter corporatist structures which formulate decisions about selective state intervention at the relevant level. There are, however, two possible exceptions to the logic described above. (1) First, peak associations may not always operate in the democratic fashion specified by the ideal-type. In particular, associations of employers may in some instances be dominated by their most powerful member sectors or firms. If this situation obtains, it is not unreasonable to expect such associations to agree to policies which discriminate among their members. Where this happens, we should expect these sectors or firms to benefit disproportionately from these policies. (2) Second, in a context of crisis for a sector or firm (e.g. a drastic decline in demand or threatened bankruptcy), we may find representatives of a labor (but not employer) peak association participating in a corporatist 'crisis cartel'. This would be explained by two

factors. One is the tendency for a crisis situation to enable solidarity among workers to overcome self-interest. Secondly, when a firm goes bankrupt workers in other firms may be negatively affected as well: unemployment increases, driving down wages. Thus, not just altruism but also enlightened self-interest may compel workers as a group to agree to temporary subsidization of some of their members.

It is unlikely that we will encounter the actual course of events outlined above, in which discriminatory decisions are made via a corporatist concertation arrangement, causing some members of the interest group(s) to dissociate themselves from the process, in turn leading to the dissolution of the arrangement itself. Rather, since the potential for conflict is likely to be quite apparent at the outset, corporatist bodies in most instances will shy away from industrial policy formulation, and state policy makers will not attempt to make use of corporatist arrangements to implement industrial policies, in the first place.

Three national cases – Japan, Sweden, and West Germany – are examined here, over the period 1960 to the present. Among advanced industrial nations, these three have had some of the best economic performance records during this period (Gorham 1988; OECD 1990). Japan and Sweden are particularly useful cases for our purpose – the former because it has pursued an active industrial policy, and the latter because it is characterized by heavily institutionalized use of corporatist concertation. The identifying feature of the West German political economy is the role played by large banks in guiding the structure and strategies both of industry as a whole and of particular firms to which the banks are connected (Hicks 1988a; Zysman 1983). But it has used corporatist arrangements in wage policy, and from 1967 to 1977 it had a mechanism, Concerted Action, through which business and labor could offer input into some state economic policy decisions. West Germany is not known for much use of selective state intervention, but it is viewed by some as having been more interventionist in this regard than Sweden (Shonfield 1965; Wilensky and Turner 1987).

3.1. *Japan*

Japan is generally considered the prime example of successful pursuit of industrial policy. Selective interventionist policies guided by the Ministry of International Trade and Industry (MITI) are widely (though by no means unanimously) credited with playing a vital role in engineering Japan's phenomenal 7 per cent average annual growth rate since 1950 and the nation's success in overtaking international competition in such key industries as steel, automobiles, consumer electronics, and semiconductors. Some examples of Japanese use of industrial policy

during the postwar period include the following (Dore 1986, ch. 6; Eccleston 1986; Hosomi and Okumura 1982; Johnson 1982; Johnson et al. 1989; Komiya 1975; Komiya et al. 1988; Magaziner and Hout 1980; Pugel 1984).

One type of policy aims at the promotion of 'infant' industries. In order to help develop new industries – including iron and steel, shipbuilding, automobiles, petrochemicals, machine tools, consumer electronics, semiconductors, and computers – the Japanese government has supplied firms in such sectors with subsidies and low-interest loans through the Japan Development Bank, the Japan Export-Import Bank, and other governmental financial institutions. It has offered them special tax incentives, such as accelerated depreciation privileges, special low tax rates on profits, and exemption from tariffs on imported production inputs. The state has imposed quotas and tariffs on imports that compete with the products of these industries and has restricted foreign direct investment. Preferential treatment has been given to firms in these industries in the authorization of patent and know-how contracts. In several instances the government has initiated and helped fund research consortiums among the leading firms in an industry. Perhaps most importantly, these various measures send a signal to private financial institutions that these firms and industries should receive favorable treatment.

Second, the state has attempted to concentrate and modernize several existing industries, particularly those in which a relatively large number of firms operate at a smaller-than-optimum scale and produce an excessively wide variety of products in small quantities. In such cases, the government has instituted an industrial reorganization or structural improvement program, encouraging investment to introduce modern technology and promoting mergers and cooperation. Some firms are induced to specialize in fewer products, so as to attain economies of scale. The converse danger is that firms may overinvest, creating excess capacity. As noted earlier, for industries in which this problem obtains the government has attempted to engineer cooperation among the firms in setting investment levels. Its typical means of achieving cooperation – whether for purposes of modernization or investment control – is to organize a 'rationalization cartel', which is exempted from antitrust prosecution. Under this type of program a medium-range 'basic plan' and an annual working plan are prepared, and firms cooperating with the plan may be granted special tax privileges or low-interest funds.

Third, the state has provided assistance to declining industries, such as coal and shipbuilding. This support is usually combined with state-led formation of a temporary cartel to organize capacity and output reduction.

It is often noted that Japanese industrial policy is implemented not through unilateral state action, but through cooperation between the state and business. This has led some analysts to refer to Japanese policy making as 'corporatism without labor' (Pempel and Tsunekawa 1979). How can what has obviously been discriminatory policy making be carried out via a corporatist arrangement? In fact it is not. A more accurate label for the process would be something like 'administered pluralism' (Aoki 1988). MITI and the other state ministries in Japan make decisions that discriminate among sectors in concertation, not with a peak association of business (there does exist such an association: the Federation of Economic Organization, or *Keidanren*), but rather with associations representing individual industries. For each industry a corresponding government bureau exists, located in one of the various government ministries. There are hundreds of industry associations and association subdivisions, which are counterparts of these bureaus. The industrial policy decision-making process works as follows (Aoki 1988, pp. 274–76; Komiya 1975, pp. 14–15). Representatives of the various industry associations negotiate constantly with officials in their corresponding bureau in an attempt to convince them to implement measures favorable to their industry. These officials then may or may not lobby higher-level officials within their ministry in favor of such measures. Each ministry also has a number of councils and investigation committees, which do research on specific and general matters of relevance to industrial policy formulation. Decisions about policies are made by the higher-level officials within the ministries on the basis of these various inputs. Decisions are then coordinated with those made by other ministries, and must be approved by the Ministry of Finance.

How can this arrangement be used to make decisions which discriminate among firms *within* sectors? First, as just noted, the industry associations do not actually participate in the industrial policy decision making. Their input is generally limited to advocacy. Also, most of their lobbying is aimed at securing support for their sector as a whole, rather than for particular firms within it. To the extent that these representatives do press the interests of specific companies, the explanation lies in the fact that many industry associations and councils are dominated by the presidents and board chairpersons of the leading firms within the industry. These firms therefore have the most influential voice in negotiating with the relevant government bureau over state action to be taken vis-a-vis their sector (Komiya 1975, p. 19). As a result, these companies typically are favored when the industry takes an action that discriminates among firms with the sector.

Industrial policy in Japan has also been used, particularly since the mid 1970s, to aid declining sectors and firms. Decisions on these matters

have been worked out in the same basic fashion as proactive industrial policy decisions. Typically the government directs the formation of a depression cartel, which assigns a quota for capacity reduction, output levels, and in some instances prices to the various firms (see, for example, Yonezawa 1988). In organizing and implementing such programs, state ministries have negotiated directly with the firms and/or the industry employer association in question. Associations of labor have played no role.

International and domestic conditions have changed appreciably during the past 15 years, and it appears that the Japanese economic bureaucracy may now be somewhat less capable of implementing the sort of proactive, coordinated industrial policy it has pursued over the course of the postwar period (Eads and Yamamura 1987; Hills 1983; Kikkawa 1983; Saxonhouse 1983; Uekusa 1988; Yamamura 1986). First, the popular consensus around state-led growth has weakened. In particular, quality-of-life issues such as pollution control and consumer protection have become more important among the Japanese populace recently. Also, the political hegemony of the Liberal Democratic Party has waned, and as a result the bureaucracy now faces a steadily increasing and more determined challenge from the Diet (Japan's parliament), as politicians have become more eager to obtain a share of the federal budget for their particular constituency. In addition, the bureaucracy's kit of industrial policy tools has been reduced. The internationalization and liberalization of Japan's product markets have decreased its ability to use protection as a means of fostering industrial development.⁸ Finally, as many Japanese firms have attained the status of world leaders there is increasing corporate resistance to extensive state guidance of the economy. A number of firms no longer feel they need government financial support, and oppose state use of funds to favor other industries or firms.

