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UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

TRADE AND DEVELOPMENT REPORT, 2003

CAPITAL ACCUMULATION, GROWTH AND STRUCTURAL CHANGE

UNITED NATIONS
New York and Geneva, 2003

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Report by the secretariat of the
United Nations Conference on Trade and Development

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FOREWORD

With the adoption of the Millennium Development Goals, the international community has made a bold commitment to correcting some of the most egregious social imbalances scarring the global landscape. The timetable is tight, and success will depend on a host of factors, including achieving stable and robust global economic growth.

Currently, the world economy is going through difficult times. The financial excesses and global economic imbalances of the 1990s are proving difficult to overcome. Although there has been no repeat of the damaging contagion from financial crises that have regularly hit emerging markets since the mid-1990s, confidence has remained fragile almost everywhere. Moreover, despite the efforts of policy makers, the rebound that had been anticipated in the richest economies has not happened.

Getting back on track requires greater policy coherence and more effective multilateral coordination. Given the increased integration of developing countries into the global economy and their external vulnerability, it is especially important to find ways to better support the expansion of global economic activity and to attain greater stability of the international financial and monetary system. Indeed, these issues will continue to be at the top of UNCTAD's agenda as it prepares for its eleventh quadrennial conference, to be held next year in Brazil.

For more than two decades, developing countries have been implementing a variety of demanding reforms – in particular increased openness to international trade and capital flows – in an effort to stabilize their economies and to tackle poverty. These measures have been pursued with particular vigour in many Latin American countries. And yet, early successes have not endured. This year's *Trade and Development Report* looks for clues as to why this has happened, focusing in particular on capital formation, structural change and international competitiveness. The *Report* provides explanations that may challenge conventional points of view, and calls for new thinking on development strategies and on how domestic and international policy makers might best direct their energies to revive growth and tackle the deep-seated problems of poverty and social exclusion.

Kofi A. Annan
Secretary-General of the United Nations

This *Trade and Development Report* was prepared by staff of the Division on Globalization and Development Strategies of UNCTAD, under the guidance of its Director, Yilmaz Akyüz. The analysis has benefited from comments and suggestions by staff from other UNCTAD divisions. The *Report* is the main document for intergovernmental deliberations on interdependence in the Trade and Development Board, the permanent organ of UNCTAD to carry out the functions of the Conference when it is not in session.

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Classification by country or commodity group

The classification of countries in this *Report* has been adopted solely for the purposes of statistical or analytical convenience and does not necessarily imply any judgement concerning the stage of development of a particular country or area.

The major country groupings distinguished are:

- Developed or industrial(ized) countries: in general the countries members of OECD (other than the Czech Republic, Hungary, Mexico, the Republic of Korea and Turkey).
- Transition economies: the countries of Central and Eastern Europe (including the States formerly constituent republics of Yugoslavia), the Commonwealth of Independent States (CIS) and the Baltic States.
- Developing countries: all countries, territories or areas not specified above.

The term "country" refers, as appropriate, also to territories or areas.

References to "Latin America" in the text or tables include the Caribbean countries unless otherwise indicated.

Unless otherwise stated, the classification by commodity group used in this Report follows generally that employed in the UNCTAD *Handbook of Statistics 2002* (United Nations publication, sales no. E/F.03.II.D.2).

Other notes

References in the text to *TDR* are to the *Trade and Development Report* (of a particular year). For example, *TDR 2002* refers to *Trade and Development Report, 2002* (United Nations publication, sales no. E.02.II.D.2).

The term "dollar" ($) refers to United States dollars, unless otherwise stated.

The term "billion" signifies 1,000 million.

The term "tons" refers to metric tons.

Annual rates of growth and change refer to compound rates.

Exports are valued FOB and imports CIF, unless otherwise specified.

Use of a dash (–) between dates representing years, e.g. 1988–1990, signifies the full period involved, including the initial and final years.

An oblique stroke (/) between two years, e.g. 2000/01, signifies a fiscal or crop year.

Two dots (..) indicate that the data are not available, or are not separately reported.

A dash (-) or a zero (0) indicates that the amount is nil or negligible.

A dot (.) indicates that the item is not applicable.

A plus sign (+) before a figure indicates an increase; a minus sign (-) before a figure indicates a decrease.

Details and percentages do not necessarily add to totals because of rounding.

Abbreviations

ADB	Asian Development Bank
BIS	Bank for International Settlements
CEPAL	Comisión Económica para América Latina y el Caribe
CIS	Commonwealth of Independent States
CPI	consumer price index
CTE	Committee on Trade and Environment (WTO)
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
ECE	United Nations Economic Commission for Europe
ECLAC	United Nations Economic Commission for Latin America and the Caribbean
EFTA	European Free Trade Association
EIU	Economist Intelligence Unit
EU	European Union
FDI	foreign direct investment
FTZ	free trade zone
G-24	Intergovernmental Group of Twenty-Four on International Monetary Affairs and Development
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
GFCF	gross fixed capital formation
GTAP	Global Trade Analysis Project
IADB	Inter-American Development Bank
ILO	International Labour Organization
IMF	International Monetary Fund
ISIC	International Standard Industrial Classification
IT	information technology
ITRO	International Tripartite Rubber Organization

LDC	least developed country
M&A	merger and acquisition
MERCOSUR	Southern Common Market
NAFTA	North American Free Trade Agreement (or Area)
NIE	newly industrializing economy
NTM	non-tariff measure
OECD	Organisation for Economic Co-operation and Development
OEEC	Organisation for European Economic Co-operation
OPEC	Organization of the Petroleum Exporting Countries
R&D	research and development
RCA	revealed comparative advantage
SARS	Severe Acute Respiratory Syndrome
SDR	Special Drawing Rights of the IMF
SITC	Standard International Trade Classification
TDR	Trade and Development Report
TNC	transnational corporation
TRIMs	Trade-related Investment Measures (WTO Agreement)
TRIPs	Trade-related Aspects of Intellectual Property Rights (WTO Agreement)
ULC	unit labour cost
UN/DESA	United Nations Department of Economic and Social Affairs
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organization
UNU/WIDER	United Nations University/World Institute for Development Economics Research
WEO	World Economic Outlook
WTO	World Trade Organization
WTOR	World Tourism Organization

OVERVIEW

The past two decades have been shaped by a radical shift in development thinking and practice. In the wake of the debt and development crisis of the 1980s, a new policy approach looked to liberate enterprise from state intervention, deferring to the invisible touch of global market forces. The promise was for an end to macroeconomic chaos, stop-go development cycles and debilitating levels of debt, ushering in an era of sustained growth and poverty reduction. The collapse of the Berlin Wall gave this agenda global reach.

The agenda was embraced with particular enthusiasm in Latin America, and with the success of the Brady Plan the floodgates opened to foreign capital in the 1990s. The green light from international capital markets encouraged a quickening pace of reform, attracting foreign investment and making international competition the engine of renewed growth. But after some initial signs of success, familiar structural constraints have resurfaced. Most countries have failed to accelerate capital formation and technological progress, and diversify into more dynamic sectors. As spending outpaced the expansion of productive capacity and imports boomed, the growing reliance on external capital left many countries exposed to external policy shocks. Over the past five years, as global economic imbalances have generated such shocks with increasing frequency, Latin America has endured a "lost half decade", recalling the disappointing developments of the 1980s.

A passing familiarity with broader historical experience might have cautioned against advertising the originality of the new development agenda or encouraging exuberant expectations. Back in the 1920s, balanced budgets, independent central banks, flexible labour markets and a rapid opening to international competition also promised to get things back to normal. Instead, as unregulated financial flows spilled across the global economy, boom-bust cycles erupted on the periphery of Europe and in parts of the developing world, linked to instability in commodity export earnings and mounting levels of debt.

Fanaticism, according to the Spanish philosopher George Santayana, calls for a doubling of effort in the face of failure. Despite its pantheon of critical and creative minds, economics is also susceptible to such thinking. Indeed, as inflation has subsided and market forces enjoy an increasingly freer reign, the call for developing countries to pursue greater fiscal discipline, more deregulation and ever faster liberalization has intensified, even as growth prospects have dimmed in many places and poverty levels have risen.

In the 1920s, when the "market juggernaut" was rolling at full steam, John Maynard Keynes called for a "new wisdom for a new age" with "new policies and new instruments to adapt and control the workings of economic forces, so that they do not intolerably interfere with contemporary ideas as to what is fit and proper in the interests of social stability and social justice". Open-minded, tolerant and pragmatic approaches to the development challenge, consistent with today's increasingly interdependent world, are urgently needed to place economic policy once again at the service of social justice and stability.

Global trends and prospects

This is an anxious time for the global economy. The long anticipated rebound in the United States continues to be delayed, and there are concerns that the imbalances and excesses created during the high-tech boom of the 1990s could result in a long period of erratic and sluggish growth, with occasional surges and dips, accompanied by price deflation. With Europe undecided on, and Japan unable to find, the appropriate policy mix for sustained recovery, the world economy looks set to repeat the weak performance of the past two years and could still falter badly.

Adverse consequences for the developing economies, even the most resilient, are unavoidable. Brighter political conditions should help avoid a repetition of last year's recession in Latin America, but any recovery will be anaemic and fragile. Africa appears to be relatively insulated from global trends, but the continued weakness of many commodity prices means that it may not be able to repeat its performance of the past two years. Given the current level of development cooperation and the structural weaknesses across the region, there is now a growing consensus that it will be impossible to meet the Millennium Development Goals even under the most optimistic growth scenario for the world economy. Asia has until recently been able to maintain momentum based on domestic demand, exports to the United States and buoyant intraregional trade, but growth in the region is certain to slow.

The current downturn in the world economy was preceded, at the end of the 1990s, by widespread but misplaced optimism about the nature and sustainability of United States expansion as the single most important force driving global growth. This was noted in *TDR 2000,* at the time when the world economy was still moving at full steam and many observers thought that the United States economy had been liberated from the inexorable turn of the business cycle:

> Most forecasts of continued global expansion are based on the "Goldilocks" scenario in which the United States economy is neither too hot nor too cold, allowing Europe and Japan to grow and providing support for continued recovery in Latin America and Asia. In assessing the forecasts for accelerated global growth it is as well to remember that Goldilocks is a fairy tale.

Indeed, the factors that helped the United States economy to surge ahead have also increased financial fragility and global imbalances. Accordingly, and as anticipated in *TDR 2001* in the wake of the current downturn, the unwinding of the legacy of the 1990s is proving a good deal more difficult than many had expected:

> Expectations remain quite high that a short Keynesian downturn in the United States can be corrected by appropriate monetary and fiscal action. ... But, even if the steady hand of recent years is maintained, there are doubts that traditional macroeconomic policies will carry the day, given the high level of private indebtedness, the surfeit of investment during the technology boom, and the uncertainties surrounding the dollar. ... The fact that such a long period of expansion has no recent precedent should make for cautious assessment of the current slowdown. However, on balance, the various conflicting pressures point to an uncertain future.

Thus, in spite of aggressive interest rate cuts by the Federal Reserve, investment has failed to recover as capacity utilization remains low despite the scrapping of excess equipment. The economy has so far avoided a more prolonged period of recession thanks to continued growth in consumer spending, which now appears to be losing momentum. Europe's ability to respond vigorously to the current downturn has continued to be compromised by the restrictions on fiscal policy imposed by the Stability and Growth Pact, and the monetary policy stance of the European Central Bank. Japan appears to have given up fighting deflation with macroeconomic tools, emphasizing instead international competitiveness and exports as a basis for growth. Consequently, even though growth rates have fallen everywhere, disparities in the strength of demand among the major industrial countries have persisted, with the United States economy still outperforming Japan and the European Union.

With weak policy responses to sluggish and uneven growth, there is increased reliance on currency adjustments to reduce trade imbalances and revive growth. The combination of the reduced attractiveness of United States assets to foreign investors and the continued increase in its current account deficit has created downward pressures on the dollar. However, this has so far been reflected primarily in a rapid depreciation of the dollar against the euro and some reversal of prior depreciation of Latin American currencies: East Asian economies, including Japan, have resisted the appreciation of their currencies by intervening in the foreign exchange markets and accumulating large reserves.

Since the bulk of the United States trade deficit is with East Asia, it is not clear if recent currency movements will reduce rather than aggravate trade imbalances between Asia and the rest of the world. Indeed, the events of recent months evoke memories of the competitive devaluations of the inter-war period. Certainly, it would be unrealistic to expect the international trading system to evolve in the right direction or international monetary stability to be maintained in the face of slow growth and mounting unemployment. A reversion to the pattern of unruly competition and conflict characteristic of the 1930s could derail the process completely.

Different developing countries are unequally prepared to deal with these increasingly volatile conditions. The weakness of global demand in the past two years has only had a limited impact on East Asia despite its dependence on exports, largely because the strong macroeconomic and balance-of-payments positions of countries in the region have allowed considerable room for domestic demand expansion to support growth, reinforced by strong intraregional trade linkages.

Such policy space was not available to most economies in Latin America facing stringent payments positions. In these countries the global downturn aggravated external financial difficulties, and macroeconomic policy has focussed on reducing current-account deficits and reassuring financial markets. While Asian economies generated large current-account surpluses through a rapid expansion of exports, the situation in Latin America in 2002 was reminiscent of the conditions prevailing during the debt crisis of the 1980s. The region received virtually no net inflows of private capital in 2002 after being the largest recipient in 2001, and it has had to combine a fall in output with a trade surplus and net transfers abroad, generated entirely by cuts in imports.

While prospects for East Asia and, to a lesser extent, Africa, depend on the evolution of their external trading environment, for Latin America financial conditions are equally important. In recent months extremely high yields and improved political conditions in some countries in the latter region, combined with sharp declines in equity and bond yields in industrial countries, have been attracting short-term, speculative capital, leading to the appreciation of currencies at a time when global prospects are deteriorating and long-term capital inflows to the region declining. It is unlikely that such short-term inflows mark the beginning of another cyclical upturn in private capital flows to the region, as happened during the 1970s after a long period of stagnation or in the 1990s after the debt crisis. These post-war surges in private capital flows to Latin America were idiosyncratic, driven by ad hoc responses to specific global circumstances rather than being parts of a recurrent cyclical pattern. The

first was made possible by the end of the Bretton Woods system and the accompanying financial deregulation in industrial countries and the recycling of petrodollars. In the second, the Brady Plan, designed to relieve United States banks of non-performing loans, laid the ground for a surge in portfolio and investment flows which were further encouraged by progressive liberalization and privatization in the region. There is no guarantee of a renewed surge in capital inflows, and certainly not to the peaks reached during the 1990s.

Hopes are also being pinned on a successful Doha round of trade negotiations to bolster confidence and kick-start the global economy putting trade ahead of growth. Certainly, international trade surged from the late 1980s, growing considerably faster than output until the beginning of the new millennium when it fell not only behind growth of world output but also in absolute terms. While trade is expected to recover in 2003, again there is a danger of optimistic extrapolations. The growth of world trade during the 1990s was driven by a number of structural and institutional changes, which are unlikely to be repeated, at least with the same intensity. These changes included the rapid liberalization of imports in developing countries; the spread of international production networks for some of the most dynamic products in world trade, resulting in a rapid expansion of intra-industry trade with a prominent North-South component and the round-tripping and double-counting of goods in the measurement of world trade; and a surge in capital inflows which helped to boost trade by allowing imports to expand faster than exports in many developing countries. While similar forces could still propel an independent recovery in trade, they are unlikely to match the earlier rise, if only because they will lack the same first-mover boost. Under current conditions, a rapid expansion of trade and further trade liberalization will depend crucially on a rapid recovery of demand and production in the world economy rather than the other way round.

The world economy is now facing a widening deflationary gap created by deficient global demand. There is a global glut in both labour and product markets, with too many goods chasing too few buyers and too many workers chasing too few jobs. Intense price and exchange-rate competition among major exporters have been adding to instability and deflationary pressures, while many developing countries facing tight payments positions are being forced to curtail imports. These difficulties are similar to those that the Bretton Woods Institutions were created to resolve. If decisive action is not taken to restore stability in financial and currency markets, to start a global recovery and reverse the rapid rise in unemployment, there is a real threat that trade imbalances and the coexistence of continued rapid growth in some parts of the world with stagnation, decline and job losses elsewhere could deepen the existing discontent with globalization among a wide section of the world's population, triggering a political backlash and a loss of faith in markets and openness, and leading to international economic disintegration with the burden falling disproportionately on the poor and underprivileged. This is perhaps the first real test for economic policy in a post-Bretton Woods globalized world.

Guided by fiscal and monetary orthodoxy, the measures so far applied in some leading economies have been inadequate for striking a better balance, even as inflationary pressures have dissipated and unemployment is rising again. Indeed, with prices already declining in some larger developed and developing economies, the risk of a deflationary spiral is an increasing worry to policy makers everywhere. Although the likelihood of such a spiral is still controversial, it is nevertheless clear that there is now a real danger of a "liquidity trap" emerging, where monetary policy becomes incapable of checking and reversing the falls in output and employment. This is precisely the context in which it is most apt to adopt Keynesian policies to expand liquidity and effective demand, both at the national and global level. An effective policy response should include a fiscal stimulus over and above that provided by automatic stabilizers: an increasingly interdependent global financial and trading system can scarcely function efficiently with only one policy tool, monetary policy, especially without an appropriate degree of policy coordination and agreement on its objectives. Policy should also address the liquidity needs and the debt burden of developing countries facing stringent external financial conditions. For all countries, therefore, the prospects for prosperity hinge on international cooperation as well as on the intensity of their own efforts.

Capital accumulation, economic growth and structural change

The increased diversity in economic performance of developing countries in the current global downturn reflects differences in their domestic conditions. In this respect the contrast between East Asia and Latin America is particularly striking. The poor economic performance of most middle-income Latin American countries in comparison with East Asia suggests that their productive structures, institutions and policies do not have the flexibility and resilience needed to respond to external shocks with the same vigour and effectiveness as in East Asia. In this respect, the current economic landscape in the developing world has an uncanny resemblance to conditions prevailing in the early 1980s, when external shocks, including widespread recession in the industrial world and tightened financial conditions, pushed Latin America into a deep crisis while most East Asian economies were able to swiftly adjust and continue, after a brief pause, on their high growth paths.

What is perhaps more unsettling is that current difficulties in Latin America follow many years of intensive market-based reforms adopted in response to the debt crisis of the 1980s with the support of the international financial institutions. These reforms, collectively referred to as the "Washington Consensus", aimed to remove structural and institutional impediments to growth, improve productive capacity and trade performance, and put an end to stop-go development associated with excessive indebtedness and periodic balance-of-payments crises. While claiming success in controlling inflation and bringing monetary and fiscal discipline, the evidence examined in Part II of this year's *Report* shows that the reforms have failed in exactly the same areas in which previous policies of import substitution had also failed. Just as significantly, the problem lies as much with what has been included in the reform packages as with what has been left out.

Investment and growth: the record

Between 1960 and 1973 Latin America and East Asia grew at much the same rate, and average per capita income in 1973 in the four first-tier NIEs was lower than that in the five largest countries in Latin America by $850. Thereafter, performance started to diverge sharply, with East Asia growing at more than double the average rate in Latin America between 1974 and 2000. Furthermore, the slowdown in Latin America was accompanied by increasing instability: in most countries of the region, growth in the period 1980–2000 was slower and less stable than in the previous two decades. Only Chile enjoyed a more rapid and sustained growth rate accompanied by greater stability.

Why growth rates differ between countries and regions has generated a myriad of explanations. Nevertheless, there is general agreement that growth cannot be sustained without an adequate level of

investment. Certainly, as discussed in past *TDRs*, a strong and sustained investment drive by national elites, often from very low levels, has been a defining feature of successful development episodes in the post-war period. The minimum level needed for a satisfactory growth performance will be influenced by country-specific factors, but a 20 per cent share of fixed investment in GDP has been suggested as a target threshold in poorer countries, rising towards 25 per cent as countries climb the income ladder.

In the first half of the 1980s, there was a drop in the share of investment in almost all developing countries, often below these thresholds, and in some cases below the level needed to replace depreciated capital. Drastic policy changes introduced in response to the debt crisis to restore macroeconomic stability, correct price distortions and free market forces were expected to improve the investment climate and prepare the ground for a recovery led by private investment. However, the strategies adopted for activating a dynamic process of capital accumulation and growth, based on a combination of increased FDI and reduced public investment and policy intervention, have not produced the expected results.

In Latin America where such reforms have gone furthest, there has been a steady and persistent fall in the share of public investment, along with increased FDI, often through the sale of public assets. There was only a weak recovery of total investment from the second half of the 1980s, often led by less productive categories such as housing construction, before hovering around 20 per cent of GDP in the 1990s, well below previous peaks. In many cases, investment in machinery and equipment during the 1980s stagnated or declined sharply, before posting modest recoveries in the 1990s. This shift in the structure of investment towards less productive activities appears to have contributed to the weakening of the link between capital formation, technological upgrading and output growth. Furthermore, the conditions that attracted foreign enterprises to Latin America have not been conducive to faster capital formation: FDI as a proportion of GDP was higher by some 1.7 percentage points in the 1990s compared with the 1980s, but the share of gross fixed capital formation was lower by 0.6 percentage points. This trend characterized all the major economies, except Chile, and is equally apparent when the contrast is with domestic private investment.

In the East Asian economies a very different investment regime has been established. The rising share of investment in GDP throughout the 1970s was only briefly interrupted by the turmoil of the early 1980s and it recovered strongly during the second half of the decade as moderate devaluations and temporary wage restraints allowed countries to build a dynamic investment-export nexus, before accelerating rapidly in the first half of the 1990s. The regional peak of 30 per cent of GDP was surpassed in a number of countries, in some cases by a considerable margin. Investment in machinery and equipment along with expanding construction in physical infrastructure were important features of East Asian investment. This improvement in overall investment was in most cases associated with a stable or rising share of public investment with strong crowding-in effects. For some countries, such as Malaysia, the surge was closely associated with increasing FDI, but this was not a common feature in the region.

It is not just the level or composition of investment that matters. A comparison of investment cycles over the past four decades suggests that the cycle is a good deal more volatile in Latin America than in East Asia. Furthermore, investment has played a much more significant role in the recovery phase of a typical cycle in the latter region than in the former. Thus, in Latin America, in a typical cycle, the investment recovery has been much shorter and the slowdown, when it came, has been much more pronounced. This implies that counter-cyclical policies gain added importance in Latin America, but their scope is limited due to greater fiscal and monetary fragility.

Industrialization, deindustrialization

The historical experience of advanced economies shows that establishing a broad and robust domestic industrial base holds the key to successful development because of its potential for strong productivity and income growth. This process is associated with a strong investment drive in industry, rapidly rising productivity and a growing share of the sector in total output and employment. As the economy matures, growth in demand for manufactures slows down relative to productivity growth, and the share of the sector in the economy levels off and eventually starts to decline. In today's advanced economies, such a process of "deindustrialization" occurred at very high levels of industrial productivity and income, and under relatively rapid overall rates of economic growth, accompanied by a persistent rise in the share of services, many of them closely related to the needs of industry.

Industrialization still matters for developing countries lower down the income ladder. The presence of scale economies, gains from specialization and learning, as well as favourable global market conditions, implies that the creation of leading industrial sectors, along with related technological and social capabilities, remains a key policy challenge. Still, there is considerable room for diversity in the timing and the pace of industrial development across countries, reflecting differences in resource endowments, size and geographical location. Such diversity, including the pace and pattern of capital accumulation and trade performance, is also strongly influenced by policy choices.

A steady rise in the shares of industrial output and employment characterized most of the developing world in the 1960s and 1970s. In some regions, notably Latin America, the increases were especially pronounced thanks to a strong industrial drive under the import substitution industrialization strategy; indeed, with the possible exception of China, the Southern Cone countries were, at the time of the debt crisis, the most industrialized part of the developing world, as measured by the share of industry in total employment. This pattern has become a good deal less uniform since then, with premature deindustrialization in a context of slow growth becoming a common feature across parts of the developing world.

The East Asian economies have continued to industrialize at a rapid pace, with the first-tier NIEs reaching productivity levels consistent with industrial maturity as a new generation of late industrializers from the region were expanding rapidly, combining rising investment and manufacturing value added both in absolute terms and as a share of GDP. By contrast, industrial stagnation and decline has been the norm in Latin America as well as in Africa where in most countries a declining share of investment in GDP has combined with a falling share of manufacturing value added in a context of slow and erratic growth. Among a selection of 26 countries examined in this *Report* only eight have succeeded in raising the share of manufacturing value added in GDP between the 1980s and the 1990s, together with a rising share of investment in GDP. In East Asia this is noticeably the case for the second-tier NIEs. The Republic of Korea and Taiwan Province of China have reached the more mature stages of industrialization, combining rising investment ratios with relatively stable shares of manufacturing in GDP. In Latin America, none of the major economies ended the 1990s with a higher share of manufacturing value added in total output than in the 1970s.

This process of deindustrialization is sometimes interpreted as a benign shift to a pattern of development more consistent with national resource endowments and comparative advantages, following a period of "excessive" and "wasteful" industrialization under import-substitution strategies. Such an interpretation might be valid for China where the decline in the share of industry in the economy since the mid-1980s has been associated with a significant acceleration of investment and growth. But this is not the case for the major Latin American countries except Chile. In the latter, industrialization also lags considerably behind the levels achieved by similar resource-rich countries, such as the Scandinavian economies, when they were at comparable income levels.

In successful episodes of industrialization, rising shares of investment and manufacturing value added in GDP have also been associated with a rising share of manufacturing exports in both total exports and GDP. In economies where there has been increasing participation in international networks producing manufactures such as electronics, automobiles and textiles and clothing, manufacturing exports have grown more than manufacturing value added by a large margin because of the high import content of such exports. This is the case for Malaysia, for example. By contrast, in China there was a small decline in the share of manufacturing value added in GDP, but a large increase in manufactured exports in the context of rapidly rising investment and GDP.

In economies lagging in industrialization, declining shares of investment and manufacturing value added in GDP have usually coincided with a stagnant or falling share of manufactures in total exports. This is the case for most Latin American countries. In Mexico, as in China, however, the share of manufactured exports in GDP did increase during the 1990s compared with the 1980s as a result of its increased participation in international production networks, while the share of manufacturing value added in GDP fell. Unlike China, however, Mexican GDP growth has been poor, with the per capita average annual growth rate barely exceeding the Latin American average. Indeed, a more detailed examination of Mexico's industrial structure shows that in some sectors such as clothing, exports grew rapidly while domestic value added fell; by contrast, in some other sectors not integrated with international production networks, growth in value added was strong but export performance was below average. Thus, despite several years of economic reforms, privileged access to the largest and most dynamic market in the industrial world, and large inflows of foreign investment, the Mexican economy has been unable to establish a dynamic process of industrialization and economic growth.

Trade and competitiveness

In recent years international competitiveness has provided a framework for understanding how industry, trade and development are linked together. However, a degree of caution is needed in applying this concept to economic challenges facing developing countries. In the first place, strictly speaking, the concept may be useful to define the position of individual enterprises vis-à-vis each other, but not for comparisons among economies as a whole or even among industries comprising many firms with different characteristics. Many countries which contain highly competitive firms in certain industries find it necessary to protect others against foreign competition, and this is true at almost every level of industrialization and development. Furthermore, from a corporate perspective it may matter little whether international competitiveness is improved through productivity growth, wage cuts or a devaluation of the currency, but from a broader socio-economic point of view, these have totally different implications for economic and social stability and welfare. Finally, competitiveness is a relative concept and there is an adding-up problem; it is not possible for all countries to simultaneously improve the competitiveness of their firms in a given industry. On the other hand, the success of several developing countries in simultaneously raising productivity and wages can improve their overall economic welfare without altering their relative competitive positions in the sectors concerned.

The real challenge for developing countries from this perspective is how to combine strong productivity growth with increased employment, a growth of real wages that does not outpace productivity and stretch the external constraint, and a nominal exchange rate that maintains purchasing power parity. This challenge has been met with different degrees of success in different parts of the developing world during the past two decades.

East Asia's pattern of structural change has been accompanied by a significant and continuous improvement in productivity across a broad range of industrial sectors, in most cases closing the gap on the technological leaders. Most of the countries in that region, but especially the Republic of Korea

and Taiwan Province of China, have been consistently successful in basing their trade performance on strong productivity growth. The fact that this was compatible with rapidly rising real wages and relatively stable exchange rates is a clear indication of their successful integration into the global economy. The second-tier NIEs and China have replicated the same pattern, albeit less vigorously; in particular in sectors organized through international production networks, growth in labour productivity and wages was much less impressive than export performance.

Outside of East Asia, exchange rate depreciation or wage restraint appear to have been much more common routes to seeking greater competitiveness. But none of the countries that pursued this route achieved sustained improvements in export and value-added performance to the same extent as countries that succeeded in raising productivity and wages in a virtuous process of capital accumulation and employment growth.

In Latin America, overall productivity in manufacturing declined or remained stagnant and the level of wages fell in most countries during the 1990s. In some cases, there was an improvement in overall manufacturing productivity as a result of labour-shedding rather than investment and the expansion of employment. Even in strong exporters such as Mexico, the rise in manufacturing productivity was small and wages remained stagnant. The competitiveness of manufacturers in many countries in the region was further undermined by sharp currency appreciations, particularly in Argentina, Brazil and Peru.

In most countries in Latin America where weak investment has stunted productivity growth and upgrading, the rapid opening up to international competition and FDI has tended to shift the production structure away from sectors with the greatest potential for productivity growth towards those producing or processing natural resources. The demand for labour also fell as capital intensity increased in resource-based manufacturing industries. In a number of countries, there was a particularly sharp decline of productivity in traditional labour-intensive sectors such as textiles and clothing. Where investment has increased in the context of international production chains, the tendency has been for an apparent increase in the technology content of exports without a similar increase in domestically generated value added. In sectors intensive in research, the productivity lag behind the technological leaders has widened considerably. By contrast, it is notable that some industries that have continued to receive support through industrial policies of one kind or another have seen a considerable improvement in their productivity and trade performance.

The evidence on international specialization suggests that developing countries are becoming increasingly similar to major industrial countries in the structure of their exports but not in the structure of their manufacturing value added. The disparity between the two is greatest for countries participating in international production networks, and still greater in Latin America than in East Asia. Only the first-tier NIEs, notably the Republic of Korea and Taiwan Province of China, have been successful in simultaneously upgrading both their production and export structures towards the patterns of advanced industrial countries, by moving into a comparatively wide range of medium and high-technology products. In most of Latin America and Africa, both industrial production and exports continue to be dominated by resource-based products.

In countries closely linked to international networks, manufactured exports appear to be much more technology intensive and dynamic than domestic manufacturing value added. This divergence between the technology intensity of domestic value added and of manufactured exports is largely a reflection of the high (technology-intensive) import content of such exports. Domestic value added reflects the contribution of unskilled labour-intensive operations in the production process for goods, which are predominantly technology- or capital-intensive. Thus the growing similarity of developing and industrialized countries' export structures is basically an illusion based on double counting the exports of high-tech intermediate goods.

A stylized picture of diversity in industrial development

The comparative analysis in this *Report* of trends in capital formation, growth and industrialization since the early 1980s in Latin America and Asia offers a stylized picture of where developing economies stand in relation to each other:

- *Mature industrializers*: This group includes the first-tier NIEs, notably the Republic of Korea and Taiwan Province of China, which have already achieved industrial maturity through a rapid accumulation of capital, growth in industrial employment, productivity and output, as well as manufactured exports. These economies still have a share of industrial output in GDP above the levels of advanced countries, but industrial growth has started to slow down.

- *Rapid industrializers*: These are countries with a rising share of manufactures in total output, employment and exports, based on strong investment and upgrading from resource-based and labour-intensive activities to middle-range technology products. This group includes the second-tier NIEs and, to a lesser extent, China and perhaps India.

- *Enclave industrializers*: This group includes countries which have also moved away from dependence on commodity exports by linking to international production chains with a heavy reliance on imported inputs and machinery. However, their overall performance in terms of investment, value added and productivity growth is poor.

- *Deindustrializers*: This group includes most countries in Latin America, which have achieved a certain degree of industrialization but have been unable to sustain a dynamic process of structural change through rapid accumulation and growth. In a context of rapid liberalization, there have often been declining shares of manufacturing employment and output and a downgrading to less technology intensive activities. In some countries in this group, notably Chile, there has been a less destructive pattern of deindustrialization as a result of a fast pace of investment, accelerating growth based on natural resources, although this process appears to have reached its limits.

Countries in any one of these groups may also share some of the characteristics of those belonging to another. For instance, China and Malaysia have both expanded their manufactured exports much faster than value added by participating in international production networks, but unlike Mexico, their investment and growth performance is impressive. There are also borderline cases between rapid industrializers and deindustrializers: Turkey, for example, is closer to the former while Colombia is closer to the latter group.

The Washington Consensus revisited: theory and practice

Latin America and East Asia have been on divergent development paths for the past two decades. It is notable that all the major Latin American countries are in the groups that lack dynamism in industrialization, structural change and productivity growth, while most of the major East Asian economies are at various stages on the route to successful industrialization. With few exceptions, countries in the former region have been unable to remove structural impediments to rapid and sustained accumulation and growth.

Understanding the different trajectories certainly requires sensitivity to specific local conditions and histories. But institutional and policy choices have also mattered, particularly where, as in the case of Latin America, there have been pronounced discontinuities due to the rapid switch from an inward- to an outward-oriented development strategy.

The new strategy in Latin America can claim some success. Inflation has been brought under control and a reasonable degree of monetary and fiscal discipline has been established in the region. However, the record in terms of growth, employment and poverty reduction has been disappointing. The experience does not support the underlying logic of the new policy approach, namely that an import-substitution growth strategy could effectively be replaced by a market-driven, outward-oriented strategy simply by eliminating inflation, downsizing the public sector, and opening markets to foreign trade and capital.

These disappointing results have been explained by lacunae in the initial reform agenda, policy slippages and the failure to move to "second-generation reforms"; that is, by omissions rather than commissions. However, by overlooking more traditional macroeconomic fundamentals, such as aggregate demand, real interest rates and real exchange rates, the policy choices and institutional reforms designed to remove state-induced distortions have, themselves, weakened long-term growth prospects. The new policy orientation has failed to produce an appropriate macroeconomic environment for investors and firms to encourage and support the creation, expansion and improvement of productive capacity while at the same time unleashing the forces of global competition. In other words, the policy reforms have been unsuccessful because the "creative" element of Schumpeter's process of "creative destruction" has failed to bring about real transformation of the productive structure through higher investment and technological change:

- While exchange-rate-based stabilization policies succeeded in reducing inflation by relying on capital inflows, the resulting currency appreciations and gyrations in exchange rates, together with high interest rates needed to attract foreign capital, have meant that monetary conditions in Latin America in the 1990s were too stringent and unstable to provide a sound basis for capital accumulation. An index combining the real exchange rate and the real policy interest rate shows much tighter monetary conditions in Latin America than in East Asia throughout the 1990s, while they had enjoyed similar conditions throughout the 1960s and 1970s.

- Trade and financial liberalization, together with the initial surge in demand and growth brought about by rapid disinflation caused external balances to deteriorate, and debt once again started to grow, outpacing the capacity to service it. This, together with increased inflows of FDI, meant that payments for factor services became an increasingly large component of the current account balance, which in turn necessitated considerable deflation to achieve external adjustment. On balance, FDI inflows have contributed to financial instability as they have increased external obligations without generating the required capacity to service them.

- Fiscal balances have also deteriorated as the interest component of public expenditures has risen with the issue of new debt at higher interest rates. This has reduced the scope for fiscal adjustment without depressing domestic activity and tax yields, while increasing the size of the deficits to be financed.

- Capital account liberalization and capital flows have caused serious disruptions in the mechanisms for fiscal and balance of payments adjustment. Excessive inflows have rendered adjustment mechanisms inoperative while excessive outflows have led to deflationary overkill.

- The inconsistencies of macroeconomic, trade, FDI and financial policies have carried over to the pattern of structural changes. Efforts to build technologically sophisticated sectors to match those in the advanced economies have been damaged while at the same time weak productivity performance in more labour intensive sectors has led to increased competition from lower-wage economies. The squeeze from these two sources has led to deindustrialization in Latin America in a context of labour shedding and sluggish growth.

Thus while the new policy direction has successfully uprooted the previous regime it has failed to establish a flourishing alternative. More worrying still, in terms of future prospects, has been the loss of policy autonomy, at both the microeconomic and macroeconomic levels, and the narrowing of the room for policy manoeuvre. Rethinking options requires a candid assessment of the economic record of the past two decades and of the experience of the more successful cases of industrialization and development. It also requires a move away from generalized approaches to accommodate the diversity of conditions and challenges facing the developing world.

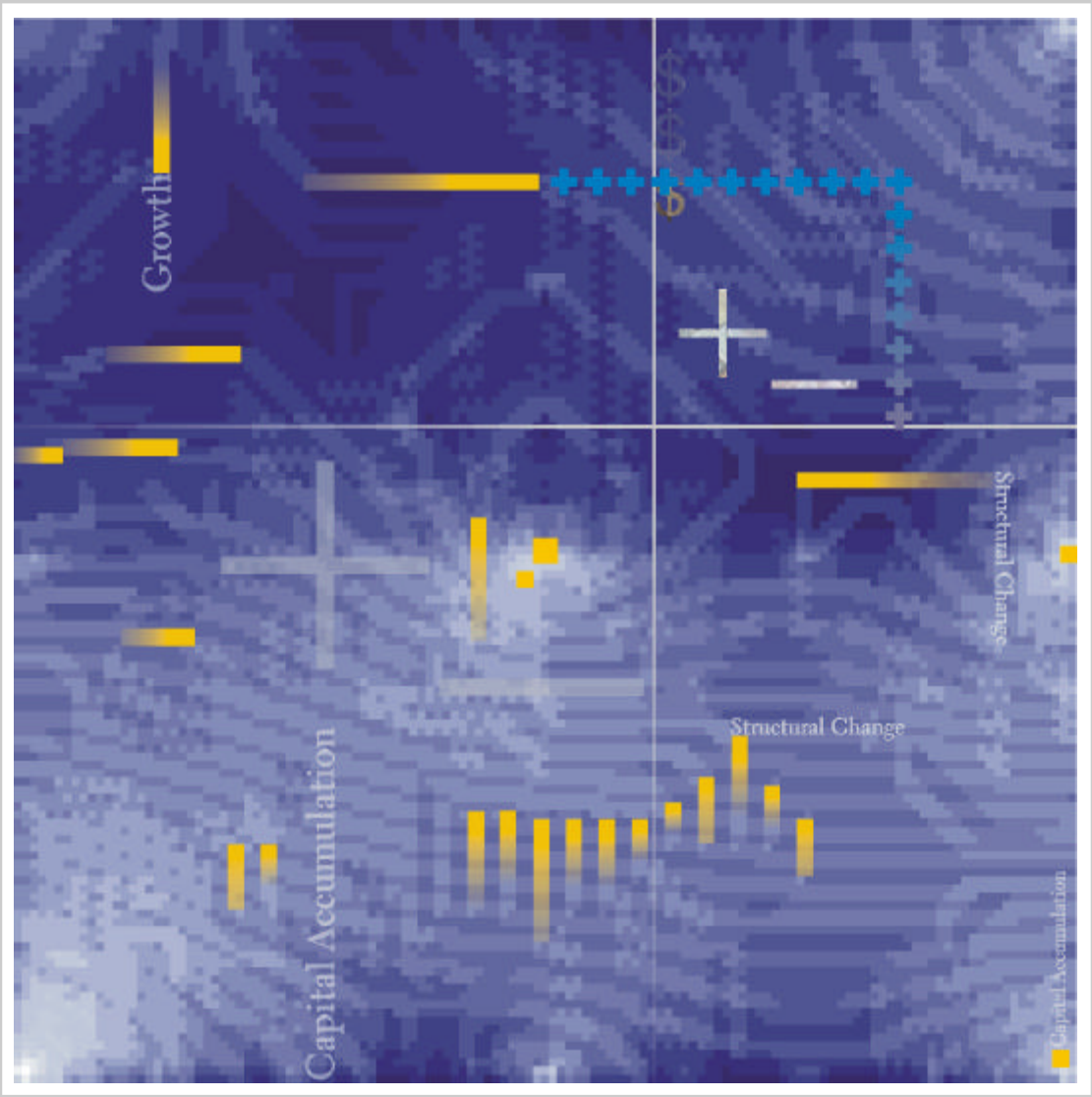
As much depends on countries reaching their potential growth rate, a wider range of more strategic policies to support higher rates of investment and upgrading will be needed. These will require active policies, particularly on such matters as industrial support, technological progress and public infrastructure, all of which will have to be tailored to the special circumstances of the countries concerned.

In many cases, easing the balance-of-payments constraint will require reducing dependence on foreign capital and promoting stronger investment-export linkages. This means a more activist trade and investment agenda, which will need to take account of the realities of the current trading system. Expectations of what FDI can achieve in the current context need to be more realistic. Ways must be found to improve the contribution of FDI to technology, productivity and exports. This will require a reconsideration of the policy approach to FDI, drawing lessons from more successful experiences.

A viable exit from this vicious circle of low and unstable investment and growth, high interest rates and rising indebtedness is likely to require direct action to reduce the burden of debt service. At the very least, as the last of the Brady Bonds is retired, new approaches to dealing with the outstanding debt are urgently needed, including a renegotiation of interest rates to levels closer to the real returns that can be earned from investment and a reduction of domestic and external debt to levels that do not compromise the objectives of rapid and sustainable growth and a reduction of poverty to internationally agreed levels.

Rubens Ricupero
Secretary-General of UNCTAD

GLOBAL TRENDS AND PROSPECTS



Chapter I

THE WORLD ECONOMY: PERFORMANCE AND PROSPECTS

A. Introduction

The past two years have seen the growth of world output fall sharply; after reaching almost 4 per cent in 2000, it dropped below 2 per cent for the first time since 1993. In industrial countries, growth more than halved between 2000 and 2002 while in developing countries it fell by 2 percentage points (table 1.1). The downturn in the growth of industrial output was widespread and even sharper (fig. 1.1). While no developing region was able to escape the consequences of the global slowdown, there was considerable diversity in the performance of individual countries. East Asian economies, helped by their low dependence on capital inflows and buoyant intraregional trade, managed to maintain momentum, with growth rates ranging between 5 and 8 per cent in many countries in 2002. In contrast, output declined in Latin America for the first time since the 1980s, on account of a sharp drop in growth or outright recession in most of the major economies. Africa and the transition economies were less affected by the global slowdown, maintaining growth rates of around 3 and 4 per cent, respectively.

The recovery of global economic activity after its sharp decline in 2001 has been much slower and more erratic than expected. In the United States, gross domestic product (GDP) rose at the end of 2001, after falling during the first three quarters of that year, and growth accelerated in 2002. This appeared to signal the start of a sustained recovery that would help reverse the slowdown of the world economy. However, the upturn, supported by the rebuilding of inventories and the shift of the United States federal budget to deficit, could not be sustained in the absence of a recovery of investment in the manufacturing sector. Furthermore, growth in Europe and Japan, instead of accelerating to offset the slowdown in the United States, actually fell in 2002 (table 1.1) and turned negative in the beginning of 2003. The industrialized countries have been growing at rates well below their potential: in the G-7 countries taken together, the output gap, an indicator of deflationary pressures (measured as the difference between actual and potential GDP and expressed as a percentage of potential GDP),

Table 1.1

WORLD OUTPUT GROWTH, 1990–2003

(Percentage change over previous year)

Region/economy	1990–2000	1997	1998	1999	2000	2001	2002	2003 forecast FUGI	2003 forecast EIU	2003 forecast IMF
World	2.7	3.4	2.2	2.9	3.9	1.2	1.9	1.9	3.1	3.2
Developed economies	2.4	3.1	2.5	2.7	3.4	0.9	1.5	1.4	1.8	1.9[a]
of which:										
United States	3.4	4.5	4.3	4.1	3.8	0.3	2.4	1.9	2.2	2.2
Japan	1.3	1.8	-1.1	0.1	2.8	0.4	0.3	-0.1	0.2	0.8
European Union	2.0	2.5	2.9	2.7	3.5	1.5	1.0	1.4	1.2	1.3
of which:										
Euro area	1.9	2.3	2.9	2.7	3.6	1.4	0.8	1.3	1.1	1.1
Germany	1.5	1.4	2.0	1.8	3.0	0.6	0.2	0.4	0.4	0.5
France	1.8	1.9	3.4	3.2	3.8	1.8	1.2	1.4	0.9	1.2
Italy	1.6	2.0	1.8	1.7	3.1	1.8	0.4	1.2	1.1	1.1
United Kingdom	2.7	3.4	2.9	2.4	3.1	2.1	1.8	1.9	1.8	2.0
Transition economies	-2.5	1.9	-0.7	3.6	6.4	4.6	4.0	3.6	3.7	4.0
Developing economies	4.8	5.1	1.1	3.4	5.5	2.4	3.3	3.5	.	5.0
Developing economies, excluding China	4.0	4.5	0.0	2.7	5.1	1.5	2.3	2.7	.	.

Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators*, *2003*; IMF, *World Economic Outlook*, April 2003; Economist Intelligence Unit (EIU), *Country Forecast* (various issues); FUGI Global Modelling System (FGMS), Centre for Global Modelling, Tokyo.

a IMF forecast for "advanced economies" that include developed countries and Hong Kong (China), the Republic of Korea, Singapore and Taiwan Province of China.

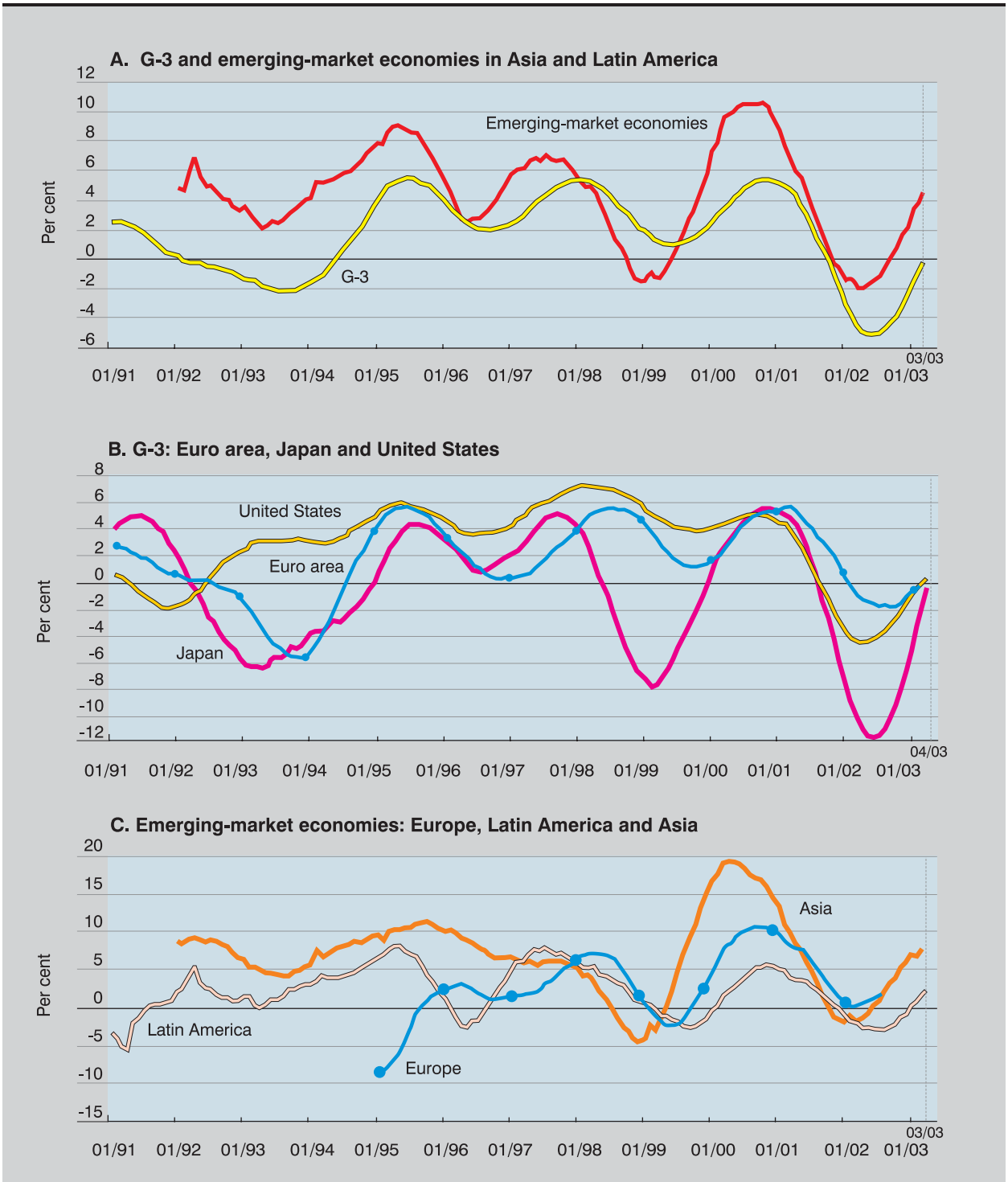
is expected to rise to 2.5 per cent in 2003, compared with 0.1 per cent at the end of the 1990s (IMF, 2003, table 1.5).

Nor has the rapid end to the war in Iraq, in May 2003, produced the anticipated improvement in economic conditions. Growth in the first half of 2003 in the United States was around one percentage point lower than the 2.5 per cent achieved in 2002. Following the slowdown in the United States, prospects have soured in the rest of the world, particularly in East Asia, but also in parts of South America such as Brazil and Argentina, where growth had been largely based on exports to the United States. Although the sharp decline in production in Argentina and Venezuela in 2002 is expected to be reversed, growth in Latin America as a whole is likely to be modest in 2003. In East Asia output growth in 2003 is likely to be weaker than in 2002, not least because the spread of Severe Acute Respiratory Syndrome (SARS) has adversely affected earnings from trade and services. The transition economies in Eastern Europe will find it difficult to sustain the increase in domestic demand that allowed the region as a whole to expand at around 4 per cent in 2002, substantially faster than the growth of demand in their major export markets in Western Europe. While Africa has remained relatively insulated from recent shocks, the region depends on the Western

Figure 1.1

INDUSTRIAL PRODUCTION IN THE G-3 AND EMERGING-MARKET ECONOMIES, 1991–2003

(12 months moving average of percentage changes over same period in the previous year)



Source: Thomson Financial Datastream.

Note: G-3 includes Euro area, Japan and the United States. Emerging-market economies include: Czech Republic, Hungary, Poland, Russian Federation and Turkey in Europe; Malaysia, the Republic of Korea, Singapore, Taiwan Province of China, and Thailand in Asia; and Argentina, Brazil, Chile, Mexico and Peru in Latin America.

European economies for its export growth. In addition, the decline in the prices of its major commodity exports and the stagnation of official aid flows mean that Africa may not be able to repeat its growth performance of the past two years.

Support for an acceleration of global growth above the rate of nearly 2 per cent in 2002 has thus weakened considerably in the first half of 2003. There is little prospect of reaching growth of 3 per cent, the rate that is generally considered to be the minimum necessary to provide employment for the expanding population of the developing world and to provide the resources needed to attain the Millennium Development Goals. Indeed, a return to global growth of 3 per cent will require a much more vigorous and balanced recovery than during the sustained expansion of the 1990s, and will need to involve all the developed and the major developing countries.

B. Persistent weaknesses in the developed economies

1. *The legacy of the 1990s*

Despite the acceleration of growth of the United States economy in the 1990s, reaching an average rate of 4 per cent in the last half of the decade, the global growth rate barely averaged 3 per cent throughout the decade. The failure to emulate the United States economy in this period with a vigorous expansion across the developing world was largely due to the disappointing performance of Europe and Japan – which grew at about 2.5 per cent and 1 per cent respectively – as well as a series of financial disruptions in the developing world that kept growth at modest rates. Growth in Latin America was disappointing, at an average rate of about 2 per cent, even before the collapse of the Argentinean economy and the political turmoil in Venezuela. While Asian developing countries recovered rapidly from the 1997 crisis, growing at nearly twice the Latin American rate, their average growth was significantly lower than that achieved before the crisis.

As discussed in some detail in previous *TDRs*, although the acceleration of growth in the United States helped to eliminate the fiscal deficit, it was nevertheless associated with increased fragility and imbalances in certain sectors of the economy. These included excessive investment in the high-tech sectors of information and telecommunications, supported by a stock market bubble and highly inflated asset prices, a sharp decline in savings, and a rapid increase in the debt of the household sector. In addition, corporate excesses, which were exposed by the subsequent slowdown in economic activity, became an obstacle to recovery by undermining confidence. Equally important, disparities in the level of demand among the major industrialized countries, together with the increased attractiveness of United States corporations to foreign investors, and exchange rate misalignments led to trade imbalances. While in 1995 the United States attracted about $60 billion of inward FDI, by 2000 the figure had risen to over $300 billion. Allowing for outward investment by United States companies, there was a swing from a net outflow of direct investment of $33 billion in 1995 to a net inflow of $165 billion in 2000. In addition, there was a sharp increase in the net inflow of funds for the purchase of securities, with monthly flows more than doubling dur-

ing the same period to reach a high of around $45 billion per month. An important part of portfolio inflows after 1997 was due to the investment of reserves generated by the large current-account surpluses of the recovering East Asian economies and China.

The result of this large increase in capital flows to the United States was a persistent appreciation of the dollar and a deterioration of the United States external balance, from a little over $100 billion in 1995 to more than $400 billion in 2000, or an increase from 1.5 per cent of GDP to over 4 per cent. Almost every region benefited from the increasing United States deficit. In 2000, Western Europe accounted for nearly $60 billion, Japan for more than $90 billion, Latin America for $30 billion and the "rest of the world", mainly Asia, for more than $210 billion. Clearly, the rapid growth of the United States economy played a crucial role in the recovery of East Asian countries from the 1997 crisis, as well as in the rebound of growth in Latin America during 2000 (table 1.2).

The increased dependence on the United States economy as the main source of global growth during the 1990s magnified the impact of the inevitable slowdown in that economy.

2. A shallower and longer recovery in the United States

The increased dependence on the United States economy as the main source of global growth during the 1990s magnified the impact of the inevitable slowdown in that economy which was triggered by the end of the high-tech stock market boom in the first half of 2000. However, contrary to general expectations of a short and sharp recession, the United States economy entered a more persistent but less severe slowdown, with a growth rate well below potential. The events of September 2001 and the subsequent geopolitical uncertainties contributed to sluggish growth. However, the delay in a vigorous recovery is primarily due to the failure of investment spending to recover because of continued excess capacity despite the elimination of productive assets. During the period 1995–2000, capacity utilization in the high-tech sector had exceeded 85 per cent, despite an extremely high rate of growth of investment spending, but it fell to around 60 per cent in 2001 and had failed to improve by mid-2003 despite virtually no investment in new capacity and the scrapping of much existing equipment through bankruptcies. For industry as a whole, capacity utilization fell to around 75 per cent after peaking at some 85 per cent, the decline continuing in the first half of 2003 (Federal Reserve System, 2003: 11).

