

The Economics of Industrial Policy

A basic principle underlying public policy in a market economy is that of market failure, or government by exception; the market mechanism is preferred to government policy except when it can be shown to fail. Generally speaking, this principle is independent of the nature of the market, and holds for concentrated, oligopolistic markets as well as for those which are more competitive. The tests for market failure, and the remedies, will in fact depend on just such characteristics.

Thus, one way to begin a study of industrial policy is by examining the circumstances under which markets fail. However, market failure is a necessary but not sufficient condition for public policy. Whether government responses are warranted depends on several factors, the most important of which are the social costs of the failure.

The following sections discuss several categories of market failure, particularly those that could serve as possible rationales for industrial policy. The aim is to identify and clarify various categories of justification for government intervention in industry and to distinguish economic from political justifications,

Externalities and Market Failure

The benefits or costs to society as a whole associated with private economic activity generally differ from private benefits or costs. Therefore, market decisions based on private calculations do not necessarily yield outcomes that are socially most desirable. Such externalities often motivate public policy measures having significant effects on industry. Regulations aimed at the control of pollution or at public health and safety are examples. Such measures are discriminatory in the sense that some industries are affected more than others. Externalities have also been a rationale for government funding of R&D because social returns to R&D may exceed private returns.

Analyses based on externalities often point to the use of nonselective market promotion policies, such as fiscal incentives, to encourage socially desirable R&D or to discourage undesirable activities such as environmental pollution. Such measures have aggregate objectives, cutting across industrial sectors rather than being sector-specific. For example, a fiscal program to stimulate R&D in

the aggregate might include tax credits for R&D facilities, or accelerated depreciation of capital investment for facilities and equipment used for R&D. Similarly, a fiscal program to encourage environmental improvement might include accelerated depreciation for pollution control equipment, investment tax credits for such equipment, or the use of a government bond or loan guarantee program to finance a portion of the investment. Market promotion policies of these types would have industry-specific effects, since some industries are more highly dependent on R&D or pollute more than others, but the measures would address themselves to aggregate rather than sector-specific objectives.

In practice, government policies in response to externalities have often been sector-specific by design—in the United States as well as in foreign countries. Direct government funding of R&D, or indirect support through procurement programs, as in the U.S. semiconductor and computer industries (ch. 6) are cases in point. Another is emissions standards for automobiles. Whether or not the industry-specific effects of government programs in response to externalities are consciously intended, policy makers should consider these effects and their implications. Failure to do so has been one of the weaknesses of Government policies toward industry in the United States. The side-effects of policies directed at externalities have sometimes conflicted with other policy objectives. For instance, in industries such as steel or automobiles, regulatory policies have required substantial capital investments. To some extent, these have drained funds from alternative investments that might have done more to enhance productivity and competitiveness. Indeed, side-effects of such types have often served to rally political support for counteracting industry-specific programs intended to compensate firms or industries *‘injured’ by Government policies.

Public Goods and National Security

Market failure also occurs in the case of “public goods.” These are goods that private firms do not produce, or do not produce in adequate quantities, usually because: 1) such goods are “non-rival” so that one person’s use of them does not diminish someone else’s enjoyment; or 2) they are “nonexclusive” so that those who choose not to

pay cannot be barred from their use. National security and defense are the categories of public goods most important to industrial policy. For example, some observers argue that aid to the American steel industry is necessary because steel is vital to national security. This kind of argument, applied in other countries, is one reason for the fact that 45 percent of world steel capacity (more than 50 percent in Europe) is government-owned.¹ Similar arguments are frequently made for public policies to promote semiconductor industries, on the grounds that semiconductors have critical military applications.

That the output of a particular industrial sector is vital to national security implies that social benefits exceed private benefits, and that government intervention may be needed to maintain socially desirable levels of production. Nonetheless, there are at least two steps that are necessary before concluding that government action is necessary. First, it must be demonstrated that in the absence of government action, domestic production might be inadequate to meet national security requirements. Studies of steel and semiconductor industries have been inconclusive on this point. It also must be demonstrated that in the absence of sufficient domestic production, secure sources of imports would not be available. For example, could the United States rely, if necessary, on imports of steel or semiconductor devices—either from allies or from neutral nations—at fair prices? The OTA steel study raises the possibility that if the domestic industry is allowed to decline, the United States may someday face unfair prices for steel imports, perhaps because of foreign cartels. Even if a steel cartel were judged unlikely because of the large number of foreign producers, foreign governments might halt exports to the United States to safeguard their own supplies during periods of military emergency and/or tight supplies. Given the vagaries of international economic and political conditions, and the importance of products such as steel for national defense, a risk-averse strategy might require government policies guaranteeing supplies. Such policies could include stockpiling as well as support for the domestic industry.

