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THE SUBSIDY AND COUNTERVAILING DUTIES NEGOTIATIONS AND THE DEVELOPING COUNTRIES

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Daniel M. Schydlowsky*

I

Introduction

Concern with export promotion of non-traditional goods, particularly manufactures, has been on the increase amongst governments of less developed countries. Export support schemes of various sorts, including export subsidies, have been in force in a number of countries since the early 1960's. In the last few years, however, as some countries have had notable success with the promotion of non-traditional exports, other countries have attempted to follow their example, and the use of such promotion schemes, including subsidies, has become much more widespread. At the same time, the success of the export promoting pioneers has led to concern on the part of importing countries about the legitimacy of the export promotion instruments used. In the context of precarious balance of payments positions for some industrialized countries in the early 70's and the oil price increase which produced a current account deficit for the industrialized world as a whole, the proliferation of export promotion policies, particularly export subsidies, has become a logical target for international regulation and agreement.

(*) The author is Professor of Economics and Senior Research Associate of the Center for Latin American Development Studies, Boston University. This paper was prepared by request of U.S. AID for presentation at a Seminar on the Multilateral Trade Negotiations and the Developing Countries: Possibilities for Special and Differential Treatment Measures.

An accepted element of any new agreement on the use of export subsidies and other promotion schemes is that equity and international relations considerations justify a different treatment for export subsidies and other promotion schemes adopted by less developed countries, as compared to the developed countries. This paper addresses itself to what kind of special treatment is justified on efficiency grounds as well as being responsive to the desire of equity for LDC's. We will begin by exploring the context in which LDC's adopt export subsidization. Then two alternative versions of acceptable export subsidization are considered. Finally, some matters of technique and administration are discussed.

II

The Context

The development strategy of less developed countries has been overwhelmingly based on the expansion of industry. It was hoped that industrialization would boost the rate of growth, reduce overt and disguised unemployment and cure what was considered excessive dependence on traditional exports. The policy adopted to this end was vigorous protection of all import competing industrial production, behind substantial tariff walls and other import restrictions.[1/] Such a policy obviously implied protection of industrial production for a particular market, namely the domestic market, but not protection of industrial production for exports.[2/]

The development strategy adopted, based on import substituting industrialization, had an inherent inconsistency built into it, which however, only became apparent after a number of years. Production of industrial goods, requires import of industrial raw materials and intermediate goods. Thus the higher the level of industrial

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1/ Schydlowsky, 1972; Hirschman, 1968; Balassa, 1970.

2/ Little, Scitovsky & Scott, 1970.

production, the greater the imports of inputs required. On the other hand, since industrial goods were not being produced for exports, industry itself did not produce a direct foreign exchange offset to these import requirements: industrialization was foreign exchange using. The only offset which industry provided was the foreign exchange freed through import substitution of previously imported industrial goods. As imports of particular commodities produced went to zero, this offset disappeared. Thereupon, the success of industrialization strategy, namely a rate of growth of demand for foreign exchange in excess of the rate of growth of foreign exchange. Thus success of the strategy implied of necessity balance-of-payments crises.

When such crises did occur, and postwar economic history of the LDC's is studded with such instances, industrial growth had to slow down, foreign debt had to be accumulated, and/or foreign private investment had to be lured in. None of these measures cured the fundamental inconsistency of the strategy. Slowing down industrial growth meant abandonment of the primary policy objectives. Increasing foreign debt simply implied postponing the day of reckoning, since only an exponential growth of debt, acceptable to neither borrowers nor lenders, would indefinitely postpone the need to repay. Foreign private investment was no more useful: if it was in the modern industrial sector, it too was foreign exchange using, if it were in the primary sector, it would produce some alleviation, but would require a remission of profits, thus having its own "import requirement". Furthermore, it implied some degree of loss of control of domestic industry.

