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Does Trade Openness Favour or Hinder Industrialization and Development?

Mehdi Shafaeddin

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1 Introduction

"The argument against industrial policy is based on a naïve reading of economic theory and misreading of economic history."
(Stiglitz, 2005: 25)

SINCE the early 1980s, economic philosophy has changed in favour of market-oriented development and the lack of government intervention, particularly in the flow of international trade. Taking trade policy reform as synonymous with trade liberalization, the international financial institutions (IFIs) began to put pressure on developing countries for trade liberalization in the early 1980s as an element of conditionalities under Structural Adjustment Programmes (SAPs) and Stabilization Programmes (SPs). Subsequently, trade liberalization also became a part of conditionalities imposed by some bilateral donors. The orthodox view on trade liberalization has been propagated further since the late 1980s through the "Washington Consensus", with its influential impact on policy reform schemes of many developing countries, particularly in Latin America. Moreover, there is also pressure on developing countries, through the current Doha Round of negotiations under the auspices of the World Trade Organization (WTO), to liberalize their trade regime further.

The change in the dominant economic philosophy in favour of trade liberalization was a reaction to the failure of traditional (across-the-board) import-substitution policies of the 1950s-1970s. The argument was that import liberalization, together with the lack of government intervention in the economy, would change the incentive structure in favour of exports, private invest-

ment would be stimulated, and growth and the diversification of exports and output structure in favour of manufactured goods would follow. Moreover, upgrading of the production and export structure would be facilitated by imported technology and improved skills and knowledge enhanced by trade. Accordingly, the philosophy behind the recommendation for trade liberalization is that "trade openness", or free trade, would be conducive to industrialization and development.

The purpose of this study is to examine the validity of this proposition. The only case during recent centuries where trade has been free was the case of Great Britain around 1860 to 1913. As far as developing countries are concerned, the experience of the colonial era is the nearest incident of free trade. The recent experience of trade liberalization, which is of special interest to us, is not a case of free trade or an open trading system; it is a tendency towards it. For simplicity we will call it the "trade liberalization hypothesis" (TLH) in this paper.

The concepts used by the neo-liberals in the literature, or by international organizations, are not always clear. For example, the terms "trade openness", "free trade", "outward orientation", "neutral-incentive trade policy" and "export promotion" are sometimes used interchangeably. These terms, however, do not necessarily convey the same meanings. Moreover, the term "development" means different things to different people; so does the role envisaged for international trade. Therefore, to proceed, we will first briefly review the features of the trade liberalization hypothesis as recommended by the orthodoxy and clarify different concepts used in this paper. Subsequently, the theoretical justification for the theory behind the TLH will be examined before we review the historical experience of trade liberalization during the colonial era and particularly during recent decades. For the recent years, we will examine a sample of developing countries and look into the particular case of Mexico, which has been one of the champions of trade liberalization. Before concluding the study, the positive impact of liberalization on industries which are close to the stage of maturity will be briefly reviewed.

2 Features of the Trade Liberalization Hypothesis

THE process of trade policy reform and liberalization which has taken place in developing countries since the early 1980s can be classified into two categories according to the ownership and content of the reform programmes. First, a number of countries in East Asia undertook "some" trade liberalization as a part of their long-term dynamic trade and industrial policies. The second category consists of countries whose trade liberalization was based on the TLH initially recommended by neo-liberals (e.g., Krueger, 1978 and Balassa, 1980) and designed and dictated by IFIs in the early 1980s and later propagated through the "Washington Consensus". Many African and Latin American countries are in this category. The latter countries were initially pushed to liberalize by the IFIs in the 1980s. Nevertheless, many of them intensified their process of liberalization in the 1990s without necessarily having been under the pressure of those institutions.

The neo-liberal views on trade liberalization, whether expressed by scholars or by IFIs, are not the same in all details (see Shafaeddin, 2006.a for details). Nevertheless, they contain some common features, the main elements of which are as follows:

- "Uniformity", which implies that all sectors and industries of a country are to be subject to the same low tariff rate, preferably zero rate, across the board. It is argued, for example, that "relatively low and relatively uniform tariffs are preferable for reasons of efficiency and political economy" (Thomas et al., 1991: 214) – although the authors agree that the "uniformity of import tariffs cannot be demonstrated in theory to be

optimal in many circumstances" (loc. cit.)! Where quantitative and other non-tariff barriers (NTBs) exist, they should be initially replaced with tariffs. Subsequently, the tariff levels and their dispersion should be reduced. Compensatory devaluation and removal of export taxes and subsidies are other elements of the TLH.

- "Universality", which implies that the same trade liberalization formula is to be applied to all developing countries irrespective of their levels of development, industrial capacities and other specific socio-economic and structural characteristics.
- Synonymity of across-the-board trade liberalization with export promotion. Export promotion is defined as a strategy for which the incentive structure is neutral between production for the domestic market and for export and between the purchase of domestic goods and foreign products. As the neo-liberals argue against government intervention in the flow of trade, such neutrality of incentives implies free trade.
- Distinction between import substitution and export promotion. The above-mentioned definition of export promotion rules out the possibility that, in a given period, a country may undertake import substitution in some industries and export promotion in others (Shafaeddin, 2005.c).
- Trade liberalization was supposed to be a part of more general economic liberalization and "market-based reform" including capital account liberalization, fiscal and financial liberalization and contractionary macroeconomic policies such as budget cuts, increase in interest rates and privatization. In other words, trade liberalization was one aspect of the general recommendation for the lack of government intervention in the economy, i.e., a tendency not only towards *laissez-passer*, but also towards *laissez-faire*.

Such features of the hypothesis imply that trade policy reform is synonymous with trade liberalization. Further, as it is taken for granted that trade liberalization always leads to export promotion and rapid GDP growth (Krueger, 1978; Balassa, 1980; and World Bank, 1987), the hypothesis gives the impression that trade liberalization, or integration into the world economy, is an end *per se* rather than being a tool of development.

Trade liberalization under GATT/WTO rules

The main features of the trade liberalization hypothesis outlined above are also embodied, to a large extent, in the philosophy behind trade liberalization pushed by developed countries through GATT/WTO. In particular, during the Doha Round, developed countries have been pushing for universal and across-the-board liberalization of trade in manufactured goods. Accordingly, it is proposed that all countries, with the exception of least-developed countries, for a temporary period, apply the same formula to cut average tariff rates on manufactured goods drastically and reduce their dispersion by binding 95 per cent of their individual tariff lines[1] at the same low rate. For example, the USA proposed cutting the tariffs to 8 per cent by 2010 and reducing them to zero by 2015. Certain sectors were proposed to be subject to zero tariffs immediately upon the conclusion of the Doha Round. The European Union (EU) suggested non-linear cuts in tariffs according to the "Swiss formula"[2], and a low and uniform coefficient of 10 chosen for both developed and developing countries. Further, the EU proposed a tariff cap of 15 per cent for developing and 10 per cent for developed countries for binding all industrial tariff lines. The latest proposal by developed countries as of late June 2006 is for values of 15 and 10 for the coefficients for developing and developed countries, respectively.

The Swiss formula proposed by the EU, and approved at the 2005 WTO Ministerial Conference in Hong Kong (WTO, 2005) despite the opposition of the majority of developing countries, has the following main characteristics:

- The higher the initial tariff rate, the higher the rate of reduction in tariff;
- The coefficient determines the maximum tariff rate possible under the formula;
- The lower the coefficient, the higher the rate of reduction in tariff;
- For high tariff rates, the rate of reduction in tariffs under the Swiss formula is higher than the rate of reduction when a simple linear for-

mula (according to which the same percentage reduction is applied to all tariff lines) is applied;

- The Swiss formula "has lower rates of percentage reduction than those generated by a tariff independent linear reduction in a certain range of low tariff rates" (WTO, 2003: 4).

The choice of the coefficients in the formula for developing and developed countries is still subject to further negotiation. Nevertheless, the proposals so far made by developed countries are not in the interest of developing countries. Initial tariffs for developing countries are much higher than those of developed countries. Therefore, they would be subject to significantly greater reduction in their tariff rates not only in absolute terms but also in percentage terms. For example, if the initial EU proposal is applied, a tariff rate of 5 per cent for developed countries will be reduced to 3.33 per cent – a reduction of 33 per cent or 1.67 percentage points. By contrast, a tariff rate of 60 per cent for developing countries will be reduced to 8.8 per cent – a reduction of 85 per cent, or 51.2 percentage points. For higher initial tariff rates, the new rate would not exceed the cap of 10 per cent (*South-North Development Monitor (SUNS),* 1 November 2005; see also Khor and Goh, 2005). This maximum rate will also apply to all unbound tariffs after tariff cuts and binding.

The application of the proposed Swiss formula will have a significant detrimental long-term effect on the industrialization of developing countries, apart from bringing about a loss in their government revenues. The industrial sector of most developing countries is, unlike that of developed countries, underdeveloped; thus they need to apply higher tariffs to some of their industries than developed countries. The low tariff rates proposed by developed countries will make them lose an important policy tool for upgrading their industrial structure. Further, binding of tariffs at low levels would not allow a developing country to raise them beyond the bound level when it faces balance-of-payments problems[3].

3 The Role of Trade in Development: Conceptual Issues

ASSUMING that the general objective of a country is development, including building up industrial supply capacity, trade policy is a means to industrialization and development. So are, in fact, international trade, industrial policies, foreign direct investment (FDI), technology, etc. Therefore, "trade openness", protection, or any other policy, would be appropriate tools if they can serve those objectives. Otherwise, the "means" are confused with the "ends".

Following Myrdal, we define development as "the movement of the whole social system upward" (Myrdal, 1971: 356). In this sense, the expansion of exports should not only lead to growth but also involve, *inter alia*, raising the standard of living of the population and providing them with employment. Otherwise, the expansion of exports simply for export's sake, or integration into the world economy for the sake of integration *per se*, may lead to "immiserizing growth" even if growth were achieved: ends may be sacrificed for means by keeping wages and other income of citizens low.

International trade can play a crucial role in development. Through their "income effects", exports can raise savings and act as a stimulus to investment. Through their "supply effects", exports ease supply bottlenecks arising from natural or technological limits by providing the foreign exchange necessary for importing raw materials, capital goods and intermediate products. Furthermore, imports ease inflationary pressures by increasing the supply of wage goods, which in turn would contribute to the competitiveness of domestic products, at a given exchange rate, in internal and international

markets. In other words, imports act as a "joker" of growth; the more rigid the structure of production, the more important the role of imports in the process of growth and development (Kalecki, 1955). Hence, imports should not be regarded simply as a withdrawal from the circular flow of income in the Keynesian sense provided they contribute to development. Moreover, through their "vent for surplus" effects, exports can provide opportunities for employment by utilizing domestic resources in the production for sale in the international market of products for which domestic demand is insufficient.

Therefore, there is no doubt that trade can be an important means to industrialization and development. Nevertheless, does it imply that *free trade* is always conducive to industrialization and development? Development is a dynamic process by which a country begins with the production of primary commodities and subsequently makes the transition to higher stages of development by embarking on industrialization and eventually expanding services until the three sectors of the economy are integrated. After all, development requires, in the first place, integration of various sectors of the domestic economy (Wade, 2005).

Can "trade openness" help this process? The term "trade openness" is applied loosely in the literature and is measured in two different ways: activity-based and incentive-focussed. The activity-based approach uses such indicators as the ratio of exports, or exports plus imports, to GDP, its changes or the rate of growth of exports alone. The main problem with the activity-based approach is that trade, or its growth rate, is affected by many other factors than trade policy, including the size of the country and the structure of its exports. In large countries interregional trade within the country replaces international trade to some extent. Therefore, they tend to have smaller trade/GDP ratios, or experience smaller growth rate in exports, than smaller countries. Moreover, countries which depend on exports of primary commodities, e.g., Sub-Saharan African countries, often rely on trade more than those with a diversified export structure.

The incentive-focussed approach regards trade openness as synonymous with free trade. However, they are not the same. One cannot speak of free trade even if developing countries remove all restrictions on their international trade and open up their markets, as long as developed countries continue to restrict trade through tariffs, NTBs, intellectual property standards or arbitrary anti-dumping and safeguard measures, etc. Moreover, even if there were absolutely no government restriction on the flow of international trade, it would still not be free. The international market is increasingly dominated by the monopoly/oligopoly power and influence of transnational corporations (TNCs) (see the subsequent chapter, particularly Tables 1 and 2).

In the neo-classical theory, free trade is a means to achieve the neutrality of incentive structure necessary for export promotion or outward orientation – terms which are vague and are often used interchangeably (e.g., World Bank, 1987 and Papageorgiou et al., 1990). Nevertheless, neutrality of incentive structure may be achieved with or without free trade. In other words, it may be achieved at zero per cent rates of protection, or with positive but equal rates of protection for imports and exports (Shafaeddin, 1991).

Although no satisfactory definition of export promotion (EP) is available (see Helleiner, 1990 for a survey), outward orientation and export promotion are not the same thing. Following Paul Streeten (1972: 2-4), we will give "outward-looking (OL)" a wider definition than "export promotion"[4]. In his view, OL strategies encourage both free trade and free movement of capital, workers, enterprises and students and welcome an open system of communication. In this sense, OL implies *laissez-passer*. EP is confined to policies concerned with trade in commodities. In contrast to OL, which is primarily concerned with the market for output of goods produced, inward-looking (IL) strategies go beyond the direction of "the look" for markets. They are concerned with an indigenous development of human capital and other capabilities necessary as inputs to the production process. Streeten (1972) rightly regards OL as learning by trading and IL as "learning by doing" or "learning by [eventually] doing without" [external sources of technology]. In this context, a country can seek out markets (pursue EP) and be

inward-looking in terms of development of domestic capabilities. The Republic of Korea is a good example in this respect. In this sense, IL is given a wider definition than import substitution (IS), which is concerned primarily with replacement of imported goods with domestic production.

The terms "trade liberalization" and "liberal trade policy" (free trade) are often used interchangeably by neo-liberals. For example, according to Papageorgiou et al. (1990, vol 7: 13), "trade liberalization is defined as any act that would make the trade regime more neutral – nearer to a trade system free of government intervention". Henderson (1982) refers to liberal policies as "an intermediate position, an attempt to establish the right balance between over-restriction and over-encouragement of trade" (ibid: 292). Nevertheless, his "right balance" is a universal formula which applies to all countries irrespective of their level of development and industrial capacity. Following Helleiner (1992), we will define the two terms differently. A liberal trade policy is synonymous with free trade and is an element of *laissez-passer*. Trade liberalization is a process which may, or may not, aim at complete liberalization. Trade liberalization is, in fact, an element of dynamic trade policy where a specific country may use both protection and liberalization to follow a mix of EP and IS, or OL and IL, at any point in time. In this sense trade policy reform is used in a wider sense than trade liberalization. The way the term "trade liberalization" is used by neo-liberals, however, contains the idea of "liberal" (free) trade policy. Therefore, we have called it the TLH which has specific features as outlined above.

4 Is the Trade Liberalization Hypothesis Theoretically Justified?

THE philosophy and the theory behind the TLH are not conducive to the industrialization and development of developing countries. The theoretical argument against government intervention in production and trade is based mainly on the premise that markets are competitive and function well; there is no market failure, but government failure is pervasive. The TLH is, however, a general theoretical abstraction based on the theory of static comparative cost advantage (CA). Accordingly, in its Heckscher-Ohlin (H-O) version, universal free trade will lead to an efficient reallocation of world resources.