Product Market Imperfections

A third category of market-failure arguments for government policies is based on imperfections in markets for the products of industry. Such im-

perfections may take several forms—e.g., barriers to entry resulting from scale economies, product differentiation, or advertising. When imperfections of these types exist, markets may not function in socially optimal fashion. Thus, such imperfections can become an important rationale for public policies. They underlie, for example, antitrust laws in the United States.

Issues such as antitrust arise in debates about industrial policy because some people argue that aggressive pursuit of antitrust measures has put the United States at a disadvantage in international competition. According to this view, antitrust enforcement by the Department of Justice and the Federal Trade Commission has focused too narrowly on domestic markets and failed to acknowledge foreign competition. As a result, it is claimed, mergers that might enhance U.S. competitiveness have been restricted, innovation stifled,² and suits brought seeking to break up the very firms that are mainstays of U.S. competitiveness (the ongoing Government antitrust proceedings against IBM and Western Electric are frequently brought forward as examples). Concerning mergers, chapter 5 points out that vertically integrated Japanese electronics firms, making semiconductors for their own use, may be a source of competitive advantage for that country. As the capital and R&D costs of semiconductor production increase, economies of scale are likely to grow, making vertical integration more desirable. However, in the United States, antitrust policies could be perceived as blocks to such strategies,

Capital Market Imperfections

Imperfections in capital markets provide another possible reason for public policy. Such imperfections can take several forms, and often resemble the externality or public goods rationales discussed above. For example, capital markets may not supply funds for investments if the expected returns are too far in the future, or if social returns greatly exceed private returns.

One type of possible capital market imperfection depends simply on the size and apparent stability of the firm seeking funds. Private capital markets often appear to discriminate between large and small companies. Investors or lenders face risk and uncertain returns. Lending to large firms with established reputations and significant

¹Technology and Steel Industry Competitiveness (Washington, D.C. Office of Technology Assessment, U.S. Congress, June 1980), p. 102.

²Possible effects of antitrust enforcement on industrial innovation are summarized in *Antitrust, Uncertainty, and Technological Innovation* (Washington, D.C.: National Academy of Sciences, 1980).

sources of internal funds gives some assurance of repayment, even though the project for which the loan was intended may fail. In contrast, lending to small firms may carry larger perceived risks of default—although this may be simply a result of poor market information about small firms, and lenders could spread their risks by lending to or investing in a number of small firms. Capital market imperfections can also stem from a preference by businesses for reinvestment of internally generated funds even given outside investment opportunities offering higher rates of return.

Alleged imperfections in capital markets resulting from better access of larger firms and established industries to external capital, or from their preferences for the reinvestment of internal funds, have sometimes led to proposals that government act as an alternative source of financing. For example, the government might guide funds from declining industries to higher productivity sectors whose growth appeared to be limited by access to capital or by high risks, perhaps associated with new technologies,

The issue of risk introduces another type of possible capital market imperfection—failure to finance projects judged excessively risky by private lenders. All investments are inherently uncertain; the greater the uncertainty, the greater the risk and hence the higher the returns required by investors. For projects with potentially high but very uncertain returns, the cost of obtaining capital from the private capital market may be prohibitive.

Discussions of industrial policy sometimes turn to the possible need for government policies to guarantee capital availability for high-risk projects in high-technology or new-technology industries, such as semiconductors or alternative energy conversion systems. Such policies might include cofinancing or loan guarantees. Alternatively, the government could raise the potential rewards to investors by lowering the capital gains tax. Government subsidization of risk might be defended on at least two grounds: 1) that government has a greater ability to bear risk than private investors; and 2) that private decisionmakers may be more averse to risky investments than government decisionmakers.

