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World Development Studies 6

# **Trade, Trade Policy and Industrialization Reconsidered**

G. K. Helleiner



October 1995

UNU World Institute for  
Development Economics Research  
(UNU/WIDER)

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Industrialization Reconsidered**

**G. K. Helleiner**

## **UNU World Institute for Development Economics Research (UNU/WIDER)**

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00160 Helsinki, Finland

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Camera-ready typescript prepared by Liisa Roponen at UNU/WIDER

Printed at KP Paino, 1995

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ISSN 1238-1896

ISBN 952-9520-29-8

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## PREFACE

This volume is the concluding stage, in fact the concluding report, of an important project undertaken by UNU/WIDER on the interrelations between trade, industrialization and development. The research work was supported by the Swedish International Development Authority (SIDA).

The director of this project, Professor G.K. Helleiner, raises in his introduction the question: that with so much research and policymaker attention already lavished upon trade and trade policy in development, does the world really need another paper on this subject? But this is not just 'another paper'. The project itself was initiated – as a second stage to some earlier research work on trade and industrialization – in order to look at the subject in the new era of the global economy. This was marked on the one hand by important spatial, structural, and organizational-managerial changes in global industry and trade; and on the other by new regulatory regimes, and changes in trade policies resultant from liberalization and the macro and microeconomic influence of the structural adjustment policies. Many developing countries achieved high rates of growth in industrial output and exports, and the rapid expansion of their domestic market created also a new growth impulse to the industrial world. Some of the middle-income countries have become important forces in the world market and have been able to compete successfully with industrial countries. In the background of the project, there were a number of noteworthy questions: to what extent are those theories, policies and policy instruments, developed during the past decades, relevant and useful? What are the interrelations between trade, macroeconomic and industrial policies? The answers to those questions have been sought in the diverse empirical experiences of fourteen countries (Bangladesh, Brazil, Chile, Colombia, India, Kenya, Korea, Malaysia, Mexico, Peru, Sri Lanka, Tanzania, Thailand, Turkey) comprising about one fifth of the world's population. The countries were selected on the basis of their importance in world trade and industrialization, and also as specific cases with regard to their size, development level, and structural characteristics.

From the concluding project report, I wish to spell out some important, explicit and implicit policy messages to the countries and international organizations, and also to the research community. As international trade will remain a vitally important global factor for industrialization and development, even after the establishment of the World Trade Organization, it is necessary, in the light of the changing realities and new challenges, to continue the global dialogue on the main issues related to the interrelations between the two processes. The ongoing global technological transformation, the simultaneous presence of convergence and increasing gaps in technological capacities are changing the role of trade, its relations with foreign direct investments, and its implications for development. These changes are increasing the complexity of trade policies and their international interactions. In the development of industries and trade, there is no uniformity in the sources of successes and failures. So far, a universally applicable optimal trade policy has not been created. There are a great

number of different routes and successful policies to industrial expansion and competitive manufacturing export growth, but the initial conditions and constraints have a strong influence over all. The political economy of public policy formation, and the capacity of governments to implement them effectively are crucially important factors. Maintenance of an open trading regime, which provides assured market access to the developing countries, is perhaps the most important requirement for global prosperity. The diversity of the situations and the dynamics of the changes must be taken into account in future agenda-setting for multilateral cooperation and also in research.

On behalf of UNU/WIDER, I express my sincere gratitude to SIDA, with thanks and appreciation to the project participants who contributed to the research work, particularly Professor G.K. Helleiner for his invaluable professional guidance and input.

Mihály Simai  
Director, UNU/WIDER, Helsinki

## ACKNOWLEDGEMENT

I am deeply indebted to my colleagues in the UNU/WIDER project on Trade and Industrialization Reconsidered, who have had an enormous impact upon my thinking on the issues discussed in this paper. I have benefited not only from their research and their discussions at our meetings but also from their comments on earlier papers I have written in connection with the project, including introductions to the published volumes. I have been extremely fortunate to have had the opportunity of working at length with such outstanding scholars. On behalf of the entire research group, I should like to thank the Swedish International Development Authority (SIDA) for its support of the project and UNU/WIDER for its continuous encouragement. For comments on an earlier draft of this summary, I am especially grateful to Merih Celasun, Kwang Suk Kim, Benno Ndulu, Mihály Simai, and Lance Taylor. I am alone in my responsibility for its contents.

G. K. Helleiner  
University of Toronto  
September 1995



## I INTRODUCTION

The role of international trade in economic development and in industrialization processes has attracted a great deal of attention from the economics profession. Economic historians of all political and analytical persuasions have assigned heavy weight to the role of international trade and international exposure more generally in their positive analyses of long-term development experiences. Modern growth theoreticians and econometricians invariably hypothesize an important role for trade in their attempts to 'explain' variation in national growth rates across countries and over time. Governmental *policies* toward trade have therefore also been featured in such historical, theoretical and empirical investigations of the growth and development record. Trade policy recommendations are prominent in normative analyses of current development problems in the developing countries (and indeed everywhere else as well).

With so much research and policymaker attention already lavished upon trade and trade policy in development, one might well ask whether the world really needs another paper on this subject? The rationale for writing one is the rationale for the larger research project which it is this paper's purpose to summarize (and which is reported in detail in Helleiner 1994 and 1995).

What, then, was the rationale for the research project? By the late 1980s and early 1990s it seemed to many development economists, certainly to the participants in the project, that it was time for a major independent cross-country review of recent experience with trade policies and industrialization in developing countries, undertaken cooperatively by eclectic analysts with detailed knowledge of their own countries' experiences. There had been no comparable cross-the-board review since the influential studies of a much earlier period undertaken by the OECD Development Centre, which studied only six countries (Little *et al.* 1970), and the National Bureau of Economic Research, which studied ten (Bhagwati 1978; Krueger 1978). Yet, over the intervening years, considerable knowledge and experience had accumulated of the interactions between trade and other policies impacting upon industrialization, and their joint effects upon other aspects of development in a wide variety of developing countries. At the same time, a prolonged period of slower global growth and increased macroeconomic instability had raised fresh questions; the deployment of new governmental policy instruments appeared to have offered wider policy possibilities; new trade theories had stimulated fresh policy controversy; and the research community had developed improved methodology for empirical investigations. The World Bank directed major research attention to trade and industrialization policy issues in the 1980s, reporting the gist of its conclusions for more 'popular' consumption in the 1987 *World Development Report*. But its research failed fully to utilize the available range of experience or theory, and thus failed to address many of the most interesting questions; and, in any case, was

suspect in many circles from its outset because of the known predilections of its organizers.

Indeed at this time there was already emerging widespread unease, an unease that has since expanded, about both the relative degree of attention being devoted by development economists, especially those in the World Bank, to trade policy; and the uniform and simplistic character of much of the advice on trade and industrialization policies emanating from the major international financial institutions. Trade policy, in this dominant view, which was effectively summarized in World Bank 1991 and 1987, is a fundamental determinant of economic performance, and it functions best when it attempts the least. (For a recent exposition, see Edwards 1993.) Domestic goods prices should closely approximate world prices, except in a narrowly limited range of cases, notably where countries possess market power (are not 'small') in the world markets for their principal exports. Government interventions should be few and, where they are made, should be unselective as between different forms of economic activity, leaving their impact as 'neutral' as possible. They should, in general, employ 'market-friendly' policy instruments, like subsidies or taxes, rather than administrative instruments, like quantitative controls. These trade policies are presumed to be universally appropriate and should be introduced everywhere as rapidly as possible. Liberal policies regarding the inflow of services, technology and capital are also recommended as part of this universally applicable set of appropriate policies. (Policies on services, technology and foreign capital may be more important to long-run development than policies on goods trade, but this project, in accordance with much recent practice, confined itself primarily to the role of the latter.)

Many developing countries are 'liberalizing' their trade policies on their own volition, having accepted the logic of the theoretical arguments for doing so, within the context of broad adjustments to development strategy following the disappointing experience of the 1980s. Many more have been pressed, in bilateral agreements with trading partners, in the GATT, and via external conditions on financial assistance, to 'liberalize' their trade and to 'disarm' themselves in respect of the potential for future more 'activist' trade and industrial policies (Agosin and Tussie 1993). The rules of the newly-created World Trade Organization (WTO) and the strengthened provisions for their enforcement now seem likely further to constrain developing countries in this regard.

There were both theoretical and empirical reasons for doubt, however, as to the universal validity of these general assessments, recommendations and policies. Allowing for learning effects, scale economies, externalities, and less-than-perfectly competitive markets, it is easy, on the basis of standard economic theory, to posit alternative 'optimal' trade policies for development (each dependent on specific alternative assumptions regarding these matters). These issues were addressed in an earlier UNU/WIDER volume (Helleiner 1992). Moreover, the historical record seems to offer remarkably few recent cases of rapid industrialization or development that can be associated with the generally recommended trade policies. In a recent comprehensive empirical investigation of the sources of growth in which the robustness of earlier results (including those relating to trade and trade policy) was subjected to systematic

testing, the only variable that proved (robustly) correlated with economic growth was the investment rate (Levine and Renelt 1992).

More particularly, many analyses of the East Asian successes of the 1970s and 1980s had called attention to the importance therein of governmental activism in trade and other spheres, much of which was quite selective in its intention and its impact (Westphal 1982, 1990; Amsden 1989; Wade 1990). There have since been many more, some even sponsored within the World Bank (e.g. World Bank 1993). Controversy over interpretation of the East Asian record continues (e.g. Amsden *et al.* 1994; Bradford 1994; Fishlow *et al.* 1994) but no reputable analysts question the important role of activist states in the success stories there. State activism in industrial development has achieved success elsewhere, of course, as well (see, for instance, Shapiro and Taylor 1990). There is now widespread agreement that the strongest case for liberalized and neutral policies rests less on economic theory than on political economy grounds, that is, on the risk that discretionary economic policy may be captured by political interests or, putting the point a little differently, the small likelihood of optimal policies in terms of economic theory emanating from discretionary political processes (e.g. Krugman 1987). (Recent experience in 'transitional' and liberalizing regimes has shown that the political economy of regime change can also create enormous shortfalls from the efficiency and equity improvements that some economic theoreticians seemed to have expected.)

There were therefore pressing practical reasons for undertaking research in this sphere. It was, and still is, highly policy-relevant and it concerns matters which are hotly contested. What better rationale can there be for a new paper – particularly when it has fresh research results to report?

Project participants agreed that since in this area, as in many others in economics, the relevant theory (of the effects of trade and trade policy) had advanced far beyond empirical analyses or verifications thereof, the highest returns were likely to derive from comparative empirical analysis rather than attempts to refine the theory. Their project emphasized positive, rather than prescriptive, analysis with particular attention to themes and issues that had previously been relatively neglected, notably industrial productivity change, the role of non-trade policies, aspects of firm size and market structure, and initial conditions (as well as the more traditional analyses of anti-export bias, levels of protection and the like). It focused upon the decades of the 1970s and 1980s, a period of considerable macroeconomic turbulence. Severe global recessions, oil price 'shocks', interest rate volatility, rising protectionism in many industrial countries, and disorder in the global financial system all generated a degree of international economic malaise in these decades that had not been seen since the 1930s. These and other factors, often including deficient domestic economic policies, contributed to reduced growth, intensified balance of payments problems, and accelerated price inflation in the majority of the developing countries. There was therefore also an obvious need to investigate the possible interactions between macroeconomic experiences and policies and the trade-industrialization issues that were the main focus of the project; this proved to be a critically important element of the study.

The presentation of a summary of the project's findings inevitably requires the provision of some contextual and complementary material if it is both to 'stand alone' and to acquire overall coherence. I believe that what follows is broadly agreed by the project's participants. At the same time, any such summary is bound to reflect some of the perspectives of its single author and cannot pretend to represent all of the views of all of the participants in the underlying fourteen-country research project, views that in their details may not always be as one.

TABLE 1.1  
COMPARATIVE INDICATORS FOR SAMPLE COUNTRIES \*

Country	Population	Per capita GNP		Infant mortality rate
	Millions	Level in 1985 US\$		Per 1,000
	1985	Exchange rate	PPP	Live births
Bangladesh	101	150	835	118
India	765	270	751	97
Kenya	20	290	885	70
Tanzania	22	290	434	104
Sri Lanka	16	380	1,869	21
Thailand	52	800	2,670	30
Peru	19	1,010	2,921	86
Turkey	50	1,080	3,638	75
Colombia	28	1,320	3,889	39
Chile	12	1,430	4,440	20
Brazil	136	1,640	4,406	61
Malaysia	16	2,000	4,950	23
Mexico	79	2,080	5,239	46
Korea	41	2,150	4,022	24

Source: Syrquin 1994: 40.

Note: \* In order of per capita GNP.

The fourteen countries included in the study vary greatly in terms of size, per capita GDP, economic structure, degree of dependence on exports, and other characteristics (see Table 1.1). They include eight 'large' countries (population over 25 million in 1985: Bangladesh, Brazil, Colombia, India, Korea, Mexico, Thailand and Turkey) and six small ones (Chile, Kenya, Malaysia, Peru, Sri Lanka and Tanzania). On the basis of data from 1980, three were characterized by Syrquin as 'outward-oriented', of which one was a primary exporter and two were industrial exporters; seven were 'inward-oriented', of which five were primary-oriented and two were manufacturing-oriented; and four were 'balanced', i.e. difficult to categorize (Syrquin 1994). Table 1.2 presents these country categorizations and data on the countries' export levels and composition over the 1965-85 period and in 1985; these data, notably those for Turkey, raise questions about some of the 1980-based categories. In terms of the World Bank's categorizations, the sample includes five low-income countries, eight lower-middle-income countries and one upper-middle-income country (Korea). Certainly, these countries' initial conditions (e.g. macroeconomic stability, external supports or constraints, etc.); boundary conditions (e.g. size, level of development, natural resource

endowments, etc.); and indeed their entire histories – social, economic, political – show great variety. It is their very variety and the further variety of their individual experiences over time which buttresses the strength of whatever generalizations the studies of their experiences may generate; on the other hand, the same variety, as will be seen, makes it correspondingly more difficult to derive such generalizations.

