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THEORY AND PRACTICE OF COMMERCIAL POLICY: 1945-1990

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ABSTRACT

In this paper, the evolution of thought regarding protectionist trade policies in developed and in developing countries is examined and contrasted. In the developing countries distrust of markets and a belief in the infant industry argument led to highly protectionist trade regimes. The consequences were so negative that thinking about interventions has changed markedly. The lessons from this experience for the policy implications of the "new trade theory" are then examined.

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Theory and Practice of Commercial Policy: 1945-1990

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Since the Second World War, thought and practice pertaining to commercial policy have proceeded along very divergent paths in the developed, and in the developing, countries.

In the developed countries until the 1980s, economists were fairly unanimous that free trade was the optimal policy<sup>1</sup> and were almost universally critical of the apparently irrational protectionism that they perceived to exist. At that time, the reality of the international economic system (among the developed countries) was that it was increasingly liberalized. By the 1980s, protectionist pressures were mounting, but economists by then were less unanimous in their conviction that free trade is an optimal policy.

In the developing countries, by contrast, most economists recognized the infant-industry exception to the case for free trade. Highly protectionist trade strategies in the 1950s and 1960s were adopted in most developing countries under the infant industry rationale. However, by the 1970s and 1980s, there was a growing disillusionment with the way these policies had in fact worked. That led to the development of a "political economy" approach to analysis of commercial policy.

To a significant degree, the contrasting lines of thought and of policy advice are linked to international economists' perceptions of the behavior of governments and of markets. In the developed countries, growing liberalization

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<sup>1</sup>Exceptions to the rule are noted in Section 1.

of trade enabled economists to focus upon market imperfections -- such as imperfect competition -- although others focused upon the determinants of actual levels of protection. In developing countries, where highly protectionist policies were in place, governments became the predominant influence on the structure of incentives and the allocation of resources. As such, it was impossible for economists not to observe the behavior of governments, and the effects of that behavior. The consequence was a strong emphasis on government failures and the virtues of an open trading system.

These empirical realities have resulted in a new set of ideas focussing upon the political economy of commercial policy, which is still developing. Whereas earlier theories of commercial policy assumed that governments were attempting to maximize a Benthamite social welfare function, and would presumably do so once they understood the principle of comparative advantage, the newer political economy seeks a positive view of governmental behavior, where the motives and outcomes of commercial policy diverge significantly from those that would result from policies adopted to maximize a social welfare function.

It is the purpose of this essay to trace these developments in thinking about economic policy, focussing upon the explicit and implicit views of the behavior of governments and markets that underlay their evolution, and to examine their relevance for the current interest in trade policy in imperfectly competitive settings.

Ideas and policies regarding the international financial system changed earlier than those about commercial policy. One of the principal tenets of the founders of Bretton Woods was that markets could not be trusted to determine exchange rates, and that there were dangers of competitive devaluations. Egon Sohmen(1961) contributed importantly to the change in those ideas with his

critical examination of the propositions underlying the fixed-exchange rate system devised at Bretton Woods. His careful analysis of the functioning of fixed and flexible exchange rates, and of the pitfalls of maintaining fixed exchange rates through government interventions in the foreign exchange market, was a major contribution to knowledge and had a significant impact on thinking about policy regarding exchange rates.

Given Sohmen's view that exchange rate policy mattered because of its impact on the free flow of goods, services, and assets between countries,<sup>2</sup> it seems fitting for an essay in honor of his memory to examine the ideas about governments and markets that have underlain commercial policy advice. In the case of exchange rates and exchange rate policy, the current questioning of flexible exchange rates originates in part from differences in implicit and explicit views of governmental behavior under alternative systems. Sohmen early saw this, and based his case for flexible rates partly on the proposition that government behavior would not be consistent with a fixed exchange rate regime.<sup>3</sup> Perhaps the interesting question regarding the evolution of thinking about exchange rates is the extent to which ideas influenced policy, and the extent to which the actual operation of the fixed exchange rate system influenced ideas.

For commercial policy, however, the matter is more complicated. I start with a brief review in Section I of the ideas underlying the postwar international system of trade relations, and the evolution of the international economy that resulted. I then turn in Section II to the evolution of ideas regarding developing countries' trade policies in the 1960s and 1970s. Next, focus turns to the "political economy" literature as it challenged some of the premises

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<sup>2</sup>Sohmen (1961), P. 14.

<sup>3</sup>op. cit., P. 124

regarding government behavior that had underlain earlier normative judgments. A final section then assesses the current interest in strategic trade policy in light of the lessons learned from developing countries and the political economy literature.

### 1. The GATT and the Evolution of Trade Policies among Developed Countries

Historically, if there was a single policy imperative upon which economists could agree, it was probably the proposition that free trade would enhance world welfare contrasted with the alternative of protectionism.<sup>4</sup> Indeed, when the highly protectionist Smoot-Hawley tariff was before Congress in 1930, over 90 percent of the members of the American Economic Association signed a petition opposing the tariff - the only time in the history of the association when such a show of unanimity has been obtainable!