The inconsistency of the development strategy could only be overcome if industry was made foreign exchange earning, rather than being only foreign exchange using. In turn, making industry foreign exchange earning implied extending the protection which was originally given to the production for the domestic market to production for all markets i.e., protection against imports had to be extended to protection for exports. Hence export subsidization of one form or another was and is an essential requirement of a growth strategy based on industrialization which is sustainable in the long run. The motivation driving the adoption of export promotion and subsidy systems by less developed countries is thus abundantly clear.[1/]

To complete the picture of the setting in which export subsidization and other kinds of export promotion take place in less developed countries, it is useful to look briefly at the structure of the trading rules adopted by these countries. A particularly notable element is that less developed countries pride themselves upon having a single exchange rate. Many of them even subscribe to article VIII of the IMF. At the same time, however, all LDC's operate with a multitude of high and differentiated import restrictions. When this import regime is put

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1/ For an extensive treatment of the strategy, its inconsistencies and its causes and consequences, see Diamand (1973).

together with the unitary exchange rate, what emerges is a de facto multiple exchange rate system consisting of a single "financial" exchange rate and as many "commodity" exchange rates as there exist differentiated tariffs. A peculiarity of the system is that commodity exchange rates differ for the same good when it is imported or exported: commodity import exchange rates are high and commodity export exchange rates are low. Furthermore, most import commodity rates are substantially above the financial rate. On the export side, some countries have operated at times with an export tax on traditional export commodities which has reduced the commodity exchange rate for traditional exports below the financial exchange rate. A good example is the system which was operating in Argentina in 1966, and which had approximately the following set of rates: 1/

Rate	Composition	Pesos per $
Agricultural Export	= Financial less 10% tax	= 200
Financial	= Financial	= 220
Non-traditional Export	= Financial + 18% tax rebate	= 260
Raw Material Import	= Financial + 50% duties	= 330
Semi-manufactures Import	= Financial +120% duty	= 460
Components Import	= Financial +175% duty	= 600
Finished Prod. Import	= Financial +220% duty	= 700

A quick inspection of this rate structure will show why industry fails to generate foreign exchange and thus is foreign exchange using. Industry buys its raw materials at an exchange rate of 330 pesos per dollar, its imported semi-manufacturers at 460 and its components at 600. This implies an average cost exchange rate for imported inputs of approximately 400 pesos per dollar. Domestic inputs have implicit exchange rates only slightly lower, since most domestic producers do not sell at prices

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1/ Taken from CARTTA 1966.

much below those of similar imports.[1/] Thus industry's cost exchange rate for all material inputs is roughly between 380 and 420 pesos per dollar. At the same time industrial wages reflect the cost of living which is raised by the tariffs on goods consumed by workers. Furthermore, profit rates are based on the cost of capital goods which are also subject to tariff. Hence total industrial costs are based on an exchange rate exceeding 400 pesos per dollar. At the same time, a dollar's worth of exports yield only 260 pesos per dollar. The would-be industrial-export producer thus faces an implicit tax levied through the exchange rate system of a magnitude exceeding 140 pesos per dollar. The implication of this situation for the profit rate on exports is rather dramatic.

The effect of the existence of this de facto multiple exchange rate system with its particular structure goes beyond the direct discouragement of exports, however. It has caused an "inefficiency illusion" to exist about industry in less developed countries. This illusion results from translating domestic industrial costs into dollars at the financial exchange rate and finding these costs to be substantially above the price of the comparative imports. Since domestic costs are based on the commodity exchange rates in fact incurred, and these are substantially above the financial exchange rate, it is not surprising that domestic cost of production will be higher at international prices when converted at an exchange rate lower than the one on which these costs are based. This commonplace practice of converting costs at the financial exchange rate, has, in the absence of the obvious explanation, produced the inefficiency illusion effect and given

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1/ The cause may lie in higher costs due to tariffs on inputs or due to import competing pricing customs.

less developed country governments and publics the impression that they have an industrial structure totally out of kilter and hopelessly inefficient. The fact of the matter is, however, that much of that inefficiency is simply the result of an improper comparison by the use of an exchange rate that is not applicable to the respective costs. When domestic costs are deflated by an appropriate exchange rate, i.e. one that is related to the commodity rates, it turns out that industrial costs are much lower than generally believed.[1/]