TABLE 1.2  
 TYPOLOGY OF SAMPLE COUNTRIES, EXPORT LEVELS AND COMPOSITION

Country	E/Y	$\Delta(E/Y)$	$E_m/E$	$\Delta(E_m/E)$	$E_p/N$	$E_m/N$
	85 (%)	65-85	85 (%)	65-85	1985 (US \$)	1985 (US \$)
Outward, primary-oriented						
Small						
Malaysia	55	13	27	21	697	258
Inward-oriented						
Large, manufacturing						
India	6	2	49	0	7	6
Bangladesh	6	-4	65	-	4	7
Large, primary						
Mexico	16	7	21	11	202	75
Brazil	14	6	41	33	112	77
Turkey	19	7	54	52	76	89
Small, primary						
Chile	29	15	7	3	290	22
Peru	22	6	12	9	137	19
Balanced						
Large						
Colombia	15	4	18	11	108	24
Thailand	27	9	35	30	89	48
Small						
Kenya	25	-6	13	3	43	6
Tanzania	7	-19	7	-6	11	1
Outward, industry-oriented						
Large						
Korea	36	27	91	31	67	672
Small						
Sri Lanka	26	-12	27	26	61	22
Country groups						
Low y	14	-5	24	15	18	6
Lower mid-y	23	7	30	21	95	40
Upper mid-y	28	10	47	22	210	240
Industrial	18	6	76	6	350	1120

Source: Syrquin 1994: 52.

Note: E,  $E_m$ ,  $E_p$ , Y, and N stand for exports, manufactured exports, primary exports, GDP, and population.

Table 1.3 shows the sample countries' growth rates and inflation record over the 1960s, 1970s and 1980s. Of the fourteen countries in the sample only two (India and Korea) experienced higher growth rates and only two (Chile and Korea) had lower inflation rates in the 1980s than in the 1960s. For most the 1980s were indeed a difficult decade.

Some countries nevertheless achieved unprecedented rates of growth in manufactured and non-traditional exports during the 1980s and early 1990s. Manufactured exports grew at an annual rate of 27 per cent over the 1980-89 period in Turkey. Mexican non-oil exports grew at 17 per cent per year in the 1981-92 period. Chilean non-copper exports grew at 15 per cent in the second half of the 1980s. In a second stage of the project, particular attention was directed to the problems and possibilities of manufacturing for export from a subsample of the overall group (Colombia, Chile, Mexico, Tanzania and Turkey).

TABLE 1.3  
MACROECONOMIC PERFORMANCE INDICATORS, 1960-89

	Real GDP growth rate (%)			Inflation rate* (%)		
	1960-70	1970-80	1980-89	1960-70	1970-80	1980-89
Brazil	5.3	8.2	3.1	46.1	36.7	227.8
Chile	4.4	1.4	2.2	33.2	185.6	20.5
Colombia	5.1	5.4	3.8	11.9	22.0	24.3
Mexico	7.3	6.4	0.7	3.6	19.3	72.7
Peru	4.8	3.8	0.4	10.4	30.7	160.3
Bangladesh	3.8	3.7	3.5	3.7	16.9	10.6
India	3.6	3.6	5.6	7.1	8.5	7.7
Korea (Rep.of)	8.9	9.1	9.7	17.4	19.8	5.0
Malaysia	5.9	7.9	4.9	-0.3	7.5	1.5
Sri Lanka	5.0	4.1	4.1	1.8	12.6	10.9
Thailand	8.3	7.1	7.1	1.8	9.9	3.2
Turkey	6.0	5.4	5.4	5.6	29.7	41.4
Kenya	8.2	5.6	4.2	1.5	11.0	9.0
Tanzania	7.8	3.1	2.6	1.8	11.9	26.1

Source: Helleiner 1994: 5.

Note: \* Implicit GDP deflator

Three of the four middle-income developing countries in this subgroup – Colombia, Mexico and Turkey – experienced manufactured export 'booms' for periods in the 1980s or early 1990s. Chile, the other middle-income country, experienced a parallel boom in non-traditional exports, most of which were not, according to standard definitions, manufactured products, but which nonetheless involved processing activity and often important links to domestic manufacturing activity. The only low-income Sub-Saharan African country in the subsample, Tanzania, also performed better in manufactured exports during this period than it had ever done before. The detailed results of this second stage of the project are recorded in Helleiner 1995.

## II INTERNATIONAL TRADE AND ECONOMIC DEVELOPMENT

### 2.1 Theory

The early literature on trade and development stressed three separate kinds of potential or actual gains from trade in developing countries: those relating to static comparative advantage, those associated with increased capacity utilization (and a 'vent for surplus'), and those relating to productivity growth (and an 'engine of growth').

The potential gains from increased utilization of comparative advantage derive from the possibility that some of the standard theoretical 'gains from trade' have not previously been fully utilized. 'Getting prices right' may, in such circumstances, generate welfare-improving reallocation of production and consumption, and trade expansion. This is a once-for-all shift; once achieved, one should not expect further gains from trade. Such gains are realizable in country circumstances where capacity remains fully utilized throughout, the country is too small to influence world prices, its prices accurately reflect social benefits and costs, and in which policy has previously discouraged export production, for instance, by taxation and other disincentives such as to generate a domestic price structure which is less favourable to exports than the international one. Where countries have actively encouraged local production of importables, particularly in manufacturing, they have indirectly discouraged exports and most observers agree that they have often overdone it. They have often also taxed *both* importables and exportables, sometimes inadvertently, by failing sufficiently to depreciate the official value of their currencies in response to rapid domestic price inflation, hence experiencing real currency appreciation.

The gains from trade deriving from increased capacity utilization are quite different in origin. In the traditional literature of developing countries, it was argued that local natural resources, including cultivable land, were frequently underutilized, as was, to some degree, labour (Myint 1958). Production therefore took place well inside the frontier of possibilities. The 'opening' of the domestic economy created new (world) demand which altered the incentives facing owners of previously idle or surplus resources and labour sufficiently to induce them to bring them into production. What is at issue is an aggregate supply response rather than a reallocation of employed resources. The potential for significant expansion of total production via voluntary responses to the provision of a 'vent for surplus', in the sense of the historical literature, is today probably fairly limited. Surplus land or other natural resources are today much harder to find. Surplus labour, on the other hand, is usually available; it can frequently be obtained without the necessity of bidding it away from 'leisure' or non-tradable production, since it is often involuntarily un- or underemployed.

The argument for gains from trade via increased capacity utilization remains an extremely important and powerful one; but its details today run rather differently.

Capacity utilization in developing countries in the 1970s and 1980s often depended heavily upon the availability of critically important imports – fuel, other intermediate inputs, spare parts, etc. When such imports cannot be financed at the levels necessary for full utilization of capacity, underemployment of labour, capital and resources in the import-dependent sectors is the result. These inputs cannot typically be redeployed quickly into other activities so the entire economy is, in the short- to medium-term, if not longer (particularly where investment activity is also highly import-dependent), also driven to production levels that are well below possibilities. Foreign exchange constraints and severe import compression – the product of unfavourable movements in the terms of trade, high interest rates, reduced capital inflows and increased debt servicing obligations – bedeviled most of Latin America and Sub-Saharan Africa in the 1980s.

Increased exports can finance increased import of critical inputs and thus achieve increased overall capacity utilization and gains in social welfare. Increased capital inflows or reduced debt servicing obligations can generate the same effects. These gains from trade derive from the role of imports, and increases in capacity utilization, not from increased allocative efficiency or purported externalities from exporting activities. Like reallocative gains, these import-related gains are once-for-all in nature. Unlike them, they can be achieved without export expansion or trade policy changes, if increased capital inflow (even on a temporary basis) can be obtained.

Where the achievement of macroeconomic balance has required the repression of domestic demand, as in many debt-burdened developing countries in the 1980s, one result has often been demand-constraint-related underutilization of capacity. Export markets have also provided a new form of 'vent for surplus' in these circumstances, particularly when further stimulated by real currency devaluation and other incentives to export, and particularly in manufacturing (see Section VI below).

There is another important policy dimension to the distinction between gains from trade from increased capacity utilization and those from reallocation. Liberalization of imports is likely to *increase* allocative gains but, if it increases the proportion of free foreign exchange that is spent on non-critical inputs, it can reduce those relating to capacity utilization (or to capital formation) in a foreign-exchange-constrained economy; it could reduce them even in 'normal' un-foreign-exchange-constrained circumstances if resources, particularly labour, are slow to adjust. The issues relating to changes in overall capacity utilization are featured in another UNU/WIDER cross-country project (Taylor 1993).

Discussions of the third kind of gain from trade hypothesize that there are different growth effects from different output-mixes; that, in particular, given a particular factor endowment, productivity grows faster in more 'open' economies. Traditionally, this was often expressed in terms of the 'engine' that exports can be – some kinds with greater effect than others, according to 'staple' theory (Watkins 1963). Why should productivity grow more quickly in 'open' economies than in 'closed' ones? The answer may be offered either in terms of externalities associated with alternative output-mixes or in terms of alternative incentive effects.



As far as output mix is concerned, some have argued that export activity can generate especially productive overall effects. Interaction with foreign buyers is frequently cited, for instance, as a source of dynamism, know-how, and marketing and production skills. Presumably, primary product exports, which are all some low-income countries can achieve in the foreseeable future, would usually generate fewer such positive externalities than industrial exports (Kavoussi 1984; Balassa 1985) though this does not appear to be evident in semi-industrialized countries (Esfahani 1991), and few detailed tests of this proposition have been undertaken. Some have formulated these arguments in terms of purported positive externalities that are generated by the export sector to the benefit of the non-export sector (DeMelo and Robinson 1990) and have sought to distinguish empirically between the (one-off) growth effects of reallocation and the (presumably continuing) growth effects of such externalities (Feder 1983, 1986).

It seems more plausible, however, to associate the main externalities associated with trade with *imports*, particularly those of capital goods and intermediate inputs (when they embody new technology) and technological and other non-factor services, rather than exports. Such imports bring the knowledge upon which long-term growth itself is now seen to be heavily dependent.

In the words of the *World Development Report*, 1991:

Openness – the free flow of goods, capital, people and knowledge – transmits technology and generates economic growth across nations.... First, increasing global competition raises the demand for new technology. Second, the supply of new technology for industrializing countries is determined largely by the degree to which they are integrated with the global economy. New products and processes are transmitted through imported inputs and capital goods, sold directly through licensing agreements, and transmitted through direct foreign investment or export contacts with foreign buyers (World Bank 1991: 88).

By affecting the nature of inputs as well as production processes, trade could generate gains which greatly exceed the short-term benefits from improved resource reallocation.... The accumulated evidence suggests that the long-run gains from increased competition and the spillover of technology are likely to be much greater than the short-term gains (World Bank 1991: 98).

Growth depends, in large part, according to this argument, which is consistent with 'modern' growth theories, upon the productivity-enhancing effects of particular kinds of imports, many of which are services. As with export staples, some kinds of imports are more 'valuable' than others. No doubt the technology embodied in some is wholly inappropriate. Policies on goods trade may therefore not be as important for growth as those relating to imports of foreign direct investment, intellectual property, and services. In this formulation exporting is important, above all, because it generates the foreign exchange with which to purchase productivity-enhancing imports.

This 'revisionist' interpretation is of profound significance to developing countries that are heavily dependent on external official finance. While reduction of such dependence is always a longer-run objective, and increased exports must be encouraged to that end, immediate growth effects, including export growth effects (Khan and Knight 1988) may be achieved more effectively through increased development assistance (as long as it is untied and used appropriately) than through resource-using export expansion. Any 'success' of those countries undertaking IMF and World Bank adjustment programmes, on this interpretation, is likely to be attributable more to the increased external credit that accompanies them than to trade policy or other reforms. This explanation is in the spirit of the capacity utilization arguments discussed in the previous section. More testing of this interpretation of the link between exports, imports and growth, in the context of particular countries' experience, is necessary.

Others, however, have emphasized the knowledge-enhancing role of some kinds of production for the domestic market and the dependence of continuing growth upon them. Production of some tradables (whether import-competing or exportable) may generate learning or technological spillovers (positive externalities) which also impact importantly upon growth. The unskilled labour-intensive activities in which developing countries usually have comparative advantage are often characterized as 'traditional', lacking in positive externalities, and stagnant in terms of productivity (e.g., Grossman and Helpmann 1991: ch. 9). Whether welfare can be improved by subsidizing more 'dynamic' non-traditional activities certainly depends on a number of other influences, but the possibility, on these arguments, seems to exist. What is at issue is whether, or to what degree, productivity growth is influenced by the composition of output, or imports.

No less important to the related trade policy debate is the likelihood that particular governments will be able to identify the most 'productive' output-mix and/or direct their policies so as to encourage economic decision makers to produce it. Evidently the 'correct' answers concerning the role of externalities are difficult to discern, even by the most objective and careful of analysts. How many governments are capable of selecting the most 'dynamic' industrial output-mix? If the gains from choosing correctly are high enough, it may nevertheless be worth risking some mistakes in their pursuit. The prospect that weak governments, known by powerful interests to be amenable to selective interventions, may be driven, as in many instances in the past, to the encouragement of output-mixes that owe much more to political pressures and corrupt influences than to any economic rationale must frequently be a source of deep concern. If manufactured exports truly *do* generally stimulate more learning than many other activities, say through the stimulus of contact with foreign buyers, it could be worth encouraging them *all* without trying to distinguish among them in terms of differential such effects.

Incentive effects are also ambiguous in their impact on productivity change. The usual presumption is that 'the brisk shower of competition', whether from imports on domestic markets or foreign rivals in export markets, sharpens performance and stimulates productivity change at more or less global rates. This proves to rest on some rather dubious assumptions as to prior entrepreneurial behaviour (Rodrik 1992a).