The falling rate of capacity utilization has not only reduced the demand for new investment goods, but has also translated into a sustained growth of labour productivity as a result of large cuts in employment. Since the return to positive growth in the last quarter of 2001, the annual rate of productivity growth in the business sector was 4.5 per cent in 2002, roughly double the rate of output growth. As a result, job losses, which had started to rise at the beginning of the recession, persisted through the recovery in 2002 and into 2003, especially in the manufacturing sector. The result has been a loss of over 2 million jobs and a 50-per-cent increase in involuntary part-time employment. The recovery has thus started to look rather similar to the "double dip, jobless recovery" of the kind observed in the early 1990s (see *TDR 1992*, Part Two, chap. II), when positive output growth was also associated with falling employment. As pointed out in *TDR 2002* (Part One, chap. 1: 9), the basic difference is that in 2003 consumption demand has remained positive while investment has failed to respond to signs of improvement.

Thus, despite the rapidly deteriorating employment conditions, the downturn has been relatively mild in the United States thanks to continued growth in personal consumption expenditures, although at less than half the annual rate at the end of the 1990s. This can be explained, at least in part, by the rapid action of the Federal Reserve in reducing interest rates. While this has had little impact on investment spending, the reduction in 10-year bond yields has fed directly into lower rates for household mortgages. The

Table 1.2

GDP GROWTH IN SELECTED DEVELOPING AND TRANSITION ECONOMIES, 1990–2003

(Percentage change over previous year)

Region/economy	1990–2000	1997	1998	1999	2000	2001	2002	2003 forecast FUGI	2003 forecast EIU	2003 forecast IMF
Developing economies	4.8	5.1	1.1	3.4	5.5	2.4	3.3	3.5	.	5.0
Developing economies, excl. China	4.0	4.5	0.0	2.7	5.1	1.5	2.3	2.7	.	.
Latin America	3.3	5.2	2.1	0.0	3.7	0.3	-0.8	1.5	1.6	1.5
of which:										
Argentina	4.3	8.1	3.9	-3.4	-0.8	-4.5	-11.0	3.0	4.0	3.0
Brazil	2.9	3.3	0.1	0.8	4.4	1.5	1.5	1.8	1.9	2.8
Chile	6.7	7.4	3.9	-1.1	4.4	2.8	2.0	3.3	3.5	3.1
Colombia	3.0	3.4	0.6	-4.1	2.6	1.4	1.6	2.5	2.5	2.0
Ecuador	1.8	3.4	0.4	-7.3	2.3	5.6	3.0	3.0	3.0	3.5
Mexico	3.1	6.8	5.0	3.6	6.6	-0.3	0.9	1.0	2.5	2.3
Peru	4.7	6.7	-0.5	0.9	3.1	0.2	5.2	4.0	3.6	4.0
Uruguay	3.4	5.0	4.5	-2.8	-1.4	-3.1	-10.8	-2.0	-1.5	-2.0
Venezuela	1.6	6.4	0.2	-6.1	3.2	2.7	-8.9	-12.1	-12.1	-17.0
Africa	2.9	3.2	3.3	3.1	3.3	3.4	2.9	2.5	.	3.9
of which:										
Algeria	1.9	1.1	5.1	3.2	2.4	2.1	3.1	2.7	6.8	3.5
Cameroon	1.7	5.1	5.0	4.4	4.2	5.3	4.3	4.2	4.3	4.7
Côte d'Ivoire	3.4	5.7	4.8	1.6	-2.3	0.1	0.5	0.5	-3.2	-2.0
Egypt	4.5	5.5	4.5	6.3	5.1	3.5	2.0	3.1	1.6	3.0
Ghana	4.3	4.2	4.7	4.4	3.7	4.0	4.5	4.6	4.7	4.7
Kenya	2.1	2.1	1.6	1.3	-0.2	1.1	1.0	1.2	2.5	1.8
Morocco	2.3	-2.2	7.7	0.0	0.9	6.5	4.5	3.9	4.0	5.5
Nigeria	2.4	2.7	1.9	1.1	3.8	3.9	1.6	3.8	3.1	6.7
South Africa	2.1	2.6	0.8	2.1	3.4	2.2	3.0	2.8	3.0	2.8
Tunisia	4.7	5.4	4.8	6.1	4.7	4.9	1.8	3.6	4.2	5.0
Zimbabwe	2.5	2.7	2.9	-0.7	-4.9	-8.4	-12.5	-11.0	-8.8	-11.0
Asia, excluding China	4.8	4.4	-2.2	4.5	6.5	1.8	4.4	3.4	.	.
Asia	6.0	5.4	0.3	5.2	6.9	3.3	5.4	4.4	.	6.3
of which:										
China	10.3	8.8	7.8	7.1	8.0	7.3	8.0	7.1	7.6	7.5
Hong Kong (China)	4.0	5.0	-5.3	3.0	10.5	0.6	2.3	1.5	2.7	3.0
India	5.9	4.4	6.5	6.1	4.0	5.4	4.5	5.4	5.9	5.1
Indonesia	4.2	4.7	-13.1	0.8	4.9	3.3	3.7	3.3	3.3	3.5
Iran, Islamic Republic of	3.6	3.4	2.0	2.5	5.9	4.8	5.9	5.7	5.7	6.5
Israel	5.1	3.2	2.6	2.2	6.0	-0.9	-1.1	1.3	0.3	0.5
Malaysia	7.0	7.3	-7.4	6.1	8.2	0.4	4.2	4.6	4.6	5.0
Pakistan	3.7	1.0	2.6	3.7	4.2	2.7	4.6	4.3	4.6	5.0
Philippines	3.3	5.2	-0.6	3.4	4.0	3.4	4.6	3.8	3.8	4.0
Republic of Korea	5.8	5.0	-6.7	10.9	9.3	3.0	6.0	4.1	4.1	5.0
Saudi Arabia	1.5	2.0	1.7	-0.8	4.9	1.2	1.4	4.0	2.9	4.0
Singapore	7.9	8.5	-0.1	6.9	10.3	-2.0	2.2	3.0	3.1	3.0
Taiwan Province of China	6.4	6.7	4.6	5.4	5.9	-2.2	3.5	3.1	3.7	3.2
Thailand	4.2	-1.4	-10.5	4.4	4.6	1.8	5.2	3.9	4.4	4.2
Turkey	3.8	7.5	3.1	-4.7	7.4	-7.5	7.8	5.1	3.1	5.1
Transition economies	-2.5	1.9	-0.7	3.6	6.4	4.6	4.0	3.6	3.7	4.0
of which:										
Belarus	-1.6	11.4	8.4	3.4	5.8	4.1	4.5	4.7	2.5	4.0
Bulgaria	-1.8	-5.6	4.0	2.3	5.4	4.0	4.2	4.2	4.2	5.0
Croatia	0.6	6.8	2.5	-0.4	3.7	4.1	4.8	4.2	4.4	4.2
Czech Republic	1.1	-1.3	-1.0	0.5	3.3	3.3	2.0	3.2	3.0	1.9
Hungary	1.5	4.6	4.9	4.2	5.2	3.8	3.3	3.7	3.8	3.6
Kazakhstan	-4.1	1.7	-1.9	2.7	9.8	13.2	9.5	7.7	7.2	8.5
Poland	4.6	6.8	4.8	4.1	4.0	1.0	1.3	3.0	2.7	2.6
Romania	-0.7	-6.1	-5.4	-1.2	1.8	5.3	4.9	4.9	4.8	4.9
Russian Federation	-4.8	0.9	-4.9	5.4	9.0	5.0	4.3	4.1	3.8	4.0
Slovakia	1.9	5.6	4.0	1.3	2.2	3.3	4.4	4.0	4.2	4.0
Slovenia	2.7	4.6	3.8	5.2	4.6	3.0	3.0	3.2	3.4	3.2
Ukraine	-9.3	-3.0	-1.9	-0.2	5.8	9.1	4.6	4.3	4.0	4.5
Uzbekistan	-0.2	5.2	4.3	4.3	3.8	4.5	3.5	3.5	3.5	3.1

Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators, 2003*; EIU, *Country Forecast*, various issues; IMF, *World Economic Outlook*, April 2003; and national sources.

possibility to prepay existing fixed-rate mortgages has led to repeated waves of mortgage refinancing as interest rates have declined. This allowed households to extract equity from the market value of the housing stock, which has increased by nearly 40 per cent since 1998, thus offsetting some of the loss in stock values. In 2002, it is estimated that as much as $100 billion was generated to support consumer spending through this mechanism. Not only did this support consumption, it also kept the construction industry expanding, as both new and existing home sales recovered in 2002. However, more recent data suggest that households are now using such funds to pay off outstanding debt rather than to increase consumption.

The recovery in the United States has started to look similar to the "double dip, jobless recovery" of the early 1990s.

With the impact on growth of rising consumption expenditures offset by the deterioration in the trade balance and the continued decline in non-residential fixed investment, the only other component of effective demand contributing to growth during the recovery since 2001 has been the rising deficit in the federal budget. It was widely expected that the conflict in Iraq, entailing an increase in military expenditure, would give a boost to United States growth. However, no such effect was visible in the first half of 2003, when there was a downturn in overall industrial production. Moreover, the federal tax cuts are not expected to be very effective in stimulating aggregate demand as they benefit primarily the higher income groups, and their effect on disposable incomes has been largely offset by increased State taxes on income, sales and property.

3. The downturn in Europe and Japan

Weak global growth has also been due to the failure of growth in the rest of the developed world to offset the decline in the United States in 2001 and to support the recovery in 2002. In Europe, where the large number of mergers and acquisitions between EU and United States firms in the second half of the 1990s has increased the interdependence of activity with the United States, growth was virtually flat in the last three quarters of 2001. The recovery in 2002 was much weaker than in the United States, averaging less than 1 per cent, with domestic demand increasing by just 0.2 per cent before declining in the first quarter of 2003.

The failure of European growth to pick up is partly due to the increasing difficulty of implementing a counter-cyclical economic policy in the Euro area. Since the larger European economies have the largest direct exposure to the United States, they were the most affected by the downturn in the United States economy. The deterioration in their budget positions thus occurred much earlier than in the smaller, more rapidly growing economies in the Euro area. Accordingly, they have been under pressure to introduce measures to keep their budget deficit ratios within the limit set by the Stabilization and Growth Pact. At the same time, disparities in growth among the Euro area countries create difficulties for monetary policy, which is expected to take into account the higher inflation risks of the more rapidly growing smaller economies. Since the European Central Bank (ECB) has interpreted its mandate as the maintenance of medium-term inflation rate at or below 2 per cent for the harmonized price index of the Euro area, monetary policy has been too restrictive for the larger, slower growing economies with higher deficits, particularly for the German economy, where recovery holds the key to growth in the Euro area. As a result, the economies that account for the largest shares of GDP and employment in the region have had to introduce restrictive fiscal policies and have been subject to restrictive monetary policies at precisely the time when international conditions are also reducing the external demand for European output. Indeed, the best performer among the larger economies in Europe has been the United Kingdom, which has not been subject to these policy constraints and where growth has been based on private consumption.

The rate of growth of final consumption expenditures in the Euro area fell by around 1 per-

centage point in 2001 and by even more in 2002, dropping below 1 per cent on an annual basis. Despite the deceleration in international trade, the net trade surplus increased from less than 2 per cent of the Euro area's GDP at the beginning of 2000 to nearly 3 per cent in 2002.

The failure of European growth to pick up is partly due to the increasing difficulty of implementing a counter-cyclical economic policy in the Euro area.

In Japan, despite the Bank of Japan's policy of zero interest rates, deflation, as measured by the decline of the GDP price deflator, continued unabated at an annual rate of about 2 per cent in 2001 and 2002, and real GDP in the last quarter of 2002 only returned to its level of the fourth quarter of 2000. Although monetary policy led to a flattening of the yield curve, with the yield of 10-year government bonds falling from around 1.5 per cent in 2002 to around 0.6 per cent at the beginning of 2003, lending by domestic banks continued to decline. Private investment remained dormant, public investment continued to be cut, and private consumption was stagnant. As a result, the economy started to contract again in the first quarter of 2003: this revealed continued weakness in the financial sector, and the government had to intervene again to support institutions in difficulty. Thus, as in Europe, instead of supporting the United States recovery in 2002, growth in Japan declined, and by the first quarter of 2003 it was actually pulling back global recovery.

An important factor behind weak consumer spending in continental Europe and Japan is the behaviour of wages relative to productivity.

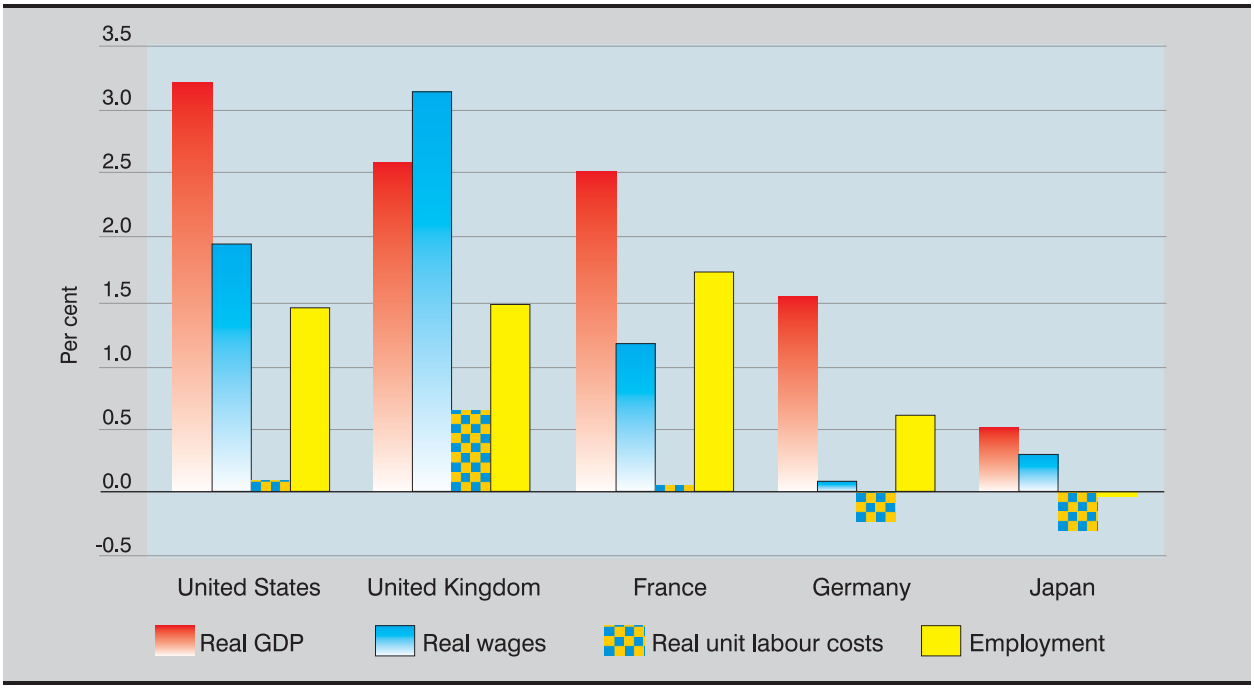
As noted above, weak domestic demand in continental Europe and Japan is partly due to the sluggish growth in consumer spending compared with the United Kingdom and the United States. This is explained partly by the savings habits of the household sector. In the United States and the United Kingdom, recent periods have seen a steady increase in the average propensity of the household sector to consume. Between the early 1990s and the beginning of the new millennium the household savings rate fell from 8 per cent to less than 2 per cent in the United States and from 10 per cent to 4 per cent in the United Kingdom. No such trend is discernible in Japan and continental Europe. In Japan, deflation has been deterring households from spending, thereby threatening to set off a downward spiral.

Perhaps an equally important factor behind weak consumer spending in continental Europe and Japan is the behaviour of wages relative to productivity. In the United States and United Kingdom, real wages broadly kept up with productivity growth after the mid-1990s, growing by 2 to 3 per cent per annum between 1996 and 2002. In the United Kingdom, real wages rose in 2002 by more than 2.5 per cent, and further increases are expected in 2003; in the United States the increase in 2002 was around 1 per cent. In contrast, real wages in Germany and Japan have been virtually stagnant during the past seven years, rising by an annual 0.1 per cent and 0.3 per cent respectively. However, contrary to expectations that falling real unit labour costs and rising profits would help to create jobs, employment has generally fallen in countries where wage growth has been weak (fig. 1.2), and falling unit labour costs have fed deflation. Thus, it will be difficult for Germany and Japan to overcome the persistent weakness in domestic demand under their current wage policies. Companies have not been hiring in the current depressed state of the economy and employees are not spending until prospects for jobs and wages improve. This deadlock can only be overcome by fiscal policy aimed at increasing the disposable income of households through tax cuts and public investment.

Figure 1.2

WAGES, EMPLOYMENT AND GDP IN THE MAJOR INDUSTRIALIZED COUNTRIES, 1996–2002

(Average annual change over previous year)



Source: EU Commission, AMECO database.

C. Developing countries and transition economies: disparities in growth performance

Mirroring the cycle in the developed economies, growth in the developing world fell sharply in 2001, and the rebound in 2002 was generally weak, leaving the average growth rate for developing countries as a whole slightly above 3 per cent. However, there have been large differences between and within different regions. After a sharp decline in 2001, economic growth picked up rapidly in East Asia, and, until early 2003, the region proved to be less susceptible to the effects of weakness in the industrialized world. In Latin America, the slowdown in the world economy came on top of a number of domestic problems; the decline of economic activity that started in 2001, after relatively rapid growth (by the standards of the region) in 2000, deepened with the impact of the Argentine default at the end of 2001 and the region plunged into recession. Africa has been affected

less than other regions by recent trends in the world economy, maintaining an average growth rate of around 3 per cent. However, there are major differences among the countries of the region in their ability to raise per capita incomes and reduce poverty. In the transition economies, where growth remained relatively strong on the basis of domestic demand, there were also considerable differences between countries.

1. Asia and Latin America: the widening gap between the developing East and the developing West

Asia is the region that has been most directly affected by the end of the IT boom in the United States. This is due to its closer trading and production linkages, particularly in the supply of high-tech and consumer electronic products, and the emergence of China as a major trading partner of the United States. Accordingly, Asia was the first region to feel both the impact of the United States recovery in 2002 and its slowing down at the end of that year. Thus most of Asia was already experiencing falling external demand in the first quarter of 2003, before the impact of the SARS outbreak on economic activity. In the Republic of Korea, GDP actually fell in the first quarter compared with the last quarter of 2002, and in economies such as Malaysia and the Philippines growth rates were falling although they have not felt a major impact from SARS.

However, the weakness in global demand over the past couple of years has had only a limited impact on Asian economic performance because the strong external position of the region has allowed greater leeway for counter-cyclical economic policy. Both China and India have increased government deficit spending and most countries in the region have reduced interest rates along with falling inflation. With little dependence on international capital flows, policy interest rates were cut aggressively and have been kept at very low levels. In the Republic of Korea, for example, interest rates were reduced from 15 per cent in 1998 to 4.5 per cent at the beginning of 2003. In Malaysia, Taiwan Province of China, and Thailand, interest rates fell below 2 per cent and in Singapore they were less than 1 per cent. For emerging Asia as a whole the real policy rate has been around 2 per cent on average. Given that the average growth rate has been over 5 per cent, there is a considerable incentive for private investment in fixed capital. Private consumption expenditure, stimulated by rising wages and employment throughout the recovery from the 1997–1998 crisis, has also been an important factor in the region's stable growth. The expansion of domestic demand in the major economies of the region has provided an independent momentum to growth, which has been further supported by regional integration and the expansion of intraregional trade. In this respect a surge in China's imports from the region has played a crucial role (see chap. III).

Consequently, economic growth accelerated rapidly in 2002 after a sharp drop in the previous year. China regained its traditional 8 per cent growth target after a marginal deceleration to just over 7 per cent in 2001, while the Republic of Korea doubled its rate of expansion to 6 per cent. Singapore and Taiwan Province of China both managed to return to positive growth in 2002, recovering from recessions in 2001, and Thailand, which relied primarily on domestic policy measures to stimulate the recovery, growth exceeded 5 per cent. Indonesia, which is still influenced by the effects of the 1997 crisis, continued to expand by around 3.5 per cent in 2001 and 2002. India, with much looser links to the United States economy, increased its growth rate to well over 5 per cent in 2001 and maintained a rate of 4.5 per cent in 2002.

The weakness in global demand over the past couple of years has had a limited impact on Asian economic performance because the strong external position of the region has allowed greater leeway for counter-cyclical economic policy.

In Latin America, where most countries experienced a sharp drop in capital inflows and tighter payments constraints (see chap. II), only a

handful of countries were able to respond to the fall-off in global demand with policy changes, and in general these were not very effective. Chile managed to grow despite the regional downturn in 2001, using the relative strength of its currency to lower short-term interest rates substantially, to an historical low of 3 per cent. Fiscal policy also played a stabilizing role in Chile thanks to its low level of public debt and a small structural deficit, but it was still unable to benefit from the United States upturn in 2002 as its growth rate fell from just under 3 per cent to 2 per cent in 2002.

Another country in Latin America with a relatively comfortable external position and some room for policy manoeuvre is Mexico. Given its close trading links through NAFTA, Mexico was influenced most directly by the cyclical developments in the United States. It introduced counter-cyclical measures to offset the impact of the downturn in exports, reducing interest rates to record lows. Since there was no sharp decline in capital inflows, its exchange rate has remained relatively stable against the dollar, a small depreciation in the first quarter of 2003 being largely reversed in the second. Mexico's external position improved primarily as a result of higher petroleum prices, increased remittances from workers abroad, and reduced debt service payments due to lower risk premia. However, exports declined over the last three quarters of 2002 and increased only marginally in the first quarter of 2003 as the *maquiladora* sector has come under competition from Asian producers, especially in the United States market. Thus, United States imports from Mexico barely increased in 2002, while those from China rose by almost 20 per cent. As a result, employment in the sector has fallen by almost 20 per cent from its peak at the end of the 1990s. According to the Bank of Mexico, the failure of exports to recover is not only due to weak foreign demand, but also to a failure to adjust to increased international competition – an issue taken up in Part Two of this Report.[1] As in Chile, while the adverse effect of global conditions on Mexico was quite strong, leading to negative growth in 2001, the upswing in the United States brought little respite in 2002, the growth rate remaining below 1 per cent.

In most other countries in the region, the global downturn came on top of financial difficulties and both monetary and fiscal policy had to be focused on reducing current-account deficits, stabilizing currencies, and restoring confidence in the financial markets. The region's economic performance has been dominated by the negative impacts of the Argentine default at the end of 2001, which quickly extended to Uruguay, the political uncertainty in Brazil and the disruption of economic activity in Venezuela and Colombia, rather than by global conditions. The fall in capital inflows during 2002, reinforced by domestic political difficulties, generated substantial exchange-rate volatility: in a number of countries, such as Brazil and Argentina, this involved such large depreciations that external account positions improved even in the face of sluggish global trade and declining primary commodity prices. At the same time, such depreciations led to a rapid increase in import prices and a return of inflation, which in turn led to tighter monetary policy and higher interest rates, further depressing domestic demand. While growth remained sluggish in Brazil, economic activity collapsed in Argentina, Venezuela and Uruguay, with output losses reaching double-digit rates. Only in two Latin American countries were growth rates relatively high in 2002. Peru recovered from near stagnation and grew by more than 5 per cent, and economic growth in Ecuador, although down from 5 per cent in 2001, still reached 3 per cent.

In Latin America, only a handful of countries were able to respond to the fall-off in global demand with policy changes, and in general these were not very effective.

East Asia as a whole is expected to continue to grow faster than Latin America in 2003, despite some weakening due to the SARS crisis and falling external demand. Although the SARS virus was first identified in the last quarter of 2002, it spread in the first quarter of 2003 and its impact will probably become more visible in the figures for the second quarter of the year. The overall impact of SARS will depend, of course, on the extent to which the outbreak is contained. Reports

available in the second quarter of 2003 suggest that the number of new cases has been falling. Initial estimates suggest that the major impact will be on the initial centres of contagion: Chinese GDP is reported to have been stagnant in the first quarter, Hong Kong (China) and Taiwan Province of China are also expected to grow at substantially lower rates, and Singapore may even fall back into recession. In addition to the initial impact on domestic production and trade, there has also been a large indirect impact on services such as transport and tourism, which together account for around 10 per cent of regional GDP and which had already slowed down as a result of terrorist activity. These effects extend well beyond the region (see chap. III). Assuming that SARS has been contained, the Asian Development Bank estimates that in the second quarter the overall loss of GDP in individual countries could range between 0.2 and 2.0 percentage points, with the largest reductions in Hong Kong (China) and Singapore, and the smallest in China and the Republic of Korea. For the region as a whole, the GDP loss would be around half a percentage point, although that would more than double if the impact extends into the third quarter.[2]

The short-term prospects for Africa do not suggest any significant divergence from recent growth trends. There is now a growing consensus that, as a result, it will be impossible to meet the Millennium Development Goals.

In Latin America, recovery is likely to be weak and fragile, driven by some improvement in financial conditions rather than by strong export growth. The continuing decline in equity and bond yields in the United States has led to renewed interest from some international investors in the high yields that can be obtained in some Latin American emerging markets. For example, there has been an increase in short-term inflows in the form of investment in exchange-rate indexed government bonds in Brazil. Such inflows have been encouraged by the fact that in both Brazil and Argentina the political risks that dominated 2002 had subsided in the first quarter of 2003, and by the new Governments meeting and often exceeding the conditions set for their IMF support programmes. Thus, much as in the period after the introduction of stabilization plans in the 1990s (see chap. VI), short-term capital inflows are attracted by perceptions of improving macroeconomic fundamentals and arbitrage profits. Coupled with the rise in the United States external deficit and the belief that the United States Government has abandoned its policy of a strong dollar, these short-term capital flows have reversed the currency depreciations that had earlier improved export competitiveness. As a result, these countries now have appreciating currencies just when there is a global slowdown in output and trade and a shift to short-term capital flows in an international environment of reduced external financing (see chap. II).[3] There is a risk that if expectations of improved political conditions and of successful economic reforms are disappointed, or if there is some other external shock, there could be a rapid reversal of short-term flows with consequent pressure on exchange rates. This, in turn, would require interest rates that would not be appropriate for sustaining internal demand and economic growth.

2. *Africa remains relatively insulated from global trends*

Performance in Africa was largely independent of the impact of the downturn in the United States in 2001 and more closely linked to demand conditions in Europe. Like Latin America, the region benefited little from the upswing in 2002. Climatic and political factors continued to have a major impact on economic performance. Eastern and Southern Africa were adversely affected by drought, which created severe food shortages, and by depressed export prices. In these subregions, growth remained well below the African average. Conditions in Nigeria and Zimbabwe were dominated by political tension. The conflict in Côte d'Ivoire had an adverse impact on trade in the neighbouring landlocked countries, Mali, Burkina Faso and Niger, which had to rely on port facilities in other West African countries as the Nigerian facilities were no longer accessible. Trade in the

subregion has been seriously disrupted with a consequent loss of income, in part because of longer transportation routes for both exports and imports. It has also had a direct impact on cocoa prices.

The strength of oil prices in 2002 underpinned a 5 per cent growth rate in Angola. Among the subregions, the highest rate (5.0 per cent) was achieved in the Horn of Africa, reflecting relatively good performance in Ethiopia and Sudan. Similarly, growth in the Great Lakes region exceeded 4 per cent (compared with 2.3 per cent 2001) following efforts to restore peace and the concomitant recovery in the Democratic Republic of the Congo, where growth reached 3.0 per cent in 2002 (compared with a fall of 2.0 per cent the previous year). Expansion continued strongly in the United Republic of Tanzania and Uganda, which grew at 6.0 per cent and 6.6 per cent, respectively. In North Africa and Central Africa, growth was close to the regional average.

Despite the relatively stable performance, with 15 countries in the region reaching growth rates of 5 per cent in 2002, only six (Angola, Chad, Equatorial Guinea, Mali, Mozambique, and Rwanda) achieved rates of 7 per cent or more, which are required every year if the goal of halving poverty by 2015 is to be reached. Indeed, there are very few countries that have been able to maintain rapid growth for long enough to have a tangible impact on reducing poverty. Only three countries (Chad, Equatorial Guinea, and Mozambique) met this target in both 2001 and 2002, and only Equatorial Guinea has done so since 2000.

Growth in the transition economies has not been associated with an easing of the external constraint and thus remains dependent on capital inflows.

The short-term prospects for Africa do not suggest any significant divergence from recent growth trends. There is now a growing consensus that, as a result, it will be impossible to meet the Millennium Development Goals for the region, particularly that of halving poverty by 2015. A durable improvement in African economic performance will depend on success in the fight against the HIV/AIDS pandemic and other diseases such as tuberculosis and malaria, and on resolving the deep-seated problems related to weak and unstable commodity prices, declining levels of aid, the continued debt overhang and political instability. Even though improvements in domestic policies, institutions and governance hold the key to sustained growth, progress on many of these fronts depends primarily on action by the international community – including faster and deeper debt relief, increased and better quality aid, and improved access to the markets of the developed economies.

3. Growth and imbalances in the transition economies

Although many of the transition economies in Eastern Europe and the Commonwealth of Independent States (CIS) are highly dependent on trade with Western Europe and less closely linked to developments in the United States, they have faced relatively stable external conditions. Along with an expansion of domestic demand, these contributed to maintaining output growth at a rate considerably higher than the world average in 2002. However, unlike East Asia, growth in many of the countries that are candidates for accession to the EU has relied on increased capital inflows (see chap. II). In some countries, the rise in domestic demand has led to a further deterioration in current-account deficits, while in others a slowdown in growth has not led to a reduction in these deficits. Relatively high nominal interest rates and optimism generated by the agreements on accession to the EU have attracted inflows of short-term capital, leading to an appreciation of real exchange rates and accelerating the deterioration in the current account. Hungary, as well as the Czech Republic and Poland, have experienced a real appreciation of their exchange rates of 20 per cent in the last two or three years. Only in Poland has the appreciation slowed recently in reaction to the slowdown in growth.

Another cause of concern is that the recent reduction of inflation, coinciding with rapid nomi-

nal wage growth, has increased real wages and private consumption but has not been accompanied by a strong increase in investment (ECE, 2003: 101) or by restructuring of domestic industry to improve competitiveness and exports. In other words, growth has not been associated with an easing of the external constraint and thus remains dependent on capital inflows. This is a combination that has frequently been a prelude to financial instability in Latin America (see chap. VI).

In the CIS economies growth was close to 5 per cent in 2002, primarily due to strong petroleum prices, which allowed a rapid expansion of wages and consumption. Although GDP grew by close to 6 per cent in 2002, there was a significant improvement in the Russian Federation's current-account balance as a result of increased oil revenues, a development which also improved its access to international financial markets (see chap. II). However, other sectors continue to be weak and the non-oil trade balance is in large deficit. The region is therefore vulnerable to a weakening of oil prices, an outcome which could be aggravated by reduced access to external finance. On current trends in the oil market, economic growth can be expected to fall in 2003, possibly to below 4 per cent.

D. Economic prospects and policies to promote global recovery

The failure of an expected strong recovery in the United States to materialize and of the rest of the industrialized world to take measures to stimulate domestic demand has made the global recovery process more difficult. With the inevitable slowdown of the United States economy after its historic expansion of the 1990s, preserving the growth of global income and international trade would have required a rapid shift in the policies of the major industrialized countries in Europe and in Japan. To support the expansion of their economies measures were needed to stimulate an expansion of domestic demand, which would have increased their demand for imports and reduced their current-account surpluses. This would have halted the deterioration in the United States external balance and resulted in a slowdown of capital flows to that country, thereby avoiding the appreciation of the dollar vis-à-vis the euro and the yen that occurred in the last half of the decade. If accompanied by increases in capital flows towards developing countries facing payments difficulties, such a process would also have accelerated growth in these countries by reducing their need to introduce restrictive policies in order to balance their external accounts.

However, what actually occurred was a continued contraction in domestic demand in Europe and Japan that kept their growth rates even below the low rate of the United States. As a result, the United States current-account deficit continued to increase despite a sharp slowdown in growth. The Federal Reserve responded promptly by reducing interest rates, and the expenditures associated with the war against terrorism, coupled with the new Administration's political commitment to tax reductions, quickly turned the United States budget from surplus to deficit. In Europe, in contrast, the Stability and Growth Pact prevented expansion-

ary fiscal action. Furthermore, an inflation rate marginally above the 2-per-cent target was interpreted as requiring monetary restriction, especially given the presumption that the continued depreciation of the euro would provide an alternative to monetary stimulus. It was only after a sustained appreciation of the euro and a decline in inflation below the 2-per-cent target in the second quarter of 2003 that the ECB moved to cut interest rates.

In Japan, interest rates had already reached their technical minimum, and a decade of ad hoc fiscal policy packages had swollen government debt without reversing deflation and stagnation in the economy. The failure of these fiscal packages to lift the economy has eroded political support for additional stimulus measures. Instead, the Government has opted for a longer-term strategy of improving industrial productivity in order to better compete globally with the United States in the knowledge-intensive, high-technology sectors; it is thus relying on exports as the only source of demand expansion.

With growth in the industrialized world remaining uneven and sluggish, there has been increasing resort to currency adjustments to reduce trade imbalances. Indeed, the dollar has come under pressure since mid-2002, due to the sharp decline in capital flows to the United States. As noted in subsection B.1, the recession in the 'high-tech' sectors has made investment and acquisition of United States companies less attractive and so there has been a large fall in FDI in the United States. The rapid lowering of interest rates and the continued weakness of equity markets, which still appear to be overvalued (price-earnings ratios are still roughly double their pre-1995 average) despite a dramatic fall in prices, have also led to a decline in non-resident purchases of private securities. Together with the continued increase in the current-account deficit, which exceeded $500 billion in 2002 (accounting for about 2 per cent of world income), this has created downward pressure on the dollar. The external value of the dollar peaked around February 2002 and had depreciated in real terms by about 15 per cent by the first quarter of 2003, according to the Major Currency Index of the Federal Reserve, but by only 6 per cent when measured by the Broad Index, and by only 2 per cent according to the Other Trading Partner Index, which includes many Asian currencies that are pegged to the dollar.[4] Against the euro, the dollar fell by some 30 per cent between early 2002 and mid-2003, but by only 10 per cent against the yen in the same period. Indeed, according to the Bank of Japan, the real effective exchange rate of the yen remained stable throughout this period.

> The failure of an expected strong recovery in the United States to materialize and of the rest of the industrialized world to take measures to stimulate domestic demand has made the global recovery process more difficult.

However, it is not clear if the currency realignments alone can help remove trade imbalances and support global growth. Given the substantial interest rate differentials that had emerged between the United States and Japan on the one hand, and the Euro area on the other, the appreciation of the euro against both the yen and the dollar is not a surprise. But since a large proportion of the United States trade deficit is with East Asian countries, a correction of these imbalances would require the dollar to depreciate against the East Asian currencies, including the yen. However, the East Asian economies have so far resisted such an appreciation. Given the impossibility of further interest rate reductions in Japan and its need to rely on external demand for growth, it has prevented any significant real appreciation of the yen by intervening in the currency market and pur-

> For the Asian developing countries with relatively stable currencies against the dollar, there will be opportunities for expansion in European markets without losses in the United States. This could be a source of new frictions in the international trading system.

chasing United States securities to accumulate large amounts of dollar reserves. Since Japanese domestic costs and prices are falling relative to those of its trading partners, the yen is already experiencing real depreciation, and this is reinforced by the attempts to prevent a nominal appreciation. The currencies of China, Hong Kong (China) and Malaysia are pegged to the dollar, while most other developing countries of the region have been intervening in order to stabilize their dollar exchange rates.

Intense competition among the countries of the region is a major reason for their efforts to avoid appreciation. In South East Asia, there is concern about losing competitiveness against China, which so far has resisted demands to revalue its currency against the dollar. In the Republic of Korea and Taiwan Province of China, exchange rate policies appear to focus on the movement of the dollar-yen rate, since these economies see Japan as their main competitor. Although most of the accumulated current-account surpluses of these countries are held as reserves invested in United States assets, there is also an effort to diversify away from the dollar and this seems to have contributed to the large gains made by the euro.

For emerging-market economies, movements in the exchange rates of the major currencies can be an additional source of instability.

Since policy interest rates in Europe have remained higher than those in the United States and Japan, international interest rate arbitrage has attracted funds to the Euro area, contributing to the rapid depreciation of the dollar against the euro. There is a risk that these arbitrage flows could lead to a continuing appreciation of the euro and become self-reinforcing. This in turn could lead to a substantial overshooting of the euro-dollar and euro-yen exchange rates that is unlikely be reversed by the size of interest rate reductions that the ECB would be willing to accept. Japan may thus find better markets in Europe, while losing some market share in the United States. For the Asian developing countries with relatively stable currencies against the dollar, there will also be opportunities for expansion in European markets without losses in the United States. Overall, therefore, the currency movements under way may increase, rather than reduce, the global market share of the Asian countries. This could be a source of new frictions in the international trading system.

The major impact of these exchange-rate realignments would be on Europe, reducing its external demand and economic growth. Furthermore, given the linkages between United States and European firms, a significant impact of the rise of the euro against the dollar will be an improvement in the dollar profits of United States firms operating in Europe and a reduction in the euro profits of European firms with substantial operations in the United States. This will have a negative impact on the profitability, and thus on the investment, of European firms. If these developments exacerbate budget deficits in Europe, they could lead to further cuts in government expenditures, thus adding to deflationary forces.

For the United States, these currency movements may leave the trade deficit unchanged while bringing a marginal improvement to its current account, since the country earns higher returns on its foreign assets than are earned by foreigners on assets held in the United States. To the extent that currency movements prove ineffective in reducing its trade deficit, the required external adjustment may have to rely increasingly on price deflation. Since a large proportion of United States imports of consumer goods is supplied by Asian countries with relatively stable currencies against the dollar, or from Mexico – where capital inflows have kept the currency relatively stable against the dollar – the dollar depreciation has had little impact on United States import prices which, in fact, have been falling. This, together with the falling prices of domestic manufactures over the last few years, is one of the main reasons why the Federal Reserve has been able to pursue an aggressive easing of monetary policy without the risk of importing inflation. However, in the absence of effective currency alignments and rapid growth in Europe and Japan, external adjustment will call for a faster decline in costs and prices in the United States than in the economies that are its main trading

partners. Given the risks of such a deflationary process, not only for the United States but also for the global economy, it may become necessary for the East Asian countries to stop resisting the appreciation of their currencies against the dollar. While this may reduce the foreign demand for dollar assets, including United States treasuries, the Federal Reserve has already announced that if there is any fall in the demand for United States securities that pushes up the yield curve, it is willing intervene to keep long rates from rising.

For emerging-market economies, these currency movements can be an additional source of instability. Indeed, the volatility of capital flows and exchange rates has already made policy in some emerging-market economies, such as Argentina, Brazil and Turkey, more restrictive than is warranted by domestic and global conditions. The sharp devaluations in the currencies of these countries were associated with the reversal of capital flows in the past two years and led to a return of inflation, which has been fought with a large increase in interest rates. Despite the fact that, in general, these were one-off increases in the price level, interest rates have been kept very high relative to domestic requirements, thus threatening the sustainability of public debt. As a result, the currencies of Argentina, Brazil and Turkey have started to appreciate at precisely the moment when they should be preserving competitiveness in order to improve their current-account positions and adjust to reduced inflows of capital. Even after the depreciation of the dollar and the appreciation of their currencies, there has been little easing of monetary policy in these countries despite the fact that inflation rates have started to come down.

In the rest of the world prices have been stable or declining, raising the possibility of deflation in a number of countries, including China, Germany, Japan and the United States, and other countries now seem to be following this trend. The basic impact of deflation is to increase the burden of debtors, as countries with large external debts will have to export more to meet debt service requirements in conditions where both export prices and export volumes are falling or stagnant. Since the United States and the emerging-market economies of Latin America are net debtors, and the EU and East Asia are net creditors, this suggests that conditions in the debtor countries will deteriorate relative to the creditor countries if there is a generalized global deflation. However, the depreciation of the dollar allows the United States to avoid much of the negative impact of global price declines, since international claims on the United States are denominated in dollars and are thus reduced by a depreciation of the currency. Since the indebted developing countries do not enjoy this privilege, they are even more exposed to global deflation than other countries.

> The exchange rate adjustments that are now occurring are unlikely to reduce global trade imbalances by an appropriate redistribution of global demand, nor are they likely to support global recovery.

Thus the exchange rate adjustments that are now occurring are unlikely to reduce global trade imbalances by an appropriate redistribution of global demand, nor are they likely to support global recovery. Rather, they appear to be reinforcing the external imbalances that currently exist, and thus increasing the volatility of capital flows and the instability of exchange rates in developing countries. Global growth will continue to depend heavily on the performance of the United States economy even if expansionary measures are taken by the EU and Japan.

> Without a coordinated expansionary action the international monetary and financial system is likely to remain highly unstable.

The danger facing the United States economy is that imbalances and excesses created during the boom of the 1990s could result in a long period of unstable and sluggish growth, with occasional surges as well as dips, accompanied by a process of deflation, very much as in Japan during the past 12 years. The evolution of the economy over the past three years suggests that this may indeed be

a potential threat. Decisive action may thus be needed in order to avert such an outcome, particularly if deflation starts to deepen and threatens to set off a downward spiral as a result of a sharp drop in consumer spending. The monetary authorities have already indicated their willingness to use all possible means to fight deflation by injecting money into the economy in order to induce price rises through measures including purchases of long-term government paper, making low-interest loans to banks and accepting private debt as collateral.[5] However, much of the task of stimulating the economy will fall on fiscal policy. Although the federal budget is currently running a deficit as a result of tax cuts, there may be a need to re-orient public spending if it is to have a greater impact on employment. This may call for increased public investment in areas that did not share in the rapid expansion of the 1990s, such as public infrastructure, health and environment. Finally, should serious financial difficulties emerge in the household and business sectors, much in the same way as in Japan, more decisive and prompt action would be required to restructure and reduce debt in order to avoid the same outcome as in that country.

In Japan, there is some room for monetary expansion to help ease deflationary pressures, and this can be supplemented by fiscal expansion. But neither is likely to reverse the deflationary process that has been under way for more than a decade. Action should thus simultaneously focus on financial and corporate restructuring in order to remove the structural impediments to revitalizing the economy. The EU, by contrast, has much greater scope for expansionary monetary and fiscal action, which can supplement and support the United States recovery and play a significant role in reviving the global economy.

Deflation is a global problem, with too many goods chasing too few buyers and too many workers chasing too few jobs. Under such circumstances currency movements only serve to redistribute the deflationary gap and unemployment among countries without bringing much support to global recovery. For the same reason, without a coordinated expansionary action the international monetary and financial system is likely to remain highly unstable, resulting in sharp and unexpected movements in capital flows and exchange rates, thereby straining trade relations. Monetary policy coordination can play an important role in bringing about stability to capital flows and an orderly realignment of exchange rates if it is combined with coordinated fiscal expansion.

Global deflation constitutes a serious problem for developing countries. Many successful exporters now face excess capacity in sectors supplying foreign markets, and this tends to intensify price and exchange rate competition, thereby adding to global deflationary forces. Others, particularly those with serious foreign debt problems, face stringent external conditions and are forced to cut imports at a time when there is a glut in global markets. Action on the external debt of developing countries, particularly on their official debt, in order to provide them with more breathing space, as well as a rapid expansion of international liquidity through various means – including a sizeable allocation of SDR to countries facing stringent external financial conditions – should be an integral component of an international strategy for fighting global deflation. ■

Action on the external debt of developing countries as well as a rapid expansion of international liquidity should be an integral component of an international strategy for fighting global deflation.

Notes

1 Bank of Mexico Press Release "La Balanza de Pagos en 2002", 27 February 2003, p. 4. In its Press Release "Trayectoria Reciente de las Principales Variables Económicas y Financieras", 23 May 2003 the Bank notes that investment declined by nearly 3 per cent in real terms in February 2003, year-on-year, and that investment growth was negative in 18 of the last 23 months.

2 "SARS and Asia's Economy: Impacts and Policy Recommendations", speech by Ifzal Ali, Chief Economist, Asian Development Bank, 13 May 2003, Beijing (www.adb.org).

3 Somewhat paradoxically, given the increased financial fragility that the substitution of short-term for long-term flows represents, and the continued deterioration in prospects for a global economic recovery, the international credit rating agencies have upgraded the debt of some economies such as Brazil. In early 2003 Brazil returned to the capital markets with a sovereign issue and Mexico has retired all of its remaining Brady debt.

4 The Major Currency Index contains the currencies of seven industrialized countries which, together, have a 55 per cent weighting in the Broad Index. The weight of the Euro area in the Broad Index is 17 per cent. The Other Important Trading Partner Index is designed to capture movements of the dollar against key United States trading partners in the developing world. The share of East Asian countries in this index is 62 per cent and that of Mexico is 20 per cent. For these exchange rate indexes see *Federal Reserve Bulletin*, 1998: 811–818.

5 This was most explicitly stated and discussed by Ben S. Bernanke, Governor of the Federal Reserve System, in a discourse before the National Economists Club, Washington, DC, 21 November 2002: "Deflation: making sure 'It' doesn't happen here".

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Chapter II

FINANCIAL FLOWS TO DEVELOPING COUNTRIES AND TRANSITION ECONOMIES

A. Recent trends

Net private capital flows to developing countries rebounded in 2002, after falling below $20 billion in 2000 and 2001. However, despite the recovery, such flows stayed at less than a quarter of the peak reached in 1996, before the outbreak of the East Asian financial crisis. Foreign direct investment (FDI) remained the only positive component among the broad categories of private capital inflows, but it was well below the historical high registered in 2001 (table 2.1). The other components, net portfolio investment and bank lending, were again negative. Net official flows, including IMF lending, were stable at the level attained in 2001.

The picture is somewhat different for the group of the transition economies, where net private capital flows rose in 2002, reaching their highest level since 1995. All three components of private capital flows were positive, and higher than the levels of the previous year. Clearly, for many transition economies, the optimism generated by the progress towards their accession to the European Union (EU) has been an important factor in sustaining private capital inflows despite a general deterioration in global financial conditions.

Although net capital inflows to the developing countries increased, net resource flows, as measured by the current-account balance in table 2.1, were negative. Indeed, developing countries as a whole ran a current-account surplus for the fourth consecutive year. In 2002, the aggregate surplus amounted to more than $100 billion, exceeding the peak reached in 2000. Similarly, the transition economies maintained a current-account surplus for the third consecutive year. Thus in both categories of countries, net total capital inflows were used not for current-account financing, but for increasing foreign-exchange reserves. The increase amounted to an unprecedented $177 billion in the developing economies and to about $30 billion in the transition economies. Although international reserves of developing countries and the transition economies have been constantly rising in recent years, in the period since 1998 (1999

Table 2.1

NET CAPITAL FLOWS AND THE CURRENT ACCOUNT: DEVELOPING AND TRANSITION ECONOMIES, 1995–2002

(Billions of dollars)

	1995	1996	1997	1998	1999	2000	2001	2002
Developing economies								
Private capital flows, net	157.0	208.1	96.6	38.9	66.2	18.2	17.9	51.8
Private direct investment, net	82.0	97.2	120.5	128.0	133.0	125.6	145.3	110.0
Private portfolio investment, net	34.2	81.5	41.6	-3.7	39.0	9.7	-41.7	-40.0
Other private capital flows, net	40.8	29.3	-65.5	-85.3	-105.8	-117.2	-85.8	-18.2
Official flows, net	34.3	-5.0	40.8	49.3	10.5	-0.7	25.6	22.9
Change in reserves	-80.1	-105.7	-58.7	-47.0	-80.1	-93.2	-100.5	-177.6
Current account balance	-88.6	-78.2	-45.9	-21.6	36.5	100.9	72.1	104.0
Latin America								
Private capital flows, net	39.1	65.3	58.7	63.3	50.2	50.5	34.7	2.1
Private direct investment, net	21.0	35.2	51.1	56.1	58.1	57.1	65.9	38.5
Private portfolio investment, net	7.0	44.1	28.3	23.7	19.6	21.2	2.8	-6.5
Other private capital flows, net	11.0	-14.0	-20.8	-16.5	-27.5	-27.8	-33.9	-29.8
Official flows, net	20.0	3.9	14.6	15.5	0.7	-4.3	23.7	18.4
Change in reserves	-22.9	-29.0	-13.2	8.4	8.7	-3.6	0.8	-1.3
Current account balance	-37.4	-39.9	-67.0	-90.5	-56.2	-47.7	-53.3	-16.8
Asia[a]								
Private capital flows, net	98.4	123.2	12.0	-44.9	6.3	-18.3	15.5	69.5
Private direct investment, net	52.6	53.7	56.4	59.3	60.3	53.0	46.5	55.3
Private portfolio investment, net	22.7	32.8	7.1	-17.9	14.4	4.3	-13.5	-18.1
Other private capital flows, net	23.1	36.6	-51.5	-86.3	-68.4	-75.5	-17.6	32.3
Official flows, net	4.3	-12.7	17.1	26.1	4.2	3.2	-6.0	-10.2
Change in reserves	-43.1	-46.6	-15.0	-67.9	-78.9	-49.0	-84.6	-166.9
Current account balance	-30.2	-37.4	22.1	110.9	95.4	79.1	77.7	102.4
China and India								
Private capital flows, net	37.4	48.5	28.3	-4.6	10.3	13.1	42.2	59.4
Official flows, net	3.9	2.3	1.5	5.6	7.0	-0.4	1.0	3.1
Change in reserves	-20.3	-34.4	-40.5	-9.1	-14.5	-16.5	-56.1	-93.7
Current account	-3.9	1.2	33.9	24.6	12.4	16.1	17.3	27.7
First tier NIEs[a]								
Private capital flows, net	11.3	16.1	-26.8	-17.8	20.9	3.3	-9.2	16.0
Official flows, net	-3.1	-11.4	2.8	4.9	-17.9	-9.0	-12.2	-15.4
Change in reserves	-11.7	-9.3	13.1	-47.2	-47.9	-31.5	-23.1	-55.0
Current account balance	11.9	1.8	13.7	63.0	48.7	34.9	43.2	51.2
Africa								
Private capital flows, net	11.3	10.0	9.0	10.4	13.7	4.8	6.0	5.5
Private direct investment, net	1.9	3.5	7.8	6.3	9.4	7.8	22.4	8.9
Private portfolio investment, net	2.5	2.8	7.0	3.7	8.2	-2.2	-9.1	-1.2
Other private capital flows, net	6.9	3.7	-5.9	0.4	-3.9	-0.8	-7.3	-2.3
Official flows, net	5.7	-2.2	3.2	4.2	2.0	3.0	1.6	2.2
Change in reserves	-2.5	-7.9	-11.1	2.8	-3.5	-13.2	-11.9	-1.4
Current account balance	-16.6	-6.2	-6.4	-18.6	-15.6	5.1	-0.4	-8.0
Sub-Saharan Africa								
Private capital flows, net	8.3	8.1	5.9	9.4	12.4	4.8	2.6	3.9
Official flows, net	6.0	-1.8	4.2	4.7	2.5	3.9	2.7	3.5
Change in reserves	-3.9	-5.2	-6.1	1.8	-3.8	-6.6	-1.8	3.4
Current account balance	-12.4	-7.0	-9.1	-16.9	-15.0	-2.7	-8.2	-13.0

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Table 2.1 (concluded)

NET CAPITAL FLOWS AND THE CURRENT ACCOUNT: DEVELOPING AND TRANSITION ECONOMIES, 1995–2002

(Billions of dollars)

	1995	1996	1997	1998	1999	2000	2001	2002
Middle East[b]								
Private capital flows, net	8.2	9.5	16.9	10.2	-3.9	-18.8	-38.3	-25.3
Private direct investment, net	6.4	4.7	5.2	6.2	5.3	7.7	10.5	7.3
Private portfolio investment, net	2.0	1.8	-0.9	-13.2	-3.2	-13.4	-22.0	-14.2
Other private capital flows, net	-0.3	3.0	12.6	17.1	-6.0	-13.1	-26.9	-18.4
Official flows, net	4.4	5.9	5.9	3.6	3.7	-2.5	6.3	12.5
Change in reserves	-11.6	-22.2	-19.4	9.7	-6.4	-27.3	-4.9	-8.0
Current account balance	-4.4	5.4	5.5	-23.3	13.0	64.3	48.0	26.4
Transition economies								
Private capital flows, net	51.4	20.2	-20.9	14.5	29.8	32.9	20.9	34.1
Private direct investment, net	13.0	12.3	15.5	20.8	23.8	23.4	25.2	29.2
Private portfolio investment, net	14.6	13.1	6.9	5.4	2.4	2.4	3.2	3.4
Other private capital flows, net	23.8	-5.1	-43.3	-11.8	3.6	7.1	-7.4	1.5
Official flows, net	-6.0	2.2	15.5	33.7	3.5	-3.1	13.2	2.9
Change in reserves	-37.4	-4.2	-3.3	-6.5	-6.7	-20.1	-18.0	-31.4
Current account balance	-4.9	-12.2	-25.9	-29.7	-2.5	24.8	12.0	10.3

Source: UNCTAD secretariat calculations, based on IMF, *World Economic Outlook*, April 2003.

Note: Figures under the item "other private capital flows" comprise other long- and short-term net investment flows, including private borrowing and residuals not covered under other items; due to limitations in data coverage such residuals may also include some net official flows. A minus sign in the lines for change in reserves indicates an increase.

a Excluding Hong Kong (China).

b Including Israel, Malta and Turkey.

for the transition economies) the main source of reserve accumulation has been current-account surpluses, whereas previously net capital inflows had provided financing for both current-account deficits and reserve accumulation.

The net transfer of resources from developing countries and transition economies was even greater when allowance is made for net payments on foreign investment income, including interest payments on outstanding debt and profit remittances. According to preliminary estimates by the United Nations Department of Economic and Social Affairs (UN/DESA), the net transfer of financial resources from developing countries, including net capital inflows, increases in reserve holdings and net payments on foreign investment income, reached an unprecedented $192 billion in 2002 (table 2.2). About $90 billion of this was transferred as net payments on foreign investment income, which exceeded total net capital inflows, including official capital inflows, by some $15 billion. Thus, on a cash-flow basis, developing countries' financial balance with the rest of the world was in the red, financed by surpluses generated on the trade account. This continued the trend that had started after the financial crisis in East Asia. In 2002, the net transfer of financial resources was negative for every developing region (except sub-Saharan Africa) as well as for the transition economies.

The downward trend in net private capital flows to developing countries that has persisted since the 1997 East Asian financial crisis has been influenced by a number of factors. First, there has been a general worsening of global financial conditions. In particular, volatility and risk have

Table 2.2

NET TRANSFER OF FINANCIAL RESOURCES TO DEVELOPING AND TRANSITION ECONOMIES, 1994–2002

(Billions of dollars)

	1994	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*[a]
Developing economies	44.2	49.7	30.3	-2.7	-33.7	-120.9	-179.3	-155.1	-192.5
Africa	4.6	6.6	-4.4	-3.7	15.6	5.1	-18.8	-11.2	-9.0
Sub-Saharan Africa[b]	6.7	8.2	10.5	7.9	13.2	9.7	5.0	9.0	9.5
East and South Asia	5.1	25.6	22.4	-34.6	-130.1	-134.8	-110.4	-111.0	-141.5
West Asia	15.2	18.8	11.2	11.4	36.1	-0.3	-48.3	-34.9	-13.2
Latin America	19.3	-1.3	1.1	24.2	44.7	9.1	-1.8	2.0	-28.8
Transition economies	-2.2	10.0	20.0	30.2	33.7	4.5	-23.4	-9.7	-9.5

Source: UN/DESA, based on data from IMF, *World Economic Outlook*, April 2003; and IMF, *Balance of Payments Statistics Yearbook*, various issues.

a Preliminary estimate.

b Excluding Nigeria and South Africa.