The TLH suffers from general shortcomings of the theory of CA and problems of adjustment to free trade during trade liberalization. The deficiencies of CA theory are, in turn, related to its power of explanation, its unrealistic assumptions and its concern with static efficiency.

Power of explanation

If free trade prevails, under certain assumptions the CA theory can predict and explain the division of labour between industrial countries and developing countries and the specialization of the latter in production and exports of resource-based and labour-intensive products[5]. This is, however, a "self-evident" generalization; a country exports what it has (Subasat, 2003: 153-5). "Heckscher and Ohlin seem to make assumptions that guarantee desirable outcomes rather than simplify or clarify the analysis" (ibid: 149). The CA theory, however, does not stop at predicting the pattern of trade; it also provides a normative guide to developing countries recommending them to spe-

cialize in products mentioned above – specialization which may not necessarily serve their interest in the long run (see, e.g., Gomory and Baumol, 2000). In fact, it will hinder their development process (Subasat, op. cit.: 154-5). As development requires transition from primary production and export to industrialization, and "a move from labour-intensive production to capital-intensive [and technology-intensive] production the success of trade policy must be judged in terms of how effective [it] is as a catalyst for change and not with the stage of it" (ibid: 145). Unfortunately, the CA theory cannot explain the process of "catching-up" and upgrading by latecomers, even if its underlying assumptions were realistic, as it is concerned with static efficiencies (see below).

Unrealistic assumptions

In fact, the theory of CA is based on unrealistic assumptions which distort the reality rather than simplifying it (ibid: 149). Such assumptions include the existence of competitive and perfect internal and international markets, constant returns to scale, the small size and "passivity" of firms, no "market inadequacy"[6], the lack of externalities and other causes of market failure, and independence of present and past costs and prices. Prices of factors of production are determined in a general equilibrium system and incorporated into the H-O theory. Moreover, this theory assumes implicitly that all countries are at the same level of technological development, the mix of goods and services is the same in all countries, each product is produced with the same technology in different countries and technology is readily and freely available to their firms. Further, as all firms are small, they do not play an active role in pricing, technological development, capacity building and the learning process. Full employment, mobility of factors of production between industries, and lack of uncertainty and risks are other unrealistic assumptions of that theoretical abstraction. There is no need for government intervention, whether functional or selective, as it is assumed that no sector or industry plays a particular role in providing positive externalities.

In reality, firms of developing countries are faced with an oligopolistic international market dominated by a small number of large established firms

(TNCs) that increasingly control international trade and industrial production through mergers and acquisitions (Tables 1 and 2). They benefit from increasing returns to scale at the firm level not only in production but also in R&D, marketing, distribution and financing. Cost advantages emanating from static and dynamic economies of scale (experience) are totally different from cost advantages related to factors of production; they destroy the foundation of the theory of CA (Streeten, 1990). Further, TNCs have the privilege of having long experience in controlling technology, know-how, and marketing and distribution networks. Such attributes provide them with the power of "creative destruction" and the capability to take strategic actions on prices as well as non-price attributes of products. As a result, they are, on the one hand, placed in a position of superior "competitive advantage" vis-à-vis newcomer firms of developing countries. On the other hand, they are provided with the power to create severe barriers to entry against the newcomer firms of developing countries because for the latter, unlike the established firms of developed countries, only cheap labour and/or raw materials are their main sources of competitive advantage. Moreover, attempts at industrialization through TNCs may not necessarily lead to technological development and upgrading unless they are managed and controlled by the host country. TNCs' main interest is profit maximization rather than the industrialization of the host country. And control of TNCs is not easily feasible under present WTO rules.

Table 1: The share of top firms in global production and trade (late 1990s)

Activity	*Number*	*Per cent*
All output	200	28
Industrial output	1000	80
World trade	500	70

Source: Mooney (1999: 74).

Table 2: Annual average cross-border mergers and acquisitions with value of more than $1 billion, 1987-2004		
Period	*No. of deals*	*Value ($billion)*
1987-1996	23	49
1997-2001	128	425
2002-2004	71	218

Source: Based on UNCTAD (2005.a: Table 1.1:9)

The aforementioned assumptions related to internal market structure are particularly unrealistic for low-income countries and those at the early stages of industrialization where markets are missing, market failure is pervasive and their industrial production and export bases are usually very small.

Allocative efficiency

Although sometimes they pay lip service to the question of growth, the main concern of neo-liberals is allocative efficiency.[7] For example, John Williamson, the initiator of the Washington Consensus literature, admits that "none of the ideas spawned by … development literature … plays an essential role in motivating the Washington Consensus …" (Williamson (ed.), 1990: 19). In other words, what is recommended by the orthodoxy does not seek to contribute to "catching-up", industrialization and development beyond a short-term gain achieved through static allocative efficiency. Dynamic external economies of learning and linkages require targeting in industrial development which is not easily feasible under free trade.

Concentration on allocative efficiency was, in fact, one of three main interrelated issues in Adam Smith's theory of international trade which has been the basis of the neo-classical theory of trade and the TLH. The first is Smith's "focussing attention on the allocative functions of the markets to the exclusion of their creative functions – as an instrument for transmitting impulses to economic change" (Kaldor, 1972: 1240). The second is his concern with "interchangeable value" (international trade) as against "productive power"

(economic development) (see List, 1856: 253 and Shafaeddin, 2005.b for details). Third, Smith introduced his universal theory of free trade for the "cosmopolitan economy", i.e., the economy of mankind as a whole, believing that free trade would maximize the welfare of the world economy as a whole. He, in fact, did not distinguish between the interests of individuals, nations and mankind in general. He ignored the fact that some nations may give more weight to their own welfare than to the collective welfare of humanity. He thought that what was in the interest of Britain was also in the interest of the world as a whole (List, ibid: 245-6, 74 and 261).

Adjustment problems

The problems of adjustment during trade liberalization are also related to the main assumptions of the CA theory. Assuming full employment, mobility of factors of production, independence of present and future costs and the lack of dynamic external economies implies that trade liberalization would lead to a simultaneous shift from inefficient industries to efficient ones without adjustment costs. The first objection to this proposition is about the concept of efficiency, which is a short-term static one. The whole idea of infant-industry protection is that an industry would incur high average production costs at present in order to achieve lower production costs in the future because of the existence of dynamic internal and external economies. In other words, there is an inverse relation between experience and production cost. Distorted present prices are the cost of achieving dynamic comparative advantage (Amsden, 1989 and Fontaine (ed.), 1992). As a result, the shift of resources from infant industries to some other industries may sacrifice dynamic efficiency gains for static allocative efficiencies.

Secondly, the assumption of simultaneous and costless adjustment is also questionable. In fact, since the theory is concerned with the short term, it is implied that capital – machinery – does not have time to adjust, but all other factors adjust simultaneously (Subasat, 2003: 160). It is not clear how all other factors, including labour, could move to another activity, even if the workers had the required skill and there were no need for training, without adjustment of capital, which is a complementary factor of production. As

has been experienced in many Latin American and African countries, trade liberalization led to unemployment of the bulk of the labour force instead of their moving to other activities.

Free trade as a theory or ideology

A number of famous neo-classical economists do admit that free trade is an "ideal" as the theory of CA is based on abstract assumptions (Haberler, 1950: 227; Corden, 1974: 7-8; Samuelson, 1938: 266 and 1939: 195; and Viner, 1953: 4-5). For example, according to Samuelson: "some trade is better than no trade, but that does not necessarily imply that free trade is the optimum for any country" (Samuelson, 1938: 266)[8]. Jacob Viner (1953: 4-5) correctly maintains that Smith and other classical economists took a cosmopolitan approach because they thought that what was in the interest of England was also in the interest of the world as a whole. Viner admits that what was relevant to their time and country may not necessarily be relevant for other times and other countries, and, in particular, it may not be relevant for "economically less advanced countries" at any time. Hence, "it is today always necessary, as it was for the English classical economists, to be perfectly clear whether we are considering a problem, say, commercial policy from a national or from a cosmopolitan point of view" (Viner, 1953: 5).

Despite such reservations by famous neo-classical economists, in the end free trade remains the "religion" of neo-liberals.

> The ideological convenience of the theory is so great that unless the dominant ideological paradigm in the international political economy changes, neo-liberals are unlikely to abandon the theory regardless of its lack of theoretical and empirical validity (Subasat, 2003: 163).

Such an ideology is, for example, evident in a recent report of the World Bank (2005.a), which is blunt in self-criticism of its own policy recommendations on economic reform during the last quarter of a century. Yet in the final analysis "openness" remains, in the Bank's view, a must for all devel-

oping countries irrespective of their level of development! For example, it is admitted that reform policies of the 1990s did not provide sufficient incentives for the expansion of production capacity; that market failure prevails (ibid: 10); that "one size fits all" policies fail (ibid: 12); that means [reform] were mistaken for goals [growth] (ibid: 11), etc.:

> In retrospect, it is *clear* [our italics] that in the 1990s we often mistook efficiency gains for growth. The "one size fits all" policy reform approach to economic growth and the belief in "best practices" exaggerated the gains from improved resource allocation and their dynamic repercussions, and proved to be both *theoretically incomplete and contradicted the evidence* [our italics]. Expectations that gains in growth would be won entirely through policy improvements were unrealistic. Means were often mistaken for goals – that is, improvements in policies were mistaken for growth strategies, *as if improvements in policies were an end in themselves* [our italics] (ibid: 11).

Further, recognition is made of the risk in indiscriminate opening of the capital account (ibid: 14), the importance of "country specificities" in drawing up policies (ibid: 15), and the role of trial and error and experiment (ibid: 16). Nevertheless, in the end the idea of universal free trade remains sacred: "trade openness [remains] a key element of successful strategy" (ibid: 18) and "protection is not good for economic growth" (ibid: 137). The only qualification to this "universal" formula is that it has to be combined with other policies, i.e., it should be a component of a comprehensive package (ibid: 18-21 and 135), i.e., SAPs (see Shafaeddin 2006.c for details).

Attempts to modify the CA theory to keep it alive have not been of much help on technical grounds, yet the theory has survived since the time of Adam Smith because the ideology behind it has served the interest of early industrializers. If this is the case it is up to developing countries not to listen to advice given by those whose ideology is based on this theory.

> The basic vision and emphasize [sic] of Heckscher-Ohlin theory are such that attempt [sic] [for its modification], while welcome, will have somewhat limited success until the 'modifications' result in the effective abandonment of the basic framework (Steedman, 1979, cited in Subasat, 2003: 163).

Other arguments in favour of free trade

Before ending this chapter, let us mention that there are two other arguments in favour of free trade, even though they are not the basis of the trade liberalization hypothesis: easiness and external economies of scale[9]. According to the first argument, as management of a sophisticated trade and industrial policy is not easy, particularly for countries with low bureaucratic capacity in decision-making and implementation, international trade should be left free of government intervention. The easiness argument is, however, totally irrelevant as it is a recipe for lethargy rather than development.

With respect to scale economies, it is argued that the large international market provides the opportunity to a firm to achieve economies of scale and reduce production cost when the sources of economies of scale are external to the firm and prevail in the industry concerned at the international level. This is an argument which is also used in favour of globalization. However, the main assumption behind this proposition is that the market is competitive and the countries involved are *already producers of manufactured goods*. The problem is that before being able to enter the international market, a developing-country firm should be internationally competitive. In fact, Ethier (1979) has argued that when the two partners involved in trade are not similar in terms of factor endowment, economies of scale cannot explain the pattern of production and trade. In industries where scale economies prevail, import substitution is a prerequisite to export promotion (Krugman, 1984). In fact, generally speaking, "often, a phase of import substitution precedes a phase of exports, laying the foundation for successful export performance" (Streeten, 1985: 60). According to Streeten, however, what is required is to do both import substitution and export efficiently. Just as import substitution may take place inefficiently, so may export. This may hap-

pen if excess capacity is developed, stocks are unsold or the terms of trade have deteriorated, e.g., due to the fallacy of composition and/or intensification of protectionist barriers in importing countries when a large number of developing countries embark on export promotion (ibid: 61-2).

In fact, Great Britain, as the first industrializer, exploited the home market through protectionism to realize the benefits of increasing returns to scale necessary to reduce the cost of production in order to expand exports. According to Alfred Marshall:

> ...the growing richness of her home markets lowered the cost of production of those of her exports which conformed to the law of increasing return and therefore enabled her to sell more of them abroad (Marshall, 1920: 65).

Marshall, however, failed to admit that the domestic market was initially protected. Such protection not only helped the realization of increasing returns, but also reduced the element of uncertainty significantly and provided the strongest incentive to innovation (Deane, 1965: 50).

5 Evidence from History

THE historical evidence is also not supportive of the TLH. We will refer briefly to the experience of successful developed- and developing-country industrializers before considering the case of developing countries during the colonial era, when liberal trade was imposed on them. The recent episodes of trade liberalization in developing countries will be discussed separately in the next chapter.

The experience of successful industrializers

Generally speaking[10]:

- The experience of successful early and late industrializers indicates that with the exception of the territory of Hong Kong, Province of China, no country has managed to industrialize without going through the infant-industry-protection phase. Hong Kong is, however, a city territory; moreover, its ability to upgrade has been limited.
- While across-the-board import substitution and prolonged protection have led to inefficiency and failure, the experience of developing countries which have undertaken across-the-board and universal trade liberalization has also been disappointing.

In all successful early and late industrializers:

- Government intervention, both functional and selective, in the flow of trade and in the economy in general has played a crucial role**.**

- In all cases, including Great Britain, industrialization began on a selective basis, although to a different degree, and continued in the same manner until the industrial sector was consolidated.
- When their industries matured, they began to liberalize selectively and gradually.
- Premature trade liberalization, whether during the colonial era or in more recent decades, has been disappointing. In the case of the USA, when the country tried to liberalize prematurely in 1847-61, the industrial sector suffered and the country had to revert to protectionism against imports from Great Britain.
- In all successful cases government intervention was not confined to trade; the state intervened through other means, directly and indirectly, in particular to promote investment and to develop the necessary institutions and infrastructure.
- In all cases industrialization was supported by attention to and growth in agricultural production. The Corn Laws in Great Britain and protection of rice production in East Asian countries are only two examples.
- While different countries did not follow exactly the same path, all learned from the experience of others; the USA learned from Great Britain, Germany from the USA, Japan from Germany and the Republic of Korea from Japan, etc. (Shafaeddin, 1998).

In all main early industrializers – Great Britain, the USA, France, Germany – when the industrial sector matured, tariffs were used as a tool of bargaining in trade negotiations for opening markets in other countries:

- In the 19th century free trade policy was forced on colonies and 5 per cent rules (according to which 5 per cent was the maximum tariff rate allowed on any import item) were imposed on semi-colonies and independent countries through "unequal" bilateral treaties and/or through force (e.g., the imposition of the opium war of 1839-42 on China). During recent decades, developing countries have been pushed through multilateral organizations and bilateral trade agreements to open their markets (Chang, 2005.a: 10 and Shafaeddin, 1998).[11]

- Further, limiting the policy space of the colonies in the 19th century was not confined to forcing open their markets. High-value-added manufacturing activities were outlawed in the colonies and exports of competing items from colonies to England were banned. Instead, production of primary products was encouraged (Chang, 2005.b: 60-1). During recent decades, tariff peaks and escalations and arbitrary anti-dumping measures have been among the means of restricting imports of high-value-added products from developing countries.