It was largely economists who were the architects of the postwar international trading system,<sup>5</sup> which turned out to provide strong momentum for trade liberalization, although the motives for adopting it were related to concerns in addition to a belief in the superiority of free trade.<sup>6</sup> Official

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<sup>4</sup>See Samuelson (1983), p. 204.

<sup>5</sup>The broad outlines of the principles to underlie a multilateral organization for international trade were developed at a "seminar" between American and British officials in Washington in 1943. Among those participating were James Meade and Lionel Robbins. In later negotiations between the British and the Americans - the dominant influences - over the structure of the postwar international economic system, John Maynard Keynes was highly influential on the British side and Clair Wilcox played a similar role on the American side. See Gardner (1980) for an account.

<sup>6</sup>Meade, Robbins, and Wilcox were clearly motivated predominantly by the belief in free trade. Keynes, White, and most other participants were much more concerned with making the international financial institutions function effectively in order to avoid a repetition of what they perceived to be the international financial instability of the 1930s. As such, they were opposed to quantitative restrictions (QRs) on international trade because QRs might frustrate the functioning of the exchange rate adjustment mechanisms envisaged through the IMF. See Curzon (1965) for an account.

American policy after the Second World War strongly supported free trade, but this support was based on Secretary of State Cordell Hull's very strong belief in free trade as an instrument for attaining and maintaining peace; and a widespread belief that the Smoot-Hawley tariff (and retaliatory increases in trade barriers between countries) had significantly deepened, if not caused, the Great Depression.<sup>7</sup> Because of the experience of the Great Depression, a great deal of concern centered on attainment of full employment in the postwar years. It was believed by those instrumental in the shaping of the postwar system that a liberal international trading world, with no quantitative restrictions and low or zero tariff levels, would be most conducive to achieving that end.<sup>8</sup>

The GATT principles were based on two pillars: the belief that free trade was a desirable situation for the world economy, and that any barriers to trade that did exist should be tariffs; and the view that the international trading system should be multilateral and nondiscriminatory.<sup>9</sup>

The mechanism envisaged for reduction of tariffs was to be reciprocal bargaining over tariff levels: countries were not obliged to offer tariff

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<sup>7</sup>See Bhagwati (1988) for a discussion.

<sup>8</sup>Gardner (1980), Pp.104ff. It is well known that GATT was initially envisaged to constitute an interim arrangement governing commercial policies until such time as a proposed treaty for an International Trade Organization (ITO) was signed. The provisions of the GATT regarding commercial policy were, however, very similar to those of the ITO.

<sup>9</sup>American objectives for GATT included the elimination of preferential trading arrangements, and especially Commonwealth preferences. The British appear to have been willing to reduce or eliminate preferences only if they were assured that tariffs in effect in other countries - especially the United States - would be sharply reduced. The Administration judged that it could not politically achieve such a sharp reduction. The outcome of negotiations between the British and Americans, therefore, served to enshrine rights for preferential trading arrangements. The GATT Articles permit preferential trading arrangements and grandfather virtually all such arrangements that were present in 1947. See Dam (1970), pp. 42ff. and Gardner (1980), pp.150 ff. for an elaboration.

reductions, but they were permitted to negotiate for reductions of tariffs on items they exported to other countries in return for tariff reductions on imports of importance to them. It may be noted that the implicit theory underlying this mechanism is that country A gains when country B cuts its tariff, and vice versa - a proposition that is significantly different from the view that country A gains when country A has free trade! An interesting question is whether this arrangement was devised because of a basically mercantilistic conception of trade or whether instead it was based on a particular model of political-economy behavior under which reciprocity would provide latitude for politicians to cut tariffs.

Regardless of whether from mercantilism or from shrewd political economy, the framers of the postwar international commercial economic system did believe in laissez-faire as an international economic system, and put in place processes under GATT through which trade could become freer over time.<sup>10</sup>

Until the 1960s, the conventional wisdom of economists was that free trade was an optimal economic policy in almost all circumstances. The major exceptions

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<sup>10</sup> John Maynard Keynes was the most influential member of the British team negotiating with the Americans over the shape of the postwar international economic institutions. Harrod's (1951) biography reports Keynes' views on the American position: "[The Americans] had the will, as well as the means, to create a better international economic order. They had an intelligible policy, which they were pursuing with resolution. It is true that many sections of the American public might still be laggard, but their democracy was so functioning that able men of high calibre were in charge of external policy and seemed capable in the last resort of translating their wishes into law...Believers in laissez-faire at home, they naively thought that the British, the French and all the rest would submit themselves overnight to a benevolent American paternalism..." (p. 640)