A final capital market argument for public policy is based on time horizons of private investors. The OTA steel study, for example, found that new equity investments have tended to favor quick payoffs rather than the long-term investments needed to renew the technological foundation of the industry. During the past 10 years, the debt-

equity ratio for the entire steel industry rose from 36 to 42 percent.⁷ However, the U.S. industry still has a debt-equity ratio only half that of the Japanese industry; this is a specific example of the general argument that low debt-equity ratios in U.S. industries mean that investments are evaluated primarily according to short-term profitability (debt carries fixed rate-of-return obligations while equity brings with it pressures to compete with the returns available from alternative investments). Long-term profitability is, however, more important for continuing international competitiveness. While it is difficult to generalize about the extent of any short-term bias by managements of American firms—whether because of stockholder demands or other reasons—there is a good bit of anecdotal evidence for such behavior.⁸ Again, the policy prescription might be Government programs such as loan guarantees, support for R&D, and selective tax credits that promote long-term projects judged to be socially desirable.

This argument for government intervention is really just the externality or public goods argument in another guise. The underlying rationale is that private estimates of returns fail to include socially desirable returns that occur at some future time. For example, socially optimal time horizons may be longer than privately optimal horizons for infrastructure or R&D projects with long and uncertain gestation periods.

Labor Market Imperfections and Adjustment Assistance

Imperfections in the functioning of the labor market frequently serve as the justification for offsetting government policies. Such imperfections may take several forms, but the result is always the same. Wages do not adjust to equalize supply and demand for different types of labor—perhaps because of labor unions, minimum wage legislation, barriers to worker relocation created by skill requirements or geography, and rigid wage differentials between industries or between workers with different skills. Lack of portable pensions is also a bar to mobility. In the presence of such imperfections, changes in demand for the products of an industry may lead to production cutbacks, layoffs, and unemployment, rather than to an adjustment in wage differentials between industries that would help maintain full employ-

⁷Technology and Steel Industry Competitiveness, op. cit., p. 120.

⁸R. H. Hayes and W. J. Abernathy, "Managing Our Way to Economic Decline," *Harvard Business Review*, July-August 1980, p. 67.

ment and reallocate labor among different industries. Productivity improvements resulting in decreased employment opportunities can have similar effects, as can international capital flows—associated, for instance, with the establishment of overseas assembly plants.

In many countries labor market imperfections are central to pressures for government intervention in industries affected by import competition, as well as by technological unemployment or flights of capital. The latter two have generally been more important as causes of employment dislocations in the United States—whether productivity growth, movement of electronics assembly operations to Mexico or the Far East, or of textile plants from New England to the South. In this country, however, the Government has normally provided adjustment assistance only when unemployment is associated with import competition,

As an example of the rationale for such assistance, suppose that demand for the output of a domestic industry such as steel declines as a consequence of competition from lower priced imports. According to economic theory, if wages were free to fall, they would do so relative to wages in other industries where demand has not declined. The relative wage decrease in the import-affected sector should encourage workers to leave that sector for alternative jobs at higher relative wages elsewhere in the economy. In reality, such behavior seldom occurs. For example, in the American steel industry (chs. 4 and 5) wages have not declined despite import competition and falling profits. A strong union has kept wages high; incentives for workers to move to other industries have been few. Unemployment compensation and other guaranteed payments also discourage mobility,

In the absence of labor market imperfections, changes in wage differentials between industries, and in the aggregate rate of growth of wages, will guide the movement of workers from declining sectors to those that are more competitive. Although the distribution of labor would change, full employment would in principle be maintained. However, if wages do not adjust, the result will be aggregate losses in output, aggregate unemployment, and a slowdown in the movement of labor away from the import-affected industry. Therefore public policies to speed the process of adjustment may be desirable. Such policies might include relocation subsidies to workers and tax incentives for firms in other industries that hire the displaced workers.

The argument for government intervention because of labor market imperfections is based on economic efficiency and is distinct from that for intervention on equity grounds. Socially optimal allocation of resources under changing national and international market conditions may call for movement of both capital and labor from industries in relative decline to those which are more profitable. Labor market imperfections may interfere with this adjustment by distorting the price, wage, and profitability signals that guide decisions. Under these circumstances, an efficiency argument can be made for offsetting government policies. But even in the absence of such imperfections, public policies may be needed so that the costs of adjustment do not fall disproportionately on some individuals while others reap the benefits.