Free trade and de-industrialization during the colonial era

The result of the forced liberalization imposed on colonies and semi-colonies in the 19th century was sluggish growth, lack of improvement in the standard of living, loss of policy autonomy and de-industrialization. Most unequal treaties were signed during the first half of the 19th century[12]. The Latin American countries modified their commercial policies from 1880 onwards, some other countries between 1913 and the beginning of the great depression of 1929 (Bairoch, 1993: 41-2 and Chapter 8). As can be seen in Table 3, during the height of compulsory liberal trade regimes (1800-80), growth in per capita income was slightly negative in the "Third World". Only after 1880, when the Third World began to regain its policy autonomy gradually, did the per capita income of the group begin to accelerate. While we have shown data for the Third World as a whole, per capita growth accelerated at both regional and country levels wherever developing countries regained their policy autonomy (Chang, 2005.b: 30-4). By contrast, the countries which remained colonies, or were still subject to unequal treaties, during the first half of the 20th century grew more slowly than others. This was the case, for example, with 9 out of 13 Asian territories for which data are readily available (ibid: 65, Table 8). Generally speaking, "in all parts of the developing world economic growth accelerated dramatically after the end of imperialism" (ibid: 64)[13]. Table 3 also indicates that growth accelerated during 1950-80 as remaining colonial territories gained independence and were able to implement their own trade policy – although the policies pursued were not always conducive to consolidation of their industrial structure. The higher growth rate during this period can be partly explained by

the growth rate in the "centre", which went through the "golden age of capitalism". Nevertheless, it is not the only contributory factor as the per capita income in the Third World increased by about 3.8 times during this period as compared with 1900-50, despite the acceleration of its population growth, whereas the corresponding increase for developed countries was 2.5 times.

Table 3: Annual average growth rates[a] in per capita GNP of industrialized countries and the Third World (1800-1980)

Period	*Third World*[b]	*Developed countries*
1800-1830	-0.2	0.6
1830-1870	0	1.1
1870-1880	0	0.5
1880-1890	0.1	0.9
1890-1900	0.2	1.7
1900-1950	0.45	1.34
1950-1980	1.7	3.4

a: Three-year average b: Excluding China

Source: Based on Bairoch (1993: Table 1.1, p.7)

In various colonies handicraft industries were damaged by free imports from Britain, funds were transferred out of the country and modern industries did not grow (Bagchi, 1982: 32-9 and the sources therein). According to Bairoch's calculations, the "de-industrialization" effect of the forced liberal trade policy imposed on the Third World was between 85 and 95 per cent; i.e., in the absence of trade liberalization the size of the manufacturing sector of the Third World would have been 85 to 95 per cent larger (Bairoch, op. cit.: 88). The extent of the destruction can be exemplified by the case of the textile industry of India, which had been the country's main contributor to manufactured production and exports before the free trade era (see Box 1). Other regions and countries also experienced, to a varying degree, de-industrialization until the situation was reversed when they regained their policy autonomy (ibid: 90-2). The expansion of cash crops at the cost of food produc-

tion (ibid: 93 and Bagchi, op. cit.) was another result of forced trade liberalization during the colonial era.

Box 1: The impact of the compulsory liberal trade regime imposed on India by Great Britain in the 19th century: the case of the textile industry

Before colonization, the textile industry accounted for nearly three-quarters of industrial output and 60 to 70 per cent of exports of India. The free influx of English textiles began in 1813; imports of cotton textiles increased to about a million square yards in 1814 and shot up to 13 million in 1820 and 2050 million in 1890. Imports of textiles reached approximately around 55 to 75 per cent of local consumption. The productivity of English workers was between two and three times higher than that of the modern textile industry of India and 10 to 14 times higher than that of its traditional artisans. Yet, English textiles were imported to India with no import duties until 1859 – while the inter-regional movement of textiles within India was subject to duties for a while (Bagchi, 1982: 82-3). Even when an import duty of 3-10 per cent was imposed by the British Government in India for fiscal reasons, the local producers also became subject to an equivalent tax rate for reasons of equal treatment of imports and local products. Subsequently, the duties were repealed altogether in 1882 (Chang, ibid: 61). India regained its tariff autonomy only during the early 1920s. It is estimated that the de-industrialization effect of the forced free trade was equivalent to 55 to 75 per cent of the national consumption of India by 1870-80, reaching 95 to 99 per cent in 1890-1900 – or near-total destruction of the local industry. If one takes into account the survival of the industry in remote areas, which were not covered by the statistics, the level of destruction would be somewhat lower, but still significant enough to claim that the bulk of the Indian textiles industry disappeared. Textiles were not the only product sector to suffer from free trade; other industries which became exposed to imports from Britain shared the same fate (see Bagchi, 1982: 82-3).

Source: Based mainly on Bairoch (1993: 88-90) and Bagchi (1982: 79-94).

6 Recent Trade Liberalization

"We cannot go back to the past. But neither should we fail to recognize the failures of the present."
(Stiglitz, 2005: 32)

THE available evidence on the results of across-the-board trade liberalization by developing countries during recent decades is also disappointing, contrary to the claim made by the neo-liberals and neo-liberal-oriented institutions (see, e.g., Sachs and Warner, 1995)[14]. The studies presented by the neo-liberals suffer from many methodological problems. In fact, the results of cross-sectional and time-series studies have revealed no, or little, evidence that there was any statistically significant correlation between trade barriers or openness and economic growth in recent decades (Rodriguez and Rodrik, 1999; Wacziarg and Welch, 2003; ECLAC, 2002). More importantly, the United Nations Development Programme (UNDP) (2003) finds a positive correlation between a country's tariff rate and growth rate for the 1990s. In a recent case study of eight countries which undertook trade reform, "with some exceptions, the results of the reform have been disappointing with respect to growth rates and social indicators, especially employment" (Fernandez de Cordoba and Laird, 2006: x).[15] The notable exception is India, but the authors cast doubts on the attribution of its performance to trade liberalization (loc. cit.). In fact, the growth performance of India is attributed by some to its policies and effort in the 1980s (Singh, 2005: 246) and the change in the attitude of the Government towards the private sector in the 1980s rather than the "Washington Consensus"-type reform (Rodrik and Subramanian, 2004). At any rate, trade liberalization by India, like that of

Vietnam, was of its own design and was undertaken selectively and gradually (see, e.g., Chang, 2005.b).

With respect to the case of low-income countries, there is also some evidence that trade liberalization has led to de-industrialization, particularly in Sub-Saharan Africa (Bennel, 1998; Shafaeddin, 1995; Noorbakhsh and Paloni, 2000; Thoburn, 2002; Fernandez de Cordoba and Laird, 2006: chapters on Zambia and Malawi; and Shafaeddin, 2006.a)[16]. Rodrik (1997) argues that trade policies have not played an important role in the trade and growth performance of Sub-Saharan Africa; by contrast, external factors have been significant.

According to Professor Stiglitz: "Today the inadequacies of Washington Consensus reform are apparent…" (Stiglitz, 2005: 31). He maintains that stabilization policies do not ensure either growth or stability, and the benefits of trade liberalization are questionable, *inter alia,* because:

> Workers move from low-productivity jobs to unemployment instead of moving to high-productivity jobs; capital market liberalization does not necessarily lead to faster growth and exposes the countries to higher risks; privatization often leads to higher prices of utilities; the adverse social consequences of wrong policies imposed on developing countries have been seen in many countries (Stiglitz, ibid: 16-8).

A sample survey

As mentioned before, the main argument of the proponents of the TLH is that across-the-board trade liberalization would provide incentives for export expansion, which in turn would have stimulating effects on private investment, including FDI, and positive effects on growth, particularly growth of manufacturing value added (MVA). To what extent have these objectives been achieved in developing countries which undertook reform? To provide an answer to this question, we will first review the performance of a sample of about 50 reforming developing countries for the period 1990-2000, when

liberalization was widespread and intensified and the world economy was growing reasonably fast. Subsequently, we briefly review the evolution in their performance since 2000 when most developing countries faced balance-of-payments crises due to the failure of liberalization followed by world economic recession. Finally we will study the specific case of Mexico, which has been a champion of trade and economic liberalization, in more detail.

The sample includes those countries for which data are readily available. In addition, in order to cover countries with some industrial capacity and manufactured exports in the base period (1989-91) and exclude re-exportation of manufactured goods, a combination of three criteria was used: exports of manufactured goods exceeded $90 million; the share of manufactured goods in exports was at least 10 per cent; and the share of MVA in GDP was at least 5 per cent. Nonetheless, for wider coverage a number of low-income countries which did not meet some of these criteria are also included in the sample. These include Bolivia, Paraguay, Barbados, Trinidad and Tobago, Panama, Fiji, Nepal, Papua New Guinea, Ghana and Madagascar**.**

Export and output performance[17]

Table 4 shows the data for the 1989-2000 period. The countries are classified into three groups according to the performance of their exports of manufactured goods, represented by the purchasing power of manufactured exports; within each group they are classified according to growth in their MVA[18]. Data on purchasing power of exports are used for the analysis as they represent the ability of the countries to import manufactured goods from developed countries. The data on the value of exports are, however, also reported for comparison. According to the data, 20 out of 46 countries for which the necessary data are available experienced rapid expansion of exports of manufactured goods associated with rapid expansion of total exports.

In a "minority" of these countries, mostly East Asian newly industrializing economies (NIEs), rapid export growth was also accompanied by fast expansion of industrial supply capacity (growth of MVA), growth of GDP and

Table 4: Annual average growth rates* of output and trade of the sample countries (1989-2000)

Country[1]	Purch. power of exports		Value added		Domestic absorption	Export value	
	Man. goods	Total exports	Man. goods	GDP		Manufactures	Total
I. High Export Growth	**17.0**	**10.6**	**5.2**	**4.8**	**4.8**	**16.7**	**10.0**
a. High output growth	***16.6***	***12.3***	***7.6***	***5.9***	***5.5***	***16.7***	***11.6***
Costa Rica	25.9	17.02	6.41	5.20	4.61	25.8	16.37
Sri Lanka	24.1	12.34	8.18	5.28	6.15	25.3	11.72
Malaysia	19.0	13.77	10.16	7.30	5.30	18.9	13.14
China	17.8	15.47	13.27	10.22	9.99	17.7	14.83
Bangladesh	17.5	13.16	6.96	4.82	4.75	18.1	12.53
El Salvador	15.7	10.81	5.30	4.83	5.60	15.6	10.20
Thailand	14.4	11.99	7.18	4.81	2.77	14.3	11.37
Singapore	13.7	11.25	7.10	7.92	6.86	13.6	10.64
Indonesia	12.8	9.36	7.29	4.71	4.92	12.7	8.76
Turkey	11.8	9.61	5.05	3.87	4.23	11.7	9.01
India	10.2	10.10	6.69	5.79	5.54	10.1	9.49
b. Moderate output growth	***21.5***	***12.4***	***4.48***	***4.99***	***5.3***	***21.4***	***11.8***
Mexico	29.6	16.05	4.27	3.13	3.13	29.5	15.41
Chile	13.4	8.78	4.68	6.86	7.48	13.3	8.18
c. Low output growth	***16.3***	***7.5***	***1.61***	***2.93***	***3.4***	***15.2***	***6.9***
Bolivia[a]	29.2	4.56	1.97	4.03	4.41	29.1	3.98
Philippines	24.3	18.41	2.79	3.08	3.61	24.2	17.75
Guatemala	14.8	10.10	2.79	4.10	4.51	14.7	9.49
Kenya	12.4	7.48	2.31	2.06	3.76	4.8	6.88
Argentina	12.4	11.01	2.96	4.50	5.06	12.3	10.40
Jamaica[b]	10.8	3.05	-1.73	0.95	0.80	11.9	2.48
Madagascar	10.0	-2.08	0.18	1.76	1.86	9.3	-2.62
II. Moderate Export Growth	**7.7**	**7.2**	**3.11**	**3.97**	**3.9**	**7.8**	**6.6**
d. High output growth	***8.3***	***8.4***	***6.81***	***4.81***	***3.9***	***8.8***	***7.8***
Nepal	9.9	12.58	9.89	4.93	4.80	10.4	11.96
Republic of Korea	9.2	10.54	7.59	6.01	4.17	9.2	9.93
Trinidad and Tobago	8.6	7.09	5.38	2.77	2.68	8.5	6.50
Mauritius	7.1	4.83	5.69	5.30	4.47	7.0	4.26
Jordan	6.7	6.90	5.50	5.02	3.27	8.7	6.31
e. Moderate output growth	***7.7***	***7.4***	***4.15***	***4.67***	***4.7***	***7.9***	***6.8***
Tunisia	9.4	7.15	4.27	4.76	4.25	9.3	6.56
Peru[b]	7.9	8.73	3.62	4.19	4.47	7.8	8.13
Panama	7.9	10.36	3.62	4.46	5.66	7.8	9.75
Taiwan, Province of China	7.3	7.81	4.90	6.40	6.70	7.2	7.22

Pakistan	7.3	5.89	3.80	3.86	3.86	7.2	5.30
Papua New Guinea	6.4	4.55	4.70	4.32	3.50	8.1	3.97
f. Low output growth	***7.4***	***6.3***	***0.01***	***3.05***	***3.2***	***7.1***	***5.7***
Ghana	9.1	8.04	-3.50	4.15	3.98	7.2	7.41
Colombia	9.0	8.09	-1.93	3.14	3.80	8.9	7.49
Morocco	8.7	8.90	2.97	2.39	2.80	8.6	8.30
Venezuela	7.8	6.11	1.36	2.06	1.52	7.7	5.52
Zimbabwe	7.7	3.10	0.58	2.52	2.35	8.1	2.53
Uruguay	6.7	5.70	-0.25	3.38	4.77	6.6	4.97
Paraguay[a,b]	6.4	3.17	-0.28	2.31	3.68	6.3	2.61
Malta	6.2	7.78		4.92		5.5	7.19
Brazil	5.4	5.98	1.13	2.59	3.02	5.3	5.40
III. Low Export Growth	**-1.5**	**3.7**	**0.67**	**2.37**	**3.6**	**-1.2**	**3.1**
g. High output growth							
Egypt	3.2	-1.40	6.16	4.47	4.14	3.1	-1.94
h. Moderate output growth	***1.5***	***5.4***	***3.51***	***3.06***	***3.9***	***1.8***	***4.8***
Senegal	4.3	4.30	3.67	3.38	3.18	4.2	3.72
Fiji	2.3	1.96	3.36	1.73		3.4	1.40
Hong Kong SAR, China	-2.2	9.80		4.08	4.68	-2.2	9.20
i. Low / negative output growth	***-8.2***	***3.7***	***-4.92***	***0.29***	***3.1***	***-7.8***	***3.1***
Barbados	2.5	4.41	0.57	1.45	3.84	2.4	3.84
Haiti	-18.9	2.94	-10.40	-0.87	2.30	-18.0	2.38
Total sample	**10.6**	**8.2**	**3.78**	**4.11**	**4.3**	**10.5**	**7.6**

General notes:
Purchasing power of total exports and exports of manufactured goods is calculated by using the value index divided by the unit value of manufacturing exports of developed countries; figures correspond to the period 1989/99 except for the following countries: Bangladesh and Nepal (89/98); Indonesia, Jamaica and Haiti (89/97); Zimbabwe (90/99); El Salvador and Sri Lanka (89/94); Papua New Guinea (89/93); Jordan (89/95)
Value added – manufactures: Figures correspond to 1989/2000 except for the following countries: Belarus (1990/2000); Bolivia (1997/2000); Brazil, Fiji (1989/1999); Madagascar (1989/1997)

[1] Exports and output in this column refer to purchasing power of exports of manufactured goods and manufacturing value added, respectively
[a] Share of manufactured goods in total exports is less than 10 per cent
[b] Exports of manufactured goods are less than $100 million

* The notations for percentage growth rates are as follows:
Exports: high: more than 10; moderate: between 10 and 5; low: less than 5
MVA: high: more than 5; moderate: between 5 and 3; low: less than 3

Sources: Shafaeddin (2005.a: Table 2.1), which in turn is based on: World Bank, *World Development Indicators* for macroeconomic variables; UNCTAD, *Handbook of Statistics* for manufacturing and total exports as well as unit value indices of developed countries.

absorption capacity. Rapid expansion of domestic absorption and output implies the interrelation between output, investment (see below) and consumption. High investment allows rapid expansion of output, which in turn allows expansion of investment and consumption. In these countries, at least until recently, economic reform, particularly trade liberalization, took place gradually and selectively as part of a long-term industrial policy after they had reached a certain level of industrial maturity and development. By contrast, the performance of the remaining countries, mostly in Africa and Latin America (majority cases), has not been satisfactory in terms of growth of MVA and GDP even when the export of manufactured goods expanded fast. Where domestic absorption expanded, it was mainly due to borrowing and inflow of FDI rather than growth in output and income. These countries embarked, in the main, in the 1980s on a process of structural reform including uniform, across-the-board and often premature liberalization and intensified their liberalization efforts in the 1990s. The exceptional performance of MVA and GDP in Costa Rica cannot be attributed to liberalization and export growth alone. The country had been a high performer also during the previous period. Despite the fact that Costa Rica managed to attract some FDI due to its location and availability of skilled labour (Paus, 2005: 193), the linkages of exports with the rest of the economy were small and limited to low-skill labour-intensive activities such as packaging and printing materials, cleaning, providing meals and transportation (ibid: 197). The WTO rules would not allow tight control of FDI, nor did the country have a cohesive government strategy to manage it (ibid: 192).

