



# **Can Trade Policy Help Resources for Economic Development?**

**Zdenek Drabek and Sam**

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# **Can Trade Policy Help Mobilize Financial Resources for Economic Development?**

by

**Zdenek Drabek and Sam Laird**

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## **Abstract**

The linkages between trade and resource mobilization are complex and not well defined in theory. To what extent does trade policy affect resource mobilization and what are the mechanisms? A critical issue in this respect is that trade policy affects the current account imbalance without necessarily affecting the fundamental balance between aggregate savings and investment. Trade restrictions may, therefore, only be used to correct short-term disequilibria. However, trade policy can be used to mobilise resources via the static and dynamic gains from trade. The effect on the supply of financial resources also operates through several channels including through linkages of trade policy with foreign investment, government revenues, income distribution, and foreign aid. The paper looks at direct and indirect as well as the short- and long-term effects of different trade strategies. We also briefly review trade barriers in goods and services affecting developing countries and the potential gains from further trade liberalization. The long-term gains from trade liberalization are substantial, but they may have to be set against short-term adjustments. Such costs may be substantial, although they could be reduced by effective institutional and tax reforms.

## **Outline**

1. Background
2. The Role of Trade Policy in Development Financing
3. Autonomous Trade Reforms
4. Liberalization Through Trade Negotiations

## 5. Conclusions





## I. BACKGROUND

With the background of the violent protests of "anti-globalizers" in Seattle, Washington, Prague, Göteborg and, most recently, in Genoa, trade policy makers are no strangers to controversy. Liberal trade policies have been traditionally targeted as the primary reason for loss of domestic jobs due to foreign competition. Most recently, the critics have expanded their "arsenal" of attacks by blaming trade liberalization for poverty, income inequality, marginalization of countries in the globalized world, poor labour standards, environmental degradation and even for social instability and political turmoil, to name just a few. Proponents of liberal trade policies have been having their plate full of so many different attacks that they must wonder whether they have started a new book of "genesis".

There have been wide ranging attacks in relation to the debt burden, foreign aid and the role of multinational firms, but there has so far been relatively little informed discussion of the crucial question for developing countries concerning the linkages between trade and resource mobilization. Certainly the inter-linkages are complex, but the low-level of the debate is surprising because resource mobilization and the improved allocation of scarce resources are the keys to sustainable long-term financing of economic development which, in turn, is at the heart of poverty, lack of education, poor medical standards, spread of diseases, malnutrition, open or disguised unemployment, low incomes and even environmental degradation. More resources would help developing countries tackle social programs, poor infrastructure, and weak private sector investment. It is, therefore, fortuitous that the issue has recently been raised by international policy makers.<sup>1</sup>

The linkage between trade policy and resource mobilization is also interesting from a theoretical and conceptual angle. The relevant branch of economic theory - growth theory - has surprisingly little to say about the nature of the linkages. Starting from Solow's growth model, modern theory is focussed on the role of capital accumulation,

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<sup>1</sup> In December 1999, the United Nations General Assembly agreed to hold "a high-level intergovernmental event of political decision makers, at least at the ministerial level, on financing for development". See Resolution A/RES/54/196 published on 14 January 2000. The meeting is now planned for the first quarter of 2002. The UN Secretary-General has been requested "...to initiate ...preliminary consultations with all relevant stakeholders, in particular the World Bank, the International Monetary Fund and the World Trade

labour, technical progress and the degree of substitutability between production factors. Trade enters the theory only as an instrument of capital accumulation or a factor stimulating domestic competition and thus the elasticity of substitution. The World Bank "two-gap" model of economic growth, used as the analytical tool for economic advice of the World Bank to client countries, is not a formal model derived from a theory but a framework based on accounting identities. While these identities include an external balance as an element of the model, the mechanism influencing the balance is unclear. Perhaps the "growth model" closest to the examination of the trade policy–resource mobilization linkage is the well-known Prebisch model of economic development. However, even this model does not provide clear answers to the problem at hand. The main reason is that the model only addresses the question of terms of trade as a specific issue of international trade. It does not, therefore, address the much broader questions of the linkages between trade and finance.

The present paper seeks to fill this gap. The purpose is not to formulate a new theory or a model of growth in which trade policy would figure prominently as a separate argument. Rather we attempt to outline the main linkages between domestic resource mobilization and trade policy. We outline in conceptual terms various areas in which trade policy operates and the channels through which trade policy affect domestic resource mobilization. The discussion is not merely of hypothetical situations but also looks at practical evidence. We ask the following simple questions. How can trade policy affect domestic resource mobilization? What are the main channels through which trade policy operates? What is the evidence that trade policy has been instrumental in stimulating domestic resource mobilization?

A discussion of the linkage between trade policy and resource mobilization could theoretically cover the following areas – mobilization of domestic resources, mobilization of foreign resources, international financial cooperation such as ODA, external debt and coherence and consistency of international monetary, financial and trading systems, and perhaps others. While undoubtedly interesting, these areas cannot be covered in a short paper. We have, therefore, decided to limit ourselves only to three of these areas – mobilization of domestic resources, foreign direct investment and aid and the role of

international trade negotiations. The latter is, of course, only a sub-set of the latest systemic issue related to coherence and consistency of activities of international financial and trade institutions.

The paper is divided into the following sections. In Section 2 we identify and discuss the transmission channels of the effects of trade policy on domestic and foreign resource mobilization, including foreign direct investment and aid. In Section 3 we consider the question of autonomous liberalization and look at the empirical evidence on the effects of trade liberalization on economic growth and income distribution, on tariff revenues and on inefficiencies caused by trade protection. Whatever the merits of autonomous trade, it is a fact of life that most countries find it politically easier to liberalize when other countries are doing the same. We, therefore, include in Section 4 a discussion of the merits of trade liberalization through trade negotiations. The paper concludes with a discussion of the policy implications.

## **II. THE ROLE OF TRADE POLICY IN DEVELOPMENT FINANCING**

Trade régimes both in a home country and in the country's trading partners can have significant implications for development financing. Such régimes reflect a variety of national sectoral strategies and fiscal choices. In the area of goods, trade instruments include price-based or non-price based measures, which may be applied at the frontier (e.g., tariffs, import restrictions or export subsidies) or domestically (e.g., discriminatory internal taxation, domestic licensing, regulations, investment incentives or other subsidies). In the area of services, intervention more often takes the form of domestic regulation, which may be applied equally to domestic and foreign service providers or more restrictively against foreign suppliers.

### *(i) Trade Policy and the Fundamental Macroeconomic Balances*

The link between trade and development financing operates both directly and indirectly. The direct link between trade policy and development finance is principally through the savings-investment mechanism. Those developing countries that have achieved a high and sustained economic growth and development record over the past forty years have generally maintained high savings-investment ratios (often around 30 per cent of GDP)

while those in which economic growth and development have languished, including the LDCs, have extremely low domestic savings ratios, and, as is well recognized even in the donors' circles, rely heavily on ODA for financing.<sup>2</sup> This is the first message that should be borne in mind in judging the relative importance of trade policy in promoting growth and development.

The direct link operates through the effect of trade policy on the level and pattern of domestic aggregate spending. This is evident from the fundamental macroeconomic identities that state that the country's national savings-investment imbalance must be exactly equal to the difference between exports and imports of goods and services. This can be expressed as:

$$Y - E = S - I_d = X - M = I_f$$

Where Y - Net National Product

E - National expenditures

S - Domestic savings

I<sub>d</sub> - Domestic capital formation

X - Exports of goods and services

M - Imports of goods and services

X-M - Current account balance

I<sub>f</sub> - Net foreign investment (negative value implies a capital inflow)

These identities make it clear that the excess of expenditures over domestic production is mirrored by a savings shortfall and a current account deficit that need to be financed by a net capital inflow. When restrictive trade policies are used to reduce imports, improving a negative current account balance, this must correspond to a reduction of a negative domestic output gap (by increasing production or decreasing spending or both). This must also be reflected in a decrease in the domestic savings-investment imbalance - i.e. the domestic resources gap (by saving more or investing less) and in a reduction of the net capital inflow. An increase in the shortfall of national resources available for national investment can only be financed through an increase in the current account deficit and a

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<sup>2</sup> See, for example, the above-mentioned UN Secretary -General's report.

corresponding net capital inflow. To put it differently, a restrictive trade policy reduces the current account deficit in the short-run without necessarily forcing up the domestic savings rate (that is, maintaining domestic consumption) or without forcing a reduction in national investment.

We must emphasize that the use of restrictive trade policy in this way can only operate as an instrument of balance-of-payments adjustment if the country's balance-of-payments is in a temporary disequilibrium due to external factors which are also temporary. The latter may include, for example, seasonal fluctuations of commodity prices or temporary disruptions in the supply of foreign capital. While normally preferable, alternative policies may not be readily available to governments. These policies would include external borrowing, but this may be constrained by the country's poor access to foreign capital or by high costs of foreign borrowing or by the country's excessive external indebtedness. The alternative balance-of-payments policy would require domestic adjustment (reducing domestic consumption or investment and, most likely, employment), and the latter typically takes time to work itself through the system. Most importantly, if there is no domestic adjustment on the side of investment or savings, the short-term balance-of-payments disequilibrium becomes permanent, and the country will be run unsustainable current account deficits.