Yet, while the overall degree of selective state intervention in the Japanese economy may have declined since the mid 1970s, it is hardly the case that active industry policy is a thing of the past. Attention has shifted to knowledge-intensive sectors, and the state has played a substantial role in promoting high-technology industries such as biotechnology (Dibner 1985; Yoshikawa 1987), computers (Anchordoguy 1988; Ouchi 1984; Shinjo 1988), semiconductors (Borrus et al. 1983; *Business Week* 1990a; Clausing et al. 1990; Okimoto et al. 1984), telecommunications (Cohen and Donow 1989; Harris 1989), and high-definition televisions (*Science* 1989). The processes through which industrial policy is formulated and administered have remained largely unchanged during the recent period (Komiya 1988).

3.2. Sweden

Sweden has the most longstanding and institutionalized corporatist concertation arrangement among advanced capitalist nations, in which national-level peak associations of employers (SAF) and workers (LO) negotiate wage levels periodically, with limited state guidance. Since 1960 these two organizations also have participated in the implementation of an active labor market policy. Both associations enjoy an unusually large degree of authority vis-a-vis their member organizations. On the other hand, Sweden has had very little in the way of selective industrial intervention by the government. The state's strategy with regard to industrial policy since 1960 has had four distinct stages.

From 1960 to around 1967 the state's goal was strictly to improve the market process. The Rehn policy, the centerpiece of Swedish state economic policy during the past 30 years, was the key to this effort. This policy, which aims to achieve full employment and high growth while keeping inflation limited, works as follows (Ginsburg 1983; Ohman 1974; Rehn 1985). Wage levels for comparable work are set the same across firms, regardless of the size or profitability of the particular firm; and these levels are based on those in export sectors, which are determined exogenously by the international market. This arrangement, combined with a tight fiscal policy, has the effect of driving inefficient firms into bankruptcy. Displaced workers are retrained and placed in new jobs.

The retraining and job placement component of the Rehn policy is implemented very much in a corporatist fashion: both the SAF and the LO are represented heavily in the Labor Market Board, which administers the program.⁹ One might consider the Rehn policy a *de facto* industrial policy, since it is explicitly designed to discriminate against inefficient firms. Workers in the firms which fail do not suffer greatly; they are retrained and placed in new jobs. Thus there is little reason for the LO to object to such a policy. In fact the Rehn policy was first recommended by the LO. On the other hand it is not immediately clear why the SAF has been able to agree to the policy without serious dissension among some of its members. The explanation appears to be that SAF is dominated by the largest of its member firms, which also are by and large the most profitable and thus are not hurt by the policy. Lars Bengtsson, Ann-Charlotte Eriksson, and Per Sederblad (1984, p. 39) observe, for instance, that 'SAF's decision-making structure is based on the participation of some members in its various representative organs. Companies which so wish can become involved by that means. However, it is mainly large companies which utilize this opportunity'. They also note (p. 33) that 'Analysis of the companies represented in

various responsible positions show quite clearly that representatives of the large companies predominate in the organization of the branch associations. Explanations given are that the branch employers' organizations do not wish to risk neglecting the large companies in any way, and that the large companies have considerably more staff resources to allocate to employers' organization activities'. Moreover, the number of votes a firm gets in the SAF's general assembly is determined by the number of employees it has, which again gives disproportionate influence to large firms (*ibid.*; Skogh 1984, pp. 157, 161–62).

Has the retraining and placement of workers been carried out in an intentionally selective fashion? That is, have certain sectors or firms been promoted by discriminatory allocation of the retrained labor? If so, we would need to consider how the SAF and LO representatives on the Labor Market Board have formulated decisions about which sectors to target in training and placing workers. Yet it appears that this has not in fact been the case. In her review of the active labor market policy, Helen Ginsburg (1983) suggests that decisions about training and placement are generally made simply on the basis of current need, i.e. without discriminatory intent. She observes (p. 128), that: 'The County Labor Market Boards are in day-to-day contact with local unions and firms. They keep AMS [the National Board] continuously abreast of labor market conditions. On the basis of the state of the labor market, AMS then allocates funds to the County Labor Market Board. . . .'¹⁰

In 1959 the Swedish government created a public pension investment fund system (Pontusson 1984). A percentage of the employee pension funds provided by employers and the state are placed into a public trust which is used to provide loans for investment. At their zenith in the early 1970s these funds accounted for more than half the total supply to the capital market in Sweden. The funds are divided into three different accounts – one for fees paid by public employers, another for those from large private employers, and a third for fees collected from small private employers and the self-employed. Each is administered in a quintessentially corporatist fashion: the boards are composed of representatives of the government and of the peak associations of labor and business (*ibid.*, p. 21). This would appear to be an ideal resource through which to selectively assist particular industries, for it provides a significant degree of control over the allocation of capital in the country. But the funds have not been used for this purpose. The 1957 committee which planned the creation of the pension fund system insisted that it would be 'clearly inappropriate to require the fund board to take into consideration goals of economic or social policy . . . in making decisions' (cited at *ibid.*,

p. 24). And indeed, Jonas Pontusson (*ibid.*, p. 56) has found that 'The allocation of credit to the private sector seems to have been based strictly on calculations of return. No attempt whatsoever has been made to prioritize among industrial investments'.

During the second period, from 1967 to 1976, the government created a number of new institutions designed for more active state intervention in the allocation of resources across sectors and firms (Appels 1986, pp. 65–66; Eliasson and Ysander 1983, pp. 160–63; Lundmark 1983, pp. 227–28; Udis 1987, pp. 85–87). In 1967 a State Investment Bank was established to ease the financing of risky ventures in new industrial fields and to support latent innovations until commercial fruition. A Special Development Fund was added soon after to offer financial support in the early stages (i.e. between research and production) of innovative ventures. In 1968 the National Board for Technical Development was created to coordinate technological and industrial research. In 1969 a new Ministry of Industry was formed to centrally coordinate the state's targets for industrial development. A similar structure was set up to guide regional development. Also, several publicly-owned companies were formed to aid in the general process of selective industrial development. The most important of these was the State Holding Company, a conglomerate under the direct control of the Ministry for Industry, which was designed to push industrial development into socially desirable sectors and regions. Finally, the Swedish Trade Council was created in 1972 to supplement the Export Credit Corporation's efforts at promoting Swedish exports.

At the outset, most of these programs were to be administered through the same type of 'autonomous' board that administered the active labor market policy. They were to be implemented 'within the framework of the traditional government process, which emphasized participation and collaboration of all affected interests' (Lundmark 1983, p. 240). In particular, a tripartite National Industrial Policy Council and several tripartite sector councils were set up under the auspices of the Ministry of Industry to administer the new industrial policy programs (Pontusson 1990). As in Japan, however, in most instances interest group representatives participated in policy formulation only in an advisory capacity (Grant 1983, p. 378; Pontusson 1990). Moreover, the amount of subsidies and other selective aid actually granted by these bodies was relatively small (Lundmark 1983, p. 229).

The third stage, from 1976 to 1982, was dominated by efforts on the part of the Swedish government – a bourgeois coalition government – to deal with the decline of several important sectors (Appels 1986, pp. 76–83; Carlson 1983; Lundmark 1983, pp. 228–31; Udis 1987, p. 84). It was

a period of emergency rescue operations.¹¹ State funds allocated to industry increased dramatically after 1975, but the increases consisted largely of funding referred to as 'non-permanent industrial support'. Funds allocated to immediate support for ailing industries grew from SKr 1 billion in 1975 to SKr 12 billion in 1982, and seven cases of industrial crisis accounted for 90 per cent of the funds in this category. Crises in shipbuilding and in steel were the most prominent. The state in most instances attempted to slow down the decline, or delay the bankruptcy, of failing firms by offering special subsidies in return for restructuring on the part of the enterprise. When this failed, the government often resorted to nationalization of the firms.