De-industrialization

With the exception of Kenya, Madagascar and Bolivia, none of the low-income countries in the sample have shown rapid growth of exports of manufactured goods. Further, even in those cases, particularly Madagascar, performance of MVA was poor. The only important manufactured export of Madagascar in 2001-2 was clothing items, amounting to over $39 million and accounting for about 10 per cent of total exports of the country. Otherwise, spices and fish account for 55 per cent of its exports[19]. In fact, all low-income countries in the sample experienced de-industrialization during 1980-

2000; so did most of them during the 1990s (see Table A.1 on p. 68 and Shafaeddin, 2005.b: Chapter 3 and 2006.a). We define de-industrialization here as a fall in the share of MVA in GDP. The data on MVA and GDP in Table A.1 are in constant prices. The extent of de-industrialization would have been even more marked had we used data in current prices as the relative price of manufactured goods has declined in relation to other components of GDP due to trade liberalization.

De-industrialization is not, however, confined to low-income countries. In fact, half of the sample countries for which the necessary data are available have faced de-industrialization during 1980-2000 as well as the 1990s, including countries such as Brazil which had a considerable industrial base before the liberalization of its trade regime.

Incidentally, the impact of the expansion of exports in general on poverty reduction in low-income countries has not been promising either. According to a United Nations Conference on Trade and Development (UNCTAD) study, during 1990-5 and/or 1995-2000, out of 66 observations (for the two periods) in the case of least-developed countries, 51 showed export growth. Only in 22 out of the 51 cases, however, was export expansion accompanied by an increase in per capita income. In the remaining cases, 18 experienced falling per capita income and the results for another 11 cases were ambiguous (UNCTAD, 2004).

Performance during more recent years

The performance of the sample countries since the recession of early 2000 is shown in Table 5, which uses the same groupings and definitions as Table 4. The table reveals a number of interesting points. First, the subgroups with high output (MVA) growth during the 1990s continue to show higher growth in MVA, GDP and domestic absorption than other subgroups. Second, and more importantly, their performance in terms of exports of manufactured goods is also far better than other subgroups and in many cases even better than their own performance during 1990-2000. Third, by contrast, some of the countries which showed high export growth during the 1990s, by relying

Table 5: Annual average growth rates* of output and trade of the sample countries (2000-2004)

Country[1]	Purch. power of exports		Value added		Domestic absorption	Export value	
	Man. goods	Total exports	Man. goods	GDP		Manufactures	Total
I. High Export Growth	**-1.3**	**2.3**	**3.6**	**3.4**	**3.6**	**1.8**	**5.4**
a. High output growth	***4.9***	***4.7***	***5.2***	***4.6***	***4.8***	***8.3***	***8.1***
Costa Rica	0.1	0.0	2.3	3.9	4.0	2.3	2.2
Sri Lanka	-0.6	0.3	2.0	3.8	4.8	3.2	4.1
Malaysia	1.3	3.0	4.5	4.3	4.7	5.2	7.0
China	21.5	20.4	11.3	8.7	8.2	26.2	25.0
Bangladesh	-1.0	-0.8	6.5	5.1	4.4	2.8	3.1
El Salvador	1.7	-3.9	3.2	1.9	1.6	3.8	-1.8
Thailand	2.4	3.7	7.1	5.3	6.0	4.6	5.9
Singapore	2.6	3.1	3.2	2.8		6.6	7.1
Indonesia	-3.4	-2.2	5.1	4.6	5.0	0.4	1.6
Turkey	19.6	18.4	5.7	4.2	4.7	24.2	23.0
India	9.9	10.0	6.5	6.2	5.0	12.2	12.3
b. Moderate output growth	***0.1***	***2.8***	***1.1***	***2.5***	***1.6***	***3.1***	***6.0***
Mexico	-2.9	-2.1	-0.6	1.5	1.4	-0.8	0.0
Chile	3.1	7.7	2.8	3.4	1.8	7.1	11.9
c. Low output growth	***-11.3***	***-1.7***	***1.7***	***1.9***	***2.3***	***-8.8***	***1.0***
Bolivia	-9.2	7.2	2.8	2.6	0.5	-5.7	11.3
Philippines	-3.1	-2.7	3.9	4.2	5.3	-1.0	-0.6
Guatemala	0.2	-4.4	1.2	2.3	3.4	2.4	-2.3
Kenya	13.7	12.8	1.6	1.5	0.3	18.1	17.2
Argentina	-1.5	2.5	0.8	-0.1	-1.2	2.3	6.5
Jamaica	-36.2	-7.6	0.2	1.7		-36.5	-8.1
Madagascar	-43.0	-20.0	1.4	0.9	5.7	-40.8	-16.9
II. Moderate Export Growth	**5.01**	**4.88**	**1.2**	**2.8**	**2.2**	**8.9**	**8.7**
d. High output growth	***8.0***	***9.5***	***3.3***	***4.8***	***5.1***	***11.7***	***13.3***
Nepal			-2.5	2.6			
Korea, Rep.	7.1	6.7	5.1	4.7	4.1	11.3	10.8
Trinidad and Tobago	2.1	4.2	6.0	7.2	9.1	4.3	6.4
Mauritius	0.7	3.4	1.8	4.4	3.3	4.6	7.4
Jordan	22.0	23.6	6.0	5.1	3.9	26.7	28.4
e. Moderate output growth	***5.3***	***3.4***	***2.9***	***3.1***	***2.6***	***9.1***	***7.2***
Tunisia	7.9	7.6	3.0	4.3	4.2	12.0	11.8
Peru	8.9	11.1	2.6	3.6	2.9	13.1	15.4
Panama	-14.5	-1.6	-2.2	3.3	2.4	-11.2	2.2
Taiwan, Province of China	0.8	1.4	4.4	2.8	1.0	4.7	5.3
Pakistan	7.3	7.1	8.0	4.1	2.8	11.4	11.2
Papua New Guinea	21.7	-5.0	1.7	0.6		24.3	-2.9

f. Low output growth	***3.3***	***3.8***	***-1.4***	***1.5***	***0.5***	***7.3***	***7.8***
Ghana		3.9	0.6	4.8	6.1		7.2
Colombia	2.9	1.6	0.0	2.9	3.6	6.9	5.6
Morocco	5.3	3.7	3.7	4.5	5.5	9.4	7.8
Venezuela, RB	6.7	0.2	-0.6	-1.3	-1.3	10.9	4.1
Zimbabwe	10.0	1.9	-12.9	0.4	-7.3	14.3	5.8
Uruguay	-6.3	1.6	-3.0	-1.2	-2.3	-2.7	5.6
Paraguay	0.8	11.6	-0.7	1.2	-1.0	4.7	15.9
Malta	-0.7	0.0		0.1		3.2	3.9
Brazil	7.5	9.7	2.0	2.0	0.3	11.7	14.0
III. Low Export Growth	**7.01**	**2.67**	**0.1**	**2.1**	**1.4**	**10.7**	**6.0**
g. High output growth							
Egypt, Arab Rep.	21.5	7.9	3.0	3.5	2.3	24.1	10.2
h. Moderate output growth	***7.8***	***5.8***	***0.3***	***3.8***	***2.3***	***12.0***	***9.9***
Senegal	24.3	13.8	5.3	4.6	3.6	29.2	18.2
Fiji	-4.1	0.0	2.6	3.5		-0.3	3.9
Hong Kong, China	3.2	3.5	-6.9	3.2	1.0	7.2	7.5
i. Low / negative output growth	***-9.9***	***-4.6***	***-1.7***	***-1.0***	***0.2***	***-6.4***	***-2.0***
Barbados	-9.9	-10.3	-0.1	-1.1	-1.0	-6.4	-6.8
Haiti		1.2	-3.3	-1.0	1.3		2.9
Total sample	**2.31**	**3.43**	**2.3**	**3.0**	**2.8**	**5.8**	**6.9**

General notes:
Purchasing power of total exports and manufacturing exports: Figures are calculated as in Table 4 and correspond to the period 2000-2004 except for manufacturing exports for the following countries: Costa Rica, Egypt, El Salvador, Guatemala, India, Mexico, Papua New Guinea, Thailand, and Trinidad and Tobago (2000-2003), and Jamaica (2000-2002)
MVA: Figures correspond to 2000-2004 except for the following countries: Guatemala, Nepal, Korea and Barbados (2000-2003)
Domestic absorption: Figures correspond to the period 2000-2004 except for the following countries: Barbados, India, Guatemala and Korea (2000-2003), and Zimbabwe (2000-2002)

[1] See Table 4 for the notations, classifications and general notes

Sources: World Bank, *World Development Indicator*s for macroeconomic variables; UNCTAD, *Handbook of Statistics* for manufacturing and total exports as well as unit value indices of developed countries

mainly on TNCs and export processing, show stagnant (Costa Rica) or negative (Mexico) manufactured export growth. Fourth, these results would imply that these countries have been more vulnerable to external factors – recession – than those with high output growth. Further, it would confirm the result[20] that at earlier stages of industrialization, where there is a correlation between export growth and output growth (here manufactured goods), a causal relation goes from output to exports rather than the other way round.

Upgrading

One critique of IS industrialization was that it failed to stimulate upgrading of the manufacturing sector sufficiently. Trade liberalization and exposure to the international market would, it was argued, help structural change in exports and upgrading of the export structure through imported technology and the learning effect of trade. While industrialization has to begin with production of light manufactured goods, upgrading is essential; the continuation of specialization in traditional, standard manufactured goods is not conducive to development in the long run as it could lead to serious losses in the terms of trade due to the fallacy of composition and slow growth for many light manufactured goods. In fact, an empirical investigation of a sample of 17 developing countries for the period 1985-2001 indicates that countries for which high-tech products constituted a large proportion of their exports escaped from price competition with each other. As a result, they avoided losing on the terms of trade vis-à-vis importing developed countries, particularly over 1993-2001 when their industrial structure was upgraded further. By contrast, exporters of standard manufactured goods did suffer from such losses (Blecker and Razmi, 2005).

While, unlike East Asian countries, there has been little upgrading in the particular case of Latin American countries and Africa, the performance of two types of industries in Latin America has been exceptional during the post-liberalization era: those which have continued to be targeted by the government, e.g., transport equipment in Brazil and Mexico, until the early 21st century, and those which have been near the stage of maturity and have under trade liberalization been subjected to pressure to become competitive

(Shafaeddin, 2005.a: Chapter 2), e.g., the aerospace industry in Brazil (as will be explained below). These results are in conformity with an earlier study on the reaction of various groups of industries to trade liberalization (see Lall et al., 1994: Chapter 7).

Investment

The prospect for expansion of output and exports, upgrading and competitiveness obviously depends, *inter alia*, mainly on investment (Amsden, 2001: Chapters 4 and 5). In fact, capital accumulation played a key role in structural change and competitiveness of NIEs (Bradford, 1987), as it did in the relatively rapid growth of Africa during the 1960s and 1970s (Berthélemy and Söderling, 2001). Unfortunately, trade liberalization, together with other reform programmes, failed to stimulate growth in investment even in cases where FDI was abundant.

The data on various indicators of total investment and FDI are shown in Table 6. As disaggregated data on sectoral investment are not readily available, the data on total investment are used. The figures for FDI are only an indication of the availability of investment funds and do not necessarily represent additions to production capacity as a part of FDI was used for the purchase of existing establishments. For the calculation of investment (I)/GDP and FDI/GDP ratios for recent years, we used the average for 2000-4 to smooth out the influence of the recession in the early 21st century. Despite their shortcomings, the data provide some interesting information.

First of all, contrary to the views of neo-liberals, the impact of liberalization on investment was disappointing. The I/GDP ratio in 2000-4 was far below its level in 1979/81, i.e., before reforms were initiated, in 30 out of 44 cases and changed little in another two cases. A more or less similar picture emerges if one compares the figures for 1998/2000 and 1979/81 or those between 2000/4 and 1989/91, i.e., before the reform was intensified in many countries. The fall in the ratio was again more widespread in the case of low-income countries in the sample and most Latin American countries where the growth rate in MVA was also low. The decline in the ratios for East Asian

Table 6: Investment indicators

Country	Domestic investment	Investment/GDP ratio		
			Change over	
	Ann. average growth rate 2000/2004	2000-2004	1979/81	1989/91
Group I*	**3.6**	**21.3**	**-2.8**	**-0.8**
I. a	***5.0***	***23.3***	***-2.8***	***-2.6***
Costa Rica	7.2	19.1	-0.1	1.3
Sri Lanka	4.5	23.6	-10.1	-1.4
Malaysia	0.4	23.1	-3.8	-6.8
China	15.6	40.7	4.4	4.9
Bangladesh	7.5	23.4	1.7	6.1
El Salvador	2.8	16.5	3.6	2.3
Thailand	8.5	23.5	-6.3	-13.9
Singapore	-3.8	26.8	-14.3	-6.5
Indonesia	6.0	19.6	-3.9	-9.3
Turkey	-0.5	18.1		-5.0
India	7.0	22.2	0.6	-0.1
I. b	***2.0***	***20.8***	***-5.7***	***-0.7***
Mexico	0.2	19.9	-16.3	-4.1
Chile	3.8	21.6	4.9	2.6
I. c	***1.9***	***18.2***	***-1.9***	***2.1***
Bolivia	-7.2	14.8	-0.4	0.6
Philippines	-0.5	17.9	-8.1	-3.4
Guatemala	3.4	16.9	-0.6	3.5
Kenya	2.2	13.2	-16.2	-5.5
Argentina	-1.6	15.0	-8.5	0.9
Jamaica	4.7	31.4	15.8	14.0
Madagascar	12.0	18.0	4.5	4.4
Group II	**0.3**	**19.6**	**-6.1**	**-1.7**
II. d	***3.4***	***22.6***	***-6.0***	***-3.1***
Nepal	n/a	19.2	2.0	-1.2
Korea, Rep.	3.6	29.8	2.0	-5.3
Trinidad and Tobago	2.7	19.8	-3.8	9.3
Mauritius	3.0	23.2	-8.5	-8.8
Jordan	4.3	20.9	-21.6	-9.7
II. e	***1.0***	***19.9***	***-5.6***	***-0.4***
Tunisia	-0.1	24.8	-10.7	-2.0
Peru	1.5	18.6	-3.0	2.0
Panama	2.1	24.7	0.4	10.9

for selected countries (2000-2004)