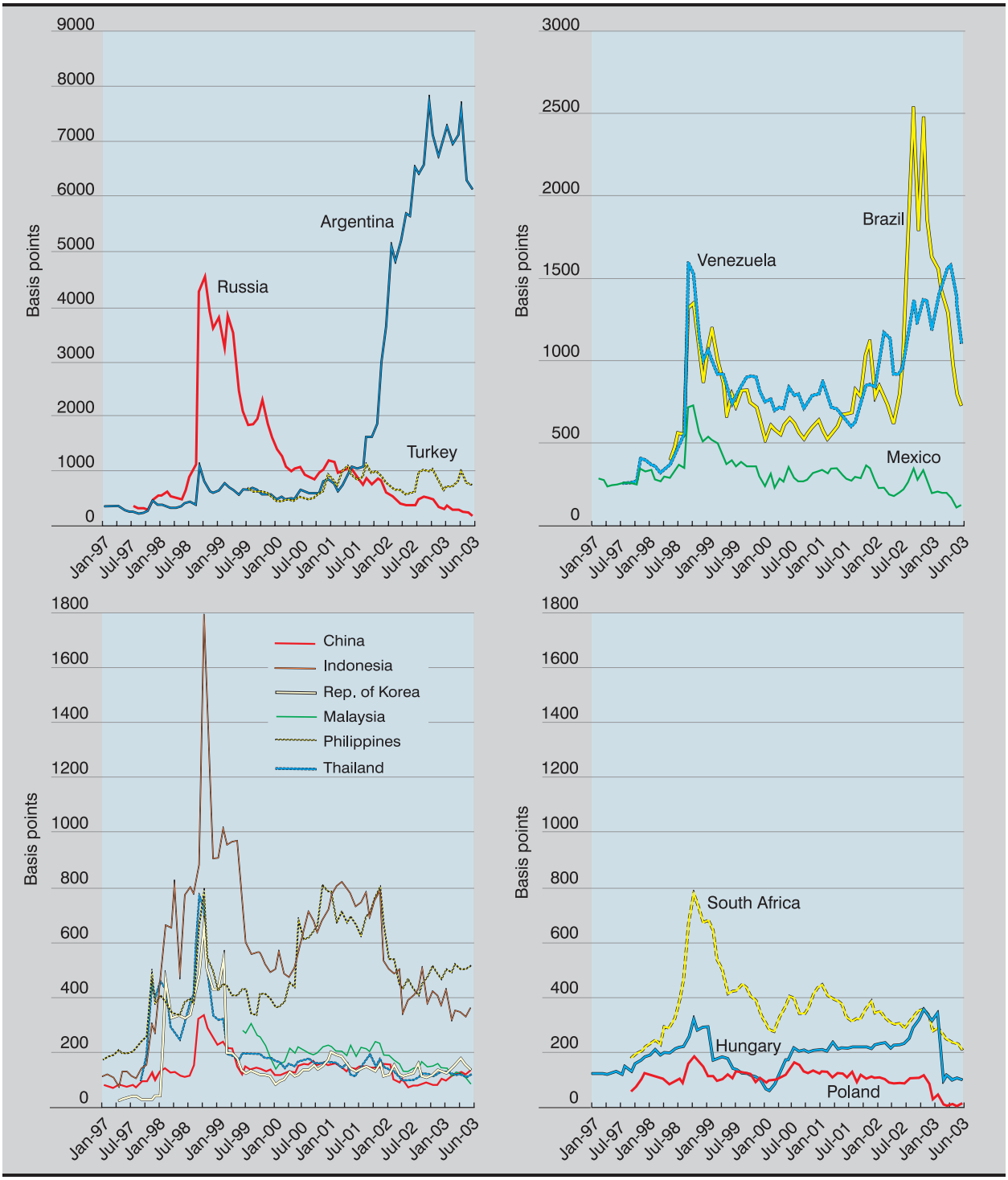
remained high due to a number of developments since the turn of the century, including the sharp decline of United States equity prices in 2000, the Turkish crisis and the Argentine debt default in 2001, and geopolitical uncertainties beginning with the terrorist attacks in the United States on 11 September 2001. All these have resulted in considerable increases in risk spreads on internationally issued emerging-market bonds which, on average, have remained at relatively high levels, despite some moderation since mid-2002 (fig. 2.1).

Moreover, two developments have reduced the opportunities for international arbitrage: a greater convergence of inflation and interest rates between emerging-market economies and industrial countries, and the shift of many emerging-market economies to a regime of floating exchange rates. According to estimates by the UNCTAD secretariat, the difference between average short-term nominal interest rates of the G-7 countries and a group of 14 emerging-market economies has been decreasing almost constantly since the mid-1990s: the difference was as high as 30 percentage points in 1995, dropping to some 8 points at the end of the century and to less than 5 percentage points in 2001 (fig. 2.2).[1] When these margins were quite high, they provided important short-term profit opportunities through international arbitrage, particularly in countries which pursued stabilization programmes based on fixed exchange rates or crawling pegs. This was the case in Latin America and some transition economies, as well as in many East Asian economies that traditionally pursued a policy of stable nominal exchange rates under price stability. Such regimes often provided implicit exchange rate guarantees, thereby reducing the currency risk. In recent years, many of these countries, particularly in East Asia, have shifted to floating rates while reducing interest rates sharply from the peaks reached during the financial crisis. In others such as Malaysia, where exchange rates remain nominally fixed to the dollar, domestic interest rates have been too low to yield profits from arbitrage. However, in Latin America, notably in Argentina and Brazil, the downward trend in inflation and interest rates has been somewhat reversed with the breakdown of fixed or pegged currency regimes and the consequent rise in interest rates. Although this has also meant a significant increase in both currency and credit risks, as noted in chapter I, the ex-

Figure 2.1

YIELD SPREADS OF SELECTED INTERNATIONALLY ISSUED EMERGING-MARKETS BONDS,[a] JANUARY 1997 TO JUNE 2003

(Basis points[b])



Source: Thomson Financial Datastream.

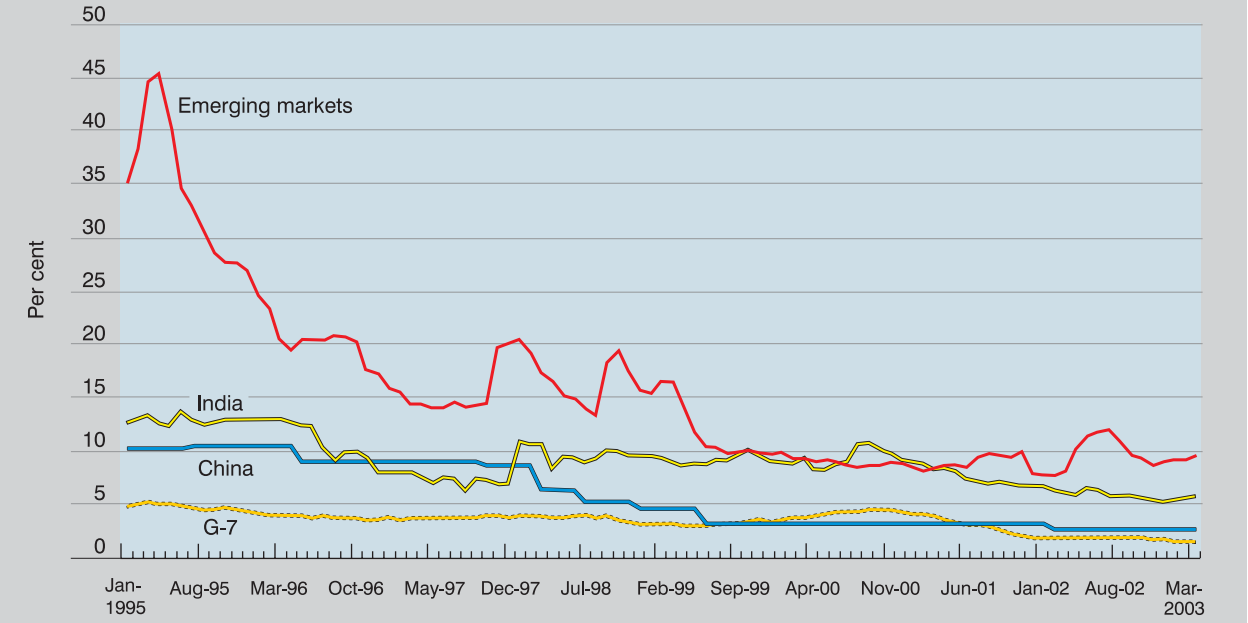
a Differential between the yield on a representative bond issued by the borrowing country and those of the same maturity issued by the government of the country in whose currency the borrower's bonds are denominated.

b One basis point equals 0.01 per cent.

Figure 2.2

REPRESENTATIVE SHORT-TERM INTEREST RATES IN THE G-7, EMERGING MARKETS, CHINA AND INDIA,[a] JANUARY 1995–MARCH 2003

(Per cent)



Source: IMF, *International Financial Statistics*; World Bank, *World Development Indicators, 2003*; and Thomson Financial Datastream.

a Weighted averages for G-7 and emerging markets (Argentina, Brazil, Chile, Czech Republic, Hungary, Malaysia, Mexico, Peru, Poland, the Republic of Korea, Russian Federation, Singapore, Taiwan Province of China, and Thailand).

tremely high yields in some of these countries (e.g. Brazil) have been attracting a certain amount of short-term capital to the region.

Finally, financial crises in many developing countries have prompted governments to strengthen scrutiny of their financial systems with a view to reducing their vulnerability to a reversal of capital flows. Many countries in East Asia and elsewhere have tightened their regulation and supervision of the banking system to prevent excessive risk-taking. This has included a stricter application of certain prudential measures, such as capital requirements, and more effective restrictions on open foreign-exchange positions. Tightened financial oversight, together with reduced profitability and increased currency risks of arbitrage-related flows, has certainly played a role in checking short-term speculative flows into emerging-market economies in recent years.

However, there has also been considerable diversity among developing countries regarding the causes and effects of private capital flows, as well as their volume and composition. Latin America has seen a significant change of fortune in terms of its risk profile and the volume of private capital inflows. It received virtually no net inflows of private capital in 2002 after being the largest recipient the previous year. International bond issues by Latin American countries were halved in 2002 compared to 2001, and their spreads, which had risen sharply, first with the Argentine default and then with political uncertainties in Brazil, declined considerably in the more recent period, reaching very low levels for

a few countries, including Mexico. However, they remained extremely high for Argentina, Brazil and Venezuela (fig. 2.1). The downward trend in net portfolio inflows that started after 1997 continued unabated, with a net repatriation of such investment for the first time in 2002. Net inflows of FDI fell to almost half the level reached in 2001, after having remained relatively stable at over $50 billion during the previous five years.

Although net capital inflows to the developing countries increased, net resource flows were negative.

In Latin America, with the exception of a few countries, recent trends in international capital flows and resource transfers are reminiscent of the conditions prevailing during the debt crisis of the 1980s. In 2002, the region as a whole combined a contraction in output with a trade surplus that was generated entirely through import compression brought about by a fall in domestic absorption; exports of goods and services remained unchanged from the level of the previous year, following a decline between 2000 and 2001 (IMF, 2003, table 31). However, the current account was still in deficit, as net payments on foreign investment income exceeded the trade surplus. Since net private inflows and changes in reserves were negligible, a large proportion of official inflows, in addition to the trade surplus, was used to finance net transfers to private investors abroad in the order of $30 billion in 2002 (table 2.2).[2] In other words, as in the 1980s, resource transfers from the region were the result of reduced private capital inflows and were accompanied by tightened balance-of-payments constraints, reduced growth, and increased external indebtedness to official creditors.

The net transfer of financial resources from developing countries reached an unprecedented $192 billion in 2002.

The picture is quite different in Asia, which received a significant amount of private capital in 2002. Indeed, at about $70 billion, this was more than four times the level of the previous year. Net private capital inflows to India and China, amounting to an estimated $59 billion, accounted for more than four-fifths of the total inflows to the region. This included a surge in FDI to China that was attracted, as anticipated in *TDR 2002*, by the country's accession to the World Trade Organization (WTO). The first-tier NIEs (excluding Hong Kong, China) received $16 billion while net private inflows to the rest of Asia were negative.

Unlike Latin America, the Asian economies generated large current-account surpluses through a rapid expansion of exports. The total current-account surplus in Asia exceeded $100 billion, with China and India together accounting for some $28 billion and the first-tier NIEs (excluding Hong Kong, China) for $51 billion. Since net official inflows to the region were negative on account of payments to the IMF, net private capital inflows were, in effect, used, together with the current-account surpluses, to pay off official creditors and to add to international reserves, at an unprecedented amount of $167 billion; China and India accounted for around $94 billion and the first-tier NIEs for $55 billion. In China and India reserve accumulation was mainly from net capital inflows, while in the first-tier NIEs it was largely from current-account surpluses. In other words, unlike the situation in Latin America, the net transfer of financial resources from East and South Asia reported in table 2.2. was associated with a net acquisition of assets abroad rather than increased indebtedness.

In Asia, notably among the NIEs, recent changes in the volume and composition of private capital inflows reflect as much the behaviour and choices of the recipient economies as the risk-return assessment of international investors. This is because their strong balance-of-payments position has precluded the need for foreign capital for balance-of-payments purposes. In this context it should be noted that the figures on net private capital inflows in table 2.1 are reported on a balance-of-payments basis, including external capital transactions by both residents and non-residents. Given that the capital-account regimes in the region contain relatively few restrictions on FDI inflows and portfolio in-

vestment by non-residents in domestic financial markets, such components of private capital inflows are largely autonomous and reflect the risk-return assessment of investors. However, a number of countries in the region have also become exporters of FDI, and such outflows are netted out with non-resident inflows in table 2.1. Borrower behaviour is equally, if not more, important for net debt-creating flows, including international bond issues and bank lending. In recent years, many of the East Asian economies which have enjoyed high sovereign ratings and low spreads have done without international bond markets in view of their comfortable payments positions. Instead, they have chosen to pay off to international banks the debt that they had inherited from rapid borrowing in the period leading up to the 1997 crisis. Similarly, many corporate borrowers have opted for local currency loans and domestic bonds, rather than borrowing in foreign currency, even though they have had access to international markets.

The situation in the transition economies taken together was similar to that in the East Asian economies. Increased inflows of private capital in the form of FDI and current-account surpluses, in the context of relatively rapid growth, helped to add significantly to their international reserves and improve their net foreign asset positions. However, there were considerable variations within this group. While smaller countries ran relatively high current-account deficits financed by net private capital inflows, the Russian Federation enjoyed an improvement in its current account thanks to rising oil revenues. This led to an upgrading of its credit rating and to a reduction of its spreads, thus improving significantly the country's access to international bond markets.

Sub-Saharan Africa, including South Africa, saw a relatively large increase in its current-account deficit in 2002. While both net private and official capital inflows were positive, they fell short of the current-account deficit. As a result, the region suffered a sizeable decline in its international reserves. Countries in the Middle East, as well as Turkey, experienced net private capital outflows on account of withdrawals of portfolio investment and declines in international banks' exposure to the region; these were not compensated by the moderate inflow of FDI. The region as a whole generated a current-account surplus, but the underlying factors varied across countries. The oil-exporting countries in the Middle East saw considerable improvements in their trade and current-account balances as a result of higher oil prices and export revenues, while in Turkey, such improvements occurred in much the same way as in debt-stricken Latin American countries. The breakdown of the Turkish exchange-rate-based stabilization programme in February 2001, and the consequent financial crisis, plunged the economy into a deep recession, leading to massive cuts in imports. There was a sharp rise in spreads on Turkish bonds and reduced access to international markets, increasing the country's reliance on IMF financing (Akyüz and Boratav, 2003).

In Latin America, recent trends in international capital flows and resource transfers are reminiscent of the conditions prevailing during the debt crisis of the 1980s.

Therefore, while the past couple of years have seen a significant deterioration in global financial conditions as a whole, its effects on developing and transition economies have varied considerably depending on their real economic performance, particularly with respect to trade, and their degree of indebtedness. The international financial markets have continued to differentiate between emerging markets with respect to risks and returns. This is clearly seen in the large differences in the risk spreads of different emerging-market economies as well as in their degree of access to international capital markets. Many economies in East Asia that have succeeded in combining expansion of economic activity with strong payments positions have not needed foreign capital to sustain economic growth, and it is precisely these countries that have attracted relatively large amounts of private capital because of their favourable risk-return profiles. However, while receiving sizeable inflows of private capital, many of these countries have improved their net external asset positions thanks to their large current-account surpluses. By contrast, most Latin American countries with weak trade and growth

performance and high external-debt burdens have failed to receive sufficient amounts of private capital to meet their needs for imports and payments of foreign investment income. As a result, they have been forced to cut economic growth and imports, rely on official flows, or use their foreign-exchange reserves in order to balance their external accounts.

B. Prospects for capital flows to developing countries: a historical perspective

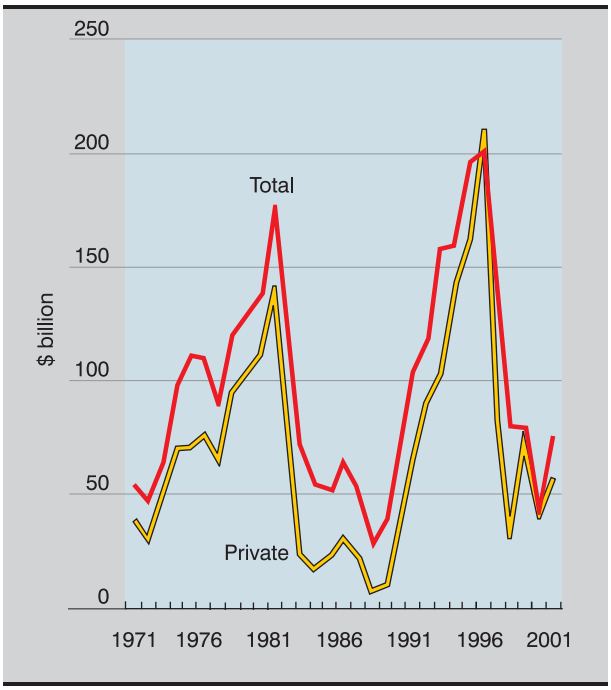
Short-term prospects for capital flows to developing countries reflect a number of positive and negative developments, apparent since the second half of 2002. For many developing countries, which had previously faced stringent external financial conditions, spreads started to decline, in some cases sharply, beginning in the second half of 2002. Recent economic and political developments in Argentina, Brazil and Turkey have helped restore investor confidence from the low levels observed throughout 2001–2002, reflected not only in reduced bond spreads, but also in declines in their domestic interest rates and a rebound in their currencies. Credit ratings have also been upgraded for many other emerging markets, including Mexico, the Republic of Korea and the Russian Federation, with the former two countries now enjoying investment grade status.

However, these improvements in the risk-return profiles of emerging markets need to be weighed against a number of adverse developments that became apparent in early 2003. First, as discussed in the previous chapter, recovery in the industrial countries has been delayed, with attendant consequences for export earnings and payments of the developing countries, including East Asian economies that are highly dependent on developed-country markets. Second, the gyrations in currency markets – notably the sharp rise of the euro against the dollar and yen – add to uncertainties and tend to encourage flight to liquidity, as do political uncertainties in the Middle East. Finally, the spread of the Severe Acute Respiratory Syndrome (SARS) has been causing disruptions to international movements of goods and natural persons, particularly in East Asia.

Perhaps a more fundamental question is to what extent recent declines in capital flows to developing countries constitute a cyclical downturn, which is expected to be followed by a strong rebound, similar to the situation after the previous cycle that started in the early 1970s. Indeed, from a longer-term perspective, capital flows to developing countries appear to be at the end of a second 10-year cycle of expansion and contraction: the first beginning in the early 1970s and ending with the debt crisis, and the second beginning in the early 1990s and ending with the recent slowdown (fig. 2.3). It appears that, although the two periods differ in the nature and composition of capital flows, they are similar in terms of cumulative net inflows to emerging markets: from 1974 to 1981 cumulative net inflows in constant (2000) dollars amounted to $1.155 billion com-

Figure 2.3

REAL NET CAPITAL INFLOWS TO DEVELOPING COUNTRIES, 1971–2001



Source: IMF, *World Economic Outlook*, 2003 database; World Bank, *Global Development Finance, 2003*.
Note: Real flows are nominal flows adjusted for changes in the United States GDP deflator.

pared to $1.243 billion between 1992 and 2001. The general similarity also holds on a regional basis for Latin America (fig. 2.4), where cumulative net inflows amounted to $523 billion in the first cycle and $683 billion in the second.

However, a detailed examination of the conditions that produced these two surges in capital flows to emerging markets suggests that they are not part of a recurrent cyclical pattern. Rather, they appear to be more the result of ad hoc policies introduced in response to specific global circumstances, accompanied by the deregulation of financial markets and liberalization of international financial flows. Moreover, these post-war cycles are not the first episodes of rapid expansion and contraction of capital flows to developing countries. Indeed, they have occurred with varying frequency and under different circumstances ever since the new States in Latin America emerged from colonial rule in the first quarter of the 19th century. While surges in capital flows started for different reasons in different episodes, more often than not these cycles ended in financial distress, as had already been noted in the inter-war years:

> The fiscal history of Latin America ... is replete with instances of governmental defaults. Borrowing and default follow each other with almost perfect regularity. When payment is resumed, the past is easily forgotten and a new borrowing orgy ensues. This process started at the beginning of the past century and has continued down to the present day. (Winkler, 1933: 41)

As discussed in some detail in chapter VI, independence for the Spanish colonies in Latin America around 1820 was followed by a rapid increase in capital inflows, which resulted in widespread defaults about 10 years later and in the disappearance of international lending to the region until around 1850 (see chap. VI, box 6.1). During the remainder of the 19th century, capital flows to the region were sustained, but they were punctuated by frequent defaults by individual country borrowers. The excesses surrounding the United States stock market boom of the "roaring twenties" also spilled over to Latin America. Loans made to the region between 1924 and 1929 reached $1.2 billion, as United States bankers started to compete for attractive underwriting fees on new loans, at times misinforming lenders of the creditworthiness of the borrowers (Winkler, 1933: 48). However, the fall-off in exports produced by the Great Depression, coupled with a cutback in international lending, created difficulties in servicing the debt. At the end of 1933, delinquent Latin American bonds amounted to about $3 billion, or about 60 per cent of the non-Russian delinquent bonds on the New York market.[3] By 1935, there were defaults on 85 per cent of Latin American dollar bonds and over 50 per cent of European-currency bonds (United Nations, 1955).[4] Private lending totally dried out well into the 1950s (fig. 2.4).

The inter-war experience led to a change in thinking on the role of international capital movements in the global financial architecture. In the words of the United States Secretary of the Treas-

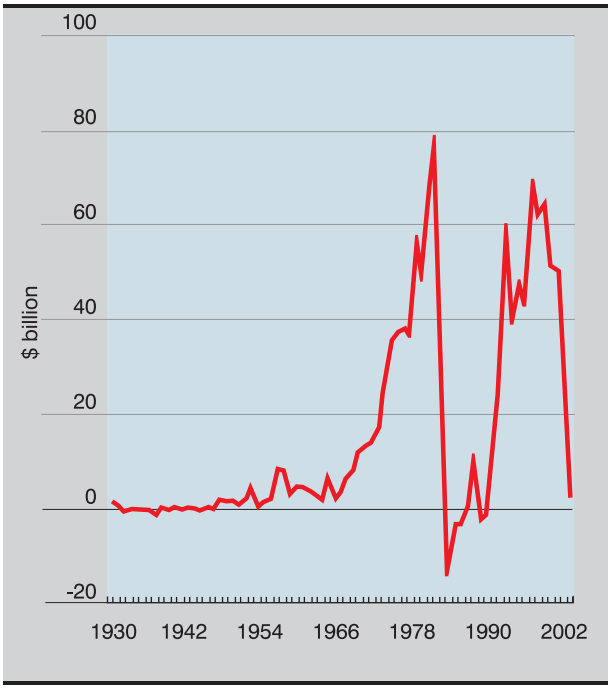
ury, the architects of the post-war financial system intended "to drive … the usurious money lenders from the temple of international finance" in order to make the system respond to the needs and interests of "sovereign governments, and not of private financial interests".[5] Until the beginning of the 1970s, virtually all lending to developing countries, and particularly to Latin America, was by official bilateral and multilateral creditors, while private flows consisted mainly of FDI by United States companies (fig. 2.5).

The picture had already started to change in the 1960s in conjunction with the rapid expansion of the Eurodollar market, driven by mounting United States external deficits and deregulation and liberalization of United States financial markets. In the late 1960s, several Latin American countries had relaxed their controls on foreign currency borrowing by their domestic banks and eased entry conditions to their markets for international banks from industrialized countries. The surpluses of oil exporters vis-à-vis industrial countries in the early 1970s gave new momentum to international capital movements, expanding further the Eurodollar market and leading to the return of private international lending to Latin America (fig. 2.4 and 2.5). Much of this was in the form of syndicated bank lending, mainly to private companies and public enterprises involved in industrialization programmes. In comparison, FDI flows were small and portfolio flows almost non-existent.[6]

The Latin American economies seemed particularly attractive to international lenders because they had been able to sustain high rates of growth throughout the 1950s and 1960s, and they were keen to maintain growth by making policy adjustments to offset the negative impact of the rise in petroleum prices on their external balances.[7] The process was generally encouraged by the Bretton Woods institutions and some of the major creditor countries, notably the United States, as a way of avoiding a collapse of global demand. However, the size of inflows was determined not so much by the region's external financing requirements as by the volume of rapidly expanding international liquidity associated with rising petroleum surpluses and a growing United States current-account deficit.[8] Thus the inflows were historically large, and in many cases exceeded the absorptive capacity of the recipient economies. The Asian economies were less involved in this initial expansion of international lending (fig. 2.6), although some, such as the Republic of Korea, were able to sustain growth by borrowing abroad as well as adopting measures to boost exports.

Figure 2.4

LATIN AMERICA: REAL NET PRIVATE CAPITAL INFLOWS, 1930–2002

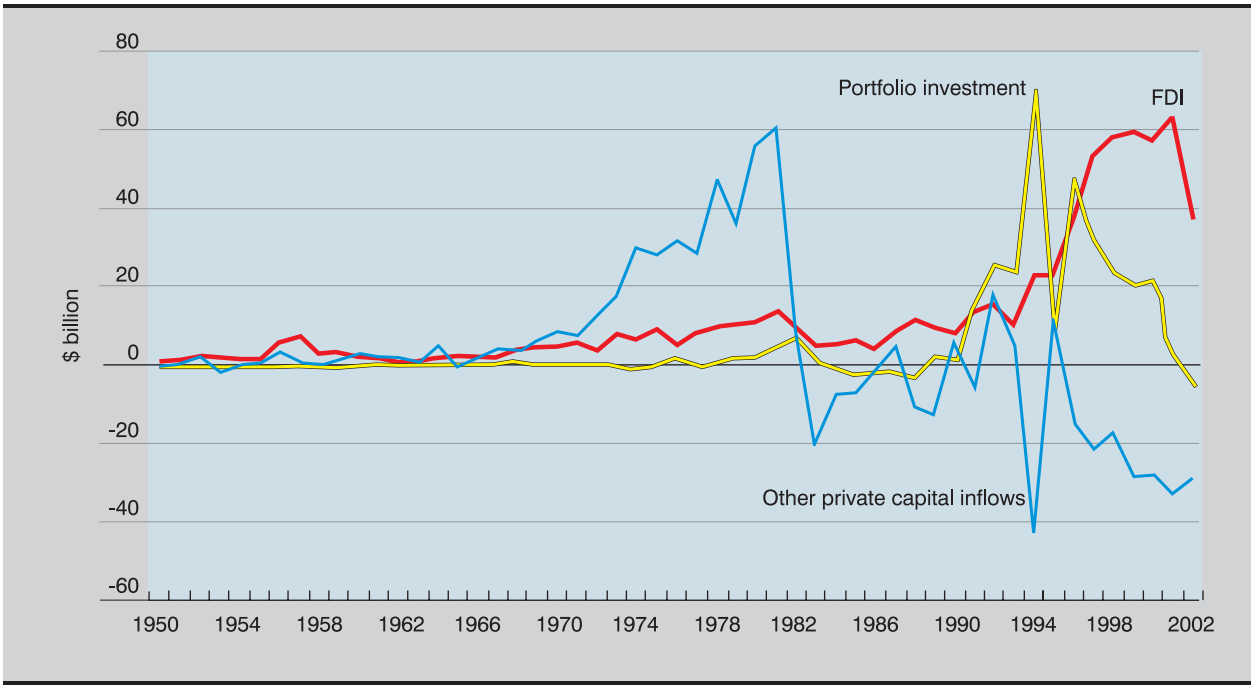


Source: IMF, *World Economic Outlook*, 2003 database.
Note: Real flows are nominal flows adjusted for changes in the United States GDP deflator.

This initial period of large private capital inflows marked the beginning of a major shift from multilateral to private lending for developing countries facing payments difficulties. Although most Latin American borrowers had initiated successful adjustments, private finance allowed them greater policy space than did multilateral lending with conditionalities. In any case, the latter had been limited by the resources and policies of the international financial institutions. Hence, international liquidity creation came to depend increasingly on the lending decisions of globally active commercial banks, based on their judge-

Figure 2.5

LATIN AMERICA: REAL NET PRIVATE CAPITAL INFLOWS, BY TYPE, 1950–2002



Source: ECLAC, Statistical Division; IMF, *World Economic Outlook*, 2003 database; and World Bank, *Global Development Finance, 2003.*

Note: Real flows are nominal flows adjusted for changes in the United States GDP deflator. The item "other private capital inflows" comprises other long- and short-term net investment flows, including private borrowing and residuals not covered under other items; due to limitations in data coverage such residuals may also include some net official flows.

ments concerning the risk-return profiles of borrowers, rather than on the amount of liquidity required to support adjustment policies in individual countries or to ensure the stability of international payments.

This shift from official to private financing opened the way for boom-bust cycles in international lending: while surges in capital flows often allowed adjustment to be postponed, rapid reversals, unrelated to the underlying fundamentals of the recipients, required severe adjustments. The sudden change in United States monetary policy at the end of the 1970s to bring inflation under control was just such an external trigger that eventually caused a sharp discontinuity in liquidity flows, giving rise to the debt crisis and to negative net resource transfers from Latin America (fig. 2.7).[9] Although this was not the first time since the 1930s that a negative transfer or resources occurred, its size in the 1980s was unprecedented.

It is not clear for how long negative transfers of this magnitude could have continued before the depression in economic activity needed to generate them would have led to social unrest and political instability. As default would have been politically unacceptable to creditors and full repayment politically unacceptable to debtors, a third option was required. This took the form of the 1989 Brady Plan, which provided an elaborate scheme that allowed debtor countries to refinance their debt to commercial banks by issuing "Brady Bonds" in international markets. The shift in the international approach to the debt problem encouraged a change in domestic policy in the major borrowing countries to make them more

"investor friendly". This involved bringing rapid inflation – which had plagued the region in the 1980s – to a swift halt, opening up domestic markets to foreign competition, privatizing public enterprises and liberalizing the financial system. The initial effect of the Brady Plan on the composition of flows was the replacement of syndicated bank loans by portfolio flows (fig. 2.5). However, with increased sales of public assets to foreigners and the greater participation of developing countries in international production networks, by the second half of the 1990s FDI had replaced portfolio and bank flows as the main source of external capital.

Asia started receiving greater inflows during the late 1980s (fig. 2.6 and 2.8), as the rapidly expanding first- and second-tier NIEs offered attractive alternatives to the stagnating Latin American economies. Nonetheless, portfolio inflows in Asia were still less than half those in Latin America ($124 billion and $270 billion respectively between 1991–1998), as the Brady initiative did not have the same impact on investment in East Asia as in Latin America.

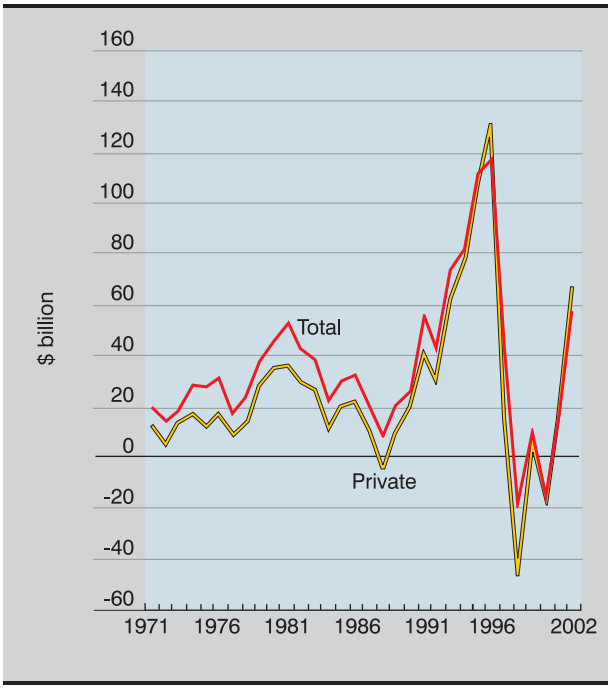
As a result of the success of the Brady Plan and the stabilization policies that brought rapid reductions in inflation, private inflows quickly returned to the levels of their earlier peaks. Just as in the earlier period, an unexpected increase in United States interest rates along with political uncertainty produced another financial crisis, this time in Mexico in 1994, that spread to Argentina and reduced inflows by more than half. This provided an additional impetus to investment in East Asia, although equity markets there had already peaked and there was evidence of slower growth and weaker macroeconomic fundamentals. In addition, as a result of large interest-rate differentials between developing East Asia on the one hand, and Japan and the United States on the other, international banks, that had cut lending to emerging markets since the 1980s, started to intermediate between low borrowing rates in the United States and Japan and higher interest rates in the rapidly growing East Asian emerging-market economies. This led to a rapid accumulation of short-term liabilities in these economies (fig. 2.8).

Despite their better macroeconomic fundamentals, the rapid surge in lending produced similar results in the economies of East Asia as it had in Latin America some 15 years earlier. The second upswing in capital flows was brought to an end in 1997–1998 by a reversal of bank flows and portfolio investment, and led to the emergence of negative net transfers similar to those experienced in Latin America in the 1980s. More recently, as noted above, the region has had record current-account surpluses, used to pay off outstanding bank loans and build large foreign-exchange reserves. There has also been a change in the composition of flows, with a larger share of direct investment, including mergers and acquisitions.

Thus the two cycles of rapid expansion of international capital flows met very specific policy needs: the first, to recycle petrodollars in order to avoid a collapse of global demand; and the second, to relieve United States banks of non-

Figure 2.6

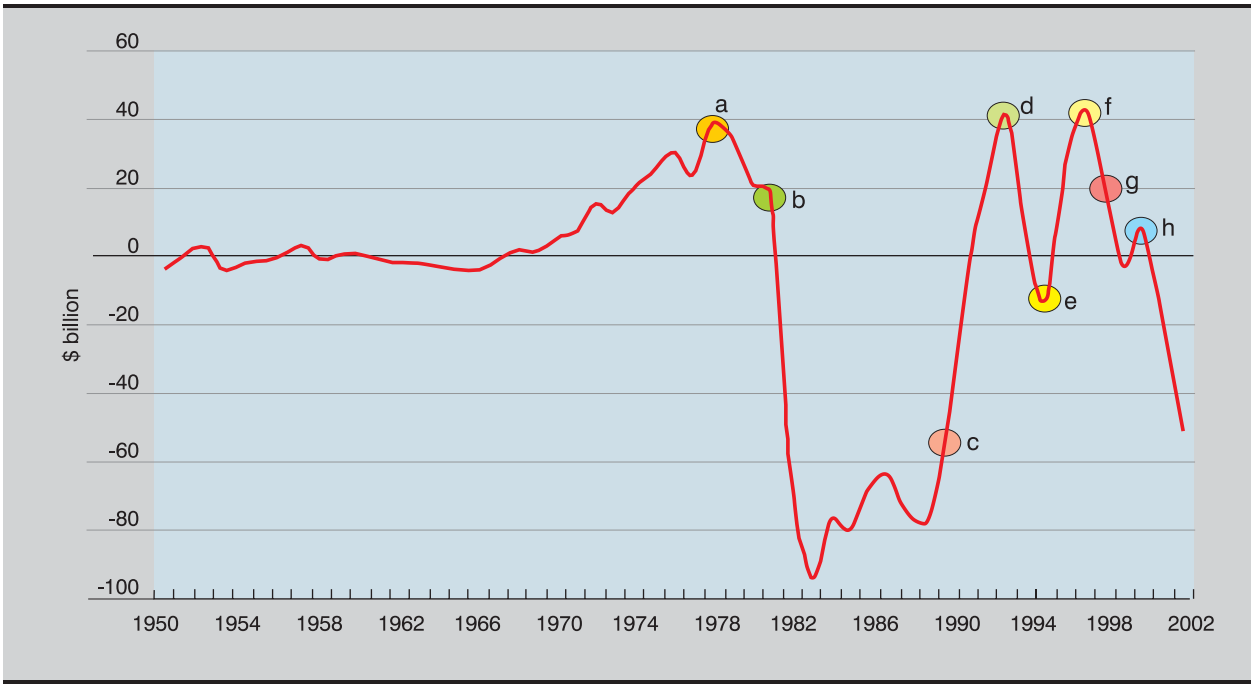
DEVELOPING ASIA: REAL NET CAPITAL INFLOWS, 1971–2002



Source: IMF, *World Economic Outlook*, 2003 database.
Note: Real flows are nominal flows adjusted for changes in the United States GDP deflator.

Figure 2.7

LATIN AMERICA: REAL NET TRANSFER OF RESOURCES, 1950–2002



Source: ECLAC, Statistical Division.

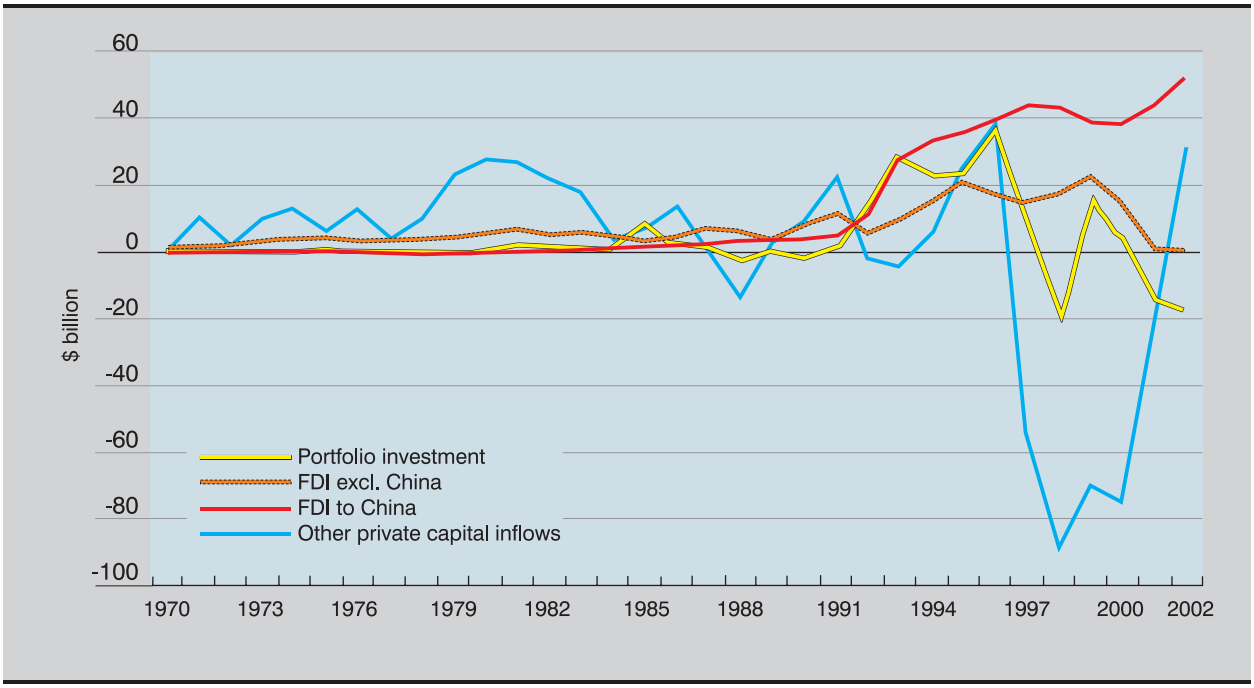
Note: Excluding net transfers with the IMF. Real transfers are nominal transfers adjusted for changes in the United States GDP deflator.
a: Sharp rise in dollar interest rates.
b: Mexican debt crisis 1982.
c: Introduction of the Brady Plan; reduction of dollar interest rates.
d: Mexican financial crisis 1994.
e: "Real Plan" in Brazil.
f: East Asian financial crisis 1997.
g: Russian and Brazilian financial crisis 1998–1999.
h: Beginning of the Argentinean crisis.

performing loans, which had resulted from the previous cycle in a way that would avert economic stagnation or political disruption in Latin America. Both surges were driven by special policy measures and financing vehicles. The first boom was made possible by financial deregulation in the industrialized countries and the rapid growth of Eurodollar markets. The second boom was greatly helped by the success of the Brady Plan and progressive liberalization and privatization in developing countries, which gave rise to a reflexive, self-reinforcing, but unsustainable process.[10]

That these cycles were not the result of autonomous market forces responding to long-term fundamentals in the recipient countries, and that they both ended with financial crises, widespread debt servicing difficulties and defaults, suggests that the magnitude and direction of the flows that were observed in the 1970s and 1990s were due more to special factors and policies that motivated behaviour on both the supply and the demand side. As such they are not likely to return as part of any natural cycle of free international capital markets. On the other hand, the history of international capital flows in periods of minimum government intervention and control suggests that financial markets do have a tendency to produce boom-bust cycles in individual economies, with periodic defaults as the natural outcome. Thus, over the

Figure 2.8

DEVELOPING ASIA: REAL NET PRIVATE CAPITAL INFLOWS, BY TYPE, 1970–2002



Source: IMF, *World Economic Outlook*, 2003 database; and World Bank, *Global Development Finance, 2003*.
Note: Real flows are nominal flows adjusted for changes in the United States GDP deflator. The item "other private capital inflows" comprises other long- and short-term net investment flows, including private borrowing and residuals not covered under other items; due to limitations in data coverage such residuals may also include some net official flows.

medium term, capital flows to developing countries may recover, but they are unlikely to reach the peaks experienced at the beginning of the 1980s and the mid-1990s, and they may not necessarily take the same form or go to the same destinations. ■

The magnitude and direction of the capital flows in the 1970s and 1990s were due more to special factors and policies and are not likely to return as part of any "natural" cycle.

Notes

1 The term emerging-market economies refers to Argentina, Brazil, Chile, Mexico, Peru, the Republic of Korea, Malaysia, Singapore, Taiwan Province of China, Thailand, the Czech Republic, Hungary, Poland and the Russian Federation. The figures above are weighted averages. The difference is even smaller for unweighted average rates.

2 There were also payments of interest on official debt, but these were small compared to payments on foreign investment income.

3 Winkler, 1933: 204–205. Russia accounted for $17 billion in defaulted bonds.

4 Maddison (1985) gives delinquency rates for 1935 for individual countries, which were 100 per cent for Chile, Colombia and Mexico, 93.2 per cent for Brazil, 62.9 per cent for Cuba, 87.1 per cent for the rest of Latin America and 23.6 per cent for Argentina.

5 Cited in Gardner, 1969: 76.

6 For a detailed account of the growth of private capital flows to developing countries from the 1950s onwards until the debt crisis, see *TDR 1984*, chap. IV.

7 See Cohen and Basagni (1981) for details of the adjustment policies implemented in various Latin American countries in response to the rise in petroleum prices.

8 By taking the oil surpluses in the form of Eurodollar deposits it was possible for the international banking system to create liquidity far in excess of the surplus created by the oil price increases.

9 For a detailed analysis of the events leading to the 1980s debt crisis, see *TDR 1985*, Part Two.

10 Soros (1987) identified this process as supporting the overvaluation of the dollar in the first half of the 1980s, and the experience of countries such as Argentina and Brazil seems very similar in terms of the process he described. Just as the overvaluation of the dollar in the 1980s was justified on the basis of increased returns resulting from supply-side policies in the United States, in Latin America it was widely maintained that capital inflows and currency overvaluations were, in reality, only a reflection of greater efficiency resulting from the market-based reforms.

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Chapter III

TRADE FLOWS AND BALANCES

A. Recent trends

World trade expanded steadily throughout the 1990s, at a rate of more than 6 per cent per annum, exceeding growth in world output by a wide margin. This expansion continued at an accelerated pace in 2000, with growth in the volume of world trade reaching double-digit figures (table 3.1). Trade in manufactures, notably in information technology (IT) products associated with the "new economy" (see *TDR 2002*, Part One) was the main factor behind this expansion. However, the subsequent bursting of the IT bubble and the slowdown of growth in world output were accompanied by an even more marked deceleration of growth in international trade in 2001. This was compounded by the events of 11 September and the subsequent "fight against terrorism". Trade in services, particularly tourism and air transport, was hurt by the effects of an increased perception of insecurity; tightened administrative and security procedures and inspection of shipments at ports and airports slowed down the movement of goods as well as people. Not only did growth in world trade fall behind that of world output for the first time since the 1980–1982 recession, but there was also an absolute decline in trade volumes for the first time since that period. This was followed by a modest recovery in 2002. Although the growth rate of the volume of world trade again exceeded that of world output, the margin was much smaller than it had been in the previous 10 years.

While almost all countries have seen ups and downs in the growth of their exports and imports over the past three years, there has been considerable diversity across regions, particularly since the downturn of the world economy in 2001. The strong growth in world trade during 2000 was shared by almost all developing regions, with growth in both imports and exports reaching double-digit figures. They grew particularly strongly in the United States, the EU and Japan. The downturn beginning in 2001 affected some countries and regions much more than others, and changes in imports and exports also varied considerably. United States exports fell for two successive years, due partly to the appreciation of the dollar, and partly to stagnation or recession in its main in-

Table 3.1

EXPORT AND IMPORT VOLUMES, BY REGION AND ECONOMIC GROUPING, 2000–2002

(Percentage change over previous year)

	Export volume			Import volume		
Region/economy	*2000*	*2001*	*2002*	*2000*	*2001*	*2002*
World	10.8	-0.9	2.0	10.2	-1.0	1.6
Developed economies	9.2	-1.2	0.1	6.4	-1.6	0.0
of which:						
Japan	9.0	-10.9	9.6	11.1	-1.9	1.6
United States	11.3	-5.9	-3.6	13.5	-3.3	3.9
Western Europe	10.0	2.1	0.0	2.4	0.0	0.0
Developing economies	13.9	-1.5	5.8	19.6	-1.1	4.4
of which:						
Africa	2.6	2.3	2.6	18.2	-2.2	2.6
Latin America	9.7	-0.1	0.7	4.1	2.7	-8.3
West Asia	9.7	3.2	-1.9	14.4	4.6	4.8
East and South Asia	15.4	-5.4	4.8	19.4	-7.4	4.0
China	25.8	7.6	23.6	52.6	12.3	20.1
Transition economies	13.0	8.7	7.8	15.0	12.7	9.3

Source: UN/DESA, based on data of United Nations Statistics Division, ECE, ECLAC, and IMF; and *OECD Economic Outlook No. 73*, June 2003.

dustrialized trading partners and in Latin America. However, United States imports rose by nearly 4 per cent in 2002 after declining by some 3 per cent in the previous year. Given that the United States is the largest importing economy, accounting for one fifth of world merchandise imports, this was the "largest single element responsible for trade recovery" in 2002, "equivalent to one half of the global trade expansion" (WTO, 2003: 6).

Export and import volumes have been sluggish in the EU in the past two years. This is not surprising in view of slow growth in the region, since intraregional trade accounts for two-thirds of the foreign trade of EU countries. In 2002 Japan's imports rose by 1.6 per cent after falling the previous year, while its exports recovered sharply from their decline in 2001 to reach the level attained in 2000. This was due to the depreciation of the yen against the dollar and to a 20-per-cent surge in exports to China.

In Asia, several countries such as Malaysia, Thailand and the Philippines, which had achieved double-digit rates of export growth in the 1990s, saw their export volumes fall sharply in 2001 because of reduced demand for IT products. On the other hand, countries with a more diversified export structure such as China, India and the Republic of Korea bucked this trend, expanding their exports despite the generalized downturn. East and South Asia became the growth centres of world trade in 2002. These subregions benefited from strong output growth and a worldwide recovery of the IT sector, as well as from growth in regional trade. In China the growth rate of exports tripled in 2002, matched by the growth of its imports following the country's accession to the WTO and

its consequent absorption of large amounts of imports from the developing economies of the region. Apart from India and China, the other developing countries of the region registered growth in export and import volumes of about 5 per cent and maintained comfortable trade balances.

In Latin America, after having achieved double-digit growth rates in exports and imports in 2000, the economic situation deteriorated rapidly in 2002, when the region experienced one of its worst years since the debt crisis. In combination with declining capital inflows and foreign-exchange reserves, imports fell sharply, by more than 8 per cent for the region as a whole. With the deepening of the financial crisis, imports in Argentina collapsed to less than half their 2001 level. Exports from the region held up slightly, benefiting partly from their currency declines against the dollar and a relatively strong import demand from the United States, which absorbs some 60 per cent of their exports. The disparate movements in exports and imports meant a swing in the region's trade balance by about $25 billion, from a deficit in 2001 to a surplus in 2002.

While almost all countries have seen ups and downs in the growth of their exports and imports over the past three years, there has been considerable diversity across regions.

In Africa, the volume of both imports and exports rose by 2.6 per cent despite weak demand from Western Europe, Africa's main trading partner. The region as a whole experienced a deterioration in its terms of trade for a second consecutive year, with import growth exceeding export growth in value terms by a wide margin. According to IMF data, the terms of trade of sub-Saharan Africa recovered moderately in 2002 on account of an upturn in prices of non-fuel commodities exported by the region, but they could not make up for the losses of the previous year (IMF, 2003, table 25). Imports expanded faster than exports in both volume and value terms.

The transition economies bucked the downturn in world trade in 2001, achieving strong growth in exports and imports. In 2002, both export and import growth decelerated, but still exceeded the world averages by a wide margin. Many of the candidates for EU membership have been integrating more closely into the single market in the process of accession. However, due to weakening growth in the EU, their exports started to slow down in the latter part of 2002. Most of the countries belonging to the Commonwealth of Independent States (CIS), notably the Russian Federation, saw increased export earnings in 2002, thanks to rising prices and volumes of oil exports, which account for a large proportion of domestic income in these countries. However, non-oil trade deficits have been rising in most countries in the region, increasing their vulnerability to a fall in oil prices.

Trade in services also expanded in 2002. Of special importance to developing countries are earnings from tourism, which constitute a major source of income for countries such as Malaysia and Thailand (6 to 7 per cent of GDP). After decades of uninterrupted growth and a record number of almost 700 million arrivals in 2000, the events of 11 September 2001 triggered the most severe crisis in tourism worldwide since the end of the Second World War. The decline in worldwide tourist arrivals was particularly marked in the last four months of that year. Most commentators expected tourism to decline further with a serious impact on some developing countries and regions. However, despite continued terrorist attacks (such as in Bali in October 2002), international arrivals increased by 3 per cent in 2002. In some regions, tourism grew surprisingly well. The Asia-Pacific region experienced an 8 per cent increase in arrivals, while the Middle East saw a rise of 11 per cent, despite political tensions. Sub-Saharan Africa and Europe were able to hold on to their market shares but the Americas and North Africa were negatively affected. According to the latest projections by the World Tourism Organization, international arrivals and earnings from tourism are expected to rise in 2003. However, the rapid spread of SARS has already had a negative impact on international travel to the economies affected. Presently it remains unclear how and when the spread of SARS can be contained and to what extent it will affect tourism.

Movements in prices of internationally traded products have reflected the impact of changes in the pace of economic growth, supply conditions, and swings in the exchange rates of major currencies. The unit value index of manufactured goods exported by developed countries reached a peak in the mid-1990s, but since then it has been declining. While earlier downward trends had reflected an increase in productivity in rapidly expanding sectors such as office machines and telecommunications equipment, more recently they were influenced first by the East Asian crisis and then by the global slowdown. In the past two years, the decline has been sharper in prices expressed in euros than in dollars due to the appreciation of the latter vis-à-vis the former. However, this is likely to be reversed with the recent sharp depreciation of the dollar.

The index of primary commodities of export interest to developing countries also continued its overall downward trend after reaching a peak in the mid-1990s. In 2002, prices declined for a large number of commodities, mainly as a consequence of the weakness in world economic activity. Annual average non-oil commodity prices fell by 2 per cent, with considerable variations across different commodity groups. Although prices for some commodities, particularly agricultural raw materials and metals and minerals, improved slightly at the beginning of the year, due to optimistic growth forecasts, this tendency was partially reversed as a result of the uncertainties and risks that emerged in the second half of the year. The renewed slowdown of growth in the major developed countries resulted in faltering demand for most commodities and falling prices. However, the drop in commodity prices in 2002 was generally less pronounced than in 2001. In addition, for some commodities, such as cocoa, grains, vegetable oils and seeds, and rubber, negative supply shocks actually contributed to price increases. Unlike most other primary commodities, crude oil prices stabilized in 2002 after dropping sharply the previous year (see annex for details).

B. Prospects: To what extent can trade expand faster than production?

Most forecasters are cautiously optimistic regarding short-term prospects for world trade. Current projections by the IMF estimate growth in world trade at over 4 per cent in 2003 and at 6 per cent in 2004, together with an acceleration of growth in world output (IMF, 2003, table 1.1). Trade is expected to expand much faster in the developing world than in the industrialized countries, with growth in their imports surpassing growth in exports both in volume and value terms. World Bank projections for growth in the volume of world trade show an even faster recovery, at a rate of 7 per cent in 2003 and 8 per cent in 2004 (World Bank, 2003, table 1.1).

Clearly, the evolution of world trade will depend crucially on the speed of recovery in the major industrialized countries. As discussed in chapter I, developments in the early 2003 in this respect have not been very encouraging. Without rapid recovery in the industrialized countries, it would be very difficult for the developing countries to provide a major impetus for growth in world trade. As noted above, trends in world trade

have been maintained in the new millennium both by the expansion of imports by the United States and by intraregional trade in East Asia, notably by rapidly expanding imports by China associated with its accession to the WTO. These are unlikely to persist if growth in the rest of the world – Japan and the EU, as well as developing countries in Latin America and Africa – remains sluggish. There are already signs of a slowdown of trade in East Asia, where short-term prospects depend strongly on the expansion of markets in the industrialized countries since exports from that region remain closely linked to economic activity in the industrialized countries (IMF, 2003: 35).

Trade is expected to expand much faster in the developing world than in the industrialized countries.