In cases of temporary disequilibria, the balance-of-payments imbalance may be corrected by restrictive trade policy measures – a fact that is also recognized in the WTO agreements. The latter permit temporary restrictions on imports for balance-of-payments purposes under the provisions of Articles XII and XVIII.B. The actual cases of notifications in the WTO are summarized in the following Table 1. The table shows the notifications of each case of trade restrictions imposed on the grounds of payments difficulties. As can be seen, some countries have notified twice. The table confirms that balance-of-payments difficulties of countries have been "assisted" with restrictive trade policies only in a limited number of cases in the establishment of the WTO (1995). In addition, the restrictions have been only applied as short-term measures as mandated by Article XVIII.B of the GATT 1994

**Table 1**  
**WTO: Trade Restrictions Notified for Balance-of-payments Reasons – 1995-2000**

Country	Prior to 1995	1995	1996	1997	1998	1999	2000
Argentina	disinvoked 1991						
							still invoking
	disinvoked 1991						
Bulgaria				notified			
Colombia	disinvoked 1992						
Czech Republic				notified			
Egypt		disinvoked					
Hungary		notified					
India			notified				disinvoked
Israel		notified/disinvoked					
Nigeria				notified	disinvoked		
Pakistan			notified				still invoking
Peru	disinvoked 1991						
Philippines		disinvoked	notified				
Poland			notified				
Romania					notified		
Slovak Republic		notified					
South Africa		notified					
Sri Lanka			notified		disinvoked		
Tunisia			notified	disinvoked			
Turkey			notified	disinvoked			
Yugoslavia							

Source: WTO, Balance of Payments Committees and the General Council

While the restrictive trade policies may be suitable for balance-of-payments adjustments in the short-run, they are typically neither conducive to the process of resource mobilization, nor to a sustainable balance-of-payments equilibrium in the long run. The policies act as an instrument of expenditure switching – from imports to domestically produced goods – as well as a mechanism of reducing domestic aggregate spending due to the reduction in domestic real incomes resulting from higher domestic prices. In either case, they tend to reduce real incomes as domestic consumers shift their spending to higher priced, domestically produced tradeables. Thus, the expenditure switching encourages the domestic production of commodities that will require some form of government support either in the form of subsidies or tariff protection or some other form of government intervention. Without this intervention, these production activities are unlikely to be profitable, and the support can only be justified if it serves a particular public policy goal or if the support itself is temporary. If the temporary support turns into a "permanent" one, the support itself is likely to run out of funding especially if protection becomes widespread and a significant drain on domestic resources.

The long-run effectiveness of restrictive trade policies both for balance-of-payments purposes and to mobilize resources for development is dependent on a critical assumption. This assumption is that the restrictive trade policies are imposed in an economy that is basically "competitive", i.e. that the domestic savings-investment balance is sustainable in the long run. Only then will the short-run equilibrium achieved with the help of import restrictions be also sustainable. Without a "competitive" economy, the country sooner or later must run into balance-of-payments difficulties and hence will need further costly domestic adjustments. The short-run equilibrium will be sustainable only if there is no need to reduce the *desired* level of expenditures or if expenditure switching fully reflects the desired pattern of demand<sup>3</sup> or if domestic producers become fully competitive with foreign competition. If the economy is not "competitive", it must adjust to the changes in internal or external conditions. In other words, it will be the domestic adjustment that will ultimately generate the required resources for domestic development, not the reduction of imports resulting from restrictive trade policies. *Pari passu*, restrictive trade policies will not work to produce a sustainable current account balance – this can only be achieved by a competitive domestic economy. The lack of competitiveness takes us to the second

import effect of trade policy - the indirect effect that will be addressed in the next section and later when we discuss the matter "infant protection".

We must note, however, that the short-term disequilibria may in practice be sustained for a number of years. For example, current account deficits may be financed by a surge in foreign capital inflows. These capital flows may "overshoot" the level of foreign financing needed to maintain the savings-investment balance in the long-term equilibrium. The "excess" of foreign savings will obviate the need to undertake domestic adjustments and delay the introduction of measures to increase domestic savings or to reduce domestic investment or both.

The implications of restrictive trade policies for resource mobilization are quite serious. Under restrictive trade regimes, a large proportion of domestic resources is tied or devoted to the support of activities to maintain current employment rather of a creation of new jobs and opportunities or of funding social expenditures. If the country runs into balance-of-payments difficulties in the process, it will have to increase the resources needed for adjustment and reduce the resources for social programs even further. Moreover, the policies may also reduce the access to external borrowing as we shall see further below. Since external loans represent a *supplement* to domestic resources, restrictive trade policies tend to diminish the aggregate amount of resources available for domestic development.

(ii) *Trade Policy and Allocative Efficiencies*

The indirect link between trade policy and domestic resource mobilization operates through the effects of trade policies on economic efficiency. This link is key to "competitiveness", as noted above. These effects have, in turn, two origins. The first type of efficiency gain originates in the reallocation of resources towards the sectors in which countries exhibit comparative advantage. Once trade policy is liberalized, domestic relative prices will change, and so will the pattern of production. The efficiencies will emerge from an increase of those production activities that will be using more intensively the relatively more abundant factors of production. These efficiency gains come, therefore, from inter-sectoral shifts, and the latter are made possible by changes in the

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3 To put it differently, consumers must *prefer* to spend their income on higher priced domestic products than on



structure of protection away from sectors with comparative disadvantage to sectors with comparative advantage. It should be noted that these *static gains* are time bound; once resources have been moved to more productive uses no more gains can be realized until a new pattern of relative prices emerges in the market or factor endowments change.

The second indirect type of efficiency originating in changes of trade policy can be attributed to increases of productivity generated by increased competition and the emergence of new forms of international trade, the *dynamic gains*. By definition, trade liberalization increases competition in the domestic markets and has a direct relationship to competition policy. In some situations, trade policy may act as complement to competition policy; in other cases, trade policy may be a substitute for competition policies. The reason for this close relationship between trade and competition policies is that the goals of both policies are the same – to increase consumer welfare through the enhancement of efficiency.<sup>4</sup> In either case, more liberal trade policies tend to lower costs due to the elimination of x-inefficiencies (the elimination of dead-weight losses), and increase competitive pressures requiring new investments and technological advancement. For many observers, these sources of efficiency gains are dominant under current conditions of international trade and more important than the gains from static inter-sectoral shifts.<sup>5</sup>

The importance of trade policy for static and dynamic gains has been succinctly stated: ‘Current thinking has evolved away from seeing gains from either trade liberalization or from moving from less to more effective competition within markets as ‘one-shot’ (i.e., static) in nature. The changed thinking is based on the recognition that the main driver of efficiency gains in the medium and long run is not the reallocation of resources in a static sense but rather the enhancement of total factor productivity’ (Graham, 2001: 1175).

Trade liberalization will also encourage new forms of trade such as intra-industry trade. It is well known that the share of intra-industry trade has dramatically increased. The

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cheaper imports.

<sup>4</sup> For more discussion see Graham (2001).

<sup>5</sup> Building on the theoretical work of Feenstra and Hanson, Smith (2000), for example, has been stressing the point that skill differentials within countries is the critical determinant of trade flows at present. He argues that there is no longer much room for traditional trade policy which primarily targets inter-sectoral resource allocations. See also Feenstra and Hanson (2001).

increase has been particularly sharp in mutual trade of developed countries, but several transition and developing countries have also benefited.<sup>6</sup> Intra-industry trade reflects increased degree of international trade specialization that will often reflect different consumer preferences or skill differentiations rather than differences in factor endowments. These new forms of trade will only flourish under more open trade regimes. In sum, trade policy reforms aim to improve resource allocation in the economy, to increase its efficiency and competitiveness, and to stimulate growth and the supply capacity of the country.

*(iii) Trade Policy and Foreign Investment*

The national accounting identities go some way to helping an understanding the link between trade policy and movement of foreign capital. But there is an underlying and more complex policy linkage that is significant for the long term. In this sense, the question one needs to ask is whether trade policy can encourage or discourage inflows of foreign capital, and if so how? Perhaps the best understood linkage is the one between trade policy and foreign direct investment. Under certain conditions restrictive trade policies act as an incentive for foreign investment. Foreign firms have a choice between sales of their products in the form of exports or through production by their affiliates abroad. If they opt for the latter approach, they will opt for FDI instead of direct exports. The approach is known as "tariff jumping". This will be the case of what is known as horizontal FDI, that is FDI whereby multinational firms produce final goods in multiple locations.

But even in the absence of "tariff jumping" trade policy can play an extremely important role in attracting foreign investment. This will happen whenever foreign affiliate firms depend on the access to imported inputs. Trade and FDI are in such a case "complementary". The classical example of complementary trade and FDI is vertical FDI, that is, when multinational firms geographically split stages of production and integrate the production from global production units. Foreign affiliate firms may also seek wider access to export markets that are similarly will be dependent on trade policies. Examples

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<sup>6</sup> See, for example, Drabek and Greenaway (1984) and Laird (1981) which are among the first studies covering countries outside the OECD area. The same conclusions have been reached in a number of subsequent studies.

of such policies include the use of export taxes or subsidies or regional trading arrangements.

While countries may be sometimes tempted to attract foreign direct investment by imposing tariffs on imports, this policy is likely to have only limited success, especially in countries whose domestic market is limited in size. A recent study on the subject has concluded: 'FDI attracted to protected markets tends to take the form of stand-alone units, geared to the domestic market, and not competitive for export production. Indeed, high tariffs on imported raw materials and intermediate production can further reduce international competitiveness, especially if local imports are costly or of poor quality ... [Thus] a low level of import protection – especially if it is bound – can be even stronger magnet for export-oriented FDI than [various incentives schemes such as] duty drawback schemes' (WTO, 1996: 51).<sup>7</sup>

The impact of trade policy on foreign direct investment can be critical. When foreign firms make plans to invest in a foreign country they appraise their new investment in world prices. For these firms world prices constitute the real opportunity costs of investing in country A rather than in country B or rather than in their home country. If the transactions in the host country are distorted by higher prices of inputs or government interventions on pricing of outputs they will consider alternative host countries for their investment. It is clear that government interventions as well as market imperfections can play a decisive role for multinational firms to invest in a particular country or not. Clearly, trade policy matters a great deal to those investors whose investment may be critically affected by trade restrictions.<sup>8</sup>

These conclusions are also supported by empirical evidence (WTO, 1996, 50-5). Comparing open Asian economies with Latin American countries suggests that low levels of protection are important in attracting export-oriented FDI. This is revealed from aggregate FDI inflows and from the ratio of exports to total sales of Japanese affiliates in these countries.

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<sup>7</sup> The study is also a useful summary of the literature on the relationship between FDI and trade policy.

<sup>8</sup> Liberal trade policy will not guarantee the inflow of foreign capital. Even in the absence of other domestic distortions – admittedly a strong assumption for many developing countries – FDI inflows will be dependent on the relative host country's characteristics such as relative factor endowments, relative size of its market and trade costs. For a theoretical discussion see Markusen (1995) and his subsequent work.