Gerard Curzon believes that the objective of full employment was overriding, but that placed the international monetary system as the objective of paramount importance to economists, as its failure was blamed for the breakdown of the 1930s. In Curzon's view, the framers of the postwar system perceived trading interventions, and in particular quantitative restrictions on trade, to be an obstacle that might prevent the smooth functioning of the monetary system that had been put in place at Bretton Woods. See Curzon (1965), Pp 28-29.



related to the infant industry argument, to which attention returns in Section II, and the optimal tariff argument. This latter remains a recognized exception, although it has seldom been used as a basis for advocacy of trade restrictions among developed countries, and is therefore not further considered here.<sup>11</sup> Economists also noted that there might be a reason, such as the desire to have productive capacity on one's own soil for reasons of national defense, which overrode considerations of economic efficiency.

Under the aegis of GATT and spurred by earlier U.S. initiatives to bring about the European Payments Union and other arrangements to liberalize the commercial policies of European countries and Japan, trade liberalization proceeded rapidly in the 1950s and 1960s. By any measure, trade among the developed countries grew at least twice as rapidly as their real output. In part, this growth in trade was due to rapid growth in real output in the OECD countries and to declining real costs of transport and communications. In part, however, the rapid growth of real output was a consequence of the liberalization of trade that was taking place.

In this environment, protectionist pressures were not strong. To be sure, there were exceptions.<sup>12</sup> Trade in textiles and clothing was increasingly subject to restraint under the MultiFibre Arrangement but, at least until the 1980s, an

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<sup>11</sup> One of the difficulties of advocating the imposition of an optimum tariff is that it is clear, especially in a multicommodity setting, that determination of the level of tariff that would constitute an optimum, even in the absence of possible retaliation by trading partners, is impossible as a practical matter. That has probably contributed to the failure of protectionist advocates to use the argument. Interestingly, however, there is no evident reason why it should be any easier to identify the industries that might be infants and the level of protection that might be warranted for them than it would be to calculate an optimal tariff level.

<sup>12</sup> See Frank (1977) for a discussion of protectionist pressures in the United States in the 1960s. There were protectionist pressures throughout the postwar years in all countries. See, for example, Milner (1988).

observer might have been forgiven for concluding that these arrangements were largely ineffective as imports of textiles and apparel of the major industrial countries from non-OECD sources grew at an average annual rates of 13 and 20 percent respectively.<sup>13</sup> Trade in agricultural commodities was also exempt from the GATT rules. Until the 1970s, however, restrictions appeared to have at most small deleterious effects on resource allocation, and were not a source of major concern.

The strong trend toward liberalization, and the very low levels of protection for most manufactured goods (except textiles and apparel), led many international economists even in developed countries to focus their attentions on trade policies in developing countries where the picture was far different. Some work was, of course, done on the costs of protection, and generally showed few gains and large welfare costs.<sup>14</sup> Moreover, for the most part, examination of the pattern of protection did not reveal any plausible rationale for the protection that was in fact conferred to various economic activities. National defense, for example, was the rationale given for oil import quotas in the United States,<sup>15</sup> when any rational approach for the preservation of a nonrenewable natural resource would have entailed importing as much as possible and keeping the resource in the ground!

By and large, economists' analyses of trade policy were based on the assumption that those participating in the political process were maximizing, or attempting to maximize, a social welfare function along Benthamite lines. It was

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<sup>13</sup>Data are from Cline (1990), p. 126.

<sup>14</sup>Baldwin (1984) provides a good bibliography.

<sup>15</sup>See Dam (1971) for an account.

often implicitly assumed that tariffs were imposed only because policymakers were ill-informed as to the consequences of trade interventions, and that trade interventions would be removed with sufficient education.

Over time, however, questions began to be asked as to why protection persisted despite economists' endeavors to demonstrate its adverse effects. It had finally to be recognized that something was wrong: apparently decision makers were not attempting to maximize social welfare in the utilitarian sense. Research therefore began focussing on the political determinants of levels of protection. That subject is deferred for discussion to Section 3.

## 2. Ideas underlying Commercial Policy in Developing Countries

As is well known, the infant industry argument was (and is) the only generally accepted reason why temporary protection might improve global economic welfare in a world which all other markets function competitively and prices appropriately reflect marginal rates of transformation and substitution. The basic argument is that in a developing country there could be a potential new industry, already established in the rest of the world, which might have a comparative advantage in the long run. Nonetheless, it might not be established without public support because of dynamic aspects of cost reduction and externalities generated by those starting it. In these circumstances, if the long-run gains from the industry are sufficient to offset the short-term losses associated with initial encouragement to it, it could be Pareto-optimal for the country and for the world as a whole to permit temporary protection (through a governmental subsidy to production or through a tariff) during the initial startup period.<sup>16</sup>

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<sup>16</sup>See Baldwin (1969) for an exposition of the argument and a critical analysis of the circumstances under which it might be correct. Even those who are normally closely identified with the neoclassical viewpoint accepted the infant

The theory of infant industry protection needs little comment. If there are externalities associated with the presence of an economic activity, and if there are reasons to believe that the cost of the activity will fall over time<sup>17</sup>, it is certainly possible that it might not be privately profitable to undertake an economic activity that would be socially and presumably privately profitable in the longer term.