Significant changes can be expected in the patterns of trade and trade balances across countries in view of rapid shifts in the exchange rates of the main reserve currencies, particularly the depreciation of the dollar against the euro, as well as disparate movements of the currencies of emerging-market countries against the dollar, and, hence against each other. However, while these exchange-rate movements may bring about rapid changes in the trade of the United States with the EU, this is unlikely to be the case for its trade with East Asian countries. As discussed in chapter I, this is not only because the appreciation of the dollar is much less pronounced against the yen, but also because several economies in the region such as China, Hong Kong (China) and Malaysia continue to maintain fixed exchange rates against the dollar. Furthermore, many countries which adopted a regime of floating exchange rates after the East Asian crisis have been managing their currencies in recent months in such a way as to prevent a rapid appreciation against the dollar. This stands in sharp contrast with the recent experience of Argentina, Brazil and Turkey whose currencies have been appreciating vis-à-vis the dollar, and hence also against East Asian currencies, offsetting much of the gains in competitiveness brought about by sharp depreciations over the past two years.

Significant changes can be expected in the patterns of trade and trade balances across countries in view of rapid shifts in the exchange rates.

Over the medium term, prospects for the expansion of world trade depend not only on growth in world income, but also on a number of other factors such as the evolution of the international trading system, the pace of global integration and the level of capital flows to developing countries. As already noted, the 1990s saw a rapid expansion in world trade, which exceeded the growth of world output. In fact this occurred every year from 1985 to 2000, with the difference reaching as much as 7 percentage points in 1994, 1997 and 2000. But this was not the first period since the war when world trade grew persistently faster than world GDP; a similar episode had occurred between 1961 and 1974, followed by a decade of erratic and slower growth in world trade and GDP (fig. 3.1A). The entire post-war period has seen an upward trend in the ratio of world trade to world output, but the trend became steeper after the late 1980s. This is also true for the growth of international merchandise trade relative to growth of total world production of goods in agriculture, manufacturing and mining (fig. 3.1B).

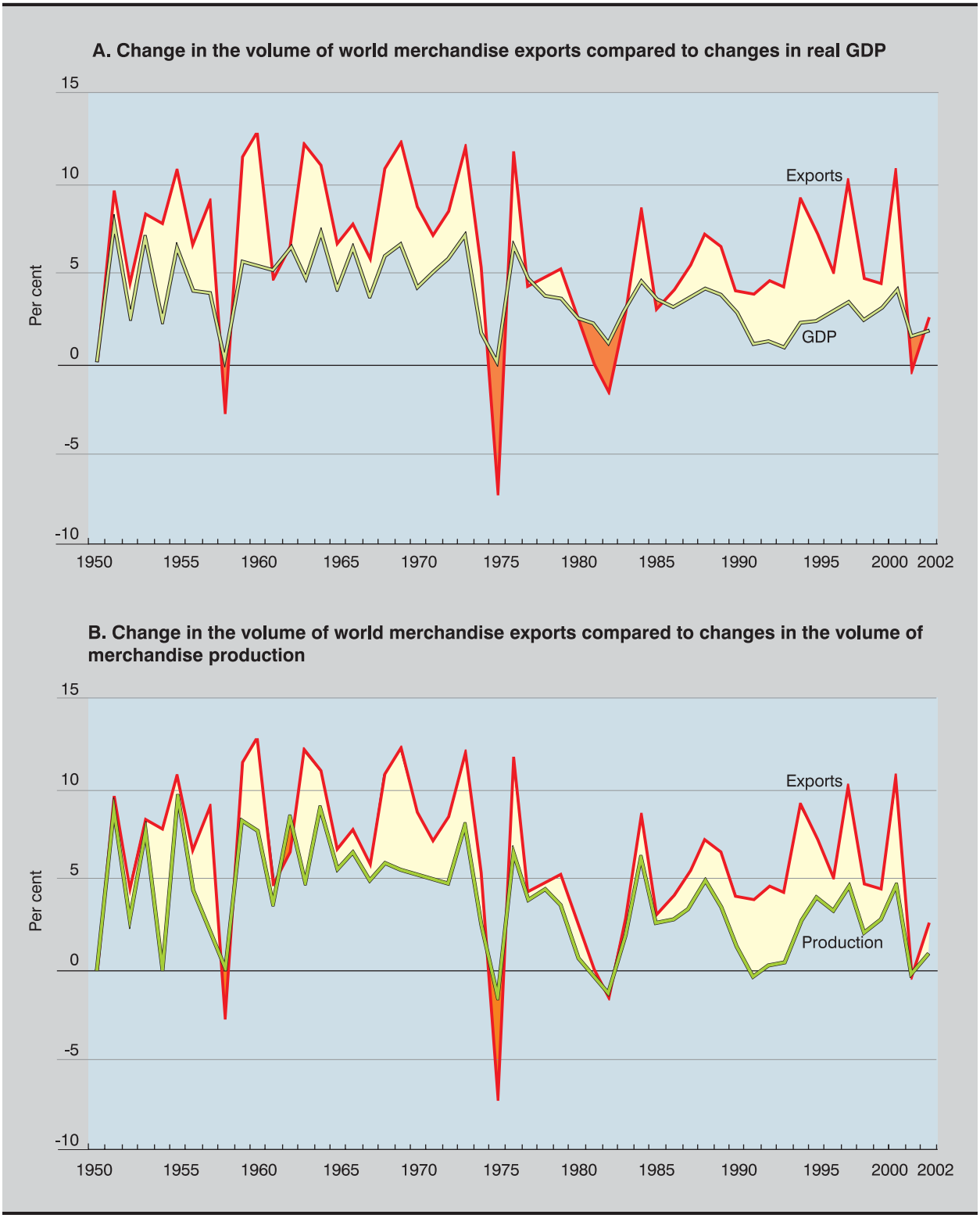
The growth of trade during the earlier period appears to have been driven by a number of structural and institutional changes, most notably in Western Europe, which accounted for two-thirds of the increase in world trade during this period. Much of this recovery reflected growing intra-European trade, particularly intra-industry trade in manufactures, which, on one estimate, accounted for three-quarters of the growth in intra-European trade in manufactures (Rayment, 1983).

The take-off of European trade in general and intra-European trade in particular in the 1960s must be seen against not only European reconstruction but also the unwinding during the 1950s of the many structural problems that had accumulated since the early 1930s. Their correction, together with new institutional arrangements designed to push forward European

Figure 3.1

CHANGES IN THE VOLUME OF WORLD MERCHANDISE EXPORTS COMPARED TO CHANGES IN GDP AND PRODUCTION, 1950–2002

(Per cent change over previous year)



Source: WTO, *International Trade Statistics, 2002.*

integration, preceded the rapid trade growth of the 1960s, much of which reflected delayed catch-up. It is notable that while intra-European trade accounted for 57 per cent of total trade by European countries in 1935, this figure had fallen to 53 per cent in 1952; by 1973, it rose to reach 70 per cent.

This process of integration was facilitated by a steady stream of measures from the late 1940s through the 1950s, which helped to erode the long-standing barriers to intra-European trade. These include: the post-war reconstruction programs themselves, assisted by Marshall Aid which was conditional on efforts to pursue European integration and to reduce trade barriers within the framework of the Organisation for European Economic Co-operation (OEEC); the establishment of European Payments Union (1951–1961), which removed currency incentives to discriminate against member countries' trade; and several rounds of tariff reductions under the auspices of the GATT (Geneva 1947, Annecy 1949, Torquay 1950/51, Geneva 1956). Following a large increase in IMF quotas in October 1958 there was a general movement towards current account convertibility of European currencies, a move accompanied in France by devaluation of the Franc and a significant liberalization of its OEEC trade. In 1960, the European Common Market (of the Six) came into effect, starting a steady process of removing tariffs and other restrictions on trade among its members and setting up a common external tariff. In the same year, the European Free Trade Association (EFTA) was created with an immediate cut of 20 per cent in tariffs on the mutual trade of the member countries in industrial products, and a new round of trade negotiations, the Dillon Round, began under the auspices of the GATT. All these developments helped to stimulate the economic recovery and to set the stage for an exceptionally rapid growth of intra-European trade, contributing to a rapid expansion of global trade in excess of world output and income.

The 1990s saw a rapid expansion in world trade, which exceeded the growth of world output.

... but this was not the first time since the 1950s that world trade grew persistently faster than world GDP.

A number of similar structural changes that occurred from the late 1980s onwards appear to account for much of this acceleration in trade relative to world GDP and merchandise production in the 1990s. Perhaps one of the most important factors was rapid liberalization by developing countries of their import regimes. Between 1990 and 2000, their exports and imports grew at annual rates of more than 9 and 8 per cent respectively, while the corresponding figures were less than 6 per cent for the industrialized countries. As a result, there was a rapid rise in the share of exports and imports in GDP in developing countries, as well as a rapid increase in the share of these countries in international trade in goods, from about 23 per cent to about 30 per cent (table 3.2).[1]

The pace of trade liberalization and integration will be an important determinant of the expansion of trade over the medium term. There is certainly scope for further liberalization of international trade. However, estimates suggest that even full liberalization would boost world trade by only 20 per cent (Hertel, 2000). Furthermore, under current circumstances the scope for liberalization is much more limited in the developing countries than in the industrialized ones. Many developing countries with relatively high tariffs in manufactures, particularly those in Latin America, Africa and South Asia, have limited potential for rapid export expansion, operate under relatively tight balance-of-payments constraints, and suffer from chronic trade deficits; their imports tend to surge relative to exports as soon as growth picks up. By contrast, most of the developing countries that have strong export performance and account for a large proportion of developing countries' share in world trade, already have low tariffs; in some cases (e.g. East Asian NIEs) their average tariffs are even lower than in the industrialized countries (*TDR 2002*, tables 4.2. and 4.3). As demonstrated in some detail in *TDR 1999* (chap. IV), the major industrialized countries have

Table 3.2

WORLD MARKET SHARES, AND GROWTH, OF EXPORTS AND IMPORTS, BY REGION, 1990–2000

(Per cent)

	Exports				*Imports*			
			Change in market share	*Average annual growth*			*Change in market share*	*Average annual growth*
	1990	*2000*	*1990–2000*	*1990–2000*	*1990*	*2000*	*1990–2000*	*1990–2000*
World	.	.	.	6.6	.	.	.	6.5
Developed economies	71.5	64.0	-7.5	5.5	72.5	67.3	-5.2	5.7
of which:								
Western Europe	45.9	37.6	-8.3	5.1	45.8	36.1	-9.7	4.2
United States	11.3	12.3	1.0	7.3	14.4	19.3	5.0	9.5
Japan	8.3	7.6	-0.7	4.1	6.5	5.8	-0.7	4.6
Developing economies	23.9	32.0	8.1	9.1	22.6	29.1	6.5	8.3
of which:								
Asia	16.9	24.2	7.3	9.5	15.9	21.1	5.2	8.2
East and South Asia	13.0	20.0	7.0	10.3	12.9	18.0	5.1	8.7
Latin America	4.2	5.6	1.4	10.2	3.7	5.9	2.2	11.4
Africa[a]	2.3	1.8	-0.5	3.5	2.4	1.6	-0.8	3.2
Sub-Saharan Africa[a]	1.2	1.0	-0.2	4.1	1.1	0.8	-0.4	2.6
Transition economies	4.6	4.0	-0.6	8.8	4.9	3.6	-1.3	8.7

Source: UNCTAD, *Handbook of Statistics, 2002* (CD-ROM).
a Excluding South Africa.

considerable scope for trade liberalization in labour-intensive manufactures, such as textiles, clothing, footwear and travel goods, which could create significant opportunities for the expansion of international trade and reshape international specialization to favour development. An UNCTAD secretariat estimation, based on conservative assumptions, showed that additional exports by developing countries of labour-intensive manufactures alone could be as high as $700 billion, or over 12 per cent of world merchandise trade.

A related factor affecting the growth prospects of world trade is capital flows to developing countries. As noted earlier, there was a rapid surge in such inflows in the 1990s, which helped many countries expand imports much faster than exports. This was particularly true for Latin America, where imports expanded faster than in any other region, including East and South Asia, thus making an important contribution to the growth in world trade (table 3.2). However, such capital inflows have not been sustained, and it is unlikely that their levels in the region will attain those of the previous post-war cycles so as to allow a rapid expansion of imports relative to exports. By contrast, large inflows of capital to countries in East Asia have been adding to foreign-exchange reserves, or have been used for debt repayments rather than for expansion of trade. In any case, developing countries that have experienced serious financial crises and setbacks to their

development over the past decade are finding a strategy of reliance on private capital inflows to be increasingly untenable.

Finally, another area where structural change has occurred over the past decade and contributed to a rapid expansion of international trade is the spread of international production networks and the growth of intra-industry trade, examined in detail in *TDR 2002*. Since trade among countries linked through international production networks tends to be double-counted, an expansion of such networks is reflected in a faster growth of international trade in the goods concerned than of their total global production and consumption. Indeed, many of the fastest growing categories of goods in international trade (e.g. dynamic products such as electronics, electrical goods and clothing) have been increasingly produced in such networks, and hence double-counted in trade statistics (*TDR 2002*, table 3.1). Such double counting is also an important reason why the data show rapid increases in manufactured imports and exports relative to value added in countries such as China, Malaysia and Mexico that are heavily involved in international production networks (see chap. V).

In the 1990s, the expansion of such networks was relatively rapid, as a significant proportion of the increased FDI into developing countries was designed to relocate production to low-cost countries for exports back to the home countries of the TNCs or to third markets. There is undoubtedly further scope for expansion, but it is equally true that such a process of vertical integration cannot continue at the speed with which it began following rapid liberalization of international trade and investment. Indeed, recent FDI flows to developing countries, notably to China, appear to aim at relocating production from other developing countries, including those in Central America, thereby diverting rather than creating North-South trade. Such inflows are also motivated by the opportunities offered by rapidly growing Chinese domestic consumption. Certainly, there is considerable scope for vertical integration and increased specialization within the developing world, but this is more likely to follow, rather than lead, rapid growth and structural change.

Trade liberalization and global economic integration are greatly facilitated by expansion of economic activity and employment, and by improvements in living standards.

While greater trade liberalization, deeper vertical integration and increased capital inflows can enable international trade to expand faster than global production and income, they are not in fact independent of the latter. Historical experience shows that trade liberalization and global economic integration are greatly facilitated by expansion of economic activity and employment, and by improvements in living standards. Similarly, sustainable, long-term capital flows, particularly greenfield FDI, are primarily attracted to countries that have already achieved rapid economic growth and constant improvements in human and physical infrastructure. It is precisely for this reason that the architects of the post-war international economic system emphasized full employment and growth as preconditions for the expansion of world trade and the greater integration of countries through liberalization. Given that the autonomous impact of trade on economic growth is limited and conditional upon a number of other factors, and that – in terms of what Schumpeter referred to as the process of "creative destruction" – the "destructive" impact of trade liberalization is often more readily felt before its "constructive" impulses come into play, putting trade first at a time of sluggish growth and rising unemployment may only rekindle mercantilist impulses. The rapid expansion of trade and further trade liberalization depend crucially on a rapid recovery of the world economy rather than the other way round. ■

The rapid expansion of trade and further trade liberalization depend crucially on a rapid recovery of the world economy rather than the other way round.

Note

1 For a further discussion of the participation of developing countries in world trade, see *TDR 1999*, chap. IV; and *TDR 2002*, chap. III.

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Annex to chapter III

COMMODITY PRICES

The overall downward trend in commodity prices that began in 1996–1997 continued throughout 2001–2002, but price movements varied significantly across markets, primarily due to different supply conditions (table 3.A1).[1] The slowdown of demand, in addition to a chronic oversupply, was the main factor in keeping a downward pressure on the prices of many commodities including coffee, bananas and some metals and minerals. By contrast, adverse supply conditions helped to offset the slowdown in demand for a number of commodities, such as cocoa, grains, vegetable oils and seeds, thereby stabilizing and even raising their prices. For a number of other agricultural commodities, notably cotton and sugar, market-support policies in developed countries, such as the new Farm Bill introduced in the United States in May 2002, contributed to weakness in their world prices.

The price index for tropical beverages rose in 2002, after having fallen for four consecutive years. This was mainly due to a substantial increase in cocoa prices. Coffee prices remained at the level of 2001, when they hit a 30-year low. The main reason for the crisis in the coffee markets is the persistent oversupply resulting from a rapid increase in production by new entrants to the market such as Viet Nam, new plantations in Brazil, and improvements in productivity. Since the third quarter of 2002, coffee prices have recovered slightly due to increased speculation about the possible contraction of production in Brazil and Viet Nam. The Coffee Quality-Improvement Programme launched by the International Coffee Organization in October 2002, with a view to removing low quality coffee from the market, also appears to have contributed to the improvement of the balance between supply and demand in the world coffee market.

Developments in the cocoa market were mainly determined by uncertainties resulting from the political situation in Côte d'Ivoire – the largest cocoa producing and exporting country in the world – that accounts for about 45 per cent of world production and exports. In 2002, there was a global shortfall in the supply of cocoa for the second consecutive year, leading to a price increase of 63.3 per cent. By contrast, tea prices fell as a result of the high level of stocks and stagnant world demand.

Average food prices deteriorated again in 2002, their annual average drop of 4 per cent reversing the rebound of the two previous years. However, there were strongly diverging trends for different commodities in this group: prices fell considerably for sugar, less for bananas and only slightly for beef. Sugar production in Brazil has continued to rise unabated, doubling over the past decade. Increased production in China and South Africa added to better-than-expected sugar output in the EU, depressing prices by more than 20 per cent, to approach the extremely low level registered in 1999. The oversupply of sugar is ex-

Annex table 3.A1

WORLD PRIMARY COMMODITY PRICES, 1997–2002

(Percentage change over previous year)

Commodity group	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*
All commodities[a]	**-0.5**	**-13.1**	**-13.9**	**2.0**	**-2.9**	**-2.0**
Food and tropical beverages	**2.3**	**-14.9**	**-18.5**	**1.0**	**0.0**	**-2.0**
Tropical beverages	33.3	-17.3	-20.9	-13.2	-22.0	8.7
Coffee	54.7	-28.5	-23.2	-16.2	-28.5	0.0
Cocoa	11.2	3.7	-32.1	-22.2	22.7	63.3
Tea	35.1	4.3	-7.0	6.8	-20.2	-9.5
Food	-4.2	-14.1	-18.3	5.3	5.0	-4.0
Sugar	-4.9	-21.2	-30.0	30.5	5.6	-20.3
Beef	4.0	-7.0	6.1	5.7	10.0	-0.2
Maize	-25.3	-13.4	-5.5	-1.0	4.2	0.3
Wheat	-22.6	-19.9	-10.9	3.5	9.2	16.2
Rice	-10.7	1.3	-18.6	-18.1	-15.2	11.0
Bananas	4.3	-3.1	-9.9	-2.3	38.8	-9.6
Vegetable oilseeds and oils	**-0.9**	**7.1**	**-23.3**	**-22.8**	**-8.5**	**26.2**
Agricultural raw materials	**-10.3**	**-10.8**	**-10.3**	**1.9**	**-1.9**	**-6.7**
Hides and skins	-19.8	-22.7	-27.6	73.8	41.1	-9.2
Cotton	-8.9	-8.3	-22.9	3.5	-20.9	-3.3
Tobacco	15.6	-5.5	-7.0	-3.3	-0.3	-8.5
Rubber	-28.3	-29.8	-12.6	7.9	-14.1	33.1
Tropical logs	-5.5	-1.2	-7.2	3.8	6.3	-10.5
Minerals, ores and metals	**0.0**	**-16.0**	**-1.8**	**12.0**	**-9.9**	**-1.8**
Aluminium	6.2	-15.1	0.3	13.8	-6.8	-6.5
Phosphate rock	7.9	2.4	4.6	-0.4	-4.5	-3.3
Iron ore	1.1	2.8	-9.2	2.6	4.5	-1.0
Tin	-8.4	-1.9	-2.5	0.6	-17.5	-9.4
Copper	-0.8	-27.3	-4.9	15.3	-13.0	-1.2
Nickel	-7.6	-33.2	29.8	43.7	-31.2	13.9
Tungsten ore	-9.3	-6.4	-9.3	12.1	45.5	-41.8
Lead	-19.4	-15.3	-5.0	-9.7	4.9	-4.9
Zinc	28.4	-22.2	5.1	4.8	-21.5	-12.1
Crude petroleum	**-6.0**	**-31.8**	**38.7**	**55.6**	**-13.3**	**2.0**

Source: UNCTAD, *Monthly Commodity Price Bulletin*, various issues.

a Excluding crude petroleum.

pected to continue in the short run, although the downward trend may be mitigated by increased consumption in the emerging-market economies of East Asia and the Russian Federation. A major feature of the sugar market is the presence of market distortions, stemming mainly from subsidization in the EU and the United States that insulates domestic producers from international market pressures.

After a substantial increase in 2001, banana prices tumbled in 2002. There was a moderate contraction in production and exports, but global demand fell despite a small growth in consump-

tion in the United States. Beef consumption rose due to the recovery of consumer confidence in this particular food item, but global beef supply also increased because higher feed prices encouraged slaughtering; the outcome was a slight fall in beef prices. Prices of grains improved due to reduced supply as a result of drought and other unfavourable weather conditions in the major producing areas in North America and Australia, which was not compensated by stock depletion or increased output elsewhere. Food aid to African countries affected by drought also appears to have played a role. Maize prices remained unchanged, despite downward pressure from more competitively priced, low-quality wheat supplies exported in large quantities by China. Prices of vegetable oilseeds and oils increased substantially due to a fall in production resulting from adverse weather conditions that affected crops in the major exporting countries.

Prices of agricultural raw materials, and minerals, ores and metals are most vulnerable to cyclical downturns in economic activity. As a result of high levels of stocks and weak demand from industry, prices declined for all commodities in these groups, except rubber and nickel. For cotton, the average price level continued to fall in 2002 due to sluggish growth in world demand, abundant cotton inventories and fierce competition from synthetic fibres. However, lower production during the crop year 2002/2003 and strong demand from China caused prices to recover to a certain extent during the second half of the year. Subsidized cotton production in the United States and China continued to contribute to oversupply and to the historically low level of prices reached in the 2001/2002 growing season. Particularly hard hit by these measures were the export earnings of producing countries in West Africa and Asia, many of which are among the world's poorest developing countries. The evolution of prices for the various qualities of cotton continued to vary; prices of the better qualities showing a more positive evolution than those of the lower qualities.

Natural rubber prices increased due to strong demand, exchange-rate appreciations in producer countries and an imbalance in the rubber industry, that led to falling stocks. This prompted governments in some producing countries such as Thailand to intervene in the market. Weather conditions also helped to keep rubber supply low. The establishment of the International Tripartite Rubber Organization (ITRO) by the three major producing countries – Indonesia, Malaysia and Thailand – with the objective of rationalizing and coordinating production also had some influence on rubber prices.

Prices of metals and minerals are closely related to the growth performance of the world economy. Demand for most metals has been growing only slightly due to the sluggishness of the world economy. Although prices recovered to some extent in early 2002, the overall trend has been negative, and despite some cuts in production capacities, short-term expectations of producers remain depressed, as the level of stocks is still relatively high and demand prospects are uncertain. China is playing an increasingly important role as an emerging market for many metals and minerals, due to the rapid growth of consumption. For iron ore, aluminium and copper, China's industrial expansion is critical to increasing global demand and prices. The same is true for nickel, the most important ingredient for stainless steel production, which accounts for two-thirds of the worldwide consumption of primary nickel. As production is unlikely to keep up with demand, stocks are likely to continue falling and prices rising.

After a substantial decline in 2001, oil prices have been fairly stable since the beginning of 2002, thanks to the discipline established by the Organization of the Petroleum Exporting Countries (OPEC). Production targets, set with a view to maintaining the price per barrel within the $22 to $24 range, as well as the coordination of production with non-OPEC oil exporting countries, have been working well. The rise in crude oil prices during 2002 was mainly spurred by political instability in the Middle East and Venezuela. In the end, oil prices did not rise as dramatically as had been feared. Global production expanded during the course of the year after a preliminary reduction of the OPEC target in January 2002. The target was revised upwards in December in an attempt to adjust supply to rising demand due to a colder-than-expected winter in the Northern hemisphere and to some switching to oil from other sources of energy in Japan and the United States.

This forced some depletion of stocks, particularly in the United States.

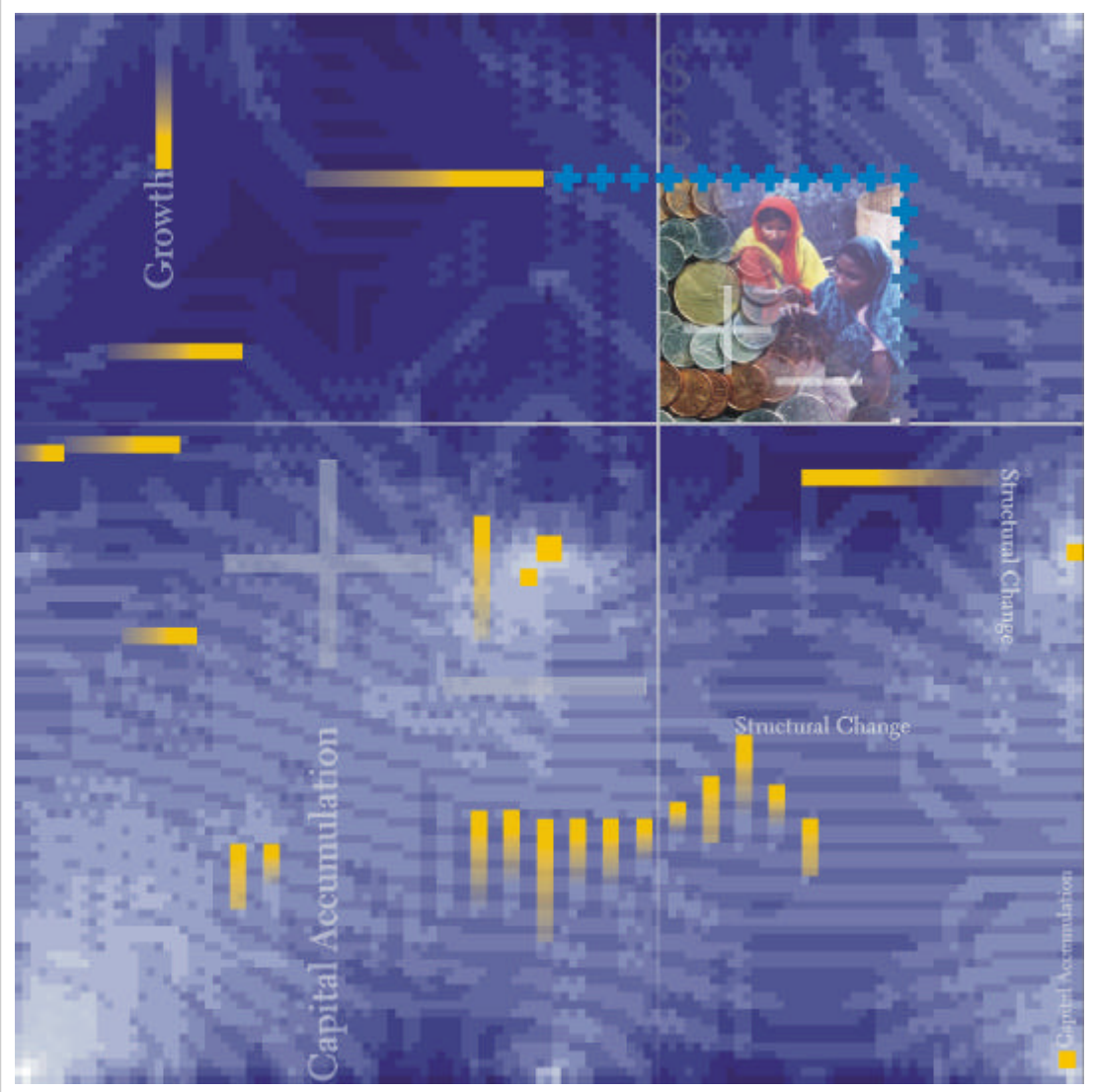
With the beginning of the war in Iraq in March 2003, volatility in the oil markets increased. But even after the war, prospects for any near-term change in oil prices remain unclear as the role of Iraq in the oil markets is still uncertain. During the second quarter of the year, some of the factors that were contributing to price rises have been easing, including the gradual recovery of production in Venezuela and Nigeria and the seasonal reduction in demand with the end of winter in the Northern hemisphere. Continuing slow output growth in the world economy and reduced travel as a result of SARS may further weaken demand growth. Clearly, the evolution of oil prices remains highly dependent on the capacity of OPEC to maintain some discipline in the new geopolitical context. ■

Note

1 There are considerable differences in commodity price statistics published by different international organizations including UNCTAD, the IMF and the World Bank. These differences arise largely from differences in the coverage of different categories of products (e.g. meat) and product groups (e.g. food, minerals, fertilizers) as well as differences in the weights used for aggregation. UNCTAD statistics define coverage and weights according to the relative importance of the different products to developing countries. Thus, while in UNCTAD statistics weights are determined according to the share of individual commodities in the total commodity exports of developing countries, in some others (e.g. IMF statistics) the shares of individual commodities in world commodity exports are used as weights. Commodity prices used are also different; UNCTAD uses prices that apply primarily to the exports of developing countries.

Part Two

CAPITAL ACCUMULATION, ECONOMIC GROWTH AND STRUCTURAL CHANGE



Chapter IV

ECONOMIC GROWTH AND CAPITAL ACCUMULATION

A. Growth divergence: the recent record

Economists and economic historians have long recognized that income and technology gaps opened up by leading economies can provide growth opportunities to latecomers. However, there is no natural tendency for poorer countries to grow faster than the richer ones. Indeed, the broad sweep of historical evidence suggests that falling behind has been the more typical experience of the latecomers than has catching up (Pritchett, 1995). During the first three decades after the Second World War, wide income gaps persisted among countries as growth accelerated across almost all regions, in both the North and South. Those gaps widened further in the subsequent period, as growth momentum stalled in many poorer countries, particularly after the debt crisis of the 1980s (fig. 4.1) (*TDR 1997*; and Milanovic, 2002). According to the *Economic Report of the President*:

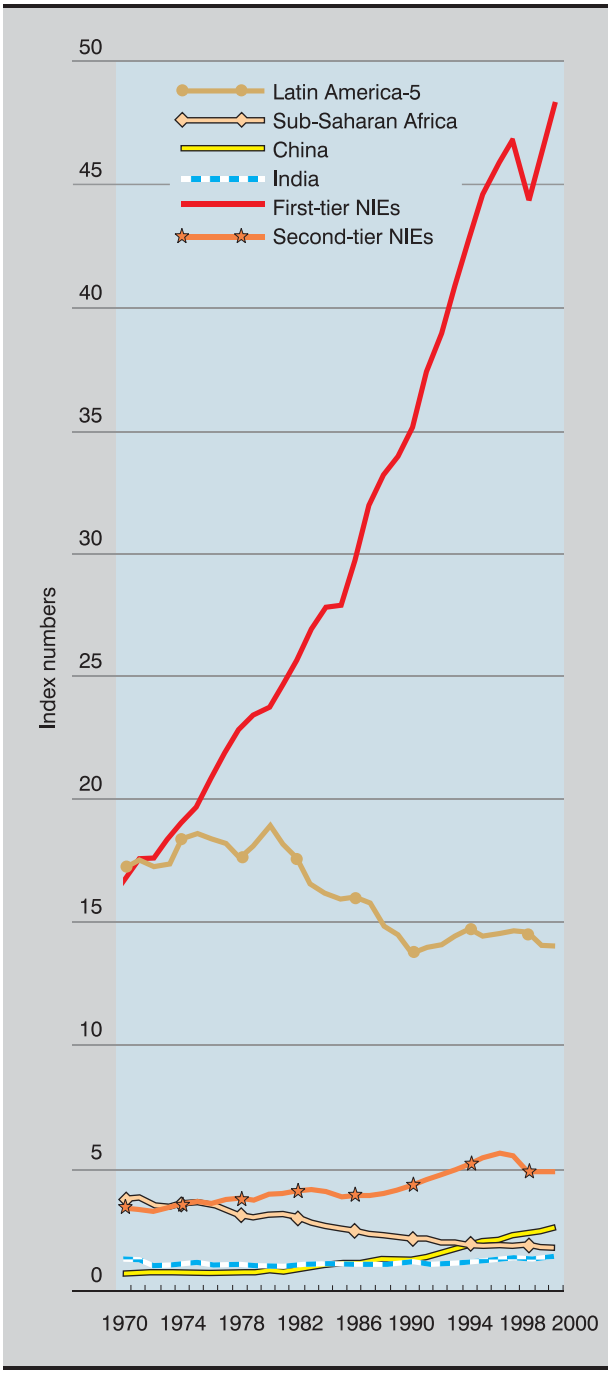
> In 28 countries out of 134 for which consistent and complete data are available, annual average growth in GDP per capita ranged between 0 and 1 percent from 1980 to 2000. GDP per capita fell during that period for another 41 countries in the sample – in several cases by more than 30 percent over the period as a whole. (United States, 2003: 218–219)

Nevertheless, the record also includes some very strong and sustained growth episodes in a number of poorer countries. Since the early 1960s, the most notable success stories have been found in East Asia, in the first-tier and second-tier newly industrializing economies (NIEs).[1] Until the financial crisis of 1997, the countries in that region had enjoyed rapid and uninterrupted growth, and this even accelerated in some during the 1980s. This not only allowed them to overtake other developing countries, but also to narrow the income gap with the major industrial economies (fig. 4.1). In all cases, growth was accompanied by a rapid expansion of industrial activity and profound political and social transformation. Despite the speed of this transformation, growth in the region was remarkably stable (fig. 4.2A).[2] In particular, the first-tier NIEs combined a fast pace of growth

Figure 4.1

GDP PER CAPITA IN SELECTED DEVELOPING COUNTRIES AND REGIONS COMPARED TO THE G-7, 1970–2000

(G-7 = 100)



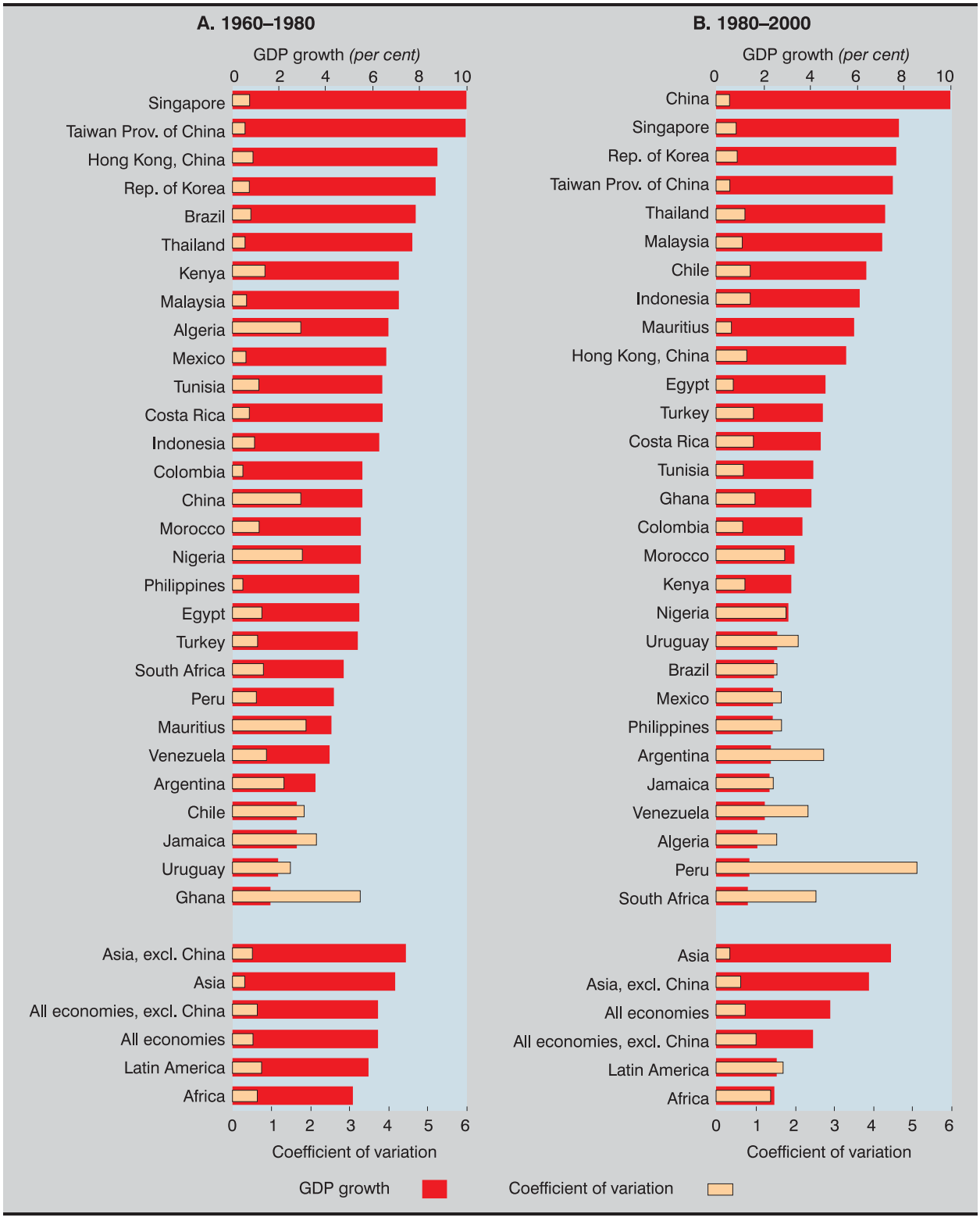
Source: World Bank, *World Development Indicators, 2002.*
Note: Latin America-5 comprises Argentina, Brazil, Chile, Colombia and Mexico; the first-tier NIEs comprise Hong Kong (China), Republic of Korea, Singapore and Taiwan Province of China; the second-tier NIEs comprise Indonesia, Malaysia, the Philippines and Thailand. Sub-Saharan Africa excludes South Africa.

with a high degree of stability during the period 1960–1990; indeed, they were able to reduce instability as growth accelerated. Growth slowed down somewhat and instability increased during the 1990s, reflecting the intense boom-bust cycles associated with unstable capital flows that afflicted countries throughout the region. However, most have managed a fairly rapid turnaround following the crisis, and long-term regional growth forecasts remain buoyant, although not all the social and structural problems resulting from the crisis have been solved (*TDR 2000*, chap. IV) and short-term risks persist (see Part One). China has, since the early 1980s, taken up the mantle as the newest East Asian industrializing economy, spurring growth momentum across the whole region.

Latin American growth performance contrasts starkly with that of East Asia. The two regions grew at much the same rate between 1960 and 1973, when they also had similar levels of per capita income. Real GDP grew at an average rate of 6.8 per cent per annum for the first- and second-tier NIEs taken together, compared with 5.9 per cent for the five largest countries in Latin America (Argentina, Brazil, Chile, Colombia and Mexico), and real per capita income in 1973 in the four first-tier NIEs was $3,735 compared to $4,574 in the same five Latin American countries (Maddison, 2001). Thereafter, average growth rates began to diverge sharply, with growth in East Asia at 6.3 per cent per annum between 1974 and 2000 compared to 2.8 per cent in Latin America. Moreover, the slowdown in growth in Latin America was accompanied by high and, in a number of countries, growing instability (fig. 4.2B). The intensity of these two trends in the 1980s resulted in a "lost development decade", followed by some improvements in the first half of the 1990s. However, growth stalled in the second half of the decade as capital flows were reversed, prompting some to call the period since 1997 a "lost half-decade" (Ocampo, 2002). Among the more successful countries in the region, Mexico saw growth accelerate above the regional average in the second half of the 1990s, thanks to its improved access to a rapidly growing United States market and increased FDI inflows as a result of the North American Free Trade Agreement (NAFTA). However, taking the period 1990–2002, Mexico's per capita average annual growth rate of 1.4 per cent was only slightly above the regional

Figure 4.2

AVERAGE ANNUAL REAL GDP GROWTH AND VOLATILITY IN SELECTED DEVELOPING ECONOMIES AND REGIONS, 1960–2000



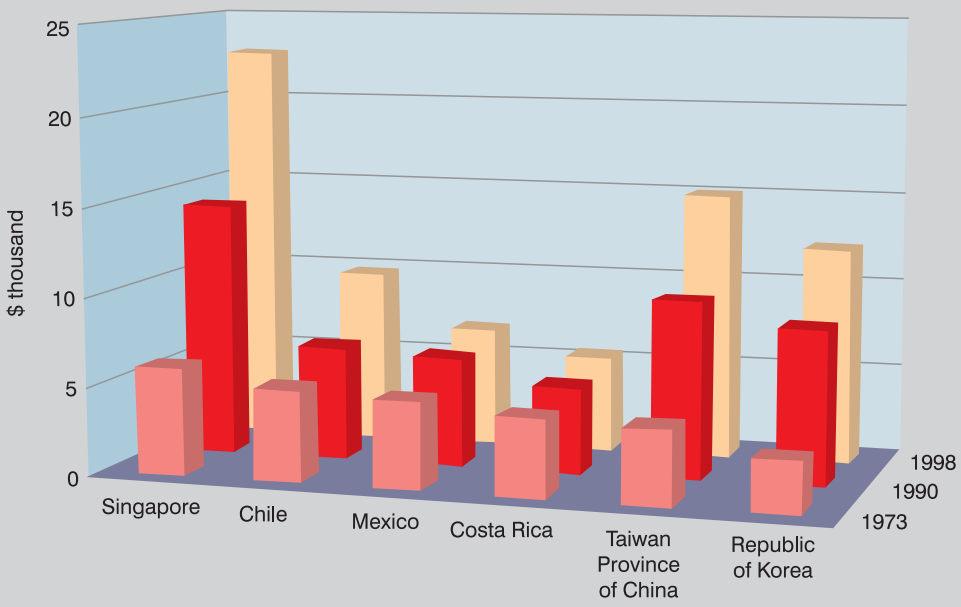
Source: World Bank, *World Development Indicators, 2002.*

Note: Calculations are based on GDP in constant 1995 dollars. Coefficients of variation for all developing economies and regions are weighted averages of the data for the countries listed.

Figure 4.3

"TIGERS" AND "PUMAS": PER CAPITA INCOME IN SELECTED ECONOMIES IN EAST ASIA AND LATIN AMERICA, 1973–1998

(1990 dollars[a])



Source: Maddison, 2001.

a GDP per capita converted from national currencies into dollars using 1990 multilateral purchasing power parities.

average and well below the rate it had achieved in the 1960s and 1970s, let alone the rate in East Asia. Only Chile, where average per capita growth after the mid-1980s was well above that of the 1960s and 1970s, enjoyed a more sustained period of catch-up growth accompanied by greater stability (fig. 4.2A and B). Still, none of these experiences matched those of the East Asian "tigers". As a result, income gaps between the most successful economies in the two regions widened (fig. 4.3). Overall, most countries in Latin America experienced slower and less stable growth in the period 1980–2000 than in the previous two decades.

In sub-Saharan Africa too, successful growth experiences were less frequent and weaker after the debt crisis, resulting in growing poverty levels and a further widening of the income gap with advanced countries (Berthelemy and Soderling, 2001, table 3; Akyüz and Gore, 2001; and UNCTAD, 2001).[3] Like Latin America, the lost decade of the 1980s was characterized by negative per capita growth, followed by a weak recovery in the 1990s, reflecting, in large part, persistently tight external constraints due to weak commodity prices, stagnant official development assistance, and, for most African economies, an absence of private capital inflows.

B. The role of investment in the design of development strategies

There is general agreement that a rapid pace of capital accumulation, and shifts in the structure of economic activity towards industry and technological upgrading are among the basic forces behind any sustained acceleration of growth in successful cases of catching up. In all such cases, strong complementarities and mutually reinforcing linkages among capital accumulation, technological progress and structural change have constituted the basis for rapid and sustained productivity growth, rising living standards and successful integration into the international economy. In the interplay of linkages that make up a virtuous growth regime, capital accumulation holds a central place. Investment simultaneously generates income and expands productive capacity, and it also carries strong complementarities with other elements in the growth process, such as technological progress, skills acquisition and institutional deepening. Moreover, due to the sensitivity of the investment decision to the level and stability of economic activity, investment plays an important bridging role between the cyclical and longer-term features of economic development. But just as importantly, because investment performance is susceptible to policy influence, it offers a clearly identifiable objective on which to base the design of development strategies, as well as tangible criteria for judging the success of such strategies.

In the interplay of linkages that make up a virtuous growth regime, capital accumulation holds a central place.

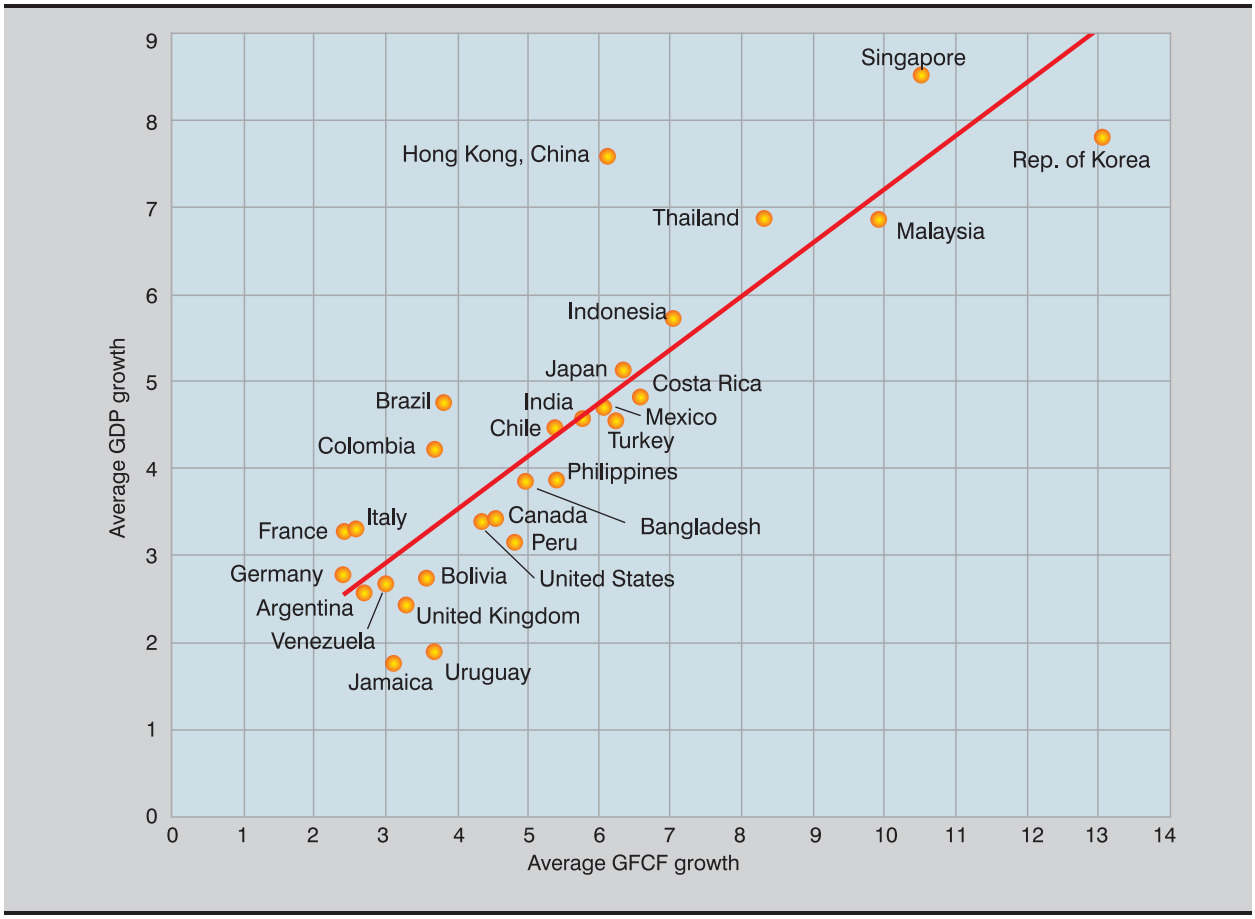
A given pace of capital accumulation can certainly generate different growth rates, depending on its nature and composition as well as the efficiency with which production capacity is utilized. This is one of the main reasons why econometric studies on the determinants of growth have failed to establish a one-to-one relation between the rate of investment and economic growth.[4] However, among the many variables fed into growth equations, investment still emerges as one of the few with a robust and independent impact on economic growth, particularly for rapidly growing middle-income economies (Levine and Renelt, 1992; Sala-i-Martin, 1997; IMF, 1997: 80–81; and Ros, 2000). An analysis carried out by the UNCTAD secretariat on a number of developed and developing countries for the period 1960–2000 also confirmed a strong positive relationship between growth rates of gross fixed capital formation (GFCF) and GDP (fig. 4.4). Indeed, it is generally agreed that growth cannot be sustained without an adequate level of investment, allowing for complementarities and linkages among different sectors and spheres of activity. Determining the target thresholds will naturally be influenced by country-specific factors, but a 20-per-cent share of investment in income has been identified as such a target for poorer economies and a 25-per-cent share for middle-income developing countries (UNCTAD, 2001 and ECLAC, 2000).

The close link between investment and productivity growth implies that capital accumulation could still be a key causal determinant of growth

Figure 4.4

AVERAGE ANNUAL GROWTH OF GDP AND GROSS FIXED CAPITAL FORMATION IN SELECTED ECONOMIES, 1960–2000

(Per cent)



Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators, 2002*; IMF, *International Financial Statistics, 2002*; and Thomson Financial Datastream.

even when it does not account for much of the observed cross-country differences in growth rates (Easterly and Levine, 2001: 191). Since much technological change is embodied in new equipment, its role in growth could still best be explored in the context of capital accumulation:

> ... even if technological innovation is the undisputed star in the scenario (which is by no means certain), substantial capital accumulation very likely would have been required to put the inventions into practice and to effect their widespread employment. If, moreover, saving and investment play a primary role of their own, it becomes all the more important to explore the nature of that role, recognizing that because of unavoidable interactions between the rates of innovation and investment, any attempt to separate the two may prove to be artificial, if not ultimately unworkable. (Baumol et al., 1991: 164)

Given the key role played by investment in the expansion of productive capacity and productivity growth, identification of the factors that govern investment decisions holds the key to the formulation of an effective development strategy.

This was fully recognized by the founding fathers of development economics:

> ... any theory of development must start with a consideration of the forces that determine investment in underdeveloped countries, especially when it is realized that savings are by no means the only limiting factor, and may be low because investments are low rather than vice versa. ... [C]urrent writings on development are almost devoid of attempts at building up a theoretical framework to answer this question. One finds in them many valuable hints on how investment should proceed, and on investment criteria useful for policy makers, but little systematic discussion of the forces that govern the process of capital accumulation. (Hirschman, 1958: 35)

In this respect, there is a very real sense that the debate on investment and development strategy has come full circle. After the debt crisis, the focus on investment as a policy objective shifted to an emphasis on the removal of policy distortions as the leitmotif of a new approach to development strategy. From this perspective, strengthening investment performance was made subordinate to the broader challenge of improving allocative efficiency, and was linked, specifically, to the mobilization of domestic savings through deregulation and liberalization of the financial sector and attraction of foreign direct investment (FDI) (Conable, 1987: 5; and World Bank, 1991). However, with the failure of a first generation of reforms to deliver on their promises, attention has recently turned to "getting the investment climate right" through a marriage of macroeconomic stability with better business organization, improved governance and measures to boost competition, not only as a way of generating an adequate level of investment, but also for ensuring its quality.[5] In particular, a strong emphasis has been placed on the role of competition in promoting investment and economic growth, to be attained not only through deregulation of domestic markets, but also through closer integration into the world economy and greater openness to international trade and investment.

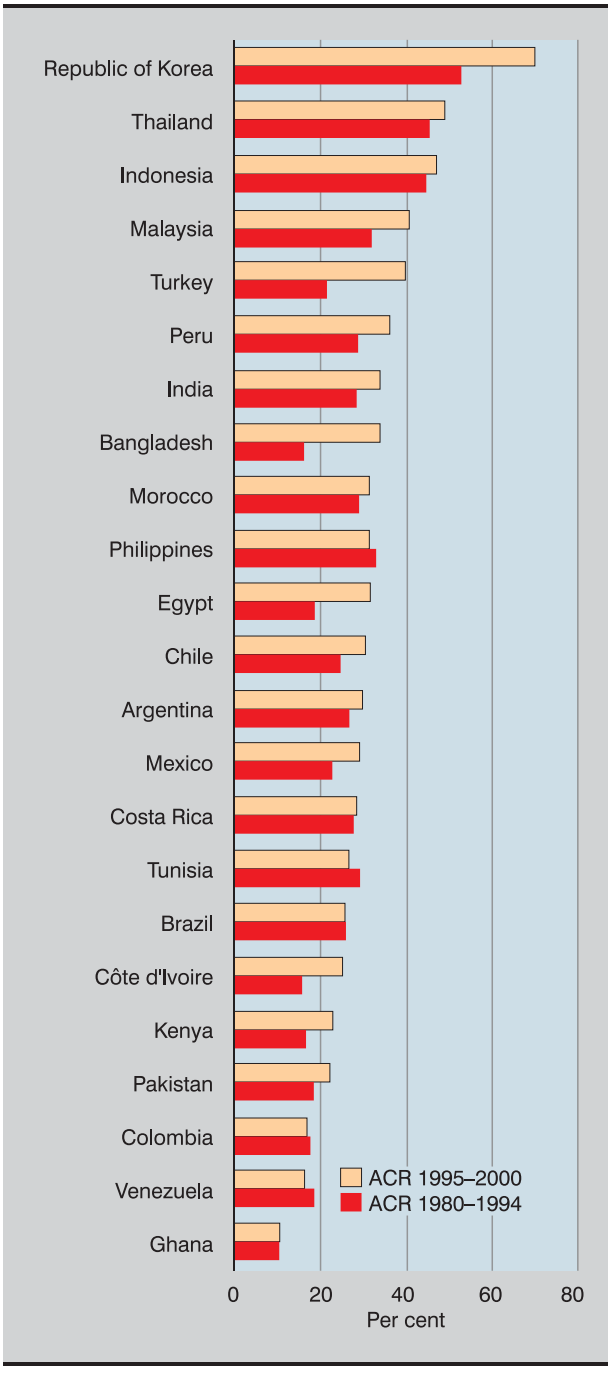
Identification of the factors that govern investment decisions is key to the formulation of an effective development strategy.

Certainly, in a more open and integrated world economy, both the quantity and quality of investment are increasingly influenced by external factors. However, an unconditional link between greater openness and economic growth remains the subject of theoretical and empirical disputes, and recent efforts to strengthen that link by emphasizing the potential benefits of increased international competition have been inconclusive. For instance, it was acknowledged in a World Bank study on the East Asian miracle that these countries did not have maximum competition in product, capital or labour markets, but rather strived to achieve an optimal degree of cooperation and competition (World Bank, 1993). Indeed, many countries in the region, notably Japan and the Republic of Korea, implemented selective import controls, fostered close relationships between government, business and finance, and discouraged foreign investment while importing technology from abroad by other means (Amsden, 1989; Rodrik, 1995; Singh, 1995; and Wade, 1990). The "broad-brush" East Asian evidence does not bear out the claims for the virtues of unlimited competition in relation to economic development.[6] The experience of China, which for the last two decades has had one of the fastest growth rates in the world, is also consistent with the East Asian story.

