INTERNATIONAL DIVISION OF LABOR AND INDUSTRIAL ADJUSTMENT: RELEVANCE OF THEORY TO POLICY ANALYSIS

HIROSHI KITAMURA

I. INTRODUCTION: THE NATURE OF THE PROBLEM

MOST of the papers included in this Special Issue of the *Developing Economies* have been written in response to the challenges to Japanese economic policy posed by recent changes in international industrial competition in the Asia and Pacific region. The main area in which an appropriate adjustment to change is required is not in the field of traditional trade policy but in that of industrial structure. While Professor Yamazawa's paper deals directly with Japan's response to the challenge of the "Newly Industrializing Countries" (NICs) in a specific industry, Professors Tanaka and Watanabe in their respective contributions relate the problems of Japan's structural adjustment to the emerging new division of labor between Japan and the Asian NICs. It is in the light of Japan's need to form a harmonious and complementary pattern of international specialization with its neighbors that the policy conclusions of their papers should be evaluated. One of the important agents in transferring technology and industries to a group of rapidly industrializing countries and thus effecting rapid changes in their industrial structures has been a number of transnational corporations with headquarters in the industrialized countries. In his paper Mr. Nakajō examines the extent to which emerging trade relations take the form of intra-firm transactions within the internationally active enterprises in Asia.

As experience shows, rapid growth greatly facilitates industrial adjustment. During the past period of high-geared growth, the Japanese economy has had to its credit an outstanding record of industrial adjustment, and factors accounting for the capacity of Japan's economic system to adapt as well as the specific contributions of certain governmental measures may deserve closer analysis. Dr. Namiki attempts to sketch the broad directions of change in Japan's industrial structure as he sees them occurring in the coming decade of the 1980s mainly in response to changes in domestic and world demand. In connection with the theme of this Special Issue, reference may be made to the recent official guidelines for the "industrial structure policy" of the 1980s in which "dynamic comparative advantage" figures prominently alongside other criteria such as meeting the needs of the people, economizing on energy and resources, and ensuring long-term economic security [17, p. 122]. Any blueprint for the future patterns of Japan's industrial development thus presupposes the ability of the Japanese economy to adjust smoothly to changing conditions affecting international costs and prices. That even in the recent past the Japanese economy has been characterized by a high degree of resilience involving flexible adaptation to changes in oil prices is clearly brought out by Professor Kaneko's analysis of the input-output relationships in the Japanese economy over the past decade.

Adjusting to the shifting pattern of comparative advantage in all trading nations is essential for the maintenance of the open world trading system, and this is vitally important not only for the industrialized countries but also for the emerging developing nations that hope to rely on increased exports for accelerated economic growth. The prospects of liberal trade are now increasingly seen as to be tied to a complex of problems centering around the concept of industrial adjustment. The new emphasis is of far-reaching significance for both economic theory and policy. It represents a challenge to the basic tenet of the free trade doctrine which would have denied any justification for concern with industrial adjustment on the grounds that any short-term adjustment cost would be more than offset and actually compensated for by welfare gains resulting from trade liberalization. It was assumed in the traditional theory that this process of compensation would work so smoothly as to preclude any possibility of resistance to change and adjustment. It was this assumption that was invalidated by the recent high tide of protectionism all over the world. As the attempts to deal with structural changes in the world economy by means of pure trade policies have produced increasingly unsatisfactory results, practical policy makers have been induced to shift their focus more and more towards the domestic aspects of adjustment. The question is now whether and to what extent economic theory needs to be reexamined and reconstructed if it is to help the trading nations to adopt somewhat more rational approaches to the question of the shifting international division of labor. The present introductory paper is intended to put the problem of international adjustment to structural changes into broader perspective by focusing on the relevance of economic theory to urgent policy issues.

The present difficulties of adjustment may have been aggravated by the short-term problems of slow growth and inflation with which the industrialized countries have been faced since the oil crisis. The challenge of the NICs, which may have appeared excessively severe in these circumstances, has thus provided an immediate occasion for renewed attention to the problem of international industrial adjustment.[1] However, the emergence of the NICs as efficient industrial exporters is not an isolated phenomenon without precedents. It represents rather a link in the continuous chain of historical events in which new industrial powers have risen to challenge the established positions of older ones, to be displaced in due time by still others. The adjustment problems facing the OECD countries today are essentially of the same order as were those of accommodating the newly emerging competitive exporter, Japan, into the GATT framework during the 1950s and 1960s. The particular ways of coping with these problems reveal the

[1] In fact, the OECD work on positive adjustment policies leading to, and emanating from, the Ministerial Agreement of June 1978 [14] was published in June 1979, the same month as the OECD report on the challenge of the NICs [15].

roots of the deep-seated crisis of the postwar international trading system. Moreover, there are signs that the pace of structural change in the world economy has recently quickened considerably. I therefore propose to take a closer look at those factors that account for especially rapid changes in the pattern of the international division of labor in Section II.