These crisis management decisions were formulated chiefly through direct negotiation between the Ministry of Industry and the government on the one hand and the management of the firms in question on the other (Lundmark 1983, p. 240; Pontusson 1990). Special governmental commissions were appointed in some cases. Consistent with our expectations, these commissions often included representatives from the industry union, but never from an employer association. A commission appointed in 1975 to offer suggestions about the Gothenburg shipyard crisis is typical; it was composed of managing directors from two other shipyards, a lawyer from the metal workers union, an under-secretary of state for industry, and the chairperson of the Royal Commission on Shipbuilding Credits (Lundmark 1983, p. 233).

Upon returning to power in 1982, the Social Democrats engineered a reorientation of industrial policy away from these sorts of reactive support measures (OECD 1987, p. 22; Udis 1987). This turn stemmed in part from rising fiscal constraints, and partly from a realization that reactive supports had proved to be of limited use in achieving industrial adjustment. Direct relief funds were immediately decreased to SKr 3.5 billion in 1983. At the same time, an attempt has been made to return to the early 1970s practice of promoting rising industries which need developmental support (Udis 1987). A National Industrial Board has been given the function of coordinating governmental industrial and regional policy efforts. The Industrial Development Fund, created in 1979, received a significant funding boost in 1984. This fund supports high-risk projects by financing up to 50 per cent of project costs in the form of loans or grants. The bulk of funding has been provided to the transportation, steel, metal, pharmaceuticals, and electronics industries. Also, a national program has been established to encourage work in the field of microelectronics. As with the earlier proactive industrial policy instruments, the current efforts appear to be carried out in a quasi-corporatist fashion, with interest group representatives providing input but not actually participating in the decision-making process.

3.3 *West Germany*

As Kenneth Dyson (1981) has observed, three (somewhat conflicting) principles have dominated economic policy making in West Germany throughout the postwar period. The first has been that of the 'social market economy'. This principle dictates that the government's role is to enforce the rules of the game but to let private actors play on their own. In other words, the state is to secure conditions under which the market can function as freely as possible. A second principle, connected with the first, has been that where the allocation of resources among sectors or the composition of a sector needs to be altered, it should be the large commercial banks, rather than the state, which plays the leading role. As Dyson (p. 51) notes: 'The banks acted as major initiators and organizers of industrial activity so that industrial policy remained somewhat screened from the general area of politics. Outside the SPD [Social Democratic Party] left-wing and technocrats, the conception of an activist, entrepreneurial role for the state had little support, except when the structural problems of industry were perceived to be too great for the banks to handle alone. . . .' The banks exercise leverage over firms chiefly through their significant equity holdings, which allow them representation on companies' supervisory boards. A third guiding principle, which became prominent especially after the Social Democrats came into power in the late 1960s, has been that of 'social partnership', which implies that economic policy is to be determined in a consensual, cooperative fashion through negotiation between the major economic interests – the state, banks, firms, and labor.

The period from 1960 through the latter part of that decade was dominated by adherence to the first principle. Some government subsidies and tax concessions, however, were allocated on a selective basis through the Ministry of Economics, and a great deal of funding was provided to the nuclear energy industry through the Ministry for Nuclear Energy (Shonfield 1965, ch. 12; Wagenhals 1983, p. 247). Also, in cooperation with the banks the government actively encouraged mergers between German firms (Price 1981, p. 52).

In 1966 the Social Democrats entered into a coalition government with the Christian Democratic Party, which had ruled throughout the post-war period. Also, in 1966–67 West Germany suffered a major economic recession. These two developments led to the adoption of a Keynesian demand management policy by the state. This was a first step toward increased state intervention, but not yet of a selective kind. In 1969 the SPD took power in a coalition with the smaller Free Democratic Party, which allowed the former greater control over the economy than they previously had. The principle of the social market

economy was extended to that of the 'enlightened' social market economy.

In 1967 *Konzertierte Aktion* was created. This tripartite body composed of representatives of business, labor, and the state (along with delegates from other social groups and economic experts) was used as a consultative device in the formulation of various economic policy decisions. Concerted Action was a prototypical corporatist body in its form, but despite the hopes of some it had little or no input into decisions other than those relating to wage and price levels (Clark 1979; Hudson 1980). Moreover, the body was organized around the concept of 'global steering', or nonselective macroeconomic management; no discriminatory policies were even contemplated within it (Wolfgang Streeck, personal communication). In 1977 the labor representatives boycotted the body's meeting to protest an effort by business leaders to get West Germany's codetermination law declared unconstitutional. It has remained dormant since that time.

The oil price shock in 1973 altered the terms of the debate over state intervention in West Germany. As Jeffrey Hart (1986, p. 165) notes: 'Whereas previously the main debate had been between the advocates of intervention and those of nonintervention, now the debate was between those who wished to stick with macroeconomic policy interventions and those who preferred additional sectoral or mesoeconomic interventions'. The Social Democrats began to favor more discriminatory intervention, and the level of selective financial assistance provided to industry increased (Grant 1983, p. 370). Still, the overall degree of proactive industrial policy intervention has been relatively minor during the past two decades. The Ministry of Economics is the principal agency responsible for such intervention, and it has made limited use of grants, loans, tax assistance, public procurement and other such measures to promote industrial development in a selective fashion (Appels 1986; Udis 1987; Wagenhals 1983). As Andrew Black (1986, p. 91) notes, 'the main official objective of industrial or structural policies is that they should remain limited in scope and time so as to avoid interfering with the operation of the free market economy'.

In 1972 the Ministry for Nuclear Energy was transformed into a Ministry for Research and Technology. Since 1973 this body has been used to coordinate and direct federal expenditures on research and development. Of the various agencies within the West German state, this Ministry is the most closely involved in encouraging the development of high technology industries and guiding government funds toward the 'winners' of the future (Black 1986, p. 89). With the formation of this body a significant change occurred in the nature of subsidies granted by the state to industry. Whereas in the 1950s and '60s the

primary form of subsidy had been a nonselective tax rebate on the purchase of investment goods used in R&D, in the 1970s there was a shift to direct subsidizing of R&D projects performed by firms (Appels 1986, p. 153). Cooperative research arrangements with educational institutions have also been organized. Sectors to which the Ministry has directed a disproportionate amount of assistance include aircraft, computers, microelectronics, machinery, nuclear energy, and telecommunications (Appels 1986, p. 137; Black 1986, p. 89; Esser and Fach 1983, p. 109; Grewlich 1987, p. 75).

In the process of formulating decisions about the direction and extent of financial aid the Ministry receives advice from a screening committee, composed of government officials, business and labor representatives, and independent consultants (Grant 1983, p. 379). The interest group delegates represent individual industries, however and so do not face the problem of trying to reconcile decisions which discriminate among their members. Moreover, in both Sweden and Japan the advice of these representatives is consultative; they do not participate in the actual making of decisions.

As in Sweden, the period from the mid 1970s through the mid 1980s was to a large extent characterized by attempts to deal with the sudden decline of several key economic sectors and firms – again most notably in steel, shipbuilding, and coal. However, the West German government – in particular, the Ministry of Economics – went about tackling these crises in a different fashion than that followed in Sweden. For the most part the state preferred to rely on the large commercial banks, and in some instances the local governments, to negotiate an arrangement with the firms in question (Esser and Fach 1983, p. 125; Hart 1986, p. 167). Hence, A. Appels (1986, p. 125) found in his cross-national evaluation of state subsidies to firms that West Germany differed markedly from other countries in that there was not a tremendous sudden growth in subsidies during this period, and in that a dramatic shift in the character of the subsidies did not occur. As in Sweden, when the federal government did intervene there was a preference for the use of 'crisis cartels' in working out solutions to problems of industrial decline (Esser and Fach 1983; Hart 1986).

Business interests typically were represented in these forums only by the employers directly involved in the particular crisis, while workers were represented by the works councils of the firms involved (Rhodes 1985, pp. 196–7). In cases where the negotiations concerned several firms within a sector, representatives of the sectoral-level trade union – but not of the sectoral employer association – often took part; delegates of IG Metall, for instance, were involved in the negotiation processes dealing with the crises of several steel firms during the latter 1970s

(Esser and Fach 1983, pp. 111–14; Rhodes 1985, pp. 198–99). This again is consistent with our theoretical expectations.