The inefficiency illusion and the anti-export bias in the exchange rate system have interacted to the mutual reinforcement of both and the hindrance of a change in policy. The inefficiency illusion reinforces the belief of policy makers that industry is not efficient enough to export. The anti-export bias in the exchange rate structure makes exports impossible. The resultant lack of exports confirms the policy makers view that industry is unable to export. In view of the obvious scarcity of foreign exchange, however, the impossibility for industry to export means that additional import substitution must be undertaken. This in turn implies higher import restrictions which cause an increase in the inefficiency illusion. As a result the policy makers become even more convinced of the inefficiency of industry and its inability to export and at the same time the higher import restrictions increase the anti-export bias, thus making it ever less likely that industry will become foreign exchange generating.

1/ See Schydlowsky 1972, 1975, also exchange with Balassa in QJE, August, 1975.

The inefficiency illusion also operates at an international level, generating the conviction that export promotion tools, particularly subsidization, are given as crutches to hopelessly inefficient industry, which could not survive in world competition on its own feet. Because of the formal separation of the unified exchange rate and a differentiated tariff system, the de facto existence of a multiple exchange rate system is lost from sight and therefore the inappropriateness of the simple cost comparisons are not realized. The implications of realizing the nature of the exchange rate system and the size of the cost exchange rates affecting industrial costs for an assessment of export subsidization measures are very considerable indeed.

In the context just described, export subsidization and other measures, henceforth all called subsidization for short, have two fundamental justifications. The first of these is that export subsidies are designed to offset the excess of the industrial cost exchange rate over the financial exchange rate. On this basis, export subsidies simply refund a tax levied through the import price structure. We will discuss this justification for export subsidies in the following section under the name of the semi-traditional view. The second justification is based on the recognition that the exchange rate system is not unitary, and that in addition other distortions exist in the economy, particularly in the labor and capital markets. These distortions introduce differences between private marginal costs

and social marginal costs. Evidently, world welfare requires that production cost be minimized in terms of real costs i.e. in terms of marginal social costs. Thus subsidization will be justified to the extent that differences exist between marginal private and marginal social costs. This justification for export subsidization will be discussed in section IV. 1/

1/ Ffrench-Davis and Piñera (1976) argue in favor of regarding "compensating" subsidies as acceptable, but do not clearly define the scope of the term.

III

Acceptable Export Subsidization I: A Semi-traditional View

It has long been recognized that exporters should not be placed at a competitive disadvatage as the result of taxation levied on the inputs into the exported product. Thus, industries transforming imported raw materials or intermediate goods into output that would be exported have always benefited from a refund of the duties paid on the imported raw materials, in this way being allowed to compete on the basis of their own productivity, unhampered by the taxation on the inputs that would have been levied if the refund would not have been forthcoming. The refund of such import duties, generally known as "drawback", is incorporated into most trade legislations and is universally regarded as acceptable "export subsidization".

As long as transformation activities operate 100% with imported inputs, the principle that each exporter should compete on the basis of his own productivity and not be penalized for artifically raised input costs is well served by the drawback. As soon as domestic production of inputs exists, that is no longer so. When some inputs are sourced domestically behind tariff protection, costs are no lower than when the competing import is bought. However, if the refund is only made available on that part of the increased costs corresponding to imported inputs, the general principle that the exporter should compete on the basis of his own productivity no longer holds in the presence of such local sourcing; therefore, the export subsidy

should refund the full increase in cost due to the import protection.[1/]

Accepted practice with regard to indirect taxation leads to the same conclusion. If a producer is subject to indirect taxes on his inputs, these are refundable upon export of the finished product. Now, if that indirect tax on inputs happens to be of the same magnitude as the import duty on competing imports and if, in addition, the revenue from that indirect tax is used to subsidize the domestic producers of that same input, then these circumstances should not remove the user's right to have that tax refunded. However, whether a tax is formally collected and a subsidy formally paid out or whether the equivalent effect is achieved by having the user pay the tax directly to the producer is surely irrelevant. In either case a refund of the increase in cost due to the tax should be provided to the user upon export of the merchandise.