In any discussion of the forces governing the process of capital accumulation, the manner in which the richest stratum of society – the class of domestic entrepreneurs – acquires and uses its income appears to play a key role. A good deal of evidence suggests that after the initial stages of industrialization, when agricultural incomes provide the main source of investment, capital accumulation is financed primarily by profits in the form of corporate retentions, rather than household savings (*TDR 1994*; Akyüz and Gore, 1996). Over the long term, a high rate of corporate retention is almost always associated with a high rate of corporate investment and corporate dynamism. In its turn, such dynamism provides a social as well as economic justification for the concentration of an important part of national income as profits in the hands of a small minority of the population. The statistical diffi-

Figure 4.5

SELECTED DEVELOPING COUNTRIES: ACCUMULATION/CONCENTRATION RATIO (ACR), 1980–2000



Source: Everhart and Sumlinski, 2001; World Bank, *World Development Indicators, 2002*; *TDR 1997*.

Note: Share of private investment in GDP expressed as a percentage of the share of the richest quintile of the population in total income. As income distribution data is only available for individual years at varying intervals, the data given for the two periods are for different individual years, or they are averages of some years within each of the two periods.

culties of measuring profit shares in developing countries place a constraint on empirical analysis. However, a recent study based on a sample of 30 developing countries in the late 1980s and early 1990s finds a strong relationship between a high savings rate, a high share of manufacturing output in GDP and a high profit share in manufacturing value added in East Asia (Ros, 2000: 79–83). Moreover, the rapid rise in the savings rates in the East Asian economies is closely associated with sharply rising profit shares and a rapid increase in the share of manufactures in GDP. The study reveals that, by contrast, Latin American countries have savings rates lower than expected on the basis of the share of profits in national income, and a fall in the savings rates in the region has been associated with stagnant or falling manufacturing shares. The strong investment drive of elites in East Asia, maintained over a considerable period of time, can be seen in figure 4.5, which compares the share of private investment in GDP expressed as a percentage of the share in income of the richest quintile. The figure also shows very little change in the relative position of different countries over the past two decades.[7]

In those economies that were able to generate sizeable resources for investment and successfully harness capital accumulation to achieve a sustained process of economic development, market forces alone were not left to dictate either the pace or direction. Rather, the defining features of successful development strategies were the design of effective control mechanisms to both encourage and discipline private investors by raising profits above those generated by competitive market forces, and active policies to ensure those profits found outlets that would add to productive capacity, create jobs and help technological progress (Amsden, 2001). Both fiscal and monetary instruments were used, particularly a low-interest-rate policy – which is important to firms as they build internal funds – and controls on luxury consumption. But trade, financial and industrial policies were also used to create and augment rents and to coordinate investment decisions to prevent "investment races" among large oligopolistic firms.[8] These were supported by long-term ties between banks and large corporations that provided shelter from shocks, helped coordinate investment decisions, improved predictability and reduced the cost of finance (Akyüz, 1993; Singh, 1995; Stiglitz and Uy, 1996; and Amsden, 2001).[9]

C. Capital formation: recent trends

1. Investment levels

The debt crisis of the early 1980s marked a watershed in the investment regime of many developing countries. The crisis threw many countries off their long-term growth paths. Among 25 developing countries which experienced a break in their growth trends between 1950 and 1990, 14 were affected in the period between 1979 and 1983, in all cases registering a shift from a positive to a negative trend (Ben-David and Papell, 1995). Among a smaller group of 18 developing countries examined by the UNCTAD secretariat, including 14 of the so-called Baker 15 group (*TDR 1988*),[10] all but Chile, Ghana and Pakistan saw a drop in per capita growth rates in the 1980s compared with earlier periods, and for nine of these countries per capita growth rates were negative. Almost all the countries experienced a drop in the share of investment at some time between 1979 and 1985, some below the level needed to replace depreciated capital (Serven and Solimano, 1992). In many cases, drastic policy changes followed in an effort to reduce levels of indebtedness and re-establish a sustainable growth momentum. A number of countries implemented stringent monetary and fiscal measures to curtail the volume of credit and reduce government spending. They lowered the real exchange rate to raise export earnings and introduced structural policies to correct price distortions, free market forces, raise the profile of the private sector and improve overall allocative efficiency. Although the ultimate aim of such adjustments was to prepare the ground for private-investment-led recoveries, it was also recognized that some of these measures could have a temporary adverse effect on investment, particularly through the rising costs of imported goods, excess capacity in import-competing sectors, and a profit squeeze, leading to an investment pause in the "transition to a new relative price regime" (World Bank, 1992: 34–35). However, for most of the reforming countries, a rapid and sustained recovery in capital accumulation and growth has proved elusive.

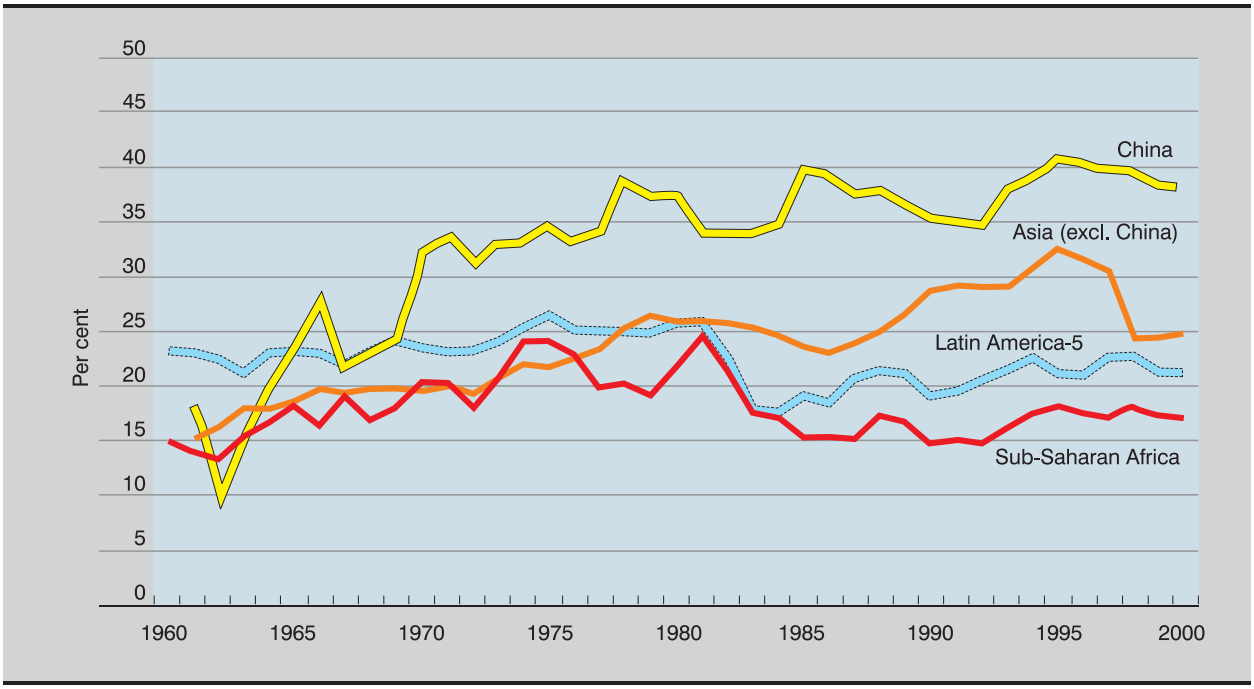
The debt crisis of the early 1980s marked a watershed in the investment regime of many developing countries, throwing them off their long-term growth paths.

Long-term trends in gross capital formation as a share of GDP are presented in figure 4.6 and table 4.1 for different regions and economies. Sharp differences among regions are clearly visible. In Latin America, there was a marked decline in capital accumulation that occurred during the debt crisis of the early 1980s, and the recovery beginning in the late 1980s was not sufficient for it to return to earlier levels. Nor has it proved sustainable, with investment weakening again across most of the region since 1998.Thus Latin America in general appears to have established an accumulation regime which commits around 20 per cent of its income to capital formation, well below the level thought necessary to allow the region to attain catch-up rates of economic growth. Moreover, a comparison of investment-growth re-

Figure 4.6

GROSS CAPITAL FORMATION IN SELECTED DEVELOPING REGIONS AND CHINA, 1960–2000

(Per cent of GDP)



Source: World Bank, *World Development Indicators, 2002*.
Note: See fig. 4.1 for definitions of regional groups. Ratios are calculated on the basis of values in constant 1995 dollars.

lations in Latin America across each of the last four decades suggests a weakening of the effectiveness of investment in the period following the debt crisis. Despite extensive market-oriented reforms, designed to improve the allocation and use of resources, each percentage point increase in gross capital formation was associated with slower income growth in the 1990s than in both the 1960s and 1970s (fig. 4.7A).

Country-level trends confirm this picture, albeit with variations. Investment in Argentina, Brazil and Venezuela dropped furthest and longest among the larger Latin American economies in the 1980s, and recoveries in the 1990s were partial; in all three cases, the average for the period 1995–2000 remained below that for 1980–1985. Investment performance was less erratic in Mexico and Colombia, although in neither case did the recoveries return to earlier peaks, and Colombia experienced a very sharp fall beginning in the late 1990s. Thus, while in the region as a whole there was a recovery in growth after the debt crisis, which became quite marked in some countries in the early 1990s, this was not supported by a process of strong and sustained capital formation. The notable exception to this was Chile, where investment recovered in the second half of the 1980s and maintained an upward trend for much of the 1990s, taking it towards a 25-per-cent threshold level. Some other economies rich in natural resources, notably Peru and Jamaica, followed a pattern similar to that of Chile after the debt crisis, although without a comparative acceleration of growth.

Africa experienced a marked improvement in its rate of capital accumulation in the 1960s and early 1970s. Some growth-accounting exercises show that physical capital accumulation ac-

Table 4.1

GROSS FIXED CAPITAL FORMATION IN SELECTED DEVELOPING ECONOMIES AND REGIONS, 1970–2000

(Per cent of GDP)

	1970–1975	1975–1980	1980–1985	1985–1990	1990–1995	1995–2000
Argentina	22.3	24.0	19.4	15.9	16.9	18.8
Bolivia	15.3	16.4	11.2	12.4	15.1	19.6
Brazil	28.9	30.3	24.0	21.8	19.5	20.5
Chile	17.1	14.8	15.0	16.1	20.4	23.4
China	25.1	28.8	28.7	29.1	30.5	35.4
Colombia	18.4	17.9	19.4	17.6	18.5	18.3
Côte d'Ivoire	22.7	30.3	23.9	12.6	10.1	13.4
Ecuador	26.3	29.4	23.5	18.7	17.8	17.3
Egypt	17.0	28.7	33.2	25.7	16.7	17.9
Ghana	15.1	15.3	11.3	11.2	16.8	20.6
India	17.6	18.9	19.4	20.6	22.0	23.5
Indonesia	..	..	22.4	22.9	26.5	26.1
Kenya	20.7	21.3	16.1	15.5	16.3	14.8
Malaysia	19.7	22.0	28.8	24.3	36.2	34.7
Mexico	21.9	22.9	21.4	17.6	19.8	20.1
Morocco	22.5	31.7	25.6	21.4	21.8	21.6
Nigeria	21.3	26.0	17.5	15.4	19.8	19.7
Pakistan	18.8	19.1	18.4	17.9	17.3	15.6
Peru	16.1	16.7	17.0	15.1	19.1	22.9
Philippines	16.2	22.0	23.9	18.4	21.4	22.1
Republic of Korea	16.3	24.0	25.6	29.0	35.7	32.0
Taiwan Province of China	19.6	22.5	21.2	19.1	23.4	24.9
Thailand	27.9	28.1	28.7	30.3	39.6	28.8
Turkey	14.0	16.5	15.1	21.5	24.2	24.0
Uruguay	11.1	18.6	15.4	9.6	12.7	14.2
Venezuela	21.1	29.4	22.4	18.2	17.8	16.4
Latin America	**24.0**	**26.0**	**21.7**	**19.1**	**19.0**	**20.0**
Asia	**19.3**	**22.7**	**23.5**	**24.7**	**29.0**	**29.5**
Asia, excluding China	**17.7**	**21.2**	**22.2**	**23.4**	**28.4**	**27.0**
Sub-Saharan Africa	**23.3**	**24.6**	**21.3**	**17.9**	**17.1**	**17.2**

Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators, 2002*; and Thomson Financial Datastream.

Note: Gross fixed capital formation by country was calculated on the basis of real GFCF and GDP data except for Kenya, Nigeria and Turkey. Figures for regions are weighted averages of the values of the countries listed, except for sub-Saharan Africa, where the average is for all countries of the region.

counted for around two-thirds of the growth in sub-Saharan Africa in the period 1960–1975 – as much as is found in East Asian countries (Collins and Bosworth, 1996). Physical investment rates increased in a wide range of countries. Of the 47 episodes of "investment transition", or investment surges (defined as a rapid rise in the investment rate which is sustained for at least five years), observed in developing countries between 1960 and 1980, 21 were in sub-Saharan Africa (Rodrik, 1999, table 3.2). However, these post-colonial investment booms were all too often followed by investment slumps, rather than being translated into a virtuous growth process. Investment in the

1970s was already on an unsteady path before experiencing a sharp and persistent decline beginning in the early 1980s and bottoming out in the early 1990s at between 15 and 18 per cent of GDP, a level well below the desired threshold (fig. 4.6). And much like Latin America, there appears to have been a weakening in the link between capital formation and output growth in the 1990s (fig. 4.7B). The evolution of investment and growth in Africa reflects in large part the shifting combinations of commodity price movements, aid flows and balance-of-payments constraints, all of which have strongly influenced investment and growth performance in that region.[11] A recent comparison of strong growth episodes in Africa between 1960 and 1996 confirms that these tended to be higher before the debt crisis than after, as a result of high rates of capital accumulation; in the post-debt-crisis success stories, capital accumulation accounted for only 13 per cent of growth, on average, compared to more than two-thirds in the earlier period (Berthelemy and Soderling, 2001).[12] Another recent study on policy reforms and capital accumulation in Africa has concluded that "even where adjustment policies have been rigorously implemented, they have failed to establish a sustained accumulation process." (Akyüz and Gore, 2001: 272)

A rapid and sustained recovery in capital accumulation and growth has proved elusive for most of the reforming countries.

East Asia established a very different investment regime from that of the other developing regions. The rising share of investment in GDP throughout the 1970s was only briefly interrupted by the debt crisis of the early 1980s (fig. 4.6). A number of East Asian economies with large tradeable goods sectors and substantial industrial capacity were able to use modest currency depreciation and temporary wage restraint to initiate an export-led recovery. Such was the experience in the Republic of Korea where, after a sharp initial drop in growth and investment, growth picked up based on strong investment-export linkages.[13] This pattern was repeated, to varying degrees, in Taiwan Province of China, Indonesia, Malaysia and Thailand (*TDR 1989*, Part One, chap. V). In all these economies, investment levels were maintained, even in the face of significant swings in resource transfers. Between 1979–1981 and 1985–1987, the average share of investment in GDP in these five economies fell from 29.2 per cent to 26.3 per cent, compared with an average decline from 24 per cent to 15.5 per cent for the Baker 15 countries.[14] Investment across the region began to recover strongly during the second half of the 1980s, accelerating sharply in the first half of the 1990s to above 30 per cent of GDP. The upward trend ended with the Asian financial crisis in 1997, although it still consistently remained at or above a high threshold level for most countries. But even in these high-investment regimes of East Asia there are variations among countries (table 4.1). The larger first-tier NIEs saw a steady rise after the mid-1980s, more prominent in the Republic of Korea, which achieved very high peaks in the mid-1990s, whereas in Taiwan Province of China the rise was steadier and from a lower level than elsewhere in the region. In the second-tier NIEs, the increase in investment from the second half of the 1980s was more pronounced, reaching much higher levels than previously, but the drop following the 1997 crisis was also sharper.

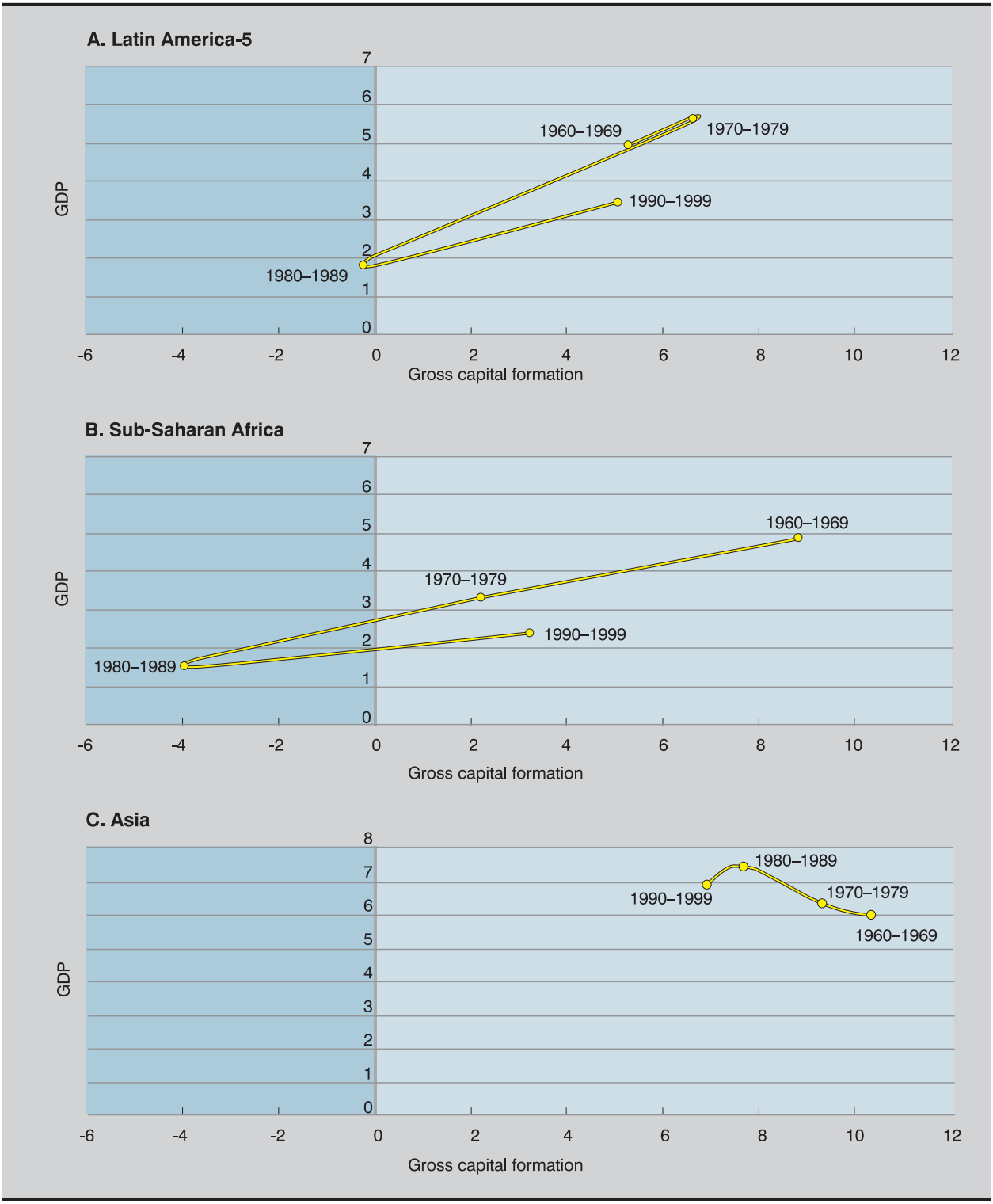
Latin America appears to have established an accumulation regime which commits around 20 per cent of its income to capital formation, well below the level thought necessary to allow the region to attain catch-up rates of economic growth.

Although countries in South Asia also maintained a robust investment performance after the debt crisis, this started from a lower level than in East Asia, and acceleration was weaker during the 1990s. China had maintained a very high rate of accumulation over the past three decades, and it rose further in the late 1990s. However, the contribution of capital accumulation to economic growth improved significantly only in the past two decades. The rate of accumulation in India was above the

Figure 4.7

GROWTH OF GROSS CAPITAL FORMATION AND GDP IN LATIN AMERICA, SUB-SAHARAN AFRICA AND ASIA, 1960–1999

(Average annual change in per cent)



Source: World Bank, *World Development Indicators, 2002.*
Note: See fig. 4.1 for definitions of regional groups. Figures for regional groups are weighted averages.

20-per-cent threshold from the late 1980s, and moved towards the 25-per-cent threshold in the 1990s.

To summarize, with few exceptions, investment rates were broadly similar in the 1960s and 1970s in different regions and countries. Since then the ratio of gross domestic investment to GDP in the most successful East Asian NIEs has continued to rise, in some cases reaching 30–40 per cent in the 1990s. These countries have been joined by China and, to a lesser extent, India, both of which have seen considerable improvements in their investment and growth performance over the past two decades. By contrast, in a large majority of countries in Africa and Latin America, investment rates have failed to recover after sharp falls in the 1980s. In particular, while some major Latin American countries, including Argentina and Brazil, have had much higher per capita incomes than the Asian countries, such as India, Indonesia and Thailand, their investment rates have been persistently lower, by between 5 and 10 percentage points of GDP. In this respect, the "investment pause" associated with structural adjustment policies has become a permanent feature of these economies.

East Asia established a very different investment regime from that of the other developing regions.

2. Stability of investment

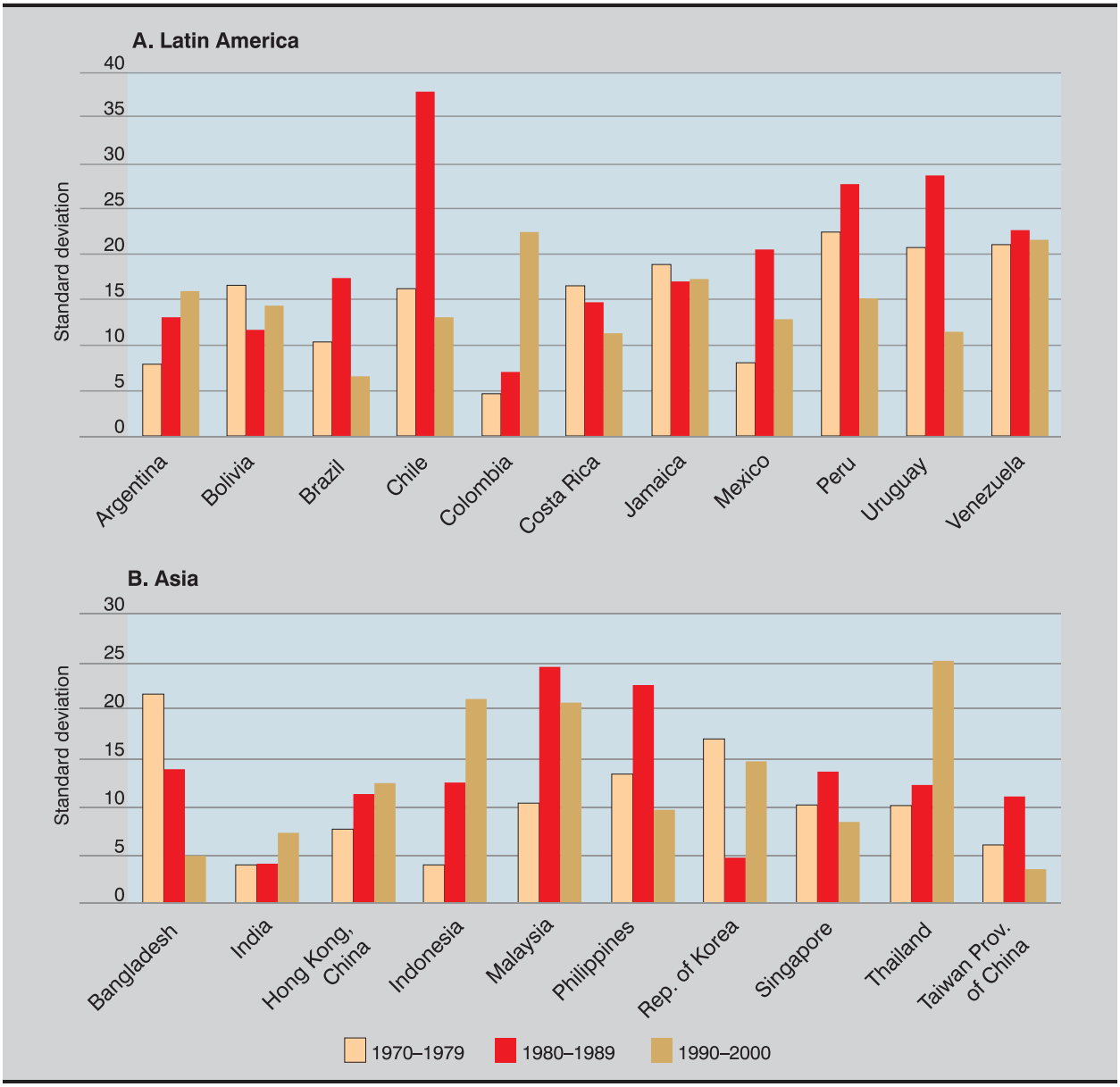
A stable macroeconomic environment is an essential element of strong investment performance. A volatile business climate can increase investor uncertainty and reluctance to expand capacity, which in turn can slow productivity growth, thereby increasing the potential for further economic uncertainty and heightened instability. On the other hand, a fast pace of investment is unlikely to be a stable one; it can carry strongly unbalancing pressures and create disequilibrium, which might increase vulnerability to shocks and heighten instability. In the context of a fast pace of capital accumulation, institutional arrangements and policy measures will be needed not only to smooth out cyclical fluctuations in economic activity, but also to prevent the kind of boom-bust cycles in investment that have been witnessed in the past decade, both in advanced countries such as the United States and in strong performers in East Asia.[15]

A combination of the accelerator mechanism and an expectational calculus makes investment a lead factor in the business cycle. That investment is also a more volatile component of the business cycle in developing countries than in developed countries is also reasonably well established. According to a recent study, investment and imports are twice as volatile in the South as in the North (Kouparitsas, 2001), although others have suggested that this is only true for private investment (Rand and Tarp, 2002). The absence or weakness of automatic stabilizers in most poorer countries, and the heavy reliance of investment on both external financing and imported capital goods – which ties its movement more closely to the external economy – are likely explanations for this pattern. While in middle-income developing countries capital inflows tend to trigger domestic cycles (World Bank, 2003), in poorer countries, particularly in sub-Saharan Africa, investment volatility has been closely tied to commodity price movements.

Although vulnerability to external shocks has been a long-standing feature of investment in developing countries, it appears that high volatility levels have persisted even after the immediate disturbances of a debt crisis have subsided (fig. 4.8). An examination by the UNCTAD secretariat of boom-bust cycles in East Asia in the 1980s and 1990s (*TDR 2000*: 60, table 4.1) found that surges in capital inflows were particularly tied to private investment booms. Investment/GDP ratios at the peak of the financial cycle in Indonesia, Malaysia, the Republic of Korea and Thailand were between 3 and 14 percentage points higher than at the start of the boom, which in all these cases had already been high. However, in some other episodes examined, where capital inflows were associated more closely with a boom in private consumption, investment could still play a significant role in fuelling the boom. In Argentina,

Figure 4.8

VOLATILITY OF GROSS CAPITAL FORMATION IN SELECTED DEVELOPING ECONOMIES IN LATIN AMERICA AND ASIA, 1970–2000



Source: World Bank, *World Development Indicators, 2002*; and Thomson Financial Datastream.
Note: Calculations are based on values in constant 1995 dollars.

Turkey and Venezuela, the share of investment rose by between 3.7 and 6 percentage points, and this occurred over a shorter period of time than in East Asia. Declines in investment following financial crises were particularly dramatic in East Asia, exceeding 15 percentage points, whereas elsewhere, with the exception of Turkey, the bust led to falling consumption.

These experiences suggest important variations in the investment cycle across developing regions, which may well have implications for

Box 4.1

COMPARING INVESTMENT CYCLES IN LATIN AMERICA AND ASIA

To better grasp the differences in business cycles across the developing world, an attempt has been made to identify typical business cycles for Latin America and South and East Asia (or Asia for short). Taking the period between 1960 and 2000, and using a Hodrick-Prescott filter to de-trend investment and output, a stylized cycle has been created, divided into nine phases, each representing one year, with phase zero indicating the trough of the cycle. Peaks and troughs in each individual country over the period have been averaged to identify respective periods of recovery and slowdown.

Taking the period as a whole, the cycle in Latin America appears to be a good deal more volatile than in Asia. In Asia, even in the trough growth remains positive, and while the recovery peaks in the first phase, the pace remains very fast through the first four phases. Investment is clearly a strongly growing presence across the recovery phase. By contrast, in Latin America, the trough registers negative growth and the recovery is much weaker even though it is maintained through the second phase and drops very sharply thereafter. Investment is particularly volatile, falling sharply in the year prior to the trough and slowing already in the third phase of recovery.

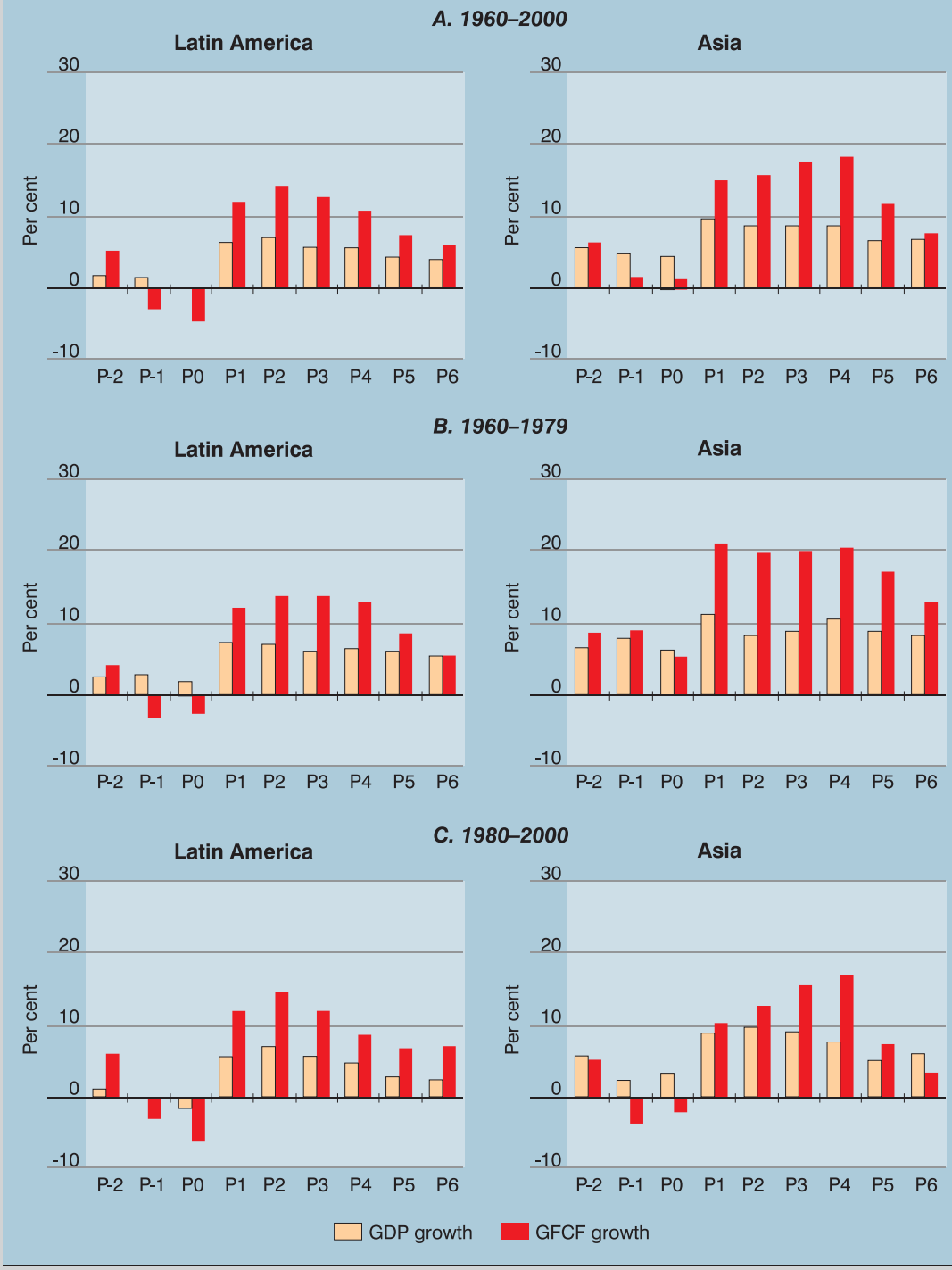
When the periods 1960–1979 and 1980–2000 are considered separately, some additional conclusions are reached. In both regions, the cycle becomes visibly more volatile in the later period. In Latin America the cycle appears to be more robust in the earlier period, with no phase of negative growth, and sustained recovery over the subsequent four phases. By contrast, in the later period, growth becomes negative in the trough, and the recovery begins to slacken visibly after the second phase. Investment volatility clearly is much greater in this second period, falling sharply after the second phase in the latter cycle. In Asia, although growth in the trough remains positive in the later period, the drop is greater and the recovery is also weaker than in the earlier cycle. Investment exhibits negative growth in the later period, but recovery is stronger and more sustained than in Latin America.

/...

longer-term growth performance. To better grasp the differences, the UNCTAD secretariat has attempted to identify "typical" business and investment cycles for different regions. A closer look at these cycles confirms significant differences between Latin America and Asia, differences that have become even more marked since the debt crisis (box 4.1). In the cycles for the Asian countries examined, due to the strong turnaround in investment activity, annual growth rates, on average, reach 10 per cent in the first two years after a recession, and stay at high levels as investment remains robust for some time after recovery has set in. Moreover, prices remain surprisingly stable across the cycle in most cases, and the fiscal and external deficits continue to be kept under control. In Latin America, the cycle shows greater variations and the pattern of successful recovery is far less clear-cut: growth rates are only half those seen in Asia, the recovery is shorter, and the slowdown, when it comes, is much more pronounced. This is largely due to investment being cut short, its growth rate falling sharply in the fourth phase of the turnaround following growth rates of over 10 per cent per annum. Consequently, counter-cyclical policies gain added importance in Latin America, but their scope is highly limited due to structural imbalances (see chap. VI).

Box 4.1 (concluded)

GROWTH AND INVESTMENT CYCLES IN LATIN AMERICA AND ASIA, 1960–2000



Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators, 2002*; and Thomson Financial Datastream.

Note: Latin America comprises Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Jamaica, Mexico, Peru, Uruguay and Venezuela; Asia comprises Bangladesh, China, Hong Kong (China), India, Indonesia, Malaysia, the Philippines, the Republic of Korea, Singapore and Thailand. For further explanations see text.

3. Composition of investment

The fact that many developing countries, particularly in Latin America and Africa, have, since the debt crisis, slipped below the investment thresholds needed for rapid and sustained economic growth, suggests that reforms have, so far, failed to deliver on the promise of improving this key dimension of economic performance. However, countries in different regions have achieved quite different growth rates even with similar investment levels, and different regions have seen different growth outcomes from the same level of investment at different times. This suggests that attention should also be paid to the composition of investment in any assessment of overall investment performance.

(a) Public and private investment

Capital formation in most developing countries is undertaken predominantly by private domestic enterprises. Although there was a noticeable and generalized shift towards public investment during the 1970s, from 6.3 per cent of GDP at the beginning of the decade to 10.1 per cent in the early 1980s, private investment also enjoyed a rising share of GDP during this period. The balance was close in sub-Saharan Africa, with short episodes of public investment being higher as a share of GDP, and both South Asia and North Africa saw higher shares of public than private investment for a more sustained period from the mid-1970s (Everhart and Sumlinski, 2001). Following the debt crisis of the 1980s, the balance in all regions shifted towards private investment, including by foreign corporations (fig. 4.9). However, the earlier peak in private investment prior to the debt crisis was not surpassed until 1996 in developing countries taken together. This level was reached somewhat earlier in East Asia, later in Latin America and not at all in sub-Saharan Africa. In China, the share of private investment rose sharply, from less than 4 per cent of GDP in 1980 to 17 per cent in 2000.

By contrast, the declining share of public investment in GDP after the debt crisis has been strong and persistent in most developing regions: from an overall average of over 10 per cent of GDP in the early 1980s to 7 per cent by 2000. However, China has resisted this trend; public investment has consistently remained higher than private investment during its recent period of very rapid growth, albeit posting only a modest overall rise from an already high level. In East Asia, the 1990s witnessed a strong recovery in public investment, which in some countries, notably Thailand, even surpassed previous peaks.

The leading role for private firms in animating the profit-investment nexus does not exclude a potentially important role for public investment. Indeed, an important policy challenge will be to strike the right balance between the two. Recently there has been much warning of the threat of public investment crowding out private investment. Crowding out, strictly speaking, refers to the variety of channels whereby additional government spending may have little or even a negative effect on total output because of its adverse effects on interest-sensitive components of private expenditure. However, in the developing-country context it also refers, more loosely, to the possibility of State-owned enterprises entering activities that might otherwise offer acceptable returns to private investors. A central assumption of structural adjustment programmes was that downsizing the public sector would bring a significant improvement to the investment climate and encourage private investment, which, being more efficient, would accelerate growth.

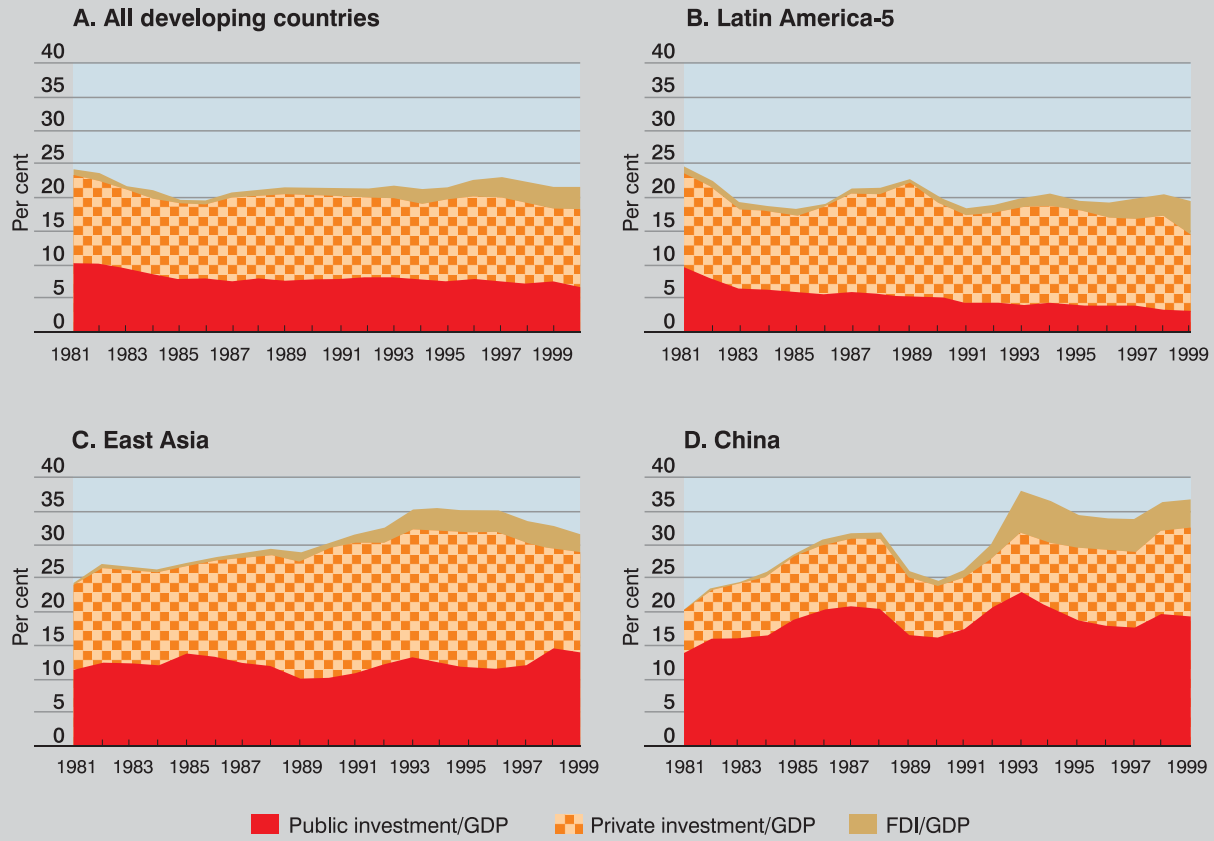
In any assessment of overall investment performance, attention should be paid to the composition of investment.

Neither theory nor empirical evidence offers clear-cut conclusions in these respects. Studies on whether public investment crowds out private investment range across the spectrum of possible outcomes. A recent review of the literature (covering studies in both developed and developing countries) was unable to report any consensus, with just 5 of the 20 studies reviewed reporting strong evidence of "crowding out" (Everhart and Sumlinski 2001, table 2.2), and suggesting that a more disaggregated approach to the

Figure 4.9

PUBLIC, PRIVATE DOMESTIC AND FOREIGN INVESTMENT IN SELECTED GROUPS OF DEVELOPING COUNTRIES, 1981–1999

(Per cent of GDP)



Source: UNCTAD secretariat calculations, based on Everhart and Sumlinski, 2001; UNCTAD, *World Investment Report, 2002*; and World Bank, *World Development Indicators, 2002*.

Note: Latin America-5 comprises Argentina, Brazil, Chile, Colombia and Mexico; East Asia comprises Indonesia, Malaysia, the Philippines, the Republic of Korea and Thailand. Percentage shares are weighted averages of the values for these countries. Private investment is defined as total gross domestic investment (from national accounts) less consolidated public investment and FDI inflows.

possible impact of increased public investment (and spending more generally) is needed, given the range of activities included under this category.

A simple exercise of within-country correlations between public and private investment found an almost even split between episodes of crowding in and crowding out in 63 developing countries for the period 1970–2000. However, public investment in communication and transport did appear to consistently crowd in private investment (Everhart and Sumlinski, 2001, tables 2.2 and 2.3; and World Bank 2003: 104). Repeating this exercise for the period 1985–2000 shows little change: four countries (Papua New Guinea, Thailand, Tunisia and Uruguay) shifted from crowding in to crowding out and two countries (Brazil and Chile) shifted in the opposite direction.

Many of the countries that successfully maintained a robust investment performance after the debt crisis also maintained a stable or rising share

of public investment in total income along with crowding-in effects. This was the case with Chile in Latin America, as well as with China, Malaysia and the Republic of Korea in East Asia, and Mauritius in Africa. By contrast, the sharply declining trend in public investment across much of Latin America since the debt crisis appears to be associated with a deindustrialization trend (see chap. V). In sub-Saharan Africa this same trend is closely tied to the weak performance of agriculture and to the lack of diversification (Berthelemy and Soderling, 2001, table 3; and Akyüz and Gore, 2001).The difficulties involved in any such analysis of these trends is typified by a recent study of the Latin American experience during the period 1983–1993. It found a positive association between public investment and economic growth, but also evidence that public investment does crowd out private investment where inefficient State-owned enterprises and public trust funds substitute for private investment spending. Furthermore, there was evidence of a significantly adverse impact of defence spending on private investment (Ramirez and Nazmi, 2003).

Many of the countries that successfully maintained a robust investment performance after the debt crisis also maintained a stable or rising share of public investment in total income.

(b) *Foreign direct investment and capital accumulation*

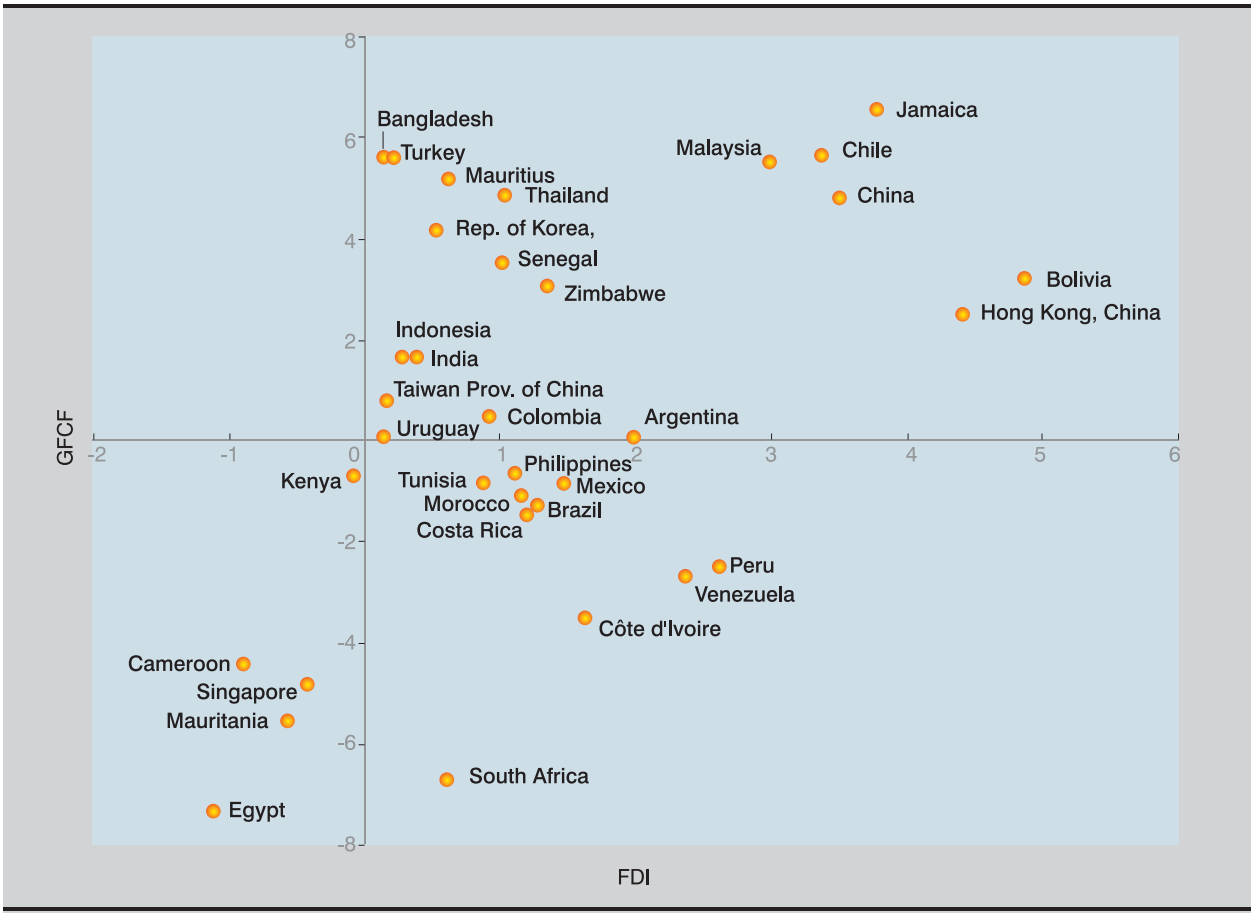
In contrast to public investment, foreign direct investment (FDI) has risen persistently as a proportion of GDP in all developing regions since the debt crisis (fig. 4.9). The increase has been particularly marked in Latin America where, on average, FDI rose to almost 3 per cent of GDP in the 1990s, from less than 1 per cent in the 1980s. About two-thirds of these inflows in the 1990s were linked to privatization (*TDR 1999*: 117–119). Almost every country in the region attracted increased inflows of FDI. In Asia, the average increase was in the same order of magnitude as in Latin America, although less evenly distributed. China and Malaysia stood out with very high ratios of FDI to GDP. Excluding these, dependence on FDI was limited. In Africa, FDI inflows were small in absolute terms but not relative to domestic capital formation and GDP. However, in that region too the increase was concentrated in a small number of countries.

The impact of FDI on capital accumulation and economic growth is difficult to trace, and this is perhaps the main reason for the lack of consensus on the role of FDI and foreign corporations in economic development.[16] The inclusion of both greenfield investment and the acquisition of existing assets in the definition of FDI makes it difficult to link FDI directly to fixed capital formation. Further, as in the case of public investment, its effect on domestic private investment is ambiguous. On the one hand, even when FDI takes the form of acquisition of existing assets,[17] rather than investment in bricks and mortar, it can still lead to an expansion of domestic investment in both public and private sectors. It can do so by loosening balance-of-payments constraints, helping to loosen the budget constraint and boosting public investment in physical and human infrastructure. It may also lead to productivity gains or to additional real investment for rationalization and technological upgrading. On the other hand, large inflows of FDI can equally impede investment in tradeable goods sectors to an extent that they lead to an overvaluation of the currency. Similarly, over time, profit remittances may tighten the balance-of-payments constraint, necessitating cuts in domestic absorption and public and private investment. Finally, a foreign presence may improve overall economic performance by helping establish linkages with international markets and creating positive technological spillovers. However such benefits are not automatic, in part because transnational corporations (TNCs) operate in highly imperfect markets, where their financial and technological strengths enable them to crowd out domestic producers or pre-empt their investment opportunities.[18] Consequently, the contribution of FDI to capital formation, technical progress and growth depends crucially on the policies adopted by recipient countries vis-à-vis foreign investors.

Figure 4.10

CHANGES IN DOMESTIC GROSS FIXED CAPITAL FORMATION AND FDI IN SELECTED DEVELOPING ECONOMIES: 1990–2000 COMPARED TO 1980–1990

(Per cent of GDP)



Source: UNCTAD, *World Investment Report* database; World Bank, *World Development Indicators, 2002*; and Thomson Financial Datastream.

Note: GFCF as a percentage of GDP was calculated using data in current prices, except for Argentina, where constant 1995 prices were used.

An examination of recent trends in FDI and gross fixed capital formation (GFCF) in developing countries supports these considerations. For developing countries as a whole, there is a positive but weak relationship between the share of FDI in GDP and the share of GFCF. More importantly, there are significant differences in the relationship between changes in FDI and domestic capital formation in Asia and Latin America (fig. 4.10). In this respect a comparison of changes in GFCF and FDI between the 1980s and 1990s is revealing. In figure 4.10, for comparison purposes, the investment ratio is measured in current prices. As a result, changes in this ratio can differ from those reported in table 4.1 based on constant prices. For the countries in figure 4.10 the difference is particularly large for Costa Rica, Peru and Singapore. In Latin America, while FDI as a proportion of GDP was higher on average in the 1990s than in the 1980s by more than 1.7 percentage points, the share of GFCF in GDP was lower by 0.6 of a percentage point. In all major Latin American countries (Argentina, Brazil, Colombia and Mexico), FDI as a proportion of GDP rose between these two periods while GFCF stagnated or fell. The only notable exceptions were Chile, where a

sharp increase in FDI inflows was associated with a similar increase in GFCF, and Bolivia, where the increase in GFCF was moderate compared to FDI.

This evidence clearly shows that whatever the direct or indirect impact of FDI on domestic capital formation may have been, the conditions that attracted foreign enterprises to these countries were not conducive to faster capital formation, and that the two sets of investment decisions can be driven by very different motivations. The picture is only slightly better when FDI inflows are compared with private investment alone. In a number of countries such as Brazil, Paraguay and Venezuela, private investment fell while FDI increased, and in most other Latin American countries, including Argentina and Colombia, the increase in FDI as a proportion of GDP was far higher than the increase in private GFCF. By contrast, in none of the rapidly growing East Asian NIEs was rising FDI associated with falling domestic GFCF, the only exception being the Philippines.

The conditions that attracted foreign enterprises to Latin America were not conducive to faster capital formation.

These observations are consistent with the findings of various econometric studies on the link between FDI and accumulation and growth. Indeed a number of studies have established that FDI is not an independent accelerator of economic growth (Carkovic and Levine, 2002), and that its positive growth-effects are contingent on other variables which are endogenous to the growth process (Blomstrom et al., 1992; Borensztein et al., 1998; and Alfaro et al., 2001). A recent study of 32 developing countries for the period 1970–1996 found that the evidence of crowding out was strongest in Latin America, whereas Asia exhibited stronger crowding in, and Africa was neutral (Agosin and Mayer, 2000). In a more comprehensive study of 98 developing countries covering the period 1980–1999, a significant relationship between FDI and domestic investment was detected in 52 countries: 29 experienced net crowding out and 23 experienced crowding in, with Latin American countries again most vulnerable to crowding out (Kumar and Pradhan, 2002).

Particularly in countries where domestic private investment has been weak and dependent on foreign capital flows, attracting FDI is seen as a stabilizing factor. The belief that FDI responds to longer-term economic fundamentals, and the fact that FDI has held up strongly after the Asian financial crisis, are often cited as evidence of this stabilizing role. However, empirical evidence on the volatility of FDI flows vis-à-vis other forms of private capital flows is not conclusive. For instance, at the time of the East Asian financial crisis, the Bank for International Settlements (BIS) noted that FDI was caught up in and added to an unstable investment pattern in the region based on less-than-solid risk-to-return characteristics (BIS, 1998: 35). Nor does this appear to be an altogether new feature of FDI. A recent review of the business cycle in 15 developing countries for the period 1970–1997 found that FDI inflows were a very volatile component of those cycles, and a good deal more so than either domestic investment or aid flows (Rand and Tarp, 2002). According to another study of 103 countries for the period 1980–1996, portfolio investment was only slightly more volatile than FDI, and among 85 emerging market countries over the same period the levels of volatility were actually equal.[19] Indeed the similarity between the volatility of FDI and portfolio flows is cited by the United States Government in its communication to the WTO as one of the reasons why a WTO framework for investment should also include portfolio investment.[20]

(c) The structure of investment

Another factor which influences the impact of capital accumulation on economic growth is the structure of investment. In this respect, investment in machinery and equipment has been shown to be key to sustained growth. A positive relation between machinery investment and growth appears to hold across all developing regions (De Long and Summers, 1993).[21] Such investment often embodies new technologies and carries strong ties to research and development activity and the size and quality of the human capital stock. Determin-

ing causality among these elements of a strong accumulation process is likely to be difficult, and it is probable that their relative strength will change across sectors and over time. Nevertheless, investment in all these areas will be essential for sustained growth in productivity performance (Temple and Voth, 1998).

By contrast, residential construction, which in essence is a durable good, although classified as investment, is carried out by households rather than firms, and responds to a different set of pressures than those linked to the expansion of productive capacity. While investment in machinery and equipment often plays an independent role in the growth process, residential construction usually follows increases in income levels. However, speculative pressures can influence the pace of housing (and other commercial) construction, delaying or crowding out productive investment projects by distorting profit expectations (Hirschman, 1958: 20) or by encouraging luxury consumption. While there are also episodes of overinvestment in machinery and equipment – as was observed, for instance, in the recent United States investment surge in information technology products – investment bubbles are more common in property markets.

A common feature of weak investment regimes in many developing countries in the 1980s was a shift in the structure of investment in favour of residential construction, reflecting a diminished expectation of profits in more productive activities during and immediately after the debt crisis, particularly in the tradeable goods sectors. In some cases, that share of residential construction reached between 25 and 40 per cent of GFCF. The trend was less apparent in those countries that were able to maintain a resilient investment performance. However, strong investment recovery in a number of countries in the second half of the 1980s contained a significant housing component, notably in the Republic of Korea and Thailand, peaking in both cases at close to 25 per cent of GFCF in the early 1990s (fig. 4.11). However, construction was no more pronounced than other components of investment, which also expanded rapidly in response to mounting competitive pressures in a more liberal policy environment characterized by excessive capital inflows (*TDR 2000*). In Latin America, residential construction as a share of GFCF stayed at relatively low levels in Bolivia, Chile, Colombia and Costa Rica in the 1980s (table 4.2), and only in Chile and Costa Rica did this occur in the context of a rising share of GFCF in GDP in the second half of the decade. In several countries where investment recovery was delayed until the 1990s, the share of residential construction remained high or rose further especially in Latin America (with the exception of Chile, Costa Rica and Bolivia). It was particularly pronounced in Argentina, where the share of residential construction rose steadily to reach an average of 45 per cent of GFCF in 1996–1998.