In recent years the West German government has made an effort to reduce somewhat the level of assistance provided to firms in declining sectors, although shipbuilding and steel continue to receive substantial quantities of adjustment support (OECD 1989a, p. 31). Otherwise, little appears to have changed in the content and form of industrial policy. The Ministry for Research and Technology has continued to fund certain high technology projects, particularly in the electronics, communications, and aircraft industries (Esser 1989; OECD 1989b, p. 32). And the Ministry of Economics has sustained its skepticism toward selective intervention.

4. Results and prospects

These case studies by and large support the expectations laid out above. In each of the countries examined there have been only two circumstances in which peak interest group associations have participated in making policy decisions that intentionally discriminate among their members: first, when an employer association is dominated by its largest members, and second, when a labor association participates in a temporary 'crisis cartel'. Of course these findings are hardly conclusive, since only three national cases were looked at. Yet based on these three cases we can conclude at least that there does not appear to be an elective affinity between industrial policy and corporatist concertation.

Further support for this view is provided by the Austrian, Danish, and French cases. In Austria and Denmark decisions regarding industrial policy matters tend to be made in a corporatist fashion, with the participation of representatives of peak associations of business and labor. But in both nations, state assistance of a selective nature has been minimal (Grunwald 1982; Muller 1983; Sidenius 1983). France, on the other hand, is the country most similar to Japan in making extensive, explicit use of proactive, discriminatory industry promotion. As in Japan, industrial policy decisions in France are made by state bureaucrats, particularly in the Commissariat du Plan. These decisions typically have been made following consultation with business leaders, but the latter's input tends to be advisory. Moreover, the state officials confer primarily with representatives of individual firms rather than of business associations (Hall 1986, ch. 6; Shonfield 1965, ch. 7).

What, if anything, do these findings tell us about the future(s) of industrial policy and corporatism? First of all, it is by no means certain that industrial policy is the (or even *an*) answer to remaining competitive in the international economy of the 1990s. Sentiment against this view is

at least as common as that for it (Denzau 1984; Eliasson 1984; Gilder 1983; Lavoie 1984; Lawrence 1984, ch. 5; Lindbeck 1981; Norton 1986; Schultze 1983). In particular, the importance of industrial policy in Japan's postwar success at developing internationally competitive industries is hotly disputed (Friedman 1983, 1988; Sakoh 1984; Sekiguchi and Horiuchi 1985; Trezise 1984). Also, some contend that while industrial policy may be a key to success, this is true only during a nation's early developmental stage. The apparent reduction of selective intervention by MITI in Japanese industry over the past decade is often pointed to in support of this claim.

Industrial policy may not only be unnecessary to success, but also increasingly difficult to implement under current economic and political conditions. The growing internationalization of finance, for instance, may create severe impediments to a national government's ability to direct significant quantities of funds to areas of its choosing (Bryant 1987). Also, as firms become increasingly transnational in orientation, the domestic payoffs – in terms of employment and wealth generation – of state assistance to firms may decline (*Business Week* 1990b; Reich 1990). Additionally, constraints on the interventionist capacities of national governments may be imposed by supranational bodies. This holds with particular force for West Germany and other members of the European Community. The European Commission's plans for integrating the Community's internal market by 1992 feature a variety of limitations on national governments' legal capacity to engage in selective promotion of domestic industries (Calingaert 1988; CEC 1988; Geroski 1989; Hufbauer 1990). Though it remains to be seen how stringent and effective these limitations will turn out to be, clearly they will reduce the scope for national industrial policy somewhat. On the other hand, this will probably encourage greater pursuit of multinational sectoral assistance projects, along the lines of Airbus Industries in aircraft, ESPRIT in information technology, JESSI in semiconductors, RACE in telecommunications, and Eureka-95 in high-definition televisions. EC protectionism vis-a-vis Japan, the United States, and other outsiders in certain key industries is also a possibility.

Despite these objections, there are some good reasons, outlined earlier in Section 1, to suppose that selective state intervention will indeed be a key to national economic success in the present and near future. Given this assumption and the findings in this paper, there are a number of potential future scenarios.

First, corporatist concertation may be wholly incompatible with industrial policy – at least of the positive, anticipatory kind. That is, corporatist structures may effectively allow selective intervention only in situations of crisis, where the goal is usually to slow down the process of

industrial restructuring rather than to encourage it. If so, their harm may outweigh their benefits: lack of proactive industrial policy may weaken economic performance. Moreover, by deterring pursuit of anticipatory industrial policy, corporatist structures may undermine their own basis. Loss of competitiveness means fewer jobs, and the threat of job loss gives workers a strong incentive to identify with their own firm, rather than with workers in other firms (Lash and Urry 1987, ch. 8; Streeck 1984). Sadly, then, the choice faced by workers in advanced capitalist countries in the age of open markets and strong foreign competition may be between industrial policy plus dualism and dualism alone.¹² In this scenario Japan is the model of the future, while the Swedish/West German model is destined to collapse.

The theoretical argument and empirical findings of this paper, however, need not entail this sort of judgement. A more reasonable view is that corporatism can coexist with industrial policy as long as it attends to different policy domains. For instance, if corporatist arrangements are used chiefly for implementing incomes and employment/training policies they would not interfere with – in fact, they would complement – state policies which discriminate in allocating resources among sectors and firms. The performance-enhancing qualities of each of these types of policy makes such a coexistence appear quite probable (Wilensky and Turner 1987). In this scenario the Japanese and Swedish models converge, in a sense: Japan adopts some sort of corporatist concertation mechanism to negotiate wage agreements, while in Sweden and West Germany the state resurrects – in noncorporatist fashion – the aborted proactive industrial policy ventures begun in the early 1970s. Empirical support for this scenario is mixed. On the one hand, in 1987 a new national labor confederation (Rengo) was formed in Japan with the stated intent of facilitating a national wage bargaining process (O’Leary 1988). On the other hand, the West German and Swedish governments have continued in recent years to engage in relatively limited proactive discriminatory intervention.

It bears emphasizing, however, that even though corporatist concertation arrangements are not well suited for implementing industrial policies, selective state intervention is neither logically nor institutionally precluded as a policy choice in nations with strong corporatist structures. Sweden and West Germany have opted for limited use of anticipatory industrial policy for reasons that have to do primarily with the availability of an attractive alternative, supply-side policy (the Rehn policy in Sweden) and frightful past national experience with extensive government intervention in industry (the Fascist legacy in West Germany). Additionally, in Germany the state has a somewhat limited capacity to engage in sectoral guidance because of its limited control

over financial resources (Zysman 1983). It is these sorts of factors, rather than the existence of institutionalized corporatist arrangements, which present the major barrier to increased pursuit of proactive industrial policy in these and other similar nations.

A third possible scenario is that corporatist arrangements may increasingly be used to implement a de facto industrial policy of the type pursued by Sweden – namely, a solidaristic wage and active labor market policy, in which less efficient firms are forced into bankruptcy. This type of program relies on the market to impose decisions about the sectors in which a country will specialize, and compensates for market failure in labor allocation and relocation through a corporatist labor market policy. Sweden’s economic performance has been superb during most of the postwar period. Through the early 1970s Sweden achieved a lower unemployment/inflation tradeoff than most other industrialized nations along with high productivity growth. As in most OECD countries, performance declined in the latter half of the 1970s and into the early 1980s (Lundberg 1982; Svensson 1986). It then recovered fairly well during the mid 1980s (Martin 1987), but in the past few years it has slumped again (*Economist* 1990). This is due in part to growing fragmentation among private-sector blue-collar, private-sector white-collar, and public-sector workers (Lash 1985). Has the Swedish model run its course? Or is the recent downturn only temporary? I would venture to suggest the latter, but it is certainly too early to tell; the verdict on the Swedish model is not yet in. In any event, the applicability of the model to other nations seems highly problematic.