A further strand of theorizing about trade and development concerns the possibility of economic growth that leaves the nation worse off. There have long been important debates about the costs of 'dependence', the income distributional implications of trade expansion, the costs of adjustment, and so forth. But even without these complications, growth can be 'immiserizing'.

Two quite different kinds of 'immiserizing growth' are possible. On the one hand, there is that which arises from deterioration in the terms of trade following export-led growth, a deterioration which may result from one country's expansion, if it possesses market power, or parallel export expansion in a number of countries that collectively face less than infinitely elastic world demand (Bhagwati 1958).

On the other hand, growth may also engender reduced national welfare if it is oriented, in response to a distorted incentive structure, too much towards non-export, typically import-substituting, activity (Johnson 1967). As in the previous case of immiserization, if production expansion has necessitated increased factor inputs the deterioration is even greater.

The prospect of the first kind of immiserizing growth is today a very real one in some sectors. Several studies have noted the probability of welfare deterioration in the exporting countries if world production of cocoa and coffee expands at more than very modest rates (Evans, Goldin and Mensbrugge 1991; Koester, Schafer and Valdes 1990). The second is the kind about which the mainstream development literature and the World Bank issue the most dire warnings.

## **2.2 Empirical testing**

The empirical literature on the general relationship between trade and development in developing countries is suggestive, but still ambiguous in its results. Edwards (1993) provides a useful summary of the recent empirical literature, its antecedents and its methodological problems. Early tests found simple correlations between export performance and overall growth or non-export growth (including Emery 1967; Maizels 1968; Kravis 1970; Michaely 1977; Balassa 1978; Heller and Porter 1978). Later authors used multiple regression analysis in more sophisticated investigations. Using an aggregate production function framework, and making the strong assumption that the characteristics of such a function are common to all the countries in the sample, many found statistically significant relationships between measures of export performance and growth (Michalopoulos and Jay 1973; Balassa 1978 and 1985; Feder 1983 and 1986; Ram 1985 and 1987; Rana 1988; Tyler 1981; Kavoussi 1984 and 1985; Otani and Villanueva 1990).

The frequently observed association between export growth and overall growth tells one nothing, however, about causality. Even 'Granger-causality' tests (which are not really tests of causality as most understand the term) of this relationship in individual countries over time can find little evidence of its presence (Jung and Marshall 1985; Darrat 1987). Indeed, more worrying still, statistically significant relationships can also

be found between overall growth rates (in the 1960-70 period) and measures of growth (or increasing shares of GDP) of government consumption; private consumption; agriculture; manufacturing; construction; electricity, gas and water; and services (Sheehy 1990). Where the growth of GDP is not independent of that of its major components there is evidently a major problem of simultaneity bias in all such hypothesis testing. It would therefore be foolhardy in the extreme to conclude that these cross-sectional studies imply the desirability of export promotion as a growth strategy.

Time series analyses or pooled time series and cross-sectional analyses of the relationship between trade/exports and growth (such as that found in Ram 1987, or Salvatore and Hatcher 1991) are even less likely to shed light on the efficacy of alternative trade policies for long-term growth and development. They avail themselves of many more observations, of course; but, in consequence, they are heavily influenced by a variety of short-term and cyclical phenomena. Among those who have investigated the correlation between exports and growth via cross-sectional regressions that assume a common aggregate production function in all countries and include labour and capital as primary inputs, many have noted their inability to find a strong one in low-income countries (e.g. Michaely 1977; Tyler 1981; Kavoussi 1984; Feder 1986; Ram 1987). The idea that there is a threshold level of development below which these relationships differ has been systematically explored in a paper analysing the data for the 1970-80 period (Moschos 1991). Dividing the sample of developing countries into two, on the basis of a systematic search for the most appropriate threshold, the author finds that capital and, surprisingly, export growth appear to play a relatively *greater* role, and labour a lesser one, in the lowest-income countries. The rate of export growth was the only export performance variable upon which a result was reported; it is not evident why the change in export share, which was featured in many previous tests, was not also tested in this analysis.

Is it possible to find other evidence on the association between trade or trade policy regimes and growth in very low-income countries? That which exists, based, inevitably, upon more imperfect data, is mixed. As far as such measures as those discussed above, of 'revealed' trade policy, are concerned, the results seem to depend upon the specification of the equation. The change in export share of GDP is negatively related to growth rates, but not statistically significantly so in cross-sectional analysis of the 1960-80 period (Helleiner 1986). On the other hand, export growth is sometimes positively related to growth in African (not all low-income) countries (Fosu 1990). When both are included in the same equation for the same sample of countries, both retain these signs; the positive sign on the export growth variable is statistically significant when the sample includes all low-income countries or all African countries, but not when it includes only Sub-Saharan Africa (Lussier 1993). One study uncovered a significant relationship between growth in low-income countries in one period (1973-84) and the growth in export share in a previous period (1963-73) (Lal and Rajapatirana 1987).

The role of imports in growth and development has been subjected to considerably less empirical testing than the role of exports. As has been seen, there are

sound theoretical reasons for focusing upon imports and regarding exports, above all, as a means of acquiring foreign exchange with which to purchase them.

This interpretation of the interrelationships between exports, imports and growth is that offered by Esfahani (1991), who adds import variables to the traditional formulae for the testing of exports' effects upon growth and estimates a three-equation system in which GDP, export and import growth are determined simultaneously. The growth-promoting role of exports, in his formulation, stems not from export production externalities but from their capacity to break import bottlenecks in foreign-exchange-constrained economies. The extent of 'import shortage' is measured by the difference between the actual and 'expected' import/GDP ratio where the expected ratio is estimated as a function of GDP per capita, population and (with the most powerful influence of all) geographic area. The results of his tests on data including only semi-industrialized and 'marginally' semi-industrialized countries in different subperiods of the 1960-86 period are fully consistent with his model. 'Once the import supply effect of exports has been taken into account, there does not seem to be any significant externality effect left.' (See also Fung *et al.* 1994.) Changes in the apparent role of export growth during the period, a matter of some earlier debate (e.g. Ram 1987; Rana 1988; Kavoussi 1984; Singer and Gray 1988), are consistent with the interpretation that their role is to finance imports, and that the availability of foreign exchange varied over time. This relates, in particular, to the large increase in the impact of exports on growth in low-income countries from the 1960-72 period, when it was not statistically significant, to the more foreign exchange constrained 1973-82 period, when it was (Ram 1987: 58).

In analysing developing countries' longer-term growth and development, increasing attention has been devoted to the role of (total factor) productivity growth. Expanded inputs of capital, labour and other identifiable factors or production, while accounting for a much higher proportion of growth in output in developing countries than in industrial countries, still leave significant proportions unexplained, not only at the aggregate level but also at the level of the manufacturing sector as a whole, at the individual industry level and at the plant level. Despite considerable methodological and measurement problems, there is therefore a growing interest in the discovery of the determinants, or even the concomitants, of productivity change. Continuing improvements in productivity can obviously achieve more for overall sustainable growth, together with continuing expansion of factor inputs, than the primarily once-for-all gains that accrue from improved static efficiency of resource allocation or increased capacity utilization.

Much of the influential literature on trade policy in recent years presumes a positive association between openness in international relationships, defined in various ways, and the rate of productivity growth; and there is some modest evidence for this over the 1950-80 period (Syrquin and Chenery 1989). Further, there is often a presumption that liberal trade policies and liberalization processes (variously defined) also generate productivity growth.

Aggregate total factor productivity growth over 1960-90 has been empirically best 'explained' by models that posit that certain initial conditions (stock of human capital, per capita income) are positively correlated and political instability is negatively correlated with it. Investment rates are correlated neither with TFPG nor with these independent variables. Other variables, like import or export growth, may also have some influence but that influence is 'fragile', and sensitive to the addition of other variables (Nehru and Dhareshwar 1994).

Empirical research on the relationship between total factor productivity (TFP) growth and output-mix, imports or the trade regime has been inconclusive. Comparisons across countries are often unpersuasive since there are so many other influences for which it is difficult to control. Typically, only growth in the labour force and in capital stock are controlled for in cross-section analysis; and even these are imperfectly measured. Nor are comparisons within countries over time always easy to interpret, since macroeconomic influences upon capacity utilization typically dominate the effects of changing output-mix or incentive structure over the short- and medium-run; long-run data are rarely available for developing countries.

The impact of liberalization upon ongoing technical change is thus theoretically ambiguous and empirically uncertain. 'There is as yet no convincing empirical evidence for developing countries that shows liberalization to be conducive to industry rationalization' (Rodrik 1992a: 170). For that matter, '...to date there is no clear-cut confirmation of the hypothesis that countries with an external orientation benefit from greater growth in technical efficiency in the component sectors of manufacturing' (Pack 1988: 353). Even the World Bank, which vigorously promotes trade liberalization for its members, notes that 'the relation between imports and productivity growth is sometimes positive and sometimes negative', and concludes that 'the debate is not fully resolved' (World Bank 1991: 99; see also Havrylyshyn 1990; Tybout 1991, 1992; Pack 1992).

### III TRADE POLICY: MEANING, MEASUREMENT, AND INSTRUMENTS

#### 3.1 The meaning of trade policy

The interaction between trade (or commercial) policies and macroeconomic policies is considerable, complex and subject to misunderstanding. Assessments of the nature and efficacy of a country's economic policies should avoid confusing the issues of trade policy with those of macroeconomic (including exchange rate) policy. Trade policy relates, strictly speaking, to the overall structure of incentives to produce and consume, and hence import or export, tradable goods and services. It typically serves *long-run* objectives of growth and development. It is therefore usually closely linked to policies on both local and foreign investment, technology and particular sectoral objectives (industrial policy, agricultural policy, regional policies, etc.).

Macroeconomic policy, on the other hand, relates to the continuing (i.e., short-term as well as long-term) achievement of overall internal and external balance. Low rates of price inflation and high capacity utilization (especially of labour) are the primary objectives of internal balance. A current account in the international balance of payments that is sustainable in the sense that it is consistent with (expected) long-run capital flow is the objective of external balance. Both internal and external balance objectives are pursued, where possible, through means that are consistent with long-run development objectives and policies. Thus, for example, no matter whether the (longer-term) trade and development policy calls for an emphasis on export growth or for (efficient) import substitution, successful macroeconomic policy ensures that overall external and internal balance are maintained *en route*. Similarly, the attainment of short-term macroeconomic balance is not compatible with development objectives if it requires investment levels so low as to compromise future growth.

The two principal instruments of macroeconomic policy are aggregate demand (monetary and fiscal) policies and exchange rate policies. Nominal exchange rate policies typically seek to influence the relative price of tradables (to non-tradables). By altering the incentives to produce and consume these broad categories of goods and services, they influence the current account of the international balance of payments. Only changes in the *real* (i.e., inflation-adjusted) exchange rate can be expected to alter the relative price of tradables: other things equal, real currency devaluation increases the relative price of tradables. Nominal devaluation has often proven difficult to translate into sustained real devaluation.

The services of labour are broadly non-tradable; real currency devaluation therefore typically implies real wage reduction. (Where the consumption of wage-earners consists largely of non-tradables, this link is obviously weaker.) Indeed real wage reduction is often seen as an essential element of change within the overall restructuring of prices attendant on 'successful' real currency devaluation. Real wage

reduction increases the competitiveness of non-traditional exports, cushions industrial firms against the increased costs of concomitant interest rate increases, and contributes to aggregate demand restraint (by redistributing income from lower to higher savers on the margin). The political management of changing wage and income distributional relationships is therefore critically important to the success of macroeconomic management and, among other elements of performance, the sustainability of expanded industrial exporting.

Over the long run one can conceive of an equilibrium real exchange rate which is the product of such 'fundamentals' as the country's long-run productivity, terms of trade, sustainable external capital flow and trade policy regime. In the short to medium term, in which policies are made, however, the real exchange rate can be influenced by official policy on the nominal exchange rate (often buttressed by exchange restrictions) and aggregate demand, as well as by a variety of other shorter-term influences. Although nominal exchange rate policy is usually directed at external balance objectives, it is also sometimes directed at the goal of internal balance, typically seeking to offer a nominal anchor in the pursuit of anti-inflationary objectives.

Since nominal exchange rate changes are frequently accompanied by changes in the trade regime, they are sometimes confused with, or even described as, trade policies (e.g. Thomas and Nash 1991: 1-2). Elements of the import regime, particularly those that originated with balance of payments problems, are often removed at the same time as a currency devaluation. Sometimes long-run trade policies are also changed at the same time as the exchange rate. Such overall changes may be convenient to undertake 'in one go'. Indeed, some have actively fostered the idea that these separate issues are all of a single piece – to be dealt with by 'structural adjustment' reforms. Conceptually, however, it is still best, as argued above, to try to separate the macroeconomic (external) balance issues from longer-run trade and development policies and objectives. This conceptual distinction between alternative motivations for import barriers was clearly recognized in the GATT. It is also recognized in all careful theoretical analyses of trade and exchange rate phenomena (e.g. Edwards 1989: 25-37, 81-82).

However clear this conceptual distinction may be, the real world's taxation, control and licensing regimes in the sphere of international trade are frequently themselves murky in their motivation, and confusing and complex in their operation. Ministries of Commerce (or Trade) and Industry usually carry responsibility for such import licensing as may be associated with industrialization objectives. Finance Ministries, Treasuries and Central Banks are responsible for macroeconomic stability, and, in that connection, normally administer any foreign exchange controls and/or controls on credit systems. Customs duties, however, are collected by Finance Ministries or Treasuries, whose prime concern is the raising of revenue for the support of government activities. It is not always easy to discern whether particular governmental measures were undertaken primarily to address long-term development objectives, short-term macroeconomic targets, or both at the same time. During a period of great macroeconomic turbulence, such as that of the 1970s and 1980s, it is often simply not possible – as it may be in calmer times – to isolate the role and impact of trade and industrial policies as distinct from those of macroeconomic policies.



Moreover, consideration of the details of incentive structures at the micro-level always necessitates analysis of the joint effects of macroeconomic (especially exchange rate) policies, trade policies and a variety of other policies.