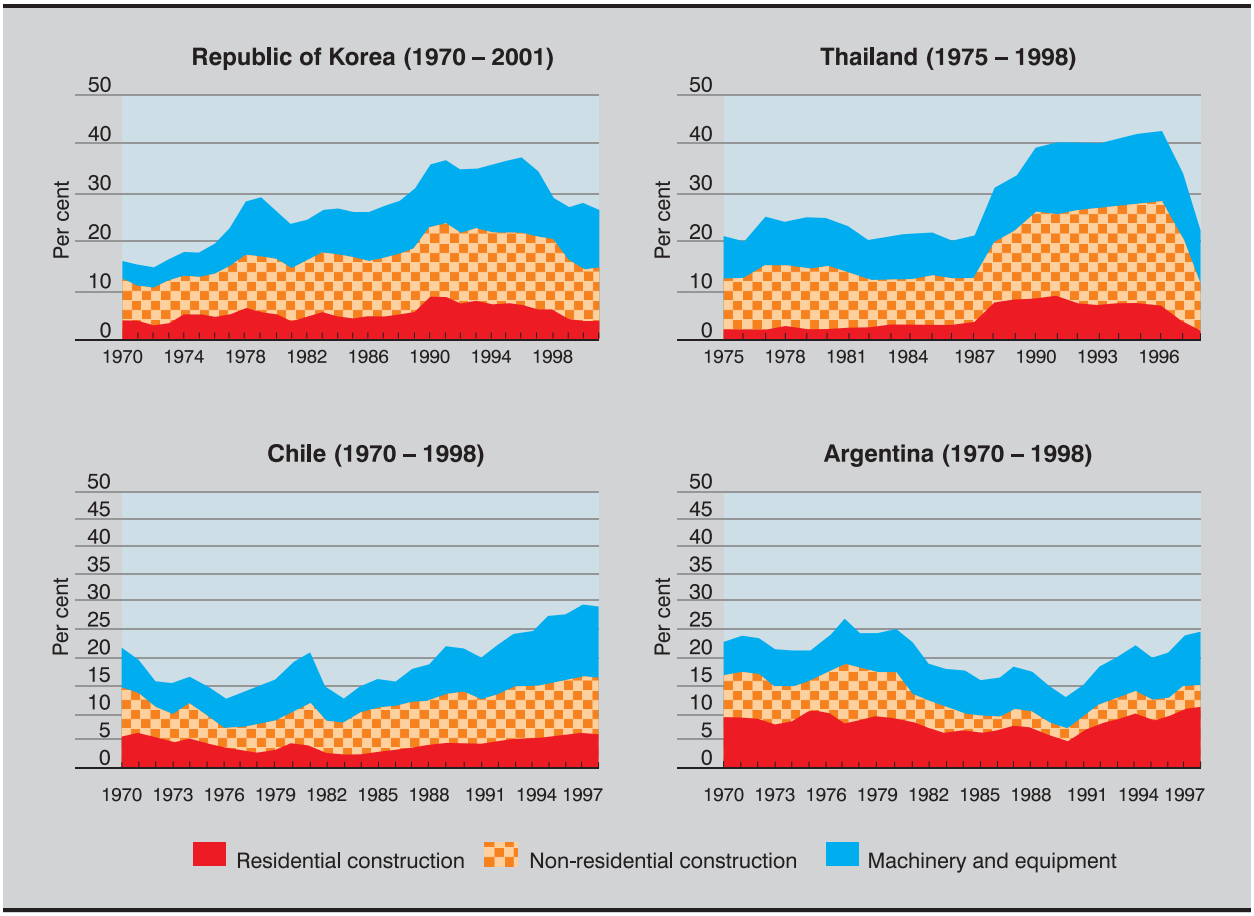
A common feature of weak investment regimes in the 1980s was a shift in the structure of investment in favour of residential construction, reflecting a diminished expectation of profits in more productive activities.

The combination of a rising share of investment in machinery and equipment along with expanding non-residential construction, particularly in physical infrastructure (much of which is likely to be in the public sector), would seem to be a defining feature of a strong investment performance in developing countries. Investment patterns in the Republic of Korea and Taiwan Province of China typify these mutually supportive trends. Over the past three decades, in only three years in the early 1970s has residential construction in the Republic of Korea exceeded investment in machinery and equipment as a percentage of GDP, and not at all in Taiwan Province of China. Taking the average figure for each of the last three decades, there has been a clear rising trend in investment in machinery and equipment, fluctuating annually between one-third and one-half of GFCF throughout the period. In particular, in both countries, a strong recovery in private investment after the debt crisis was accompanied by a sharp increase in investment in machinery and equipment. Following the brief construction boom of the late 1980s in the Republic of Korea, there was again a shift in favour of investment in machinery and equipment during the 1990s (fig. 4.11).

Figure 4.11

STRUCTURE OF INVESTMENT IN SELECTED DEVELOPING COUNTRIES SINCE THE 1970s

(Per cent of GDP)



Source: National sources; and Moguillansky and Bielschowsky, 2001.

Moreover, there appears to have been a close relationship between investment in machinery and equipment and in non-residential building in the Republic of Korea over the past three decades. A similar pattern holds for Taiwan Province of China, where there appears to have been a balanced structure of investment since the 1980s, led by robust investment in machinery and equipment that accounted for an ever-increasing share of GFCF during the 1990s. The pronounced increase in the share of investment in the second-tier NIEs in the 1990s contained a steadily rising share of investment in machinery and equipment, consistently above one-third of GFCF, although some of these countries, notably Indonesia and Thailand, went through a construction bubble before the 1997–1998 crisis.

In countries that saw a declining share of investment in GDP in the 1980s, the share of investment in machinery and equipment also declined, with sharp falls experienced in Bolivia, Chile, Mexico and Peru. Such investment recovered subsequently, beginning in the mid-1980s in Chile, and somewhat later in Mexico (with an interruption in the mid-1990s). In Brazil, both aggregate fixed capital formation and investment in machinery and equipment remained weak until

Table 4.2

STRUCTURE OF INVESTMENT IN SELECTED LATIN AMERICAN COUNTRIES, 1979–1998

(Percentage share in total gross fixed investment)

	1979–1981	1982–1985	1986–1990	1991–1995	1996–1998
			Machinery and equipment		
Argentina	34.5	41.5	44.9	39.2	39.2
Bolivia	55.3	44.7	41.8	47.7	53.5
Brazil	37.1	30.3	31.6	31.2	37.3
Chile	46.7	34.8	35.4	41.1	44.8
Colombia	46.0	41.7	43.2	50.0	52.2
Costa Rica	44.2	41.5	50.0	54.9	55.1
Mexico	43.9	35.9	38.9	46.0	48.2
Peru	45.2	38.1	26.3	21.1	21.0
			Residential construction		
Argentina	36.8	38.6	39.9	44.6	45.0
Bolivia	15.0	15.0	15.1	15.5	14.3
Brazil	22.3	26.9	26.7	26.8	24.4
Chile	21.0	18.5	20.2	21.1	20.9
Colombia	14.2	15.7	17.2	20.7	20.7
Costa Rica	14.3	13.7	13.9	10.7	11.6
Mexico	18.1	24.9	29.3	28.7	28.7
Peru	27.1	30.2	32.7	33.6	34.4
			Non-residential construction		
Argentina	28.8	19.9	15.1	16.2	15.8
Bolivia	29.6	40.2	42.8	36.7	32.2
Brazil	40.6	42.9	41.7	41.9	38.2
Chile	32.3	46.6	44.4	37.8	34.2
Colombia	39.8	42.5	39.6	29.3	27.1
Costa Rica	41.4	44.8	36.1	34.4	33.3
Mexico	38.0	39.2	31.8	25.2	23.0
Peru	27.7	31.7	40.9	45.5	45.3

Source: UNCTAD secretariat calculations, based on Moguillansky and Bielschowsky, 2001.

the second half of the 1990s. However, in most of these cases, early peaks were not matched, and the improvement in productivity brought about through an intense cycle of labour-shedding and investment in new capital equipment did not continue into a strong and sustained investment recovery. One sign of this trend was the weak response of non-residential construction to the growth recovery in Latin America in the first half of the 1990s (table 4.2), suggesting a reluctance to broaden productive capacity. The notable exception to this was Chile, where the share of machinery and equipment in total fixed capital formation rose steadily from 35 per cent in the mid-1980s to 45 per cent by the late 1990s, reaching about 13 per cent of GDP. This followed a strong rise in non-residential construction in the mid-1980s, which persisted into the 1990s.

A more detailed analysis of this component of investment, although desirable, is limited by lack of data. However, a more comprehensive pic-

Table 4.3

GROWTH OF IMPORTS OF MACHINERY AND COMPONENTS OF ELECTRICAL AND ELECTRONIC GOODS IN 26 DEVELOPING ECONOMIES, 1970–2001

(Per cent)

	Growth of machinery imports			*Growth of imports of parts and components of electrical and electronic goods*			***Memo item:*** *Share of machinery imports in GDP*		
	1970–1979	*1980–1989*	*1990–2001*	*1970–1979*	*1980–1989*	*1990–2001*	*1970–1979*	*1980–1989*	*1990–2001*
Argentina	9.5	-10.4	8.4	10.5	-10.1	10.3	1.4	1.5	1.4
Bolivia	24.2	-9.9	5.5	30.5	-5.4	9.4	5.3	2.8	2.9
Brazil	3.0	0.7	13.1	8.7	6.6	14.6	1.9	1.0	1.6
Chile	8.1	12.2	3.9	9.3	12.7	9.4	2.5	3.3	4.3
China	26.9	24.7	10.6	39.0	34.2	21.2	0.4	1.7	2.8
Colombia	4.8	1.9	-1.0	3.8	5.4	0.9	2.8	2.7	2.8
Côte d'Ivoire	12.3	-4.8	10.5	14.1	-2.4	14.1	4.9	3.6	4.1
Ecuador	15.4	2.7	0.8	18.2	11.2	3.2	3.6	2.8	5.5
Egypt	43.5	-1.5	-0.5	41.1	5.5	-0.7	4.5	7.7	5.2
Ghana	8.2	5.0	8.2	5.7	8.6	12.5	0.6	1.1	1.4
India	8.2	10.8	5.8	8.2	21.3	9.2	3.0	2.6	4.0
Indonesia	7.3	6.4	0.9	11.8	8.7	12.1	4.8	2.8	3.0
Kenya	8.4	6.9	-2.9	9.9	11.2	-1.7	4.5	4.0	4.3
Malaysia	9.2	4.2	6.6	35.7	11.2	12.9	4.4	5.4	10.8
Mexico	10.5	9.1	7.4	8.1	19.2	12.0	2.5	3.4	5.5
Morocco	15.8	3.5	3.0	23.7	10.7	10.4	3.8	3.9	4.6
Nigeria	17.5	0.1	-2.0	27.2	-0.4	0.7	3.4	4.4	4.5
Pakistan	16.9	10.5	-4.6	..	13.5	-4.2	2.6	2.8	2.6
Peru	8.2	-3.7	6.5	7.7	2.5	12.6	2.7	2.8	2.1
Philippines	6.8	-2.6	9.9	18.7	4.4	20.9	4.3	3.0	6.8
Republic of Korea	14.6	12.2	4.4	17.2	13.5	13.3	5.3	5.3	4.9
Taiwan Province of China	8.8	7.5	9.0	11.9	13.5	10.4	7.3	6.5	6.6
Thailand	6.2	12.6	3.0	13.3	16.3	13.2	3.5	3.7	7.1
Turkey	4.9	12.1	9.4	1.9	24.2	16.2	2.0	2.6	3.9
Uruguay	12.3	-1.0	6.2	13.3	11.6	-1.2	1.5	1.5	2.0
Venezuela	10.6	6.5	-3.6	-0.1	8.2	11.1	4.3	3.7	4.2

Source: UNCTAD database; and UN/DESA, *Commodity Trade Statistics* database.

Note: Growth rates are based on imports in constant 1995 dollars. Machinery excludes transport equipment; it includes SITC Rev. 2 groups 71–77 (less 759, 76, 775 and 776). Parts and components of electrical and electronic goods include SITC Rev. 2 groups 759, 764, 772 and 776.

ture emerges from an examination of trends in imports, which constitute an important element of machinery and equipment investment in most developing countries. The growth rate of machinery imports consistently exceeded that of total imports by developing countries in each of the past three decades. Even so, the rate of growth of machinery imports was lower in most countries during the 1990s than during the 1970s. In the 1980s, such imports were hit particularly hard in Latin America (except Chile) and some African economies, but remained buoyant in East Asia and Turkey (table 4.3). The table also shows the rapid rate of growth of parts and components of electrical and electronic goods in the imports of developing countries. As discussed in *TDR 2002*, this is related to the increased participation of developing countries in international production networks. Indeed, for half the sample, growth rates of such imports were higher in the 1990s than in the 1970s.

In only 10 countries out of 26 was the ratio of machinery imports to GDP from developed countries on average higher in both the 1980s and 1990s compared with the 1970s, and in another 3 countries it was higher in the 1990s than in the 1970s. The ratio registered a sizeable increase in Chile and Ghana, although in the latter from a very low starting level (in both cases the declining share of manufacturing in total output suggests that this higher ratio was linked to primary sector activities). The ratio also grew strongly in China, Malaysia, Mexico, Thailand and Turkey. This group includes those countries that are actively participating in international production networks, which suggests that their inclusion in such networks is associated with sizeable imports of machinery in addition to imports of parts and components. By contrast, in both the 1980s and 1990s, the ratio remained unchanged or fell short of its 1970s' average in a number of Latin American countries, including Argentina and Brazil, as well as the Republic of Korea. While in the former countries the decline was associated with sluggish investment in machinery and equipment, in the Republic of Korea it reflected the rapid development of domestic production of machinery and equipment.

D. Conclusions

In the discussions above, capital accumulation regimes have been described in terms of the level, stability and composition of investment. For most developing countries at the early stages of industrialization, a good investment regime is characterized by a rising trend in the share of investment in income. This is sustained through certain key threshold levels, along with a balance between public and private investment. In terms of composition, there is a bias towards a set of mutually supportive components, centred around investment in machinery and equipment, which deepens productive capacities and supports faster productivity growth within a manageable degree of instability. Inevitably this regime reflects strong country-specific factors, where policy variables have a critical bearing on the outcome. However, some broad patterns are discernible:

- The "investment pause" that followed the debt crisis of the early 1980s has become a much more permanent feature of the economic landscape in many developing countries. Recoveries that have taken place, particularly in Africa and Latin America, have been weak and have failed to match earlier performances, leaving many countries below the thresholds needed for strong and sustained growth. By contrast, East Asian economies appear to best typify dynamic investment performance in terms of level, stability and composition.

- Weak overall levels of investment appear to have been associated with a falling share of public investment in GDP, which, in most cases, failed to crowd in private investment, except by bringing in FDI through privatization, notably in Latin America.

- A strong relationship between the ratio of machinery imports to GDP and a rising ratio of investment to GDP constitute an integral part of a virtuous investment dynamic in most East Asian countries. By contrast, weak recoveries in Latin America have often been associated with stronger performances in less productive categories of the accumulation dynamic, such as housing construction, along

with a sharp decline in public investment in infrastructure.

- The contrast between Asian and Latin American investment regimes is also evident regarding the link between FDI and domestic capital accumulation. In both regions, recent periods have seen a significant increase in inflows of FDI. However, while in Asia this has been associated with a rising share of investment in GDP and increased investment in machinery and equipment, in Latin American countries, there has been little or no improvement in the level or the composition of investment. In fact, in most countries in that region, the investment ratio fell while FDI increased.

These findings raise serious questions about the strategies adopted in a number of developing countries for activating a dynamic process of capital accumulation and growth through a combination of increased FDI and reduced public investment and policy intervention. ■

These findings raise serious questions about the strategies adopted in a number of developing countries for activating a dynamic process of capital accumulation and growth through a combination of increased FDI and reduced public investment and policy intervention.

Notes

1 The former group consists of Hong Kong (China), the Republic of Korea, Singapore and Taiwan Province of China, while the latter group comprises Indonesia, Malaysia, the Philippines and Thailand.

2 Between 1960 and 1997, the first-tier NIEs together registered only five episodes of negative annual growth, and the second-tier NIEs only eight such episodes.

3 In Africa, Botswana and Mauritius had the most successful growth record, the former experiencing sustained growth for over four decades. Two other island economies, Cape Verde and the Seychelles also saw faster growth in the period after 1973 compared with the two decades before (Maddison, 2001, table A4d).

4 There is a rich body of empirical literature on the determinants of growth using cross-country regression analysis. A recent review identified well over 100 economic, structural, sociological, geographical and historical variables which have been fed into growth equations (see Kenny and Williams, 2001). Most of the variables introduced in order to explain the growth residual after accounting for factor accumulation have been familiar since growth became an explicit goal for development policy in the 1950s (for example, Lewis, 1955; and Hirschman, 1958). However, such exercises suffer from serious methodological limitations (Mankiw, 1995: 307–308; Ros, 2000; Kenny and Williams, 2001; and Reati, 2001).

5 See, for example, Stern, 2001; and World Bank, 2003. This reintroduction of investment into the mainstream does not, however, imply a fundamental departure from the earlier focus on market-driven efficiency: "The word 'investment' in our title will evoke memories – in some – of the development philosophies of the 1950s and the 1960s, when the emphasis was on growth through capital accumulation. There was a mistrust of the private sector and little mention of entrepreneurship or social inclusion. Thus, development assistance was seen primarily as the transfer of capital to the countries recently emerging from colonialism and aspiring to join the ranks of industrialized countries. Since those early days of development economics, I hope we have learned much." (Stern, 2001: 2)

6 While some explanations of the East Asian financial crisis of 1997–1998 contend that the crisis-affected countries, including the Republic of Korea, suffered from poor competitive environments that resulted in overinvestment (World Bank, 2000), these explanations are widely challenged (Akyüz, 2000; Stiglitz, 2002).

7 For a discussion of the accumulation-concentration ratio, see *TDR 1997*: 164–166.

8 It is important not to confuse this policy approach with the more limited notion of "picking winners", to which it is sometimes reduced. For a further discussion of the range of policies used in the East Asian context, see *TDR 1994*, *1996* and *1997*; Amsden, 1993; Felix, 1994; Singh, 1995; Sen, 1996; Kwon, 1998; and Rasiah, 1998.

9 Many of these institutional features, which had been considered among the factors contributing to the "Asian miracle", were subsequently held responsible for the crisis in that region, including a robust network of government and business institutions, concentration of ownership in the hands of inside investors, an internal capital market organized within banks and firms, and high corporate leverage. In fact a major reason for the sharp deterioration in the performance of such institutional arrangements in East Asia was the dismantling of checks and balances needed for the efficient functioning of such arrangements. The break with past practice was notable in two crucial areas: control over external borrowing and State guidance of private investment. For a discussion of these issues, see Akyüz, 2000.

10 The countries in the Baker Initiative were Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire,

Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay, Venezuela and Yugoslavia. The Initiative, announced in October 1985, promised a sustained injection of external capital from both commercial and multilateral sources in return for the adoption of market-friendly reforms (*TDR 1988*, Part One, chap. IV).

11 Differing results have been reported for the impact of aid flows on investment. Hadjimichael et al. (1996) have reported a non-linear and negative effect of foreign assistance on private investment for a sample of sub-Saharan African countries between 1986 and 1992; Hansen and Tarp (2001) report a positive impact of aid on gross domestic investment for varying samples of developing countries.

12 In this exercise, a successful growth episode is defined as an uninterrupted period of 10 years or more, during which time the 5-year average of annual growth exceeds 3.5 per cent.

13 On the Korean response to the debt crisis, see Amsden and Euh, 1990; Chang and Yoo, 2002; and Kim Mahn Je, 1987: 529.

14 Social conflicts were kept in check, thanks partly to a more equitable distribution of the burden of adjustment; controls were maintained over the financial sector and real wages were able to recover without threatening exports, thanks to their robust investment performance and strong productivity growth. For further details, see Taylor, 1987; and Van der Hoeven, 2000.

15 On investment cycles in advanced countries, see *TDR 2001*, chap. I, and in East Asia, see *TDR 2000*, chap. IV.

16 The literature on FDI and development is even more extensive and inconclusive than that on public investment and development. For further discussion see *TDR 1996*, *1997* and *1999*; Milberg, 1999; and Hanson, 2001.

17 For a discussion of the impact of the recent merger-and-acquisition wave on developing countries, see Singh, 2002.

18 The firm-level evidence of spillovers is inconclusive (see Greenaway and Görg, 2001; Aitken and Harrison, 1999; and Kumar and Pradhan, 2002).

19 Cited in Communication from the United States to the WTO Working Group on the Relationship between Trade and Investment, 16 September 2002, para. 14.

20 Ibid.

21 Sala-i-Martin (1997) also finds a more robust impact on growth from equipment investment than from non-equipment investment. A recent study of equipment investment in 55 African countries for the period 1965–1990 also reported a positive impact of machinery equipment investment on economic growth (Jalilian and Odedukun, 2000). For a review of the literature discussing the importance of machinery and equipment imports in relation to the international diffusion of technology and, through this, to faster economic growth, see Keller, 2001.

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Chapter V

INDUSTRIALIZATION, TRADE AND STRUCTURAL CHANGE

A. Introduction

It is generally accepted that capital accumulation can help raise per capita income and living standards in an economy simply by allowing a fuller use of underutilized labour and natural resources without altering the efficiency with which resources are utilized. Long-term economic success, however, depends on sustained improvements in productivity; each worker producing more from any given level of effort provides the basis for rising incomes and living standards. In this sense, it is productivity gains, and not simply additional jobs, that characterize a virtuous process of accumulation and growth. Such a process is invariably associated with structural changes in output and employment as a result of both shifts in economic activities across agriculture, industry and services and upgrading to higher value-added activities within each sector through the introduction of new products and processes. The importance of structure to the development process is partly due to the fact that the overall level of income is closely linked to the allocation of resources among sectors, and the sectors can show, at any point in time, significant variations in productivity levels. But it also derives from differences in the potential of various sectors for technical progress and productivity growth. Such differences emerge not only in the broad division of sectors into agriculture, mining, manufacturing and services, but also in intra-sectoral structures.

The importance of establishing a broad domestic industrial base to respond to development challenges lies in its potential for strong productivity and income growth. That potential derives, on the supply side, from a predisposition to scale economies, specialization and learning and, on the demand side, from favourable global market and price conditions. Successful development experiences have established a close relationship between the growth rate of industrialization and of productivity (Kaldor, 1967), as well as between an acceleration of growth and a shift of labour from the low-productivity primary sector into higher-productivity industry (Kuznets, 1955). These observations have also been confirmed most recently by the experience of the East Asian NIEs (Ros, 2000: 19–30).

As discussed in the previous chapter, varying investment performance is a major reason for the differences among developing countries in their ability to establish and sustain a strong development path. Although the associated changes in the structure of economic activity reflect some common underlying forces, there is also considerable potential for diversity across countries in the timing and extent of structural changes, depending on the nature and composition of investment (both in machinery and equipment and in human and physical infrastructure), resource endowments, size and location. Foreign trade also exerts an important influence on the evolution of economic structure, insofar as it can help overcome domestic supply-side and demand-side constraints on industrialization and growth. However, as with investment, the extent to which trade feeds into a more or less dynamic and virtuous industrialization process owes a good deal to policy choices and interventions.

Following a discussion of the industrialization process in economic development, this chapter assesses how the main factors associated with building and maintaining industrial capacity, productivity and the pattern of trade have changed in developing countries over the past two decades. Particular attention is given to changes in international specialization within the industrial sector through upgrading. Throughout, the chapter compares and contrasts the performance of economies in East Asia and Latin America and, to a lesser extent, Africa, with respect to structural change, productivity growth, international competitiveness and trade.

B. Structural change and economic development

1. Industrialization and growth

Traditional agrarian societies tend to be subsistence economies and generally suffer from chronic surplus labour. The shift away from an agrarian economy usually begins with technological breakthroughs, leading to an acceleration of productivity growth in agriculture accompanied by the rise of new urban centres linked to commercial and financial activities. Historically, however, the big break came with the rise of manufacturing activity which, having made steady and widespread progress in the 18th century, took off more spectacularly in the 19th century in some European countries. There, it was associated with a demographic transition, revolutions in transport and communications, as well as fundamental changes in the organization of production and the relationship between capital and labour. As a result of the take-off, the world economy became divided into industrial leaders and "laggards", accompanied by a sharp divergence in the distribution of global income (Maddison, 2001).

Today, the challenge of narrowing income gaps with richer countries depends crucially on the creation of leading industrial sectors, along with related technological and social capabilities, in the context of the process of structural change that accompanies economic development (Abramovitz, 1986). A common pattern is discernible in most of the successful experiences. An initial sharp drop in the share of agriculture in total employment is followed by its continuous decline, steadying at a very low level as the economy matures. A weak rise in demand for foodstuffs, combined with relatively strong productivity growth in agriculture, explains the declining weight of the primary sector in overall economic

activity. This is associated with a sharp rise in the share of industry in terms of both employment and output. During the "industrialization stage" mechanization spreads to the primary sector, thereby sustaining the fall in agricultural employment. At the same time, strong complementarities with the service sector ensure a steady rise in employment and output in commercial services, transportation and finance.

As the economy grows, the differential growth in productivity and demand between industry and services brings about further structural changes in employment and output. While the growth in demand for manufactures slows down as incomes rise, relatively rapid productivity growth is maintained. As a result, industrial output keeps pace with demand without additional employment, and the share of industry in total employment starts to fall. If aggregate demand becomes sluggish, the industrial sector may start shedding labour, and hence lose employment in absolute as well as relative terms. On the other hand, relatively slow productivity growth of the service sector, coupled with a steady growth in the demand for its products, implies that this sector begins to absorb the employment released by industry. This process is accompanied by a persistent rise in the share of services in total employment and output, reaching over two-thirds at higher levels of income. These trends describe the process of "deindustrialization" that has occurred in mature high-income economies (Rowthorn and Wells, 1987).

The challenge of narrowing income gaps with richer countries depends crucially on the creation of leading industrial sectors, along with related technological and social capabilities.

Such structural changes rarely occur as a smooth or harmonious process. Indeed, they pose new and difficult economic challenges for policy makers. In particular, as labour is released from agriculture its absorption is not assured, with a consequent risk of disguised or open unemployment. In the earlier stages of industrialization, rapidly increasing demand for manufactures could lead to balance-of-payments difficulties and threaten sustained economic growth if the primary sector is unable to provide the necessary foreign exchange earnings. At a later stage of industrialization, as seen in many European countries over the past three decades, slow growth in aggregate demand could mean that labour released from industry cannot be productively absorbed in the services sector, resulting in persistent unemployment. This process can be called "negative deindustrialization" as opposed to "positive deindustrialization", the latter taking place in the context of rapid growth and full employment (Rowthorn and Wells, 1987: 25; see also *TDR 1995,* Part Three, chap. III).

There has been a good deal of diversity in the pace and scale of industrial development across countries. Such diversity is clearly influenced by factors susceptible to strong policy influences and choices, including the pace and nature of capital accumulation, trade and international competitiveness (Gomory and Baumol, 2000; Amsden, 2001). Resource endowments, size and geographical location also have a strong bearing on the timing and extent to which labour shifts into industrial activities. Countries rich in natural resources can delay industrialization even as they experience faster growth, resulting in a lower share of employment in manufacturing at any given level of income. However, they cannot always avoid pressure to establish dynamic industrial sectors, since it may not be possible to reach high income levels without a strong industrial base. Moreover, the pressure to diversify into industrial activities is likely to intensify if efforts to expand incomes are hindered by adverse terms of trade and external payments difficulties that prevent them from meeting the demand for manufactures. Indeed, those economies that have relied more heavily on primary commodity exports to achieve higher levels of income, such as Australia, Canada and some of the Scandinavian countries, have all experienced periods of strong industrial development and diversification as essential components of their sustained economic growth.

For late starters, the industrialization process tends to be more capital-intensive, offering greater opportunities for rapid productivity growth

due to their access to the technology and capital equipment produced in the more advanced economies. As a result, successful industrialization in developing countries is expected to create fewer jobs in industry at any given level of income. But opportunities for some late industrializers to become "workshop economies", producing large quantities of labour-intensive products for export, can go some way towards offsetting this tendency. Thus, they can expand manufacturing employment beyond the limits set by the domestic market. In the same vein, a mature economy, with a competitive edge in key industrial sectors and a surplus in manufacturing trade, can normally employ more labour in those activities and delay deindustrialization.

Most developing countries should be expected to experience a steadily rising trend in the share of manufacturing in total employment and output ...

Deindustrialization associated with strong productivity growth in manufacturing has been a visible trend in the advanced industrial economies over the past few decades.[1] Pooled data regressions on the share of manufacturing in total employment for 18 developed countries during the period 1963–1994 suggest that the level of per capita income at which deindustrialization typically becomes a visible trend is between $8,000 and $9,000 (measured at constant 1986 prices), a figure already reached in the 1960s in a number of advanced industrial economies (Rowthorn and Ramaswamy, 1999).

To the extent that most developing countries are well below this level of income, they should be expected to experience a steadily rising trend in the share of manufacturing in total employment and output. Indeed, as tables 5.1 and 5.2 show, this was generally the case in most developing regions until the early 1980s. In almost all regions in table 5.1, manufacturing employment started rising from the 1960s onwards whilst confirming the tendency, noted earlier, for late industrializers to exhibit a relatively lower share of employment in manufacturing than the early industrializers. Latin America already had a high share of manufacturing in total employment during the 1960s, and this was maintained in the two subsequent decades, except in the Southern Cone countries where it declined sharply during the 1970s from the higher levels of the 1960s. East Asia started from a lower level but caught up rapidly with Latin American countries during the 1960s and, in particular, in the 1970s, while sub-Saharan Africa made modest progress during those decades.

... this was generally the case until the early 1980s.

Output trends broadly paralleled this shift in employment. Again, in the early 1960s, Latin America, particularly the Southern Cone countries, had a higher share of manufacturing in GDP than other developing regions, and these shares were broadly maintained throughout the subsequent two decades. The high shares of both employment and output as early as the 1960s suggest that the import-substituting industrialization pursued in the region did have a significant impact on the process of structural change. In East and South Asia, the share of manufacturing progressed steadily from the relatively low levels of the early 1960s, and it showed a noticeably steeper rise in the first-tier NIEs. China already had a high share of manufacturing in GDP in the early 1960s due to its strong industrialization drive, and this increased even further in the two subsequent decades. In sub-Saharan Africa, there was also an upward trend during the period 1960–1980, but it was much weaker than in Asian countries. In West Asia and North Africa, the rise in the share of manufacturing in GDP during the 1970s was reversed in the subsequent decade, due to the increasing importance of crude oil production in the region.

The period since 1980 has been marked by a significant degree of divergence. The East Asian economies continued to industrialize at a rapid pace, with the first-tier NIEs reaching industrial maturity. The second-tier NIEs, thanks to their large natural-resource base, started to industrialize later, their industrialization gaining momentum from the late 1970s. China's pattern of early industrialization clearly shows the influence of central planning. From the 1980s, following its

Table 5.1

MANUFACTURING EMPLOYMENT AS A SHARE OF TOTAL EMPLOYMENT, BY REGION, 1960–2000

(Per cent)

Region	1960	1970	1980	1990	2000
Sub-Saharan Africa	4.4	4.8	6.2	5.9	5.5
West Asia and North Africa	7.9	10.7	12.9	15.1	15.3
Latin America	15.4	16.3	16.5	16.8	14.2
Southern Cone	17.4	20.8	16.2	16.6	11.8
South Asia	8.7	9.2	10.7	13.0	13.9
East Asia (excl. China)	8.0	10.4	15.8	16.6	14.9
First-tier NIEs	10.5	12.9	18.5	21.0	16.1
China	10.9	11.5	10.3	13.5	11.5
Developing countries	10.0	10.8	11.5	13.6	12.5
Developed countries	26.5	26.8	24.1	20.1	17.3

Source: UNCTAD secretariat calculations, based on data provided by the International Labour Organization.

Note: *Sub-Saharan Africa* includes Benin, Botswana, Burkina Faso, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Gabon, Ghana, Kenya, Lesotho, Malawi, Mauritania, Mauritius, Niger, Nigeria, Rwanda, Senegal, South Africa, Togo, Zambia and Zimbabwe; *Latin America* includes the Southern Cone countries and Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay and Peru; *Southern Cone* includes Argentina, Brazil, Chile and Uruguay; *West Asia and North Africa* includes Algeria, Egypt, Morocco, Oman, Saudi Arabia, Tunisia and Turkey; *South Asia* includes Bangladesh, India, Pakistan and Sri Lanka; *East Asia* includes Hong Kong (China), Indonesia, Malaysia, the Philippines, the Republic of Korea, Singapore, Taiwan Province of China and Thailand.

increasing shift towards a market economy and the expansion of foreign-funded enterprises, there were reversals in terms of both employment and output (*TDR 2002*, chap. V). In sub-Saharan Africa, the share of manufacturing in total employment stagnated during the 1980s, associated with a decline in the share of manufacturing output in GDP; however, both stabilized in the 1990s at relatively low levels. Latin America seems to have experienced deindustrialization prematurely. The region as a whole saw a sharp drop in the share of manufacturing in total output during the 1980s and 1990s in the context of a significant slowdown in overall economic growth, while the share of manufacturing in employment started to fall in the 1990s after remaining relatively stable in the 1980s. The reversal was particularly pronounced in the Southern Cone countries. The share of manufacturing in total output in Latin America is now similar to that of the major industrial countries, while its level of per capita income is much lower.[2]

Turning to country experiences, only 8 of the 26 economies listed in table 5.3 succeeded in raising the share of manufacturing value added in GDP from the 1980s to the 1990s. Surprisingly, perhaps, three of these countries were in Africa (Côte d'Ivoire, Egypt and Ghana), but their shares nevertheless remained at modest levels. The Republic of Korea and Taiwan Province of China appear to be set to enter a phase of positive deindustrialization in the context of rapid growth. On the other hand, the East Asian second-tier NIEs (except the Philippines), which are in the intermediate stages of industrialization, experienced continuous and strong growth in the share of manufacturing value added in GDP and employment.

Table 5.2

MANUFACTURING OUTPUT AS A SHARE OF GDP, BY REGION, 1960–2000

(Per cent)

Region	*1960*	*1970*	*1980*	*1990*	*2000*
Sub-Saharan Africa	15.3	17.8	17.4	14.9	14.9
West Asia and North Africa	10.9	12.2	10.1	15.6	14.2
Latin America	28.1	26.8	28.2	25.0	17.8
Southern Cone	32.2	29.8	31.7	27.7	17.3
South Asia	13.8	14.5	17.4	18.0	15.7
East Asia (excl. China)	14.6	20.6	25.4	26.8	27.0
First-tier NIEs	16.3	24.2	29.6	28.4	26.2
China	23.7	30.1	40.6	33.0	34.5
Developing countries	21.5	22.3	24.7	24.4	22.7
Developed countries	28.9	28.3	24.5	22.1	18.9

Source: UNCTAD secretariat calculations, based on data on manufacturing output and GDP at current prices from World Bank, 1984 and 2003; and *Government Statistical System of the Republic of China*, online.
Note: For definitions of country groupings, see table 5.1.

By contrast, almost all Latin American countries listed in the table saw significant declines in the share of manufacturing value added in GDP. This was most pronounced in Argentina and Chile following their introduction of economic reforms, during the 1970s and 1980s in Chile and during the 1980s and 1990s in Argentina. In Brazil and Mexico too, the sharp fall in the share of manufacturing activity in the 1990s coincided with an intensification of market-based reforms. In these cases, the decline in the relative importance of manufacturing activities occurred at a level of per capita income that was much lower than in either the industrialized economies or the East Asian economies. This might conceivably be interpreted as a desirable return to their comparative advantage in resource-based sectors, following their shift from import-substituting industrialization to an outward-oriented strategy. However, while this shift was associated with a significant acceleration of growth in Chile, this was not the case for Argentina, Brazil or Mexico. Furthermore, a comparison with European economies that have a well-endowed natural-resource base, such as the Scandinavian economies, shows that resource-rich Latin American countries, including Chile, are lagging considerably in industrialization, even allowing for their rich resource endowments. Available evidence on employment shows that the share of manufacturing employment in Chile and Argentina in the late 1990s was between one-half and one-third the level reached by the Scandinavian economies in the early 1960s, when they were at comparable income levels. In the resource-rich Scandinavian economies, the share of manufacturing employment started to fall from a much higher level of income – after having reached a higher peak – than the levels attained in Latin America.

In Chile, while it is possible that manufacturing activity may pick up, in both relative and absolute terms, once the opportunities in the primary sectors are exhausted, the current level of industrialization does not appear to contain the many dynamic elements needed for such a transformation. This point has been made in a recent assessment of Chile's pattern of structural change between 1960 and 1990, using an input-output accounting framework to gauge the strength of its

Table 5.3

SELECTED TRADE AND PRODUCTION INDICATORS FOR 26 DEVELOPING ECONOMIES, 1960–2000

(Percentage)

	Manufacturing value added as a share of GDP				*Exports of manufactures as a share of exports of goods and services*	
Economy	*1960–1969*	*1970–1979*	*1980–1989*	*1990–2000*	*1980–1989*	*1990–2000*
Argentina	38.6	35.3	29.3	20.3	25.9	26.4
Bolivia	..	..	..	15.8	2.8	15.3
Brazil	28.2	30.0	32.6	23.7	44.2	46.8
Chile	23.8	24.2	19.7	18.0	6.6	10.6
China	29.0	37.3	35.8	34.0	67.5	78.0
Colombia	18.9	23.0	22.0	17.0	15.4	23.9
Côte d'Ivoire	10.3	9.4	16.0	18.8	8.3	11.9
Ecuador	18.6	17.8	19.4	20.9	1.6	5.4
Egypt	..	15.7	14.6	17.8	7.8	10.0
Ghana	11.4	11.1	8.0	9.2	..	7.0
India	13.6	15.3	16.4	16.4	16.2	55.4
Indonesia	9.0	10.4	15.1	22.8	29.6	45.1
Kenya	10.5	12.0	11.8	11.2	7.1	15.8
Malaysia	9.5	16.8	20.3	27.3	27.7	63.0
Mexico	20.1	22.7	23.2	20.6	29.3	62.3
Morocco	16.2	16.7	18.0	17.6	26.4	33.7
Nigeria	5.0	4.8	8.2	4.9	..	1.1
Pakistan	14.3	15.9	16.0	16.6	55.3	73.4
Peru	16.9	21.4	26.8	15.3	11.9	13.2
Philippines	20.4	25.7	25.0	23.2	18.1	47.7
Republic of Korea	16.5	25.0	29.8	29.5	81.6	77.5
Taiwan Province of China	16.7	28.4	34.4	28.9	81.8	81.9
Thailand	14.2	19.0	23.5	28.8	30.6	56.7
Turkey	12.7	13.4	18.7	18.3	45.2	44.9
Uruguay	..	23.8	26.5	21.0	32.7	28.9
Venezuela	15.4	16.1	19.5	17.4	5.4	11.0

Source: UN/DESA, *Commodity Trade Statistics* database; World Bank, *World Development Indicators*, *2002*; and Thomson Financial Datastream.

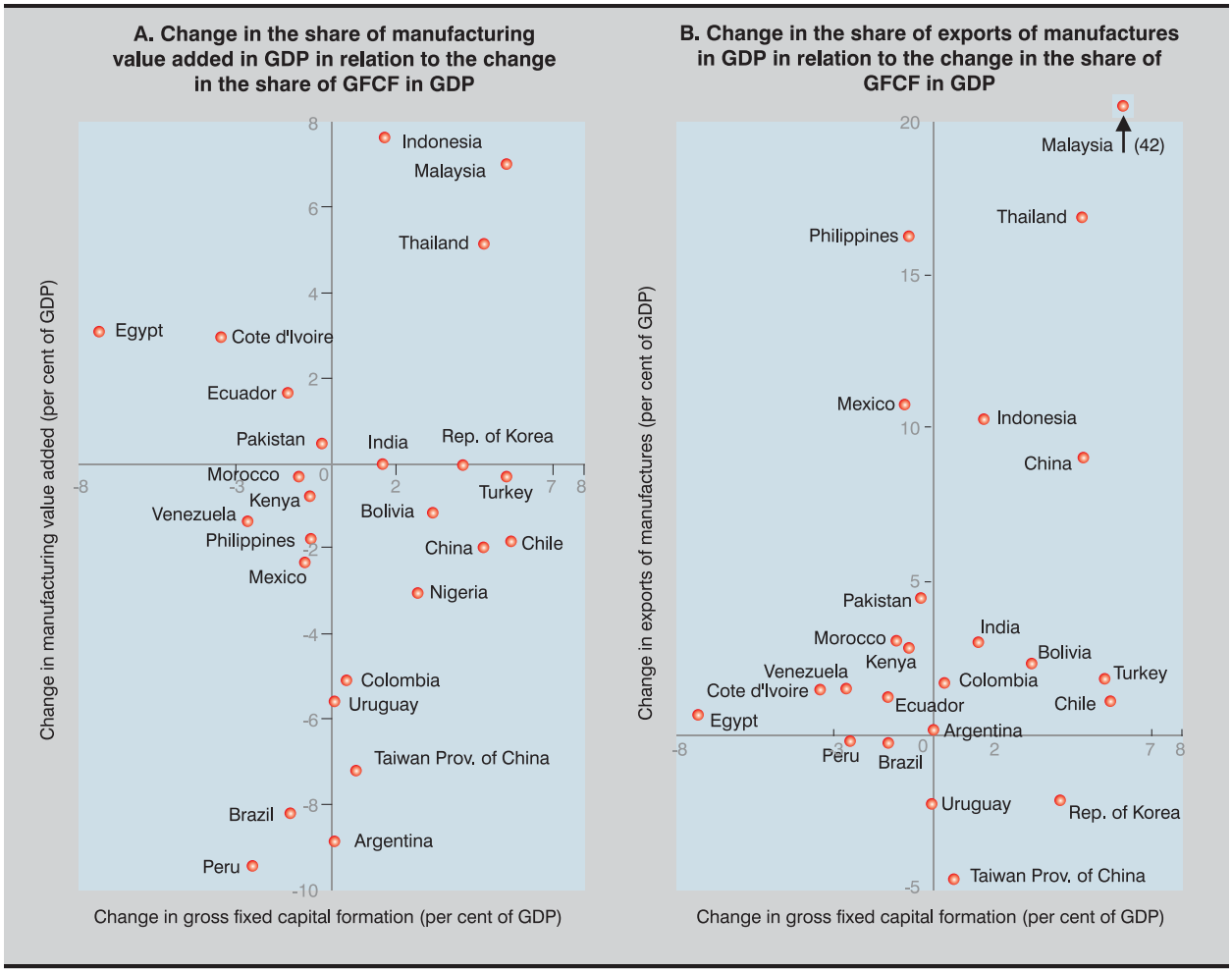
industrial sector. The legacy of a decade of reforms, beginning in the mid-1970s, appears to be weaker backward and forward linkages in this sector, particularly in the technologically sophisticated segment of manufacturing. The downgrading of "heavier industries" is reflected, in particular, in a sharp jump in imported inputs to nearly two-thirds of total inputs (compared to less than 40 per cent in the East Asian economies at a comparable stage of development) as well as a significant weakening of competitiveness in technology-intensive sectors (see subsection D.3 below). These raise concerns about the longer-term technological prospects, self-sustainability and overall stability of this pattern of structural change (Albala-Bertrand, 1999).

Taken together, the above evidence shows that, unlike the advanced industrial economies and the East Asian NIEs, the deindustrialization trend in many developing countries in Latin America and sub-Saharan Africa has not been a benign

Figure 5.1

CHANGES IN MANUFACTURING VALUE ADDED AND EXPORTS OF MANUFACTURES IN RELATION TO CHANGES IN GROSS FIXED CAPITAL FORMATION: 1990–2000 COMPARED TO 1980–1990

(Per cent of GDP)



Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators, 2002*; and Thomson Financial Datastream.

product of differential productivity growth in the context of a steady economic expansion. Rather, it has coincided with a widespread slowdown in output growth. Indeed, a recent study of developing countries in the decades before and after the debt crisis in the 1980s has shown that across much of South and East Asia productivity remained high in the post-crisis period, often accelerating, and employment growth remained strong (Pieper, 2000). This pattern was supported by persistently high rates of economic growth in the periods before and after the crisis. Latin American economies have exhibited a different pattern. In most cases, growth in employment remained largely unchanged between the two periods while output growth was similar or lower. As a result, productivity growth remained slow or negative. The exceptions to this pattern are Brazil, where higher productivity growth in manufacturing was achieved at the cost of employment, which fell sharply, and Chile and Costa Rica, both of which enjoyed stronger output and productivity growth in the

later period. Economies in sub-Saharan Africa generally showed very little change across the two periods, reflecting widespread and persistent stagnation.

2. Capital accumulation, trade and industrialization

As noted above, the pace and pattern of industrialization are greatly influenced both by the pace and pattern of capital accumulation and the participation of countries in international trade. Indeed, successful industrialization in developing countries is often based on mutually reinforcing dynamic interactions between capital accumulation and exports. This dynamic export-investment nexus is well known and is described in some detail in *TDR 1996* in relation to the evolution of the East Asian NIEs. Exports broaden the size of the market and thus allow scale economies to be exploited; they also provide the foreign exchange needed for capital accumulation, in view of the dependence of most developing countries on imported capital goods. At the same time, investment improves export potential by adding to production capacity and improving competitiveness through productivity growth. Such a process is typically characterized by rising investment, exports and manufacturing value added, both in absolute terms and as a share of GDP. Over time, both foreign exchange and savings gaps close as exports and domestic savings begin to grow faster than investment.

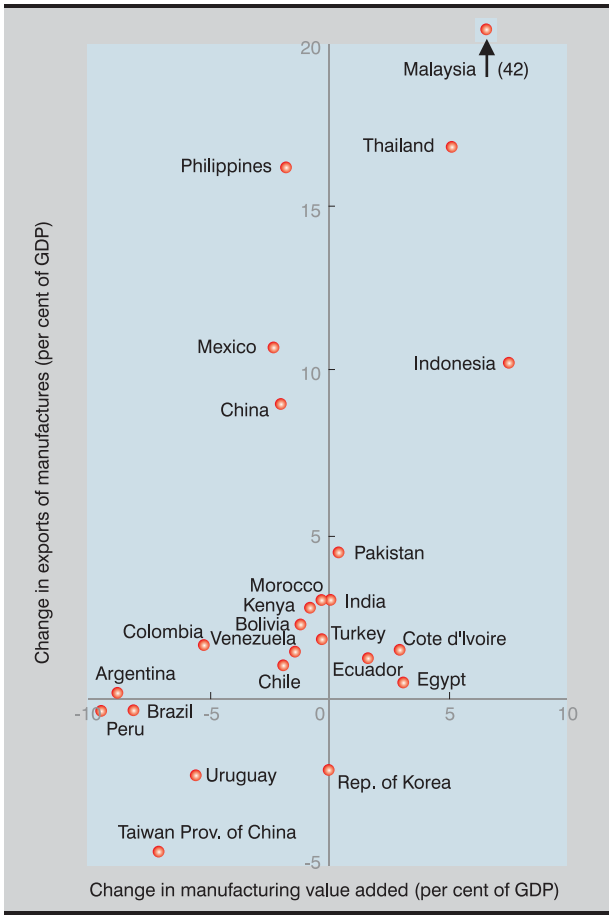
Figures 5.1A and 5.1B relate changes in the investment ratio over the period 1980–2000 to changes in the shares of manufacturing value added and exports in GDP, while figure 5.2 relates changes in the latter two to each other.[3] They show that countries which have been successful in sustaining a virtuous process of accumulation at the initial and intermediate stages of industrialization are the ones that have been able to combine rising investment with expanding manufacturing value added and exports. This is particularly the case for the three dynamic second-tier NIEs, namely Indonesia, Malaysia and Thailand. On the other hand, the Republic of Korea and Taiwan Province of China are in more mature stages of industrialization, combining still rising investment ratios with falling or stable shares of manufacturing value added and exports in GDP. In both cases, the share of manufacturing value added in GDP is still at much higher levels than in advanced industrial countries, and the share of manufacturing in total exports has been stable, at high levels that had already been attained in the 1970s and 1980s (table 5.3; see also Amsden, 2001, table 6.9).

Most Latin American countries combined a declining share of investment in GDP with a declining share of manufacturing value added. While

Figure 5.2

CHANGES IN MANUFACTURING VALUE ADDED IN RELATION TO CHANGES IN EXPORTS OF MANUFACTURES: 1990–2000 COMPARED TO 1980–1990

(Per cent of GDP)



Source: See fig. 5.1.

Box 5.1

MANUFACTURED EXPORTS AND VALUE ADDED IN MEXICO

The combination of a strong performance in manufactured exports with a weak performance in value added in some of the countries participating in international production networks, including Mexico, was already noted in *TDR 2002* at the aggregate level. The reason for this, according to an analysis by the UNCTAD secretariat of evidence from Mexico at the sectoral level, is that most of the increase in manufactured exports has been in those industries that have been participating in international production networks: clothing, non-electrical machinery, electrical machinery, transport equipment, and professional and scientific equipment. In clothing, the evidence for the period 1980–1998 shows that exports grew faster than the average for manufactured goods as a whole, but also that this was one of the few manufacturing sectors in which domestic value added declined between the early 1980s and 1998 (see table).

The fact that imports of both textiles and clothing also registered above-average growth rates, suggests that the inclusion of this sector in international production networks was accompanied by the substitution of a significant share of domestic production by imports. Transport equipment experienced the fastest export growth rate among all the manufacturing categories and became Mexico's second most important sector in manufactured exports. However, this sector's growth in value added exceeded the average for manufacturing by much less than its growth in exports. In non-electrical machinery, electrical machinery and professional and scientific equipment, exports also grew much faster than value added, although value added in these sectors also performed better than average. The disparity between the growth rates of manufacturing value added and exports was also due to weak growth in domestic value added and to strong growth in imports for domestic consumption in industries such as paper and products, printing and publishing, plastic products, glass and products, and other manufactured products. It is interesting to note that value added in processed foods, beverages and tobacco (i.e. sectors that have not been included in international production networks) rose rapidly, and that both processed foods and beverages continued to rank among the five most important manufacturing categories in terms of value added, but their export performance was below average.

/...

in many of these countries the share of manufactured exports in GDP remained unchanged or fell, in others the falling or stagnant share of manufacturing value added in GDP was associated with a rising share of manufactured exports. This latter group consists of two sets of countries. First, the middle-income, primary-commodity exporters, where the increase in manufactured exports was moderate and started from a very low base (e.g. Colombia, Ecuador and Venezuela); and second, countries where the increase in manufactured exports was due to their participation in labour-intensive assembly activities. The most important example of the latter is Mexico, which combined a lower share of investment and manufacturing value added in GDP with a rapidly expanding share of manufactured exports (see box 5.1).[4]

In East Asia, only the Philippines manifests the same characteristics as Mexico in combining rising manufactured exports as a share of GDP with a falling share of manufacturing value added in GDP. As in Mexico, the share of investment in GDP fell in the Philippines during 1980–2000. While Malaysia also participates in international production networks through labour-intensive assembly activities, it succeeded in increasing both its manufactured exports and value added, although the increase in the former was much stronger (table 5.3). China saw a small decline in the share of manufacturing value added in GDP, but a large increase in manufactured exports, a disparity due partly to the extremely high share of manufacturing in GDP in the 1980s associated with central planning, and partly to the country's

Box 5.1 (concluded)

MEXICO: MANUFACTURING VALUE ADDED AND TRADE IN MANUFACTURES, BY SECTOR, 1980–1998

(Per cent)

	Value added			Exports			Imports		
	Share of sector in total manufacturing industry		Average annual growth	Share of sector in total manufacturing industry		Average annual growth	Share of sector in total manufacturing industry		Average annual growth
Sector	1980	1998	1980–1998	1980	1998	1980–1998	1981	1998	1981–1998
Food products	8.0	8.2	7.4	6.9	2.1	9.2	4.7	3.4	14.1
Beverages	10.8	8.8	6.9	1.3	1.1	15.0	0.4	0.2	24.7
Tobacco	3.9	3.7	8.0	1.0	0.1	0.3	0.0	0.0	33.1
Textiles	5.2	1.9	-0.1	5.6	3.6	15.3	1.1	4.0	27.4
Wearing apparel, except footwear	..	0.5	-0.1[a]	3.7	4.9	20.5	1.0	2.4	25.3
Leather products	..	..	..	0.7	0.3	14.6	0.2	0.7	27.6
Footwear, except rubber or plastic	..	0.3	-4.4[a]	1.2	0.4	11.0	0.1	0.1	19.7
Wood products, except furniture	0.7	0.2	-1.1	1.3	0.4	10.9	0.5	0.5	18.9
Furniture, except metal	..	0.2	1.0[a]	0.9	2.4	23.3	0.2	0.4	22.3
Paper and products	6.1	2.3	1.4	0.9	0.5	7.9	1.3	2.4	17.7
Printing and publishing	..	0.5	3.0[a]	0.6	0.4	15.0	0.7	0.9	18.5
Industrial chemicals	4.7	8.9	9.8	6.2	3.1	11.8	8.3	7.1	13.3
Other chemicals	6.7	8.8	8.9	2.0	1.7	16.6	2.3	3.1	18.7
Petroleum refineries	..	..	..	5.7	0.6	-1.1	0.8	1.8	15.1
Misc. petroleum and coal products	0.5	0.6	7.0	0.4	0.0	5.3	0.1	0.2	20.7
Rubber products	3.5	1.3	0.0	0.1	0.4	23.3	1.4	1.5	19.9
Plastic products	..	1.5	4.5[a]	0.9	1.0	19.1	0.7	4.2	34.4
Pottery, china and earthenware	..	0.5	6.3[a]	0.3	0.3	16.5	0.0	0.3	31.5
Glass and products	3.9	2.3	3.9	0.8	0.8	15.6	0.4	0.7	24.2
Other non-metallic mineral prod.	5.6	3.8	4.6	1.1	0.6	12.9	0.6	0.4	13.9
Iron and steel	13.3	7.9	3.6	0.9	2.2	21.2	8.6	2.9	13.0
Non-ferrous metals	3.7	3.2	4.8	14.6	1.3	4.1	1.8	1.9	17.6
Fabricated metal products	3.2	4.1	7.3	2.1	3.7	20.4	5.7	6.2	19.8
Machinery, except electrical	1.4	3.8	11.4	4.7	11.4	22.3	25.1	13.9	13.1
Electrical machinery	5.3	6.0	7.1	27.1	29.3	17.3	11.5	25.2	20.4
Transport equipment	13.5	20.2	9.2	5.4	22.3	24.2	18.0	11.5	13.3
Prof. and scientific equipment	..	0.4	8.3[a]	1.8	3.7	22.9	3.5	3.0	15.1
Other manufactured products	..	0.3	3.2	1.7	1.4	18.2	0.8	1.1	20.3
Memo item:									
Total manufacturing industry	100.0	100.0	6.8	100.0	100.0	16.8	100.0	100.0	16.6

Source: UNCTAD secretariat calculations, based on Nicita and Olarreaga, 2001.
a 1984–1998.

participation in low-value-added assembly activities within international production networks. Chile was the only country in Latin America to combine a strong investment performance with a lower share of manufacturing value added in GDP and a moderate increase in manufactured exports, from a very low base.