	1998/2000	FDI net (million US$) 2000-2004	FDI net/GDP in % 2000-2004	Change over 1979/81	Change over 1989/91	Change over 1998/2000
	-2.0	**5141**	**2.9**	**2.0**	**1.2**	**0.0**
	-1.6	***6730***	***2.7***	***1.7***	***0.7***	***0.1***
	0.3	543	3.2	1.7	0.8	-0.4
	-4.1	201	1.2	5.2	1.6	-4.9
	-3.2	2928	2.9	-0.2	-2.8	0.4
	1.9	50894	3.9	3.8	3.1	-0.1
	-0.1	228	0.4	0.4	0.4	0.0
	-1.5	312	2.1	2.2	1.9	-1.9
	4.5	2240	1.8	1.2	-0.6	-1.4
	-6.2	12364	13.3	3.7	4.5	7.9
	0.7	-1391	-1.0	-1.2	-1.9	0.8
	-6.0	1959	1.0	0.9	0.5	0.9
	-3.8	3755	0.7	0.6	0.6	0.2
	-5.2	***11112***	***4.5***	***3.4***	***2.5***	***2.0***
	-9.4	17504	2.8	1.8	1.4	0.4
	-0.9	4720	6.1	5.0	3.6	3.7
	-1.7	***1099***	***2.8***	***2.1***	***1.6***	***-0.8***
	-7.5	487	6.0	3.7	4.7	-4.4
	-2.6	970	1.3	1.2	0.0	-0.3
	-0.9	216	1.0	-0.5	0.1	-0.8
	-5.8	80	0.7	-0.1	0.1	0.3
	-3.8	4175	2.2	1.3	0.9	-2.2
	3.6	587	7.4	7.6	4.8	2.3
	5.3	48	1.1	1.2	0.6	-0.1
	-2.0	**1988**	**2.7**	**1.9**	**2.2**	**-0.1**
	-1.4	***1336***	***3.2***	***2.2***	***2.3***	***0.4***
	-4.0	8	0.1	0.1	0.1	0.0
	5.4	5346	1.0	0.9	1.0	0.2
	-3.5	823	8.4	5.5	5.6	-0.3
	-5.4	95	2.0	1.8	0.8	-0.4
	0.5	406	4.3	2.7	4.1	2.2
	-3.7	***990***	***2.4***	***1.8***	***2.5***	***0.9***
	-1.3	662	3.0	0.7	1.9	0.0
	-3.1	1452	2.5	2.2	2.4	-0.3
	-8.9	599	5.3	7.5	12.6	6.5

Country	Domestic investment	Investment/GDP ratio		
			Change over	
	Ann. average growth rate 2000/2004	2000-2004	1979/81	1989/91
Taiwan, Province of China	-2.9	19.5	-2.4	-0.3
Pakistan	3.9	15.6	-3.8	-3.2
Papua New Guinea	1.5	15.9	-14.0	-10.1
II. f	***-1.6***	***17.8***	***-3.8***	***0.7***
Ghana	4.9	24.1	0.2	-0.8
Colombia	14.4	13.7	-5.8	-2.5
Morocco	5.4	23.3	-4.8	-0.2
Venezuela, RB	-9.6	20.1	-8.1	6.2
Zimbabwe	-11.9	9.7	-9.8	-8.9
Uruguay	-11.6	11.3	-9.2	0.5
Paraguay	-4.0	18.8	-12.3	-5.4
Malta	0.8	19.9	19.9	19.9
Brazil	-3.0	19.2	-3.9	-2.4
Group III	**2.0**	**19.2**	**-5.6**	**2.6**
III. g	***1.2***	***16.7***	***-20.1***	***-4.8***
Egypt, Arab Rep.	1.2	16.7	-20.1	-4.8
III. h	***5.5***	***18.1***	***-7.7***	***0.5***
Senegal	10.8	18.7	4.8	2.2
Fiji	n/a	11.8	-20.1	
Hong Kong, China	0.2	23.9	-7.7	-1.2
III. i	***-1.1***	***21.9***	***17.8***	***18.4***
Barbados	-1.7	17.3		
Haiti	-0.5	26.5	17.8	18.4
Total sample	**2.0**	**20.3**	**-4.0**	**-0.3**

Sources: Based on World Bank, *World Development Indicators* and *Global Development Finance 2005,* except for data

* The classification of countries is the same as in Table 4; figures for 2000-04 are averages of four years.

		FDI net (million US$)	FDI net/GDP in %			
				Change over		
	1998/2000	2000-2004	2000-2004	1979/81	1989/91	1998/2000
	-4.2	2567	0.9	0.6	3.0	1.7
	-0.8	600	0.8	0.6	0.3	0.1
	-3.9	61	1.9	-0.7	-5.2	-2.4
	1.3	***1134***	***2.2***	***1.7***	***1.6***	***0.4***
	3.7	118	1.9	1.7	1.6	1.4
	-1.8	2313	2.8	2.4	1.5	0.7
	-0.4	1380	3.6	3.5	2.8	2.3
	0.4	2669	2.5	2.3	1.1	-1.1
	-3.6	29	0.6	0.6	0.8	-2.1
	-3.3	298	2.2	0.1	1.8	1.1
	-1.9	70	1.0	0.2	0.0	-0.9
	19.9	234	5.5	3.0	3.0	-9.8
	-1.5	20027	3.7	2.9	3.6	-0.8
	1.3	**4918**	**3.7**	**1.7**	**3.0**	**3.1**
	-5.0	***777***	***0.9***	***-3.2***	***-0.9***	***-1.0***
	-5.0	777	0.9	-3.2	-0.9	-1.0
	-2.0	***9563***	***6.6***	***4.4***	***6.1***	***6.5***
	-1.3	59	1.1	0.6	0.6	-0.7
	-0.2	22	1.3	-1.0	-0.4	3.9
	-4.4	28608	17.5	13.5	18.1	16.3
	9.5	***20***	***0.7***	***0.0***	***0.2***	***0.2***
	-1.3	33	1.2	0.6	0.8	0.6
	20.3	8	0.2	-0.6	-0.3	-0.2
	-1.1	**3741**	**2.9**	**1.9**	**1.9**	**0.4**

on exports and FDI, which are based on UNCTAD, *Handbook of Statistics, 2005.*

countries was partly due to the Asian crisis; otherwise, they were still considerably higher than the corresponding ratios for other countries. In the case of Latin American countries, the acceleration of the process of liberalization in the 1990s led to a severe drop in the I/GDP ratio in the early 1990s, and despite the fact that the investment climate improved in some cases later on around the mid-1990s, it could not be sustained (ECLAC, 2001) and collapsed in the early 21st century. The table also indicates that during 2000-4, growth in investment was negative in 14 cases, insignificant in 4 cases and low in other cases except in East Asia.

FDI did increase in most cases, mainly during the 1990s; nevertheless, only in a few cases was it accompanied by an increase in the I/GDP ratio. In some countries, even though FDI inflow was considerable, the I/GDP ratio fell noticeably throughout the period, e.g., Brazil and Mexico, or even if it did not fall (e.g., Jamaica and Panama during the 1990s), its contribution to MVA and GDP growth was minimal. One reason for the lack of such contribution was that the TNCs showed more interest in the purchase of existing plants and service companies than in greenfield investment. For example, according to one estimate about 50 per cent of the FDI flows in Latin America were brownfield investment (Ffrench-Davis, 2002).

Whether the FDI crowded-out domestic investment, as suggested by some (Agosin and Mayer, 2000), or whether it would have fallen in the absence of FDI is not clear in the absence of the counter-factual. What is clear is that public investment declined considerably in Latin America and Africa due to cuts in government expenditure; and that contrary to the claim made by neoliberals, trade liberalization and economic reform did not stimulate private investment to compensate for the decline in public investment.

Private investment in the manufacturing sector was, in particular, influenced negatively; by contrast, there was a reallocation of investment in favour of residential construction. While trade liberalization did change the structure of incentives in favour of exports, the balance between risks and returns changed against the manufacturing sector. In contrast to traditional IS strat-

egies, the outward-orientation strategies reduced the incentive for investment in the manufacturing sector due to reduction in its profit margin resulting from import liberalization. In the case of Brazil, for example, the mark-up in the manufacturing sector declined considerably, ranging from -4.2 per cent for capital goods to -12.1 per cent for non-durable consumer goods (Moreira and Correa, 1998: Tables 12 and 13; see also Grether, 1997 for the case of Mexico). At the same time it increased the risks of investment in the manufacturing sector for local investors due to increased competition in the domestic market and the lack of sufficient market information and marketing channels for exports.

The experience of developing countries indicates that speculative and rent-seeking activities often increase when expectations of profits in the manufacturing sector diminish and/or its risks increase, i.e., the opportunity cost of speculation (returns in the manufacturing sector) decreases (Amsden, 2001: 92 and Steel, 1993: 44). Hence, it is not surprising that investment in the manufacturing sector was not favoured by the investors, particularly in the early stages of the reform in Latin America.

Within the manufacturing sector, in the particular case of Latin America the industries which attracted investment during the 1980s and 1990s were those which had been dynamic during the import-substitution era. These industries continued to increase their share in investment in the manufacturing sector (see Shafaeddin, 2005.a: Chapter 3). Otherwise, in rare cases where a new product figures in the list, it is simple processing, assembly operations and/or labour-intensive industries[21] in which the country concerned has static comparative advantage, such as metal in Chile and Colombia, clothing in Peru, and iron and steel in Brazil. The food industry, which produces mainly for sale in the domestic market, remains another favourite industry in the post-liberalization era (Shafaeddin, op. cit.).

Volatility and vulnerability to external factors

Across-the-board trade and capital account liberalization has been accompanied not only by low growth in the "majority cases", but also by more

Box 2: Ghana: Structural change or de-industrialization?

Ghana started its economic reform in 1983 followed by a number of other reform programmes, the latest being the Ghana Vision 2020 which began to be implemented in 1996-2000. Over the 1983-91 period, almost all trade restrictions were removed. Ghana is regarded as a model of sustained economic reform by the World Bank. Yet, it is a clear case of de-industrialization in Africa as predicted by Stein (1992). Its economic performance during 1980-2000 was moderately better than many countries in Africa in terms of growth of GDP, exports and investment. Nevertheless, its growth of MVA was negative in the 1990s, exports of manufactured goods did not expand and investment did not come forward (see Tables 4 and 6).

The combination of unutilized production capacity (79 per cent in large- and medium-scale manufacturing factories) in 1982 (Owusu, 2001: Table 3)[22] and availability of foreign loans led to annual average growth rates of GDP and MVA of over 5.9 and 14.5 per cent respectively during the first phase of adjustment (1984-7). Nevertheless, in the subsequent period (1988-92), the GDP growth rate decelerated to 4.6 per cent and that of MVA to as low as 3.2 per cent before decelerating further to -1.2 per cent during 1993-2000. Between 1979/1981 and 1998/2000, the MVA/GDP ratio (at constant 1995 prices) dropped from 9.9 per cent to 4.5 per cent.

Nearly 77 per cent of the increase in exports of the country over 1981-2000 was due to gold. In the year 2000, only four manufactured and semi-manufactured goods appeared in the list of its main exports which together accounted for 16 per cent of exports: aluminium (9.1 per cent), processed wood (4.9 per cent), plastic articles (1.5 per cent) and cotton fabrics (0.5 per cent). The rest were all primary commodities, and three items (gold, cocoa and petroleum) accounted for about 59 per cent of total exports. Growth of exports of processed wood was mainly due to capacity utilization. Exports of aluminium declined by about 40 per cent and 30 per cent in terms of value and volume, respectively, and its price fell by about 10 per cent over 1980-2000. There was some diversification out of cocoa, but it was the result of an expansion of exports of gold and a 60 per cent reduction in the price of cocoa over 1981-2000; the volume of its export, in fact, expanded by 91 per cent over 1980-2000.

The lack of private investment, particularly in the manufacturing sector, is attributed mainly to the lack of investment in and maintenance of infrastructure,

an unstable macroeconomic environment, and doubts and uncertainty about the attitude of the Government towards the private sector due to liberalization and conditions attached to SAPs. The bulk of the increase in investment was undertaken by the Government, whose share in total investment increased from 11.7 per cent in 1983 to over 49 per cent in 1998.

Ghana could not attract much FDI; it is among the countries with the lowest FDI/GDP ratios (Table 6). Further, foreign investors have been interested largely in the mineral sector, mainly gold, and simple processing activities, which during 1992-2002 accounted for about 70 per cent of FDI, followed by services and agriculture. The manufacturing sector, mainly simple food processing, beverages and wood products, accounted for 20 per cent of gross FDI during the same period.

The economic performance of the country has improved since 2000 in some respects; exports, investment and GDP growth picked up (Tables 5 and 6). Nevertheless, growth of MVA has still been limited to an annual average rate of 0.6 per cent during 2000-4 (loc. cit.). Hence, the MVA/GDP ratio fell further to 8 per cent in 2004. The growth of exports and GDP was mainly due to two factors unrelated to liberalization. One was the Government's policy to stimulate private investment (Wolf, 2003). The other was the increase in prices of its main commodity exports during 2000-4: gold (46 per cent), cocoa (74.5 per cent), aluminium (11 per cent) and petroleum (33 per cent). Their weighted average contribution to the value of exports and GDP was over 31 per cent and nearly 12 per cent, respectively, in 2004 as compared with 2000 (based on UNCTAD, 2005.b: Table 2.2).

In short, Ghana's ability to expand production and exports of manufactured goods has been extremely limited mainly due to the lack of investment. The result of structural reforms has been de-industrialization and intensification of the pattern of static comparative advantage.

Source: 1980-2000: Based mainly on Shafaeddin (2005.a: Chapter 2).

volatility in economic variables and vulnerability to external factors. There are theoretical arguments that trade openness may lead to boom-bust cycles of investment and terms of trade, and hence of growth, particularly in developing countries (see, e.g., Razin et al., 2003). The liberalization of capital flows can intensify such volatility due to the resulting severe fluctuation in

Box 3: Brazil: De-industrialization, investment failure and immiserizing export growth

Notwithstanding its deep trade and capital account liberalization (Table 11) and economic reform since 1988 and significant inflow of FDI, Brazil's exports of manufactured goods and MVA grew only by 5.4 per cent and 1.1 per cent a year respectively during the 1990s. The bulk of FDI was allocated to the purchase of existing companies, public investment was cut sharply and domestic private investment did not respond positively to liberalization. Consequently, the I/GDP ratio (in constant prices) declined from 24.2 per cent in 1989/91 to 20.7 per cent in 1998/2000 (Table 6). The investment climate in the manufacturing sector was negatively affected by the economic reform, particularly during the early stages of reform, due to the rising interest rate, volatility in the exchange rate resulting from a currency crisis and speculative attacks on the currency, a decline in the profit margin despite the availability of cheaper intermediate and capital goods, the fall in capacity utilization, due to the contractionary impact of macroeconomic policies and an increase in unemployment. As a result, the balance between risk and return changed for the manufacturing sector; while its expected return declined, the perceived risk of investment in the sector increased. There was some improvement in the investment climate after the change of government in 1993-4; nevertheless it could not last long. In 1996, MVA was 2.1 per cent lower than in 1989 and 18 out of 39 industries saw their share in output decline; the loss reached over 58 per cent in the case of agricultural machinery. The result was the appearance of bottlenecks, growing dependence on imports, indebtedness and a substantial increase in the current account deficit which led finally to the balance-of-payments and economic crisis of 2000.