### 3.2 Measurement

Empirical tests of the impact of trade policy have frequently been couched in terms of changes in inputs or outputs, or output-mix, rather than in terms of different trade policy regimes. It is common simply to assume that there is a one-to-one relationship between output-mix and policy, i.e. that output mix is actually 'revealed' policy. But that is far from obvious, if only because of the existence of significant and variable (over time and across countries) lags. Obviously there are many influences upon output and output-mix besides government policy. Indeed, even within the realm of government policy, there are many relevant dimensions besides trade policy, e.g. exchange rates, credit policy, 'industrial' policy, public investment, R&D policy, etc. Government policy is multidimensional. Certainly it cannot be characterized effectively in such simple measures as trade shares of GNP.

Can one find simple measures of trade policy orientation that permit one objectively to compare policy 'episodes' in different countries and time periods? The answer, regrettably, is probably no. The principal traditional summary measure of the orientation of trade policy, and conceptually the simplest, is that favoured by Bhagwati, Krueger and the World Bank – the degree of 'anti-export bias', as measured by the relationship between the effective exchange rate for a country's exports, allowing for all taxes and subsidies, and that for its imports. When the incentives for exporting are the same as those for import-competing activity, the trade policy is 'neutral' in its encouragement to these two kinds of activity. When such neutrality exists or when exporting is favoured in the economy or, in studies of industrialization, for the industrial sector as a whole, the trade policy is generally said to be 'outward-oriented'. Otherwise, trade policy is said to reflect anti-export bias and therefore to be 'inward-oriented'. The ubiquity of barriers to imports implies that, in most countries, unless they were offset by export subsidies, there has been anti-export bias and 'inward-orientation'.

Where quantitative restrictions, tax exemptions and all manner of *ad hoc* subsidies and other policy measures are common, even such a crude measure is not at all easy to construct. Nor does it, in any case, incorporate such important matters as the distinction between export tax or subsidy policies and import protection ones, the degree of dispersion or selectivity of incentives, or their stability, or the relative importance of market and administrative instruments. Many other measures are possible. One analysis of four alternative measures of the outward orientation of trade policy in a cross-country data set found, however, that they were almost completely uncorrelated, one with another. Its author therefore concludes, 'no reliable, robust estimate of the impact of general outward orientation on economic performance (i.e. economic growth or export performance) is likely to be possible from cross-country data' (Pritchett 1991: 32). Some have nevertheless attempted to categorize countries, according to whether they were inward- or outward-oriented (see, for example, Table

1.2 above), and even whether moderately or strongly so, e.g. World Bank 1987; but these categorizations are inevitably somewhat fuzzy and have not been very well received. Some analyses of trade liberalization have stuck to intertemporal changes within individual countries in their attempts to characterize trade regimes (Michaely *et al.* 1991); these too have encountered vigorous argument, e.g. Evans 1991. Although a number of authors have attempted econometric tests of relationships between such indicators of trade policy and economic growth (e.g. Edwards 1993), their results are open to serious question. In this study, it was considered neither practical nor advisable to use only one measure to assess the orientation of developing countries' trade policies.

Despite reservations as to the importance to be assigned to them, this project incorporated traditional measures of anti-export bias in its methodological tool kit. The studies in this project revealed great variation in the degree of anti-export bias in manufacturing incentives across countries and within countries over time. All of the countries in the sample had a heavy anti-export bias as part of their import substitution strategy in the 1950s and 1960s. Some retained it into the 1970s, e.g. Turkey, India, Sri Lanka, Peru, Bangladesh, Kenya, Tanzania. But many, by then, had significantly offset the effects of import protection with export promotion policies that left significantly lower degrees of overall anti-export bias, e.g. Colombia, Mexico, and Brazil (and the rest did so thereafter). Typically, then, industrial anti-export bias declined in the sample countries in the 1970s and 1980s. In Korea, while there was wide variation across industries there was actually, on average, a pro-export bias in the manufacturing sector in the 1970s. These countries and others achieving improved manufactured export performance at that time typically also devalued their currencies in real terms and/or prevented their subsequent real appreciation. Import liberalization, except for imports destined directly or indirectly for use in manufactured exports, was *not* generally, however, an important means of reducing anti-export bias in the 1970s (or, in most cases, the 1980s). Typically, import substitution policies were built upon, through the provision of new export incentives, rather than dismantled. Implicit in this experience was an overall structure of inter-industry incentives that was quite different from the relatively 'neutral' one that would have resulted from import liberalization.

The one exception to these generalizations about the usual means of reducing anti-export bias in manufacturing in the 1970s was the Chilean case. In Chile there was a massive cross-the-board liberalization of imports over the 1974-79 period, with a consequent major reduction in overall anti-export bias. Initially, the import-substituting industrial sector was buffered against the effects of this import liberalization by real currency devaluation (although it suffered severely from the concomitant drastic demand restraint); but subsequent real currency appreciation thereafter left it severely exposed. Manufactured exports and other non-traditional (primary) exports responded only moderately to Chile's drastic reduction in its previously high degree of anti-export bias. Non-traditional exports expanded much more rapidly in the 1980s with the initiation of a devalued and stable real currency value. Up until 1990 industrial exports, as conventionally defined, had not materialized to any significant extent.

In the late 1970s and 1980s there were significant further moves to reduce manufacturing anti-export bias in Sri Lanka, Turkey, India, Mexico, Tanzania and

Bangladesh. Sri Lankan policy toward the manufacturing sector actually created a pro-export bias following the major trade reforms of 1977. The sequence, again, was typically not so much to liberalize imports at the outset as to increase export subsidies, or create 'export processing zones', first. Again, real currency devaluation was a concomitant of manufactured export success. Import liberalization, where it occurred, usually only came later. It was not until the late 1980s and early 1990s, in such cases as Mexico, Peru, and Colombia, and, to a lesser extent, India and Korea, that import liberalizations themselves could be said to be 'leading' in the efforts to reduce anti-export bias in the manufacturing sector.

The studies show that the degree of anti-export bias or inward orientation is indeed only one element of trade and industrial policy. They show that there was considerable variation of incentives *within* the export and import-competing sectors; and that there are important other dimensions to trade and industrial policy. In actual fact, governments typically deployed a whole armoury of trade and industrial policy instruments. The standard categorization of countries as either inward or outward oriented seems too crude either to describe trade and industrialization policies usefully or to explain divergent industrial performance.

### **3.3 Instruments of trade policy**

Among the most striking features of the trade policy of the developing countries in the sample was the important and continuing role of direct and indirect export subsidies. Despite discouragement of such subsidies in the GATT, and the prospect of countervailing duties in the importing countries to offset them, export subsidies on manufactured exports from the countries in our sample were very common and often very large. They took many forms – import and excise duty exemptions or drawbacks for inputs (often extended to local suppliers of inputs to exporters); subsidized credit; corporate tax concessions (reductions or refunds); preferential exchange rates; preferential foreign exchange retention rights or allowances; and direct cash subsidies. They reached between 25 and 50 per cent of the relevant exports' value at various times during the two decades studied in Brazil, Colombia, Turkey, India and Peru. Even Chile offered non-traditional exporters a flat 10 per cent subsidy after its major trade liberalization in the 1970s. The subsidies were often so generous that they induced over-invoicing of exports and even totally fictitious exports, with consequent overstatement of manufactured export 'success'.

As has been seen, anti-export bias was found in almost all of the countries in the sample and almost all of the time, and it was typically reduced in the 1970s and 1980s. Such reductions were achieved much more by export subsidies than by changes in the overall import regime. Export promotion policies during this period, while certainly variable, were much steadier and more similar across countries than import regimes, which were subject to constant 'tinkering' and periodic major changes. The tightening of GATT/WTO rules on export subsidies could therefore have profound implications for the developing countries' freedom for trade policy manoeuvre (although trade policies'

influence upon export performance were, in any case, usually dwarfed in importance by the behaviour of the real exchange rate).

There is no evidence in this project's country studies of any direct link between the overall degree of protectionism in the import regime (as opposed to liberalized imports solely for exporters) and manufactured export performance. There is always, of course, a long-run link between the real exchange rate, which *is* associated with manufactured export performance, and the trade regime, in that the equilibrium real exchange rate reflects the trade flows that are influenced by the structure of trade barriers and subsidies. With real devaluations sufficient for external balance, export subsidies often were eliminated or reduced (e.g. in Mexico and Korea) and import liberalization often followed.

Another feature of the trade policy experience of the 1970s and 1980s in the countries studied in this project was the major importance of exemptions from normal customs duties. Virtually all the country studies found enormous differences between scheduled tariff rates and actual tariff collections. Some of these differences were attributable to evasion, undervaluation and misclassification, particularly in high-tariff items. In some cases, where official development assistance was important, e.g. in Tanzania, they reflected external agencies' insistence on exemptions for their own trade. Most of the differences, however, were the product of various 'special regimes' for favoured activities, industries or firms. In Brazil in the mid-1980s, for instance, such special arrangements for duty exemptions covered nearly two-thirds of all imports; while scheduled duties averaged 90 per cent of Brazilian import value in 1984, import duties actually collected were only 19 per cent of imports. The difference between scheduled and collected duties was of a similar order in many other countries in this study. (Research elsewhere has found similar results: Kostecki and Tymowski 1985; Pritchett and Sethi 1994.)

Exemption of import duties for exporters was common, and carried a clear theoretical rationale. Most of the exemptions, however, were far more discretionary and *ad hoc* in their application. Moreover, they were often far from transparent: that is, the existence of specific exemptions was not public information. The importance of these exemptions makes it impossible to base analysis of tariff and incentive structures purely upon the legal tariff codes even where non-tariff barriers are few. Changes in these exemption systems may also complicate analysis of tariff reforms. Tariff reductions, accompanied by reduced exemptions, actually *raised* the ratio of tariff collections to imports in some import 'liberalizations', e.g. in Colombia in 1985 and Chile in 1974-6. Others have found only weak correlation between scheduled and collected rates, with the relative importance of exemptions rising with the level of the scheduled rate (Pritchett and Sethi 1994).

Evidently, the rules are not always what they seem. The apparently wide scope for discretionary exemptions from existing trade, tax (and presumably other) laws may make analysis of incentive systems and trade and industrial policies much more difficult than has been generally realized. These exemptions also imply enormous scope for rent-

seeking activities; these socially-costly activities would presumably have been reduced if the trade barriers from which exemptions were sought were lower.

The dispersion of the domestic prices of tradable goods (relative to their world prices) may be as important to industrial performance as the more aggregative measures that have so far featured in the literature. The dispersion of such relative prices is not systematically related to any of the conventional indicators of 'open-ness' (which are, in any case, as noted, unrelated one to another) (Aitken 1992; Pritchett 1991). Moreover, the same price structure may be the product either of direct governmental administrative controls or of taxes and subsidies. Since there is so much variety in the dispersion of incentives and in the instruments with which they are achieved, the studies in this project support others' views that 'to characterize inward oriented countries as interventionist and outward oriented countries as liberal ... is simply wrong for developing countries' (Aitken 1992: 29).

Which particular relative prices are high and which are low may also be at least as important as the degree of dispersion or the overall broad structure of relative prices. The prices of capital goods, especially machinery and equipment, have been singled out by some for particular attention (Aitken 1992; DeLong and Summers 1991). The non-tradable portion of the capital goods sector, i.e., the construction sector, is emphasized by others (Bevan *et al.* 1990).

To understand changes in overall incentive structures at the industry or firm level, it is necessary to consolidate the effects of trade and exchange rate policies in measures of changing effective subsidies (or protection) or effective exchange rates. Particularly is this the case when there have been official or *de facto* multiple exchange rate policies (e.g. varying rights of foreign exchange retention for exporters). Even when exchange rates have remained unified, changes in real exchange rates, frequently accompanied by changes in trade policies, have been major influences upon incentives for production and consumption of particular tradables. In turbulent times, changes in exchange rates usually dominate changes in trade policies, including those affecting the degree of dispersion of incentives. Moreover, where changes in the trade regime occur they are frequently accompanied by compensating or partially compensating currency devaluations; typically, the principal effect of such combined policies is to reduce anti-export bias and encourage resources to flow from both the import-competing and the non-tradables sector into export activity.

Deriving 'tariff-equivalents' of import controls is a formidable task, involving problems of quality comparison, weighting and appropriate timing of product-by-product comparisons of domestic and world price levels. Where controls abound, it is therefore extraordinarily difficult to assemble micro-level data on incentive structures and to keep abreast of their change over time. Even when one has acquired some micro-level data, it is difficult to characterize the degree of dispersion or selectivity in the incentive structure via any one summary measure.

Except for the sharp interruption created by the debt crisis in many countries in the early 1980s, the 1970s and 1980s have seen fairly widespread (if usually moderate)

simplification of trade policies, involving a shift from controls to tariffs, and reductions in the dispersion of protectionism and incentive structures. By the early 1990s, this trend had become quite general and more pronounced. Liberalization usually began with imports employed as inputs to manufacturing for exports. As far as the general range of imports is concerned, tariff structures were frequently significantly simplified, and sometimes average tariff levels were lowered, even while quantitative restrictions (QRs) were still fairly firmly in place, as in Tanzania and Bangladesh. Major tariffifications of QRs, in which tariff rates obviously rose, took place in India (though, in this case, many QRs remained) in the late 1970s and early 1980s, and in Sri Lanka in the late 1970s.

In Chile the change, already realized in the 1970s, was particularly dramatic. The trade regime in Chile in 1973 was among the most complex and unproductive anywhere. Tariffs averaged 105 per cent and ranged between zero and 750 per cent, but were subject to exemption or adjustment for particular regions, industries and (public) firms. In addition, there was a complex system of import licensing and an extremely heavy prior import deposit requirement, both with further discretionary exemptions and adjustments for firms, persons, industries or regions. At the same time there were eight different exchange rates with a 1,000 per cent differential between the extremes. By 1979, all of these complexities had been replaced by a modest uniform tariff, the level of which was subsequently altered from time to time in response to balance of payments experience.