Again, the example of an import-affected industry such as steel or automobiles can illustrate. Shifts in international competitiveness may require the movement of labor from such an industry on efficiency grounds. Although this movement yields social benefits, it also has costs. These costs include the income lost by workers during the transition to new jobs, and any retraining and relocation costs. In the absence of public policies, the full adjustment costs are borne by the displaced workers. This is not necessarily equitable. Why should employees of firms affected by imports (or technological change or flights of capital) bear the brunt of the costs, while others—such as the consumers of cheaper foreign imports—reap the benefits? The government may well decide that a different distribution of social costs and benefits is desirable. This was one motivation for the expanded trade adjustment assistance program (see ch. 8) created by the Trade Act of 1974. In many countries income supplements, retraining and relocation grants, and aid programs for communities are used to reduce the costs paid by workers and localities when industries decline or employment opportunities are lost—whether caused by shifts in international competitiveness, technological change, or other factors. Such policies may be particularly important for industries where workers are older, unskilled, or otherwise have difficulty finding new jobs.

Efficiency and equity rationales for trade adjustment assistance are specific applications of the general principle that the costs of moving labor and capital so as to produce a net social

gain should not fall disproportionately on particular groups. Whether the factors behind resource relocation are the result of changes in consumer demand, changes in technology, or changes in government policy—such as the scaling down of military installations or the imposition of standards for environmental control or occupational health and safety—government programs may be desirable to protect those whose jobs are affected. In the United States, however, such policies have in the past been limited to trade-affected sectors or to a limited number of programs dealing with regional adjustment—such as the programs of the Economic Development Administration or the Department of Housing and Urban Development (ch. 8.)

Equity and efficiency rationales for government intervention are distinct, and may be in conflict. For example, adjustment programs have sometimes acted to reduce incentives for finding new jobs and themselves slowed the adjustment process. Indeed, some observers contend that the sluggish movement of labor in the United States is precisely the result of such programs—which is not an argument against adjustment policies in principle, but against those that are poorly conceived or otherwise do not function as intended. To counteract such flaws, adjustment assistance programs could be designed to increase incentives for adjustment by tying payments to socially desirable objectives such as retraining or relocation. Finally, one of the most persuasive arguments for adjustment assistance is that, in the absence of such programs, individuals who bear the costs of a socially desirable movement of resources are likely to use their political and institutional power to impede adjustment. In other words, if the equity issue is not confronted by government policy, the result may be development of imperfections in capital, labor, and product markets that hinder rather than facilitate the movement of resources in response to shifts in competitiveness,

Market Imperfections Resulting From Government Actions

While many failures or imperfections are inherent to markets, another category consists of those that are themselves consequences of government policies, be these domestic or foreign governments. Intervention by the U.S. Government to promote or support industries such as steel or semiconductors is sometimes urged as a

counter to “unfair” competition resulting from foreign government policies.

Measures to protect U.S. markets from “unfair” foreign competition have included voluntary restraint agreements (VRAS) or orderly marketing agreements (OMAS), trigger pricing, antidumping surcharges, and other remedies implicit in sections 301 and 337 of the Trade Act of 1974. These measures have not always been effective (see ch. 6). As one result—here and elsewhere—pressures can mount for alternative policy responses—e.g., subsidization of industry by tax cuts or R&D support to counterbalance similar programs in other countries. Imperfections created by foreign industrial policies are becoming a force for similar policies in the United States. Indeed, this is the point of departure for many discussions of industrial policy. The net result could be offsetting neomercantilist policies leaving each country worse off than it would have been if none had introduced such policies.

It is not obvious that the United States should respond to market imperfections resulting from subsidies to industries that compete with American firms. Indeed, some people argue that if foreign governments are subsidizing exports to the United States, then they are effectively subsidizing U.S. consumers. According to this view, the United States benefits from “unfair” competition, and no policy response—protectionist or otherwise—is needed. Of course the gains to the United States are not without costs and may be short-lived. As discussed in the preceding section, adjustment costs are one consequence. These costs—for moving capital and labor out of firms, regions, and industries that cannot compete against subsidized foreign producers—are often substantial. This is particularly true if capital and labor are relatively immobile. Costs of adjustment must be weighed against the benefits of subsidized imports,

Even if the net benefits outweigh the costs, a government policy response might still be warranted. At the very least, equity concerns could justify adjustment assistance. Why should some domestic interests benefit from the policies of foreign governments while others suffer? Distribution of costs and benefits should be the outcome of domestic policies rather than actions taken by foreign governments.

