THE SIGNIFICANCE AND POTENTIAL
OF POSITIVE INDUSTRIAL POLICY

by

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Introduction

The salient feature of the contemporary world auto market, indeed that aspect which more than any other has brought this forum into being, is the rapid shift in world market shares among the major auto producers. This phenomenon, insofar as several national and international commissions have been able to determine\(^1\), is due to differential improvements in product quality, production efficiency, and packaging by several producers rather than direct subsidies or market protections from their home governments. However, if the history of international trade relations is any guide to the future, it seems clear that few governments will find it politically feasible or strategically prudent to permit their national producers to lose too much market share, particularly at home, no matter how clear it may be that ascendant foreign producers are winning in a fair fight. Thus we may predict that continuing shifts in market share will cause many governments to intervene on behalf of their home producers either through the protective techniques of market barriers and subsidies or by means of positive industrial policies which stimulate home producers to greater efficiency and competitiveness.

We will not discuss protectionist measures here except to note that they are universally viewed as distant second bests to be employed reluctantly in the absence of positive policy alternatives. Rather, we will inquire into the nature and potential of positive industrial policies by which we mean measures which stabilize or increase the market shares of home producers by improving their efficiency and competitiveness but without resort to subsidy or market protection. Specifically, we will seek answers to the following

\(^1\text{Cf. the U.S. International Trade Commission decision on the petition from American producers and labor unions for tariff protection.}\)
questions:

(1) What is the range and nature of positive industrial policy?
(2) What has been the role of such policies in the performance of ascendant producers?
(3) Might positive industrial policy, if applied to lagging producers, stabilize their market shares and head off demands to their home governments for protectionist measures by improving their efficiency and product quality?
(4) Insofar as particular positive industrial policies appear to have substantial potential to stimulate producers, are there important political barriers, national or international, to their implementation?

The Nature of Positive Industrial Policy

If governments are to assist their lagging producers, they must first identify the nature of their home industry's comparative disadvantage. Two broad analytical approaches to this question have developed in industrial policy discussions in recent years. One approach focuses on problems in the broader economic environment in which producers operate, singling out four especially important forms of disadvantage:

(1) high capital costs and a lack of investment funds, generally traced to investment disincentives in the tax system or a national propensity to consume rather than invest;
(2) high labor costs;
(3) disproportionate regulatory burdens in such areas as air quality, safety, noise, and occupational health;
(4) an uncertain planning horizon due to inappropriate or vacillating government policies on fuel pricing, interest rates, aggregate demand management, and so forth (which makes producers in one country disproportionately vulnerable to sudden changes in the environment and, in consequence, excessively cautious in mapping corporate strategy.)

Analyses grounded in this approach tend to assume that firms are essentially dependent variables and that producers operating within similar environments will behave similarly. Thus, to bring one's home producers up to the level of the world leaders, government should duplicate or improve upon the operating environment enjoyed by the front runners. Investment incentives, "social contracts" with labor on wages, "de-regulation", and improvements in government macro-economic planning are the logical instruments of a positive industrial policy premised on this approach.

But what if this formulation is incomplete? What if national producers show very different capacities for melding capital, labor and technology into automotive products of given price and quality? What if the functioning of firms as shaped by managerial traditions, labor-management relationships, and other "sociological" factors is quite different and continues to be so even when lagging firms find themselves operating in identical economic circumstances with the front runners?

A second broad approach to positive industrial policy grounded in this view treats producing organizations as highly, although not totally, independent variables able to overcome many sorts of external disadvantages provided that the appropriate sorts of productive relationships can be developed within the firm. A decline of national producers is therefore
indicative of internal malfunctions and policy prescriptions based on this approach call for direct government intervention in the internal affairs of producers. Government brokering of labor-management relationships and the institution of procedures for external review of producer strategies for product development, internal organization, and investment (generally in return for government assistance in obtaining necessary financing) are among the policy instruments of a positive industrial policy based on this approach.

Bearing in mind these contrasting views of the causes of differential success among national automotive industries, we may proceed to an examination of actual cases. We will begin with the Japanese auto industry, clearly the preeminent case of ascendance in the present era. In our examination we will seek to identify the cause of their success and the role, if any, played by positive industrial policy.