Sharp reductions in the dispersion of protectionist incentives also occurred in Mexico and Turkey in the second half of the 1980s and in Colombia in 1990-91. A more gradual such reduction was registered in Korea, which had a remarkably high degree of dispersion about fairly low average import protection levels in the 1960s and 1970s. In some cases – e.g. India, Sri Lanka, Malaysia, Bangladesh, Brazil, and Kenya – dispersion remained fairly high in the late 1980s even after conscious efforts, and even some success, at reducing it.

In Peru, however, events in the 1980s moved in the reverse direction – towards greater complexity. By 1990, there were thirty-eight different tariff rates and fourteen types of surcharge, with gross tariff rates ranging from 10 per cent to 110 per cent. At the same time there were about fifty kinds of 'special' customs regimes for favoured enterprises or activities. Over 500 import items were banned and many of the rest (all the rest for a period) subject to licensing. Massive simplification and liberalization began with the new administration in late 1990.

Selective promotion of particular industries was common in the sample countries. Many policy instruments were employed in these efforts, of which protection against imports was only one. They met with only mixed success. In the larger middle-income countries, support was usually directed at capital goods and intermediate goods producers, as in the cases of Brazil, India, Mexico and Korea. These countries also actively promoted the computer and automobile industries. Malaysia promoted petroleum refining and related industries with some success; its support for automobiles looked rather more problematic in terms of social returns. Where similar efforts were

undertaken in lower-income or smaller countries, e.g. Tanzania and Peru, they were almost certainly even less successful.

The country studies in this project offer no dramatic conclusions as to the importance (or unimportance) of the dispersion of incentives to industrial growth, relative to that of their average level, stability or other characteristics. Evidently, as, for instance, in the Korean case, dispersion and targeted incentives, if properly managed, can be conducive to successful industrial performance. (See also Amsden 1980; Westphal 1982 and 1990; Pack and Westphal 1986.) Equally clearly, when the state had limited implementation capacity and seemed easily manipulable by special interests, as for instance in Brazil, Bangladesh, and India, high dispersion could reflect gross mismanagement and resource misallocation. More research on the social efficacy of various kinds of selective policy and the circumstances required for success is still needed.

## IV TRADE POLICIES, OTHER POLICIES AND DEVELOPMENT: FINDINGS

### 4.1 Trade, trade policy and productivity

The key question for which evidence was sought in this project was whether productivity growth could be associated in any way with trade or trade policy characteristics. On this issue the evidence from the case studies is somewhat mixed. As always, detailed analysis is inhibited by the absence of data and the weak quality of much of the data there are. Interpretation of productivity data is also complicated by the need to take account of cyclical effects and compositional changes, and the difficulty of distinguishing these from learning or scale effects (Tybout 1991, 1992). Sufficiently long time series to address long-term relationships are simply unavailable. It would certainly be difficult, however, to infer any strong relationship between productivity growth and either trade or the trade policy regime from the evidence presented in the studies in this project. Over the short- to medium-term periods analysed in these studies one finds the principal concomitant of manufacturing productivity growth to be the rate of growth of output itself (see Table 4.1).

Much of this association between productivity growth and output growth is attributable to the impact of variation in the level of capacity utilization. Particularly in times of great overall economic instability, the degree of utilization of existing installed capacity (and utilization of available labour) is highly variable. Conventionally, these variations are attributed to fluctuation in aggregate demand. In the 1980s, foreign exchange 'scarcities' created severe import compression in many developing countries; the resulting shortages of inputs and spare parts created capacity under-utilization from the supply-side as the more typical experience. As overall demand or supply constraints eased, the capital stock and labour that were previously under-utilized were more fully employed and measured productivity rose; and conversely when they tightened and output declined.

There are other well-known reasons, often associated with the names of Kaldor and Verdoorn, for anticipating more rapid productivity growth during periods of high investment and rapid growth in output. High investment rates are likely to generate technical advances through the embodiment of new technologies in freshly installed capital equipment and the reduced average age of the capital stock. Rapid output growth may also permit the realization of latent scale economies, positive externalities, and intensified learning experiences. These links between manufacturing productivity growth and the rate of macroeconomic growth are clearly evident in the high productivity growth realized at various times in the 1980s in such divergent countries as India, Turkey, Mexico, Colombia, Sri Lanka, Kenya and Tanzania and, for a brief period, in Garcia's Peru. Similarly, total factor productivity in manufacturing fell in Chile in the 1970s and in Tanzania in the first half of the 1980s, times of severe macroeconomic decline.



The case studies in this project offer very weak, if any, support for the proposition that either import liberalization or export expansion are particularly associated with overall productivity growth. In Brazil, Turkey, Korea, Thailand, Kenya and Sri Lanka, manufacturing productivity increased at the same time as manufactured exports; but the latter success was also correlated with overall growth so the separate role of exports cannot easily be ascertained. In some of these cases, e.g. Thailand, TFP growth *was* greater in industries that were exporting than in protected import-competing industries.

TABLE 4.1  
CHANGES IN TFPG AND GROWTH IN MANUFACTURING OVER TIME  
(Annual Percentage Rates)

		TFPG	Total mfg growth
Brazil:	1970-80	2.6	13.0
	1975-85	0.8	4.4
Colombia:	1967-74	1.2	9.1
	1974-82	-0.2	2.1
	1982-9	0.9	4.1
Mexico:*	1970-80	3.8	
	1980-5	1.2	1.2
	1985-9	1.8	1.6
Peru:	1976-87	0.6	-0.1
India:	1957-60 to 1965-6	0.2	9.1
	1965-6 to 1979-80	-0.3	5.0
	1980-1 to 1987-8	2.5	6.5
Korea:	1967-73	4.2	23.2
	1973-9	1.9	20.8
	1979-88	0.5	13.0
Thailand:	1963-72	0.3	18.5
	1972-4	-0.8	8.3
	1974-9	2.4	12.6
	1979-82	-1.4	3.4
	1982-6	2.3	7.3
Turkey:*			
(large manufacturing only)			
	1963-76	1.3	9.6 **
	1976-81	-2.4	-1.7 **
	1981-8	1.7	7.4 **

Source: Helleiner 1994, various.

Note: \* Labour productivity

\*\* Growth is measured as gross output for the periods 1968-77, 1977-80 and 1980-8.

On the other hand, the rapid growth in total factor productivity in India's manufacturing sector in the 1980s *preceded* its export boom in the latter part of the decade and the still later import liberalization. This TFP growth is attributable to general domestic deregulation and to rapid overall economic growth that was, at least in part, the product of fiscal stimuli and, perhaps, also to the breaking of infrastructural bottlenecks through public investment. In Mexico, there was no clear link between increased productivity growth in manufacturing in the 1980s and the import liberalization which took place only in the second half of the decade; and such link as there may have been with export expansion, in particular sectors, was much more complex than the generalized one usually hypothesized by proponents of 'outward orientation'. Similarly, the period of most rapid productivity growth in Korea was not one of import liberalization. Nor was any such link with productivity visible in the Colombian experience with changing import regimes over the 1970s and 1980s. Import liberalization in Chile in the 1970s was accompanied by overall total factor productivity decline, although this decline was probably attributable, in large part, to the concomitant macroeconomic decline. More micro-level investigation of possible links between Chile's import liberalization and productivity change found that, whereas technical efficiency improved most in the sectors that experienced the largest reductions in effective protection, the overall level of technical efficiency across all sectors did not change after import liberalization (Tybout *et al.* 1991).

In some of the country case studies (Brazil, Colombia, India, Korea, Mexico, Peru) authors were able to conduct econometric investigation of some of the sources of interindustry variation in total factor productivity growth. Scale and/or growth of own output were strongly positively related to productivity growth in Brazil, Colombia, India, Korea and Mexico, i.e., in every country for which there were data except Peru. Industrial concentration was associated positively with productivity growth in Brazil, Colombia and Korea. (See Table 4.2.)

TABLE 4.2  
CONCOMITANTS OF INDUSTRY-LEVEL TOTAL FACTOR PRODUCTIVITY GROWTH  
IN MANUFACTURING IN THE 1970s AND 1980s

	Trade orientation				Industrial concentration
	Output growth	Import protection or domestic orientation	Import penetration	Export orientation	
Brazil (1970-80)	+			+	+
Colombia (periods from 1967 to 1989)	+	+			+
Peru (periods from 1976 to 1987)	+			-	
India (1959-60 to 1979-80 and 1980-1 to 1987-8)	+	-			
Korea (1967-88)	+	-	-		+

Source: Helleiner 1994, various.

The role of trade orientation in individual industries' TFP growth was mixed. In India those industries in which higher proportions of output growth were the product of import substitution experienced slower TFP growth. In Colombia, higher tariff and QR protection, and import-substitution, were positively associated with productivity growth; export growth carried a negative, though insignificant, sign. Export growth was associated positively with TFP growth in Brazil in the 1970s, but in another formulation of the test, import substituting growth was even more so. In Korea, greater import liberalization was associated with slower TFP growth, and the degree of export orientation was insignificantly related to productivity change. Export orientation was significantly negatively correlated with productivity growth in Peru in the 1980s although this was in the context of so adverse an economic environment that it is hard to know what to make of this result. In Mexico (not shown in Table 4.2), higher productivity growth was positively associated with (modest) protection against imports and also with the presence of transnational corporations; neither market concentration nor import dependence had significant effects in this country. It is difficult to find any overall pattern of relationship between trade and productivity growth in these interindustry results.

It is possible that links between trade, trade policy and productivity growth take longer to manifest themselves than the relatively short period of two decades analysed in this project. In the long run, however, many other influences are also working more powerfully. On the basis of currently available evidence, it is difficult to escape the conclusion that trade policy has *not* been the major influence on productivity growth in manufacturing that many analysts have said that it should be. Such association as there has been between productivity growth and trade phenomena seems to relate more to manufactured export expansion than to import liberalization.

## **4.2 The role of macroeconomic policies**

As noted above, the studies in this project addressed the role of trade policies within the broad context of macroeconomic and other policies, only some of which were explicitly directed at industrialization and development, without prior assumptions as to their relative importance. When defined narrowly – as policies influencing the structure of incentives and influences upon the production and consumption of tradable goods and services – trade policies do *not* appear to have played a dominant role in these countries' industrialization and development experiences in the 1970s and 1980s.

Much more important have been macroeconomic policies and, in particular, policies in respect of the exchange rate. As also noted above, during the 1970s and 1980s, much more than in the previous two decades, the macroeconomic environment in the developing countries was highly unstable. Two major oil price shocks, major global recessions, large international interest rate variations and the debt crisis all created severe external pressures that would have challenged the most astute of macroeconomic policymakers. Typically, these pressures, particularly the sharply increased external debt servicing obligations of the 1980s, reduced domestic savings available for productive investment. In some cases, as in that of the coffee boom in Colombia in the late 1970s

or in those of the oil exporters, favourable shocks also created macroeconomic management difficulties.

Macroeconomic policymakers in the developing countries grappled with the new problems of this period as best they could. But balance of payments 'crises', large fiscal deficits, high rates of price inflation and, periodically, sharp currency devaluations and severe austerity programmes were characteristic of the period. Private investors and decision makers, both domestic and foreign, were understandably more anxious about the next macroeconomic policy moves of developing country governments than they might be in more economically stable times. The relative importance of microeconomic signals, reflecting trade, industrial and other policies, was bound to decline in such a macro-economically turbulent period. The significance of policy reforms directed at the rationalization of micro-level incentives, and improved efficiency, was therefore almost certainly correspondingly less in the developing countries of the 1980s than it would have been, say, in the 1960s (when the Little-Scitovsky-Scott and Bhagwati-Krueger studies were undertaken).

Characteristic of all 'successful' manufactured export and/or overall growth experiences in these countries at this time (success in these two dimensions was highly correlated) was an 'appropriate' real (i.e. inflation-adjusted) exchange rate; one that generated a relative price for tradables, both importables and exportables, sufficient to encourage enough domestic production and discourage enough consumption of tradables, to ensure sustainable external balance; or in terms of another perspective, one that generated real wages sufficiently low as to raise international competitiveness and lower domestic absorption, to achieve the same overall effect. 'Weak' performers all had overvalued currencies and unstable real exchange rates during the period under study, whatever else they may have been doing 'wrong'.

This evidence on the significance of the real exchange rate is consistent with the results of other empirical investigations (e.g. Cottani *et al.* 1990; Dollar 1992). The real exchange rate may be a more reliable predictor of longer-term economic performance than *any* of the variety of measures of trade policy 'open-ness', which are, in any case, not even highly correlated amongst themselves (Harrison 1991; Pritchett 1991a). In the very poorest countries, in one recent study, real exchange rate 'distortion' is the *only* variable significantly related to growth; even investment carried no explanatory power (Dollar 1992: 537-8). Obviously, however, causality cannot easily be ascribed in these associations; when economies function well or badly, they tend to do so in many dimensions.

Stability in the real exchange rate has repeatedly been found to be associated positively with non-traditional export growth and indeed overall economic performance (e.g. Caballero and Corbo 1989; Dollar 1992; Thomas and Nash 1991: 53). The stability of incentives, and hence their credibility as guides to investment and other behaviour, may thus be as important as having the statically 'correct' ones, assuming (which may not always be easy) that one knows roughly what the latter are (Rodrik 1991). If static optimum allocation is less important than ongoing productivity change, as argued above, then whatever drives productivity change should carry greater importance than

statically 'correct' prices. In the short- to medium-term, as has been seen, productivity is closely associated with macroeconomic performance. Macroeconomic performance, and particularly private investment, is typically highly sensitive to expectations, and not least to the expectation of stability in incentive structures. The evidence from the country studies in this project provides modest backing for the proposition that the stability of overall incentives is important – particularly from the Korean experience over the past two decades (during which there was remarkable stability not only in its real exchange rate but also in the degree of anti-export bias), and from shorter periods in the recent history of Colombia, Brazil, Chile, Malaysia, Thailand and Turkey.