Finally, we may find in the near future an increasing number of corporatist concertation arrangements in which peak associations of employers and/or workers actually do make industrial policy decisions which openly discriminate among their members. We have observed this process in an advisory context in Japanese industry employer associations and in the Swedish national employer federation, SAF. The circumstances in which this pattern might become more prominent are those of deepening national and sectoral economic crisis. Crisis conditions may facilitate increased domination of national or sectoral peak associations by a few of their most powerful members, and an increase in the willingness of these members to take advantage of their leverage to press their own particular interests upon the policy agenda.

Of these scenarios, my view is that the second and perhaps the fourth are the most likely to obtain. Incomes and active labor market policies can yield substantial gains in efficiency and welfare, and corporatist concertation arrangements appear to be a very useful vehicle for implementing such policies. Thus, corporatist structures are likely to remain a prominent feature of a number of advanced industrial

economies. Similarly, a coherent, proactive industrial policy can provide significant payoffs, and will in all probability be increasingly seen as necessary to economic success, even in nations such as the United States where the political and cultural environment is most hostile toward selective state intervention. The barriers to using corporatist arrangements to make discriminatory decisions should be apparent from the discussion here. But corporatist concertation is an attractive mode of decision making, particularly because of its inherent democratic features and because it enables state policy makers to obtain prior agreement on policy choices from the major economic interest groups. Hence, we may observe various attempts to use corporatist concertation to carry out a selective industrial policy. To the extent such attempts succeed, it is likely to be because the associations participating in the negotiation process are influenced disproportionately by a small subgroup of their members.

Perhaps the most probable course of events for the countries studied here is a continuation of their present policy mixes. Like other institutional configurations, policy regimes tend to have an inertial or 'sticky' quality; once in place they can be difficult to alter (Ikenberry 1988, pp. 223-4). Particular institutional arrangements generate privileges and payoffs for individuals and groups, who then have an interest in perpetuating these arrangements. Moreover, the costs and benefits of change are always uncertain. These factors weigh especially heavily when an institutional configuration generates very successful performance results, as has been the case for Japan, Sweden, and West Germany during most of the postwar period. Thus, we should hardly be surprised if policy types and styles in these nations do not converge toward a particular mix of proactive industrial policy and corporatist concertation.

NOTES

1. Andrew Shonfield (1965, ch. 8) drew implicit attention to this contradiction in his discussion of the National Economic Development Council in Britain.
2. PCIC (1985, p. 36); Osborne (1987, p. 1); *Business Week* (1980, p. 60); Scott (1985b, p. 18).
3. Note that this does not presuppose participation by labor. Corporatist concertation can be bipartite, tripartite, quadripartite, etc.
4. This follows Philippe Schmitter's (1982, pp. 262-63) suggestion that we use the term 'corporatism' to refer to a mode of interest intermediation in which members are organized into peak associations, and the term 'concertation' to denote a mode of policy making in which interest group members or representatives enjoy institutionalized participation.
5. The solidaristic wage policy pursued by the principal Swedish union confederation (LO), for instance, lowered the wage differential among union members in Sweden by 50 per cent between 1959 and 1979, and helped raise women's wages from 70 per cent of men's wages in 1959 to 92 per cent in 1984 (Svensson 1986, p. 273).
6. But see also Panitch (1986); Therborn (1987).
7. The view that sectoral-level (or meso-) corporatism is becoming more prominent is now fairly widespread. See for example Cawson (1985); Schmitter (1988).

8. For a contrary view see Prestowitz (1988).
9. According to Helen Ginsburg (1983, p. 127), the National Labor Market Board, which directly supervises county-level boards and the 200 or so local offices of the Employment Service, has 15 members. Three are from LO, two from TCO (a white-collar employee association), one from SACO/SR (a government employee association), one from female labor, three from SAF, one from agriculture, and four appointed by the government.
10. As Jonas Pontusson (1990) remarks: 'By definition, active labor market policy is essentially a matter of adjusting the labor force to corporate investment choices'.
11. Gunnar Eliasson and Bengt-Christer Ysander (1983, p. 188) write: 'From the official records accompanying the new kind of direct government involvement in business management in the 1970s, we learn that it was originally propelled by high ambitions to improve and innovate. From the records of the 1970s, we can read that such involvement became mostly defensive, supporting declining industries in the hope of getting them back on their feet'.
12. By 'dualism' I refer to a type of labor market structure - exemplified by Japan and the United States - in which some workers are organized and enjoy relatively high compensation and job security, while most are unorganized and face low compensation along with uncertain, irregular employment opportunities. See Goldthorpe (1984).

REFERENCES

- Anchordoguy, Marie (1988) Mastering the market: Japanese government targeting of the computer industry, *International Organization* 42, 509-43.
- Aoki, Masahiko (1988) The Japanese bureaucracy in economic administration: a rational regulator or pluralist agent? In *Government policy towards industry in the United States and Japan*, ed. John B. Shoven. Cambridge: Cambridge University Press.
- Appels, A. (1986) *Political economy and enterprise subsidies*. Tilburg University Press.
- Atkinson, Michael M. and William D. Coleman (1985) Corporatism and industrial policy. In *Organized interests and the state: studies in meso-corporatism*, ed. Alan Cawson. London: Sage.
- Atkinson, Michael M. (1989) Strong states and weak states: sectoral policy networks in advanced capitalist economies. *British Journal of Political Science* 19, 47-67.
- Baldwin, Robert E. (1984) The changing nature of U.S. trade policy since World War II. In *The structure and evolution of recent U.S. trade policy*, eds. Baldwin and Anne O. Krueger. Chicago: University of Chicago Press.
- Bengtsson, Lars, Ann-Charlotte Eriksson, and Per Sederblad (1984) The associative action of Swedish business interests: the Swedish Employers' Confederation and centralized collective bargaining in 1980, 1981, and 1983. IIM/LMP discussion paper 84-24.
- Berger, Suzanne, et al. (1990) The US textile industry: challenges and opportunities. In *Working papers of the MIT Commission on Industrial Productivity*, vol. 2. Cambridge: MIT Press.
- Black, Andrew P. (1986) Industrial policy in W. Germany: policy in search of a goal? In *European industrial policy*, ed. Graham Hall. London: Croom Helm.
- Bluestone, Barry, Peter Jordan, and Mark Sullivan (1981) *Aircraft industry dynamics*. Boston: Auburn House.
- Borras, Michael (1983) The politics of competitive erosion in the U.S. steel industry. In *American industry in international competition*, eds. John Zysman and Laura Tyson. Ithaca: Cornell University Press.
- Borras, Michael, James E. Millstein, and John Zysman (1983) Trade and development in the semiconductor industry: Japanese challenge and American response. In *American industry in international competition: government policies and corporate strategies*, eds. John Zysman and Laura Tyson. Ithaca: Cornell University Press.
- Bryant, Ralph C. (1987) *International financial intermediation*. Washington, D.C.: Brookings Institution.
- Business Week* (1980) The reindustrialization of America. 30 June, 55-142.
- Business Week* (1990a) The future of Silicon Valley: Does the U.S. need a high-tech industrial policy to battle Japan Inc? 5 February, 54-60.
- Business Week* (1990b) The stateless corporation. 14 May, 98-105.
- Calingaert, Michael. 1988. *The 1992 challenge from Europe: development of the European Community's internal market*. Washington, D.C.: National Planning Association.