Since 2001, growth in exports of manufactured goods and total exports has accelerated (Tables 4 and 5) due to currency depreciation during 2000-2 and the need to repay debts. But export growth was not accompanied by corresponding growth of MVA, GDP and investment (Tables 5 and 6). In particular, in current prices, the share of the manufacturing sector in GDP declined from 17 per cent in 2000 to as low as 10 per cent in 2004 due to the slow growth of MVA and a further fall in the relative price of manufactured goods[23]. Otherwise, little has changed in the structural features of Brazilian industry except for the increase in market concentration and foreign ownership (Ferraz et al., 2004). The push in exports was accompanied by compression of absorption capacity despite the availability of some FDI (Table 6). Growth in investment was negative throughout

2000-4, including the last year when GDP growth of 4 per cent was achieved. Hence the I/GDP ratio continued falling; it reached 19 per cent in 2004 as against 22 per cent in 2000 (Table 6 and the same sources). As a result, growth of GDP decelerated in 2005 to an estimated rate of 2.4 per cent.[24] The export push during 2001-4 was also accompanied by little growth in private consumption (0.6 per cent a year), implying negative growth in per capita private consumption (the population grew by an annual average rate of about 1.5 per cent), an increase in the open unemployment rate from 6.2 to 11.5 per cent, and a terms-of-trade (of goods) loss of about 2 per cent[25]. The estimated loss in the total terms of trade of the country for 2000-3 was around $54 billion in constant 1995 prices[26]. Real wages fell nearly 20 per cent between 1998 and 2004 (ECLAC, 2005: Table A.24). Since there has been hardly any growth in per capita GDP, the acceleration of exports since 2001 can be labelled immiserizing export growth rather than immiserizing growth.

Source: Shafaeddin (2005.a: Chapters 2 and 3), unless otherwise stated.

the exchange rate and its consequential impact on exports, imports, investment and growth. In fact, there is also some empirical evidence that growth fluctuated more severely during the 1990s, when liberalization was intensified in developing countries, than in the previous decades (Ocampo, 2002). Instability in capital flows and the resulting fluctuation in the exchange rate have been two contributory factors to instability in GDP and other economic variables during the 1980s and 1990s (Ocampo, ibid: Figure 1.5 and Rodrik, 2000). The volatility in the capital and foreign-exchange markets has increased the cost of holding foreign-exchange reserves significantly. During the 1990s such cost was estimated to range from 0.9 per cent of GDP for South Asia and 1.4 per cent for Latin America to 2.1 per cent for East Asia, the Middle East and North Africa (Weisbrot and Baker, 2002: Table 7).

Further, the economies of developing countries have become more vulnerable to external factors as the exports/GDP and imports/GDP ratios and particularly the ratio of the trade balance of the manufacturing sector to GDP have increased substantially since the early 1980s (Shafaeddin, 2005.a: Chapters 2 and 3).

Experience of three champions of liberalization

The economic performance of three countries during recent decades stands out: Ghana, Brazil and Mexico. Despite two decades of reform, Ghana's exports of manufactured goods were not encouraging beyond some wood processing, the production capacity of which by the end of the 1990s in fact remained below the level of the mid-1970s. Moreover, the country experienced severe de-industrialization. Ghana's growth in MVA was significantly negative during the 1990s (-35 per cent) and has not picked up much since then (see Box 2). Ghana is only one example in Sub-Saharan Africa. Many other countries of the region have suffered from de-industrialization; their structure of production and exports has become locked in primary products and simple processing (Shafaeddin, 2006.a and 1995; see Fernandez de Cordoba and Laird, 2006 for the disaster cases of Malawi and Zambia). Further, "… there is no evidence in any statistical exercise that per capita growth improved with increased intensity of structural lending" through SAPs (Easterly, 2002: 23; see also Easterly, 2001).

Brazil has also been experiencing de-industrialization. Further, it achieved little in the growth of exports of its manufactured goods during the 1990s. Currency depreciation helped the Brazilian Government to push exports during 2000-3 to repay its debts. The expansion of exports has, however, been accompanied by terms-of-trade losses, a decline in real wages, and stagnant per capita consumption and capital formation (see Box 3). Further, there are signs that growth of exports will not be sustained as the local currency has appreciated since 2002 due to the inflow of capital.

Mexico showed the fastest export growth among developing countries during 1980-2000. Nevertheless, its MVA and GDP did not accelerate and the growth in exports of its manufactured goods came to a halt at the turn of the century. As the country has been a major champion of trade liberalization and economic reform, we will study its prospects in more detail below.

7 Mexico's Experience

MEXICO has been not only the main champion of trade liberalization, but also a champion of economic reform in general, including capital account liberalization and privatization (see ECLAC, 2002). It has followed almost all recommendations made by the neo-liberals and advocates of the "Washington Consensus". The country started trade liberalization in 1984[27]. In 1986 it joined the General Agreement on Tariffs and Trade (GATT) forum and began deregulation of FDI, which was further intensified in 1989, 1993 and 1999 when FDI in services was also fully liberalized. In 1988, the range of import duties was reduced from 0-100 to 0-20 per cent. The North American Free Trade Agreement (NAFTA), of which Mexico is a member, came into effect in the beginning of 1994. Further liberalization took place in 2001 when NAFTA tariff rates were applied to a large number of import items originating from other countries. During the 1990s, Mexico also signed free trade agreements with five Latin American countries, followed by similar agreements with the EU in 2000 and Japan in 2004. Since the balance-of-payments crisis of 1995, particularly since 2000/1, the implementation of some sector-specific policies or programmes has been among the stated objectives of the Government in order to increase domestic value added and international competitiveness. Nevertheless, "the announced changes in Mexican industrial policy's orientation….have so far been rhetorical than real" (Moreno-Brid et al., 2005: 1103).

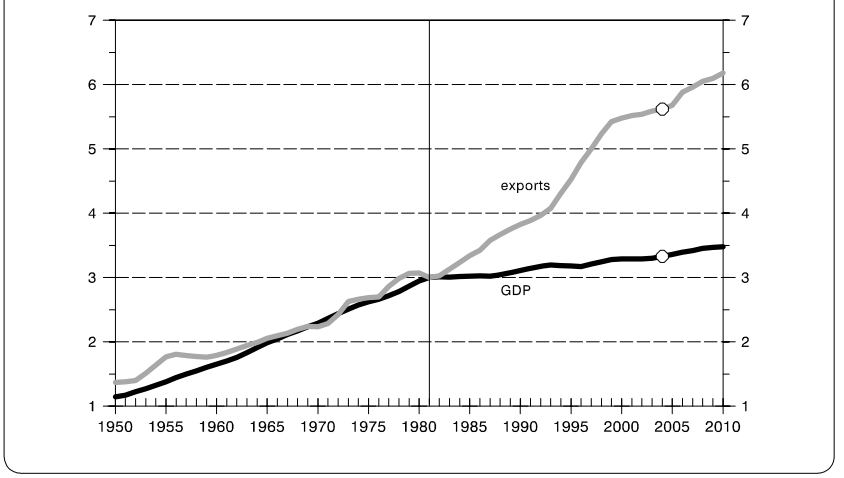
Mexico's trade liberalization has been relatively rapid and significant (Table 11). It was associated with a significant and accelerating rate of growth of exports of manufactured goods during the 1980s and 1990s, reaching $150

billion in 2000[28]. However, growth of exports was not associated with acceleration of growth of GDP and MVA. More importantly, the relationship between exports and value added in Mexico has evolved contrary to the prediction of neo-liberals. Non-oil exports and GDP growth rates were closely related during the "inward-looking" period of 1950-80. By contrast, the relation between the two variables nearly collapses after the trade liberalization of recent decades (see Chart 1). In fact, according to Chart 1, between 1950 and 1965 the three-year-moving-average growth rates of non-oil exports were well above the corresponding growth rates of GDP. For the subsequent period until 1982, the two variables changed more or less neck and neck. During the 1980-2000 period the relationship disappeared; while non-oil exports accelerated sharply as compared with 1960-80, the growth rate of GDP sharply decelerated from 6.3 per cent for 1960-80 to slightly over 2 per cent for 1980-2000 (see Table 7). The same imbalance is forecast to continue in the next five years, according to Chart 1. The lack of nexus between the growth of manufactured exports and MVA is even more pronounced than that between growth of total exports and GDP (see Table 7). In a nutshell, there was a negative correlation between growth of (Exports + Imports)/GDP and the rate of growth for the period 1960-2000 (Puyana and Romero, 2006: 33).

Another disappointing development is that more recently, during 2000-3, not only growth in GDP and MVA, but also growth in non-oil exports, particularly manufactured exports, all came to a halt (Table 7). Although growth of MVA and GDP has picked up in 2004, due to expansion of import demand in the USA, the MVA/GDP ratio, in current terms, fell to 18 per cent as against 20 per cent in 2000[29]. Further, the sustainability of the growth rate is in doubt as growth of investment was negative during 2000-3 and picked up only slightly in 2004 (Table 7)[30]. The net flow of FDI, which had reached its high of nearly $27 billion in 2001, also dropped considerably to about $11 billion before increasing slightly to $14.4 billion in 2004 (UNCTAD, 2005.b). The drop in FDI was partly due to its being a worldwide phenomenon and partly due to the shift of investment by US investors to China.

Chart 1

MEXICO: GDP and exports, 1950-2010



Source: Palma (2003:7) and updated for 2000-2010 by courtesy of G. Palma of Cambridge University.

Note: The vertical axis is log scale and the variables are in three-year moving averages.

In fact, judged by the rate of growth of gross domestic capital formation (GDKF) (Table 7), the response of investment to liberalization has been poor throughout the period since the early 1980s despite the attraction of significant amounts of FDI (Tables 6 and 7). As a result, the I/GDP ratio at the turn of the century was far smaller than that before the beginning of the reform (Table 6). Further, in current terms the ratio fell further from 23.6 per cent in 1999/2000 to 21.2 per cent in 2003/4 (World Bank, 2005.b). There is also some evidence that there was a shift from investment in productive activities to less risky investment such as residential construction. The share of this activity in total investment increased from 17.3 per cent in 1980/1 to 28.7 per cent in 1997/8 (based on Shafaeddin, 2005.a: Table 3.3). The fall in productive investment was partly due to a sharp drop in public investment, which declined from over $25 billion in 1979/81 to about $11 billion in

Table 7: Growth of output, investment and exports, Mexico (1960-2004)

	1960-80	1980-90	1989-2000	2000-3	2004
Non-oil exports	14.6[a]	16.2	19.0	-0.50	5.5
Exports of manufactured goods	6.7[a]	18.8	29.5	-0.96	4.9
MVA	7.0[b]	1.4	4.27	-4.0	3.0
GDP	6.3	1.2	3.13	0.7	4.4
GDKF	7.7	-2.5	4.9	-2.9	1.8

Sources: Based on UNCTAD, *Handbook of Statistics*, various issues; World Bank (2005.b), except the data for 2004 which are based on ECLAC, *Economic Survey of Latin America*, 2005, online.

a. 1962-80 b. 1966-80

current terms in 1998/2000[31]. It was also partly due to the lack of response of domestic private investors to liberalization, contrary to the prediction of neo-liberals. Developments and movements in the exchange rate were not conducive to investment either. The availability of oil revenues and workers' remittances, accompanied by the inflow of foreign capital, which became increasingly ample after the liberalization of the early 1980s, led to a significant upward trend in the real effective exchange rate (REER) of the country. The index of REER (1995=100) almost doubled between 1983 and 2000, increasing from about 88 to 166, and reached 178 in 2002. Before the devaluation of 1983 the so-called "Mexican Syndrome" had led to a significant appreciation of the local currency; the REER index stood at about 180 (1995=100). The appreciation of the currency may not have affected foreign investment in the *maquila* (export processing zone) sector much, as importation and exportation in this sector are a sort of book transaction, particularly since the value added in these activities is low. Nevertheless, the non-*maquila* sector must have been affected. Further, the long-term trend in the exchange rate was accompanied by sharp fluctuations and occasional shocks, for example in 1983, 1985-6, 1995 and early this century. The fact that the fluctuations and currency shocks were also accompanied by severe fluctuations and increases in interest rates no doubt has had a negative impact on investment. The sharp declines in investment during the periods of currency

shock are evidence of this effect. For example, the gross capital formation in constant 1995 prices fell by 22 per cent in 1983, over 15 per cent between 1985 and 1987, 34 per cent in 1995 and over 10 per cent between 2000 and 2003 (based on UNCTAD database).

Within the manufacturing sector, hardly any new industry was added to the list of investment-dynamic industries, i.e., industries which attracted more investment than others during the import-substitution era. These are food, transport equipment, chemicals, electric machinery and drinks. In fact, the share of each of these industries in total investment in the manufacturing sector increased considerably during the liberalization era, with the transport equipment industry, mainly the car industry, taking the first position (UNCTAD, 2003: Table 5.9).

The car industry has had a long history of development and did not fully face international competition until 2004; it benefited from special arrangements. Until then it had also been subjected to some restrictive conditions set by the Automobile Decree of 1989, according to which assembly firms had to, *inter alia*, maintain a minimum national value added (e.g., 30 per cent in 2002) and the manufacturers of components 20 per cent (Puyana and Romero, 2006: 33). Nevertheless, the use of imported components of up to 70 per cent was allowed if the product was exported (Mortimore, 2000: 1617). The industry also benefited in Mexico from tax-free operations and in the USA from payments of taxes only on value added for imported products that used components exported from the USA (Mortimore, 2000: 1617). Some of the auto companies in Mexico also applied flexible production and Japanese techniques of production to improve productivity and quality (Carrillo, 1995). This was a contributory factor to the relatively high rate of productivity growth in the automobile industry, which accounted for 65 per cent of the rate of growth of productivity in the manufacturing sector (the annual average growth rate of productivity for the sector was 0.33 per cent during 1980-2000; Puyana and Romero, 2006: 32)[32].

Structural change and upgrading

The rapid expansion of exports of manufactured goods was mainly due to the expansion of *maquila* industries whose share in total exports increased from about 14 per cent in 1980 to 46 per cent in 2000. Moreover, the share of *maquila* industries together with PITEX, which is a programme similar to *maquila,* in total exports of manufactured goods was 87 per cent in the same year (Puyana and Romero, 2006: 17). Unlike China, however, Mexico has not achieved much in increasing domestic value added in its assembly operations. China started a process of assembly operation for export in data processing and electronic equipment and increased domestic value added gradually (Shafaeddin, 2004).

In fact, when *maquila* industries were established, upgrading and productivity enhancement were among the long-term objectives of the programme (Puyana and Romero, 2006: 18); they were supposed to be achieved through creating linkages between the *maquilas* and the rest of the economy. Mexico did manage to change the structure of its exports; it reduced its reliance on exports of primary commodities from over 27.5 per cent of its non-oil exports to about 7.6 per cent over 1985-2000. Nevertheless, little upgrading was achieved. The gaining industries were mainly such labour-intensive and resource-based industries as textiles and clothing, which benefited from access to the US market, metal processing, and assembly operations mostly in data processing and to some extent in office equipment and communication equipment and electric and non-electric machinery (UNCTAD, 2003: Table 5.8).