Domestic investors with global orientations will pursue similar logic of rationalization. However, domestic investors without global orientations may not always have the same choice. They may be too "small" to be international, lacking economies of scale or resource endowments. Or they may be "inward-looking" failing to take advantage of opportunities abroad. Whatever the circumstances, these firms produce at costs that are higher than foreign competition and probably require protection. The calculation of internal rates of return based on domestic prices will only bring positive yields, *ceteris paribus*, if revenues from the new investment are generated in protected markets. This would arise because foreign suppliers of the same goods or services may have comparative advantage and will be, therefore, more competitive for a variety of reasons, including a policy environment that is more conducive to their operations.

The real question then is whether governments should maintain trade restrictions in order to encourage investment decisions. In other words, how should investment decisions be made in protected industries? How should the investment decisions be evaluated? The answer to these questions is that governments should only provide the protection if the protected firm can demonstrate that it will become competitive and eventually earn a "normal" rate of profit on production at world prices (in the absence of externalities). To this end, the firm will also require that it purchase its inputs at world prices.<sup>9</sup> In other words, to the extent that governments pursue trade restrictive policies in order to protect domestic industries, they should only do so as a temporary policy stand which allows domestic firms to become world competitive.

This is obviously not a general prescription for permanent protection, a policy that could only be pursued in practice by governments that have the capacity to appraise projects in world ("shadow") prices, that can work in partnership with domestic industry, and that are not overburdened with administrative requests for protection,. This has been the case in relatively few countries that have at times been able to pursue this approach with varying degree of success as "strategic trade policy", for example, some countries in East Asia. But there are also examples of countries when the policies failed because some or

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<sup>9</sup> To the seasoned reader this argument is on familiar territory, following the early literature on project appraisal and the original work of Little and Mirlees (1974).

all of the assumptions noted above did not apply or where circumstances changed in the same countries (e.g., Korea) and policies have had to be adapted.

*(iv) Trade versus Aid*

It is also quite plausible that there are important linkages between trade and another key component of foreign resources - foreign aid. The first important issue is whether aid should be seen as a replacement or complement to trade. Why should aid even enter into debates about the role of trade policies? The second interesting question is whether trade policy can have an effect on the supply of foreign aid and if so how and what is the mechanism through which trade policy may operate? The linkages between trade and aid are not entirely obvious and they are also not based on strong theoretical foundations. Nevertheless, the linkage can be observed from real world situations.

Let us start with the first question – is trade a complement to aid or not? This question has been recently posed on various occasions. For example, several transition countries, currently negotiating the accession into the European Union, have consistently argued over time that they prefer to secure a free and stable market access for their exports rather than aid from the EU. Their motivation was based on their fears that aid could be used as a pretext to delay internal measures to open the EU markets for exports from the candidate countries.<sup>10</sup> But there is also another reason why trade may be preferred to aid – the gains from trade could theoretically far exceed the amount of resources available for aid.

The latter point was made in a recent study from the Tinbergen Institute at Erasmus University, which estimated the gains from trade resulting from the elimination of trade barriers at US\$155 billion a year, over three times the US\$ 43 billion they get annually from overseas aid (Francois, 2000). While, these estimates are based on certain assumptions, it is evident that, under ideal conditions of "free trade" and an elastic supply response, the gains from trade would be enormous. So, the real question is whether countries can generate through their own policies and institutions a sufficient supply response to allow them to take the full advantage of new market opportunities. Similarly,

how realistic is it to assume that markets will be opened in key sectors? Both of these conditions imply that aid will be a necessary complement of market reforms, including trade policy reforms for some time to come.

There are, however, circumstances in which aid can even have negative effects on exports. For example, a sufficiently large amount of aid may cause upward pressure on the exchange rate, making exports less competitive in world markets. This happened in El Salvador in the late 1980s, when there were large inflows of US aid. The phenomenon has also been observed in other countries. This is not an argument against aid, but a cautionary note about trade-aid linkages.

Let us now turn to the second question – whether trade policy can have any effect on the supply of foreign aid. We strongly believe that the answer is affirmative. Consider the following. The donors' perception of aid effectiveness varies greatly and so therefore does the intellectual support for it.<sup>11</sup> The reasons for the scepticism is not the failure to recognize the positive values of a *marginal dollar of investment* but the criticism of the process of identification and implementation of projects financed under foreign aid programs. The only way, it would seem, to convince the sceptics would be if recipient countries had or could create the institutions that are critical for aid delivery and if they pursued supply-side policies designed to increase their competitiveness. One, but only one, such element of these policies is likely to be more open, credible and predictable trade regimes.

The empirical evidence is again rather fragmentary but what has been emerging suggests that aid and good policies are quite closely related. Using a new data base on foreign aid, economic policies and growth of per capita GDP, Burnside and Dollar (1997) find that aid has a positive impact on growth in developing countries with fiscal, monetary, *and trade* policies (emphasis added). In other words, aid will be effective only if domestic policies are right, and it will be wasted if domestic polices are wrong. They also find that aid does

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10 These issues were especially pertinent at the time of negotiating the Europe Agreements – the predecessor of the countries accession agreements.

11 The latter ranges from completely negative attitudes of economists such as Bauer to those such as Sachs who blame the inadequate provision of aid as the major source of economic failures of developing or transition countries.

not appear to affect policies either for good or for ill. Any tendency for aid to reward good policies has been overwhelmed by donors' pursuit of their own strategic interests.<sup>12</sup>

*(v) How Much Foreign Resources?*

How closely trade policy is related to foreign aid will ultimately depend on the success with which trade policy is effectively consistent with other domestic policies and institutional support. This will determine the extent to which the country in question will be able to mobilize domestic resources by appropriate domestic policies and how much the country will have to obtain by borrowing or through foreign aid.

Later in this paper, we look at some recent estimates of the welfare gains from trade liberalization. However, it is to be noted that some economists place greater weight on good governance (which is also encompassed by trade negotiations on rules, increasingly encroaching on domestic regulation) than on liberalization. In either case, higher economic activity will tend to generate increased government revenues for developmental spending, even from the same rate of domestic taxation. But, as discussed in the next section, this increase in growth and hence in tax revenues from liberalization may not occur in the short term, especially in low-income economies; trade liberalization may lead initially to declining revenues and economic adjustment costs may be high. This pattern may also not apply in small economies where most goods are imported and where domestic indirect taxation is therefore effectively equivalent to a tax on imports alone.

The issue of the optimal balance between raising government revenues from trade taxes and increasing flows (earnings) to the private sector is also an open question. Government revenues associated with a particular trade régime are normally construed by economists as a transfer from the private sector (consumers or industries using imported goods). Trade intervention is thus seen as reducing welfare, and, in the absence of externalities, as leading to a less efficient allocation of resources. The question posed is whether development goals are likely to be best served in the long-term by augmenting

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<sup>12</sup> The Burnside and Dollar results have been much debated in the literature. Various economists have contested the Burnside-Dollar findings as insufficiently robust such as, for example, Dalgaard and Hansen (2000) but also Tarp, Morrissey, Lensink, White and others. For more details, see the discussion in CREDIT research papers (<http://www.nottingham.ac.uk/economics/credit/research/index.htm>).

government tariff revenues (thus creating resources available, for example, for social or infrastructural spending), or, through trade reforms, by improving the liquidity of the private sector and thus the incentives to invest. The choice is complicated by the fact that, in practice, autonomous trade liberalization, liberalization under regional trade agreements and that resulting from multilateral trade negotiations may all affect government revenues in a positive or negative manner. Industrial countries and a number of developing countries have been able, under fiscal reforms, to transfer the burden of revenue raising to domestic indirect taxes, in particular value-added tax, which is considered to be more neutral in terms of the allocation of resources. Such reforms have generally been more difficult in developing countries, particularly in small economies.

The extent of domestic adjustment will also depend on the country's ability to generate sufficient resources from its exports either in order to mobilize foreign exchange or to generate revenues and thus help augment domestic savings. However, market access for developing countries is still adversely affected by trade barriers, both in developed and developing country markets. To some extent these may be addressed in mandated negotiations in agriculture and services in the WTO, but there is a need to extend the WTO negotiations to include industrial products, in which most developing countries have an increasing export interest. Finally, it must be kept in mind that market access, while crucially important for developing countries, is only one element in the trade-finance-development link. Without an effective capacity in developing countries to supply goods and services, market access will be meaningless. It is therefore essential that efforts to improve market access and efforts to improve the supply response go hand in hand. The latter may encompass policies that go far beyond the limited field of trade.

### **III. AUTONOMOUS TRADE REFORMS**

#### *(i) Effects on Growth and Income Distribution*

Most economists accept that trade liberalization makes a positive contribution to economic growth (the single most important trade and development issue), at least in the medium to long term.<sup>13</sup> However, this relationship between openness and growth is essentially an empirical matter, as economic theory provides no formal linkage. Thus, other economists criticise the econometric evidence, and emphasise the importance of

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<sup>13</sup> See, for example, Sachs and Warner (1995).



governance rather than openness *per se*.<sup>14</sup> Moreover, even among economists who accept the general proposition, there is recognition that the short-term effects need not be positive. A recent survey reaches the conclusion that "inasmuch as openness to international trade (in low-income countries) and limited government intervention (everywhere) do not correlate with growth" (Mosley 2000) it is necessary to widen the basic IMF prescription for growth, i.e. "openness toward international trade, macroeconomic stability and limited government intervention in the economy" so as to include measures aimed at correcting endogenous distortions in income distribution and in the capital market.<sup>15</sup>

Apart from the absence of any theoretical linkage, one reason for the lingering uncertainty about the beneficial effects of trade liberalization on economic growth relates to the difficulty of measurement of the degree of openness. This is because non-tariff barriers (NTBs), whose use has been declining but which remain important especially in agriculture, textiles and clothing and services, have multiple effects that may vary across time and in response to changes in international markets (Laird 1997). Even tariffs are sometimes applied as specific or mixed rates or tariff rate quotas whose *ad valorem* or percentage equivalents can be difficult to estimate. Moreover, MFN tariffs often coexist with regional or other preference schemes and complex rules of origin. The measurement problem is compounded when NTBs and tariffs are used in conjunction ("stacking"). In addition, in countries that have undergone major trade reforms over the past decades, there have been complex and inter-linked policy changes. For example, reduction in the use of NTBs has often gone together with rationalisation and simplification of tariff régimes; including, in some cases, the elimination of distortive tariff exemptions from the payment of customs duties. In some instances, zero rates have even been eliminated in order to increase tariff revenues and compress effective rates of protection so as to improve resource allocation.