It is suggested here that the basic problems confronting the world trading system may not really belong to the sphere of international trade as such; they are related to the question of how the contemporary economies outside the Communist bloc can best absorb radical changes in cost and price relations, both internally and internationally. The main causes for an industry's inability to maintain its international competitive position may often lie in the general domestic conditions governing technological innovation, investment, and productivity, with factors relating to international trade being only of secondary importance. While the need for adjustment increased considerably in the last decade, the capacity and willingness of national economies to adjust, nationally and internationally, have been visibly reduced by various social forces, making for increased rigidities and uncertainties. Section III will try to trace how the traditional approach to trade policy has failed to produce an adequate solution to the basic problem of adjustment to structural change and thus to keep the open trading system intact.

The final section will then ask the question what has to be done if a reasonable degree of assurance is to be obtained that the necessary process of adjustment will take place smoothly so as to maintain sufficiently open and multilateral international trade relations. While it is recognized that effective adaptation to structural change represents an essential condition for progress and stability in the world economy, the reduced capacity and willingness to adjust would suggest that some positive policy measures are required to facilitate and promote the adjustment process at the national level. The particular ways in which domestic adjustment is accomplished, however, cannot avoid affecting the interests of other trading partners in some sensitive areas. This is liable to lead to imitation and retaliation. What is now termed "positive" industrial policy must therefore assume a truly international dimension if mounting protectionist trends are to be kept in check while industrial adjustment is deliberately promoted at the national level. Some effort will be required to introduce elements of international agreement on, and surveillance over, the effective coordination of national industrial policies.

In view of the ominous shadow cast over the essential order of the interdependent world by incessant trade conflicts, one may ask what are the prospects for resolving international adjustment problems in a way that satisfies the criteria of both efficiency and harmony. Whereas an economist can outline the broad directions of a rational policy approach, one unfortunately cannot be sure of the rationality of the final outcome; one is still operating in a world which is far from ideal and which remains subject to the continuing constraints of trade-off involving different objectives as well as policy instruments. The solutions that keep the trading system from disorder or breakdown may not be satisfactory in terms of economic efficiency. This is the greatest dilemma facing economic policy making in the world economy of today. Obviously, there are certain internal contradictions: the move towards freer trade cannot entirely rely on the methods of laissez faire, and the move towards international coordination must proceed without the requisite centralization of global policy making.

II. DYNAMIC CHANGES IN THE INTERNATIONAL DIVISION OF LABOR

One of the most outstanding characteristics of the postwar process of world economic development has been the rapid and even accelerating shift of economic activity, particularly that of manufacturing, from some countries to others. This process has aptly been called "transitional growth" by Hollis B. Chenery [2]: in the quarter of a century since the war, manufacturing activity has shifted with increasing speed from the old industrial centers to "newly developed countries," which include Italy, Japan, Spain, and Argentina, and to what are known as "transitional countries," i.e., those having travelled half the distance to the stage of full economic maturity and which are now in the process of rapid development. What we have here is not the usual dichotomy between the industrially developed countries in the north and the less developed countries in the south with an implicit deepening of the cleavage between the two, but rather a continuous spectrum of countries, each in the process of catching up and overtaking the others. The more recent trend clearly shows that those countries which lag behind in relative terms tend to accelerate their pace of industrial growth. This suggests that the dynamic factors of world industrialization have been further increasing in effective scope. These factors also have the potential to produce converging rather than diverging effects on the distribution of economic power among nations.

The pattern of rapid and large-scale transfer of industrial activity reflects, on the one hand, growth dynamics within each national economy where the expansion of the domestic market in response to increasing levels of income makes possible the realization of important economies of scale. On the other hand, however, the structure of comparative advantage and the twist in the composition of production in each country are critically influenced by increasing international transfers of capital, management skills, and production techniques. In both "newly developed" and "transitional" countries where capital, including the human elements of capital, has been rapidly accumulated, the increasing relative shortage of natural resources has necessarily brought about the conversion of main export items from primary products to manufactured goods.

From the point of view of economic theory, it is of great interest that there has been an important shift in focus in explaining the pattern of the international division of labor. While in small countries, especially in the early stages of development, there is some room for interpreting trade patterns in terms of factor proportions, it is increasingly developments such as the formation of skills in the actual production process and the adaptation and improvement of technology that support the expansion of exports in the later stages. In the case of large countries, Chenery argues, it is more difficult to explain the pattern of exports by the traditional theory of factor proportions or by other simple international trade models because of changes in scale and factor proportions [2, pp. 481–82].