In the early years after the Second World War, economic policy makers in developing countries used the infant industry argument as a rationale for imposing high levels of protection for domestic manufacturing industries. Whether it was genuinely believed that the infant industry case was valid, or whether instead a desire for industrialization and self-sufficiency motivated these policies, is virtually irrelevant for present purposes, although it is very germane to the political economy of protection: the infant industry argument was certainly seized upon and used by those wanting to legitimize their argument.

Because of the infant industry argument, many economists initially tended to view protection of industry in developing countries rather benignly. Acceptance of the infant-industry case for protection (via production subsidy or tariff) was virtually universal. Gottfried Haberler, who was more skeptical than most, acknowledged the case. In his Cairo lectures, in 1958, he stated that:

"It is possible that the development of a particular manufacturing industry, or of manufacturing industries as a whole, will produce 'external

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industry exception as a practical concern in the 1950s. See the quotation from Haberler below.

<sup>17</sup>This fall might result from "Learning by Doing" (Arrow, 1962), from the training and greater experience of workers, from reaching a sufficient scale of operations, or from other factors. Baldwin's (1969) skeptical analysis of the likelihood that protection would induce the anticipated response in the face of forms of externalities or market imperfections normally alleged is the classic.

economies'...which eventually will make those industries able to stand up to foreign competition without protection. But since these economies are slow in coming, difficult to foresee, and often of such a nature that private enterprise cannot well appropriate them, private initiative may not be enough to ensure their realization."<sup>18</sup>

The "infant industry rationale" certainly underlay many defenses of the trade policies of the developing countries in the 1950s and 1960s.<sup>19</sup> Theory supported the proposition that protection to a new industry generating externalities dynamically might improve the present value of future welfare and in that sense be justified. For my purposes, what is important to note is that there was little consideration as to how government officials, even economists, would be able to ascertain the presence of an infant, much less determine how much assistance was justified on infant industry grounds. Haberler (P.52) himself noted that it would require "judgment" to identify such industries, and that data on the basis of which objective calculations could be made were unlikely to be forthcoming.

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<sup>18</sup>Haberler (1988), Pp. 50-51. In his introduction to the reprinted Cairo Lectures, Haberler notes that he now believes, in hindsight, that he "went too far...in trying to find justification for a certain amount of protectionism in the LDCs." (P. 11)

<sup>19</sup>The optimum tariff argument has also been used on occasion to justify developing countries' protection. There, the - usually nonprofessional - argument has been that the Lerner symmetry theorem demonstrates that an export tax is equivalent to an import tariff. It has then been asserted that most developing countries have some degree of monopoly power in one or more primary commodities and that protection to imports may therefore improve their terms of trade on optimum tariff grounds. The difficulty with this argument is that there is no basis for differential tariff rates among imports of commodities of which the country is a price taker because of monopoly power in export markets. At best, a uniform tariff might be justified under the Lerner symmetry theorem as imports might be regarded as a composite commodity. In practice, if a country possessed monopoly power in the international market in more than one commodity, the formula for determining its optimum tariffs, would become complex indeed.

In theory, of course, it is clear that a production subsidy would be preferable to a tariff (or a quantitative restriction) as an instrument for protecting an infant industry when conditions are satisfied. Most economists accepted the use of tariffs, in preference to production subsidies, as necessary consequences of governmental fiscal constraints in developing countries. However, in most developing countries, quantitative restrictions on imports were employed to protect new import substitution industries.<sup>20</sup> Despite this, in the 1950s and 1960s, few questioned the losses associated with the use of quantitative restrictions, including outright prohibitions against imports, from import-substitution industries.

The widespread acceptance of the infant-industry argument as a rationale for policy clearly illustrates the views of economists toward markets and governments at that time. Interestingly, there was apparently no questioning as to how, even if a prospective infant industry did exist, government officials might recognize it. In theory, it was clear that a tariff (as second best to a production subsidy) might be warranted if the externality and dynamic conditions were met. The question as to how it might be ascertained ex ante whether any particular tariff would in fact conform to these conditions was not addressed. Nor was much attention given to the conditions under which the level of protection actually granted might be sufficiently high as to generate welfare losses greater than the gains attainable from the presence of the mature industry. Finally, there was no concern with the impact of protection on incentives - either to producers for cost control and quality or to the political process to prevent the emergence of

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<sup>20</sup>These restrictions usually became import prohibitions once domestic productive capacity was deemed to be established. In some Latin American countries, tariffs were used in preference to quantitative restrictions, but tariff rates were often hundreds, and occasionally, thousands of percentages of the international price. In practice they, too, were prohibitive.

vested interests for continued and often increasing levels of protection.