Positive Industrial Policy and the Japanese Jugernaut

The initial development of the Japanese auto industry is without doubt a monument to thoroughgoing protectionism thoroughly applied. After a brief period of vascillation about the potential of a Japanese auto industry to ever be competitive in world markets, the organs of Japanese government undertook to protect nascent domestic producers from foreign products and foreign investment and to furnish adequate investment capital. During the 1950s and 1960s protective measures included high tariffs, an auto excise tax discriminating against larger vehicles not produced domestically, exchange controls on individuals seeking to import foreign autos over the tariff, and strict controls on foreign capital investment in the Japanese auto industry. Subsidies included low interest loans from public financial institutions,
special depreciation allowances for investments in auto production equipment, exemptions from import duties on necessary machinery and equipment, and low interest loans to aid the merger of inefficiently small producers into larger firms. ²

However, by the 1970s an event possibly unique in the annals of "infant industry" protection had occurred -- the infant had grown to full industrial adulthood in less than 20 years in a world of long established giants and had little further need for special treatment from its governmental parent. Indeed, the greatest growth in the Japanese industry in world markets has come in the 1970s after the sector specific policies favoring the industry were almost entirely dismantled.

Just how can we account for the continuing ascendance of Japanese producers? A case can be made for the economic environment, another for the "sociology" of Japanese industry. Both deserve a careful look, although data limitations will make our analysis here less than completely satisfying in both cases.

The economic environment approach stresses the incentives to investment in all industrial sectors in the Japanese tax system combined with the greater propensity of the Japanese to save (perhaps even as a form of "consumption"), the lower wage level (in comparison with the U.S., Germany and France, although no longer with Italy and the UK and never with Spain) negotiated with a clear eye to international competitiveness, and the special provisions for producer cooperation and investment write-offs incorporated into the Japanese regulatory programs for air quality, safety, and

other environmental problems. These advantages, it can be argued, flow from positive industrial policies embodied in the tax laws and in the Japanese rules of industrial competition. The results may be highly significant.

For example, a number of recent studies have indicated a Japanese production cost advantage for small cars landed in the U.S. in the range of $1,000 to $1,500. Martin Anderson, an American industry analyst, has recently traced roughly 1/3 of this cost advantage to lower wages, 1/3 to greater system efficiency in the Japanese manufacturing process, and 1/3 to advantages in the tax, regulatory, and anti-trust laws which lead in his view to the greater efficiency in the production process. Thus, in this view, the role of positive industrial policies shaping the economic environment in which firms operate is very great indeed, accounting for a very large part of the Japanese success in the American market.

An alternative view stressing the importance of the organization environment emerges from a similar set of calculations recently completed by Kim Clark at the Harvard Business School as part of a comparison of the U.S. and Japanese auto industries conducted for the U.S. National Academy of Engineering. Clark also found a large production cost advantage for Japanese

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4 In a personal conversation with the author. It should be emphasized that these are Mr. Anderson's personal views and not necessarily those of the U.S. government or any of its agencies.

5 Again, it should be emphasized that these are the personal views of Professor Clark and not necessarily those of the National Academy of Engineering or other participants in the NAE study.
producers landing cars on the U.S. west coast, roughly $1,100-$1,300 for a subcompact vehicle retailing in the $5,000-$6,000 range. About 2/3 of this advantage for the Japanese is traced to lower wages and the remaining third is attributed to more efficient use of human resources and machinery within Japanese producing organizations. However, Clark points out that Japanese producers in the U.S. are not competing on price (although they could). Rather, they are matching prices with comparable U.S. makes and competing on quality and reliability, areas where Japanese products in the 1970s had a clear advantage.

In searching for explanations of the Japanese advantage in process efficiency and their ability to produce a higher quality product, Clark examined and rejected a number of popular explanations: A higher technology production process in Japanese plants was not the answer since Japanese and U.S. plants on average in 1980 had about the same level of technology. A more supportive economic environment (i.e., the Anderson hypothesis) was judged helpful but not central to Japanese success. The influence of Japanese culture (i.e., the docile workforce hypothesis, etc.) was again judged helpful but not the heart of the matter.