This new way of looking at the determinants of comparative advantage is confirmed by empirical observations of the process of modern economic growth. The quantitative increase in factors of production measurable by some visible external characteristic plays in general a much less important role than improvements in qualitative aspects such as labor skills and the technological innovation incorporated in capital goods. Traditionally, the Heckscher-Ohlin hypothesis attempted to interpret comparative advantage in terms of the relative abundance and scarcity of factors of production on the basis of an assumed equality of production functions and technology between countries. This hypothesis fitted rather well into the general equilibrium framework of neoclassical trade theory and was, in fact, an essential addition to the abstract deduction of the maximizing behavior that characterized the neoclassical welfare analysis. Without this particular hypothesis, the static normative theory would not have been able to generate any structural predictions about the equilibrium pattern of the international division of labor [1, p. 67]. This does not mean, however, that the essentially static nature of the hypothesis was able to accurately capture dynamic changes occurring in the real world. Economists are increasingly aware of the limited relevance of such a theory.

The theoretical shift of emphasis to technology and technological change is also reflected in the recent change in policy focus. Now policy makers in virtually every industrialized country are preoccupied with what is termed the "technological gap" which is assumed to determine shifting competitive positions in world trade. Attention is drawn to the reasons why technological innovation tends to be concentrated in countries with distinctive characteristics and to the process by which technological knowledge is disseminated internationally. It is then recognized that the sequence of innovation, imitation, and product differentiation and standardization, as reflected in the product cycle hypothesis, vitally affects the patterns of international trade. The so-called neo-technology hypothesis, then, focuses on the changes in production conditions that take place where monopolistic competition obtains rather than on static equilibrium, stressing economic returns to scale, product cycles, and product differentiation [5, p. 196]. At the center of interest in policy matters are not marginal changes in the static pattern of resource allocation between trading nations but rather the behavior of large and internationally active corporations competing monopolistically on the basis of either superior technology and managerial and labor skills or the exploitation of cheap labor in certain regions. As Harry Johnson puts it [7, p. 19], the greatest appeal of the neo-technology version is that it accounts more satisfactorily for the fierce competition that characterizes a dynamically evolving world economy.

Governments of the major trading countries do not hesitate today to intervene to maintain the technological superiority of their national economies or to enhance the competitive power of nationally-owned corporations operating in the international arena. This is in line with the general trend towards increasing governmental intervention in the economic and social life of each nation. While the extensive subsidization of scientific and technical research and development may be resorted to for competitive purposes, this is only one of a whole gamut of policy instruments at the disposal of governments to meet a broad array of national objectives. Being theoretically nothing but a modern application of the well-known infant industry argument, such government support must be accepted as an unavoidable element of competition in the present-day international economy. Thus, the key to understanding of the rapid structural changes accompanying world industrialization may be the analysis of who possesses and controls knowledge and technology, how and in what forms they are transferred from one country to another and from one enterprise to another, and how their economic benefits are distributed and consumed.

This shift in theoretical focus has one important consequence: once it is recognized that the structure of comparative advantage is determined by changes in technological knowledge and application, there is bound to be a fundamental change in the conception of the international division of labor. If emphasis shifts from the relative endowment of productive factors to changing technical conditions of production, stability in comparative advantage cannot be assured except under specific conditions. Even if a comparative advantage is established in some way, the underlying monopoly of knowledge cannot be of more than temporary duration. For by its nature, the commodity called knowledge is a public good, and over time powerful economic forces will increasingly erode its monopoly value. If knowledge is essentially a public good, it follows that reliance on the market principle of granting private monopoly over technological innovation does not satisfy the criterion of efficiency.

In the absence of structural stability, the world trading system must look for a surrogate arrangement so that rational economic calculations may be made on the basis of existing comparative advantage. As products tend to be differentiated in the process of product cycles, there emerges the possibility of specializing in a limited number of products within the same industry in order to take advantage of economies of scale. In these circumstances, internationally active corporations are in a position to organize a greater part of the transactions within their own organizational setup across national borders. One estimate even reported that this "intra-firm trade" accounts for over 30 per cent of all world trade [6, p. 188]. The market function of allocating world resources is thereby circumscribed to that extent, and the market determination of comparative advantage is necessarily replaced by negotiations and agreements between the constituent elements of the world economy: national governments and transnational corporations.

How the changed nature of the international division of labor will affect the effective responses of national economies will be examined in the following sections. At the end of this brief analysis, however, Göran Ohlin's conclusion appears indisputable: "When it is recognized to what an extent comparative advantage is a function of development and technology, the traditional conception of an effective division of labour which constitutes the intellectual backbone of liberal commercial policy becomes an uncertain guide in the changing world of the new industrial policy" [12, p. 175].