In recent years, there has been extensive autonomous liberalization, especially among developing countries and transition economies (although among OECD countries,

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14 See, for example, Rodrik (1999).

15 It may be noted that in the 1990s Chile adopted more socially oriented spending programmes in health and education without any slackening of the real growth rate of some 9 per cent an year (up to the Brazilian crisis of 1998). WTO (1997).

Australia and New Zealand have also proceeded with important trade liberalization programmes).<sup>16</sup> As a result of reforms at the unilateral, regional and multilateral levels, weighted averages of applied industrial tariffs in industrialized countries have fallen to around 3-4 per cent today, opening markets substantially, and leading economic growth.

As noted, the weight of evidence is that, in the medium to long term, increased openness is associated with faster economic growth. This is in turn recognized as a prerequisite, although not a sufficient condition, for economic development; and economic growth and development may, but not necessarily, be associated with social development. The philosophical, policy, and temporal linkages between open trade, growth, and broader development are complex and subject to considerable debate.

At the same time, globalization has been accompanied by a process of changing income distribution with some indications of increased income inequality.<sup>17</sup> Some empirical studies of income distribution have shown that income inequality within developing and industrialised countries has increased in the last two decades, and that it affected not only the income distribution between high and low income families but also between high-and low-skilled labour. The pattern of changes of income distribution over time in developing countries seems to be less clear-cut. The widely quoted study of Dollar and Kray (2000) has, however, shown that economic growth is neutral with respect to income distribution even though, as the authors themselves point out, the results are based on statistical evidence with significant variations among countries. In other words, their results were statistically significant *on average* rather than for all countries. Moreover, the participation of *countries* in the globalization process has also been uneven leading to an increased gap between the high-income countries and low-income countries.<sup>18</sup>

Where it has occurred, increased income inequality has produced a lively academic debate about the causes of this phenomenon. Critics of globalization have attributed the origins of increased inequality to globalization *per se*, and this position is taken by a number of

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16 See Drabek and Laird (1998) and WTO (1996), Volume I.

17 For empirical evidence see, for example Atkinson (2001).

18 Even stronger results have been obtained by Mbabazi, Morrissey and Milner (2001) who find a consistent evidence for a negative effect of inequality on economic growth in the long run and no evidence that inequality has any effect in the short run. Moreover, they find a robust, positive relationship between trade liberalization and economic growth.

developing countries in international economic and financial fora. However, detailed investigation and empirical testing over the last decade have led to different conclusions. The acceptance of these conclusions is in turn so widespread and firm by now that it has led to what is known as the "transatlantic consensus".<sup>19</sup> The debate started from the examination of income differentials in industrialized countries, and the consensus has been essentially reached in attributing the causes of inequality to differences in technical progress, differences in skills, shifts in demand towards high-skill products and the emergence of "global production sharing", that is, increased trade in intermediate products.<sup>20</sup> At the same time, there is an important body of literature that claims that international trade is *not* a significant factor in explaining the movement of wages.<sup>21</sup> This is supported by the fact that trade of industrialized countries with developing countries is too small to lead to the observed differences in wages. In addition, the movement of prices across industries contradicts the movement of wages.<sup>22</sup> The debate has been perhaps less pronounced with regard to developing countries but the debate has identified similar forces of changes in income distribution.<sup>23</sup>

What has all this discussion of economic growth and income distribution have to do with development financing? The answer is that trade liberalization can contribute to development financing by encouraging both the possibility of absolutely cheaper imports and their substitution for relatively less efficient domestic production, releasing, therefore, resources for other uses. Trade liberalization is most likely to encourage growth of intra-industry trade and thus contributing to growth of total trade and growth of incomes. Trade liberalization may also encourage trade in intermediate products and thus growth of FDI inflows.

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19 The term is attributable to A. B. Atkinson who has recently reviewed the literature supporting the "consensus" and who has also raised some unresolved issues that the "consensus" need to address. See Atkinson (2001) which is based on his WIDER Annual Lecture in Helsinki in 1999. A useful survey can also be found in Mbabazi, Morrissey and Milner (2001).

20 For a survey of the relevant literature, see Feenstra and Hanson (2001).

21 See Dawkins and Kenyon (2000) for a review of literature, which largely shows that technology is the driving force. Wood (1995) finds a much greater, but still modest trade effect. Of course, to some extent, technological change and trade may also be linked endogenously.

22 The idea is that we should have observed the prices of the least-skill-intensive goods to have fallen relative to other goods in order to be the cause of the fall in the relative wage of less-skilled workers. See Laurence and Slaughter (1993)

23 See, for example, Bourguignon and Morrisson (1998) and Cornia (1999).

Changes in income distribution are also most likely going to have an impact on the availability of development finance. The effect will be critically dependent on the differences in the marginal propensity to consume (hence to save) as between high-income and low-income households. If high-income households have a higher propensity to save from the extra increase of their income than low-income households, the aggregate savings will increase from the increased share of high-income families in total population.

As we have already noted, there are, of course, at least short-term risks associated with trade liberalization for strategies to maximize development resources. These include, in particular, balance-of-payments risks and structural unemployment. The risk of adverse balance-of-payments effects from trade liberalization can be, and has in practice been, avoided by most developing countries through the shift that they have made from the extensive use of trade restrictions to greater emphasis on monetary and fiscal measures for economic management. The risk of adverse social consequences may need to be addressed by social safety nets, retraining and structural adjustment programmes to facilitate change and minimise social disruption. In either case, trade liberalization is a necessary, but not a sufficient condition for financing for development.

*(ii) Administrative Considerations and Revenue Effects*

With tariff reforms, the average level of revenue from tariffs worldwide has declined. As a broad measure of tariff reform, taking account of preferences and exemptions, in the last 25 years, Table 2 shows a decline in tariff revenue collected as a share of the value of imports over all regions, but most pronounced in the OECD area. For other regions there was virtually no change up to 1985, and then all regions show a decline as the pace of liberalization gathers. Table 3 shows a decline in the use of NTBs in OECD countries between 1989 and 1995 (essentially showing the results of the Uruguay Round, except that textiles and clothing NTBs are scheduled to decline through 2005). A similar pattern of reduced use of NTBs by developing countries in this period has been shown by Michalopoulos (1999), although directly comparable data are not available. Overall, while there is strong evidence of liberalization, the data and econometric analyses based on such data are not sufficiently clearcut to withstand all criticism.

**Table 2**

**Collected Tariff Rates by World Region**

(percentage of value of imports)

<b>Region</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>Latest year</b>
All countries	12.62	11.36	12.27	11.05	9.70
OECD	5.81	4.19	3.51	2.88	1.69
Non-OECD	15.64	14.27	15.89	14.37	12.91
Africa	19.31	17.36	19.09	18.17	16.01
Asia/Pacific	14.05	12.04	15.63	16.51	13.13
Middle East	16.47	14.33	14.07	10.70	11.39
Western hemisphere	12.37	12.67	13.77	11.09	10.26

Source: Ebrill, Liam, Janet Stotsky and Reint Gropp (1999), "Revenue Implications of Trade Liberalization", Occasional Paper 180, IMF, Washington D.C.

Note: Latest year is 1995 for most countries or 1996 for some countries. OECD excludes Czech Republic, Hungary, Luxembourg and Poland.

Table 3

Import Coverage of Major NTBs in OECD Countries

<b>(A) 1989</b>										
Indicator	Australia	EU	Iceland	Japan	New Zealand	Norway	Mexico	Turkey	Switzerland	USA
All NTBs	3.4	26.6	n.a.	13.1	14.1	26.6	2.0	0.1	12.9	25.5
- Core NTBs	3.4	25.2	n.a.	12.5	14.1	25.2	2.0	0.0	3.3	25.5
Quantitative restrictions (QRs)	0.5	19.5	n.a.	11.7	13.9	19.5	1.9	0.0	1.7	20.4
- Export restraints	0.0	15.5	n.a.	0.3	0.0	15.5	0.0	0.0	0.0	19.5
- Non-auto licensing	0.5	4.4	n.a.	8.9	0.0	4.3	1.8	0.0	0.4	0.0
- Other QRs	0.0	0.2	n.a.	2.8	13.9	0.2	0.2	0.0	1.4	6.6
Price controls (PCMs)	2.9	12.4	n.a.	0.8	0.3	12.4	0.1	0.0	1.6	17.8
- Variable levies	0.0	6.3	n.a.	0.8	0.0	6.3	0.0	0.0	1.5	0.1
- AD/CVs & Voluntary export price restraints (VEPRs)	2.9	2.6	n.a.	0.0	0.3	2.6	0.1	0.0	0.0	17.8
- Other PCMs	0.0	4.3	n.a.	0.0	0.0	4.3	0.0	0.0	0.1	0.0
<b>(B) 1996</b>										
Indicator	Australia	EU	Iceland	Japan	New Zealand	Norway	Mexico	Turkey	Switzerland	USA
All NTBs	0.7	19.1	3.6	10.7	0.8	4.3	14.1	0.4	7.6	16.8
- Core NTBs	0.7	15.1	1.5	10.0	0.8	2.6	14.1	0.4	0.2	16.7
Quantitative restrictions (QRs)	0.0	13.1	1.5	9.2	0.0	2.6	1.0	0.2	0.2	10.9
- Export restraints	0.0	11.4	0.0	0.0	0.0	1.2	0.0	0.0	0.0	10.8
- Non-auto licensing	0.0	1.5	1.4	8.6	0.0	2.6	1.0	0.2	0.0	0.0
- Other QRs	0.0	0.2	0.1	0.6	0.0	0.0	0.0	0.0	0.2	0.6
Price controls (PCMs)	0.7	3.2	0.0	0.7	0.8	0.0	13.1	0.3	0.0	7.6
- Variable levies	0.0	1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.1
- AD/CVs & VEPRs	0.4	0.9	0.0	0.0	0.8	0.0	13.1	0.3	0.0	7.6
- Other PCMs	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1

Source: OECD (1997).

Notes: “Core” NTBs are QRs and PCMs shown in the table, imposed “with the specific intent of modifying or restricting international trade” (OECD, 1997). Non-core NTBs include automatic licensing and monitoring measures. See OECD (1997) for further details of methodology.