It is only a small step to generalize the argument from material inputs to all cost increases arising from taxation on inputs. Three such cost increases not affecting materials bear particular mention.

a) Increase in labor costs due to protection on finished goods. If supply of labor is a function of the real wage, the once-and-for-all increase in the price level inherent in the existence of tariffs will lead to a once-and-for-all rise in the money wage. The corresponding proportionate change might be called the tariff equivalent affecting wages.

1/ Note that refunding tariffs paid on inputs into inputs (i.e. on indirect inputs) does not fully take care of this problem because it leaves out the tax implicit in the direct and indirect domestic inputs into inputs.

b) Import duties on capital goods raise the cost of these capital goods and hence the annual depreciation. Furthermore, at any constant rate of return an increase in the cost of the assets implies that the annual profits in nominal terms must be greater in order to maintain the same real rate. Thus nominal capital costs per year rise as a result of taxation of capital goods.

c) Interest costs being largely a function of inventories and working capital needs, the existence of tariffs increases the required working capital and hence the required interest costs.

We are now ready to formulate the general principle embodying the semi-traditional view of the acceptable level of export subsidization:

"Refund all excess costs compared to the free trade situation at the existing exchange rate which result from the imposition of trade taxation on imports and exports".

The instrument which implements this principle is usefully called a "generalized drawback" to indicate at the same time its ancestry in the "traditional" drawback and the generalization which is undertaken to cover all repercussions of import protection onto increased export costs.

IV

Acceptable Export Subsidization II: An International Division of Labor Point of View

The purpose of world trading arrangements is the maximization of world welfare through the specialization of the different countries participating in the world trade according to their respective comparative advantage. In practice, however, world trade flows are determined by the absolute advantage obtaining at each moment in time. Evidently absolute and comparative advantage need not coincide. However, when they diverge in the absence of restrictions on trade, balance-of-payments disequilibria ordinarily occur. When such disequilibria are adjusted through modifications in the exchange rates and when factor markets are undistorted and full employment obtains, the exchange rate adjustment necessary to equilibriate the balance of payments will also bring absolute advantage into line with comparative advantage.[1/] Thus, given balance-of-payments equilibrium and full employment, achievement of specialization according to comparative advantage under free trade is equivalent at the micro level to the simple competitivess criterion: a country has comparative advantage in all the goods which it can sell at or below the world market price.

When product and factor markets are distorted, i.e. when exchange rates are overvalued, import restrictions exist and factor markets do not clear at competitive prices due to imperfections and restrictions of various sorts, market competitiveness no longer provides a correct guide to comparative advantage. Rather, it is necessary to calculate marginal social cost in lieu of marginal private costs and compare the former with world price.

1/ When trade restrictions are used for BOP purposes, the divergence between absolute and comparative advantage persists.

Conventional rules for accepting export subsidization are clearly understandable and justifiable in the light of the above discussion. If undistorted markets are assumed to hold, export subsidies are harmful to world welfare, since countries should not be exporting those goods in which they are not competitive at market prices. Furthermore, if there exists taxation on inputs which distorts factors and product markets, such taxation is legitimately offset by an export subsidy, since in the presence of such distortions, market price is no longer an appropriate guide to "real" competitiveness.

Less developed countries are well-known to have distorted factor and product markets. Labor is unemployed and underemployed, with market wages being held up by government legislation and institutional forces of various sorts (unions, peer group income sharing, traditional floors, etc.). Capital markets are segmented and interest rates are regulated through government imposed ceilings on rates paid and charged. Foreign exchange markets are distorted due to the presence of tariffs and other import restrictions, export taxation at various rates and possibly exchange control. In addition, the basic price, the financial exchange rate, is typically pegged by the government (the fact that it may be a crawling peg does not affect the fundamental existence of distortions in the market).

Furthermore, it should be realized that these distortions in the separate markets interact to produce composite divergence between market prices and marginal social costs. Thus, for example, a marginal social cost of labor below the market wage implies by itself a marginal social

productivity of capital above the market return to capital. The marginal social utility of foreign exchange above the official exchange rate implies that the marginal social productivity of capital in export industry is above the marginal private productivity. In turn tariffs on import competing production implies that, on that count taken separately, the marginal social productivity of capital in these industries is below the private marginal product.