III. THE INADEQUACY OF TRADE POLICY APPROACHES

The industrialized countries proved largely incapable of smoothly absorbing the impact of changing patterns in comparative advantage in the normal working of their economic systems. The difficulties of adjustment were reflected in the long-drawn silent crisis of the postwar trading system as incorporated in the General Agreement on Tariffs and Trade (GATT). Trade policy obviously failed to uphold the GATT system as a working instrument of crisis management when as early as the mid-1950s, as soon as the Japanese textile industry had recovered from the war and modernized its equipment, the U.S. government took the initiative in pressing Japan in its extremely weak position into imposing "voluntary" restraints on its exports rather than settling the dispute in the spirit of the GATT rules. This ad hoc solution was soon multilateralized in the form of a number of international textile agreements and sanctioned under GATT authority by the newly coined concept of "market disruption." In the judgement of an authoritative American analyst, the tacit agreement of GATT countries to the "market disruption" criterion, which avoided the necessity of arriving at a convincing definition, and to the "voluntary" quotas for textiles and steel was nothing less than a major violation of GATT rules, "an indication of the extent to which the old, discredited protectionism still persists despite GATT principles to which all the developed countries profess allegiance" [11, pp. 181, 183–84].

When in the 1970s the great tide of trade liberalization of the preceding decade began to ebb as domestic difficulties caused by economic disequilibria and uncertainties mounted, pressures for protectionism enormously magnified the challenge to the GATT system. "Voluntary export restraints" with or without the threatened imposition of "anti-dumping" or "countervailing" duties and "negotiated" approaches to what is called "orderly marketing" proliferated. Unlike the fixed exchange rate system of the IMF, the GATT trading system was spared a formal breakdown. Towards the end of the last decade, the GATT could even provide an apparently successful forum for another round of multilateral negotiation. However, apart from the most sensitive problem of safeguards, which remains unresolved, it is increasingly evident that the ability to manage incipient trade conflicts within the GATT framework is now seriously undermined. The erosion of the validity of GATT principles is seen in the tendency for the major trading nations to seek solutions to the difficulties of adjustment independently of GATT principles and to enforce or "negotiate" restrictive arrangements bilaterally outside the system.

It is true that the original authors of the General Agreement were not dogmatic believers in the doctrine of free trade. The influence of the Keynesian policy stance was strong enough at the time of drafting to allow for the primacy of full employment and development objectives for which some restriction of international trade flows might be legitimately justified,[2] and there were important provisions including other escape clauses or simply exceptions. Together, these amounted to something very different from a liberal trading system in the classical sense. But all the flexibilities and realistic adaptations which were incorporated into the text of the General Agreement were not sufficiently effective to enable the system to cope with the postulates of national policymaking in a closely interdependent world. There was simply no welfare theory available which could manage to reconcile the facts of national policymaking with its separate objectives with the requirements of international harmony and cooperation. The classical doctrine could not fulfil this function because, as James Meade writes, "the general case for free trade rests upon the contention that in a world of *utopian* domestic economic policies it sets internationally the proper *marginal* conditions for economic efficiency" (italics original) [9, p. 139]. In the real non-utopian world in which otherwise marginal conditions for optimality are not fulfilled, the policy prescriptions to be derived from the free-trade doctrine can at best be only second, third, or nth-best solutions. The general theory of the second best tells us, however, that when Pareto-optimal conditions are not met in any case, few safe generalizations can be made; an attempt to come even partially closer to the optimal conditions does not necessarily improve the overall welfare position [8].

The circumstances in which the concept of "market disruption" came to be introduced clearly testify to the weakness of present world trading arrangements. The General Agreement itself allows for certain remedial safeguard measures provided that trade liberalization in persuance of GATT Article XI commitment or tariff concessions caused serious injury to the competing industries in the importing country. Otherwise the imposition of quotas, either unilaterally by the importing country or "voluntarily" by the exporting country, would be outlawed. However in most relevant cases, especially those involving textiles and steel, the countries resorting to import restrictions on the grounds of "market disruption" have not been able to demonstrate and prove the existence or threat of serious or material injury. To sanction long-term quotas, as for example via a series of textile agreements, without proof of serious injury and in the absence of some agreed upon definition of a disrupted market amounts to a major revision of the trading framework in a protectionist direction. The GATT has now accepted, in effect, the freedom of the importing countries to impose quantitative restrictions whenever important domestic industries deem it in their interest to prevent "too much" import penetration into their own markets.

In the language of American legislative practice, "too much" import penetration is now termed "unfair competition." Competition is considered to be "unfair" when the rate of increase in imported supplies or in the share of foreign supplies in the domestic market exceeds a certain unspecified level, which is, moreover, rather difficult to establish on any rational ground. Even in cases where no

[2] As, for example, explicitly stated in the GATT's Article XII: 3 (d).

dumping in the sense of differential pricing is involved, trading is deemed "unfair" so long as the difference between import prices and domestic prices exceeds the margin of the price-cut that domestic producers would be prepared to accept, which the "trigger price" system for steel entails in practice. To the extent that trading at the lowest possible price is outlawed and free expansion of trade in response to market demand is restricted, the "fair trade" argument cannot be regarded as a logical extension of "free trade"; it may mean in some cases that no country can trade freely if that trade causes too much inconvenience to a competing industry in the importing country.