For the purposes of understanding industrialization processes the longer-term structural consequences of real exchange rate behaviour (in particular, its level and stability) are far more important than its role in the maintenance of short-term external balance, or the often disruptive effects of changing it. These long-term exchange rate effects have been linked to trade policy in a general equilibrium framework of analysis; if such trade policy is reasonably stable, it can be regarded as one of the underlying determinants of the 'equilibrium real exchange rate', together with such other 'fundamentals' as long-term capital flow and the terms of trade. Observed (actual) real exchange rates can then be seen as the product of short-run macroeconomic policies, including those relating to the nominal exchange rate and short-term aggregate demand, and adjustment lags *en route* to (changing) equilibria; short-run macroeconomic policies thus can and do influence real exchange rates.

Quantitative restrictions were often, in large part, also macroeconomic policy instruments employed for the objective of maintaining external balance. They were retained in the early 1990s, either as instruments of balance of payments policy or for protectionist purposes, or both, in more country cases in our project than not; though they had often been significantly eased. Until the late 1980s, the easing of QRs was typically associated with favourable balance of payments circumstances, and conversely, their tightening reflected external imbalance. With the increased general pressure (and vogue) for trade liberalization in recent years, indeed, in an increasing number of cases, the acceptance of the obligations of Article VIII of the IMF (current account convertibility), this association can no longer be assumed as a pattern for the future. Where QRs were used primarily as tools of balance of payments management they should presumably be assessed primarily on the basis of their efficacy in that regard, relative to alternative instruments of such policy.

Controls over capital movements were also employed by all of the sample countries in the 1970s and 1980s. Where the capital account of the balance of payments is freed of foreign exchange controls, or such controls are largely ineffective, the nominal exchange rate, rather than being a policy variable, acquires some of the characteristics of an 'asset price': potential volatility and extreme vulnerability to changing private expectations. Unless domestic circumstances are more stable than they usually can be in developing countries, there will be significant expectations-responsive international private capital flows. If the monetary authorities seek to modify consequent exchange rate fluctuations they must abandon some of their control over domestic monetary aggregates. Liberalized capital accounts may thus reduce

macroeconomic policymakers' autonomy and make it more difficult for them to achieve the stable and appropriate real exchange rates that have been associated with successful manufacturing for export.

What about the role of *internal* macroeconomic balance? Maintenance of an appropriate real exchange rate may be a necessary condition for sustained external balance but, it is often argued, it is not always consistent with internal balance and therefore not sufficient macroeconomic underpinning for growth. There has been considerable concern about the potential negative effects of price inflation, some of which may be implicit in a 'crawling peg' policy that seeks to retain a stable real exchange rate (e.g. Aghevli *et al.* 1991). By generating too much 'noise' in the signals emanating from the price system, rapid price inflation may seriously inhibit appropriate decision making, particularly in the sphere of investment.

The studies in this project shed little fresh light on these issues. (It was not intended that they should do so.) There is no obvious direct connection revealed, in these studies, between rates of price inflation and measures of industrial or overall economic performance. On the other hand, they do show that private industrial investment was typically low in the high inflation episodes of the 1980s in such sample countries as Brazil, Mexico and Turkey.

In recent years, aggregate demand restraint in developing countries has increasingly been directed at the reduction of inflation. Aggregate demand policies – with monetary and fiscal policies as the main instruments – were also clearly relevant to trade performance, the maintenance of external balance, and productivity growth, in the countries studied in this project. Domestic demand compression, initiated for purposes of macroeconomic balance, played an important role in the stimulation of manufactured exports from existing industries in the 1980s in Mexico and Turkey, at the same time that it throttled some other domestic economic activity. Aggregate demand restraint in these and other cases, to the degree that it reduced capacity utilization, investment and growth itself, however, reduced the short- to medium-term prospect for both industrial and total factor productivity growth.

Where substantial external financial support accompanied such macroeconomic restraint policy – as in Chile, Turkey and Tanzania – short-term setbacks were reduced or even offset. In previously 'import-strangled' economies, e.g. Tanzania, increased external finance made it possible to utilize industrial capacity more fully and thus to record short-term productivity improvement, as well as increased investment and the prospect of greater longer-term growth.

It is also important to note that in some instances, e.g. in Mexico, Turkey and Colombia in the late 1980s and in 1990, import liberalization was utilized as an instrument of anti-inflation policy, at the same time as traditional trade liberalization objectives were being pursued. It has even been suggested that radical trade liberalization may strengthen the credibility of government macroeconomic adjustment programmes and overall changes in the policy regime: the 'bigger the bang', so to speak, the more serious must be the reforming government (Rodrik 1992b). In this connection,

trade policy liberalization has sometimes also been accompanied by financial liberalization and consequently increased real interest rates, with further 'shock' effects, e.g. in Turkey, Chile and Mexico. Liberalizations that accompany, or precede, stabilization efforts may have the further advantages of avoiding inappropriate investments that have been influenced by 'distorted' incentive structures; and, to the extent that tariff revenues replace import quotas, easing the fiscal constraints (World Bank 1992b).

There has been active debate about the appropriate pace of both macroeconomic stabilization efforts and trade policy reform. One major study of import liberalization experiences in middle-income countries concluded that such reforms most frequently 'held' when they were undertaken in quick and drastic fashion (Michaely *et al.* 1990); but its assumptions and methodology have been vigorously challenged (Evans 1991). The studies in this project, while not set up specifically to test this conclusion, do not, on the whole, support it. They include some cases of successful gradual trade policy change, notably Colombia (until 1991) and Korea; and they suggest that some of the heavy costs of 'shock' liberalization in Chile, and, after periods of more gradual policy change, in Mexico and Turkey may have been unnecessary.

### **4.3 The role of non-trade policies**

It takes considerable time to build capacities and institutions that are supportive and flexible, and can be responsive to changing incentives for different kinds of industrial activity. 'Getting the prices right', through trade and other policies, however important, can achieve little in the absence of response capacity. Governments in many developing, indeed also industrialized, countries have played an important role in the long-run buildup of capacity to undertake efficient industrial production, not only through infrastructural and educational investments but also through support for research and development, encouragement of technological innovation, provision of finance, and a variety of other 'industrial policies' (Lall 1990). Although there may be a theoretical preference for functional and 'neutral', rather than selective, governmental supports (and for factor market, rather than product market, 'interventions') such supports cannot, by their nature, always be totally neutral as between different kinds of industrial or other economic activities. Scarcity of governmental resources will often require choices as to where and how they are to be deployed (Lall 1990; World Bank 1992a). The immediate consequences for incentive structures may be quite small; but their ultimate consequences can be far-reaching. The impact of such governmental industrial policies comes via the strengthened institutions for research and development, industrial finance and the like, and through increased response capacities in particular industries in the future.

Some governmental non-trade policies have more immediate effects upon micro-level industrial incentives, e.g. micro-level credit policy (in particular, interest subsidies and direct finance); direct industrial subsidies and encouragements; creation or reduction of domestic barriers to entry or exit, regulation and competition policy; state ownership; government procurement; supportive infrastructure; labour and management

training; and research and development activities, etc. It is difficult to quantify the relative importance of these various policies and influences in the majority of cases, but our studies suggest that, in terms of their influence upon the levels and character of industrial performance, they have usually been at least as important as trade policies, narrowly defined, and often, as in Brazil, India and Korea, more important. It seems that it may be as important to understand the disposition of government industrial and related 'support' expenditures as to know the overall structure of industrial input and output prices.

Liberalized trade has brought increasing 'international production' and interpenetration of industrial firms' activities in the industrialized world. Foreign direct investments, technology agreements and various forms of strategic alliance among transnational corporations have become important determinants of international trading patterns and patterns of national manufacturing production. Most developing countries have been on the periphery of the momentous process of global industrial integration that gathered steam in the 1970s and 1980s. In large part, this was through no fault of their own. Transnational manufacturing corporations have tended to concentrate their activities where the markets are largest and easiest to understand, and where economic and political conditions are more stable and familiar. But developing countries' own policies on foreign investment and imported technology have also played some role in the manner in which foreign firms have been involved in their industrialization processes.

As far as the manufacturing sector is concerned, foreign direct investment (FDI) can be expected to play a greater role when industrial growth is more export-oriented and/or when it moves to 'higher-stage' (more technically demanding) import substitution. Changes in both of these directions have typified developing countries' industrialization experiences in the 1970s and 1980s. Policies toward FDI have therefore reflected, to a considerable degree, the changing stage and strategy of individual countries' industrializations. Generally, policies toward FDI in the developing countries were modestly liberalized over the past two decades, with a recent burst of more vigorous decontrol. The shift away from statist approaches to industrialization, in such countries as Chile, Peru, Bangladesh and Sri Lanka, also 'opened up' foreign investment policies and thereby increased the potential role for FDI, and foreign firm activities more generally, in these and similarly changing countries. Foreign firms subsequently dominated the expansion of manufactured exports from Sri Lanka, as they also did in countries that had traditionally been more receptive to them, e.g. Malaysia, Thailand, Mexico and Brazil. ('Receptivity' in the latter two cases was accompanied by a considerable degree of regulation in particular sectors.) It is noteworthy, however, that Chile's dramatic expansion of non-traditional, resource-based exports in the 1980s was achieved largely, and especially in fruit, by local, rather than foreign, firms (though foreign firms were also involved – in wood, pulp and paper, and fish products).

Most of the country studies in this project did not particularly highlight the role of FDI or imported technology. Where export processing zones have become important policy instruments, as in Bangladesh, Malaysia, Sri Lanka and the *maquiladora* sector in Mexico, FDI has obviously played a prominent role. The degree to which industrial



exports from such zones contribute to broader learning and productivity improvement remains in dispute and is, in any case, related to the exporting governments' policies (see below, page 68). In most of the other cases where FDI has been welcomed, it has played a relatively moderate role, though usually, as in Colombia, Mexico and Turkey, one that was larger in the 'later' stages of import substitution than in the 'easier' early ones. In Korea, after FDI policies were significantly eased in the early 1980s, FDI and technology imports rose sharply, especially in technology-intensive industries like electronics and electrical equipment, chemicals, and transport machinery and equipment. FDI still accounted, however, for a very small share of Korean industrial investment and total capital inflow.

In the Brazilian case, the role of transnational corporations, both in manufacturing production and in exporting, has long been major; and receptive policies toward it, except for selected sectors, have made this possible. While, in the 1980s, foreign investors were generally skittish about directing further resources to debt-distressed countries, TNCs' trade, allocative, and investment strategies were nevertheless important to Brazilian industrial performance.

Policies on the acquisition and use of foreign technology and capital are likely to assume greater importance in the developing countries' industrialization processes as the emphasis in policy discussions shifts to productivity improvement and 'keeping up' with an increasingly integrated world economy. It is worth noting, for instance, that positive 'spillovers' from transnational corporate producers are identified in the Mexican case study as significant contributors to total factor productivity growth in Mexican manufacturing. Trade policy that is designed purely to influence the incentives for the production and use of tradable *goods*, which is still how most think of it, may miss some of the most important issues and key determinants of industrial learning. Further research is required on the efficacy of alternative means of acquiring technology, critical services and capital from the global marketplace in support of industrial growth in the developing countries. (See, for instance, Westphal 1982, 1990; Lall 1990)

## V FROM IMPORT SUBSTITUTION TO MANUFACTURING FOR EXPORT

Import-substituting industrialization (ISI), defined as reduction in import shares of apparent consumption of manufactures, has been the usual route for early industrializers. Some has occurred, without governmental encouragement, through the natural evolution of market opportunities. Sometimes it was stimulated by such temporary 'shocks' as wars, sanctions and the Great Depression. Governmental encouragement of ISI through conscious protectionist policies was a prominent feature of development strategy in most developing countries in the 1950s and 1960s; and it has been heavily criticized (e.g. Little *et al.* 1970). Certainly ISI policies were at one time important elements of the development strategies of all of the countries studied in this project.

During the 1970s and 1980s, very small shares of the overall expansion of manufacturing output in the developing countries studied in this project could be attributed directly to import substitution in the sense of reduced import proportions of domestic manufacturing usage. When expansion of industrial output is decomposed, using Chenery's methodology, into its demand-side constituents, most of the industrial growth in these countries was associated with growth in domestic demand.

Industrial growth associated with overall domestic demand expansion generally took place in industries that were developed in an earlier import-substituting period. Some of these industries were internationally competitive. Others, however, had originally been established with the help of protection against imports, much of which remained in place. To the degree that imports could have met some of the expanding domestic demand more efficiently, one could say that import-substituting industrial output under protection continued to expand along with domestic demand and, in an absolute sense, the static costs of protection grew; so, presumably, did any positive externalities, learning effects, employment creation or other desired effects of this protected output. Chenery's methodology for the measurement of import substitution is thus a somewhat imperfect indicator of the continuing role of import-substituting activities.

When changes in domestic demand dominate overall manufacturing growth, the pattern of change is primarily the product of differential income elasticities of demand for particular industries' outputs. The pattern of export performance is also affected by differential domestic demand pressures on different industries as overall growth in demand varies. With few exceptions, industrial growth, when led by domestic demand (as is normal in large countries), followed the usual (large country) patterns. Heavy intermediate products, consumer durables and capital goods grew relatively more quickly in the 1970s and 1980s in such countries as Mexico, Brazil, Korea and Turkey. In India, however, where these 'late' industries were encouraged to make an early start in

the 1950s and 1960s, consumer-goods production enjoyed a relative spurt in the late 1980s.

Import shares of apparent consumption in manufacturing did sometimes change significantly in the countries in the project during the 1970s and 1980s. For example, in Chile and in Sri Lanka, import liberalization in the 1970s increased import shares, reversing some of their earlier import substitution; and the manufacturing sector actually declined in size relative to the primary sector. Positive import substitution occurred in the 1970s in heavy and high-technology industries in Brazil, and in many industry-specific instances in other countries. In low-income Tanzania, the 'basic industry' strategy of the late 1970s even produced a temporary 'bulge' in the 'later' industries' share of manufacturing output. But, overall, the 1970s and 1980s cannot be characterized as a period of import substitution.