In Clark's view Japanese success is the direct result of competitive strategies developed by Japanese producers to break into the well-established club of world producers. These strategies evolved in the early 1960s after an initial disaster in the American market demonstrated that low price alone could not sell automobiles unless product quality equalled or exceeded that of the competition. And, given the low opinion of Japanese products after the initial North American venture, it was judged that much higher quality was needed at least initially. In consequence, Japanese producers determined
that a manufacturing system dedicated to high quality must become their key competitive weapon. And, in the course of developing this system they discovered that it could also be more efficient than American and European processes.

The elements of the Japanese system are well known -- the kanban inventory system and the extremely close and cooperative relationships with suppliers, quality circles and other techniques to involve line employees and feed information on problems up to higher levels, the higher level of responsibility delegated to line employees and the resulting savings in inspection costs and down time, the flattened management hierarchy, etc. -- and this in any case is not the place for an extended discussion of manufacturing processes. The point as regards the second, or "organizational", approach to industrial policy is that Japanese industrial ascendance may well derive from competitive advantages worked out within producing organizations more or less in isolation from government policy.

These practices, it should be noted, have been consciously developed by borrowing and adapting ideas first proposed or tried in the U.S. and Western Europe. As Robert Cole argues in his recent study of Japanese industry⁶ (using the examples of Toyota Auto Body contrasted with General Motors), the practices leading to Japanese quality and productivity advantages were developed privately and adjusted to Japanese conditions. They are neither "culture bound" (although the underlying culture is hardly irrelevant) nor the result of positive policy initiatives on the part of MITI or other Japanese government agencies.

Positive Industrial Policy and the Lagging Producers

While an examination of the ascendant national industry is interesting, indeed fascinating, its relevance to the also-rans varies with the diagnosis of the Japanese advantage. If it lies in the economic environment then a replication of Japanese public policy in the U.S. and Europe might be adequate. If the edge lies within the producing organizations, however, the public policy prescription is more problematic since Japanese producer dynamism does not seem to stem directly from Japanese government policy initiatives. Indeed, the question must arise whether governments in the U.S. and Europe can really succeed in improving the internal dynamics of their producers (even when state owned and ostensibly under direct control.)

In either case further examination of the situation of the laggards is urgently needed given our initial premise that the significance of domestic auto industries in national economies is so great that their performance must either improve or they will inevitably be protected, the latter with ominous consequences for international trade and relations.

Let's begin closest to home with the American industry whose self-diagnosis blames the external environment. The problem areas include the investment incentives in the American tax laws for investment in new equipment, the cost burdens of air quality, safety and occupational health regulations, and the spectacular failure of American government planning in the 1970s to provide a smooth transition to higher energy prices and to stabilize interest costs and aggregate demand.

Remedies for the first two items are proposed by the Reagan administration in the form of liberalized investment tax provisions and a delay in new regulations. However, the impact is seemingly trivial in proportion to the magnitude of the industry's problems: The savings on deferral of 27 proposed
safety and air quality regulations are estimated to reduce the capital investment requirements of the U.S. domestic producers by $1.4 billion during the period 1981-1986, a period when total capital spending will probably exceed $50 billion.\(^7\)

The importance of the third item -- a predictable planning horizon -- is probably much greater given the extreme capital intensiveness of the industry and the 3-4 year lead time needed for new products. However, it is also much more difficult to remedy. Liberalized investment taxes and regulatory moratoria are in principle achievable through limited legislative initiatives. American institutions, however, have proved unable to deal with higher fuel prices except through vehicle fuel efficiency regulations (now superseded by events) and with inflation except through credit restrictions. These policies, selected for their fit with the broader needs of the political system, have undoubtedly worked to the singular disadvantage of the domestic auto industry, a case in fact of political and macroeconomic choices adding up to a sort of anti-industrial policy in the auto sector.