But there is no denying that trade liberalization necessarily affects some groups within a country adversely while it affects others in the same country favorably. That in any trade liberalization considerable transformation costs must be borne by some groups is an essential aspect of the process by which the benefits of freer trade can be reaped. The presumption of the case for liberal trade is only that the short-term adjustment costs can be more than compensated for by the long-term potential benefits for the society as a whole, either on the basis of the working of market forces or through a kind of income transfer mechanism. The present policy situation suggests, however, that this compensation mechanism is today much less effective than the traditional free trade theory assumes or than was the case during the heyday of capitalism. We may point to institutional elements of rigidity which reinforce the social forces of resistance to necessary adjustments, or we may argue in terms of social disintegration that the self-centered actions of politically powerful groups which sabotage the adjustment process cannot be held in check in the interests of society as a whole. In effect, the claim of "market disruption" may be simply understood to reflect the inability or unwillingness on the part of important social groups in the country to make adequate adjustments to increasing imports and to other changes in international supply and demand conditions.

The prevailing policy responses to international structural changes, such as the practices of invoking safeguards, arranging for orderly marketing, and applying legislative and executive procedures for restrictive purposes, lack any rationale in terms of welfare analysis [10, p. 71]. How can the actual workings of international trade arrangements be made more rational? As far as the area of direct trade policy is concerned, a positive approach may be to recognize the social costs of adjustment as a problem and attempt to minimize these by perfecting the safeguard mechanism. It is now generally recognized that there is a legitimate case for market safeguard measures against too rapid and disruptive changes, but how far such safeguards should be extended depends upon the social evaluation of adjustment and transformation costs. One may, for instance, argue at the risk of making the theory of externalities intolerably amorphous that the injury inflicted upon an industry is comparable to the case of pollution, the adverse effects of which could be remedied by some social measures. If, however, the scope of compensation is extended too far, there is a danger that the result may not really be distinguishable from the prevailing abuse of the safeguard clause. It is our experience that too liberal an application of market safeguards makes it impossible to achieve their very objective of keeping trade flows as open and multilateral as possible.

While in the past GATT Article XIX proved in general to be too cumbersome to apply in emergency situations, the danger of abuse of market safeguards through too liberal an interpretation has not received sufficient attention. The reforms in this area must aim, first, at making the terms and conditions under which safeguards can be invoked more definite and, second, at internationalizing the safeguard mechanism itself. An attempt may thus be made to reach an international agreement on the precise definition of the conditions of legitimate safeguards. Attention may be given to the necessary time limits of safeguard measures, to progressive reduction of the degree of imposed trade restrictions, and to the obligation to undertake necessary adjustments. Finally, the absolute requirement may be the establishment of some multilateral machinery for surveillance over both safeguards and adjustment measures. The hurdles on the way to such an agreement should not be underrated, however. Although the safeguard rules were placed at the center of the negotiation agenda, the recent Tokyo Round has failed to make any progress on this important subject.

In view of the deplorable tendency for the major trading nations to seek solutions to many trade problems outside the framework of the GATT, often in violation of the GATT spirit, it would be eminently desirable if the capacity of the GATT to manage critical problems could be strengthened so that important trade frictions could be discussed and settled under the GATT auspices and in conformity with the GATT rules. A series of international codes concerning nontariff measures such as drawn up at the end of the Tokyo Round may open up some possibilities of reinforcing the GATT system so that it may manage world interdependence more adequately. Such a task would obviously require much more in terms of commercial diplomacy and political maturity on the part of national negotiators than an agreement on safeguards. While it is rather difficult to be sanguine in the hope that such an expanded role for the GATT will emerge at the present juncture, it is interesting to note that a proposal has been made by parties critical of the GATT philosophy that its machinery be utilized to solve many more questions relating to the access of Third World exports [4, p. 229]. Such a broadening of the responsibility of the institution would, of course, imply a radical restructuring of the GATT into something resembling an international body of managed rather than free trade, as originally embodied in the stillborn International Trade Organization.

In all these fields, however, the scope for a purely trade-policy approach to solve the problems of international structural change seems to be fairly circumscribed. The obstacles to liberal trade lie in the difficulties of adjustment through economic transformation, yet the extensive use of trade-policy measures would mean that no explicit effort is made to deal with the basic problems of structural adjustment. The indication is now that the effectiveness of market safeguards would be predicated on the simultaneous implementation of relevant domestic adjustment measures; the improvement of the GATT's capacity to manage critical trade frictions between countries imply that domestic adjustment policies themselves would become an internationally negotiable issue. Against this background, policies dealing with changes in international competition are now increasingly seen as a problem of industrial rather than of traditional trade policy.