The contrasting views of markets and governments implicit in the infant-industry notion are striking. Government officials were regarded as able to ascertain which industries would eventually be profitable and then to provide temporary incentives for their start-up. These same officials would then remove protection - presumably gradually - as the industry matured. Private entrepreneurs, by contrast, were thought to be unable to start these industries without government protection (due to externalities or other market imperfections) but to be able and willing to do so with protection. The question as to how government officials would obtain unbiased forecasts of streams of costs and benefits from self-interested entrepreneurs was not addressed.<sup>21</sup> Nor were questions raised concerning the incentives that would confront producers once protection was granted.

The underlying premises regarding markets and governments implicit in these policy prescriptions are obvious: there was a strong emphasis on the primacy of market imperfections: market failures were thought to be relatively strong, while it was assumed that governments could correctly identify and perform economic functions. Virtually no attention was given to the possibility that there might be government failure. An alternative view of markets and governments might have led to the conclusion that despite externalities and dynamic factors, the profitability of new industries would be so great that enough of them would

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<sup>21</sup>In some countries, this issue was avoided by deciding that government-owned enterprises should start production of industrial commodities previously imported. Bureaucrats who are operating parastatal enterprises, however, have the same interests in convincing other officials of their likely future performance as do private entrepreneurs. Moreover, the high costs of public sector production have been a major source of difficulty for developing countries. In Turkey, public sector enterprises use 3-4 times as much of both capital and labor as private sector enterprises in the same lines of activity. See Krueger and Tuncer (1982).

anyway be undertaken by private entrepreneurs. On this view, one could have accepted that there were certainly opportunities for new industries which would generate positive externalities, which would have high initial costs, that learning by doing and other factors would subsequently reduce them, where nonetheless the prospective private profitability was sufficient so that it would pay entrepreneurs to bear start-up costs without government assistance. On this view, focus would have been on creating a climate of profitability generally, rather than on governmental determination of which industries would be the appropriate infants.

Similarly, it can be imagined that there might be genuine infant-industry circumstances, but that government officials lacked the ability to discriminate between those circumstances and other pressures for protection: protection for non-infants, or for that matter, continuing high levels of protection for genuine infants far beyond infancy, could clearly offset whatever gains might be achievable with an optimal degree of intervention.

The 1950s and 1960s view of the government's ability to determine which categories of infants were worthy of support, the level of support desirable, and its time path, was therefore a fairly optimistic one. Simultaneously, the vision of the market was that it was unlikely to function sufficiently well to bring forth new industries that were economically warranted and needed, at a minimum, "guidance" from economic planners.

It was empirical examination of the actual patterns of protection, and their results, that began to undermine these views, especially when it came to the determinants of behavior within the governmental sphere. Studies of existing patterns of protection, and especially of effective protection rates were influential. So, too, were analyses of the effects of protectionist policies in



a number of developing countries.<sup>22</sup> Before these developments led to a rethinking of the roles of governments and markets however, there were two important theoretical developments that gave sharper focus to the question.

The first line of inquiry began with economists noting that, even in the conditions specified as justifications for protection, alternative policy instruments were more likely to improve welfare than were tariffs. This called into question the extent to which the infant industry argument was in fact the motive for protection, and also implicitly constituted a fairly strong indictment of actual protectionist practices in developing countries. The second line of thought came about as it began to be appreciated that the costs of trade regime intervention in support of infant industries were considerably higher than had earlier been anticipated.

This first strand of work culminated in the "Generalized Theory of Tariffs and Distortions", under which it was shown that in few circumstances was a tariff an optimal policy with which to address considerations of factor market distortions, desired levels of industrialization, and so forth.<sup>23</sup> If, for example, an objective of economic policy was to attain industrial employment of at least a certain level, first-best policy was to subsidize employment of labor in industry; second-best policy would be to subsidize the output of industry; and only third-best would be the imposition of a tariff. Similar considerations

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<sup>22</sup>A large outpouring of studies of structures of effective protection took place in the late 1960s and early 1970s. Some of these found their way into the series of studies of industrialization in developing countries, undertaken by Little, Scitovsky, and Scott (1971) under the auspices of the OECD. Special mention should be made of the analysis of India by Bhagwati and Desai (1970): especially in light of the highly articulate statements of Indian economic policy that had earlier been made, the evidence that policies in practice fell far short of these statements was especially damaging.

<sup>23</sup>See Bhagwati (1971) for a synthesis of this literature.

applied to national defense targets and other noneconomic objectives (where stockpiling may also be a feasible and possibly low-cost alternative), to industrialization per se, to raising government revenue, and other objectives.