The performance of the automotive industry, particularly road motor vehicles, and data processing and office machines, which are capital- and technology-intensive products, was in particular spectacular (see Table 9). Does this mean, however, that they contributed to upgrading? In order to study the evolution of the linkages of the *maquilas* in general and gauge the future prospects for linkages of its main export items for increasing domestic value added, let us first examine the development of assembly operations in gen-

eral, to the extent allowed by availability of data, before dealing with these industries in more detail.

Trade in components and domestic linkages

Unfortunately, the data on production of components for the whole economy are not readily available; hence we have examined the data on trade and looked into the linkages of the *maquilas* where export processing and assembly operations take place. During 1992-2003, the share of components in total imports of non-chemical manufactured goods increased faster than their share in exports of non-chemicals; the former increased from 18.53 to 26.82 per cent and the latter from 20.6 to 23.96 per cent. These data alone do not, however, say much about the evolution of domestic production of components as some components may have been integrated into the production of finished goods.

Table 8 provides the data on the evolution of the *maquila* export industry of Mexico. According to the data, first of all, there has been extremely rapid expansion of the sector in terms of the number of firms, number of employees and output, particularly since the trade liberalization of the 1980s. Secondly, there was a significant drop in the share of value added, particularly wages, in exports. The drop alone may not matter much if at least the share

Table 8: Indicators of the *maquila* export industry of Mexico (1974-2004)

	1974	1985	1998	2004	Ratios		
					1985/74	1998/85	2004/98
No. of firms	455	729	3130	2811	1.6	4.3	0.9
No. of workers (1000)	76	218	1039	1152	2.9	4.8	1.1
Gross output ($million)	10.9	1306	445051	938094	120	341	21
Percentages in gross output:							
Local inputs	0.9[a]	0.7	2.2	2.4	0.8	3.1	1.1
Value added:	36.2	24.9	21.7	20.7	0.69	0.87	0.95
of which Wages	22.4	12.8	10.6	10.7	0.57	0.83	1.0
Others	13.8	12.1	11.1	10	0.88	0.92	0.9
Imported inputs	63.1	74.5	76.1	76.9	1.18	1.02	1.01

Source: Based on Buitelaar and Pérez (2000: Table 2, p.1631) which is in turn based on INEG (2004: INEG site)

a. 1975

Table 9: Indicators of Mexico's trade in finished products and components of its two main export items

	Value	Growth		Share in total X or M		
	($m, 2003)	87/8-97/8	97/8-02/3	87/8	97/8	02/3
Group I: Office machines and data processing equipment						
X_f: SITC 751+752	9836	11.9	7.0	1.66	3.95	6.03
M_c: SITC 759	4543	5.1	13.3	2.16	0.91	2.67
X_c: SITC 759	2945	7.4	2.2	0.21	2.02	1.81
Group II: Automotive products						
X_f: SITC 781 to 783	20450	10.7	15.4	6.78	12.65	12.35
M_c: SITC 784	9500	8.3	31.4	6.62	5.60	5.59
X_c: SITC 784	6809	9.8	5.2	2.17	3.36	4.18
Mimeo item: Ratios of X_f/M_c:						
Group I				1.36	3.81	2.17
Group II				1.29	2.12	2.15

Sources*:* Calculated by the author based on UN COMTRADE database

Notes:

Group I: SITC 751: office machines; SITC 752: automatic data processing equipment; SITC 759: components of 751 and 752

Group II: SITC 781: passenger cars; SITC 782: lorries, special motor vehicles; SITC 783: motor vehicles not specified; SITC 784: components of automotive products

Notations: X, M, f and c stand for exports, imports, finished goods and components, respectively.

of domestic inputs in production increases, i.e., the linkages of the sector with other industries increase. Nevertheless, the share of local inputs increased little. Thirdly, by contrast, the share of imported inputs increased continuously to 76.1 per cent in 1998. The picture does not seem to have changed much since then. The latest available figures indicate that the percentage share of value added in exports fell further to 20.7 in 2004 while the corresponding share of imported inputs continued to rise (see Table 8).

The decline in value added, in relation to exports, has been far beyond what had been expected by the authorities and has not been confined to the *maquila* sector. Nevertheless, the situation was somewhat better in the non-*maquila* sector. The forecast of the authorities was that the export/value added ratio

Table 10: Indicators of competitive advantage of the office machine, data processing equipment and automotive product industries of Mexico (1992/3-2002/3)

Product	Export value ($m, 2003)	Exports R 2002/3	Exports C_R	Imports R 2002/3	Imports C_R
Office machines and automatic data processing machines					
Finished products:					
SITC 751	173	0.63	0.45	0.44	0.42
SITC 752	9663	2.076	3.677	0.91	1.48
Components:					
SITC 759	2945	0.801	1.438	1.277	3.612
Automotive products					
Finished products:					
SITC 781	13247	1.518	0.991	0.672	5.366
SITC 782	6500	4.231	3.388	1.08	3.81
SITC 783	703	1.58	20.34	0.25	0.19
Components:					
SITC 784	6809	1.725	1.095	2.316	3.666

Source: Calculated by the author based on UN COMTRADE database

Note: R stands for Revealed Comparative Advantage index (see endnote 33) and C_R for the ratio of R for 2002/3 to R for 1992/3. See notes to Table 9 for product SITC classification.

would increase from 10 in 1980 to 18 in 1995 for the manufacturing sector as a whole. The actual figures for the *maquila* sector were 635 in 1995 and 864 in 2000. For the non-*maquila* manufacturing sector, the ratio went up to 150 in 1995 before falling to over 100 in 2000. For the car industry, which is an old industry and operates in a significant way in both sectors, the corresponding ratio increased from 8 in 1980 to 378 in 2000 (Palma, 2003: 28-9).

The figure on value added of the car industry alone, however, is not sufficient to make a judgment on the performance of the industry. It may have used some domestic inputs from other sectors. In the absence of the necessary data we have used an alternative approach to study the performance of the automotive industry alongside the data processing equipment and office machine industries, which have been two star export performers as mentioned before and operate in both *maquila* and non-*maquila* sectors. The relevant data are shown in Tables 9 and 10. Table 9 shows the data on trade

in finished products and components of the two groups of industries and indicates that there are some similarities and some differences in their performance. In both cases:

- Growth in imports of components accelerated very fast, particularly for the automotive industry;
- By contrast, the growth of exports of components decelerated;
- Growth of imports of components is significantly greater than growth of exports of both finished items and components, particularly the latter.

However, the difference between the two groups is that the deceleration of exports of components in the case of the automobile industry may or may not have been due to more use of domestic components, particularly given that the share of components in total imports of the country also declined in the case of Group II (see Table 9). By contrast, in the case of Group I, the deceleration in exports of components cannot be explained by the greater use of domestic inputs for three main reasons. First, exports of finished items also decelerated while imports of components accelerated, implying greater reliance on imported inputs. Second, the ratio of exports of finished products to imports of components increased steadily for the automotive industry. By contrast, for Group I it increased relatively fast between 1987 and 1997 but subsequently declined significantly. Third, there was a sharp increase in the share of components in total imports of the country in the case of Group I over 1997-2003, whereas there was a slight decline in the case of Group II.

To study the tendency in the development of the pattern of exports, production and assembly operations, we may look at the indicators of competitive advantage for these activities. To do so we have applied various indicators of Revealed Comparative Advantage (R) to the exports and imports of the related finished products and components at SITC three-digit level[33]. The results are shown in Table 10. When the indicator is applied to an export

item, R greater than unity means that the country has competitive advantage in the exportation of that product. The change in R (C_R), i.e., the ratio of R for 2002/3 to R for 1992/3 in the case of Table 10, indicates whether a country has been gaining more competitive advantage in exportation (when C_R is greater than unity) or losing competitive advantage (when C_R is less than unity).

Nevertheless, competitive advantage in the export of a finished product does not necessarily imply advantage in the production of that product as the finished product may be the result of simple assembly operations. The application of R to imports can distinguish between competitive advantage in assembly operations and production although it does not measure the extent of the value added involved:

- R greater than unity for imports of a component implies that the country has competitive advantage in assembly operations; C_R greater than unity means further gain in assembly operations; R smaller than unity implies advantage in production.
- R greater (smaller) than unity for imports of a finished product implies that the country has a disadvantage (advantage) in the production of that product; C_R greater (smaller) than unity implies further loss (gain) in advantage.

The relevant data are shown in Table 10. We see that, first of all, in 2002/3, Mexico did not have competitive advantage in exports of office machines (SITC 751), but had some advantage in the production of these machines which had improved over time. However, the weight of this product in the total exports of Group I is negligible as Mexico did not use its advantage in production to expand exports.

Second, Mexico has gained increasing advantage in exports of automatic data processing equipment (SITC 752). Although the country still had some advantage in production of the product in 2002/3, its advantage had declined

in favour of assembly operations. The change in advantage in favour of assembly operations is particularly evident from the data on R and C_R for imports of components (SITC 759).

Third, the only item in which the country shows a very strong gain in advantage in both production and exports is SITC 783, the value of exports of which is, however, very small. Mexico has clearly been losing advantage in production (gaining advantage in assembly) of SITC 782 although it shows an increasing advantage in exports of the item. Regarding cars (SITC 781), which are the most important export item of the country and in which the country still had advantage in both export and production in 2002/3, the evolution of the industry has not been promising as far as competitive advantage in production is concerned. Over the period 1992/3-2002/3, the country has suffered some loss in advantage in exports and significant loss in advantage in production. With the abolishment of the special programme for cars in 2004, advantage in production may suffer further.

In short, Mexico has not been able to consolidate and upgrade its industrial structure after two decades of liberalization. There has been a tendency for continuous intensification of assembly operations in general and in its two main export items.

Mexico and Republic of Korea compared

The performance of Mexico stands in sharp contrast to the performance of the Republic of Korea despite the fact that Mexico's exports of manufactured goods were nearly as high as those of Korea in 2000 and that Korea has also liberalized trade in manufactured goods substantially since the early 1990s (Table 11). In 2000, Mexico and Korea exported $138 billion and $155 billion worth of manufactured goods, respectively (UNCTAD, 2005.b: Table 4.1A). Nevertheless there are a number of differences between the performance of the two countries. First, although Mexico's exports of manufactured goods expanded three times faster than Korea's during the 1990s, the growth of its MVA and GDP was only slightly higher than half that of Korea (see Table 4). Second, unlike Mexico, Korea achieved significant

upgrading of its export structure. According to UNCTAD's calculations, between 1985 and 2000, the share of the medium-to-high-skill/technology-intensive and high-skill/technology-intensive groups of products in total exports of the country increased from 25 per cent to nearly 67 per cent, out of which data processing equipment, office equipment and communication equipment accounted for 36.40 per cent (UNCTAD, 2003: Table 5.8). The country is one of the main world exporters of these high-value-added products. Third, Mexico's investment record has been poor despite significant inflow of FDI and the sustainability of its export growth is also in doubt. In fact, as mentioned before, Mexico's exports collapsed early this century while Korea has continued expanding exports, MVA and GDP during 2000-4 despite the world recession of 2000-2.

Table 11: The evolution of trade control measures for manufactured goods of Mexico, Brazil and Republic of Korea (1980-2004)[a]

Country		1980-83	1991-93	2004[d]
Mexico				
	Mean MFN tariff rate	34 (31.3)	13.9 (13.4)	16.7 (12.8)
	NTM incidences	11.5 (9.9)	1.8 (6.5)	1.8
	Standard deviation[c]	21.2	4.2	n.a.
Brazil				
	Mean MFN tariff rate	60.7 (53.5)[b]	15.6 (17.2)	13.6 (10.2)
	NTM incidences	41.2 (41)[b]	0.4 (0.1)	2.4
	Standard deviation[e]	18.6	7.49	5.95
Republic of Korea				
	Mean MFN tariff rate	23.4 (22.5)[b]	10.5 (10.2)	7.8 (5)
	NTM incidences	5.5 (22.5)[b]	0.2 (0.2)	0.0
	Standard deviation[f]	n.a.	13.5	2.4

Sources: Mean tariffs and NTM: 1980-93: UNCTAD (1994); 2004: World Bank (2005.b: Table 6.6 indicators). Standard deviation: Mexico: 1980-93: Palma (2003: 11,Table 1); Brazil: Pereira (2005: Table 2); Korea: World Bank (2005.b: loc. cit.).

Notes:
NTM = non-tariff measure

a. Figures in brackets are import-weighted. b. 1984-87. c. Weighted by production, and figures in the first and second columns are related to 1980 and 1983, respectively. d. The figures for NTMs are *ad valorem* equivalents of NTMs in 2000. e. Import-weighted for 1989, 1994 and 2003, respectively. f. Unweighted, for 1996 and 1999, respectively.

A number of factors are responsible for the differential performance of the two countries. Nevertheless, as far as trade policy is concerned, a major difference is that in the case of Korea, trade liberalization was a part of long-term trade and industrial policies. Korea exposed its industries to competition from imports selectively and gradually over a long time span, doing so when an industry neared the stage of maturity after having been provided temporary support during its infancy. By contrast, Mexico liberalized almost all industries across the board, disregarding their stage of development. As a result, two groups of industries suffered: those which were inefficient because of prolonged and over-protection and those which were far from the stage of maturity. Like in other Latin American countries, only a few industries tolerated liberalization well. Another important difference between the two countries is that Korea has benefited from a stable and remunerative exchange rate whose price signalling has been functioning well under the control of the Government. Mexico has suffered from long-term appreciation of the local currency together with sharp fluctuations caused partly by trade liberalization and partly by the liberalization of the capital account. In developing countries capital account liberalization leads to sharp movements in the exchange rate, which then loses its signalling function (Henderson, 1948).

8 Liberalization Helps Industries That Are Near the Stage of Maturity[34]

AS mentioned earlier, in Latin American countries with some history of import substitution, a few industries continued to perform well after trade liberalization not only in exportation and upgrading, but also in attracting investment. For example, in the case of Brazil, where exports of manufactured goods as a whole failed to expand fast in the 1990s, exports of vehicles, machinery, particularly non-electric, and aircraft expanded relatively rapidly. These industries were near the stage of maturity and trade liberalization helped them to become more efficient.

The spectacular performance of the aerospace industry of Brazil is in fact an example of the success of "targeting" and "selectivity". It is also proof that liberalization can be effective in making an industry competitive when it is near the stage of maturity – just as it harms infant industries or inefficient industries subject to prolonged protection. The aerospace industry is highly technology- and skill-intensive. Yet, although faced with a crisis of competitiveness after the shock of liberalization and privatization in the mid-1990s, the Brazilian aerospace industry soon recovered and became the country's most important exporter of manufactured goods. The value of exports of Brazilian aircraft increased from $182 million in 1995 to $2.7 billion in 2000 and over $3.6 billion in 2002/3 (UNCTAD, 2005.b: Table A.2D). In 1998, Embraer, the Brazilian aircraft manufacturing company, became the world leader in the commuter and regional jet market.

If a country can succeed in such an industry, it can succeed in any industry provided the industry comes under the purview of dynamic industrial and

trade policies. The aerospace industry of Brazil was established in 1945. Throughout its operation until its privatization in the mid-1990s, it received government support through tax incentives, budgetary allocations, financial benefits, procurement, etc. Both the government policy and the company's strategy were coherent, cumulative and continuous and targeted. In particular, the company concentrated on the technology of system integration and developed local designs for a family of aircraft to become independent and produce a differentiated product suitable for regional flights. To acquire the necessary technology, it focussed on organizational and technical training, both know-why and know-how, through learning by doing, by training, by adapting, by interacting, by using and by hiring.