IV. THE INTERNATIONAL DIMENSIONS OF INDUSTRIAL ADJUSTMENT POLICIES

While there is fairly broad agreement on the scope of traditional trade policy, the meaning of industrial policy is perhaps of more than semantic interest, as some Western democracies seem to have traditionally precluded this area as a legitimate concern of economic policy. That ideological objection is no longer valid in the present climate of policy making, and the majority of industrialized countries in the West are today guided by certain national images of a desirable industrial structure from which many of the present trade disputes originate. "Industrial policy" may be defined as any action or nonaction on the part of the government which bears on a particular industry or on the structure of the economy as a whole. Policy measures may form a system of consistent lines of action, perhaps guided by comprehensive indicative planning. More often, however, government measures are of an ad hoc and unsystematic nature, dealing with the specific problems of a particular industry. This difference is important for evaluating the economic effects of industrial policy, as ad hoc policy responses tend to have a defensive bias.

The underlying argument of the present paper is that economic progress is necessarily accompanied by structural change and that effective adjustment to change is generally a necessary condition for the smooth process of stable growth and trade expansion. Thus, any policy, whether trade or industrial, should be considered in relation to the process of change and adjustment. The legitimate function of market safeguards, for instance, is to ease the adjustment process by slowing down the changes to be absorbed and by extending the time available for adjustment. In fact, even the staunchest advocates of liberal trade would today recognize that obstacles to trade cannot be eliminated rapidly enough without some mechanism for cushioning the impact of change. But, the safeguard mechanism can also be used for the express purpose of resisting change or effectively blocking necessary adjustments. This will be the case if the safeguards are not supported by complementary industrial measures such as those designed to facilitate adjustment by promoting labor retraining and mobility. The recent history of international trade frictions is replete with such cases of defensive safeguard actions which serve to preserve the existing order or structure of the market using "market disruption" as a pretext.

Thus, we may establish the first two categories of industrial policy with reference to the adjustment process: (1) defensive policy, which is mainly concerned with maintaining the existing industrial structure and resisting change, and (2) adaptive policy, or positive adjustment policy, which facilitates adjustment to change by helping the diversion of resources to new uses.

What distinguishes positive adjustment from defensive policy is obviously what happens to the changes in industrial structure and the shifting of resources that actually takes place during the transitional period covered by the policy. Although the intentions and purposes of the policy maker may be important in some way, they are not decisive in determining the actual outcome. How the structure of production actually changes as a consequence of policy implementation partly depends on the differential responses of the producers, and such behavior is rather difficult to anticipate in advance.

A well-intentioned adjustment policy that proclaims to assist the redirection of industries towards more efficient lines of activity may easily be used to strengthen the resistance of declining industries, perhaps because under modern conditions of production the social costs of conversion may well exceed any potential static gains to be derived from a change in the patterns of production and trade [13, pp. 174–75]. As the adaptability and resilience of the economy have been considerably reduced, whatever burdens must be borne by the adjusting groups may appear excessively high in social terms, and these groups are likely to muster politically powerful forces of resistance. On the other hand, assistance to a declining industry, even if this intention is to ease its phasing out, is only too likely to be used to increase the efficiency of its own partial production process. As modern industries are often composed of diverse branches of production utilizing different techniques, it is quite possible that an industry regarded as uncompetitive on the whole may, once it is pared down, reorganized, and regrouped, become highly efficient and competitive. In this case, the original aim of positive adjustment has in effect been realized in a quite unintended form: while, at the intermediate stage of implementation, the policy aim was to support the declining industry in its competitive position, the final outcome has been to effectively readjust the industry in the positive sense that resources are now used in a more efficient manner than before. These cases demonstrate that the actual results which provide the basis for policy evaluation may have very little to do with the formal objectives and intentions of the policy.

The OECD member countries have recently reached a "collective agreement on the need to shift from defensive to more positive adjustment policies...as part of a concerted programme for more sustained and better balanced growth."[3] This quotation is sufficiently clear to indicate that it is on our distinction between "defensive" and "positive" adjustment policies that the whole edifice of OECD policy guidelines rests. The agreed upon "Orientations," which may commit the governments of member countries less strongly than "pledges" or "codes," are expected to help the member countries to honor their commitments under the OECD Trade Pledge by easing their adjustment to changes in trade with Third World countries. An important contribution to international economic policy-making has been made by the first attempt to guide adjustment policies of the industrialized countries at the multilateral level in a more positive direction,

[3] OECD, "Policies for Adjustment: Some General Orientations" approved by the OECD Council at Ministerial Level on June 15, 1978 [14, p. 8].

an effort that recognizes the need to harmonize trade policy with domestic adjustment policy.