A proper social calculus will take into account the interaction of the distortions in the separate markets in a general disequilibrium system of shadow prices, which would adequately measure the marginal social cost or marginal social utility of the various inputs and outputs involved. 1/

Given such a set of prices, world welfare requires that LDC's produce for world use those commodities in which marginal social cost of production lies below the world price. This implies valuing factor costs at their marginal social costs (shadow prices) and then translating these costs from local currency into foreign exchange values by use of the shadow price of foreign exchange. Whenever the dollar cost obtaining in this fashion is below the world price, the corresponding LDC will be held to have a comparative advantage in that commodity compared to the rest of the world. Where several LDC's have costs below the world prices, the one with the lowest cost will be held to have the comparative advantage.

1/ For such a "general disequilibrium" set of shadow prices see Schydlowsky, 1973.

While comparative advantage measured as social competitiveness may exist in the broad range of industrial goods, private competitiveness will not exist. This divergence between marginal social cost and private costs is legitimate ground for export subsidization.

Two further elements need to be mentioned:

a) A major empirical difference exists between short run and long run marginal social costs in LDC's due to the severe underutilization of installed capacity that appears to be the norm in many and perhaps all of them.[1/] Under such conditions, the marginal social cost of capital is at most equal to the user cost and may be as low as zero. Combined with a marginal social cost of labor below the market wage, the result is to generate a strong short run comparative advantage in a wide range of manufactures. Evidently, however, long run marginal social costs will be higher and long run comparative advantage will be different. Subsidization for the short run should thus differ from subsidization for the long run.

b) World prices do not reflect consumer utility whenever import duties exist in the major consuming countries. Such import taxation drives a wedge between world marginal social cost and consumer marginal utility. Export subsidies offsetting such import duties are welfare

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1/ Data collected for six Latin American countries in the course of a three year study show possible increases of industrial production of up to 50%. See Schydlowsky (1976). For a more pessimistic view covering two Asian and one Middle-Eastern country see Hughes (1976).

increasing and thus are fully justified on world welfare grounds.[1/] However, since import duties vary by country, an export subsidy affecting this distortion would have to be specific by country of destination, which would be an administrative nightmare.[2/] Offset then becomes either impossible or an average figure needs to be chosen. Since the spread of developed country tariffs is relatively narrow, the latter is probably the best solution.

The general principle of acceptable export subsidization on world welfare grounds can now be stated:

"Refund the difference between marginal social cost and marginal consumer utility, including the average import duties of the main importing countries".

The instrument which implements this principle can usefully be called a "generalized compensatory subsidy" to indicate at the same time that it is of general application and compensatory of pre-existing distortions.

1/ It should be noted, however, that the levying of import duties on the part of developed countries on exports from less developed countries together with the corresponding offsetting subsidies signify a redistribution of fiscal income from the poor to the rich, with the consequent worsening of world income distribution. Thus, it is preferable to remove the wedge between marginal social world costs and marginal consumer utility by repealing the import duties than it is to accomplish the same objective by imposing an offsetting export subsidy.

2/ I am indebted to Bela Balassa for pointing this consequence out.

V

Minimizing Explicit Subsidization: Compensated Devaluation

Viewing the trade regime of LDC's as an implicit multiple exchange rate system, where the composite of financial exchange rate plus trade taxation is what matters, allows consideration of various alternative mixtures of financial exchange rate and trade taxation. Thus, rather than having a financial exchange rate which is close to the commodity exchange rate for traditional exports, it would be equally possible to have a financial exchange rate close to the commodity rates for industrial production. Evidently, in the latter case import duties would be significantly lower and export taxes would be higher than in the former. A change of financial exchange rate accompanied by such offsetting changes in trade taxation constitute what is called a compensated devaluation. 1/

In terms of the exchange rate system typically used by LDC's and exemplified by that existing in Argentina in 1966 in Section II above, the compensated devaluation would look as follows:

1/ Such a policy was first proposed by this author for Argentina in 1966 and published as Schydlowsky 1967. A similar proposal was independently made by Marcelo Diamand (see CARRTA 1966 and Diamand 1969 and 1973).