- Calmfors, Lars and John Drifill (1988) Bargaining structure, corporatism and macroeconomic performance. *Economic Policy*, no. 6, 14-61.
- Cameron, David R. (1984) Social democracy, corporatism, labor quiescence and the representation of economic interest in advanced capitalist society. In *Order and conflict in contemporary capitalism*, ed. John H. Goldthorpe. Oxford: Oxford University Press.
- Carlsson, Bo (1983) Industrial subsidies in Sweden: macro-economic effects and an international comparison. *Journal of Industrial Economics* 32, 1-23.
- Castles, Francis G. (1978) *The social democratic image of society*. London: Routledge & Kegan Paul.
- Castles, Francis G. (1987) Neocorporatism and the 'happiness index', or what the trade unions get for their cooperation. *European Journal of Political Research* 15, 381-93.
- Cawson, Alan, ed. (1985) *Organized interests and the state: studies in meso-corporatism*. London: Sage.
- CCTC (Cuomo Commission on Trade and Competitiveness) (1988) *The Cuomo Commission report: a new American formula for a strong economy*. New York: Simon & Schuster.
- CEC (Commission of the European Communities) (1988) *Completing the internal market*. White Paper from the Commission to the European Council, 1985. Reprinted in 1992: *one European market? A critical analysis of the Commission's internal market strategy*, eds. Roland Bieber et al. Baden-Baden: Nomos Verlagsgesellschaft.
- Clark, Jon (1979) Concerted Action in the Federal Republic of Germany. *British Journal of Industrial Relations* 17, 242-58.
- Clausing, Don P., et al. (1990) The US semiconductor, computer, and copier industries. In *Working papers of the MIT Commission on Industrial Productivity*, vol. 2. Cambridge: MIT Press.
- Cohen, Robert B. and Kenneth Donow (1989) *Telecommunications policy, high definition television, and U.S. competitiveness*. Washington, D.C.: Economic Policy Institute.
- Collis, David J. (1988) The machine tool industry and industrial policy, 1955-82. In *International competitiveness*, eds. Michael Spence and Heather A. Hazard. Cambridge: Ballinger.
- Crouch, Colin (1985) Conditions for trade union wage restraint. In *The politics of inflation and economic stagnation*, eds. Leon N. Lindberg and Charles S. Maier. Washington, D.C.: Brookings Institution.
- Denzau, Arthur T. (1984) Removing the shackles. *Society*, Nov.-Dec., 29-36.
- Dibner, Mark D. (1985) Biotechnology in pharmaceuticals: the Japanese challenge. *Science*, 20 September, 1230-35.
- Dore, Ronald (1986) *Flexible rigidities: industrial policy and structural adjustment in the Japanese economy, 1970-80*. Stanford: Stanford University Press.
- Dyson, Kenneth (1981) The politics of economic management in West Germany. In *The West German model: perspectives on a stable state*, eds. William E. Paterson and Gordon Smith. London: Frank Cass.
- Dyson, Kenneth (1986) The state, banks and industry: the West German case. In *State, finance and industry*, ed. Andrew Cox. London: Wheatsheaf Books.
- Eads, George C. and Kozo Yamamura (1987) The future of industrial policy. In *The political economy of Japan, vol. 1: the domestic transformation*, eds. Yamamura and Yasukichi Yasuba. Stanford: Stanford University Press.
- Eccleston, Bernard (1986) The state, finance and industry in Japan. In *State, finance and industry*, ed. Andrew Cox. London: Wheatsheaf Books.
- The Economist* (1990) The Swedish economy. 3 March, 3-22.
- Eichengreen, Barry (1988) International competition in the products of U.S. basic industries. In *The United States in the world economy*, ed. Martin Feldstein. Chicago: University of Chicago Press.
- Eliasson, Gunnar (1984) The micro-foundations of industrial policies. In *European industry: public policy and corporate strategy*, ed. Alexis Jacquemin. Oxford: Clarendon Press.
- Eliasson, Gunnar and Bengt-Christer Ysander (1983) Sweden: problems of maintaining efficiency under political pressure. In *State investment companies in Western Europe: picking winners or backing losers?*, ed. Brian Hindley. London: Macmillan.
- Ellsworth, Richard (1985) Capital markets and competitive decline. *Harvard Business Review*, Sept.-Oct., 171-83.
- Esping-Andersen, Gosta (1985) Power and distributional regimes. *Politics & Society* 14, 223-56.
- Esser, Josef (1989) Does industrial policy matter? Land governments in research and technology policy in Federal Germany. In *The new centralism*, eds. Colin Crouch and David Marquand. Oxford: Basil Blackwell.
- Esser, Josef and Wolfgang Fach with Kenneth Dyson (1983) 'Social market' and modernization policy: West Germany. In *Industrial crisis: a comparative study of the state and industry*, eds. Dyson and Stephen Wilks. Oxford: Martin Robertson.

- Evenson, R. E. (1982) Agriculture. In *Government and technical progress*, eds. Richard R. Nelson. New York: Pergamon Press.
- Flamm, Kenneth (1987) *Targeting the computer: government support and international competition*. Washington, D.C.: Brookings Institution.
- Flamm, Kenneth (1988) *Creating the computer: government, industry, and high technology*. Washington, D.C.: Brookings Institution.
- Flemmings, Merton, et al. (1990) The future of the US steel industry in the international marketplace. In *Working papers of the MIT Commission on Industrial Productivity*, vol. 2. Cambridge: MIT Press.
- Freeman, John R. (1989) *Democracy and markets: the politics of mixed economies*. Ithaca: Cornell University Press.
- Friedman, David (1983) Beyond the age of Ford: the strategic bases of Japanese success in automobiles. In *American industry in international competition*, eds. John Zysman and Laura Tyson. Ithaca: Cornell University Press.
- Friedman, David (1988) *The misunderstood miracle: industrial development and political change in Japan*. Ithaca: Cornell University Press.
- Friedman, Susan and S. M. Miller (1984) The reconstruction of finance: implications of industrial policy. In *Beyond Reagan: alternatives for the '80s*, eds. Alan Gartner, Colin Greer, and Frank Riessman. New York: Harper & Row.
- Geroski, P. A. (1989) European industrial policy and industrial policy in Europe. *Oxford Review of Economic Policy* 5, 2, 20-36.
- Gilder, George (1983) A supply-side economics of the left. *Public Interest*, no. 72, 29-43.
- Ginsburg, Helen (1983) *Full employment and public policy: the United States and Sweden*. Lexington, Mass.: D. C. Heath.
- Goldthorpe, John H. (1984) The end of convergence: corporatist and dualist tendencies in modern Western societies. In *Order and conflict in contemporary capitalism*, ed. Goldthorpe. Oxford: Oxford University Press.
- Gorham, Lucy (1988) *No longer leading: a scorecard on U.S. economic performance and the role of the public sector compared with Japan, West Germany and Sweden*. Washington, D.C.: Economic Policy Institute.
- Grant, R. M. (1983) Appraising selective financial assistance to industry: a review of institutions and methodologies in the United Kingdom, Sweden and West Germany. *Journal of Public Policy* 3, 369-96.
- Gray, Virginia and David Lowery (1990) The corporatist foundations of state industrial policy. *Social Science Quarterly* 71, 3-24.
- Grewlich, Klaus W. (1987) Technological and industrial policy in the Federal Republic of Germany. In *A competitive future for Europe? Towards a new European industrial policy*, eds. P. R. Beige et al. London: Croom Helm.
- Grossman, Gene M. (1990) Promoting new industrial activities: a survey of recent arguments and evidence. *OECD Economic Studies*, no. 14, 87-125.
- Grunwald, Oskar (1982) Austrian industrial structure and industrial policy. In *The political economy of Austria*, ed. Sven W. Arndt. Washington, D.C.: American Enterprise Institute.
- Hall, Peter (1986) *Governing the economy: the politics of state intervention in Britain and France*. New York: Oxford University Press.
- Harris, Robert G. (1989) Telecommunications policy in Japan: lessons for the U.S. *California Management Review*, Spring, 113-31.
- Hart, Jeffrey A. (1986) West German industrial policy. In *The politics of industrial policy*, eds. Claude E. Barfield and William A. Schambra. Washington, D.C.: American Enterprise Institute.
- Hecl, Hugh and Henrik Madsen (1987) *Politics and policy in Sweden: principled pragmatism*. Philadelphia: Temple University Press.
- Herrigel, Gary (1989) Industrial order in the machine tool industry: a comparison of the United States and West Germany. Unpublished. University of Chicago.
- Hicks, Alexander (1988a) National collective action and economic performance: a review article. *International Studies Quarterly* 32, 131-53.
- Hicks Alexander (1988b) Social democratic corporatism and economic growth. *Journal of Politics* 50, 677-704.
- Hicks, Alexander and Duane Swank (1984a) Governmental redistribution in rich capitalist democracies. *Policy Studies Journal* 13, 265-86.
- Hicks, Alexander and Duane Swank (1984b) On the political economy of welfare expansion. *Comparative Political Studies* 17, 81-119.
- Hills, Jill (1983) The industrial policy of Japan. *Journal of Public Policy* 3, 63-80.