"Positive" adjustment is defined in the OECD Orientations as "furthering adjustment to new conditions, relying as much as possible on market forces to encourage mobility of labour and capital to their most productive uses."[4] The yardstick for evaluating just how positive "positive" adjustment is is the actual extent and direction of adjustment. However, the effectiveness of the OECD policy guidelines partly depends on the extent to which clear operational criteria for policy can be derived from the conceptual division between defensive and "positive" policy stances. It must be admitted that it is hardly possible to classify adjustment policies as more or less "positive" by reference to the intentions and stated objectives of policy makers or to their technical characteristics. The probability of an ostensibly adaptive policy degenerating into a defensive stance to strengthen the competitive position of an existing industry is especially great when the assistance measures in question are of a general nature such as those designed to improve the overall market performance, increase innovative and training opportunities, and stimulate investment, measures suggested by the conclusion of the accompanying OECD analysis.[5] Unless constrained by some industry-specific measures indicating the directions in which resources are to be channelled or withdrawn, such general market guidelines can be used for either defensive or adaptive purpose, and their effects on the industrial structure can only be identified after implementation. Thus, the Orientations cannot be expected to yield sufficiently effective criteria by which the government can formulate operational policy guidelines in advance.

One of the aspects of adjustment policy which appears to have stimulated extensive discussion at the OECD forum are the resnective roles of market forces and government intervention. There is probably broad agreement among economists today that there cannot be any valid general case for or against government interference in the market process. The government must intervene when and where the market is distorted, but market forces themselves constitute important means for achieving economic and social objectives. If a government chooses to refrain from policy intervention and lets market forces work themselves out, then something must be done to ensure that the market mechanism works somewhat better, such as eliminating existing imperfections and rigidities. Even with improved market performance, however, the reliance on market forces is subject to limitations when dealing with problems of structural change; governments and societies are not willing to give market forces free rein if they do not like the results [3, p. 149]. Otherwise, the world market economy would not have been disrupted to such an extent by the difficult adjustment problems that have arisen in the process of change.

The OECD Orientations also put much emphasis on macroeconomic and general market measures in preference to industry-specific policies of a "structural"

4 See OECD [14, p. 3].

5 "Positive Adjustment Policies: Some General Issues," Report by the Economic Adviser to the Secretary-General of OECD [14, p. 82].

nature. While this bias may be explained partly by an a priori predilection for theoretical orthodoxy, there is some doubt whether such general policy measures can effectively cope with structural adjustment problems without the help of "structural" guidance. Required adjustments are often centered around the sector- and industry-specific problems of training and retraining, research, investment, and mobility of resources, particularly in the context of specific regions where industries in difficulty are concentrated.

However, when the horizon of policy designs is thus expanded, it is suggested, the problems of adaptation to structural change will increasingly appear as part of the broadly conceived policies of industrial structure, or what may be termed industrial strategy. The enlarged scope for government policy, combined with diversified national economic and social objectives, has recently put industrial policy high up on the policy agenda of the nation states. Governments also have a variety of policy instruments at their disposal to supplement or guide market forces to effect or initiate desirable structural changes. Each society has its own idea of what is a desirable national lifestyle and thus in turn corresponds to a specific setup of the economy. When any change in the international pattern of comparative advantage comes into conflict with this ideal structure, then governments may feel compelled to preserve existing structures by whatever means are at their disposal. The continuance of some economic activity may be regarded as vital to national existence, and a government may intervene to ensure the maintenance of a certain degree of self-sufficiency for some politically sensitive goods so long as the social costs of failing to adjust do not exceed the tolerable limit. This is why industrial policy has become the key to the question of the liberal trade system. If, however, industrial policy is at the root of the international problem of structural change, it may then be possible to come to grips with the basic problem precisely by reorienting industrial policy.

A new focus on policies for structuring and restructuring industry may put the whole question of international adjustment into better perspective and help find more adequate solutions to the real issues than was possible when the policy response was limited to the use of trade policy. Of course, a broadened policy horizon in itself will not ensure the adoption of completely new policy stances, but it at least opens up new prospects for arriving at more rational decisions thereby avoiding purely negative ad hoc responses. The scope for policy options is clearly widened. Key policy decisions may then be made within a consistent framework of desirable national industrial development, taking all the relevant factors into consideration.

In so far as structural changes are concerned, industrial policy will be quite different in character; it will not only facilitate necessary adjustments to ongoing changes but will also initiate such changes as deemed desirable, anticipating probable changes at the national as well as international levels. The crucial need is often to initiate and effect changes rather to adjust to them. This means that policy must anticipate problems before they become acute [3, p. 56], and such a forward-looking stance can only be based on the prospective analysis called "indicative planning." In fact, we are introducing here, parallel to the defensive and adaptive categories of industrial policy, a third category, active policy, which aims at initiating structural change on the basis of long-term planning. Such an active industrial policy will be much more effective even for the limited task of easing adjustment to the changes now in progress. If resources are to be moved from a declining industry to a more progressive one, it stands to reason that the process will be greatly facilitated if the adjusting agents of production can be told not only what to adjust from but also, more importantly, what to adjust to.