Pre-Compensated Devaluation				Post-Compensated Devaluation		
Total	Tax/Subsidy	Basic	Rate	Basic	Tax/Subsidy	Total
200	- 10%	220	Agricultural Exports	330	- 40%	200
220	0	220	Financial	330	0	330
260	+ 18%	220	Non-traditional Exports	330	+ 18%	390
330	+50%	220	Raw Material Imports	330	0	330
460	+120%	220	Semi-Manufactured Imports	330	+47%	460
600	+175%	220	Component Imports	330	+80%	600
700	+220%	220	Finished Product Imports	330	+115%	700

Note that the commodity exchange rates for imports have stayed unchanged, as has the commodity exchange rate for traditional exports. Only the commodity exchange rate for non-traditional exports has risen. This evidently constitutes the equivalent of a subsidy of 50% on non-traditional exports, in the context of the initial pre-compensated devaluation system.

It is immediately obvious that adoption of compensated devaluation reduces the amount of explicit export subsidization that needs to be undertaken to offset the implicit export taxation inherent in the exchange rate system or to compensate for the divergence between

marginal social costs and marginal private costs. At the same time, it must be realized that there are important differences between the effects of a compensated devaluation and explicit subsidization which render the two policy measures not fully equivalent.

The first difference that needs to be borne in mind is that as the size of the adjustment of the financial exchange rate increases, it becomes less and less possible to compensate the devaluation of the financial rate through reductions in import duties on the lower tariff items without going to import subsidies. Setting tariffs that would have to become negative for full compensation at zero implies that incomplete compensation of the adjustment of the financial exchange rate will occur. As a result, cost of production will rise, effective rates of protection will change, and the structure of incentives to production will change as well.

A second difference to be borne in mind is the effect on the capital account. An outright subsidy does not affect the cost of paying outstanding foreign exchange denominated debts. A compensated devaluation is a tax on all foreign exchange debtors and a subsidy to all foreign exchange creditors. Since business firms typically tend to be foreign exchange debtors, the loss of wealth the compensated devaluation may imply for them may well cause a temporary loss in risk bearing ability, thus reducing the effectiveness of the export promoting price stimulus.

The third difference of importance relates to the treatment of traditional exports. Under a compensated devaluation, traditional exports are taxed explicitly as compared to the implicit tax levied through the exchange rate when explicit non-traditional export subsidies are used. The existence of an explicit tax on traditional exports has the advantage that it can be replaced by a tax on the fixed resource entering into traditional export production, such as land or mining resources. Such a change in the nature of the tax, i.e. change from a production tax to a Ricardian rent tax, removes the burden of taxation from new output, thus eliminating a distortion between producer marginal revenue on traditional exports and the price of these exports. 1/

The fourth difference is the effect that a compensated devaluation has on the industrial inefficiency illusion. Since the financial exchange rate rises without an equal increase in the cost exchange rate of industrial production, industry appears suddenly to have gained in efficiency. Since the consequences of the industrial inefficiency illusion for development policy are considerable and negative, any achievable reduction in this illusion should be regarded as an important advantage.

1/ Diamand (1973) argues forcefully and convincingly that such a change would have far-reaching positive consequences.

Since large explicit export subsidies, even if justified, i.e., if consistent with the argumentation presented in Sections III and IV, do give rise to pressures for the imposition of countervailing duties it would seem wise for LDC's to minimize such pressures by adoption of compensated devaluations as their "baseline" export promotion tool, to be supplemented by explicit subsidies to the extent made necessary by the differentiation in the structure of exchange rates (which a compensated devaluation cannot really deal with). Such a policy mix is consistent with the internal development desiderata relating to the substitution of export taxation by Ricardian rent taxation and to the reduction of the inefficiency illusion.

VI

Implementation Aspects

This section will briefly review the problems of implementation that might arise in LDC's where a generalized drawback or a generalized compensatory subsidy is to be applied. It will also briefly discuss the disputes that might arise with importing countries over the appropriateness of the subsidies provided and manner in which such disputes might be settled..