This is not to say that problems do not exist within the producing organizations, however, or that in the long run these may not be more serious. For forty years a tight oligopoly in the American industry focused competition on styling and marketing rather than price, where General Motor's lower production costs would quickly have led to an unacceptable monopoly. In consequence, the industry developed a cost structure out of line with American industry generally and corporate structures poorly

suited for price/quality competition. These weaknesses have been exacerbated recently by incorrect corporate strategies with regard to product mix (i.e., Ford's failure to downsize in time) and the importance of quality for sales appeal.

If we accept Clark's hypothesis that the Japanese advantage in productivity is actually growing (and at about the same rate the wage gap is shrinking), that the high level of quality goes hand in hand with efficiency, and that all these advantages lie in superior ability to meld men and machines in a productive process, then the problems are daunting indeed. What sort of public policy, after all, might speak to the internal shortcomings of producers? 8

The Chrysler loan experience seems to illustrate the "state of the art" in this area and is worthy of examination. Chrysler, of course, only came under government scrutiny when it was in a very desperate state and had exhausted the confidence of the private sector. Government's role was to supply financial guarantees for a breather, amidst assurances all around that permanent subsidization would not be countenanced. In return, the discredited senior management was turned out, government asserted the right to review and approve all product and investment plans, and government brokered a new labor pact in which workers agreed to lower wages (in real terms) in return for sharing in hypothetical future profits and a single vote on the Chrysler board of directors.

The jury is still out on this new sort of venture for American public policy, but we can note here the very limited degree of intervention which

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8 This is not to say, of course, that producers and their workers are incapable of adapting on their own without any government assistance. Indeed, the Japanese industry rebounded in foreign markets in just this way. While the industry's ability to do so is in doubt, however, there is great pressure for public policy to play an active role.
has been thought possible or desirable into the workings of the firm: Only the chairman and president were replaced, government product/investment review consists only of rejecting unacceptable proposals, and the limited wage reductions have no effect whatever on the sorts of shop-floor and intra-corporate relations which the Japanese case suggests are the key to productivity. Indeed, the general expectation seems to be that government intervention is for the purpose of a phased liquidation and sell-off of parts of Chrylser to other producers rather than to accomplish a rejuvenation of the existing firm. Thus, the ability of this approach to save a producer remains to be demonstrated even in intent.

Turning to the European also-rans we find a much more complex situation — producers lagging in world competition alongside producers lagging in world and European competition. We may as well begin with the most difficult case, the British industry, which faces virtual extinction by European competition despite protection in the home market from the Japanese.

At first there might seem hardly any case to be made for an environmental explanation of British decline: wage rates in the British auto industry are now less than those in the Japanese industry and are only about half of those in France and Germany, the regulatory burden in Britain is less than that in Japan and similar to that of continental competitors, and British investment incentives are on a par with Germany and France.

In fact, no one makes a case along these lines, but it has been argued in the past that British decline is due to unstable planning horizons, which are in turn a function of British macro-economic policy. According to this argument, in the early post-war period government efforts to support the pound in an economy very vulnerable to the vagaries of international trade
produced a succession of stop-go demand cycles (managed in considerable part by direct control on auto financing) which pushed a considerable part of British auto output into export markets. The frequency and amplitude of these cycles played havoc with product plans and with domestic and foreign sales networks. In addition, as this technique was gradually abandoned in the 1960s, government became more concerned with disparities in regional development. Just at a time when the British industry should have been consolidating its production facilities to gain economies of scale, government insisted that all new facilities be built at remote locations to address regional development imbalances. Although subsidies were provided to construct the plants and the lower prevailing wage rates might have more than offset lower productivity, increased transport costs, and foregone scale economies, the actual result was a significant cost penalty for the industry.