- Hooks, Gregory (1991) The rise of the Pentagon and U.S. state-building: the defense program as industrial policy. *American Journal of Sociology*, forthcoming.
- Hosomi, Takashi and Ariyoshi Okumura (1982) Japanese industrial policy. In *National industrial strategies and the world economy*, ed. John Pinder. London: Croom Helm.
- Hudson, Michael (1980) 'Concerted Action': wages policy in West Germany, 1967-1977. *Industrial Relations Journal* 11, 4, 5-16.
- Hufbauer, Gary Clyde, ed. (1990) *Europe 1992: an American perspective*. Washington, D.C.: Brookings Institution.
- Ikenberry, G. John (1988) An institutional approach to American foreign economic policy. *International Organization* 42, 219-43.
- Itoh, Motoshige, Masahiro Okuno, Kazuharu Kiyono, and Kotaro Suzumura (1988a) Industrial policy as a corrective to market failures. In *Industrial policy of Japan*, eds. Ryutaro Komiya, Okuno, and Suzumura. Tokyo: Academic Press.
- Itoh, Motoshige, Masahiro Okuno, Kazuharu Kiyono and Kotaro Suzumura (1988b) Industry promotion and trade. In *Industrial policy of Japan*, eds. Ryutaro Komiya, Okuno, and Suzumura. Tokyo: Academic Press.
- Johnson, Chalmers (1982) *MITI and the Japanese miracle: the growth of industrial policy, 1925-1975*. Stanford: Stanford University Press.
- Johnson, Chalmers (1984) The idea of industrial policy. In *The industrial policy debate*, ed. Johnson. San Francisco: Institute for Contemporary Studies.
- Johnson, Chalmers, Laura Tyson, and John Zysman, eds. (1989) *Politics and productivity: the real story of why Japan works*. Cambridge: Ballinger.
- Katz, Barbara Goody and Almarin Phillips (1982) The computer industry. In *Government and technical progress*, ed. Richard R. Nelson. New York: Pergamon Press.
- Katzenstein, Peter J. (1985) *Small states in world markets: industrial policy in Europe*. Ithaca: Cornell University Press.
- Kenworthy, Lane (1991) Labor organization, wage restraint, and economic performance: a review of some recent literature. *Review of Radical Political Economics*, forthcoming.
- Kikkawa, Mototada (1983) Shipbuilding, motor cars, and semiconductors: the diminishing role of industrial policy in Japan. In *Europe's industries: public and private strategies for change*, eds. Geoffrey Shepherd, Francois Duchene, and Christopher Saunders. Ithaca: Cornell University Press.
- Komiya, Ryutaro (1975) Economic planning in Japan. *Challenge*, May-June, 9-20.
- Komiya, Ryutaro (1988) Introduction. In *Industrial policy of Japan*, eds. Komiya, Masahiro Okuno, and Kotaro Suzumura. Tokyo: Academic Press.
- Komiya, Ryutaro, Masahiro Okuno, and Kotaro Suzumura, eds. (1988) *Industrial policy of Japan*. Tokyo: Academic Press.
- Korpi, Walter (1989) Power, politics, and state autonomy in the development of social citizenship: social rights during sickness in eighteen OECD countries since 1930. *American Sociological Review* 54, 309-28.
- Krugman, Paul R., ed. (1986) *Strategic trade policy and the new international economics*. Cambridge: MIT Press.
- Kuttner, Robert (1987) *The economic illusion: false choices between prosperity and social justice*. Philadelphia: University of Pennsylvania Press.
- Lange, Peter and Geoffrey Garrett (1985) The politics of growth: strategic interaction and economic performance in the advanced industrial democracies, 1974-1980. *Journal of Politics* 47, 792-827.
- Lash, Scott (1985) The end of neo-corporatism? The breakdown of centralised bargaining in Sweden. *British Journal of Industrial Relations* 23, 215-39.
- Lash, Scott and John Urry (1987) *The end of organized capitalism*. Madison: University of Wisconsin Press.
- Lavoie, Don (1984) Two varieties of industrial policy: a critique. *Cato Journal* 4, 457-84.
- Lawrence, Robert Z. (1984) *Can America compete?* Washington, D.C.: Brookings Institution.
- Levin, Richard C. (1982) The semiconductor industry. In *Government and technical progress*, ed. Richard R. Nelson. New York: Pergamon Press.
- Lindbeck, Assar (1981) Industrial policy as an issue in the economic environment. *World Economy* 4, 391-405.
- Lundberg, Erik (1982) The rise and fall of the Swedish model. In *Europe's economy in crisis*, ed. Ralf Dahrendorf. New York: Holmes & Meier.
- Lundmark, Kjell (1983) Welfare state and employment policy: Sweden. In *Industrial crisis: a comparative study of the state and industry*, eds. Kenneth Dyson and Stephen Wilks. Oxford: Martin Robertson.
- Magaziner, Ira C. and Thomas M. Hout (1980) *Japanese industrial policy*. Berkeley: Institute of International Studies.
- Magaziner, Ira C. and Robert Reich (1983) *Minding America's business: the decline and rise of the American economy*. New York: Vintage.
- March, Artemis (1990a) The US commercial aircraft industry and its foreign competitors. In *Working papers of the MIT Commission on Industrial Productivity*, vol. 1. Cambridge: MIT Press.
- March, Artemis (1990b) The US machine tool industry and its foreign competitors. In *Working Papers of the MIT Commission on Industrial Productivity*, vol. 2. Cambridge: MIT Press.
- Martin, Andrew (1987) Sweden: restoring the social democratic distributive regime. Unpublished. Center for European Studies, Harvard University.
- Millstein, James E. (1983) Decline in an expanding industry: Japanese competition in color television. In *American industry in international competition*, eds. John Zysman and Laura Tyson. Ithaca: Cornell University Press.
- Mowery, David C. and Nathan Rosenberg (1982) The commercial aircraft industry. In *Government and technical progress*, ed. Richard R. Nelson. New York: Pergamon Press.
- Muller, Wolfgang C. (1983) Economic success without an industrial strategy: Austria in the 1970s. *Journal of Public Policy* 3, 119-30.
- Mutoh, Hiromichi (1988) The automotive industry. In *Industrial policy of Japan*, eds. Ryutaro Komiya, Masahiro Okuno, and Kotaro Suzumura. Tokyo: Academic Press.
- Norton, R. D. (1986) Industrial policy and American renewal. *Journal of Economic Literature* 24, 1-40.
- O'Connor, Julia S. (1988) Convergence or divergence? Change in welfare effort in OECD countries, 1960-80. *European Journal of Political Research* 16, 277-99.
- OECD (Organization for Economic Cooperation and Development) (1987) *Industrial policy developments in OECD countries: annual review 1987*. Paris: OECD.
- OECD (1989a) *Industrial policy developments in OECD countries: annual review 1988*. Paris: OECD.
- OECD (1989b) *Industrial policy in OECD countries: annual review 1989*. Paris: OECD.
- OECD (1990) *Historical statistics, 1960-1988*. Paris: OECD.
- Ohman, Berndt (1974) *LO and labour market policy since the Second World War*. Stockholm: Bokforlaget Prisma.
- Okimoto, Daniel, Takuo Sugano, and Franklin B. Weinstein, eds. (1984) *Competitive edge: the semiconductor industry in the U.S. and Japan*. Stanford: Stanford University Press.
- O'Leary, James (1988) *Rengo and the future of Japanese labor*. Unpublished. University of Wisconsin-Madison.
- Osborne, David (1987) *Economic competitiveness: the states take the lead*. Washington, D.C.: Economic Policy Institute.
- Ouchi, William G. (1984) Political and economic teamwork: the development of the microelectronics industry of Japan. *California Management Review*, Summer, 8-34.
- Panitch, Leo (1986) The tripartite experience. In *The state and economic interests*, ed. Keith Banting. Toronto: University of Toronto Press.
- PCIC (President's Commission on Industrial Competitiveness) (1985) *Global competition: the new reality, vol. 1*. Washington, D.C.: U.S. Government Printing Office.
- Pempel, T. J. and Keiichi Tsunekawa (1979) Corporatism without labor: the Japanese anomaly. In *Trends toward corporatist intermediation*, eds. Philippe C. Schmitter and Gerhard Lembruch. London: Sage.
- Peters, Guy B. (1986) The politics of industrial policy in the United States. In *Economics and politics of industrial policy*, eds. Steven A. Shull and Jeffrey E. Cohen. Boulder, Col.: Westview Press.
- Phillips, Kevin P. (1984) *Staying on top: the business case for a national industrial strategy*. New York: Random House.
- Pontusson, Jonas (1984) *Public pension funds and the politics of capital formation in Sweden*. Goteborg: Arbetslivscentrum.
- Pontusson, Jonas (1990) Labor, corporatism and industrial policy: the Swedish case in comparative perspective. *Comparative Politics*, forthcoming.
- Prestowitz, Clyde V. (1988) *Trading places*. New York: Basic Books.
- Price, Victoria Curzon (1981) *Industrial policies in the European Community*. London: St. Martin's.
- Pugel, Thomas A. (1984) Japan's industrial policy: instruments, trends, and effects. *Journal of Comparative Economics* 8, 420-35.
- Rehn, Gosta (1985) Swedish active labor market policy: retrospect and prospect. *Industrial Relations* 24, 62-89.
- Reich, Robert B. (1982) Why the U.S. needs an industrial policy. *Harvard Business Review*, Jan.-Feb., 74-81.