A generalized drawback requires three elements of information for its application to a product or sector: the cost structure, the level of taxation of inputs, and the repercussion of taxes on the nominal wage level. Information on the taxation of inputs is public knowledge, since it is simply the tariff schedule and the tax regulations. Information on the implication for the nominal wage level is a one time calculation which, once done, is applicable to all wage costs. The only piece of information which is specific to each commodity is the cost structure, and this can be obtained either on the basis of the industrial censi, which are run periodically, on the basis of the industrial surveys, which are usually undertaken annually, or on the basis of petitioning by individual would-be exporters. If the last of these alternatives is chosen, the previous two can be used as checks on the truthfulness of the application made, in order to avoid over-subsidization.

It should be noted that the information required for the application of the generalized drawback is somewhat easier to obtain than information required to apply the conventional drawback whenever the conventional drawback allows refund of import duties paid on imported inputs more than one stage back.

Importing countries that wish to challenge the generalized drawback provided by the exporting LDC would naturally have to focus their attention on the structure of costs, since both the tax rates and the effect on wages are public knowledge.

Challenges would have to be based on calculations showing that with a plausible cost structure and the existing taxes and cost increases for labor, the rate of export subsidization is excessive. The plausible cost structure can be taken from the importing country's industrial experience. The solution to the dispute will then consist of evaluating the respective cost structures. If the exporting country can document that the cost structure used for the generalized drawback calculation corresponds to the facts, then the export subsidy will stand, since the justification for the subsidy is to offset cost increases in fact incurred. The forum in which conciliation between importer and exporter should take place is a matter for intergovernmental negotiation, but might well fit into the GATT organizational framework.

Application of the generalized compensatory subsidy requires the same cost structure information as the application of the generalized drawback, and requires in addition the availability of a set of shadow prices for the inputs and outputs. The first of these elements can be obtained in the manner described above; shadow price would need to be calculated by each LDC government and announced publicly on an annual or semi-annual basis. Furthermore, the shadow prices should be the same ones that apply to the government's own investment activity. Disputes could arise again regarding the cost structure. However, disputes would not be appropriate with regard to the shadow prices unless the exporting government failed to use the same shadow prices on which export subsidies are based in its own investment planning. Where there was considerable fear and justified reason to believe that the shadow prices were tilted to generate high export subsidies, or were otherwise incorrect, it might be worth considering the possibility of governments being required to negotiate the value of their shadow prices with a suitable international agency, preferably a multi-lateral one. Whereas such a procedure would appear to have the advantage of an international vetting of shadow prices, it does pose the problem of adopting a single world-wide methodology for the calculation of shadow prices and it does imply some restriction on government sovereignty, possibly a restriction in excess of what governments would find acceptable.

VII

Implications for the Adaptation of the Productive Structure of the Developed Countries

The type of subsidization called acceptable in the foregoing is exclusively export subsidization conducive towards bringing LDCs' productive structures closer to the underlying comparative advantage of the countries involved. As a result, the changes in location of world production which they would bring about imply an increase in world welfare. It follows that importing countries should cooperate in bringing about the adjustment process called for by these export subsidies, in order to further the welfare of the world as a whole. Were importing countries to resist the changes in their own productive structures which are implied in a world-wide move to comparative advantage consistent production, the effectiveness and desired result of the export subsidies would be lost. Hence, the action for developed importing countries to take is to provide adjustment assistance to those sectors of their economic activities which require such assistance in order to be able to complete a reallocation process in the face of increased import competition from less developed countries.

It should be noted that while the export subsidies of less developed countries produce a reallocation push in the developed importing countries, greater export revenue in LDC's will imply a higher

level of activity and a higher rate of growth, which will generate a substantial increase in the demand for imports from developed countries. Thus, the LDC's will not only produce a resource reallocation push in developed countries but concurrently will also provide a demand pull which will help absorb the factors released from the industries in which LDC's now become exporters into industries for which demand by LDC's has increased.