The support and protection given during the import-substituting industrialization of the 1960s

and 1970s undoubtedly allowed industry in Latin America, and to a lesser extent in Africa, to expand considerably faster than would have been possible under competitive conditions. Unlike in East Asia, however, which also made extensive use of industrial policies, these strategies in Latin America and Africa were not always able to promote viable industries (Hirschman, 1968). Consequently, with big-bang liberalization and the withdrawal of support and protection, industries in these regions, confronted with stiff competition, were forced to downsize, rationalize or perish. In this sense, the deindustrialization process, associated with the shift in the development paradigm, can be seen as a corrective step in the context of a Schumpeterian process of "creative destruction". However, after so many years of reform and adjustment, there is little sign of creative forces initiating a new virtuous process of accumulation, growth and structural change.

C. Productivity growth: inter-industry patterns

The close correlation observed in East Asia between high rates of investment, rising shares of manufacturing in GDP and strong export performance is underpinned by a rapid growth in productivity. However, the link between investment on the one hand and productivity growth and trade performance on the other is not automatic. While a shift to industrial activities is essential for attaining rapid productivity growth and high income levels, it is not always clear how the allocation of investment across sectors influences the speed with which the productivity gap with advanced industrial countries is narrowed. Indeed, there is no consensus as to whether productivity gains associated with investment can best be captured in sectors with large or small productivity gaps with advanced industrial economies. While some authors (Gerschenkron, 1962) have invoked the "advantage of backwardness" to support the view that sectors with the largest productivity gap tend to attract the most investment and narrow that gap the fastest, others (e.g. Krugman, 1990) have suggested that developing countries tend to narrow the productivity gap at equal rates across industrial sectors.

Productivity growth also depends on how investment is combined with learning in the context of technological progress. Even where technology is embodied in imported capital equipment along with complementary codified knowledge, certain aspects of any technology are tacit, and thus can be acquired only through learning-by-doing. Furthermore, using any imported technology efficiently would necessitate modification to suit specific local conditions. Thus, a country's initial knowledge base, combined with step-wise learning, determines how well it copes with and applies new technologies. From this perspective, technological change is the joint outcome of investment in modern capital equipment and learning how to use it efficiently (Nelson and Winter, 1982; Abramovitz, 1986; Lucas, 1993; and Nelson and Pack, 1999). Targeted technology policies also have a direct bearing on the outcome.

An important development that has influenced the sectoral pattern of technology transfer and absorption is the increasing vertical integration of production into distinct value-added stages located in different countries, and the greater par-

ticipation of developing countries in such global production networks. The kinds of industrial activities most easily relocated from more to less developed countries are those that use easily traded intermediate products, and in which the share of wages in production costs is high, because such activities benefit from a variation in wage costs across locations. As discussed in chapter IV, significant imports of both machinery and equipment and intermediate goods appear to accompany increased participation in such networks. Although this has been seen as a possible basis for technological leapfrogging and rapid acceleration of productivity growth, the technology transfer and learning processes in such networks are increasingly circumscribed by global strategies of TNCs, rather than by national development strategies of the recipient countries. Thus the pace of productivity growth in developing countries and the speed with which the productivity gap with developed countries in different sectors can be reduced are affected by the nature of their participation in international production networks, as well as by technology and capital goods imports and the process of learning and adaptation.

In Asia, labour productivity has improved significantly and continuously across all sectors, while no such trend is discernible in Latin America.

Table 5.4 shows the evolution of labour productivity in various developing countries and in the United States, the world's technology leader. It covers the manufacturing sector as a whole as well as a selection of low-, medium- and high-skill industries. The data are presented for 1980, 1985 and 2000 to enable an assessment of how the debt crisis and extensive policy reforms, which in most countries occurred between 1985 and 1990, might have affected sectoral productivity trends. Since the data reported sometimes refer to different periods, and large proportional changes often occur in countries with small industrial bases, the evidence needs to be interpreted with caution.

In all Asian countries for which data is available labour productivity has improved significantly, and in most cases continuously across all sectors, over the past two decades, while no such trend is discernible in Latin America (with the exception of Chile). Moreover, in many countries in these regions, productivity levels fell during the 1990s (i.e. the period after widespread trade and financial liberalization), and in some cases they dropped below the levels observed in 1985 (i.e. in the middle of the debt crisis).

A number of countries in Latin America, such as Argentina, Brazil and Mexico, experienced a particularly sharp productivity decline in traditional labour-intensive sectors such as textiles and clothing. By contrast, productivity performance was better in transport equipment than in manufacturing as a whole, and productivity growth in that sector in Brazil and Mexico even exceeded that observed in the United States. Productivity growth in food products in countries such as Brazil, Colombia and Mexico kept up comparatively well with that in the United States.

In Latin America, opening up to international competition and FDI led to a shift in the production structure towards the relatively capital-intensive sectors involved in processing abundant natural resources, while those activities intensive in R&D and in engineering lost weight.

In Asia, the Republic of Korea achieved higher rates of productivity growth than the United States, both in total manufacturing and in each of the sectors in the table. The evidence further suggests that other Asian economies, including India, Indonesia, Malaysia, Pakistan, the Philippines and Taiwan Province of China, as well as Turkey and Chile, also successfully reduced the productivity gap with the United States for manufacturing as a whole, but the rate of productivity growth varied widely across industries. A number of these countries have imported a substantial amount of machinery from developed countries over the past three decades (see chap. IV, table 4.3). Significantly, Mexico, which also imported large amounts of machinery,

Table 5.4

LABOUR PRODUCTIVITY IN 26 DEVELOPING ECONOMIES AND SELECTED INDUSTRIAL SECTORS, 1980–2000

(Index numbers, 1990 = 100)

	Total manufacturing (ISIC 300)			Food products (ISIC 311)			Textiles (ISIC 321)			Clothing (ISIC 322)			Electrical machinery (ISIC 383)			Transport equipment (ISIC 384)		
Country/economy	*1980*	*1985*	*2000*	*1980*	*1985*	*2000*	*1980*	*1985*	*2000*	*1980*	*1985*	*2000*	*1980*	*1985*	*2000*	*1980*	*1985*	*2000*
Argentina	..	122.1	85.1[a]	..	134.7	88.1[a]	..	109.9	55.7[a]	..	118.4	94.8[a]	..	101.2	64.2[a]	..	128.0	103.9[a]
Bolivia	77.0	58.3	90.8[b]	85.8	171.6	122.8	115.5	93.1	98.0	149.3	103.6	109.7	150.6	79.1	81.0	192.0	47.9	84.6
Brazil	..	79.9	114.0[c]	..	89.4	108.9[c]	..	91.8	76.9[c]	..	108.6	78.3[c]	..	83.2	102.0[c]	..	74.2	180.6[c]
Chile	80.2	115.3	144.6	97.7	117.0	149.6	79.8	97.9	121.7	98.8	123.9	184.8	49.5	83.5	104.4	98.3	110.6	174.6
China	..	..	242.1[d]	..	..	311.5[d]	..	..	181.7[d]	..	..	224.4[d]	..	..	285.1[d]	..	..	..[d]
Colombia	75.2	87.5	101.3	67.8	97.1	105.5	63.0	72.9	51.3	91.8	89.7	105.6	74.9	86.7	78.4	52.9	65.5	62.2
Côte d'Ivoire	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ecuador	79.8	77.2	117.3[d]	86.5	101.7	97.8[d]	99.4	95.1	101.3[d]	157.2	106.4	93.1[d]	119.9	107.6	61.5[d]	69.1	94.4	109.8[d]
Egypt	55.6	89.4	90.7[b]	73.5	94.6	81.6[e]	80.1	94.0	86.4[e]	93.1	134.0	181.3[e]	90.9	232.7	162.3[e]	76.0	128.9	262.8[e]
Ghana	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
India	55.2	72.5	152.4	34.6	78.3	174.0	69.9	67.7	107.4	43.3	52.1	107.5	64.2	69.3	173.1	60.8	73.9	123.2
Indonesia	54.0	68.9	124.2[d]	39.9	54.6	113.2	45.8	67.4	158.1	39.0	73.8	147.6	56.3	76.7	155.7	47.8	44.0	187.2
Kenya	83.7	88.8	89.4[e]	94.0	95.6	98.8[e]	104.2	88.4	74.0[e]	111.7	112.9	105.8[e]	25.1	32.9	90.9[e]	105.6	128.9	69.8[e]
Malaysia	67.1	93.9	171.1	90.6	96.4	162.7	60.2	61.5	208.6	62.8	73.9	151.2	66.6	98.6	219.3	40.9	55.6	116.8
Mexico	..	102.5	108.0	67.8	101.1	101.3	111.7	115.9	82.3	..	118.0	85.2	113.6	96.8	107.4	111.6	95.0	158.1
Morocco	85.8	81.8	117.0[d]	110.8	114.8	131.5[d]	79.0	99.9	99.2[d]	57.6	103.4	116.4[d]	70.3	88.4	85.9[d]	57.8	81.1	85.3[d]
Nigeria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Pakistan	63.4	86.0	120.8[a]	89.5	106.6	118.8[a]	41.2	61.0	106.1[a]	61.0	67.0	133.8[a]	49.7	61.9	218.9	64.0	65.5	200.2
Peru	107.3	107.0	82.0[a]	117.5	74.6	57.5[a]	120.9	116.7	76.1[a]	119.6	101.3	124.5[a]	101.3	85.9	66.2	173.0	105.5	68.1
Philippines	74.1	79.9	150.0[b]	75.0	72.3	149.5	88.7	49.7	140.2[b]	77.1	50.6	145.3[b]	59.9	46.6	96.4[b]	63.5	28.8	152.5[b]
Republic of Korea	50.7	65.1	231.8	57.2	67.2	205.8	61.0	78.5	233.1	58.6	62.4	196.5	38.7	64.0	330.0	41.8	65.4	187.6
Taiwan Province of China	61.9	72.3	127.1[a]	57.3	82.8	110.6[a]	51.3	66.7	127.4[a]	70.1	78.3	92.2[a]	56.4	67.9	148.6[a]	54.1	61.8	118.0[a]
Thailand	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Turkey	61.3	71.5	121.3	65.4	71.8	134.4	75.3	77.7	114.2	59.5	68.9	148.5	62.8	76.5	135.6	54.5	59.9	135.4
Uruguay	88.0	125.9	127.5[d]	70.6	121.7	111.7[d]	76.3	114.6	115.3[d]	98.2	97.7	66.6[d]	69.6	118.4	81.1[d]	66.3	80.9	48.2[d]
Venezuela	83.6	91.3	114.1[e]	92.7	103.1	183.0[e]	99.0	124.7	45.9[e]	142.1	156.4	90.3[b]	105.9	110.2	98.2[b]	137.3	142.1	260.8[b]
Memo item:																		
United States	80.6	89.0	114.7[c]	79.5	92.1	113.2	84.1	89.4	118.0	82.7	93.0	144.1	78.5	88.3	220.4	80.3	98.6	149.9

Source: UNIDO, Industrial Statistics Database, 2002; World Bank, *World Development Indicators, 2002*; and Thomson Financial Datastream.

Note: Labour productivity calculated as real value added (in national currency) per worker. Nominal value added deflated by the GDP-deflator. Electrical machinery includes semiconductors and telecommunications equipment.

a 1996. ***b*** 1997. ***c*** 1995. ***d*** 1999. ***e*** 1998.

Table 5.5

SECTORAL SHARES IN MANUFACTURING VALUE ADDED IN SELECTED DEVELOPING ECONOMIES, 1970–2000

(Per cent)

	Argentina				Brazil				Chile				Colombia			
Sectors	1970	1980	1990	1996	1970	1980	1990	1996	1970	1980	1990	2000	1970	1980	1990	2000
I	15.6	..	14.3	13.7	18.8	..	..	22.8	14.9	7.7	8.1	6.7	10.7	10.2	9.6	7.3
II	9.9	..	8.5	7.7	9.9	..	..	8.7	7.7	2.6	1.8	2.3	2.9	4.0	4.3	2.3
III+IV	36.2	..	46.7	48.6	35.8	..	..	42.4	43.2	61.5	64.6	66.8	45.7	50.1	51.2	53.0
V	38.2	..	30.5	30.0	35.5	..	..	26.1	34.2	28.2	25.5	24.1	40.7	35.6	34.9	37.4
	Mexico				Malaysia				Republic of Korea				Taiwan Province of China			
	1970	1980	1990	2000	1970	1980	1990	2000	1970	1980	1990	2000	1973	1980	1990	1996
I	13.3	..	14.1	11.8	9.8	21.4	30.5	48.9	9.1	16.6	29.1	39.7	21.1	21.5	28.7	36.2
II	5.5	..	14.4	18.9	3.2	4.3	5.6	4.1	5.4	6.1	10.5	11.8	5.0	6.3	7.8	8.0
III+IV	46.8	..	48.8	43.8	49.5	41.2	36.8	29.0	45.5	39.5	31.6	27.9	35.7	37.5	35.8	35.3
V	34.4	..	22.6	25.4	37.5	33.1	27.1	18.0	39.9	37.8	28.8	20.6	38.3	34.6	27.7	20.4

Source: Cimoli and Katz, 2001; and UNIDO, Industrial Statistics Database, 2002.
Note: Sector I: Metalworking industry (ISIC 381, 382, 383, and 385), including computers and office equipment, telecommunications equipment, and semiconductors.
Sector II: Transport equipment (ISIC 384).
Sector III: Food, beverages and tobacco (ISIC 311, 313, and 314).
Sector IV: Natural-resource processing industries (ISIC 341, 351, 354, 355, 356, 371, and 372).
Sector V: Traditional labour-intensive industries (ISIC 321, 322, 323, 324, 331, 332, 342, 352, 361, 362, 369, and 390).

did not share in this productivity trend, except, as noted, in transport equipment and, to a lesser degree, in electrical machinery.

Differences across countries in the development of labour productivity in various industries are also reflected in changes in the relative weight of individual sectors in total industrial value added. Table 5.5 shows the increasing importance of industries based on natural resources in the major Latin American economies, with the exception of Mexico, and the declining importance of the metalworking industries (including the information technology subsectors), with the exception of Brazil. This implies that opening up to international competition and FDI led to a shift in the production structure towards the relatively capital-intensive sectors involved in processing abundant natural resources, while those activities intensive in research and development (R&D) and in engineering lost weight in total industrial output, thereby reducing the potential for productivity growth and innovation (Cimoli and Katz, 2001).

Regarding structural change, Mexico holds an ambiguous position which reflects the weight of the automobile sector and *maquiladora* industries – sectors with different labour intensities – in its recent pattern of industrialization. However, an examination of the structural-change index of the United Nations Industrial Development Organization (UNIDO) suggests that, while there was a restructuring in manufacturing after market-oriented reforms, structural change remained the same for the period 1984–1994 under the new policy regime as it had been for the 1970–1981 period under import substitution (Máttar, Moreno-Brid and Wilson Peres, 2002: 27–28; Moreno-

Brid, 1999: 48–49). Moreover, the sectors with the largest increase in their share in GDP during 1987–1994 (namely, automobiles, motors and accessories, and non-electrical machinery and equipment) also had the largest increase in 1970–1981. Thus more than a decade of economic reforms appears not to have radically changed the structure and dynamics of manufacturing activity.

These changes in the share of different sectors in manufacturing value added in Latin American countries significantly differ from those observed in the Asian economies shown in table 5.5. While the intensity of these changes differed considerably across the Asian economies, the metalworking and automotive industries gained in importance in all of them. The shift towards metalworking was accompanied by a sharp decline in the importance of natural-resource-based and labour-intensive industries.

A recent study provides evidence that the share of those manufactures commonly associated with successful industrial upgrading (electrical machinery, non-electrical machinery and transportation equipment) grew particularly rapidly in the Republic of Korea, Malaysia, Thailand and Turkey, but much less so in Brazil, Chile, Mexico and, particularly, Argentina (Amsden, 2001). While structural change within the manufacturing sector was limited during the period 1980–1994, it was greatest in economies such as Indonesia and Malaysia, which experienced substantial growth in manufacturing value added as a share of GDP, and lowest in semi-industrial economies, such as Argentina and Mexico, as well as in more mature industrial economies (the Republic of Korea and Taiwan Province of China), where that share contracted. Thus the weak performers included countries that experienced both "positive" and "negative" patterns of deindustrialization.[5]

D. Trade and the pattern of structural change

Close integration into the international trading system through rapid liberalization has been the cornerstone of economic reform in developing countries since the mid-1980s. This could be expected to influence the pattern of structural change, along with resource endowments and geography. However, the impact of trade integration largely depends on the circumstances under which it takes place, and on the policies pursued during the integration phase. Integration in Latin America and Africa marked a sharp shift in development strategy, occurred in a big-bang manner and followed the debt crisis (i.e. in a period of weakness). This contrasts with the integration process in East Asia that occurred from a position of strength and was characterized by a continuous and purposeful strategy of gradual opening up. China represented in some ways an exception, as it combined a rapid pace of integration with accelerated growth, largely because its opening up was from a position of strength common to other Asian countries. It is likely that the pattern of industrialization and structural change across the developing world since the debt crisis has been related to these underlying patterns of trade integration.

1. Industrialization and competitiveness

It is generally agreed that a country's pattern of participation in international trade is determined to a large extent by its resource endowments and the efficiency with which resources are utilized. Conventional wisdom suggests that greater international mobility of capital should increase the

importance of relative endowments of high-skilled and low-skilled labour in shaping the effect of trade on the pattern of industrialization. In particular, in most developing countries, industries using low-skilled labour should be expected to attract capital, making that labour more productive and those industries more competitive on international markets. According to this view, developing countries should specialize in low-skilled, labour-intensive manufactured goods and import high-skill-intensive goods from advanced countries. This would lead to a narrowing of the wage gap between unskilled and skilled workers in developing countries.

Integration in Latin America and Africa occurred in a big-bang manner and in a period of weakness.

Studies on international specialization often assume that in an economy rates of productivity growth differ widely across industrial sectors, while wages develop more equally across industries.[6] Such asymmetry can provide an important source of structural change. In a dynamic context, uneven productivity growth across industries, combined with even growth in wage rates, implies that workers in industries with relatively higher productivity are not fully compensated. The productivity gains are thus spread over the whole economy through general wage increases and changes in relative prices. Such wage and productivity dynamics – and hence the development of relative unit labour costs – will have a major bearing on the comparative cost advantages of different countries in specific industries. If a country experiences relatively faster productivity growth in some industries than in others, while wages are growing at similar rates across industries, it will gain comparative advantage in the catching-up sector, provided that productivity and wage developments in other countries do not follow the same pattern.[7]

Changes in specialization in a country are often associated with changes in "international competitiveness", although this concept is more appropriate to discussions of performance of individual enterprises.

A comparison of unit labour costs in the sample of 26 developing countries relative to the United States for a number of manufacturing categories in 2000 does not reveal a consistent pattern, as ratios differ substantially for individual countries in different industrial categories, as well as for individual categories in different countries (table 5.6). The fact that the table includes data for countries with small industrial sectors, which therefore often experience considerable fluctuations in their levels of wages and productivity over time, may partly explain this absence of a consistent pattern. For all industrial categories and all the selected countries taken together, there have been almost equal numbers of upward and downward changes in the ratios over the past two decades. But it is noteworthy that the Republic of Korea is the only country in the table where the ratio of unit labour costs to that in the United States fell in all five sectors. In a number of other countries (notably India), labour costs relative to the United States also fell in traditional labour-intensive industries such as clothing. By contrast, this ratio rose in other sectors for a large number of countries, particularly in electrical machinery. It is perhaps surprising that this is the case even for economies that have become, in varying degrees, successful exporters of telecommunications equipment and semiconductors within international production networks, such as Malaysia, Mexico, the Philippines, Taiwan Province of China, Thailand and Turkey. Strong productivity growth appears to have been a key determinant of export success in these products in Malaysia and Taiwan Province of China, while relatively slow productivity growth in Mexico and the Philippines (see table 5.4) suggests that other factors, including wages and exchange rates, played a more important role in these countries in retaining competitiveness.

Changes in specialization in a country are often associated with changes in "international competitiveness", although this concept is more

Table 5.6

UNIT LABOUR COSTS IN 26 DEVELOPING ECONOMIES AND SELECTED SECTORS, 1980 AND 2000

(Ratios to the United States level)

	Food products		Textiles		Clothing		Electrical machinery		Transport equipment	
Economy	1980	2000	1980	2000	1980	2000	1980	2000	1980	2000
Argentina	0.87[a]	1.95[b]	0.48[a]	1.28[b]	0.48[a]	0.64[b]	0.70[a]	2.11[b]	0.79[a]	1.78[b]
Bolivia	0.86	0.61	0.93	0.76	0.82	0.65	0.51	1.00	0.47	1.34
Brazil	0.53[c]	0.74[b]	0.42[c]	0.65[b]	0.39[c]	0.47[b]	0.52[c]	0.81[b]	0.60[c]	0.53[b]
Chile	0.63	0.80	0.65	0.89	0.55	0.51	0.88	0.90	0.46	0.74
China	0.68	..	0.26	..	0.08	..	0.59	..	0.42	..
Colombia	0.60	0.62	0.47	0.66	0.58	0.47	0.48	1.01	0.53	0.97
Côte d'Ivoire	0.92	1.50[d]	0.85	1.06[d]	0.73	1.02[d]	0.78	1.34[d]	0.36	1.69[d]
Ecuador	1.36	0.88[e]	0.91	0.30[e]	0.82	0.34[e]	0.96	1.20[e]	0.86	0.55[e]
Egypt	1.45	1.45[f]	1.27	1.21[f]	0.99	0.38[g]	1.00	1.10[g]	1.51	0.71[g]
Ghana	1.00	0.82[b]	0.80	0.96[b]	0.45	0.60[b]	1.08	0.39[b]	0.84	1.63[b]
India	1.74	1.29	1.25	1.57	0.96	0.47	1.01	0.98	1.24	1.43
Indonesia	0.97	0.71	0.61	0.42	0.95	0.45	0.49	0.62	0.40	0.26
Kenya	1.16	1.31[e]	1.00	2.20[e]	0.94	0.96[e]	1.47	0.74[e]	1.10	3.34[e]
Malaysia	0.60	1.08	0.75	0.59	0.82	0.84	0.71	1.01	0.67	0.69
Mexico	1.00	0.90	0.85	0.88	0.69[h]	0.64	0.73	1.06	0.49	0.43
Morocco	2.08	1.61[e]	1.19	1.38[e]	1.25	1.05[e]	1.42	1.49[e]	1.34	0.92[e]
Nigeria	0.99	0.29[b]	0.85	0.80[b]	0.52	0.11[b]	0.56	0.56[b]	0.09	0.04[b]
Pakistan	..	..	..	..	..	..	..	..	..	..
Peru	0.43	1.02[b]	0.43	0.62[b]	0.66	0.46[b]	0.37	0.95[b]	0.25	0.50[b]
Philippines	0.63	0.65[d]	0.60	0.67[d]	0.80	0.59[d]	0.60	0.80[d]	0.47	0.40[d]
Republic of Korea	0.81	0.73	0.74	0.63	0.71	0.62	0.82	0.56	0.78	0.71
Taiwan Prov. of China	0.94	1.93[b]	1.09	1.45[b]	0.44	0.80[b]	0.97	1.81[b]	0.78	1.17[b]
Thailand	0.46[i]	0.92[j]	0.46[i]	0.87[j]	0.67[i]	1.07[j]	0.35[k]	0.65[j]	0.48[k]	0.41[j]
Turkey	1.12	1.09	0.70	0.69	0.62	0.43	0.72	0.97	0.98	0.65
Uruguay	1.65	1.64[e]	0.84	0.74[e]	0.76	0.69[e]	1.03	1.52[e]	0.72	1.22[e]
Venezuela	1.34	0.93[d]	1.14	0.72[d]	1.03	0.49[d]	0.98	0.68[d]	0.86	0.17[d]

Source: UNCTAD secretariat calculations, based on UNIDO, Industrial Statistics Database, 2002.
Note: Unit labour costs calculated as wages (in current dollars) divided by value added (in current dollars).
a 1984. ***b*** 1995. ***c*** 1985. ***d*** 1997.
e 1999. ***f*** 1996. ***g*** 1998. ***h*** 1984.
i 1979. ***j*** 1994. ***k*** 1982.

appropriate to discussions of performance of individual enterprises (Krugman, 1994). A business enterprise can be called internationally competitive if it can sell its products at the same price (or slightly below) and earn the same return as its competitors. While this definition of competitiveness is straightforward, measuring changes in the international competitiveness of a country's tradeables sector is more complicated, particularly for developing countries for which the required

data are often unavailable. The real exchange rate is a widely used index of the competitiveness of a country's tradeables sector. A popular definition of the real exchange rate relies on the purchasing power parity approach, according to which the real exchange rate equals the nominal exchange rate multiplied by the ratio of the foreign price level to the domestic price level. An assessment of the international competitiveness of a country's industrial sector would, ideally, be based on the relative price of foreign to domestic production baskets of internationally traded industrial goods. But as data on this are unavailable for most countries, an assessment is made here based on consumer-price indices.

An alternative index of changes in a country's degree of competitiveness refers to relative unit labour costs (i.e. the ratio of nominal wages expressed in dollars to labour productivity also expressed in dollars, relative to the same ratio in the United States). This definition of the real exchange rate is particularly useful as it allows the decomposing of changes in international competitiveness into the relative impact of changes in nominal wages, labour productivity and the nominal exchange rate. A combination of a virtuous and sustainable improvement in social welfare and a high degree of international competitiveness is characterized by strong productivity growth associated with a rise in investment and increased or stable employment, a rate of growth of real wages that keeps pace with productivity, and a nominal exchange rate that maintains purchasing power parity.

While real exchange rates based on relative consumer-price indices and those based on relative unit labour costs largely move in parallel, their degree of divergence from each other can vary over time, indicating changes in profit margins earned in world markets. Evidence given in figure 5.3 suggests that the high profit margins earned by exporters of manufactures in the Republic of Korea and Taiwan Province of China during most of the 1980s had fallen at the end of the decade and in the 1990s, and were only restored, in the case of the Republic of Korea, in the aftermath of the financial crisis of 1997–1998. While exporters of manufactures in Argentina, Chile, Malaysia, Mexico and Turkey also benefited from increasing profit margins on international markets during the 1980s, these margins appear to have been smaller than those of East Asian exporters, as indicated by the narrower gap between the curves of real exchange rates calculated on the basis of indices for consumer prices and unit labour costs respectively. Exporters of manufactures in Brazil, Colombia and Thailand also appear to have experienced a profit squeeze on international markets during the 1990s, but without having benefited from rising profits during the 1980s.

> Most countries that sought to increase their international competitiveness, but achieved little or no improvement in labour productivity, appear to have had to resort to wage suppression or sharp depreciations ...

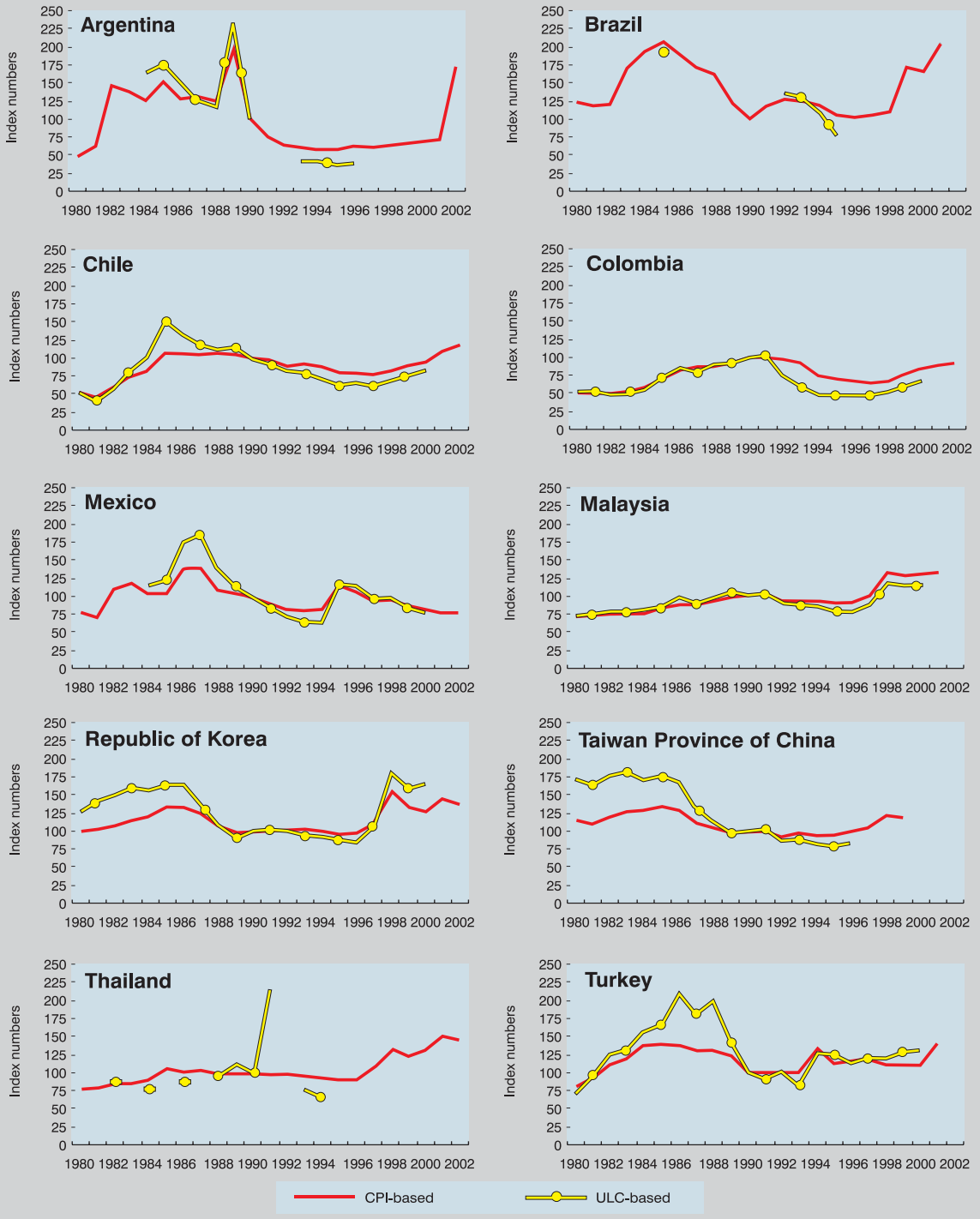
Table 5.7 summarizes the findings regarding the changes in international competitiveness and export performance of domestic manufacturers over the past two decades.[8] The growth rate of manufactured exports is a key performance indicator, but since it may be misleading with respect to countries that start from a small base of manufactured exports, it is supplemented in the table by the share of manufactures in total non-oil merchandise exports in 2000. Of the 26 economies in the table, Côte d'Ivoire, Nigeria, Peru and Uruguay have shown poor growth in manufactured exports over the past two decades. Despite a more rapid growth performance, the share of manufactures in total non-oil exports has remained very low in Chile, Ecuador, Ghana and Kenya. This group includes three countries that experienced the strongest improvement in the competitiveness indicator: Ghana, Ecuador and Nigeria. These countries raised the competitiveness of their manufactures through wage repression or a sizeable currency depreciation, rather than through strong productivity performance, which suggests that the

> ... but none of these countries achieved sustained improvements in export and value-added performance.

Figure 5.3

REAL EXCHANGE RATES OF SELECTED DEVELOPING ECONOMIES WITH RESPECT TO THE UNITED STATES DOLLAR, 1980–2002

(*Index numbers, 1990 = 100*)



Source: UNCTAD secretariat calculations, based on IMF, *International Financial Statistics, 2002*; and UNIDO, Industrial Statistics Database, 2002.

Note: The CPI-based curves represent the real exchange rate index with respect to the United States dollar based on relative consumer price indices. The ULC-based curves represent the real exchange rate index with respect to the United States dollar based on relative unit labour costs.

Table 5.7

INDICATORS RELATED TO THE INTERNATIONAL COMPETITIVENESS OF EXPORTERS OF MANUFACTURES IN 26 DEVELOPING ECONOMIES

(Index numbers for 2000 with 1980 = 100, unless otherwise indicated)

Country	Real dollar exchange rate based on consumer price index[a]	Real dollar exchange rate based on unit labour costs[b]	Real effective exchange rate[c]	Nominal wages per worker[d]	Labour productivity[e]	Unit labour costs[f]	Real wages[g]	Memo items: Average annual growth of exports of manufactures	Memo items: Share of manufactures in total non-oil merchandise exports in 2000
								(Per cent)	
Argentina (1984–1996)	47.7	23.3	66.7	240.5	50.5	101.9	73.5	13.9	40.1
Bolivia (1980–1997)	164.8	106.7	159.1	94.8	73.9	66.7	78.7	19.0	33.2
Brazil (1985–1995)	50.9	39.9	43.3	152.2[h]	114.8[h]	96.3	137.4	8.6	60.2
Chile	183.7	162.3	155.8	168.3	180.4	82.1	148.0	14.0	16.2
China (1980–1999)	..	..	343.2	..	142.3	..	..	27.4[i]	91.3
Colombia	173.2	127.6	153.4	191.1	138.2	101.0	136.0	11.7	57.0
Côte d'Ivoire (1980–1997)	195.8	140.7	150.9	107.2	110.2	106.9	107.8	3.4	18.4
Ecuador (1980–1999)	244.6	340.5	218.1	44.6	105.9	36.7	54.0	16.0	17.4
Egypt (1980–1997)	92.4	148.7	..	146.1	158.8	42.5	69.3	11.8	63.7
Ghana (1980–1995)	698.3	178.0	651.3	58.6	77.9	81.0	221.5	12.5	16.0
India	215.8	300.1	215.6	141.3	279.9	52.8	145.9	12.0	81.1
Indonesia (1980–1999)	331.3	285.5	332.2	114.7	228.2	81.7	188.0	24.8	76.5
Kenya (1980–1999)	153.0	175.9	..	97.9	120.1	61.8	74.1	10.0	22.6
Malaysia	187.5	160.2	151.8	241.1	255.2	84.9	216.5	22.1	89.7
Mexico (1984–2000)	78.2	67.0	73.9	213.4	113.0	90.2	100.7	23.8	92.5
Morocco (1980–1999)	173.0	202.0	131.8	96.8	136.3	60.8	82.9	10.6	66.5
Nigeria (1980–1996)	119.7	864.3	232.4	28.8	183.3	25.3	18.1	3.9	57.5
Pakistan (1980–1996)	188.7	..	180.7	..	177.1	95.2	181.4	12.8	86.1
Peru (1980–1996)	35.3	52.1	..	227.3[j]	140.1[j]	47.4	36.2	4.9	21.9
Philippines (1980–1997)	120.6	105.3	118.9	263.2	202.6	80.5	163.0	17.5	92.9
Republic of Korea	129.1	130.4	129.0	533.5	459.5	72.1	329.8	12.1	96.0
Taiwan Prov. of China (1980–1996)	86.7	49.7	91.4	550.7	205.9	121.0	248.6	12.9	96.4
Thailand (1982–1994)	108.5	75.4	171.3	141.6	98.6	140.9	105.9	30.4	79.8
Turkey	139.3	184.6	108.8	161.7	197.0	54.5	107.8	17.4	83.1
Uruguay (1980–1999)	113.8	120.0	92.0	175.4	146.6	68.0	98.5	6.8	47.5
Venezuela (1980–1998)	122.4	453.3	161.6	42.4	136.2	19.2	26.3	15.0	63.7

Source: UNCTAD secretariat calculations, based on IMF, *International Financial Statistics, 2002*; World Bank, *World Development Indicators, 2002;* UNIDO, Industrial Statistics Database, 2002; and Thomson Financial Datastream.

a Index of bilateral exchange rate with the United States dollar multiplied by the ratio of index of United States consumer prices to the index of domestic consumer prices; an index number higher than 100 indicates a real depreciation of the local currency.

b Ratio of domestic unit labour costs to United States unit labour costs.

c Based on relative consumer prices.

d Calculated on the basis of dollar values.

e Real value added per worker calculated by deflating value added (in United States dollars) per worker by the GDP-deflator.

f Ratio of nominal wages in manufacturing (deflated by the consumer price index) to value added in manufacturing (deflated by the GDP-deflator). An index number higher than 100 indicates an increase in the share of labour in the functional distribution of income.

g Nominal wage per worker deflated by the consumer price index.

h 1990–1995.

i 1985–1999.

j 1982–1996.

improvement in their competitiveness represented a correction of the imbalances between low productivity and relatively high domestic wages and prices.[9]

By contrast, the Republic of Korea and Taiwan Province of China registered strong growth in manufactured exports based on a significant increase in labour productivity. As a result, manufacturers in these economies were able to maintain competitiveness, while at the same time achieving the fastest increase in wages among all economies listed in the table. China, Malaysia and Mexico experienced particularly strong growth in their manufactured exports, which today account for about 90 per cent of their total non-oil exports, but their performance in terms of labour productivity growth was much less impressive; a phenomenon consistent with the observation above that the increase in manufacturing value added in these countries has lagged behind that in manufactured exports, although to varying degrees.

Most countries that sought to increase their international competitiveness, but achieved little or no improvement in labour productivity, appear to have had to resort to wage suppression or sharp depreciations. Thus the level of wages fell in most African and Latin American countries in the table. Evidence further suggests that since the mid-1980s rapid trade liberalization in these regions has also been associated with growing wage inequality between skilled and unskilled labour (UNCTAD, 2001; ILO, 2001). While various explanations have been offered for this trend, the extent to which countries have responded to competition from emerging, low-cost producers of labour-intensive manufactures by cutting wages or replacing less educated with better educated labour, rather than by new investment and upgrading, appears to be of particular importance. The competitiveness of Latin American manufacturers was further undermined by sharp appreciations. Indeed, the sharpest nominal appreciations among all the countries listed in the table occurred in Argentina, Brazil and Peru, and this has been a major factor in the very strong deterioration in the international competitiveness of these countries' manufacturers over the past two decades.

The limited data on the sectoral distribution of investment available for a number of Latin American countries (ECLAC, 2001, table I-6) suggests that there is indeed a positive link between the development of industrial investment as a share of GDP and labour productivity in the manufacturing sector. In Chile, the sectoral investment coefficient of industry more than doubled between the early 1980s and the late 1990s and, as can be seen from table 5.7, this rise was accompanied by a strong increase in labour productivity in Chilean manufacturing. By contrast, the sectoral investment coefficient of industry in Peru fell during the 1990s to about half its average level of the 1970s and 1980s, a drop that was accompanied by a sizeable decline in the country's labour productivity in manufacturing between 1980 and 1996. In Bolivia and Colombia, the sectoral investment coefficients changed little between the mid-1980s and mid-1990s, with only a slight rise in manufacturing labour productivity. In Brazil, as noted above, there was a sizeable improvement in manufacturing productivity, attained through labour-shedding rather than investment. However, none of the countries that improved their competitiveness by wage suppression or massive devaluations achieved sustained improvements in export and value-added performance to a similar extent as countries that had succeeded in raising productivity and wages in a virtuous process of capital accumulation and employment expansion.

Revealed comparative advantage increased strongly in Argentina and Brazil in sectors that have been supported by industrial policy.

2. Upgrading exports

As already noted, some production and export patterns are more favourable to industrialization and growth than others. It is possible to establish a virtuous circle between investment, exports and growth by investing in sectors with significant productivity and market potential, and using the export proceeds to finance imports of capital goods and intermediate inputs required for

further productivity increases. Exports of more technology-intensive manufactures are of key importance in this context because, as discussed in some detail in *TDR 2002*, primary sectors often face adverse terms-of-trade movements as well as limits to raising productivity, and markets for labour-intensive manufactures exported by developing countries are rapidly becoming oversupplied.

In examining the links between industrial upgrading and exports, five broad groups are used here based on a distinction between primary commodities (Group I) and manufactures; the latter are further distinguished according to whether their production relies mainly on labour and natural resources (Group II), and whether they are characterized by low-technology intensity (Group III), medium-technology intensity (Group IV), or high-technology intensity (Group V).[10] Table 5.8 shows that between 1980 and 2000, the share of primary commodities in total non-oil exports declined rapidly in all the economies, for some of them from an already low level, as in the Republic of Korea and Taiwan Province of China. Exceptions are Chile, Côte d'Ivoire and Ghana, where the decline was much more modest. The fall in commodity prices relative to manufactures played an important role in this trend. But only three countries in the table, Côte d'Ivoire, Colombia and Ghana, experienced an absolute decline in export earnings from primary commodities due to sharp declines in wood, coffee and cocoa exports respectively. While a number of countries also experienced sharp falls in export earnings in certain commodities (Argentina in cereals and sugar, Brazil in cocoa and coffee, Turkey in cotton and live animals, and Egypt in cotton and wool), their total earnings from commodity exports increased. Chile has been particularly successful in changing the composition of its primary commodity exports; it has raised the share of food and other agricultural products and reduced that of non-ferrous metals, especially copper.

Developing countries are becoming increasingly similar to developed countries in the structure of their manufactured exports, but not in the structure of their manufacturing value added.

The sharp fall in the share of primary commodities in non-oil exports contrasts with the steep rise in the share of medium- and/or high-technology-intensive products in three major Latin American economies (Argentina, Brazil and Mexico) and the three East Asian economies shown in the table (Malaysia, the Republic of Korea and Taiwan Province of China). Ghana, India, Morocco and Turkey experienced the largest increase in the share of labour- and resource-intensive manufactures, while the Republic of Korea and Taiwan Province of China are the only economies in the table where this product group declined in importance along with the drop in the share of primary commodities.

However, success in upgrading differs significantly among the Asian and Latin American economies that shifted to technology-intensive products. Industrial upgrading of exports from the Republic of Korea and Taiwan Province of China has been based on a comparatively wide range of medium- and high-tech products. This has led to an increase in the relative importance of electrical and non-electrical machinery, road motor vehicles, industrial chemicals, and electronics, as well as ships and boats in the Republic of Korea and iron and steel in Taiwan Province of China. By contrast, industrial upgrading in Malaysia has been based on a much narrower range of products, concentrating on electrical and non-electrical machinery, as well as electrical and electronic goods, in the context of the participation of the economy in international production networks. The increase in the share of manufactures in the three large Latin American economies has also been based on a relatively narrow range of products. In Mexico, the share of automobiles in total non-oil exports has grown strongly, along with that of the electronics and labour- and resource-intensive industries, such as clothing and wood products. Argentina and Brazil have also experienced a strong increase in the share of automobile exports, as well as chemicals, pharmaceuticals and aircraft.

There appears to be a close relationship between the evolution of the structure of exports and the inter-industry pattern of investment in the

Table 5.8

COMMODITY STRUCTURE OF EXPORTS FROM SELECTED DEVELOPING ECONOMIES, 1980–2000

(Percentage of total non-oil exports)

	Republic of Korea			Taiwan Prov. of China			Malaysia			China			India		
Commodity group	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*
Group I	9.9	5.5	4.0	10.7	6.7	3.6	74.9	33.7	10.3	..	20.4	8.7	40.9	26.6	18.9
Food	6.7	3.1	1.5	8.7	4.0	1.2	4.8	5.3	1.9	..	12.1	5.1	25.2	14.7	12.9
Non-ferrous metals	0.5	0.6	1.2	0.3	0.9	1.1	12.0	1.9	1.0	..	1.1	1.4	0.2	0.5	0.7
Other primary commodities	2.7	1.7	1.3	1.8	1.7	1.3	58.1	26.5	7.3	..	7.3	2.2	15.5	11.4	5.3
Group II	42.5	33.3	14.8	40.6	28.3	14.1	6.7	12.3	9.3	..	38.9	33.2	38.5	51.1	52.6
Textiles	12.8	9.5	7.9	9.2	9.4	8.2	1.9	1.6	1.4	..	13.0	6.8	15.3	12.8	14.2
Clothing	17.0	12.5	3.1	12.4	6.0	2.1	1.5	5.5	2.6	..	17.4	15.0	7.9	14.9	14.5
Footwear, leather and travel products	6.8	8.9	1.6	11.0	7.0	1.2	0.4	0.5	0.2	..	4.5	6.0	6.3	6.8	3.6
Wood and paper products	2.5	0.5	0.2	5.4	3.4	1.4	2.4	2.8	3.6	..	1.1	2.6	0.3	0.1	0.2
Paper, print and publishing	0.9	0.8	1.4	0.6	0.8	0.7	0.2	0.8	0.8	..	0.6	0.8	0.2	0.2	0.5
Non-metallic mineral products	2.5	1.0	0.6	1.9	1.7	0.6	0.3	1.2	0.8	..	2.4	2.0	8.5	16.4	19.7
Group III	19.1	14.7	11.5	8.6	10.3	10.5	0.7	3.2	1.9	..	5.9	8.4	5.7	4.8	6.6
Iron and steel	9.5	5.8	4.2	1.7	1.5	3.2	0.2	0.9	0.7	..	2.3	2.1	1.1	1.7	3.2
Fabricated metal products	4.4	2.6	1.9	4.3	5.1	4.8	0.4	0.8	0.9	..	2.6	3.4	2.9	2.0	2.5
Simple transport equipment	1.6	1.9	0.4	2.1	3.2	2.0	0.1	0.1	0.2	..	0.6	2.3	1.6	0.9	0.6
Ships and boats	3.5	4.4	5.1	0.6	0.5	0.5	0.0	1.3	0.0	..	0.4	0.7	0.0	0.2	0.2
Group IV	8.2	13.3	21.5	12.3	18.7	19.5	3.0	8.5	10.9	..	13.7	15.7	7.0	6.6	6.6
Rubber and plastic products	3.5	2.5	1.7	3.7	4.2	2.5	0.6	1.5	1.2	..	0.9	2.7	0.6	1.1	1.3
Non-electrical machinery	1.7	3.9	6.2	4.3	7.0	7.2	1.0	2.8	3.2	..	4.6	4.5	3.4	3.2	2.6
Electrical machinery (excl. semiconductors)	2.3	3.6	4.4	3.8	6.3	8.6	1.3	3.9	6.1	..	2.0	8.0	1.5	1.2	1.5
Road motor vehicles	0.7	3.4	9.3	0.5	1.1	1.3	0.1	0.4	0.3	..	6.2	0.5	1.6	1.1	1.2
Group V	16.8	27.9	46.3	18.6	27.5	48.2	14.3	39.0	66.1	..	14.8	26.2	5.1	9.3	11.7
Industrial chemicals	4.2	3.7	8.2	2.4	3.9	6.0	0.7	1.8	4.1	..	5.6	4.2	2.8	5.1	7.2
Pharmaceuticals	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.2	0.1	..	1.2	0.7	1.5	2.7	3.0
Computers and office equipment	0.5	4.2	12.2	1.1	10.0	20.0	0.0	2.8	23.5	..	0.7	7.7	0.0	0.6	0.4
Communication equipment and semicond.	9.2	18.2	24.2	12.8	11.2	19.6	11.9	31.5	36.0	..	4.9	10.3	0.2	0.4	0.4
Aircraft	0.8	0.3	0.4	0.0	0.0	0.1	0.9	1.1	0.3	..	0.0	0.2	0.0	0.0	0.1
Scientific instruments	1.9	1.4	1.1	2.2	2.3	2.6	0.6	1.6	2.0	..	2.4	3.0	0.6	0.4	0.6
Other manufactures	3.5	5.3	1.9	2.9	5.6	1.2	0.4	3.2	1.5	..	6.3	7.8	2.7	1.6	3.6

/...

Table 5.8 (continued)

COMMODITY STRUCTURE OF EXPORTS FROM SELECTED DEVELOPING ECONOMIES, 1980–2000

(Percentage of total non-oil exports)

	Argentina			Brazil			Chile			Colombia			Mexico		
Commodity group	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*
Group I	76.0	68.2	59.9	60.3	46.3	39.8	91.4	89.7	83.8	79.6	59.8	43.0	40.6	30.3	7.5
Food	51.7	42.7	39.9	40.2	21.8	17.4	17.0	23.2	21.9	73.5	51.7	32.2	21.2	16.6	4.3
Non-ferrous metals	1.8	2.4	1.9	0.5	4.8	3.3	51.8	44.2	29.9	0.1	0.2	0.7	6.3	5.2	0.9
Other primary commodities	22.6	23.1	18.1	19.6	19.7	19.0	22.6	22.3	32.1	6.1	7.9	10.1	13.1	8.6	2.3
Group II	8.7	10.0	8.8	9.4	12.7	12.9	1.8	3.7	5.2	13.2	26.0	22.1	8.7	7.8	12.8
Textiles	0.5	1.8	1.5	3.2	2.6	1.7	0.1	0.5	0.7	3.5	3.2	3.6	0.8	2.1	1.7
Clothing	1.8	0.9	0.3	0.5	0.8	0.5	0.0	0.5	0.2	3.1	10.9	7.0	3.1	0.5	5.8
Footwear, leather and travel products	5.1	4.9	4.1	2.8	4.9	4.6	0.1	0.5	0.2	1.0	4.4	2.2	0.7	0.8	0.6
Wood and paper products	0.1	0.3	1.1	1.0	0.8	2.3	0.1	0.7	1.3	0.3	0.3	1.0	0.4	0.5	2.5
Paper, print and publishing	0.9	1.3	1.4	0.9	2.4	1.9	1.3	1.5	2.5	1.9	2.9	4.3	1.8	1.2	0.9
Non-metallic mineral products	0.4	0.8	0.5	1.0	1.2	1.7	0.2	0.2	0.2	3.3	4.3	4.1	1.8	2.7	1.3
Group III	3.1	8.1	4.9	6.4	13.5	8.6	2.0	1.4	1.4	1.3	5.1	6.2	2.2	7.5	4.5
Iron and steel	1.9	6.9	4.0	4.4	11.8	7.0	0.4	0.9	0.5	0.0	4.1	4.2	0.5	4.6	1.2
Fabricated metal products	0.8	0.9	0.6	1.1	1.2	1.3	0.6	0.4	0.6	1.2	0.9	1.8	1.5	2.1	2.6
Simple transport equipment	0.1	0.1	0.1	0.4	0.3	0.3	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	0.7
Ships and boats	0.3	0.2	0.3	0.5	0.2	0.0	1.0	0.2	0.2	0.0	0.0	0.0	0.0	0.5	0.0
Group IV	5.4	5.4	14.9	15.0	15.6	19.3	0.9	0.9	3.0	2.5	2.5	8.6	19.4	35.8	43.6
Rubber and plastic products	0.1	0.6	1.1	0.6	1.1	1.6	0.2	0.4	0.8	0.4	0.7	2.1	0.2	0.6	1.7
Non-electrical machinery	2.9	2.7	3.7	6.8	8.0	7.8	0.3	0.2	0.7	1.2	1.0	1.3	5.4	13.3	8.3
Electrical machinery (excl. semiconductors)	0.8	0.5	0.9	1.2	1.5	1.9	0.1	0.1	0.4	0.4	0.8	2.3	10.2	3.2	15.3
Road motor vehicles	1.6	1.5	9.1	6.5	5.1	8.0	0.3	0.2	1.1	0.5	0.1	3.0	3.6	18.7	18.2
Group V	6.7	8.2	11.1	8.3	11.0	18.8	4.0	3.9	6.3	2.8	5.6	18.7	24.9	16.5	29.3
Industrial chemicals	4.6	6.2	7.3	3.9	5.8	6.1	3.7	3.4	5.7	2.1	5.1	14.9	6.5	10.2	2.9
Pharmaceuticals	0.5	0.3	1.5	0.2	0.3	0.5	0.0	0.1	0.2	0.4	0.3	2.8	0.7	0.5	0.6
Computers and office equipment	0.8	1.0	0.2	1.8	0.6	0.9	0.0	0.0	0.1	0.1	0.0	0.0	2.0	3.4	7.8
Communication equipment and semicond.	0.1	0.0	0.2	1.3	1.7	3.6	0.2	0.0	0.1	0.0	0.0	0.1	12.9	0.6	14.9
Aircraft	0.0	0.1	1.2	0.5	1.8	6.8	0.0	0.3	0.2	0.1	0.0	0.7	0.6	0.4	0.2
Scientific instruments	0.6	0.5	0.8	0.6	0.8	0.9	0.1	0.0	0.1	0.2	0.1	0.3	2.2	1.3	2.9
Other manufactures	0.2	0.2	0.3	0.6	0.9	0.7	0.0	0.2	0.3	0.6	1.0	1.4	4.2	2.1	2.3

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Table 5.8 (concluded)

COMMODITY STRUCTURE OF EXPORTS FROM SELECTED DEVELOPING ECONOMIES, 1980–2000

(Percentage of total non-oil exports)

	Côte d'Ivoire			Morocco			Turkey			Egypt			Ghana		
Commodity group	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*	*1980*	*1990*	*2000*
Group I	93.3	87.2	81.6	75.3	45.8	33.5	70.6	30.6	16.9	69.6	39.8	36.3	98.4	94.9	84.0
Food	60.8	59.7	61.5	28.2	25.9	22.1	41.4	18.2	10.7	18.4	13.1	13.5	78.3	73.3	49.5
Non-ferrous metals	0.0	0.0	0.0	2.1	1.8	1.5	0.6	1.8	1.4	2.1	12.3	5.8	14.0	4.2	15.6
Other primary commodities	32.5	27.5	20.1	45.0	18.2	9.9	28.7	10.6	4.8	49.1	14.4	17.0	6.2	17.5	18.9
Group II	3.2	9.9	8.8	12.8	27.2	39.8	22.2	42.0	44.2	26.5	44.8	36.9	0.6	2.4	9.0
Textiles	1.2	2.1	2.0	5.3	5.0	1.7	11.9	11.4	13.7	23.6	30.5	17.4	0.1	0.0	1.5
Clothing	0.4	0.4	0.3	4.8	17.7	33.6	7.5	26.3	24.3	2.0	7.9	13.6	0.0	0.0	0.1
Footwear, leather and travel products	0.1	0.0	1.1	1.9	3.1	3.0	0.0	0.6	0.7	0.4	1.4	0.8	0.0	0.0	0.1
Wood and paper products	1.3	2.9	2.4	0.6	0.8	0.8	0.2	0.3	0.9	0.3	3.6	0.8	0.5	2.1	6.7
Paper, print and publishing	0.1	0.1	1.5	0.0	0.2	0.3	0.1	0.5	0.7	0.1	0.9	1.2	0.0	0.0	0.4
Non-metallic mineral products	0.2	4.5	1.5	0.2	0.4	0.5	2.4	2.8	3.8	0.0	0.5	3.2	0.0	0.2	0.4
Group III	0.5	0.7	1.4	0.2	0.9	1.0	1.4	13.6	9.9	1.9	6.7	5.3	0.2	1.7	1.1
Iron and steel	0.2	0.6	0.7	0.0	0.2	0.6	0.9	11.8	7.0	1.6	4.5	3.6	0.0	0.6	0.4
Fabricated metal products	0.1	0.1	0.5	0.2	0.4	0.3	0.5	1.2	2.2	0.3	2.2	1.7	0.0	0.2	0.6
Simple transport equipment	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.9	0.1
Ships and boats	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.5	0.4	0.0	0.0	0.0	0.1	0.1	0.0
Group IV	1.6	0.6	2.6	0.6	2.6	4.7	3.0	4.9	16.4	0.1	1.2	5.5	0.2	0.3	4.3
Rubber and plastic products	0.1	0.1	1.7	0.0	0.4	0.5	0.3	0.7	2.3	0.0	0.4	4.0	0.1	0.0	2.6
Non-electrical machinery	1.0	0.3	0.4	0.1	0.5	0.3	1.2	1.4	4.6	0.0	0.3	0.9	0.1	0.2	1.1
Electrical machinery (excl. semiconductors)	0.2	0.1	0.2	0.1	1.0	3.6	0.5	1.7	4.1	0.1	0.5	0.4	0.0	0.0	0.1
Road motor vehicles	0.4	0.1	0.4	0.3	0.6	0.3	0.9	1.1	5.4	0.0	0.1	0.2	0.0	0.1	0.4
Group V	1.4	1.5	5.2	10.8	23.0	20.4	2.4	8.0	10.3	1.7	7.0	13.1	0.5	0.3	1.3
Industrial chemicals	0.9	1.4	5.0	10.8	19.6	12.3	1.7	5.3	3.2	1.2	6.1	10.6	0.2	0.2	0.9
Pharmaceuticals	0.0	0.0	0.0	0.0	0.6	0.2	0.1	0.6	0.5	0.5	0.7	2.3	0.0	0.0	0.1
Computers and office equipment	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.1	0.0	0.0	0.1	0.0
Communication equipment and semicond.	0.1	0.0	0.0	0.0	2.8	7.0	0.3	1.9	3.5	0.0	0.0	0.1	0.0	0.0	0.2
Aircraft	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	2.5	0.0	0.0	0.0	0.3	0.0	0.0
Scientific instruments	0.2	0.0	0.0	0.0	0.1	0.8	0.1	0.1	0.2	0.0	0.2	0.1	0.0	0.0	0.0
Other manufactures	0.1	0.1	0.2	0.3	0.5	0.7	0.4	0.8	2.4	0.2	0.5	2.8	0.0	0.3	0.3

Source: UNCTAD secretariat calculations, based on United Nations Commodity Trade Statistics tapes and estimates by the United Nations Statistical Office.