- Reich, Robert B. (1983) An industrial policy of the right. *Public Interest*, no. 73, 3-17.
- Reich, Robert B. (1990) Who is us? *Harvard Business Review*, Jan.-Feb., 53-64.
- Rhodes, Martin (1985) Organized interests and industrial crisis management: restructuring the steel industry in West Germany, Italy and France. In *Organized interests and the state: studies in meso-corporatism*, ed. Alan Cawson. London: Sage.
- Rohatyn, Felix (1983) *The twenty-year century: essays on economics and public finance*. New York: Random House.
- Sakoh, Katsuro (1984) Japanese economic success: industrial policy or free market? *Cato Journal* 4, 521-43.
- Sarathy, Ravi (1989) The interplay of industrial policy and international strategy: Japan's machine tool industry. *California Management Review*, Spring, 132-60.
- Saxonhouse, Gary R. (1983) What is all this about 'industrial targeting' in Japan? *World Economy* 6, 253-73.
- Schmidt, Manfred G. (1982) Does corporatism matter? Economic crisis, politics and rates of unemployment in capitalist democracies in the 1970s. In *Patterns of corporatist policy-making*, eds. Gerhard Lembruch and Philippe C. Schmitter. London: Sage.
- Schmitter, Philippe C. (1982) Reflections on where the theory of neo-corporatism has gone and where the praxis of neo-corporatism may be going. In *Patterns of corporatist policy-making*, eds. Gerhard Lembruch and Schmitter. London: Sage.
- Schmitter, Philippe C. (1988) The 'radiant future' of capitalism: organized or disorganized? Unpublished. University of Chicago.
- Schultze, Charles L. (1983) Industrial policy: a solution in search of a problem. *California Management Review*, Summer, 5-15.
- Science (1989) HDTV: the technology du jour. 19 May, 761-64.
- Scott, Bruce R. (1985a) National strategies: key to international competition. In *U.S. competitiveness in the world economy*, eds. Scott and George C. Lodge. Boston: Harvard Business School Press.
- Scott, Bruce R. (1985b) U.S. competitiveness: concepts, performance, and implications. In *U.S. competitiveness in the world economy*, eds. Scott and George C. Lodge. Boston: Harvard Business School Press.
- Sekiguchi, Suetō and Toshihiro Horiuchi (1985) Myth and reality of Japan's industrial policies. *World Economy* 8, 373-91.
- Shinjo, Koji (1988) The computer industry. In *Industrial policy of Japan*, eds. Ryutaro Komiya, Masahiro Okuno, and Kotaro Suzumura. Tokyo: Academic Press.
- Shonfield, Andrew (1965) *Modern capitalism: the changing balance of public and private power*. London: Oxford University Press.
- Sidenius, Niels Chr. (1983) Danish industrial policy: persistent liberalism. *Journal of Public Policy* 3, 49-62.
- Skogh, Goran (1984) Employers associations in Sweden. In *Employers associations and industrial relations*, eds. John P. Windmuller and Alan Gladstone. Oxford: Clarendon Press.
- Staelin, David H., et al. (1990) The decline of US consumer electronics manufacturing: history, hypotheses, and remedies. In *Working papers of the MIT Commission on Industrial Productivity*, vol. 1. Cambridge: MIT Press.
- Stephens, John D. (1979) *The transition from capitalism to socialism*. Urbana: University of Illinois Press.
- Strange, Susan (1988) A dissident view. In *1992: one European market? A critical analysis of the Commission's internal market strategy*, eds. Roland Bieber et al. Baden-Baden: Nomos Verlagsgesellschaft.
- Streeck, Wolfgang (1981) Qualitative demands and the neo-corporatist manageability of industrial relations. *British Journal of Industrial Relations* 14, 149-69.
- Streeck, Wolfgang (1984) Neo-corporatist industrial relations and the economic crisis in West Germany. In *Order and conflict in contemporary capitalism*, ed. John H. Goldthorpe. Oxford: Oxford University Press.
- Svensson, Lennart (1986) Class struggle in a welfare state in crisis: from radicalism to neoliberalism in Sweden. In *Unions in crisis and beyond*, eds. Richard Edwards, Paolo Garonna, and Franz Todtling. Dover, Mass.: Auburn House.
- Therborn, Goran (1987) Does corporatism really matter? The economic crisis and issues of political theory. *Journal of Public Policy* 7, 259-84.
- Thompson, Grahame (1987) The American industrial policy debate: Any lessons for the UK? *Economy and Society* 16, 1-74.
- Thurow, Lester C. (1984) Building a world-class economy. *Society*, Nov.-Dec., 16-29.
- Treize, Philip (1984) Japanese miracles revisited. *Society*, Nov.-Dec., 36-40.
- Tweeten, Luther (1970) *Foundations of farm policy*. Lincoln: University of Nebraska Press.
- Udis, Bernard (1987) *The challenge to European industrial policy: impacts of redirected military spending*. Boulder, Col.: Westview Press.
- Uekusa, Masu (1988) The oil crisis and after. In *Industrial policy of Japan*, eds. Ryutaro Komiya, Masahiro Okuno, and Kotaro Suzumura. Tokyo: Academic Press.
- Wagenhals, Gerhard (1983) Industrial policy in the Federal Republic of Germany: a survey. In *Industrial policies for growth and competitiveness: an economic perspective*, eds. F. Gerard Adams and Lawrence R. Klein. Lexington, Mass.: D. C. Heath.
- Wilensky, Harold L. and Lowell Turner (1987) *Democratic corporatism and policy linkages*. Berkeley: Institute of International Studies.
- Yamamura, Kozo (1982) Success that soured: administrative guidance and cartels in Japan. In *Policy and trade issues of the Japanese economy*, ed. Yamamura. Seattle: University of Washington Press.
- Yamamura, Kozo (1986) Caveat emptor: the industrial policy of Japan. In *Strategic trade policy and the new international economics*, ed. Paul Krugman. Cambridge: MIT Press.
- Yamawaki, Hideki (1988) The steel industry. In *Industrial policy of Japan*, eds. Ryutaro Komiya, Masahiro Okuno, and Kotaro Suzumura. Tokyo: Academic Press.
- Yonezawa, Yoshie (1988) The shipbuilding industry. In *Industry policy of Japan*, eds. Ryutaro Komiya, Masahiro Okuno, and Kotaro Suzumura. Tokyo: Academic Press.
- Yoshikawa, Akihiro (1987) The Japanese challenge in biotechnology: industrial policy. Working Paper 29, Berkeley Roundtable on the International Economy. University of California-Berkeley.
- Zysman, John (1983) *Governments, markets, and growth: financial systems and the politics of industrial change*. Ithaca: Cornell University Press.
- Zysman, John and Laura Tyson, eds. (1983) *American industry in international competition*. Ithaca: Cornell University Press.