An overview of taxes on international trade by region from 1975 to 1995/1996 is given in Table 4. Overall, the dependence on trade taxes is much higher in developing countries than in OECD countries. Over time, the reliance on trade taxes has declined as a share of GDP in all regions, from 4.2 to 3.2 per cent, with the sharpest reductions in export taxes. In the Asia/Pacific region, the ratio of trade taxes to GDP increased up to 1990 (falling slightly in the most recent year), while in Africa the ratio was relatively stable. The underlying data on individual countries shows considerable variability. In some cases, the ratio of trade taxes to GDP has risen even while data on collected tariffs have been declining, while in the Western Hemisphere (Latin America and the Caribbean), both ratios have moved in a relatively similar manner. Where domestic tax reforms have taken place, some countries have been able to shift from trade taxes to domestic taxation, improving resource allocation in the process. However, for small economies where most goods are imported, there may be very little difference in practice between trade taxes and other indirect taxes.

Trade taxes, while generally more distortive to the economy than indirect taxes on domestic activity, are relatively easy to collect compared to value added taxes, internal sales taxes, and direct taxes. However, tariff liberalization, short of free trade, need not always cause a loss of government revenues. Where import taxes have been prohibitively high, tariff reductions may, and indeed have, increased revenue. This effect may be even greater where tariff cuts are combined with elimination of non-tariff measures, as has been the case in many developing countries. Nevertheless, while this may occur in a first phase of liberalization, it is clear that governments cannot count on further reform as always increasing tariff revenues, and attention has to turn to improving systems of domestic taxation for revenue purposes.<sup>24</sup>

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<sup>24</sup> This point is developed by Ebrill *et al.* (1999).



**Table 4**  
**Taxes on International Trade by World Region**

(Percentage of GDP)

<b>Region</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>Latest year</b>
All countries	4.23	4.19	4.28	3.37	3.23
OECD	1.20	0.91	0.77	0.60	0.37
Non-OECD	5.30	5.21	5.36	4.39	4.25
Africa	6.67	6.22	6.50	5.28	5.50
Asia/Pacific	3.80	4.83	5.26	4.36	3.73
Middle East	5.01	4.32	4.16	3.49	3.59
Western Hemisphere	4.28	4.52	4.49	4.01	3.70
Of which:					
<b>Import duties</b>					
All countries	3.25	3.38	3.50	3.08	2.96
OECD	1.11	0.87	0.75	0.58	0.37
Non-OECD	4.00	4.17	4.35	4.05	3.91
Africa	4.98	5.01	5.30	4.97	4.94
Asia/Pacific	2.78	3.14	3.78	3.87	3.28
Middle East	4.34	4.18	3.95	3.28	3.48
Western Hemisphere	3.08	3.67	3.70	3.70	3.51
<b>Export duties</b>					
All countries	0.86	0.70	0.51	0.22	0.17
OECD	0.07	0.02	0.01	0.00	0.00
Non-OECD	1.14	0.91	0.66	0.30	0.23
Africa	1.61	1.14	1.04	0.31	0.33
Asia/Pacific	0.71	1.25	0.71	0.49	0.44
Middle East	0.56	0.09	0.05	0.04	0.05
Western Hemisphere	1.00	0.78	0.40	0.31	0.07

Source: Ebrill, Liam, Janet Stotsky and Reint Gropp (1999), "Revenue Implications of Trade Liberalization", Occasional Paper 180, IMF, Washington D.C.

Note: Latest year is 1995 for most countries or 1996 for some countries. OECD excludes Czech Republic, Hungary, Luxembourg and Poland.

Policy choices for or against autonomous liberalization and its impact on tariff revenues touch on some basic questions about the relative roles of government and the private sector in development. On the one hand, customs tariffs provide revenues that governments can use to carry out a range of development functions. Thus, according to

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the particular strategy being pursued, governments may give greater or lesser weight to social programmes in education or health. They may also take on the provision of physical infrastructure in support of trade, although this is often based on long-term borrowing from the international financial institutions, as the returns from such investment tend to be long-term and of less interest to private investors. There is considerable literature about the optimal tariff, as well as about the relative merits of different tariff structures in promoting development (the infant industry/economy argument). However, it is also clear that raising revenue from traded sectors through tariffs is a relatively inefficient and economically distortive means of doing so.

*(iii) Inefficiencies Caused by Protection and the Infant Industry Case*

Where governments rely on tariffs for revenue purposes, such trade intervention may cause certain economic losses, but these may be offset by externalities. The effects of tariff intervention are as follows: the government gains revenues from the tariff; in import-competing sectors, there is an increase in profitability as the duty-paid price rises, but consumers of these products and other industries that use these products as inputs into their own production will be negatively affected and there will be a loss in consumer surplus.

Tariffs or other forms of import protection create an anti-export bias because exporters have to pay more for inputs, as protected sectors can afford to pay (bid) more for factors of production (labour, land, capital). If demand for imports declines as a result of a tariff, this will reduce the demand for foreign currency, causing appreciation of the domestic currency. Home-produced goods will then become dearer in foreign markets, causing a fall in demand and a reduction in export earnings. The anti-export bias caused by import protection has been a compelling reason underlying trade reforms in the last 10-15 years, satisfying even mercantilist instincts.

Overall, in the absence of externalities, the increase in government revenue and the earnings of import-competing firms resulting from protection would be offset by a loss for consumers and a loss for exporters, and there would be a net efficiency loss. This analysis holds good whether the tariff intervention is in the form of a uniform tariff (used

by a few countries) or one that varies by sector.<sup>25</sup> If the tariff varies by sector but is on average the same as the uniform tariff, more highly protected sectors will gain more than less protected; overall revenue effects may differ depending on the relative elasticities of demand for different products; but the negative effects on export earnings (assuming that exchange rate adjustments restore equilibrium) will correspond to the positive effects on import revenues.<sup>26</sup>

There is also an equivalence between export subsidies and the promotion of imports. Thus, if export demand increases as a result of a subsidy, the demand for national currency increases, causing an appreciation, making imports cheaper and increasing demand for them. The use of export subsidies, especially in countries with scarce financial resources, cannot therefore lead to a net increase in foreign exchange, except in the short term. The case for export subsidies therefore also rests largely on the possible existence of externalities. In fact, while it can be argued that such subsidies can "kick-start" export development, their impact has been seriously questioned.<sup>27</sup>

Can efficiency losses linked with the imposition of tariffs be compensated by externalities associated with government intervention? Justification of sectoral intervention favouring import-competing manufacturing industry has a long history. Argumentation in the last half-century has largely been based on Prebisch and Singer's work on the secular decline in the terms of trade for agricultural commodities and the perception that only manufacturing could provide stability and jobs in developing countries. In support of this argument, it can be seen that the least-developed countries, whose trade remains concentrated in basic commodities, have suffered a declining share of world trade, whereas developing countries which have been able to diversify into manufactures have been able to expand their share (WTO 2000).

Following the Prebisch-Singer hypothesis, many developing countries from the 1960s and 1970s provided import protection for their manufacturing sectors under the "infant

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25 It can also be shown that there is an equivalence between import restrictions and tariffs, except under certain conditions of imperfect competition, but the main difference is that there are quota rents whose allocation between government, importers and exports depends on the quota allocation system.

26 Of course, in practice other factors will also enter into the equation, and the export-import equivalence is unlikely to hold in the short-term.

27 For more details see Panagariya (2000).

industry" or "infant economy" argument. This had some notable successes; in some cases, however, the policy mix became so complex as to be at least partly self-defeating. For example, if a user industry complained about the high cost of steel or capital goods, protected under a plan to develop those sectors, then compensating exemptions or tax breaks for investment might be granted to offset the effects. This pressure could go round the economy, creating layers of protection not only from imports but from the effects of other policies, so that it became difficult to ascertain the net effect of the combination of policies. In addition, in many countries with comparative advantage in agriculture, this sector bore the brunt of such policies, and became subject both to implicit and explicit taxes, including through the use of multiple exchange rates.<sup>28</sup> This exacerbated rural poverty and encouraged the drift to urban areas, increasing development problems.

#### **IV. LIBERALIZATION THROUGH TRADE NEGOTIATIONS**

##### *(i) Multilateral Negotiations: Trade in Goods*

Multilateral negotiations for increasing market access opportunities may combine the favourable effects of liberalization in the home market with other important benefits derived from the opening of foreign markets. Trade liberalization on a global scale increases the gains from the international specialisation of production according to (dynamic) comparative advantage, allowing countries to increase consumption (and hence welfare) beyond their own production possibilities. Multilateral trade liberalization has important synergies, in the shape of cooperative gains, that are not available through unilateral or regional liberalization, and this has been recognized through eight rounds of multilateral negotiations. Trade liberalization can therefore be a powerful tool creating new possibilities for financing of development.

Overall, import-weighted most-favoured-nation (MFN) bound tariffs at the end of the implementation of the Uruguay Round results will be some 6.5 per cent across all countries and products (Table 5), but applied rates will average only 4.3 per cent. In general, developing countries' bound rates remain higher than those of the developed

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<sup>28</sup> See Krueger *et al.* (1988). This point is also made strongly in World Bank (2000), World Development Report 2000/2001: "Attacking Poverty", p. 45.

countries and, for some regions, applied rates are considerably lower than bound rates.<sup>29</sup> The reduction of applied rates, especially in the last decade, and the increases in binding coverage that have taken place reflect a major shift in developing countries' attitudes towards opening of their economies and a recognition that it is necessary to participate more fully in negotiations in order to obtain improved access for exports.

**Table 5**  
**Post-Uruguay Round Import Weighted Applied and Bound Tariff Rates**  
(Percentages)

Country group or region	Applied	Bound
World	4.3	6.5
High income economies	2.5	3.5
Latin America	11.7	32.7
East Asia & Pacific	11.9	21.0
South Asia	30.4	50.8
Eastern Europe	6.7	13.3
Rest of Europe	24.2	16.3
North Africa	24.8	48.7
Sub-Saharan Africa	9.0	19.4

Source: Finger, Ingco and Reincke (1996)

Note: Weighted averages, excluding trade within FTAs. The applied rates are those for the base period (1995) (and have evolved since then), while the bound rates are those applying after the implementation. The data on developing countries was based on 26 out of 93 developing country participants in the Round, representing 80 per cent of merchandise trade and 30 per cent of tariff lines.