Growth in exports, on the other hand, almost everywhere contributed an increased share of total manufactured output growth in the 1970s and 1980s, with particularly significant increases in many countries in the 1980s. In our sample of countries, export expansion rose to become a dominant source of industrial growth in the 1980s in Malaysia, Mexico, Turkey, and probably in Brazil and Thailand. It is generally anticipated that manufactured exports will continue to make a major contribution to developing countries' industrial growth throughout the 1990s and thereafter. These changes in the manufacturing sector typically paralleled the changes at the level of the overall national economy where the share of exports (and, often to a slightly smaller degree, imports) in GDP rose as well.

When manufactured exports grew they did not do so equally across the whole range of domestic manufacturing activity. Even when the entire incentive structure was altered so as to offer new encouragement to all potential exporters, the initial response typically clustered in only a few segments of the manufacturing sector, some of which were characterized by domestic value added that was much lower than the gross value of exports. The aggregate data on the sources of the manufacturing sector's output expansion may therefore be quite misleading. For instance, in Bangladesh, Sri Lanka, Malaysia and Thailand, garments (and, to a lesser degree in the latter two countries, electronics) totally dominated exports in the 1980s. Automobiles and, to a lesser extent, electronic equipment (computers) played a great role in Mexican (non-maquila) manufactured export expansion. In Turkey the textile industry dominated manufacturing for export. These response patterns reflect different domestic capacities, differential incentives to investors, and different comparative advantages, among other influences; the sources of these differential responses undoubtedly require more research.

Table 5.1 shows the enormous importance of export demand for manufactures in the 1980s in Mexico and Turkey and, in the late 1980s, Colombia. Export shares of manufacturing output increased dramatically in many countries in the 1980s and, in some instances, this followed major increases in the 1970s, e.g. in Chile, Colombia, and, most dramatically, Korea. Of the countries in Table 5.2 only Peru and Kenya moved in the reverse direction in the 1980s. In some instances, the requirements of balance in external payments did not permit an equivalent 'opening' to imports. Import

shares of manufacturing consumption actually fell in the 1980s in Brazil and Mexico (as well as in Peru where, given the reduced export orientation, it was to be expected).

TABLE 5.1  
CHANGING SOURCES OF GROWTH IN MANUFACTURING DEMAND  
1960s to 1980s\* (%)

	1960s			1970s			1980s		
	DD	IS	EE	DD	IS	EE	DD	IS	EE
Brazil		n.a.		-	-	-	51.9	15.0	33.6
Colombia	128.1	-33.9	5.7	105.0	-19.4	14.4	83.1	0.6	16.2
							(-14.4	-6.5	120.9)
Mexico	87.4	10.3	2.3	105.0	-7.2	2.2	-54.9	0.8	154.1
Korea	78.0	15.9	9.2	64.4	6.3	32.4	49.7	5.7	45.0
Thailand	64.1	29.4	6.5	91.0	0.5	8.5	76.5	-2.3	25.8
Turkey	75.2	10.4	4.5	76.2	-1.5	10.7	-36.7	-143.9	81.5 **
							(55.6	-6.8	55.6)
Bangladesh		n.a.		128.9	-45.5	16.7	64.2	30.9	4.9
Kenya	76.1	14.6	9.3	-	-	-	64.0	42.0	6.0

Source: Helleiner 1994, various.

Note: \* The percentages shown describe the shares of each component of demand in the growth of manufacturing, where DD = Demand Expansion; IS = Import Substitution; and EE = Export Expansion. Detailed methodologies and time periods are not uniform across countries. The headings are therefore only approximate. The actual time periods covered are as follows (more details can be found in the original sources – the country studies in the source volume):

Brazil: 1970-85.

Colombia: 1967-70, 1974-9, 1985-9, (1989-91). (Percentages were calculated for this table from the data presented in the Colombia study.)

Mexico: 1960-70, 1974-80, 1980-87.

Korea: 1955-63, 1963-75, 1975-85.

Thailand: 1966-72, 1972-75, 1975-80.

Turkey: 1963-68, 1968-73, 1977-81, (1981-4).

Bangladesh: 1976-82, 1982-9.

Kenya: 1964-70, 1972-85.

\*\* Sums to negative 100 because it was a period of negative growth.

TABLE 5.2  
CHANGING IMPORT AND EXPORT COEFFICIENTS IN MANUFACTURING  
1960s to 1980s\* (%)

	1960s		1970s		1980s	
	Import	Export	Import	Export	Import	Export
Brazil	n.a.	n.a.	11.2	7.4	4.9	14.6
Chile	26.8	6.5	40.5	12.8	48.1	23.1
Colombia	20.4	3.7	23.3	5.8	25.6	7.5
					(25.8)	(12.1)
Mexico	n.a.	n.a.	40.5	9.0	22.9	16.7
					(36.4)	(26.3)
Peru	35.8	3.1	42.3	20.0	19.8	7.9
Korea	21.7	4.1	26.6	24.2	25.6	31.3
Malaysia	n.a.	n.a.	n.a.	18.4	n.a.	23.0
						(45.3)
Sri Lanka	n.a.	n.a.	n.a.	20.0	n.a.	31.0
						(41.9)
Turkey	14.7	10.0	13.3	6.0	15.9	11.3
					(22.4)	(17.1)
Kenya	n.a.	n.a.	n.a.	5.9	n.a.	3.8
Tanzania	56.2	n.a.	49.6	10.2	41.1	7.5
					(63.7)	(15.5)

Source: Helleiner 1994, and subsequent author correspondence.

Note: \* Import and export coefficients measure the percentage share of the gross value of manufacturing output made up of imports and exports respectively. Detailed methodologies and time periods are not uniform across countries. The headings are therefore only approximate. The actual time periods covered are as follows (more details can be found in the original sources – the country studies in the source volume):

Brazil: 1974, 1985.

Chile: 1967, 1979, 1989. Import and export coefficients refer to import-substituting and natural-resource based industries respectively.

Colombia: 1967, 1974, 1987, 1991 in brackets.

Mexico: 1980, 1985, 1989 in brackets (all at 1980 prices).

Peru: 1970, 1980, 1988 (all at 1988 prices).

Korea: 1963 (at 1968 prices). 1975, 1985 (at 1975 prices).

Malaysia: 1975, 1983, 1989 in brackets.

Sri Lanka: 1975-7, 1983, 1988 in brackets.

Turkey: 1972, 1978, 1983, 1990 in brackets.

Kenya: 1979-83, 1984-88.

Tanzania: 1965, 1978, 1984, 1988 import and 1987 export in brackets (current prices).

## VI ISSUES IN THE TRANSITION TO MANUFACTURING FOR EXPORT

### 6.1 Varieties of transition

The 'transition' to manufacturing for export, where it occurred, took a variety of specific forms. In some cases, as in Colombia, Mexico and Turkey (and in an earlier period, Korea), exports grew from previously (and often still) protected and originally import-substituting industries. (Mexico also experienced rapid expansion in its entirely export-oriented *maquiladora* sector.) Previous import-substituting production, much of which was encouraged by protection, thus apparently provided the base of experience, learning and, in some cases, scale economies that eventually made efficient manufactured exporting possible (though it is sometimes argued that without protection, export performance, presumably from other sectors, would have been stronger, and that protection necessitated larger incentives for exporting than would otherwise have been required).

Real currency devaluation and/or stringent repression of domestic demand, typically in response to external shocks and debt crises, created strong incentives for producers to redirect output from domestic to external markets in these and other cases. In the late 1980s, a similar process emerged in India (which had also registered some manufactured export expansion in response to domestic demand restraint in the mid-1970s) and, to a lesser extent, in Kenya and Tanzania. When undertaken rapidly, as in Mexico and Turkey, these policies involved significant short-term income redistribution and unemployment and therefore socio-political stress that eventually called into question the sustainability of the entire 'reform' effort, not least the transition to exporting. In Colombia and Korea, where such manufactured exports from existing industrial capacity expanded more gradually and over a longer period, the sheer stability of incentives – offered mainly via the real exchange rate – appears, as noted above, to have carried considerable weight. In none of these cases did across-the-board import liberalization contribute significantly to the phenomenon of export expansion.

In Mexico, while the volume of (non-maquila) manufactured exports certainly has been influenced by short-term changes in the real exchange rate, it is difficult to ascribe its recent rapid increase solely to such changes in the incentive structure. In the 1970s and 1980s there was sharp variation in the real exchange rate; at times, the real value of the peso was even higher than in previous decades, implying reduced incentives for exporting. Moreover, the reduction in anti-export bias associated with the import liberalization of the second half of the 1980s cannot fully explain the rapid growth of manufactured exports either, since this export expansion started before liberalization. Other governmental programmes and foreign investors' responses were critically important to what transpired. In particular, specific export performance targets, or what the GATT negotiators termed 'trade-related investment measures' (TRIMs), imposed by

government in the (largely foreign-owned) automobile and computer industries, played a major role in the overall expansion of Mexican manufactured exports.

In other cases, manufacturing for export developed *de novo* in response to the creation of strong and stable incentives, usually in the form of appropriate real exchange rates and/or export subsidies. Frequently they took the form of export processing or 'free' zones in which domestic taxes and other regulations were waived for foreign investors. Foreign investors brought international marketing experience and virtually automatic international market access, thus overcoming what were frequently critical barriers to local firms' entry to new exporting activities. In these cases, the foreign firms typically had no prior (or subsequent) experience selling in local markets; and there were usually fairly limited backward linkages to local suppliers of non-factor inputs. These highly import-dependent exporting activities, e.g. electronic components in Malaysia, garments in Bangladesh and Sri Lanka, and the *maquiladora* sector in Mexico, generated value added, overwhelmingly in the form of wages, that was much less than the gross value of recorded exports. While these exporting activities drew effectively upon these countries' unquestionable current comparative advantage in unskilled labour-intensive production, they generated criticism and raised doubts concerning their longer-term developmental role, because of their limited development of efficient domestic linkages, training or other positive externalities.

Chile's expansion of manufactured exports was based upon the processing of local primary products (forest products, fruits and vegetables, fish, etc.) for export. These processing activities built upon much earlier governmental investments in research, training and supportive infrastructure. When, in the 1980s, the real value of the currency, and (even before that) the real wage, were reduced, and imports liberalized, so as to provide strengthened incentives for the expansion of these resource-intensive exports the response came rapidly, from locally-owned, as well as foreign, enterprises.

Evidently, there has been no single route to successful and efficient manufacturing for export. Governments have played an important role in manufactured exports' promotion; but, contrary to inferences one might draw from much of the recent literature, that role has *not* usually been the reduction of anti-export bias through cross-the-board import liberalization. Rather, the most prominent governmental influences in the 1970s and 1980s were exchange rate policies, domestic demand restraint, real wage restraint, export subsidies, export processing zones, and export performance 'requirements'. These policies built upon significant prior, and usually continuing, broad support for industrialization processes.

Have these policies created the basis for continued, sustained growth in exports of manufactures? Can these policies themselves be sustained? Manufacturing for export evidently frequently expanded in response to the short-term macroeconomic pressures and policies of the late 1980s rather than as part of a longer-run reorientation of development strategies. Balance of payments pressures and debt crises in Mexico, Turkey and elsewhere led to significant real currency devaluation, real wage reduction, demand restraint, and increased efforts at export promotion, all of which had the desired effect of expanding export volume in the manufacturing sector as well as other sectors.

It remains to be seen whether these new exports represent more than a temporary surge; in particular, whether they reflect the longer-run 'entry' of exporting firms and thus constitute an important new element in sustained longer-term industrial growth. This question requires more research (e.g. see Roberts and Tybout 1992).

## 6.2 Emerging issues

### 6.2.1 *'Switching' or expanding capacity?*

When manufactured exports expand rapidly, particularly when they do so for the first time in a nation's history, it is tempting to attribute such 'success' to the emergence of new export-oriented manufacturing capacity, either in existing industries (and firms) or in new ones. In the countries whose recent experience is analysed in this project, however, manufactured exports were frequently the product of the redirection of existing manufacturing production from domestic to external markets in response to altered domestic incentives and depressed domestic demand. Except in the cases of export processing zones and the new resource-intensive exports from Chile, these exports usually originated from industries (and firms) that had previously substituted for imports and benefited from significant import protection. Many were foreign-owned firms (see also Blömstrom and Lipsey 1993). During the Turkish boom in manufactured exports in the 1980s, while some investment in export-oriented manufacturing did take place in sectors where initial utilization of capacity was high, the share of manufacturing in the total capital stock actually fell (see also Faini 1994). In Tanzania, there was a sharp slowdown in the growth of manufactured exports in 1990 and thereafter, once the potential for redirecting output away from the local market had been exhausted. Equally, in Mexico and Colombia, a pre-existing industrial base, nurtured by a supportive government at least in its earliest stages, was critical to the success of these countries' manufacturing for export in the past two decades.

The maintenance of growth in manufactured exports will eventually require fresh investments for this purpose. Where investment demand remains constrained by high domestic real interest rates and/or uncertainty as to the sustainability of policies and incentive structures (including access to foreign markets), the booms in manufactured exports may sputter to a halt.

### 6.2.2 *The role of the import regime*

On purely theoretical grounds, it is common to associate export performance with the nature of the import regime as well as the export regime. In a general equilibrium analysis, taxes or barriers on imports are equivalent to taxes on exports, a proposition usually known as the 'Lerner symmetry' theorem (for its author). By raising the 'fundamental' (or equilibrium) value of the domestic currency, in such analysis, import barriers discourage exports just as surely as if exports had been taxed directly. Holding long-term capital flows constant, imports and exports must move broadly in parallel over the medium- to longer-run. Hence it is frequently argued that import liberalization, and the consequent reduction of anti-export bias, is a fundamental



requirement for sustained export expansion and, in particular, that of manufactured exports.