Beyond considerations of equity, there may also be long-run efficiency rationales. Suppose that in the absence of offsetting domestic policies, foreign subsidies lead to the decline of domestic

firms. In the long run, foreign governments might use the resulting market power to cartelize or monopolize the world market, forcing up the prices of imports. Such a strategy could only be successful in industries where economies of scale or other barriers to entry prevented the reappearance of competition. For these and other reasons, predatory pricing strategies would probably not succeed. More convincing reasons for domestic policy responses to foreign subsidies focus on the loss of initiative that would result if domestic industries were allowed to passively restructure according to market signals distorted by the governments of other countries.

In addition to the distorting effects of foreign government policies, domestic government actions may create a need for compensatory policies. As noted elsewhere, policies aimed at aggregate objectives (for instance, environmental quality) often work to the disadvantage of particular industries such as steel. Evolving legal standards for product safety and reliability have likewise increased risks in some industries—e.g., chemicals. Differences in the tax treatment of various types of capital work to the advantage of some industries but not others. Interest deductions for mortgage payments in the United States favor investments in real estate over manufacturing.

Moreover, tax effects combined with rapid inflation have adversely affected investment in industry. Because the capital gains tax falls on nominal capital gains rather than real gains, investors may face taxes if they sell assets whose real value has not increased. This tends to encourage the owners of such assets simply to hold them—the lock-in effect—and works against mobility of capital. Inflation also increases the effective corporate tax rate by reducing the value of depreciation deductions based on historical costs. When public policies can be shown to distort market signals, responses ranging from their elimination to the introduction of compensating measures may be justified.

Macroeconomic Rationales for Policy

The final rationale for government intervention differs from those preceding because it is based on macroeconomic performance—measured by parameters such as price stability, aggregate levels of output and employment, or balance of payments—rather than conditions in particular industries or markets. As the market system does not always realize macroeconomic objectives on

its own, government action may be required to maintain full employment or counter inflation. Such reasoning usually points to aggregate rather than industry-specific or market-specific policies, although such policies may have sector-specific effects. For example, government policies dealing with balance of payments should not be required if exchange rates can adjust freely to changing market conditions. However, foreign government interventions or lags in adjustment may call for government responses, at least temporarily. Although not industry-specific in intent, such responses would typically be industry-specific in their results—because industries that export, those that compete with imports, and those that produce goods which are not traded at all will be affected differently.

Costs and Benefits of Alternative Policies

Public policies affecting industry often carry the potential for high net costs to society. For instance, using sector-specific policies to attack aggregate problems can be inefficient—as when a declining industry is subsidized to maintain employment. Before adopting industrial policy measures, costs should be estimated both inside and outside the sectors of immediate interest. Whether choosing sector-specific policies aimed at sector-specific problems, market promotion policies, or other measures with aggregate objectives—costs and benefits of alternatives are important considerations. Even when precise evaluation is impossible, enumerating the classes of benefits and costs—which may be widely spread through society—can help to frame judgments.

To illustrate, consider the case of government intervention in manufacturing industries such as steel or automobiles. On the benefit side of the argument, major outputs can be identified that could decline or be otherwise adversely affected in the absence of government policy. The list might include:

1. The benefits of preventing decreases in domestic output and employment as a consequence of a decline in the particular industry. These losses impose only short-run costs provided alternative employment can be found for the factors of production (labor, capital) released; in other words, such costs are adjustment costs. If, however, there are regional or other barriers to factor mobility,

then these costs may become permanent. Both short- and long-run costs can in principle be weighted to reflect distributional consequences, such as the social impact of income losses on depressed regions.

2. Prevention of losses in socially desirable R&D as a consequence of decline.
3. Prevention of declines in domestic output necessary for national defense.
4. Prevention of loss of competition within domestic markets, including losses associated with distorted market indicators and inefficient allocation of resources.
5. Avoiding lost tax revenues, increases in unemployment compensation, and similar costs.

On the cost side of the ledger, one would have to identify the various losses that would occur as a result of government policy. This list might include:

1. Long-run efficiency losses due to misallocation of resources caused by government policy. These losses could include decreased outputs in other industries—e.g., if the sector favored by the policy bid resources away from other industries.
2. Direct costs of the policy, including costs of institutional machinery for implementing it. The calculation should consider possible cuts in other Federal programs, including distributional consequences.
3. The costs of any behavioral inefficiencies resulting from the policy. For example, government intervention to support a particular industry might create pressures for matching aid to other industries.

In principle, each of these benefits and costs should be evaluated based on alternative assumptions for future market trends, with and without the policy, and with alternative time horizons. Calculations should be made for a range of policy alternatives to determine which, if any, might be preferred.