The upshot of this literature was to cast into question the earlier mind-set which had assumed that government officials were maximizing, or attempting to maximize, a perceived, presumably Benthamite, social welfare function. For, to the extent it could be shown that actual behavior was inconsistent with a "perfect government", one had to question the efficacy of policy prescriptions that were based on the implicit assumption that government decisions and interventions were omniscient, costless, and geared to the objective of attaining a Pareto-optimum in the presence of distortions.

The second line of thought focussed on the costs of the policies that were inducing new industries in developing countries. It became increasingly evident that losses associated with highly protectionist policies were often far greater than had earlier been thought. Not only were the deadweight losses of rent-seeking added to the traditional estimate of welfare losses from protection, but in addition the contrast in growth rates between countries with highly restrictive trade policies and those with outward orientations also became increasingly difficult to ignore as evidence of the impact of trade policies on output and growth. Much of the evidence was empirical, and centered on aspects of government failure. Discussion of it is therefore deferred to Section 3.

### 3. The Political Economy of Protectionist Policies.

Out of the very different empirical experiences of developed and developing countries, two parallel lines of inquiry emerged which eventually blended together and form the ingredients of a "political economy of protection". Although much of the analysis is positive, rather than normative, in nature, it

recognizes the existence of pressure groups on policy formulation, of bureaucratic self-interest in the perpetuation of policies, and of weaknesses in governmental decision-making and implementation processes. Because of these positive factors, there are clear normative implications in that the underlying view of governments is somewhat less idealized than was that of the 1950s and 1960s.

In the developed countries, the trends towards liberalization and the relatively low levels of protection meant that most economists turned their research efforts elsewhere. Nonetheless, a strong consensus view was that most existing protectist measures in the developed countries were economically costly and undesirable.

At first, some invoked the results of the Stolper Samuelson (1941) theorem to attempt to explain protection. On the assumption that the industrial countries were generally labor-poor and capital-rich, it was argued that representatives of labor might rationally oppose free trade in the absence of compensation. For some time, this led to efforts to devise adjustment assistance or other schemes for displaced workers, on the presumption that opposition to removal of protection would then diminish, if not disappear.

On close inspection, however, it did not appear that the existing pattern of protection achieved any purpose very effectively. For American voluntary export restraints (VERs) on automobiles, for example, Hufbauer, Berliner and Elliott (1986) estimated that the costs of VERs per job saved in the automobile industry was about \$105,000 in 1983.<sup>24</sup> Estimates of the costs of jobs saved - usually the rationale for protection presented politically - for other protectionist measures

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<sup>24</sup> Other analysts have arrived at even larger numbers, ranging up to \$245,000 per job saved. See Hufbauer et al, P. 258.

were also multiples of the wages paid per employee.<sup>25</sup> In light of this, it was evident that the stated aims of protection and the actual goals were at least somewhat divergent and that, if the stated aims were the actual ones, far cheaper means of achieving the same objectives could have been devised.

Confirmation of this appeared to be provided by Magee (1971) who noted that representatives of labor and of owners of capital in the same industry generally tended to throw their political support to the same side of proposed protectionist policies. That, in turn, led to development of models in which one factor of production was immobile in the short-run and mobile in the long-run.<sup>26</sup> For, in those circumstances, both factors of production in the same industry could rationally be on the same side of a protectionist policy.

However, further analysis of existing protection patterns in Europe and the United States rapidly led to the conclusion that the divergence between short-run and long-run interests of immobile factors could not explain patterns of protection. While one might explain protection for textiles, clothing, and footwear on the grounds that these are unskilled-labor-intensive industries with a labor force that is immobile in the short run, that cannot possibly explain American protection for sugar and forest products, Japanese protection of rice or citrus fruit, or French protection of automobiles.

This then led to the next stage in which a considerable - and still growing - literature in which political models were devised in an effort to understand the political determinants of protectionism. Attention has focussed on a number of

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<sup>25</sup>See Cline (1990) for estimates for textiles and apparel. In those industries, which are notoriously low-wage by American standards, the estimated welfare cost per job saved in 1986 exceeded \$50,000.

<sup>26</sup>See, for example, Mussa (1976).

variables.<sup>27</sup>

For present purposes, only a few of these models need to be mentioned. One group of models, referred to as adding-machine models, essentially posits that voters will select the side of the protectionist issue from which they directly benefit. Findlay and Wellisz (1986) developed a special case of this model, in which labor and capital vote their own particular interest on trade legislation.

Such models leave some unanswered political questions. If, as trade theory indicates, there are gains to be had for the winners from free trade by bribing the losers, why does the political process not generate an outcome such that the compensation in fact takes place?