There are flaws, however, in the applicability of this argument to the prospects of manufacturing for export from developing countries, and they are amply demonstrated in the case studies in this project. First, as has been seen, anti-export bias can be reduced, and frequently has been, via the provision of export subsidies as well as by lowering import barriers. In deploying the symmetry argument, one must therefore begin by measuring the degree of protection (or anti-export bias) *net* of the effect of export subsidies; this may significantly reduce the 'required' degree of import liberalization and/or the effects of removing all trade policy interventions (on both imports and exports).

Secondly, movements in the real exchange rate – and hence in the price of tradables (exports and import substitutes) relative to non-tradables – can, and frequently do, swamp those in the anti-export bias within the tradables sector. Export expansion can therefore rest upon a high price of exportables relative to non-tradables, rather than a high price of exportables relative to importables. Equally, real currency appreciation can discourage exports even when imports have been fully liberalized.

Third, analysis of only one kind of export, manufactured exports, must employ a model that is more complex than the simple two (or three) sector version featured in the export-import symmetry argument; the determinants and effects of changes in non-manufactured exports will have to be considered separately and this analysis integrated with that of manufacturing for export.

Fourthly, the symmetry argument rests on an assumption that there are no unemployed or underemployed resources. In developing country circumstances it may be possible to mobilize previously underutilized factors of production for expanding economic activity. Indeed, in general, the symmetry theorem abstracts from cyclical variation in demand and, for that matter, in balance of payments experience, which may be the prime motivation for the imposition of (short-term) barriers to imports.

Lastly, and even more fundamentally, the effects of the degree of dispersion of governmental 'wedges' between world and domestic prices for both importables and exportables needs to be analysed, not just the average size of such wedges; trade liberalization will have substantially different effects on the pattern of manufacturing, including that for export, depending upon whether previous governmental interventions had been relatively uniform or diverse from industry to industry.

For all of these reasons, it is easy to contemplate, on theoretical grounds, the possibility of significant expansion of manufactured exports *without* prior or simultaneous overall import liberalization. In fact, while 'liberal' treatment of the imports of those inputs used in manufactured exports was usually one of the concomitants of rapid expansion in manufacturing for export, the role of across-the-board import liberalization in such successes has generally been rather less clear.

As has been seen, a considerable degree of import liberalization actually took place during the period of study in all of the countries in which manufacturing for export expanded. Chile's import liberalization, the most dramatic, began a rapid liberalization process in the mid-1970s, at roughly the same time as it undertook a major real currency devaluation, and ended with a low and virtually uniform industrial import tariff and the total elimination of non-tariff barriers by the early 1980s; exporters also received import tariff rebates. The currency devaluation initially buffered the import-substituting industrial sector against some of the effects of the import liberalization, but with subsequent real currency appreciation, there was considerable 'shakeout' in this sector. Non-traditional (i.e. non-copper) exports expanded extremely rapidly in the late 1970s in response to the new incentives, stagnated with the relatively appreciated currency in the early 1980s, then resumed rapid growth for the rest of the decade. In Chile's case the overall import liberalization sharply reduced incentives for many import-competing industrial activities and increased those for exports, particularly the primary products in which Chile has comparative advantage, e.g. fruit, fish, forest products and minerals, and primary processing for export. Import liberalization in Chile thus significantly altered the overall structure of the economy; it both reduced the relative size of the manufacturing sector and altered its structure, particularly encouraging new exports based on Chilean natural resources at the expense of protected import-substituting industry. Hopes for the expansion of manufactured exports and manufacturing more generally rest significantly on the prospects of new industries that are linked, either forward through processing or backward through the supply of inputs, to the rapidly expanding primary exports.

Turkey's import liberalization was more gradual and, in the end, less extreme. It followed the conventionally recommended sequence, beginning with the gradual reduction and removal of import quotas and licences and their replacement with tariffs over the course of the 1980s, followed by the lowering and simplification of tariffs in 1989-90 and thereafter. Accession to the European Free Trade Area and eventually, perhaps, to the European Union will require considerable further liberalization. Manufactured exports, particularly of consumer goods (mainly textiles and clothing), rose very rapidly over the 1981-7 period, in response to the early real currency devaluation, the associated decline in real wages and tight control over domestic aggregate demand. This export success preceded much of the import liberalization. Indeed by the time that the import liberalization had reached more advanced stages in the 1989-93 period, growth in manufactured exports had already slowed dramatically in consequence of emerging major macroeconomic imbalances which eventually brought Turkish growth to a halt.

The Mexican experience with import liberalization and manufacturing for export was, in some respects, similar to that of Turkey. Liberalization was initially, in the mid-1980s, fairly gradual and accompanied by real currency devaluation that, to some degree, preserved the profitability of import-competing industries. Rapid growth in manufactured exports was not obviously associated with overall import liberalization. (The Mexican study also casts some doubt on whether import liberalization improved manufacturing productivity to the degree that has previously been believed.) The most successful manufacturing for export resulted from special industry-specific regimes – in

automobiles, computers and the *maquiladora* sector. By the time of the further import liberalizations from 1988 onwards, there had been considerable real appreciation of the currency and, although manufactured exports continued to grow, manufactured imports grew much more quickly. Pressure on the import-competing sector, together with continued low investment and low overall productivity growth, contributed to new macroeconomic imbalances and the eventual severe interruption of the Mexican recovery.

Colombia consciously pursued a 'mixed' policy of simultaneous export promotion and import substitution in the industrial sector from as early as the mid-1950s onwards. (Earlier, Colombia had been pursuing protectionist import substitution strategy for several decades.) Exchange rate policy played a major role in this approach; Colombia was the first developing country to introduce a 'crawling peg' (in 1967). Changes in the real exchange rate thereafter broadly reflected the economic 'fundamentals', particularly the fortunes of the coffee sector; these changes typically dominated commercial policy changes and, of course, left the incentives for exporting relative to local sales of manufactures broadly unaltered. Moderate efforts at import liberalization were made from time to time – gradually in the 1970s and more quickly in 1985 – but these were not significant in terms of altered manufactured export performance. A major liberalization initiated in 1991 sought to reduce the overall degree of anti-export bias, among other objectives, but its main rationales were overall economic liberalization, in line with the tenor of the times, and reduction of price inflation. The import regime was thus not an important element in Colombia's development of manufacturing for export.

Tanzania retained fairly tight import controls in its post-independence period. These were severely further tightened during the periods of sharp balance of payments shocks in the early 1970s and again from 1979 onwards, with an associated serious overvaluation of its currency. Tanzania began to liberalize imports in 1984. There followed a period of significant further decontrol accompanied by major real currency devaluation. The real depreciation of the currency generated significant changes in the domestic incentive structure and these 'led' (preceded) the further liberalization of the import regime. The unprecedented expansion of manufactured exports was thus, in Tanzania as elsewhere, associated with the former more than with the latter.

Changes in the overall nature of the import regime thus did *not*, of themselves, usually play a prominent role in the emergence of successful manufacturing for export in the five countries subjected, in this project, to more focused investigation of the transition to exporting. Nor did they do so in other countries in the project, like Brazil, Korea, Malaysia or Thailand. Other influences, notably the real exchange rate, were far more important. In some instances (Mexico and Turkey) import liberalization contributed to macroeconomic imbalance that interrupted the process of steady adjustment and growth.

### 6.2.3 *The role of the capital account*

An emerging and unanticipated problem in many of the newer industrializing countries, as they strain to expand manufactured exports, is the effect of large changes in the size (and even the direction) of private international capital flows. Particularly has this been a problem where, as in Mexico and Turkey in the late 1980s and in Chile a little earlier, international capital flow was liberalized along with other aspects of the economy.

Private capital flows often respond sharply to short-term influences – including interest rates and price/exchange rate expectations – that have little to do with the longer-term economic 'fundamentals' or the requirements of successful longer-term development strategy. They do so even when these flows are ostensibly subject to foreign exchange controls – through various evasions, leads and lags in foreign receipts and payments, and the like. When efforts to control capital flows, imperfect as they may be, are abandoned, the potential for volatile and disruptive changes in the real exchange rate, driven by private capital flows, is heightened.

Domestic financial liberalization often results in sharp increases in domestic nominal interest rates. When, at the same time that nominal interest rates are 'freed', stabilization achieves a reduction in inflation rates and a stabilization of exchange rates, domestic *real* interest rates can reach *very* high levels, generating strong incentives for capital inflow, much of it quite short-term in its motivation. Such inflows create upward pressure on the value of the currency or domestic monetary expansion (and inflationary pressure) or both. Liberalization of both domestic financial markets and the external capital account can also create increased volatility and/or uncertainty of incentive structures, via a dangerous linking of two systems, each of which is itself highly volatile.

It has been noted above that the real exchange rate has exerted a major influence upon the performance of manufactured exports. It thus follows that private capital flows, through their effects on the real exchange rate (and potentially on real wages), can impact importantly on export performance, and on other aspects of longer-term performance. In the late 1980s, in Mexico and in Turkey, such negative influences have been important.

Mexico experienced a massive capital inflow in the late 1980s in response to its domestic stabilization and adjustment programme and its relatively favourable (above all, *vis-à-vis* the US) interest rates. This capital inflow unfortunately failed, however, to stimulate domestic Mexican investment or associated productivity gains or growth itself. Rather, through its effect on the real exchange rate, it seems to have dampened ('crowded out') domestic savings, worsened the trade deficit and forced continued macroeconomic restraint. Despite real currency appreciation, Mexican manufactured exports continued to grow rapidly – but imports grew more rapidly still. The continued good performance of manufactured exports (as well as the attractiveness of Mexico to foreign capital) came to depend on the continued restraint of domestic investment and consumption, which, as in Turkey, has proven politically difficult. Import liberalization,

in the context of the real currency appreciation associated with capital inflow, proved unsustainable.

Turkey liberalized domestic financial markets in 1980-1, then began to liberalize its external capital account from 1984 onwards, attaining full convertibility in 1989-90. Foreign capital poured into Turkey in 1989-90, in response to strong interest incentives, generating significant real currency appreciation, at the same time that import liberalization was completed. As in Mexico, imports consequently expanded rapidly. Macroeconomic and wage restraint could not survive domestic political pressures. Added to the effects of currency appreciation at this time were increases in real wages, which had been severely repressed during the previous period of stabilization and adjustment, and rising fiscal deficits. Together, these developments *reduced* overall savings rates, generated a rising current account imbalance and, eventually, a reversal of the direction of capital flow, and a currency and macroeconomic crisis. The 1980s episode of adjustment, towards manufacturing for export among other objectives, had not been sustainable. Volatile private capital flows – first inward, then outward – had contributed to the breakdown of the adjustment programme.

Chile's capital account liberalization in the late 1970s and early 1980s, accompanying its trade and domestic financial liberalizations, also led to significant capital inflows and real currency appreciation. The heavy external shocks experienced by Chile in 1982 drove the country into a severe macroeconomic crisis, from which it emerged only through major real devaluation, the reintroduction (for a time) of more import protection, and determined subsequent measures to retain the devalued real exchange rate in the face of subsequent surges of capital inflow in the late 1980s and early 1990s (through monetary sterilization via the deployment of new reserve requirements on the banks). As has been seen, Chile's non-traditional exports continued to grow rapidly but, in the main, they were not manufactures (in the standard international meaning of the term).

Volatile flows of private capital can create grave macroeconomic management problems, and thus complicate the orderly processes of development, including manufacturing for export. The liberalization of the capital account has, in some instances, intensified such problems.

## VII SUMMARY AND CONCLUSIONS

Industrial growth in the 1970s and 1980s in the countries we studied was driven, above all, by expanding domestic demand and, increasingly in the 1980s, by exports. During this period import substitution, in the sense of reduced import shares of apparent consumption, was only a limited and industry-specific phenomenon. Governmental influences over industrial performance remained strong in the 1970s and 1980s, but they differed in their nature from their role in previous decades.

In the macroeconomically turbulent 1970s and 1980s trade policy, narrowly defined, did not generally play a major role in the growth, development or industrialization experience of these countries. External shocks, debt crises and (sometimes related) internal imbalances necessitated macroeconomic policy responses; and these macroeconomic phenomena and policies dominated other determinants of industrial and overall economic performance. Disruptive flows of private capital continue to threaten macroeconomic balance and hence the stability of incentives that industrialization seems to require. Industrial productivity growth was typically associated strongly with output growth; its relationship with the trade policy regime or the trade orientation of individual industries, however, was unclear. Real currency devaluation, associated real wage reduction and aggregate demand restraint, together with the perceived stability of the resulting incentives, contributed importantly to the rapid growth of manufactured exports in many countries. So did special encouragements to industrial exporting, in the form of significant direct and indirect export subsidies. Protectionist import regimes were frequently somewhat liberalized (in a few cases, radically so) but such import liberalizations were typically selective, slow and of limited impact on the overall degree of anti-export bias, relative to export subsidies. Selective exemptions from import duties were of great and continuing importance in overall trade policy. Non-trade industrial policies and policies on foreign direct investment and technology were also of major significance to the attainment of industrial objectives. The evidence on the effects of dispersion or non-uniformity of industry-level incentives is inconclusive.

The studies in this project suggest that there are a great many routes to industrial expansion and, indeed to longer-run industrial productivity growth and successful manufacturing for export. The influences upon industrial performance have been many and varied, and include, importantly, shocks and policy responses to them that are totally unrelated to trade or industrial policies. Governmental policies that have 'mattered' and 'worked' in the sphere of industrialization have also varied greatly. They include exchange rate policies, various kinds of direct and indirect export subsidies, and various industrial policies; and they include selective interventions. The policies that are appropriate for any particular time or place clearly depend upon initial conditions and constraints, not least the specifics of the political economy of public policy formation and the capacity of governments to implement them effectively. Needless to say, the

longer-run implications of alternative policies and growth patterns cannot yet be known; and they must be studied. The degree to which the emerging rules of the WTO will permit the deployment of the entire range of possible instruments of industrialization policy in developing countries is also a matter which will require more detailed research and policy attention; there remain some real uncertainties here. On the basis of the evidence available, however, to suggest that there is already a universal optimal *trade* policy prescription that will generate improved economic performance for all who embrace it is to ignore too much recent experience.

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