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<sup>29</sup> The binding coverage, which increased substantially for all regions in the Uruguay Round, is also lower for developing regions outside Latin America. To a large degree, the higher rates and the lower binding coverage for developing countries are a remnant of earlier import substitution industrialization (ISI) strategies, together with the application of "special and differential treatment" under which no serious demands were made on them to bind lower tariff rates.

While developing countries did benefit from significant gains in market access in manufactures following the Uruguay Round, it is also true that overall average tariff cuts by industrial countries on exports of manufactures by developing countries were lower than their overall tariff cuts on exports of manufactures from other industrial countries (28 percent against 40 per cent).<sup>30</sup> It is also to be noted that developing country cuts in tariffs on exports of manufactures from other developing countries amounted to 21 per cent on average, whereas their average tariff cuts on exports of manufactures by industrial countries amounted to 25 per cent. Regarding the overall depth of cuts made by developing and developed countries in the Uruguay Round on all merchandise imports, one study (Finger and Schuecknecht, 1999) notes that the depth of cuts in bound tariffs made by developing countries was greater than that made by developed countries. However, too much should not be made of this as in many cases their applied rates are substantially below bound levels.

Protection remains relatively high both in developed and developing markets in sensitive industrial areas such as textiles and clothing and transport equipment, where trade is large and imports are relatively responsive to price changes, as well as in agriculture, where the average level of tariffs in some developed countries initially increased as non-tariff measures were converted to tariffs ("tariffed") in the Uruguay Round. In addition, most countries show substantial tariff escalation and (at least potentially) increasing effective protection: uniform tariffs are rare exceptions, applied, with minor exceptions in Chile; in Peru; in Hong Kong, China; and in Singapore (in the last two cases at zero).

An analysis carried out in a joint UNCTAD-WTO (1998) study of tariff escalation by industrial countries in the post-Uruguay Round era shows a substantial loading against imports from developing countries, making it more difficult for them to develop downstream processing. Another analysis, based on WTO Trade Policy Reviews of some 42 developing countries, shows that marked escalation is also a feature of most of their own tariff structures (Michalopoulos, 1999). Thus, how to eliminate or reduce tariff peaks and escalation both in developed and developing markets should be one of the key

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<sup>30</sup> The details come from Abreu (1996).

questions to be addressed in future negotiations. However, given the importance of preferences, whether under unilateral schemes (GSP, Lomé, CBI, etc.) or regional trade agreements, and of tariff exemptions under industrial promotion programmes, analysis of MFN rates alone may lead to overstatement of applicable tariff levels in practice, and hence of the potential gains from liberalization.<sup>31</sup> It is therefore necessary to take all these other factors into account.

The Uruguay Round had a major impact in reducing the use of non-tariff measures (NTMs). There was a marked reduction in their use in agriculture, principally via the commitment to use only tariff protection. Nevertheless, complex tariff types and tariff quotas remain, and other NTMs still used in agriculture include export subsidies and other forms of domestic support. Quotas on textiles and clothing are being phased out (albeit with considerable backloading in the integration of the sector into GATT 1994). Trade-related investment measures (TRIMS), mainly used to promote local content in the automotive industry, have now disappeared from the developed countries but are still applied by a few developing countries. VERs have, in principle, been eliminated, but there are a number of similar measures still in force, including production restraints on products that are mainly exported (petroleum, aluminium), informal arrangements in the automotive sector, and price restraints as an agreed outcome of anti-dumping cases which work in a very similar way to VERs. In general, abolition of NTMs should allow trade to flow more freely and hence increase tariff revenue.

### *(ii) Regional Developments*

In recent years there has been a dramatic increase in the number of regional trade agreements.<sup>32</sup> According to the WTO, 172 regional trade agreements were in force at end-July 2000, and almost 70 more are under negotiation. Roughly two-thirds of the regional agreements currently in force entered into force since 1990 (WTO 2000). A number of these agreements have been signed for political reasons as much as economic

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31 In a recent study of tariff peaks in the Quad, Hoekman *et al.* (2001) have simulated the likely gains of a *full duty and quota free access* for LDC in the Quad markets. They estimated that the market opening would result in a one-time 11 percent increase in their total exports.

32 Among the more important examples are the European Communities, the European Economic Area, the EU's agreements with Central and Eastern European countries, the Baltic States and Mediterranean countries, NAFTA, MERCOSUR, the Andean Community, ASEAN, the agreement on Australia-New Zealand Closer Economic Relations. The proposed Free-trade Area for the Americas would be an extension along similar lines, while APEC's open regionalism represents a different approach.

reasons. Nevertheless, there is real concern about the effects of such agreements on third countries and on the WTO system.<sup>33</sup>

In economic terms, it is hard to find concrete evidence of trade diversion in looking at trade statistics alone. There is some evidence that both internal and external trade increase as the introduction of customs unions and free-trade areas imparts a degree of dynamism to participants' economies, but as agreements become more mature trade growth with RTA participants and third countries may equilibrate (Crawford and Laird 2000). In terms of revenue effects alone, *a priori* one might expect a decline in tariff revenue as a customs union or FTA becomes effective; however, there is no clear evidence on whether regional trade liberalization has had positive or negative effects on either revenue or development.<sup>34</sup>

### *(iii) Trade in Services*

The General Agreement on Trade in Services (GATS) was one of the major innovations of the Uruguay Round, and extended multilateral disciplines to an area of international trade that has become of critical importance to developed and developing countries alike. IMF balance-of-payments statistics show that world exports of commercial services grew at an average annual rate of 6 per cent in the period 1990-99, which is slightly faster than the average annual rate of growth for merchandise trade for that period. As trade determines prices at the margin within national economies, liberalization of services trade through the application of MFN and national treatment can have effects on the services sector within the domestic economies that are far greater than might be expected from the share of the sector in trade.

Trade in services can play a central role in financing for development. Many developing countries - including some of the poorest - have realised the value of services trade liberalisation to attract much needed foreign investment in areas such as banking, communications and energy, which play an important part in the overall development process. Increased levels of investment in these sectors can also contribute to alleviating the supply-side constraints that have hamstrung the participation of developing countries in merchandise exports. Against this backdrop, the value of the GATS lies in the fact that

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<sup>33</sup> For a review of the main arguments and the debate see Laird (1999).



it provides a framework within which developing countries can sequence and lock-in their liberalisation efforts. The mechanism of binding commitments helps to create a stable, predictable and transparent policy environment, which increase investor confidence by reducing uncertainty.

The GATS applies in principle to all services, except those provided in the exercise of government authority. Such "governmental services" are further defined in the Agreement to include all services that are provided neither on a commercial basis nor in competition with one or more suppliers.<sup>35</sup> These are exempted from the GATS whether or not they co-exist with private entities in the same sector and irrespective of their institutional status. Except for this carve-out, the GATS imposes a most-favoured nation (MFN) obligation on Members which prohibits discrimination on nationality grounds among suppliers of like services. Exemptions from the MFN requirement, sought for a period not exceeding ten years at the date of entry into force of the Agreement, are set out in specific exemption lists.

The principal source of information about intervention in the services sector are the GATS schedules of WTO Members. All binding commitments by Members under the GATS must be set out in their schedules, which specify terms, limitations and conditions on market access; conditions and qualifications on national treatment; undertakings related to additional commitments and, where appropriate, the time-frame for implementation of commitments.<sup>36</sup> In sectors where market-access commitments are undertaken, Article XVI:2 of the GATS prohibits (unless specifically negotiated and scheduled) limitations on the number of service suppliers allowed; on the total value of transactions or assets; the total number of service operations or quantity of service output; the number of natural persons that may be employed in a particular service sector; the type of legal entity or joint venture through which a service may be supplied; and the level of participation of foreign capital, either in terms of a percentage limit on foreign shareholding or of the total value of individual or aggregate foreign investment. By the same token, Article XVII:1 requires each Member (unless specifically scheduled)

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34 The issue is discussed at length in World Bank (2000).

35 GATS Article I:3(c). Typical examples would be police, fire protection, and health and education services provided under non-market conditions.

36 However, to date, the sectoral coverage of most national schedules remains limited; for example, two-thirds of current WTO Members have scheduled half or less of their services sectors.

to extend national treatment to services and service suppliers from any other Member in the sectors that are inscribed in its Schedule.

It is sometimes suggested that most commitments undertaken in services in the Uruguay Round were of a standstill nature, amounting to promises not to become more restrictive than at the time of the negotiation.<sup>37</sup> Moreover, there is evidence suggesting that some countries' services sectors are already more open than the commitment in their schedules (cf. "ceiling" bindings on tariffs for goods). Thus, it has been commented that GATS Members as a whole are still a long way from free trade in services, and developing countries (consistently with the "Progressive Liberalization" principle of Part IV of the GATS, particularly Article XIX:2)<sup>38</sup> have generally made substantially fewer commitments than high-income countries (Hoekman 1996). Nevertheless, it should be borne in mind that, from the perspective of an individual country, even standstill bindings are economically beneficial, given their positive effects on transparency and predictability and, in turn, investment.

Given the focus of this paper on finance for development, it is worthwhile considering the question of trade in financial services, and the developmental impact of liberalisation policies in this area. The benefits of a sound financial system are well known: chief among these is the fact that a well-developed financial system can improve the provision of credit and trade-related financial instruments which are indispensable for flourishing international trade. Secondly, a well-developed and open financial system in a stable macroeconomic is likely to be more resilient to economic and financial shocks. Financial services trade liberalisation can strengthen the functioning of the financial system through a number of channels, for example, since greater competition promotes better management and reduces waste. New entrants are liable to lead to a transfer of knowledge of best practices in management, accounting, data processing and the use of

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37 See Snape (1998), pp.287-89 or Hoekman (1996), p.101.