A second group of models focuses upon the role of special interest groups in the political process. Drawing on the work of Mancur Olson (1965), it is presumed that small, well-organized interests can prevail in the political process because of the lack of incentive for a large number of persons who may be harmed to organize effectively in opposition. This implies, among other things, that producers are likely to have more influence in political decision-making than consumers, and that existing interests will be weighed heavily relative to prospective future activities. A number of variants of interest-group models have been formulated<sup>28</sup>. Some, such as Brock and Magee (1981) focus on the ability of producers to finance politicians in return for support of special interest legislation; politicians in turn can use the financing to win election or reelection. All models have in common the notion that determination of the level and structure of protection is based on a political process in which

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<sup>27</sup>See Baldwin (1984) for a review of a large number of political economy models of the determinants of protection in developed countries. See also Baldwin (1985).

<sup>28</sup>See the references in Baldwin (1984) and Bhagwati (1988).

decisions are made under mechanisms that do not correspond to the maximization of any social welfare function nor do these processes even result in a Pareto-optimal outcome.

If these processes were understood, one might wish to devise mechanisms which could achieve higher levels of social welfare despite the political process. Such mechanisms, interestingly enough, might include reciprocal bargaining among nations for tariff concessions, as was accomplished under GATT. It is an interesting question as to whether the understanding of the political economy of commercial policy of the founders of GATT may not have exceeded that of many advocates of free trade who criticized the apparently mercantilist philosophy underlying it!

While focus in the literature on the political economy of protection in developed countries has been largely on the processes by which the level and structure of protection are determined, research on protection in developing countries has focussed much more on the effects of protection once in place.

The emergence of rent-seeking has already been mentioned, with its attendant increase in costs. Perhaps more important, from the vantage point of contrasting governmental and market failures has been the recognition that, once any measure establishing government intervention is undertaken, there arise groups with vested interests in the perpetuation, if not the strengthening, of the intervention. In the developing countries, new (often very high cost) industries were established in response to the incentives provided by highly restrictive trade regimes and other measures. However, as high-cost inefficient industrial activities increased in volume over time, so too did the political influence of those - in both the private and the public sector - engaged in operating them.

The influence of these groups has become a major impediment to correcting

past mistakes and a source of perpetuating policies that are demonstrably ill-advised. If in fact governments cannot as easily reverse decisions to protect as they can make them, government failures may prove more costly than initially equivalent market failures: if a private entrepreneur is excessively and mistakenly optimistic about the prospects for his activity, there will be some automatic pressures in the lack of profitability that tend to correct the mistake; if an industry is mistakenly assumed to be a proper candidate for infant industry protection and established behind a wall of protection which is initially insufficiently high for it to be profitable, the emergence of a pressure group to seek additional protection will increase the difficulties of reversing the decision. Workers in the industry, as well as employers, will likely pressure for its perpetuation.<sup>29</sup>

#### 4. Implications for Trade Policy under Imperfectly Competitive Conditions

All of the considerations arising out of the political economy literature do not lead to the conclusion that there will never be an infant industry or a case for intervention. They do, however, suggest that the likelihood that a "small" distortion or market failure can be corrected by government action is low because any such action is likely to be accompanied by larger government failure. They also suggest the need for considerable rethinking as to the relationship between theory and policy prescription: it has long been posited that an optimum exists when the marginal rate of transformation in production equals the marginal rate of transformation through trade, which in turn equals the marginal rate of

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<sup>29</sup>Of course, if an activity that was undertaken without protection encounters difficulties, it may well lobby for protection (or, more realistically, nationalization). There is nonetheless a somewhat smaller more claim upon government for assistance than there is when the industry began, as many did in developing countries, in response to policies and urgings of the government.

substitution in consumption. If in fact, neither governments nor markets can achieve the optimum, there is an important question as to how market failure, and for that matter, government failure, should be assessed.

In recent years, economists working with models of imperfect competition have demonstrated that there could be circumstances under which governmental intervention in favor of particular industries could increase a country's national income because early entry enabled the development of a sufficiently large market to preclude entry of others.<sup>30</sup> In these circumstances, it is clear that there could be a situation in which national welfare and real incomes were increased by such a policy.

Although there are some differences in the formal structures of models of imperfect competition (which rely on increasing returns within a range) and of infant industries (which are generated by external economies and dynamic considerations), the political economy considerations relevant to the two classes of cases appear to be strikingly similar. In both instances, the information required in order to assess the merits of protection is normally proprietary, and often requires investment in technology to acquire.<sup>31</sup> Those seeking

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<sup>30</sup>See Helpman and Krugman (1989) for an exposition. The authors are careful to point out that "...although some models can be used to support neo-mercantilist policies...slight variations on these models eliminate or even reverse their conclusions. No blanket vindication of aggressive trade policies emerges from the analysis, nor does it seem likely that a real-world government would be able to decide which model is most relevant. The design of an advantageous trade policy requires information of a kind that is simply not available...."