The relative speed of the reallocation push and demand pull effects is likely to be of major importance in determining the ability of importing developed countries to adjust smoothly to a pattern of trade more in accordance with the underlying comparative advantage of all participants in world trade. The export growth of LDC's non-traditionals will be determined basically by two features: 1) the amount of excess capacity available in the industrial sectors, and its size in comparison to developed country importing markets, and 2) the rate at which sales efforts will produce penetration into the importing markets. Information is available on the first of these elements, and indicates that considerable potential supply is available.[1/] However, given the relative size of the world's LDC's and the markets of the developed countries, that export supply is still relatively small. Regarding the effectiveness of the sales effort,

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1/ Schydlowsky, 1976.

little direct information is available; however, the guess can be hazarded that sales penetration starts at a low level and gathers momentum as it advances, with cumulative effects over time.

The import demand effect on the part of LDC's will occur roughly at the same time as exports increase, since most LDC's spend foreign exchange earned at about the same rate as it enters their Central Banks' coffers. It is therefore probably reasonable to assume that an export promotion effort based on either of the two acceptable exports subsidy schemes would have considerable impact in a five year period. This implies reallocation of resources in importing developed countries at a speed which is certainly in excess of the natural replacement rate of machinery. Therefore, adjustment assistance needs to be provided from the outset, in sectors in which it is observed that LDC originating imports are beginning to appear as a significant part of supply on the market.

VIII

Conclusion

International acceptance of export subsidization by LDC's is justified on two alternative grounds:

a) no producer for export should be penalized for taxation of his inputs; he should be allowed to compete on the unadulterated basis of his own productivity.

b) production for export should take place whenever marginal social cost in the producing country is below price (marginal utility) in the consuming country.

The first justification leads to international sanctioning of the generalized drawback; the second to sanctioning of the generalized compensatory subsidy.

In order to minimize international problems and to further their own development ends, LDC's would be well advised to adopt compensated devaluation as their "base line" policy and supplement with export subsidies as differentation might require.

Neither implementation problems nor resolution of disputes seem unduly complicated, due to the public nature of many of the data inputs going into the construction of the value of any individual generalized drawback or generalized compensatory subsidy.

REFERENCES

Balassa, Bela — "Growth Strategies in Semi-Industrial Countries" Quarterly Journal of Economics, Vol. 84, Nº 1, February 1970.

CARTTA (Cámara Argentina de Radio, Televisión, Telecomunicaciones y Afines). — "Proyecto de Modificación de la Estructura Arancelario-Cambiaria", September 1966.

Diamand, Marcelo — Bases para una Política Industrial Argentina Cuadernos del Centro de Estudios Industriales, Buenos Aires, 1969.

_____ — Doctrinas Económicas, Desarrollo e Independencia, Buenos Aires, 1973.

Ffrench-Davis, R. and Piñera, José — "Export Promotion Policies in Developing Countries", CEPAL, Seminar on Export Promotion Policies, Santiago, Chile, November 1976.

Hirschman, Albert O. — "The Political Economy of Import Substituting Industrialization in Latin America" Quarterly Journal of Economics, Vol. 82, Nº 1, Feb. 1968.

Hughes, Helen — "Capital Utilization in Manufacturing in Developing Countries" World Bank Staff Working Paper Nº 242, September 1976.

Little I. M. D., T. Scitovsky & M. Scott. — Industry and Trade in Some Developing Countries: A Comparative Study, Oxford University Press, 1970.

Schydlowsky, D.M. — "From Import Substitution to Export Promotion for Semi-Grown-Up Industries: A Policy Proposal" Journal of Development Studies, Vol. 3 Nº 4, July 1967.

_____ — "Latin American Trade Policies in the 1970's: A Prospective Appraisal", Quarterly Journal of Economics, Vol. 16, May 1972.

_____ — "Project Evaluation in Economics in General Disequilibrium: An Application of Second Best Analysis", Discussion Paper N° 1, Center for Latin American Development Studies, Boston University. March 1973.

Schydlowsky D.M. "Price and Scale Obstacles to Export Expansion in LDC's in Y. Ramati, ed. Economic Growth in Developing Countries Material and Human Resources, Praeger, 1975.

_____ "Capital Utilization, Growth, Employment, and Balance of Payments and Price Stabilization" Discussion Paper Nº 22, Center for Latin American Development Studies, Boston University, December 1976.