Although this framework may seem abstract, it demonstrates that there is no *prima facie* case for industrial policy, especially for sector-specific policies favoring or promoting certain industries. A judicious evaluation of the many competing objectives and the many competing policy responses is needed.

The Economics of Protectionism

As discussed in chapter 6, policies intended to shield domestic industries from foreign competi-

tion have seldom been effective in promoting industrial adjustment; even when effective, protectionist measures are usually rather inefficient. This section briefly reviews the effects of protection—whether by tariff or nontariff barriers. The most important nontariff barriers are quantitative restrictions on imports such as VRAs or OMAs.

In the absence of market imperfections, tariffs generally reduce aggregate economic welfare. Labor and capital employed in an industry given tariff protection will gain; but losses to consumers of the protected commodity will typically be greater.⁷ Furthermore, even when a policy response is necessary, tariffs frequently prove a second-best measure. Alternative measures can usually achieve the desired objectives at less cost to society, particularly objectives involving encouragement of domestic production in a given industry. The reason is straightforward. Tariffs change prices, and prices affect both production and consumption. A policy that works directly on production and leaves consumption unchanged—such as a tax, subsidy, or credit policy—is more efficient than a tariff because the tariff also distorts consumption.

Quotas also tend to be second-best policies, and for the same reason—they affect both production and consumption. But quotas are often less effective than tariffs. Selective quotas—applying to certain commodities and/or certain foreign suppliers—are not always successful. If imports of one kind are restricted by quota, foreign producers may switch to a substitute. If quotas are applied to imports from one country, other countries may move in. The OMA on imports of color televisions from Japan encouraged an increase in imports from Taiwan and Korea, while also encouraging Japanese production in the United States.

Tariffs are also superior to quotas from a distributional standpoint. Tariffs, like taxes, generate revenue. The funds become available for financing other government policy measures or for offsetting other taxes.

Protection against imports by means of quotas or tariffs has been used with some frequency in recent years. In the case of U.S. industries such as apparel and footwear—where domestic producers face a cost disadvantage and market im-

⁷ For a recent example estimating the effects of tariffs or quotas on automobile imports, see M. P. Lynch, et al., *Comments of the Staff of the Federal Trade Commission Before the United States International Trade Commission, Certain Motor Vehicles and Certain Chassis and Bodies Thereof*, Oct. 6, 1980, especially app. B.

perfections can be ruled out—protection has been justified as a short-term measure to slow the pace of decline and hence reduce adjustment costs. However, temporary protection intended to ease adjustment may become permanent. Furthermore, protection is a second-best policy compared to adjustment assistance and retraining or relocation subsidies, which do not unnecessarily raise prices to consumers.

Another rationale for temporary protection of mature or declining industries has recently been developed—an analog to the well-known infant-industry argument. This is the “senescent” industry argument, which holds that domestic producers with old, outmoded product or process technology should be protected from competition with foreign producers having more modern technology. Temporary protection, it is argued, will allow domestic firms to generate profits for modernizing their own processes and/or products. This rationale is quite different from that used to justify temporary protection because of rapid and unexpected change within the economy. The latter case—covered in trade law by “escape clause” proceedings—is clearly different from that of industries in slow decline because of long-term shifts in comparative advantage.

There are several possible pitfalls in the senescent industry argument. First, if domestic pro-

ducers have been unwilling or unable to modernize or keep up with the technology employed by foreign firms, this suggests that it has been unprofitable for them to do so—e.g., in the integrated portions of the American steel industry. Second, though a case might be made that market failure has caused the decline of domestic firms, this does not necessarily mean that protection is an appropriate policy response. Policy should be guided by benefits and costs expected in the future, not by the historical causes of decline.

Finally, if a policy to help a senescent industry does seem warranted, protection would probably not be the best remedy. Once again, protection is likely to be second-best, more costly, and less efficient than alternatives such as loan guarantees, or tax incentives for stimulating new investment. Furthermore, protection may not in fact promote modernization. Protection is only indirectly linked to capital investment, process or product innovation, and other possible strategies for increasing productivity and restoring competitiveness. While protection might raise profit levels, the profits will not necessarily be reinvested in the senescent industry. There is little evidence that trade protection in the steel or consumer electronics industries (or apparel or textiles) has worked to restore domestic competitiveness (see ch. 6),