"The political economy of trade policy is therefore not changed as much by the new models as is the description of its effects..." (P. 186).

<sup>31</sup>It might be objected that it is relatively more straightforward to identify economies of scale than it is to identify potential externalities and dynamic effects. An offsetting consideration, however, is that the new industries normally referred to by the advocates of "strategic protection" are the high-technology industries where investment in new product lines and in new technologies is essential. The fact that firms must invest in new technology in



protection would have, whether for infant or for strategic reasons, a vested interest in overstating the case for current protecting and optimistically forecasting the future time path of cost reductions.

In both instances, also, theory gives some guidance as to the quantitative parameters, knowledge of which would permit application of a formal benefit-cost analysis,<sup>32</sup> but proponents of intervention do not specify processes by which decisions consistent with rational resource allocation could be made.<sup>33</sup> Nor have there been suggestions as to how decision-makers could filter information provided to them by would-be recipients of protection in order to ascertain the extent of bias in their claims.

There are also issues pertaining to incentives. One of the strong lessons emerging from the experience of developing countries is the deleterious effects that many of their protectionist trade regimes have had on incentives for cost minimization in circumstances where protection conferred monopoly or quasi-monopoly power on individual producers. To the extent that protection to a new, "strategic" industry would confer protection at least insofar as the domestic market is concerned, there are issues concerning the compatibility of protection with adequate incentives for appropriate innovation and cost minimization.

Even if answers to these difficult questions could be devised, there remain

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order to develop many of the new product lines suggests that problems of forecasting what a successful technology will be like may be even more difficult than they would be in the case of infant industries where, at least, the industry is already in existence somewhere else.

<sup>32</sup>See Richardson (1989) for a survey of the small amount of empirical evidence that exists. That evidence is, of course, based on retrospective assessments, and is not commensurate with the sorts of numbers that could be used to guide decision-makers as to future protectionist levels.

<sup>33</sup>See the discussion of Tyson's paper in Schultze and Lawrence (1990).

important issues. How can a political process which confers protection on a basis far distant from the utility-maximizing models of economists be harnessed to provide protection in cases where it is apparently warranted on imperfect competition grounds without "capture" by others seeking protection? Why would not those seeking protection use the argument for cases bearing little or no resemblance to the circumstances delineated by theory?

A major problem of process therefore arises: when moving from the realm of theory to the policy arena, the political economy literature surely implies that the burden of proof lies with proponents of intervention. This would suggest the need for several components of any policy proposal: 1) the institutions, mechanisms, and criteria through which the proposed interventions would be decided upon and administered should be indicated; 2) it should be demonstrated that these would perform sufficiently well to enable the benefits of proposed interventions, where warranted, to outweigh the costs that might result from inappropriate application of the basic model; and 3) there should either be plausible processes by which protection levels would be altered in the event that initial forecasts turned out to be in error, or it should be demonstrated that protection, even if permanent, would yield sufficient benefits to justify the costs of perpetuating it.

The reason for first two of these desiderata should be self-evident: without identification of the institutions, mechanisms, and criteria that would administer intervention, it is at least as plausible that protection will be at inappropriately high levels and cover a broad range of activities indiscriminately as it is that strategic intervention might actually improve prospective welfare relative to its level in the absence of intervention.

The third criterion is equally based on experience with the political economy

of protection. It addresses the issue of how mistakes may be corrected. That, in turn, would either require mechanisms to prevent the formation of pressure groups to perpetuate protection even after its initial purpose has been achieved, or else it would account for the costs of excessive future protection in the initial benefit-cost calculus.

Ironically, the GATT system, which provided a mechanism for moving the industrialized countries toward much more open and liberalized economies than had earlier existed, was devised largely because of factors other than a conviction that free and open trade was the optimal policy. In the developed countries where trade was liberalized and tariffs were low (partly because of negative experiences under the Smoot-Hawley tariff), there was little opportunity to witness and recognize how the political process could use the precepts of economic theory for purposes far removed from those for which they were intended. Thus, at a time when protectionist pressures were mounting, economists in developed countries were exploring the theory of imperfect competition and its implications for alternative trade policies. Despite the fact that their results merely indicated that there might be instances in which (the appropriate) level of intervention could increase welfare relative to free trade, past experience in developing countries suggests that the political process may seize these arguments as justification for protection.

Simultaneously, experience in the developing countries with application of protection justified by the infant industry argument was so unsatisfactory that commercial policies began to be liberalized by many of them. Economists' research into the effects of these protectionist policies were only one of the factors that led to this trend.

Hopefully, experience with protection, and the insights into the political

economy of protection that have been derived from it, will enable the further development of theory without its immediate seizure for policy application. In the meantime, it is to be hoped that the interaction between theory and policy can be better understood in ways which will permit more realistic derivation of normative implications of positive theoretical models.

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