Finally, in the late 1970s, as inflation became the chief domestic concern, the credit restraints adopted to hold prices in line severely affected auto purchases and, by greatly strengthening the pound, cancelled much of the wage advantage British producers would otherwise have enjoyed. 9

The problem with the environmental approach is that the internal chaos of the British producers seems quite sufficient to produce the present predicament even in the context of a perfect environment. The problems are too well known to need much discussion here, consisting of an historic difficulty in managing large scale manufacturing enterprises, a unique history of labor-management antagonisms, a managerial cadre with very limited technical training, arms length and acrimonious supplier/assembler

relationships, an absence of an investment banking system which might have given some useful outside guidance to the industry, and a long history of inappropriate corporate strategies, particularly at BL (e.g., the failure to really merge internal functions after the defensive mergers of 1953 and 1968, the continuation of an enormous number of product lines at very low volumes, the failure to build-up overseas dealer networks, particularly in North America, etc.)\textsuperscript{10} The net result has been serious shortcomings in product offerings and product quality even when costs have been competitive due to low wages.

Government was very late to take a hand in the problems of the British industry, some of which were undoubtedly exacerbated by government policies directed at other sectors and problems. Loans were advanced to facilitate the 1968 BL merger, but no independent assessment of the industry was developed with the result that the collapse of 1975 was unexpected and was met with nothing much in the way of strategy beyond an open check book. More recently, the government's BL strategy has begun to look like the American Chrysler strategy -- a phased liquidation of most of the company brought about through a replacement of top management with a new team dedicated to cutting back, government approval of decisions on new products and plant, and attempts to develop a new relationship with the work force (mostly by making lay-off threats credible.)

While the Thatcher government may prove the exception to the rule that no government will allow its domestic industry to collapse, the moment of truth is not yet at hand. However, it seems clear that no means have been developed as yet to address the dysfunctional internal relationships within the producing firms (with the partial exception of the high levels of automation and reduced manning at the BL's new Metro plant) and that Britain's ties to the EEC will severely complicate efforts to artificially sustain domestic producers (through various sorts of indirect subsidies) if quality continues to be a problem in the acceptability of British products.

Turning to the continent, the German industry is perhaps the most interesting case (and in any event space only permits one additional example.) The environment there has become an increasing problem in the particular form of high wages and a strong Mark, but only for the down-market end of what has always been a bifurcated industry. Volkswagen for a long time sought to deal with the cost problem through higher and higher levels of "hard" automation permitted by product standardization, a strategy which ultimately failed disastrously when the Beetle design aged too much to sell even at bottom-of-the-market prices.

The experience of 1971-1975 does serve to illustrate, however, that government industrial policy can help rejuvenate a producer when conditions are right. Volkswagen was faced with the need to remove the old management, invest massively in new designs, and acknowledge that the cost situation in Germany had reached a point where it no longer made sense to export down-market products to North America. The interaction between the German banks, the unions, and the Social Democratic government (who were all represented on the policy board) led to a new range of products for the low end of the
market which were sold quite successfully in the late 1970s on the basis of product quality and advanced technology.

In the 1980s this approach is facing increasing resistance due to the need for greater and greater quality and technology advantages to offset the massive Japanese cost advantage. A general move up-market for the whole Volkswagen line seems to be the new strategy, but clearly one involving considerable risk. Much of the product must be exported if employment and output are to be kept up while the bottom of the home market is conceded to Japanese and Spanish production, but the up-market in Europe and the U.S. is certain to be crowded with other European producers pursuing the same strategy.

The Politics of Positive Industrial Policy

This brief review of positive industrial policy suggests that policies of an "environmental" sort may in some cases prove a necessary condition for competitiveness, but that "environmentalism" alone will often be insufficient in the absence of policies addressing the internal problems of the auto production system. Unfortunately, environmental adjustments are easier to conceive and easier to implement within most of the OECD political cultures. Policies directly intervening in producer affairs face two problems: they require governments to make complex interventions in the affairs of organizations whose problems are difficult for outsiders to understand, and they require facing up to such issues as redundant labor where the intervention of government may actually exacerbate the problem. Thus, a thorough review of auto-industrial history would probably turn up
only a few instances where positive policy intervention in producer affairs -- BMW in 1971, VW in 1971-1975 -- led to new vitality and avoided either drawn out failure or a long term substitution of subsidies for unattainable efficiency.

So the problem remains: How to revitalize the lagging producers to avoid a breakdown in the automotive component of the world trading system? We have highlighted the problems; perhaps this and future forums can discover new solutions.