38 "There shall be appropriate flexibility for individual developing country Members for opening fewer sectors, liberalizing fewer types of transactions, progressively extending market access in line with their development situation and, when making access to their markets available to foreign service suppliers, attaching to such access conditions aimed at achieving the objectives referred to in Article IV" [relating to increasing participation of developing countries].

new financial instruments. The strengthening of the overall financial architecture in this way will be facilitated through commitments on commercial presence (Mode 3).<sup>39</sup>

It needs to be emphasised that scheduling of a sector is not the same as full-fledged trade liberalization; for example, scheduling of liberalisation of trade in financial services is not coextensive with wholesale liberalisation of the capital account. The GATS allows countries – and developing countries in particular – the flexibility to select the degree of liberalisation in different modes and sectors. Thus, if a country chooses to liberalise mainly in respect of commercial presence, it may still retain restrictions on cross-border flows and consumption abroad that allow a degree of control of the capital account. Second, trade liberalization must not be equated with domestic deregulation. The GATS explicitly recognizes the right of governments to regulate and to introduce new regulations on the supply of services in order to meet national policy objectives.<sup>40</sup> Third, the Annex on Financial Services explicitly allows governments, notwithstanding their obligations under the GATS, to take measures for prudential reasons, including measures to ensure the integrity and stability of the financial system.

In the area of services, available data are weak compared to those for merchandise trade and it is difficult to identify on an *a priori* basis which services sectors are of export interest to developing countries, given that conditions for production and trade vary greatly between individual countries and regions. Nevertheless, one may identify some areas where developing countries may have a strong interest in their trading partners undertaking full commitments on economically relevant modes. These areas are: tourism, maritime transport, construction, software development, and – perhaps to a lesser extent – health services. Existing commitments reveal that trade regimes affecting the tourism services, and data-processing and software-related services exhibit a higher degree of liberality than the other sectors identified here.<sup>41</sup> It is important to note though that developing country exports in the tourism services sector are sometimes impeded by factors relating to distance, and also protectionist aviation policies.<sup>42</sup> Construction services seem also to have benefitted from liberalisation commitments, though it is to be

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39 For a more detailed discussion of financial sector negotiations see WTO (1997).

40 Moreover, referring to asymmetries in the development of services regulations in different countries, it is acknowledged that developing countries have a particular need to exercise this right.

41 See WTO Document S/C/W/45

42 See WTO Document S/C/W/51

noted that, as in all sectors, the number of economically meaningful commitments in Mode 4, a mode that is particularly relevant for construction services and developing country interests, is very limited.<sup>43</sup> The situation is similar for health services; although a relatively high share of liberal commitments on Mode 2 (consumption abroad) may benefit developing country suppliers of health care services, such benefits may be confined to a relatively small number of advanced developing countries that are located in the vicinity of major export markets.<sup>44</sup> In maritime transport, where developing countries have an especially strong interest given that virtually all of the world's bulk fleet is now registered in developing countries and manned by developing country nationals, current schedules remain, with a few exceptions, largely blank.<sup>45</sup>

Regarding modes of delivery, developing countries have often identified Mode 4 (the movement of natural persons) as being of particular export interest. Trade conditions for Mode 4 tend to be much more restrictive than for any other mode of supply, regardless of the Members and sectors concerned. To a certain extent, this is already reflected in the current pattern of horizontal limitations: slightly over 20 such limitations for Mode 2 compare with 100 cases for Mode 4. Many schedules have conditioned the entry of natural persons on the existence of a commercial presence, i.e. limiting commitments to intra-corporate transfers. Such commitments are of limited interest to Members which, given their level of economic development, are not significant foreign investors. Moreover, no more than 17 per cent of the relevant entries extend beyond the scope of specialists, senior executives etc. to cover low-skilled persons as well. In many cases, the terminology used entails significant scope for interpretation and, thus, administrative discretion ("business visitors", "company experts", etc.). The stability and predictability of actual entry conditions is further affected by Members' non-specification in most cases – 51 out of a total of 54 – in which they have scheduled economic needs tests, of the relevant criteria.<sup>46</sup>

*(iv) The Gains from Further Multilateral Liberalization*

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43 See WTO Document S/C/W/38

44 See WTO Document S/C/W/50

45 See WTO Document S/C/W/62

46 See WTO Document S/C/W/75

Estimating the potential effects of trade liberalization on economic welfare is a complex exercise, subject to various assumptions and errors. Using the Global Trade and Production Model (GTAP), it has been estimated that a 40 per cent reduction in tariff protection in manufactures would yield approximately US\$70 billion in global income (welfare) gains in 2005, while the potential gains from similar cuts in agricultural tariffs would add US\$60 billion (and another US\$10 billion from similar cuts in subsidies (Hertel *et al.* 1999). In absolute terms, developing countries would gain more from industrial tariff cuts, although much depends on liberalization in the area of textiles and clothing. However, in proportion to their production, developing countries would gain more from liberalization in the agricultural sector. In fact, the potential gains from agricultural liberalization are of particular importance to the least-developed countries and to the poorest sections of the community in most developing countries.<sup>47</sup> At the time of writing, mandated market access negotiations in the WTO include only agriculture and services; market access negotiations in industrial tariffs have not yet been agreed.

The inclusion of industrial products in multilateral negotiations should be of particular concern to a number of developing countries that have a major stake in liberalization of trade in manufactures. Indeed, it has been estimated in the above-mentioned study of Hertel *et al.* (1999) that the larger share of the gains from liberalization of such trade would accrue to the developing countries from global liberalization in the sector. This derives from the fact that their exports of manufactures have been increasing dramatically, from some 29 per cent as a share of total exports in 1980 to 67 per cent of the total in 1995 (UNCTAD 1999). In addition, developing countries as a group have now become important markets for their own exports of manufactures: in 1990 developing countries' exports of manufactures to other developing countries was 37.2 per cent of their total exports of such products, and this share rose to 43.1 per cent in 1995 (*ibid.*).

The importance of manufactures liberalization for developing countries is also evidenced by a joint UNCTAD-WTO study which shows that in a number of sectors with a relatively high value added and technological content annual export growth of the

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47 At the end of the Uruguay Round, concerns were expressed that the removal of subsidies in agriculture would lead to higher food prices, and that in consequence food-importing countries would experience a deterioration in their terms of trade. There were commitments to maintain adequate levels of food aid and agricultural export credits.

developing countries in the period 1990-95 was 15 per cent, compared with 9.6 per cent for their exports as a whole (UNCTAD-WTO 1998). Although this performance is highly influenced by the exports of a small number of major developing country exporters of manufactures, it is indicative of the importance of diversification into manufactures.<sup>48</sup> The dynamic exports were those that faced the lowest tariff barriers, while much lower export growth was achieved where tariffs were higher. At the lower end of the development process, lower-income countries and the least-developed countries have a major interest in agricultural products and products with low value added and technological content (textiles, clothing, footwear and leather products), areas where market access barriers are highest.

It is also estimated – albeit more tentatively – that liberalization in the services sector would also produce substantial welfare gains (calculated by one study as over \$300 billion in 2005).<sup>49</sup> The difficulty here is that estimates of the level of intervention is somewhat tendentious, although efforts are now being made to tackle this difficult task. Nevertheless, these estimates demonstrate the point made in the previous section that the effects of liberalization in services trade may be far greater than might be supposed from the share of the sector in trade. Without efficient services sectors – in transport, telecommunications and finance, to name but three – a modern economy cannot develop. Maintenance of restrictions on services therefore prejudices the development of other sectors, including primary agricultural products.

The quantitative estimates noted above can vary widely, according to the assumptions, and tend to be weak in capturing the effects of economies of scale, intra-industry trade as well as dynamic effects. Little account is taken of the importance of trade facilitation and improvements to the physical infrastructure for trade. Moreover, in general such procedures do not take account of the contribution that adhering to WTO provisions – through binding commitments in goods and services and acceptance of stable multilateral rules – can make to development. Signing on to WTO agreements and commitments may

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48 As mentioned earlier, developing countries that managed to diversify into manufactures were able to expand their share of world trade, while those which remained dependent on base commodities suffered a decline in their share. WTO (2000), "Participation of developing countries in World trade: Recent developments, and the trade of the Least-developed Countries", Note by the Secretariat (WT/COMTD/W/65 of 15 February), Geneva.

49 UNCTAD-WTO (1998), *op.cit.*

be read as a signal that a Member is committed to operating in a more transparent and predictable way. This makes the host country a more "investor-friendly" environment, and the incoming foreign direct investment (in contrast to short-term financial flows) tends to bring new technologies, allowing for productivity gains and an enhanced export performance. Consistent with the studies which place greater emphasis on institutional factors and good governance, it may well be that such gains are as, or more, important than some of the estimates of welfare gains from trade liberalization.

## V. CONCLUSIONS

Trade liberalization can make a valuable contribution to the financing of development. We have argued that more open, stable and predictable trade policies are a necessary condition for attracting foreign direct investment and foreign aid and for maintaining countries competitive in the medium and long run. Such policies are also optimal policies to maintain long-run balance-of-payments equilibrium. While trade restrictions for balance-of-payments or strategic industrial development may be useful in the short-run, they de-link economies from international price movements and inhibit domestic adjustments to dynamic comparative advantage; in the end they imply a loss of competitiveness and, as such, cannot constitute the basis for a development paradigm. The attractiveness of more open and predictable trade regimes is also evident from the estimates of the potential income and welfare gains from liberalisation. There is still much to be done by way of liberalising trade in areas of export interest to the developing countries where barriers seem to be stacked against them. While WTO mandated negotiations in agriculture and services will go some way to addressing these concerns, in the area of manufactures, which is of increasing importance to developing countries, there is at the time of writing no commitment to launch new multilateral negotiations. As noted in the text, the potential gains derive from the efficiency gains associated with home country liberalisation and binding of commitments in goods and services – and for countries with relatively high import protection this may well be the main source of gains from trade as well as from improved access to foreign markets.

In the short term, there may be a difficult choice between, on the one hand, trade liberalization, which increases returns to outward-oriented sectors of the economy, and, on the other hand, the need for government revenues for development of social and physical infrastructure. There is some evidence that increasing openness may have short-term negative effects, especially in low-income countries. More generally, trade liberalization causes structural shifts, with negative effects on sectors and employees open to increased competition, while other sectors gain. On balance, the gains are expected to be greater than the losses. It is, however, important to develop social safety nets, retraining programmes and other social measures to offset these negative effects and even to facilitate the reforms.

In the longer term, the weight of evidence suggests strongly that trade liberalization, combined with stable commitments, contributes to economic growth through its effect on efficiency. This growth can then generate additional government revenues, especially if accompanied by taxation reform, and these additional revenues can in turn be used for a wide range of developmental programmes.