After facing liberalization in the mid-1990s, in order to consolidate its technical knowledge, the company went through some restructuring and innovation in its organizational and institutional strategy. It also established partnerships and strategic alliances with other local and international companies. In addition, the Federal Government continued its support of the industry through export financing and a programme for the industry's expansion.

9 Summary and Conclusions

SINCE the early 1980s, developing countries have been under pressure from the IFIs to liberalize their trade regime. Universal and across-the-board trade liberalization has been recommended to all developing countries irrespective of their industrial capacities and levels of development. The dominant economic ideology, *a la* "Washington Consensus", has also been influential in shaping the trade rules under the auspices of the WTO and the conditionalities imposed on the developing countries by bilateral donors.

We have tried to see whether a liberal trade regime would help or hinder the process of industrialization of developing countries. To do so, we have examined the validity of what we termed the trade liberalization hypothesis (TLH). The answer to this question, we have concluded, is: it would depend. On the one hand, prolonged protection would lead to inefficiency and inability to compete in the international market. On the other hand, premature, universal and across-the-board trade liberalization would lead to de-industrialization, and concentration in production and exports of primary commodities, resource-based products, simple labour-intensive industries or assembly operations, without much ability to catch-up and upgrade.

These conclusions are backed by theoretical arguments and historical and empirical evidence. We have shown that the philosophy behind the TLH is a theoretical abstraction based on the doctrine of comparative cost advantage in its H-O version. This doctrine cannot be used as a normative guide to the process of catching-up and achieving dynamic comparative advantage, which is a policy-based process.

The historical evidence indicates that to varying degrees in all successful early and late industrializers – with the exception of Hong Kong (which is a city territory) – government intervention and a long period of selective infant-industry protection played significant roles. Only after their industries reached a certain level of maturity did they subject them to gradual liberalization. By contrast, history also teaches us that the forced trade liberalization imposed on the Third World countries during the colonial era led to deindustrialization, specialization in primary commodities and underdevelopment. Their process of industrialization began when they regained their policy autonomy.

Regarding the recent experience of developing countries, there is no convincing evidence in the literature in favour of the validity of the TLH. We have analyzed the economic performance of a sample of (46) developing countries that have undertaken trade liberalization during recent decades with the aim of examining the claim made by the proponents of the TLH that trade liberalization would stimulate exports, investment, growth and diversification in favour of the manufacturing sector. The results obtained are varied. During the 1990s, some 40 per cent of the sample countries experienced rapid expansion of exports of manufactured goods. In a minority of these cases, mostly in East Asia, rapid export growth was also accompanied by fast growth of MVA, GDP, domestic absorption and upgrading. Further, they continued their satisfactory performance in most recent years despite the world recession of 2000-3. By contrast, the MVA and GDP growth performance of the majority of the sample countries, mostly in Africa and Latin America, has not been satisfactory even in cases where exports expanded fast. Except for a limited number of countries, the structure of GDP has not changed in favour of the manufacturing sector. In fact, half of the sample countries, including all the low-income ones, have faced de-industrialization. Trade liberalization has led to the re-orientation of exports and production towards resource-based industries and simple labour-intensive products or assembly operations in accordance with their static comparative advantage. Yet their vulnerability to external factors has increased. Certain industries were, however, dynamic in terms of production, exports and in-

vestment in the particular case of Latin America, which has had some industrial capacity developed through import substitution; the competitive pressure resulting from trade liberalization made them more efficient. These are industries that had also been dynamic during the import-substitution era and/or near maturity when the liberalization started, such as the aerospace industry in Brazil.

During the more recent period since 2000, countries which had shown relatively high MVA growth during the 1990s have resisted the recent world recession better than those that simply had shown rapid export growth during the 1990s; the former group have also enjoyed better export performance in recent years than the rest. In other words, at least in the early stages of industrialization, the causal relation between manufacturing export growth and output growth goes from output to exports rather than the other way round.

Contrary to the claim made by neo-liberals and IFIs, trade liberalization and structural reform programmes failed to encourage private investment, particularly in the manufacturing sector. The average I/GDP ratios for 2000/4 were lower in 30 out of 44 cases than their levels in 1979/81. The picture remains more or less the same if one compares the ratios for 1998/2000 with those of 1979/81, or 2000/4 with those of 1989/91, i.e., before trade liberalization had been intensified. The structure of investment also changed against the manufacturing sector even in some countries, e.g., in Latin America, where FDI was ample. Although trade liberalization changed the structure of incentives in favour of exports, the balance between risks and returns changed against the manufacturing sector.

Mexico has been a champion of liberalization and experienced the fastest growth rate of exports of manufactured goods during 1980-2000. Yet, it is an example of failure in growth and upgrading. Its MVA has not expanded much, it has achieved little upgrading and it has shown a tendency towards intensification of assembly operations. Unlike the Republic of Korea and other East Asian countries, growth in its exports of manufactured goods and

MVA came to a halt during the recession of 2000-3 and has not picked up much since then.

A major difference between the "minority" and the "majority" groups is that in the case of the former, i.e., East Asian NIEs, at least until recently, economic reform, particularly trade liberalization, has taken place gradually and selectively as part of a long-term industrial policy. These countries embarked on a process of infant-industry protection for import substitution in certain consumer goods, but quickly shifted their strategy by pushing some of these industries for export promotion through a programme of "infant export" support. They eventually subjected them to gradual import liberalization. At the same time, they established some other industries through protection and eventually export promotion and followed the same procedures. In such a process, by following a mixture of import substitution and export promotion, protection and liberalization, they moved from traditional light consumer goods to intermediate and ultimately capital- and technology-intensive industries until they consolidated their industries. Throughout the period, they used not only trade control measures, but also taxes, subsidies and stable and, when necessary, under-valued exchange rates as their policy tools. For them neither liberalization nor protection was an end *per se*; they used them as means to industrialization and development. As far as liberalization is concerned, they embarked on gradual trade liberalization after an industry had reached a certain level of maturity and development. By contrast, the "majority group" embarked, in the main, on a process of rapid and across-the-board liberalization *a la* "Washington Consensus".

In short, trade liberalization is essential when an industry reaches a certain level of maturity, provided it is undertaken selectively and gradually. Nevertheless, the way trade liberalization is recommended under the "Washington Consensus" is a recipe for destruction of the industries which are at their early stages of infancy or development, without necessarily leading to the emergence of new ones.

If, through the negotiations on "non-agricultural market access" (NAMA) under the Doha Round, developing countries submit to developed countries by accepting the latter's proposed Swiss formula with a low coefficient (10 or even 15) and binding their tariff lines at low levels, it would be at the cost of halting their industrialization process. The low-income countries and others at early stages of industrialization, in particular, will be trapped in the production and export of primary commodities, simple processing and, at best, assembly operations and/or other simple labour-intensive industries.

I have outlined a framework for "development-oriented" trade and industrial policies elsewhere (Shafaeddin, 2005.c), but its implementation would not be easily feasible without a fundamental change in the international trade rules. The current WTO rules are not conducive to industrialization and development. Developing countries should not submit to the "blame game" of developed countries during trade negotiations; it is better to be "blamed" for defending their policy autonomy to enhance their development than to get trapped in underdevelopment. Neither can they rely, in the negotiations, on the benevolence of developed countries on moral grounds; the name of the game is bargaining (Shafaeddin, 1984). Unfortunately, since the beginning of the Uruguay Round negotiations they have been on a slippery-slope road. Any serious attempt in changing the international trade rules begins with a "change in perception". The lessons of history are rich enough.

Table A.1:
The ratio of MVA to GDP for the sample countries (1979/81 and 1998/2000[a]) (in per cent)

a. Costa Rica (21.7, 23.7); Sri Lanka (10.2, 15.4); Malaysia (17, 30.4); China (34.2, 47.1); Bangladesh (14.8, 15); El Salvador (23.4, 22.8); Thailand (23.3, 33.9); Singapore (28.1, 25.9); Indonesia (11.8, 25.9); Turkey (14.6, 20); India (13, 15.5).

b. Mexico (17.5, 19.7); Chile (19.7, 14.5).

c. Bolivia (18, 16.3[b]); Philippines (27.6, 24.7); Guatemala (16.3, 13.4); Kenya (10.5, 11.6); Argentina (20.3, 16.5); Jamaica (20.3, 15.9); Madagascar (na, na).

d. Nepal (3.9, 8.7); Korea, Rep (22.3, 32); Trinidad and Tobago (20.4, 10.5); Mauritius (13.8, 20.6); Jordan (13.3, 13.3).

e. Tunisia (18.2, 17.9); Peru (16.5, 14.8); Panama (9.6, 8.9); Taiwan, P.C. (32.6, 27.9); Pakistan (14, 15.8); Papua New Guinea (10.4, 9.3).

f. Ghana (9.9, 4.5); Colombia (21.9, 13.7); Morocco (17, 17.9); Venezuela (16.1, 19.4); Zimbabwe (22.4, 16.9); Uruguay (24.1, 18.4); Paraguay (16.9, 14.2); Malta (na, na); Brazil (26.2, 19.5).

g. Egypt (na, 17.9).

h. Senegal (11.6, 13.6); Fiji (na, na); Hong Kong, China (na, na).

i. Barbados (10.5, 7.7); Haiti (17.3, 7.1).

Source: Based on World Bank, *World Development Indicators.*

a. The first and the second figures in the brackets are those of 1979/81 and 1998/2000, respectively.

b. 1990

Endnotes

1. Five per cent of tariff lines can be exempted provided the related imports do not exceed 5 per cent of the total value of the country's imports (Paragraph 8, Annex B of the WTO July 2004 Package).
2. The Swiss formula is: T=(a.t)/(a+t) and R=t/(a+t), where T and t and a are the new and initial tariff rates and constant coefficient, respectively, and R is the rate of tariff reduction (see WTO, 2003: 2).
3. For further details see Shafaeddin (2006.d).
4. Hereafter, we will use the terms "EP", "export orientation" and "export expansion" interchangeably.
5. See Sen (2005) for a review of free trade theories.
6. Note that the concept of "market inadequacy" is different from "market failure" (see Arndt, 1988).
7. According to the dynamic version of the theory, first introduced by H.G. Johnson (1968), as production and exports of labour-intensive products increase, wages will go up and the country will lose comparative advantage in labour-intensive products and produce capital-intensive goods. The example of East Asia is often given for such a development! The theory however assumes that things happen automatically; it is not clear how the losses of advantage in labour-intensive products should imply gains in advantage in capital-intensive goods and how the adjustment takes place for the creation of dynamic advantage.
8. For details see Shafaeddin (2005.a: 118-33).
9. The New Growth Theory also argued in favour of free trade. According to the theory, free trade makes a contribution to growth through its impact on the availability and cost of inputs. However, the theory still assumes perfect competition and absence of dynamic externalities (experience). The empirical test of the theory is questionable as it uses the trade/GDP ratio as an indicator of openness (see Edwards, 1993 for a literature survey).
10. The following paragraphs are based on Shafaeddin (1998) and Chang (2005.a).
11. The USA, for example, currently has a number of bilateral free trade agreements with other countries and is in the process of negotiating a number of others.
12. During the late 1850s and 1860s a series of treaties also "converted the greater part of Europe into low tariff blocs" under the influence of Great Britain (Kenwood and Lougheed, 1994: 61-4).
13. For details see Chang (2005.b: 30-4).
14. See also various literature by the World Bank and the International Monetary Fund (IMF), particularly World Bank (1987) and (1993). For a brief survey see Shafaeddin (2006.a).
15. The countries covered include: Bangladesh, Brazil, Bulgaria, India, Jamaica, Malawi, the Philippines and Zambia.

16. For a survey of the literature on de-industrialization see Shafaeddin (2006.a). For a survey on the impact of liberalization in general see Chang (2005.b) and Edwards (1993).
17. The next couple of paragraphs are based mainly on Shafaeddin (2005.a and 2006.a).
18. For the classification of the countries according to high, moderate and low export and MVA growth rates, see the notes at the bottom of Table 4.
19. Based on UNCTAD, *Handbook of Statistics*, *2004*: Table 4.2D.
20. See Shafaeddin (2005.a: Chapter 3).
21. Some labour-intensive industries, however, did not survive due to competition from abroad as they were either at the infancy stage or not viable despite a long period of protection.
22. See also Acheampong and Tribe (2001).
23. The corresponding share in constant prices hardly changed.
24. Based on JP Morgan, *Global Data Watch*, 6 January 2006: 5.
25. Based on online data from the Economic Commission for Latin America and the Caribbean.
26. Based on CEPAL, Anurio estdistico de Américа Latino el Caribe, 2004, Table 136.
27. The present paragraph on trade liberalization is based on Moreno-Brid et al. (2005).
28. Non-oil exports reached $170 billion in 2000. Based on UNCTAD, *Handbook of Statistics*.
29. Based on World Bank, *World Development Indicators Online.*
30. According to JP Morgan the estimated GDP growth rate declined from 4.4 per cent in 2004 to 2.9 per cent in 2005 (JP Morgan online, Data Watch, 6 January 2006, p.5).
31. As a percentage of GDP, the decline in public investment was 8.8 per cent over the period concerned. Based on International Finance Corporation sources and World Bank, *World Development Indicators, 2002*.
32. The car industry was one of the three industries with positive productivity growth (meat and dairy products were the other two) (Puyana and Romero, 2006: 33).
33. When applied to exports the RCA formula would be: $R = [X_{ij}/X_j]/[X_{wi}/X_w]$, where i, j, w and X stand for product, country, world and exports, respectively. R is the ratio of the market share of Mexico's exports of an item, to the market share of Mexico in total world exports. When the RCA indicator is applied to imports the formula is: $R = [M_{ij}/ M_j]/[M_{wi}/M_w]$, where i, j, w and M stand for product, country, world and imports, respectively. Here R is the ratio of the market share of Mexico's imports of an item, to the market share of Mexico in total world imports.
34. This chapter is almost entirely based on Shafaeddin (2006.a).

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The purpose of this study is to examine whether free trade helps or hinders industrialization and development. The author argues that there is neither a theoretical justification nor historical and empirical evidence to support what he refers to as the "trade liberalization hypothesis" (TLH). The theory behind the TLH is the doctrine of comparative cost advantage, which cannot be used as a guide to catching up and achieving dynamic comparative advantage, which is a policy-based effort. Almost all successful industrializers went through a long period of selective infant-industry protection before subjecting their industries to trade liberalization gradually. The forced trade liberalization imposed on the Third World during the colonial era led to their de-industrialization, specialization in primary commodities and underdevelopment. On the basis of an empirical study of a sample of developing countries which have undertaken trade liberalization during the last quarter of a century and a case study of Mexico, which has been a champion of liberalization, the author also concludes: that trade liberalization is essential when an industry reaches a certain level of maturity, provided it is undertaken selectively and gradually; that the way it is recommended by neo-liberals under the label of the "Washington Consensus" is, however, a recipe for destruction of industries which are at their early stages of infancy or development; that if, through the Doha Round of WTO trade negotiations, developing countries submit to the developed countries by accepting the latter's proposal for drastic tariff cuts based on the "Swiss formula" with a low coefficient of 10 and binding their tariff lines at low levels, it would be at the cost of halting their industrialization process; and that the low-income countries and others at early stages of industrialization, in particular, will be trapped in the production and export of primary commodities, simple processing and at best assembly operations and/or other simple labour-intensive industries.

Finally, the author raises the need for a different framework of industrial and trade policies, which would require a radical change in the international trade rules which are not conducive to industrialization and development. In working to bring about such a framework, developing countries should not be worried, he emphasizes, about being "blamed" for defending their policy autonomy in order to enhance their development.

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