In coping with the world problems of structural change, the essential need is to formulate and implement these kinds of active industrial policies, paying attention to the international repercussions of national measures and the required international coordination. National responses in the field of industrial policy have clearly become a central concern of the international community. On the agenda are therefore inter-governmental negotiations seeking some kind of agreement on industrial policy, which has hitherto been characterized by its national orientation [13, p. 181]. There should not be any illusions about the difficulties that lie ahead on the road to coordinating the broad range of government measures that is industrial policy, but the recent achievements of trade negotiations in the limited area of some non-tariff measures provide a basis for cautious optimism. Reducing the ad hoc character of many national industrial responses may also help. It is in this context that the OECD Orientations can provide an important link in the progress towards a global industrial policy. Perhaps much groundwork remains to be laid if a minimum consensus regarding common standards for policy evaluation is to be reached, even among the limited number of OECD countries. The process of policy harmonization can then be facilitated by organizing a multilateral machinery for review, by exchanging information, and by coordinating national industrial policies. The intense interest that many countries expressed in the recent OECD "Interfutures" exercise [16] attests the speed with which our interdependent world has been moving in the past few decades towards global indicative planning which will provide at least some rational basis for effective policy coordination among nations.

REFERENCES

1. CAVES, R. E. "Comments on Professor Johnson's Paper," in *International Economic Relations,* Proceedings of the Third Congress of the International Economic Association, ed. Paul A. Samuelson (London: Macmillan, 1969).
2. CHENERY, H. B. "Transitional Growth and World Industrialization," in *The International Allocation of Economic Activity,* Proceedings of a Nobel Symposium held at Stockholm, ed. Bertil Ohlin et al. (London: Macmillan, 1977).
3. DIEBOLD W. Jr. *Industrial Policy as an International Issue,* 1980s Project/Council on Foreign Relations (New York: McGraw-Hill, 1980).
4. GREEN, R. H. "Access for Exports, the New Protectionism and all Gatt: Notes towards Negotiable Proposals," in *Commodities, Finance and Trade: Issues in North-South Negotiations,* ed. Arjun Sengupta (London: Frances Pinter Publishers, 1980).
5. HUFBAUER, G. C. "The Impact of National Characteristics and Technology on the Commodity Composition of Trade in Manufactured Goods," in *The Technology Factor in*

International Trade, ed. Raymond Vernon (New York: National Bureau of Economic Research and Columbia University Press, 1970).

6. Independent Commission on International Development Issues (Brandt Commission). *North-South: A Programme for Survival* (Cambridge, Mass.: MIT Press, 1980).
7. JOHNSON, H. G. "Technology and the Theory of International Trade: The State of Theory in Relation to the Empirical Analysis," in *The Technology Factor in International Trade,* ed. Raymond Vernon (New York: National Bureau of Economic Research and Columbia University Press, 1970).
8. LIPSEY, R. G., and LANCASTER, K. J. "The General Theory of Second Best," *Review of Economic Studies,* Vol. 24, No. 1 (1963).
9. MEADE, J. E. *The Theory of International Economic Policy,* Vol. 2, *Trade and Welfare* (London: Oxford University Press, 1955).
10. MEIER, G. M. *Employment, Trade, and Development—A Problem in International Policy Analysis,* International Economic Series No. 4 (Leiden: A. W. Sijthoff, 1977).
11. METZGER, S. D. "Injury and Market Disruption from Imports," in *United States International Economic Policy in an Interdependent World,* Compendium of Papers, Vol. 1 (Washington D.C.: Commission on International Trade and Investment Policy, 1971).
12. OHLIN, G. "Trade in a Non-Laissez-Faire World," in *International Economic Relations,* Proceedings of the Third Congress of the International Economic Association, ed. Paul A. Samuelson (London: Macmillan, 1969).
13. ————. "National Industrial Policies and International Trade," in *Toward a New World Trade Policy: The Maidenhead Papers,* ed. C. Fred Bergsten, Lexington Books (Lexington, Mass.: D.C. Heath and Co., 1975).
14. Organisation for Economic Co-operation and Development (OECD). *The Case for Positive Adjustment Policies, A Compendium of OECD Documents, 1978/79* (Paris, 1979).
15. ————. *The Impact of the Newly Industrializing Countries on Production and Trade in Manufactures,* Report by the Secretary-General (Paris, 1979).
16. ————. *Facing the Future (Interfutures): Mastering the Probable and Managing the Unpredicable* (Paris, 1979).
17. Sangyō Kōzō Shingikai (Industrial Structure Council). *80-nendai no tsūsan-seisaku bijon* [A vision of industrial and trade policy for the 1980s], A report to the Minister of International Trade and Industry (Tokyo, 1980).