As we have observed, some economists place greater weight on institutional reforms than on openness *per se*. Clearly, all economies can gain from increased predictability and security of trade regimes, and other aspects of the functioning of their societies. Such reforms can help attract foreign direct investment, increasing productivity and export competitiveness. In this sense, reforms locked in at the multilateral level, and to a lesser extent in regional agreements may be more important than autonomous measures.



**REFERENCES**

- Abreu, Marcello (1996): Trade in Manufactures: The Outcome of the Uruguay Round and Developing Country Interests; in Will Martin and Alan, Winters (Eds): *The Uruguay Round and the Developing Countries*, Cambridge: Cambridge University Press, 1996.
- Atkinson, Anthony B. (2001): A Critique of the Transatlantic Consensus on Rising Income Inequality; *World Economy*, Vol. 24,(April 2001), No. 4, pp.433-52.
- Bourguignon, François and Chris Morrisson (1998): Inequality and Development: The Role of Dualism; *Journal of Development Economics*, Vol. 57, (1998), pp.233-57.
- Burnside, Craig and David Dollar (1997): Aid, Policies and Growth; Washington, DC: The World Bank, Working Paper No. 1777, 1997, forthcoming in the *American Economic Review*. .
- Cornia, G.A. (1999): Liberalization, Globalization and Income Distribution; Helsinki: UNU/WIDER, Working Paper, 1999.
- Crawford, Jo-Ann and Sam Laird (2000): Regional Trade Agreements and the WTO; University of Nottingham, CREDIT Research Paper No. 00/3 (Revised version of paper at North American Economics and Finance Association Meeting, Boston 6-9 January, 2000- AEA-ASSA Annual Meetings)
- Dalgaard, Carl-Johan and Henrik Hansen (2000): On Aid, Growth, and Good Policies; Nottingham, University of Nottingham, CREDIT Research Paper No. 00/117.
- Dawkins, P. and P. Kenyon (2000), "Globalisation and Labour Markets: Implications for Australian Public Policy", Research Paper 2000/7, Centre for Research on Globalisation and Labour Markets, School of Economics, University of Nottingham, UK.
- Dollar, David and Aart Kray (2000): Growth is Good for the Poor; Washington, DC: The World Bank, Working Paper No. 2587, 2000.
- Drabek, Zdenek and David Greenaway (1984): Economic Integration and Intra-Industry Trade: The EEC and CMEA Compared; *Kyklos*, Vo.37, (1984), Fas.3.
- Drabek, Zdenek and Sam Laird (1998): The New Liberalism: Trade Policy Developments in Emerging Markets; *Journal of Trade*, Vol. 32, (Oct. 1998), No.5, pp.244-269.

- Francois, Joseph (2000), "The Economic Impact of New Multilateral Trade Negotiations: Final Report" Tinbergen Institute and CEPR, prepared for DG-II of the European Commission.
- Ebrill, Liam, J. Stotsky and Gropp (1999): Revenue Implications of Trade Liberalization; Washington, DC: International Monetary Fund, Occasional Paper 180.
- Feenstra, Robert and Gordon Hanson (2001): Global Production Sharing and Rising Inequality: A Survey of Trade and Wages; Cambridge, Mass.: NBER Working Paper No. W 8372.
- Finger, Michael and Ludger Schuecknecht (1999): Market Access Advancements and Retreats : The Uruguay Round and Beyond; Washington, DC: The World Bank, World Bank Working paper on International Trade No.2232, 1999.
- Graham, Edward, (2001): The Relationship Between International Trade Policy and Competition Policy; in Zdenek Drabek (Ed.): *Globalization Under Threat: The Stability of Trade Policy and Multilateral Agreements*; Cheltenham: Edward Elgar: 2001.
- Hertel, Thomas, K., Kym Anderson, Joseph F. Francois, Bernard Hoekman and Will Martin (1999): Agricultural and Non-agricultural Liberalization in the Millennium Round; paper presented at the Conference on Agriculture and the New Trade Agenda in the WTO Negotiations, held in Geneva on 1-2 October, 1999.
- Hoekman, Bernard (1996): Assessing the General Agreement on Trade in Services; in Will Martin and Alan Winters (Eds.): *The Uruguay Round and the Developing Countries*; Cambridge: Cambridge University Press, 1996.
- Hoekman, Bernard, Francis Ng and Marcelo Olarreaga (2001): Tariff Peaks in the Quad and Least Developed Countries Exports; Washington, DC: The World Bank, Research Department, *mimeo*, February 2001.
- Krueger, Anne, Maurice Schiff and Alberto Valdez (1988): Agricultural Incentives in Developing Countries: Measuring the Effects of Sectoral and Economy-Wide Policies; *World Bank Economic Review*, Vol.2, (1988), No. 7.
- Laird, Sam (1981)"Intra-industry trade and the expansion, diversification and integration of the trade of the developing countries", *Trade and Development - An UNCTAD Review*, UNCTAD, Geneva, Winter.
- Laird, Sam (1997): Quantifying Commercial Policies; In Joseph F. Francois and Kenneth Reinert (Eds.): *Applied Trade Policy Modelling: A Handbook*; Cambridge: Cambridge University Press, 1997.

- Laird, Sam (1999): Regional Trade Agreements: Dangerous Liaisons?; *The World Economy*, Vol.22, (1999), No. 9, pp.1179 –1200.
- Laurence, Robert and Mathew Slaughter (1993): International Trade and American Wages in the 1980's; Giant Sucking Sound or Small Hiccup?; *Brookings Papers on Economic Activity: Microeconomics*,1993, p.161-226.
- Little, Ian M. and James A. Mirlees (1974): *Project Appraisal and Planning for Developing Countries*; London: Heinemann Books, 1974.
- Markusen, Jan, R. (1995): The Boundaries of Multinational Enterprises and the Theory of International Trade; *Journal of Economic Perspectives*, Vol. 9, (1995), pp.169-89.
- Mbabazi, Jennifer, Oliver Morrissey and Chris Milner (2001): Inequality, Trade Liberalization and Growth in Developing Countries; Nottingham: University of Nottingham, *mimeo* (forthcoming as a CREDIT Research Paper).
- Michalopoulos, Costas (1999): Trade Policy and Market Access Issues for Developing Countries; *mimeo*, Geneva: World Trade Organization, Development Division, 1999.
- Mosley, Paul (2000): Globalization, Economic Policy and Convergence; *The World Economy*, Vol.23, (2000), No.5, pp.613-634.
- Panagariya, Arvind (2000): Evaluating the case for Export Subsidies, Washington, DC: The World Bank, Policy Research Working Paper 2276.
- Rodrik, Dani (1999): The New Global Economy and Developing Countries: Making Openness Work; Washington, DC: Overseas Development Council, Policy Essay 24, 1995.
- Sachs, Jeffrey and A. Warner (1995): Globalization and Economic Reform in Developing Countries; *Brooking Papers on Economic Activity*, 1995, No. 1, pp.1-117.
- Smith, Alasdair, (2000): Trade Policy and Industrial Competitiveness; Public lecture organized as part of conference organized under the EU project an " Stability of Trade Policy in Transition Countries", headed by Z. Drabek. Prague: Institute of Economics, Faculty of Social Sciences, Charles University, 26-27 May 2000.
- Snape, Richard (1998): Reaching Effective Agreements Covering Services; in Anne O. Krueger (Ed): *The WTO as an International Organization*; Chicago: University of Chicago Press, 1996.
- UNCTAD-WTO (1998): Market Access Developments Since the Uruguay Round: Implications, Opportunities and Challenges, in Particular for Developing

Countries and Least-Developed Countries, in the Context of Globalization and Liberalization; Geneva: Report by the UNCTAD and the WTO Secretariats, 1998.

UNCTAD (1999): *Handbook of International Trade and Development Statistics*, New York: United Nations, 1999 (Sales No: E/F.98.II.D.16).

Wood, A. (1995), "How Trade Hurt Unskilled Workers?", *Journal of Economic Perspectives*, 9, 57-80.

World Bank (2000): *Trade Blocs*; Oxford: Oxford University Press, 2000.

World Bank (2001): *Attacking Poverty -World Development Report* , Washington DC: The World Bank, 2001.

WTO (1996): *Annual Report, Special Topic: Trade and Foreign Direct Investment*; Geneva: World Trade Organization, 1996, Volume 1.

WTO (1997): *Opening Markets in Financial Services and the Role of the GATS*; Geneva: The World Trade Organization, *mimeo*, 1997.

WTO (2000a): Participation of Developing Countries in World Trade: Recent Developments, and the Trade of the Least Developed Countries; Geneva: World Trade Organization, Note by the Secretariat (WT/COMTD/W/65 of 15 February).

WTO (2000b): Mapping of Regional Trade Agreements; Geneva: The World Trade Organization, Background Note by the Secretariat (document WT/REG/W/41, October 2000).

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**Adam Blake** – CGE models of low-income countries

**Mike Bleaney** - growth, international macroeconomics

**Indraneel Dasgupta** – development theory

**Norman Gemmell** – growth and public sector issues

**Ken Ingersent** - agricultural trade

**Tim Lloyd** – agricultural commodity markets

**Paula Lorgelly** – health, gender and growth

**Andrew McKay** - poverty, peasant households, agriculture

**Chris Milner** - trade and development

**Wyn Morgan** - futures markets, commodity markets

**Christophe Muller** – poverty, household panel econometrics

**Tony Rayner** - agricultural policy and trade

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**V.N. Balasubramanyam** (*University of Lancaster*) – foreign direct investment and multinationals

**David Fielding** (*Leicester University*) - investment, monetary and fiscal policy

**Göte Hansson** (*Lund University*) – trade, Ethiopian development

**Stephen Knowles** (*University of Otago*) – inequality and growth

**Robert Lensink** (*University of Groningen*) – aid, investment, macroeconomics

**Scott McDonald** (*Sheffield University*) – CGE modelling, agriculture

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**Shelton Nicholls** (*University of West Indies*) – trade, integration

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**Eric Strobl** (*University College Dublin*) – labour markets

**Finn Tarp** (*University of Copenhagen*) – aid, CGE modelling

**Howard White** (*IDS*) - aid, poverty