Note: Total non-oil exports refer to SITC sections 0–8, less section 3. The commodity group "Other manufactures" includes sanitary and plumbing products; toys and sporting goods; office and stationary supplies; works of art; jewellery; musical instruments; and other miscellaneous manufactures. For further explanations see text.

major Latin American countries over the past three decades. Data in table 5.9 show that there has been little change in the ranking of industrial sectors regarding the allocation of investment, and that the share of the five most important sectors taken together strongly increased in all countries except Chile. Generally, there has been no significant shift in investment towards technology-intensive industrial categories in any of the Latin American countries for which data are available. Indeed, in almost all cases where a substantial change occurred in the inter-sectoral pattern of investment, there was a shift towards resource-based or labour-intensive products (i.e. metal products in Chile, paper and pulp in Chile and Colombia, and clothing in Peru). The main exception is transport equipment in Brazil and Mexico, where investment registered a strong increase. As discussed in *TDR 2002*, the automobile sector in these two countries has experienced substantial restructuring over the past few years, based on investment by TNCs. This, however, has increased the technology content of automobile exports without leading to a similar increase in their domestically generated contents.

3. Trends in international specialization

An assessment of the extent to which changes in the industrial composition of exports examined above have been associated with a consolidation of countries' positions in international trade requires a comparative analysis of changes in international specialization. For this purpose, an analysis was undertaken by the UNCTAD secretariat of changes in international trade patterns in 21 industrial categories for the period 1980–2000.[11] It compared the sector-specific indices of revealed comparative advantage (RCA) based on export data for the periods 1980–1984 and 1996–2000 (table 5.10).

The evidence shows that in the Republic of Korea and Taiwan Province of China, the greatest increase in the RCA indices was in the medium- and high-technology manufacturing categories, and the sharpest declines were in the labour-intensive and resource-based manufacturing categories. The data for Chile show the opposite picture, with the largest increase being in labour-

Table 5.9

INVESTMENT IN LEADING MANUFACTURING SECTORS IN FIVE LATIN AMERICAN COUNTRIES FOR DIFFERENT PERIODS SINCE 1970

(Per cent of total manufacturing investment)

Brazil			
1970–1988		*1995–1997*	
Iron, steel, metal prod.	18.2	Iron, steel, metal prod.	22.8
Food products	10.0	Transport equipment	13.4
Transport equipment	7.7	Food products	11.2
Electrical machinery	4.3	Electrical machinery	4.6
Plastic products	2.3	Plastic products	3.6
Total of the five sectors	42.5	Total of the five sectors	55.6
Chile			
1979–1985		*1990–1995*	
Food products	35.7	Food products	28.8
Paper and pulp	14.0	Paper and pulp	27.2
Non-metal minerals	13.4	Drinks	6.5
Press and publications	6.8	Chemical industry	6.3
Drinks	5.8	Metal products	5.7
Total of the five sectors	75.7	Total of the five sectors	74.5
Colombia			
1970–1989		*1992–1995*	
Food products	12.6	Food products	14.3
Oil refineries	8.6	Oil refineries	11.1
Non-metal minerals	7.5	Non-metal minerals	8.5
Drinks	6.1	Drinks	7.5
Metal products	3.8	Paper and pulp	6.8
Total of the five sectors	38.6	Total of the five sectors	48.2
Mexico			
1970–1985		*1991–1994*	
Food products	10.6	Transport equipment	19.0
Transport equipment	9.5	Food products	12.1
Chemicals	6.6	Chemicals	9.7
Electrical machinery	5.6	Drinks	6.4
Drinks	4.9	Electrical machinery	5.6
Total of the five sectors	37.2	Total of the five sectors	52.8
Peru			
1972–1989		*1994–1997*	
Textiles	18.7	Food products	29.1
Food products	14.1	Textiles	9.7
Chemical industry	5.7	Metal products	5.3
Metal products	4.5	Clothing	5.1
Other chemicals	3.7	Other chemicals	3.7
Total of the five sectors	46.7	Total of the five sectors	52.9

Source: ECLAC, *Investment and Economic Reform in Latin America*, 2001, table A-7.

Table 5.10

INDICES OF REVEALED COMPARATIVE ADVANTAGE FOR MANUFACTURED EXPORTS OF SELECTED ECONOMIES, 1980–2000

Industrial sector	Republic of Korea			Taiwan Province of China			Malaysia			China			Argentina		
	1980–1984	1996–2000	Average annual change (Per cent)	1980–1984	1996–2000	Average annual change (Per cent)	1980–1984	1996–2000	Average annual change (Per cent)	1987–1990	1996–2000	Average annual change (Per cent)	1980–1984	1996–2000	Average annual change (Per cent)
Labour- and resource-intensive manufactures															
Textiles	+	+	2.3	+	+	4.6	+	–	-4.1	+	+	-8.4	–	–	4.7
Clothing	+	–	-9.2	+	–	-9.0	+	+	-3.7	+	+	-3.5	–	–	-6.2
Footwear, leather and travel products	+	+	-4.9	+	+	-8.3	–	–	-5.2	+	+	5.5	+	+	-1.6
Wood, cork and furniture	–	–	-9.7	+	–	-6.0	+	+	-1.6	–	–	5.0	–	–	17.5
Paper, print and publishing	–	–	6.7	–	–	6.0	–	–	4.1	–	–	-1.4	–	+	3.3
Non-metallic mineral products	–	–	-5.2	–	–	-3.6	–	–	1.2	–	–	0.2	–	–	2.2
Manufactures with low technology content															
Iron and steel	+	+	1.8	–	–	7.7	–	–	7.2	–	–	2.2	+	+	1.3
Fabricated metal products	+	–	-2.3	+	+	4.4	–	–	1.7	+	+	0.0	–	–	-1.4
Simple transport equipment	–	–	-2.9	+	+	5.0	–	–	8.9	–	+	10.9	–	–	-1.6
Shipbuilding	+	+	2.7	–	–	1.2	–	–	4.7	–	–	5.3	+	–	-5.5
Manufactures with medium technology content															
Rubber and plastic products	+	–	-1.6	+	+	-0.5	+	–	-2.3	–	–	9.1	–	–	5.4
Non-electrical machinery	–	–	11.1	–	–	6.6	–	–	0.8	–	–	0.2	–	–	2.8
Electrical machinery	–	+	6.0	–	+	5.1	+	+	-5.7	–	–	10.1	–	–	-3.7
Road motor vehicles	–	–	18.0	–	–	5.9	–	–	3.1	–	–	-23.3	–	+	12.0
Manufactures with high technology content															
Industrial chemicals	–	–	8.8	–	–	8.7	–	–	3.4	–	–	-4.0	+	+	-0.3
Pharmaceuticals	–	–	2.8	–	–	-6.9	–	–	-10.1	–	–	-10.0	+	+	1.6
Computers and office equipment	–	–	10.1	–	+	12.7	–	+	32.9	–	–	20.7	+	–	-17.3
Communications equipment	+	+	0.7	+	–	-4.2	+	+	7.3	+	+	0.7	–	–	9.8
Aerospace	–	–	-0.3	–	–	10.3	–	–	-0.5	–	–	13.4	–	–	14.7
Professional and scientific equipment	–	–	2.2	–	–	2.5	–	–	3.0	–	–	0.3	–	–	-0.7
Other manufactures	–	–	-2.2	+	+	-3.5	–	–	2.5	+	+	0.8	–	–	5.6

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Table 5.10 (concluded)

INDICES OF REVEALED COMPARATIVE ADVANTAGE FOR MANUFACTURED EXPORTS OF SELECTED ECONOMIES, 1980–2000

	Brazil			*Chile*			*Mexico*			*Côte d'Ivoire*			*Morocco*		
Industrial sector	*1980–1984*	*1996–2000*	*Average annual change (Per cent)*	*1980–1984*	*1996–2000*	*Average annual change (Per cent)*	*1980–1984*	*1996–2000*	*Average annual change (Per cent)*	*1980–1984*	*1996–2000*	*Average annual change (Per cent)*	*1980–1984*	*1996–2000*	*Average annual change (Per cent)*
Labour- and resource-intensive manufactures															
Textiles	+	–	-4.5	–	+	14.4	–	–	2.9	+	+	-3.7	+	+	-8.0
Clothing	–	–	-4.5	–	–	14.6	+	+	3.6	–	–	-8.8	+	+	3.1
Footwear, leather and travel products	+	+	-0.9	–	–	11.5	–	–	-1.9	–	+	3.4	+	+	-0.6
Wood, cork and furniture	+	+	2.2	+	+	4.6	+	+	1.1	+	+	-1.7	+	–	-3.8
Paper, print and publishing	–	+	2.0	+	+	-1.5	+	–	-4.9	–	–	2.3	–	–	7.9
Non-metallic mineral products	–	–	0.9	–	–	1.8	–	–	-2.2	+	+	-2.3	–	–	4.0
Manufactures with low technology content															
Iron and steel	+	+	2.3	+	–	-2.6	–	–	5.6	–	–	2.5	–	–	32.7
Fabricated metal products	–	–	1.0	+	+	0.3	–	+	3.8	–	+	2.0	–	–	-1.3
Simple transport equipment	–	–	-1.3	–	–	14.5	–	–	7.7	+	–	-10.6	–	–	-5.4
Shipbuilding	–	–	-6.0	+	+	7.3	–	–	3.3	–	+	2.8	–	–	6.8
Manufactures with medium technology content															
Rubber and plastic products	–	+	1.4	+	+	4.1	–	–	6.7	–	+	8.7	–	–	6.1
Non-electrical machinery	–	–	0.9	–	–	5.2	–	–	0.5	–	–	-5.2	–	–	4.0
Electrical machinery	–	–	-3.8	–	–	0.7	+	+	-1.8	–	–	-9.1	–	–	16.0
Road motor vehicles	+	+	-0.4	–	–	2.4	–	+	8.3	–	–	-4.3	–	–	-3.9
Manufactures with high technology content															
Industrial chemicals	–	–	-0.3	+	+	-2.7	–	–	-5.0	–	+	1.8	+	+	-4.0
Pharmaceuticals	–	–	-1.4	–	–	7.4	–	–	-4.4	–	–	-8.1	–	–	3.0
Computers and office equipment	+	–	-10.5	–	–	0.4	+	+	0.8	–	–	-12.7	–	–	3.7
Communications equipment	–	–	-2.0	–	–	-2.3	+	+	0.4	–	–	-5.7	–	–	-9.0
Aerospace	–	+	7.3	–	–	1.8	–	–	3.0	–	–	-2.5	–	–	5.1
Professional and scientific equipment	–	–	0.2	–	–	-0.1	–	–	1.0	–	–	-7.8	–	–	19.9
Other manufactures	–	–	-1.6	–	–	8.8	+	+	-2.5	–	–	-0.6	–	–	2.0

Source: UNCTAD secretariat calculations, based on UN/DESA, *Commodity Trade Statistics* database, and estimates by the United Nations Statistical Office.

Note: RCA is measured as an economy's share in total world exports in a given sector divided by the economy's average export share in all manufacturing sectors. A plus sign indicates an RCA of 1 or above, a minus sign indicates an RCA of less than 1. Manufactured exports refers to SITC Rev. 2, 5–8, less 68. Other manufacturing includes SITC Rev. 2, 812 and 894–899.

and natural-resource-intensive manufacturing sectors and the greatest decline in the high-tech sectors. While changes in the RCA indices of Argentina and Brazil are more varied, the pattern is similar to that of Chile. The main feature that distinguishes the three Latin American countries from each other is the strong increase of these indices in the aerospace sector in both Argentina and Brazil (moving from below to above unity in the case of Brazil) and their sharp increase in Argentina in communications equipment and automobiles. This is particularly noteworthy, since automobiles and aerospace are the two industries in Argentina and Brazil that have been supported by industrial policy in recent years, despite extensive market-oriented reforms.[12] Changes in the RCA indices of Mexico and Malaysia reflect the increasing involvement of these two economies in assembly-based activities within international production networks. Both countries acquired or increased their RCA in computer and communications equipment manufacturing. Similarly, Mexico experienced a strong increase in its RCA index for road motor vehicles.

Given the greater import intensity of production and exports in developing countries, the examination of the pattern of exports does not provide adequate indications as to the evolution of inter-industrial patterns of production and value added in these countries. In this sense, improvements in the pattern of exports, particularly in terms of a shift towards high-tech products, does not necessarily indicate a concomitant improvement in the pattern of production and manufacturing value added. In *TDR 2002*, such an analysis was undertaken at the aggregate level for the manufacturing sector as a whole. In the present *TDR*, it is complemented by an analysis of sector-specific evidence, comparing bilateral structural similarity indices for exports of manufactures and manufacturing value added for selected country groups and economies. Evidence presented on these in table 5.11 shows that for a developing country, a higher degree of similarity with respect to any of the leading developed countries in terms of the pattern of manufactured exports does not necessarily imply a corresponding similarity in its pattern of manufacturing value added.[13] Indeed, while the structure of manufactured exports of developing countries as a whole became increasingly similar to that of developed countries as a whole between 1980 and 1998, this was much less so for the pattern of manufacturing value added. The composition of both manufactured exports and value added of most Asian economies shown in the table came to resemble more closely that of the major developed countries, but this was not generally true for the other countries.

The analysis suggests that there is little correlation between the growing similarity in the structures of manufactured exports and manufacturing value added. Among the developing countries listed in the table, the Republic of Korea stands out for having reached a manufacturing value added structure that was by far the closest to that prevailing in the leading developed countries. The manufactured export structure of China, Malaysia, Mexico, the Philippines and Singapore also began to resemble that of the major developed countries, but this was much less so for the structure of their manufacturing value added. For the majority of Latin American countries, the structure of their manufactured exports became moderately more similar to that of the major industrial countries, while the structure of their manufacturing value added became less similar.

Evidence suggests a strong divergence in the evolution of international specialization between Asian and Latin American developing countries.

In sum, available evidence suggests a strong divergence in the evolution of international specialization between Asian and Latin American developing countries. The Republic of Korea and Taiwan Province of China have gained RCA in medium- and high-technology manufactures, and the production structures of these economies have become significantly similar to the economies of the major industrial countries, both in production and exports of manufactures. In Malaysia and Mexico, the pattern of specialization has moved towards the assembly of computers and office equipment, communications equipment, computers and (particularly in Mexico) automobiles. The processing of natural resources has come to dominate production and export activities in Argentina,

Table 5.11

STRUCTURAL SIMILARITY INDICES FOR EXPORTS OF MANUFACTURES AND MANUFACTURING VALUE ADDED FOR SELECTED DEVELOPING ECONOMIES, 1980–1981 AND 1997–1998

	Structural similarity with											
	United States				*Japan*				*Germany*			
	Exports		*Value added*		*Exports*		*Value added*		*Exports*		*Value added*	
	1980–1981	*1997–1998*	*1980–1981*	*1997–1998*	*1980–1981*	*1997–1998*	*1980–1981*	*1997–1998*	*1980–1981*	*1997–1998*	*1980–1981*	*1997–1998*
Asia												
Hong Kong, China	1.26	1.01	0.95	0.73	1.24	1.03	0.94	0.79	1.29	1.17	1.03	0.93
Rep. of Korea	1.06	0.53	0.61	0.38	0.90	0.52	0.52	0.36	0.94	0.58	0.59	0.31
Singapore	0.74	0.70	0.47	0.57	0.63	0.36	0.47	0.57	0.72	0.89	0.46	0.51
Taiwan Prov. of China	1.08	0.57	0.66	0.64	0.97	0.57	0.55	0.55	1.05	0.67	0.59	0.52
Malaysia	1.32	0.71	0.71	0.67	1.19	0.71	0.59	0.68	1.31	0.88	0.72	0.61
Philippines	1.30	0.92	0.75	0.67	1.35	0.93	0.77	0.63	1.25	1.05	0.79	0.71
China	1.14	0.89	0.68	0.62	1.31	0.90	0.61	0.57	1.08	0.99	0.60	0.60
India	1.26	1.27	0.69	0.68	1.34	1.34	0.58	0.63	1.24	1.19	0.61	0.66
Turkey	1.59	1.21	0.74	0.73	1.55	1.24	0.62	0.67	1.50	1.14	0.66	0.74
Latin America												
Chile	1.33	1.15	0.74	0.82	1.50	1.33	0.69	0.76	1.30	1.08	0.84	0.88
Colombia	1.17	1.10	0.69	0.76	1.35	1.27	0.67	0.74	1.16	0.97	0.73	0.85
Costa Rica	1.22	0.86	0.78	0.76	1.29	0.94	0.75	0.79	1.16	0.97	0.82	0.88
Mexico	0.90	0.47	0.91	0.80	0.93	0.45	0.82	0.74	0.91	0.50	0.85	0.73
Venezuela	0.95	0.93	0.59	0.78	1.06	1.19	0.51	0.73	0.98	0.97	0.63	0.79
Memo item:	*Structural similarity with developed countries' average*											
Developing countries	0.87	0.57	0.46	0.37								

Source: UNCTAD secretariat calculations, based on data from Nicita and Olarreaga, 2001. The structural similarity indices have been calculated using a method suggested by Krugman, 1991. The index values are the sum of the absolute differences between the home country and foreign country in the shares of different sectors of manufacturing industry in total exports of manufactures or in total manufacturing value added. This measure varies between zero and two; a value of zero indicates identical sector compositions of the two economies, and a value of two indicates complete dissimilarity of sectoral structures.

Brazil and Chile, although the automobile and aerospace industries have gained in importance in Argentina and Brazil. Taken together, the evidence suggests that among the major developing countries, only the first-tier East Asian NIEs have succeeded in simultaneously upgrading their production and export structures. By contrast, in other countries the change in the pattern of specialization of production has not involved a shift towards high-value-added activities.

E. Conclusions

The analysis in this and the previous chapters suggests that regarding the process of accumulation, industrialization, trade and structural change, it is possible to distinguish between five broad categories of economies:

- The first group includes first-tier NIEs, notably the Republic of Korea and Taiwan Province of China, which have already achieved a considerable degree of industrial maturity through a rapid accumulation of capital, and growth in industrial employment, productivity and output, as well as in manufactured exports. In both economies the share of industrial output is well above the levels of advanced industrial countries, but the pace of expansion of production capacity and output in the industrial sector has slowed down compared to previous decades.

- The second group consists of countries that are progressing rapidly in industrialization. They are increasing the share of manufacturing in employment, output and exports and upgrading from resource-based and labour-intensive products to medium- and high-tech products in both output and trade. These include the dynamic second-tier NIEs, notably Malaysia and Thailand. China and, to a lesser extent, India should also be considered in this group of rapid industrializers, even though they are at earlier stages of industrialization compared to the second-tier NIEs.

- The third group comprises countries that have rapidly integrated into international production networks by focusing on simple assembly operations in labour-intensive manufactures. These countries have seen a sharp rise in industrial employment and manufactured exports, but their performance in terms of investment, manufacturing value added and productivity growth, as well as overall economic growth, has been poor. Two countries that stand out in this group are Mexico and the Philippines.

- The fourth group comprises countries that have reached a certain level of industrialization, but have been unable to sustain a dynamic process of industrial deepening in the context of rapid growth. These include Brazil and Argentina, where investment performance has been poor, industry has been losing its relative importance in total employment and value added, productivity growth has been cyclical (resulting from labour-shedding rather than faster accumulation and technical progress), industrial upgrading has been limited, and exports have continued to be dominated by primary products and low-value-added manufactures. In these countries, progress achieved in certain industries such as aerospace and automobiles, has not gone deep enough to establish a dynamic momentum in industry. Many African countries are also in this group in terms of sluggish progress in their industrialization and structural change, even though they are at a much lower level of industrial development.

- A final category consists of countries that have achieved sustained and strong growth by intensifying exploitation of their rich natural resources through a rapid pace of capital accumulation. However, their industrial per-

formance has been weak both in terms of manufacturing value added and exports, and prospects for further structural change and productivity growth appear to be limited. The most outstanding example is Chile.

Countries in any one of these groups may also manifest characteristics of those belonging to the other groups. For instance, China and Malaysia have also expanded their manufactured exports much faster than value added by participating in international production networks, but unlike Mexico, their investment and growth performance has been impressive. This explains why manufacturing productivity has been growing much faster, and the share of manufacturing value added in GDP has been stable (China) or rising (Malaysia). There are also borderline cases between the second group of rapid industrializers and the fourth group of "laggards". For instance, Turkey is closer to the former, while Colombia is closer to the latter group.

In this comparative analysis of economic performance in terms of industrialization and structural change, the contrast between East Asia and Latin America is particularly striking. All major Latin American countries are in the groups that lack dynamism in industrialization, structural change and productivity growth, while most of the major East Asian economies are at various stages of successful industrialization. Thus the structural weaknesses which gave rise to fundamental policy reforms in Latin America during the 1980s persist. There are undeniably some improvements with respect to the 1980s, but the economic position of much of Latin America with respect to the industrializing economies in Asia and elsewhere has weakened. Much of this is due to the failure of policy reforms to create the conditions needed to initiate a rapid process of capital accumulation and technological change in order to restructure the economies to meet the challenges posed by a rapid integration into the world trading system – an issue that is taken up in the next chapter. ■

In this comparative analysis, all major Latin American countries are in the groups that lack dynamism in industrialization, structural change and productivity growth, while most of the major East Asian economies are at various stages of successful industrialization. Thus the structural weaknesses which gave rise to fundamental policy reforms in Latin America during the 1980s persist.

Notes

1 The exact timing and pace of this shift in different developed countries is influenced by policy choice as well as supply shocks, such as the sudden discovery of raw materials, which can accelerate the shift away from manufacturing employment. This happened in the Netherlands, following the discovery of natural gas (hence the term "Dutch disease" sometimes used to describe this process), and in some favourably located smaller European economies, thanks to a sharp rise in earnings from tourism and financial services. By contrast, trade has helped sustain industrial employment in Japan, despite relatively stagnant domestic markets.

2 For a comparison with industrial countries, see Arrighi, Silver and Brewer, 2003.

3 In these figures, for comparison purposes, the shares of investment, value added and exports in GDP are measured at current prices. As a result, changes in the investment ratio in figures 5.1 and 5.2 can be different from those in table 4.1 where it was measured at constant prices. Of the countries contained in these figures, the difference is particularly large for Peru, which shows an increase in the investment ratio at constant prices but a decrease at current prices. This is also true for Mexico, but the magnitudes involved are small.

4 When measured at constant prices, the share of gross fixed capital formation (GFCF) in GDP rose, on average, by less than one percentage point during the 1990s compared to the 1980s while the share of manufactured value added rose by some 1.5 percentage points. Applying the same price index to manufactured exports as to value added, the share of such exports in GDP measured at constant prices would show an increase of 12.7 percentage points during the same period, that is, 8.5 times the increase in the share of manufacturing value added in GDP.

5 These results are based on calculating the growth rate of real manufacturing value added for every percentage point of structural change, using a structural change index from Moreno-Brid (1999).

6 See, for example, Dornbusch, Fischer and Samuelson, 1977; and Gomory and Baumol, 2000.

7 A switchover in the structure of comparative advantage can also occur in a Heckscher-Ohlin model when a country changes its endowment structure faster than others. However, this appears to be empirically less relevant, given that the relative position of country groups with respect to their endowments in human capital, natural resources and labour has changed little over the past 40 years, as discussed in *TDR 1998*: 186.

8 Figures in table 5.7 do not indicate relative competitive positions of the manufacturing sectors of the countries concerned (as the positions also depend on the situation in the base year of the index), but simply the direction of change in each country.

9 These results, based on labour productivity measured in dollars, differ from the index numbers given in table 5.4 based on national currencies. The difference is small for most countries except Bolivia, China and Ecuador.

10 For further discussion of these categories, see *TDR 2002*, chap. III. For a similar analysis, focusing on Latin America, see Katz and Stumpo, 2000.

11 This analysis of export patterns is based on a revised version of the Balassa index of revealed comparative advantage (RCA); the approach follows Proudman and Redding, 2000; and Redding 2002.The measure of RCA used by these authors evaluates an economy's export share in a given sector relative to its *average* export share in all manufacturing sectors, rather than to the weighted sum of export shares in all manufacturing sectors. For the advantages of this modification, see Proudman and Redding, 2000: 394.

12 Industrial policy in the automobile sector has been closely linked to regional policies in the context of the Southern Common Market (MERCOSUR). Thus

part of the strong export performance of the automobile sector in both countries is likely to reflect intra-industry trade between Argentina and Brazil (*TDR 2002*, chap. III), while the export success of Brazil's aerospace industry owes a great deal to Embraer's move in the mid-1990s into what was then a niche market for civilian regional jets (Goldstein, 2002).

13 It is clear that a specific index of similarity to a leading developed country does not have the same significance for all developing economies. Indices with respect to Germany, which can be taken as a proxy for indices with the European Union, are likely to be more important for Turkey, while indices with the United States are of overriding importance to Latin America.

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Chapter VI

POLICY REFORMS AND ECONOMIC PERFORMANCE: THE LATIN AMERICAN EXPERIENCE

A. Introduction

The Latin American region was considered to have extremely high development potential when it broke from colonial dominance, because of its rich natural resource endowments as well as traditions and institutions brought from Europe. By the beginning of the First World War, per capita income in Argentina, the most advanced Latin American country, exceeded that of France, Germany, Italy and Spain. Per capita GDP for the region as a whole exceeded that of Japan, and was around three times the average for the rest of East Asia. The picture had not changed much by 1950; indeed, the gap with East Asia had grown wider. However, as noted in chapter IV, after almost two decades of rapid growth, the economic performance of the region started to deteriorate in the 1970s. By the end of the 1990s, incomes in East Asia were, on average, roughly twice as high as those in Latin America.

This persistent and rapid deterioration in Latin America's position relative to both the industrialized countries and the successful developing economies of East Asia raised doubts about the appropriateness of the economic policies adopted in the region. It led to widespread scepticism concerning the ability of those policies to capitalize on the region's natural wealth in order to raise living standards for the population, let alone achieve progress towards convergence with the per capita income levels of developed countries. While the 1980s have been called the "lost decade" in Latin America, economic performance was also unsatisfactory in the 1990s, as the discussions in the previous chapters amply demonstrate. With a few exceptions, countries in the region have been unable to remove structural and institutional impediments to rapid and sustained accumulation, growth and structural change, despite drastic changes to their development strategy introduced in response to the debt crisis of the 1980s. Reforms, including replacing policies of "development from within" with a greater emphasis on outward-oriented growth, failed to replicate the successful growth and industrialization of East Asia. Rather, the new policy orientation

created new dilemmas without resolving the old ones; in particular, the region remained unable to fully exploit its export potential and therefore continued to depend on foreign capital inflows. This led to the reappearance of balance-of-payments and debt problems similar to those that had contributed to the debt crisis in the first place.

Since the introduction of policy reforms in the 1980s, most countries in the region have undoubtedly made significant progress on the macroeconomic front. They have been able to overcome rapid inflation, in some cases hyperinflation, and establish a reasonable degree of monetary and fiscal discipline. However, macroeconomic stability is not just about stability of prices in goods markets. Even though inflation has been brought under control, overall macroeconomic conditions, including key prices such as real wages, exchange rates, interest rates and asset prices, that exert a strong influence on resource allocation and investment decisions, have been extremely unstable in most countries in the region. This is partly due to increased payments instability and external vulnerability associated with trade and financial shocks, and partly to a loss of macroeconomic policy autonomy resulting from rapid liberalization and close integration into the global economy. Furthermore, rather than "getting the prices right", market forces have tended to keep interest rates and exchange rates at levels that have impeded rapid capital accumulation and technological change.

Countries in Latin America have been unable to remove structural and institutional impediments to rapid growth and structural change, despite drastic changes to their development strategy introduced in response to the debt crisis of the 1980s.

Briefly, the new policy orientation has failed to produce an appropriate macroeconomic environment for investors and firms to encourage and support the creation and expansion of productive capacity and the improvement of productivity and international competitiveness. Neither has it been able to provide effective policy interventions at the sectoral or micro levels of the kind practised in East Asia. True, the scope for such policy interventions, through differentiated measures of support and protection, has been considerably reduced as a result of commitments to various Uruguay Round agreements such as those relating to tariffs, subsidies, trade-related aspects of intellectual property rights (TRIPs) and trade-related investment measures (TRIMs). But more importantly, the new development paradigm, the "Washington consensus", disapproved of such selective policy interventions. Instead, it advocated that in pursuing structural policies in areas such as trade, finance, investment, technology and the public sector, most decisions on resource allocation, capital accumulation and technological progress be left to market forces.

The new policy orientation has failed to produce an appropriate macroeconomic environment for investors and firms to encourage and support the creation and expansion of productive capacity and the improvement of productivity.

This chapter examines the salient features of this experience in a comparative historical perspective. Section B examines briefly the evolution of economic policy in the region, which holds useful lessons for understanding current conditions. An analysis of the dilemmas generated by the new policy approach is provided in Section C with regard to macroeconomic management, and in Section D with regard to structural adjustment and development. The chapter concludes with a discussion of the options available for removing some key constraints on policy actions.

B. Policy cycles in Latin America: a historical perspective

The adverse impact of political instability on economic performance in Latin America is well known. Perhaps less appreciated are the sudden shifts in economic policy resulting from domestic political pressures and changing international circumstances. Indeed, the period of the 1980s and 1990s was not the first time Latin America had experimented with radical change in economic policy, nor was it the first time that it had relied on rapid and close integration into the world economy to accelerate its growth and development. Unlike the economies of developing Asia, which, despite political changes, have pursued much more stable and gradual economic policies since they achieved self-government in the second half of the 20th century, Latin American countries have experimented with a number of radically diverse development policies following their emergence from colonial rule in the first quarter of the 19th century.

During the first 100 years of its independence, Latin America sought rapid and close integration into the world economy, pursuing a policy of what is now called outward-oriented development in conditions of highly volatile capital flows and periodic financial crises (box 6.1). Despite success in expanding exports, trade was unable to act as an engine of industrialization and growth within the region because the export sector in most countries was not sufficiently large (Bulmer-Thomas, 1994).[1] Even those countries that were relatively successful in expanding the industrial sector could not translate these gains into growth of manufactured exports.

The breakdown of the global trading system and the collapse of the gold standard, followed by the outbreak of the Second World War, brought to an end this strategy of seeking outward-oriented development through close integration into the world economy. Cut off from supplies of manufactured consumption and capital goods and from financing from Europe and the United States, a new policy approach became necessary. There was little choice but to base growth and development on greater self-sufficiency, in particular with regard to financing and manufactured products, and rely on primary commodities for export earnings. Manufactured goods previously imported from Europe and the United States were to be replaced by domestic production under policies that were later termed "import substitution", while the dependence of Europe and the United States on Latin American primary products reinforced the concentration of such products in the region's exports. Even after the war there was little possibility of returning to the earlier policies of economic integration through trade liberalization and unhindered private financial flows, as attention was largely concentrated on European reconstruction. Moreover, the likelihood of commodity prices returning after the war to levels seen during the Great Depression and depressing export earnings and import capacity, reinforced the emphasis on "development from within". The fact that the region experienced extremely high growth rates in the immediate post-war period increased confidence in this approach. Growth rates were similar to those experienced by the European economies undergoing reconstruction under State-directed

Box 6.1

LATIN AMERICAN "APERTURA" IN THE 19th CENTURY

The liberation of most of Latin America from colonial rule in the early 19th century instantly opened the region to participation in the international trading and financial system dominated by Great Britain. The initial impact of this integration was conditioned by the fact that colonization had been driven by the search for precious metals. The outflow of gold and silver was accompanied by an almost total reliance on imports of European manufactures, and exports of other primary products were relatively underdeveloped. This meant that the region exhibited a structural trade deficit, with little export capacity, apart from mining, when independence produced the equivalent of a big-bang liberalization of domestic markets and deregulation of capital flows.

Between 1822 and 1825, even before formal independence had been achieved by all countries in the region, seven Latin American sovereign borrowers succeeded in selling bonds in the City of London, and numerous private companies raised capital to exploit the high returns anticipated from exploitation of the region's rich natural resources.[1] The largest borrower was what would eventually become Argentina, but sovereign debt was also sold by Brazil, Chile, Colombia, Peru and the Central American Federation. With government revenues largely composed of customs duties, and politicians loath to replace old colonial tributes with new taxes, much of the sovereign borrowing went to finance the new governments' unfunded expenses. Conditions were further complicated by the fact that non-metal exports, which had formerly circulated more or less unhindered within the empires of the colonial powers – much as in a customs union – now faced tariffs and other barriers. The resulting weak export earnings, combined with excessively high interest rates and high underwriting costs paid to London bankers,[2] and a growing gap between government expenditures and revenues, resulted in frequent delays in debt servicing that led to a collapse in bond prices and to an eventual default on nearly all the London bonds by the end of the decade. As a result, the region was cut off from foreign investment inflows until the middle of the century, forcing a reliance on export surpluses and internal sources of financing. This early experience thus contained many of the elements underlying some of the recent difficulties facing several countries in the region: fiscal and external imbalances financed by volatile capital flows with frequent reversals, requiring adjustment in domestic income and absorption, and producing frequent changes in economic policies.

Economic recovery started with the expansion of non-traditional agricultural exports, such as coffee, cocoa, sugar, beef and guano, under conditions of improving terms of trade, as the industrial revolution in Europe increased demand for these products. The recovery of the mining sector also helped, even though the adoption of the gold standard by the major trading countries depressed export earnings from silver. During this period there was also an increase in bilateral trade and clearing with the United States. The return of foreign investors around the middle of the century propelled technological changes in the transportation sector such as railways and steam shipping, and new techniques for refrigeration, all of which made the transoceanic shipping of agricultural products possible. By 1914, Latin America accounted for one-fifth of all overseas investment by Great Britain (with the major share going to Brazil and Argentina), over 15 per cent of investment by Germany and 10 per cent by France. As foreign investment, together with favourable commodity prices, helped raise export capacity and earnings, unlike the earlier episode of a surge in capital inflows, export earnings stayed roughly in line with the servicing requirements of external capital, and did not lead to generalized financial distress.[3] However, they did serve to further increase the

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Box 6.1 (concluded)

concentration of exports of the region in primary commodities, as none of the countries managed to exploit the increased domestic industrial production capacity to expand manufactured exports.[4] This model was thus subject to volatility in export earnings and capital flows that came to dominate the global economic landscape soon after the First World War.

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1 On sovereign bond issues, see Dawson, 1990. During the period 1822–1825, 46 joint stock companies were incorporated on the London Stock Exchange, mostly in mining. They were all insolvent by the end of the decade (Grosse, 1989: 15).

2 The bonds had coupon yields of between 5 and 6 per cent and sold at discounts of up to 30 per cent. With the addition of underwriting costs, borrowers received only about 60 per cent of the face value of the loans (Dawson, 1990).

3 However, there were severe financial crises in individual countries, such as the failure of the Argentine Government to meet its interest payments on bonds issued by Barings in 1890; this resulted in a crisis that probably caused more difficulty in London than in Latin America, and required what was the first "life boat" organized by the Bank of England.

4 In 1913, over 90 per cent of total export earnings came from two products in three countries; over 70 per cent in ten countries (including Brazil and Chile); over 60 per cent in three countries, over 40 per cent in four countries (including Argentina and Mexico), and less than 40 per cent in one country of the region (Peru) (Bulmer-Thomas, 1994: 59, table 3.2).

recovery programmes that relied on external finance channelled through the Organisation for European Economic Co-operation.

The new strategy produced accelerated growth in the post-war period, at rates almost twice as high as had been experienced in the most favourable periods of outward-oriented expansion in the last quarter of the 19th century, and this was accompanied by stable macroeconomic conditions. As private international capital flows became increasingly important in the late 1960s, and accelerated in the mid-1970s due to recycling of the growing surpluses of the petroleum-exporting countries, strong growth in Latin America was particularly attractive to international lenders, notwithstanding the growing payments difficulties and inflationary pressures originating from the rise in petroleum prices (see chap. II). Although increased external borrowing was used to finance domestic industrialization (and, in some cases, increased military expenditures and non-productive activities) without generating a commensurate export capacity, the growing debt-service payments did not create insurmountable difficulties as long as commodity prices were rising and real interest rates remained negative.[2] Indeed, the commodity boom was expected to continue, as many forecasts, such as those by the Club of Rome, predicted global shortages. However, these assumptions proved wrong as a result of the sudden shift to an anti-inflationary monetary policy in the United States at the end of the 1970s, which increased interest rates sharply. Commodity prices collapsed in the ensuing global recession, plunging the region into a debt crisis.

A development strategy based on import-substituting industrialization, that had evolved in conditions of limited trade and financial flows, proved ill-suited to the new global trading and financial environment. The search for policies conducive to more stable economic conditions, faster growth and increased debt-servicing capacity led to the

reintroduction of an outward-oriented development strategy, driven by rapid liberalization of goods markets and deregulation of international capital inflows. In most countries, although there were already pressures from domestic groups in the 1970s to return to a more liberal approach to trade and finance, with this pressure intensifying immediately after the debt crisis, the shift in policy was only fully implemented from 1989 in the wake of the Brady Plan.

Any change engenders substantial adjustment costs. However, after several years of stabilization and adjustment policies, the region is still unable to combine price stability with sufficiently rapid and stable growth and viable payment positions. Unlike some East Asian economies that have also relied on raw materials and primary commodities in their outward-oriented development strategies, Latin America has generally been unable to translate export earnings into increased investment in order to reduce its dependence on commodity exports and improve its manufacturing capacity, productivity and competitiveness. At the same time, trade liberalization in the region has resulted in a sharp increase in the import content of domestic economic activity. Therefore, there has been a growing dependence on external capital, which has led to increasing debt-service obligations without a commensurate increase in the capacity to meet them – an outcome that bears an uncanny resemblance to the development experience that followed independence in the 1820s.

C. Policy reforms and dilemmas

1. *Price stability and macroeconomic fundamentals*

Initially, the policies introduced in the major Latin American economies to enable them to resume servicing their external debt were based on creating sufficient foreign exchange through trade surpluses, generally achieved by a sharp reduction in demand and slower growth accompanied by high inflation. This period was characterized by negative net resource flows from the region.[3] Several stabilization plans and a succession of exotically named currencies, such as the Cruzado and the Austral, failed to halt inflation in these economies.[4] An important shift occurred when the Brady Plan changed the focus for the resolution of the debt problem, from policies designed to create large trade surpluses to those that would reduce the debt burden and improve access of the debtor countries to the international capital markets in order to refinance their debts to banks. Latin American countries were thus encouraged to introduce changes in their domestic policies and institutions to make them more attractive to international portfolio and direct investment flows. The intention was to achieve closer integration into the international trading and financial systems through a rapid, and often unilateral, opening up of domestic markets, to make trade and foreign direct investment (FDI) the engines of growth.

Domestic price stabilization was also found to be necessary for the creation of conditions that would allow the countries to return to international capital markets. The general approach was to combine exchange rate stabilization with convertibility of currencies at a predetermined nominal ex-

change rate (Argentina) or within an adjustable fluctuation band around a central rate (Mexico and Brazil). Exchange rate regimes were supported by cuts in government spending and the creation of primary budget surpluses, along with tight controls over money supply growth. The opening up of domestic markets to foreign competition was also expected to discipline domestic producers and reinforce the price stabilization policy. Public assets were privatized, often through sales to foreign investors, in order to generate financial resources for the budget as well as foreign exchange.

Most countries that introduced exchange-rate-based stabilization policies succeeded in fighting inflation, but they were not able to harness trade and FDI for rapid and stable growth.

Although most countries that introduced exchange-rate-based stabilization policies succeeded in fighting inflation, and were praised for their macroeconomic discipline, they were not able to harness trade and FDI for rapid and stable growth in per capita incomes based on increased capital accumulation and technical progress. The basic difference from the many previously failed stabilization attempts, and the reason for their success in bringing inflation under control so rapidly, was that the rise in incomes and the decline in competitiveness caused by the use of an exchange rate anchor did not generate a balance-of-payments crisis during the disinflation process. This was because of their success in attracting capital inflows. In addition to the increase in real purchasing power due to falling inflation, capital inflows raised the prices of domestic financial assets, and hence domestic wealth; this provided an additional boost to demand and growth. However, this positive growth performance only set the stage for a return to the difficulties caused by large external debt stocks in the previous decade. Indeed, most countries have seen earlier income gains reversed by a series of recurrent financial crises. In other words, the seeds of the "lost half decade" noted earlier were sown by policies introduced in the first half of the 1990s.

The fiscal and monetary policies adopted for macroeconomic stability initially seemed to have been highly successful in Latin America. However, by overlooking the more traditional macroeconomic fundamentals, such as aggregate demand, real interest rates and real exchange rates, they created an overall macroeconomic environment that impeded achievement of the structural changes needed at the micro level, which in turn caused imbalances at the macro level to persist. Furthermore, structural changes at the macro level made these economies less responsive to traditional stabilization policies, and thus tended to generate dilemmas in responding to crises when they occurred.

The policies pursued to eliminate inflation served to undermine macroeconomic fundamentals and adjustment of the productive structure due to the evolution of the exchange rate, real interest rates, and both fiscal and external accounts.

(a) Exchange rates

Success in fighting inflation on the basis of a stable, nominal exchange rate anchor produces an appreciation of the real exchange rate. As noted in chapter V this was generally the case in Latin America throughout the 1990s. Although use of an exchange rate anchor may be necessary in the initial stages of a price stabilization policy, it may eventually undermine the restructuring of the productive sector if real appreciation is allowed to persist. While an overvaluation of the exchange rate is beneficial in reducing the price level of imported goods, it also reduces the incentive to sell goods abroad, and enables foreigners to gain competitive advantage relative to domestic producers if the latter cannot adjust local cost and production structures rapidly. In Latin American countries, however, real-exchange-rate appreciations resulted not only from stickiness in wages and the prices of non-traded goods, but also from nominal appreciations (e.g. in Mexico and Brazil). Combined with the opening up of the domestic markets to foreign trade, this made it more difficult for domestic industry to respond to the new price and productivity structure imposed by international markets.

As in most other emerging markets that have used exchange-rate-based stabilization programmes, currency appreciations in Latin America have eventually been corrected through a reversal of capital flows. Often, there has been an overshooting of the currency in the opposite direction. While this has restored the competitiveness of domestic industry, it has also been associated with a disruption of economic activity, particularly of the import and credit systems, thereby delaying the export response to currency changes. More importantly, such gyrations in the real exchange rate have restricted the ability of industry to take a long-term view and impaired the investment in machinery and equipment needed for restructuring industry and improving productivity and competitiveness (fig. 5.3, chap. V). Indeed, a significant feature of the East Asian NIEs during their rapid pace of industrialization was their relatively stable real exchange rates until the mid-1990s. After that, they were destabilized by unsustainable capital flows, resulting in a deep financial and economic crisis.

The use of an exchange rate anchor may be necessary in the initial stages of a price stabilization policy, but it may eventually undermine the restructuring of the productive sector.

(b) *Interest rates*

Tight monetary policies are considered an integral part of the macroeconomic discipline necessary to bring inflation under control. They generally produce high nominal interest rates that, in conditions of rapidly falling inflation rates, translate into high real interest rates. High nominal and real rates are also used as a means of attracting the foreign capital necessary to refinance outstanding debt. As a consequence, however, domestic industry encounters serious difficulties in financing restructuring; banks find it more attractive to increase holdings of high-yielding government securities – often financed by borrowing externally at lower interest rates – and they offer credit to consumers, who take advantage of domestic financial liberalization and deregulation. Business firms, facing a lack of domestic credit and extremely high domestic interest rates, also prefer to borrow abroad at much lower rates. They thus take on increased foreign-exchange exposure that is usually not hedged because of the confidence in exchange rate stability created by the sharp reduction in inflation and the large foreign capital inflows. As a result, domestic banks concentrate on financing government deficits and provide virtually no lending to private businesses. The latter therefore have to finance production and investment either from their own funds or by borrowing abroad, with consequent increases in financial fragility.

One of the basic reasons for implementing anti-inflation policies linked to exchange rate stability is the belief that these policies will bring about a decline in interest rates and financing costs, thus providing support for investment. This is because high interest rates are believed to be caused by a large inflation premium and the high risks of currency depreciation. According to this view, a policy of lower inflation and greater exchange rate stability should bring about a reduction in nominal interest rates and boost domestic investment, without any negative impact on external capital inflows. Indeed, in Argentina, as a result of the elimination of inflation by pegging the peso to the dollar under the Convertibility Law, it was expected that domestic interest rates would converge towards those prevailing in the United States. However, tight monetary policy designed to attract international capital and induce residents to maintain local currency deposits, as well as the relatively high credit risks of Latin American financial institutions, offset much of the benefits of lower inflation and exchange rate stability. Further, the deregulation of financial markets caused a disproportionate increase in the cost of financial transactions in domestic credit markets for small and intermediate businesses. Thus they did not benefit from the preferential access accorded to large businesses in international capital markets. Disparities in access to credit and in its terms and conditions contributed to the concentration of economic power in the hands of a few economic groups in many countries in the region.

High interest rates, together with currency appreciations and gyrations, meant that monetary

conditions in Latin America in the 1990s were too stringent and unstable to provide a sound basis for macroeconomic and financial stability and encourage growth based on capital accumulation. This is shown by the movements of a monetary conditions index developed by the UNCTAD secretariat, combining the real exchange rate and the real policy interest rate and comparing Latin America with East Asia (fig. 6.1). On average, the value of the index was much higher in Latin America than in East Asia throughout the 1990s, suggesting that monetary conditions were much less conducive to investment and growth in the former region than in the latter. It was also much less stable in Latin America. During the expansionary phase in the early 1990s, the index in Latin America was high because of both currency appreciations and high interest rates. With the Mexican crisis and the downturn in growth, the index fell sharply, due in large part to corrections in exchange rates. Its subsequent upturn was mainly due to rising interest rates, needed to attract capital, and to currency appreciations in countries such as Argentina and Brazil.

Monetary conditions in Latin America in the 1990s were too stringent and unstable to provide a sound basis for macroeconomic and financial stability and encourage growth based on capital accumulation.

In this process, increased external indebtedness and large swings in capital flows clearly played a major role, as they also did in East Asia in the aftermath of the 1997 crisis when the index became unusually unstable. In this context, it is noteworthy that monetary conditions had evolved in a similar fashion in both regions throughout the 1960s and 1970s over the stylized cycles examined in chapter IV, box 4.1; that is, they were pro-growth and stable. In Latin America, this pattern was broken with the debt crisis in the 1980s, and tight and unstable monetary conditions persisted throughout the 1990s with the opening up of the capital-account and boom-bust cycles in private capital flows.

(c) External accounts

In the period immediately after the implementation of the Brady Plan, when stabilization policies were introduced, most countries had relatively low external indebtedness as a result of positive commercial-account balances generated during the debt crisis, a cut-back in international bank lending and debt reduction. However, after the stabilization policies succeeded in fighting inflation, rising demand and growth caused external balances to turn negative, and debt once again started to grow, encouraged also by policies to attract capital flows.

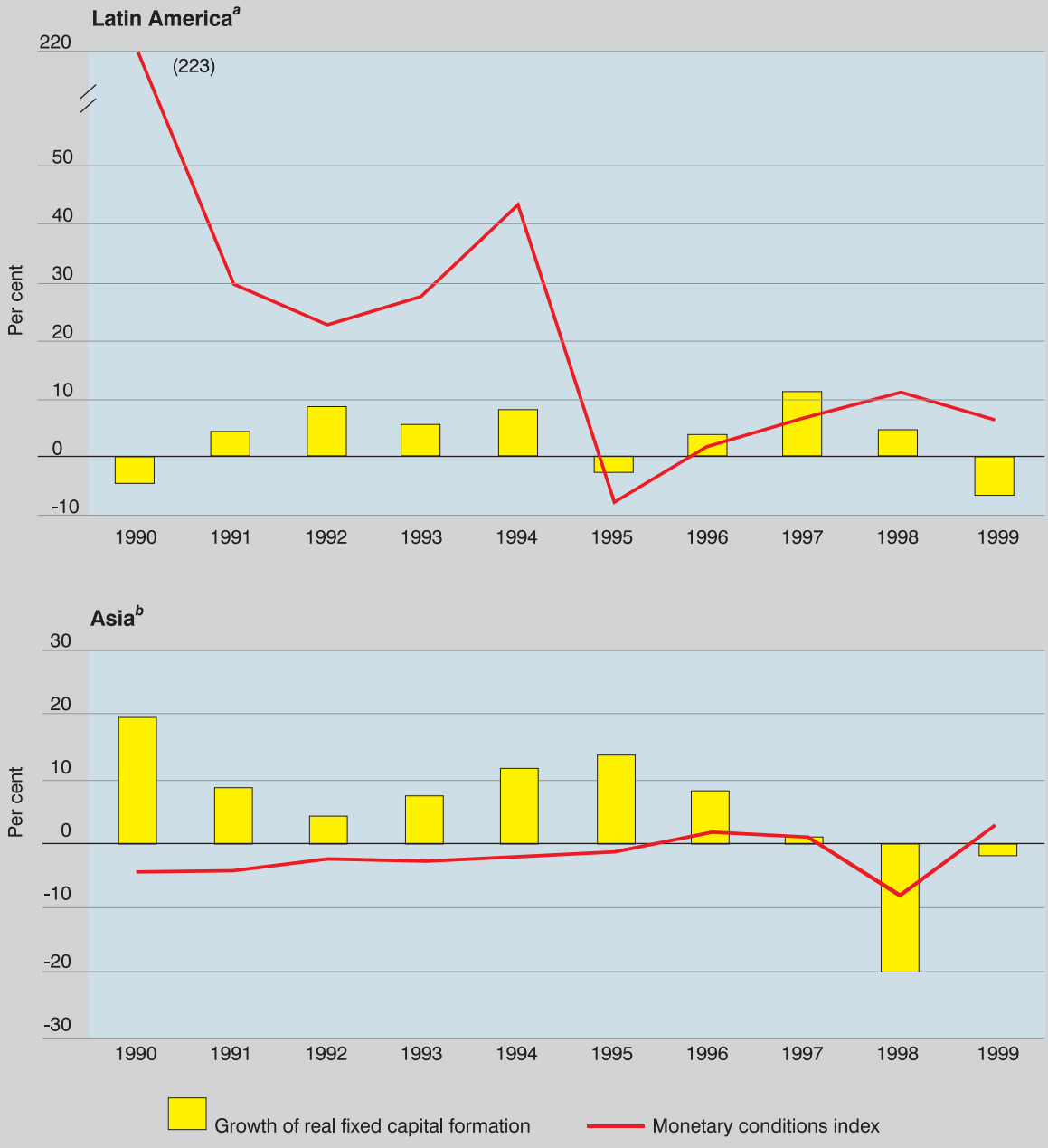
This shift was enhanced by the fact that, with increasing global financial integration, a growing share of domestic government debt was held either directly or indirectly by non-residents. In addition, the sharp rise in FDI and portfolio equity inflows increased non-resident claims on the current account in the form of profit and dividend remittances to foreign investors. Thus factor services became an increasingly important component of the current-account balance for countries that engaged in successful disinflation by relying on capital inflows. For instance, at the beginning of the stabilization programmes in Argentina and Brazil, the shares of interest payments plus profit remittances in total current-account outlays were around 16 per cent and 18 per cent respectively; by 2001, these figures had risen to 24 per cent in Brazil and 35 per cent in Argentina. While the average share of profit remittances was around 3 and 1 per cent, respectively, of total current-account outlays in the 1980s, these figures rose sharply in the 1990s due to increased FDI inflows associated with privatization, reaching 5.5 per cent in Brazil and 6 per cent in Argentina in 2001.

(d) Fiscal accounts

Similarly, the resumption of external debt accumulation in the 1990s that was inherent in the success of the Brady Plan and the stabilization programmes, and the failure of interest rates to fall, increased the interest component of current government expenditures, as governments had to refinance and issue new debt at higher interest rates. For instance in Argentina, the share of in-

Figure 6.1

GROWTH OF GROSS FIXED CAPITAL FORMATION AND MONETARY CONDITIONS IN LATIN AMERICA AND ASIA IN THE 1990s



Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators, 2002*; IMF, *International Financial Statistics* database; and Thomson Financial Datastream.

Note: The monetary conditions index is a weighted average of the annual change in the real effective exchange rate and the ratio of the real short-term interest rate to the trend growth rate. An index number of zero indicates neutrality of monetary conditions, a positive index number indicates restrictive monetary conditions. Weights for both components of the index have been determined by average trade shares of the countries concerned.

a Latin America includes Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Mexico, Uruguay and Venezuela.

b Asia includes Hong Kong (China), India, Indonesia, Malaysia, the Philippines, the Republic of Korea, Singapore and Thailand.

terest payments in total government spending rose from around 8 per cent in the late 1980s and early 1990s to over 22 per cent in 2001. In Brazil, on the eve of the launching of the stabilization programme in 1994, the share of interest payments in total government spending (after allowing for its inflation component) was around 10 per cent; this figure exceeded 30 per cent at the end of the decade.

The restrictive fiscal policy adopted in response to rising debt servicing often served to depress domestic activity and tax yields, thus increasing the size of the deficits to be financed. And it did little to reduce government borrowing costs that were set by international financial markets and by sovereign risk premiums. This adverse impact on government finances was reinforced by the negative carry on the increased foreign-exchange reserves due to the difference between the domestic interest rate paid on the bonds issued to sterilize the capital inflows and the short-term interest rates earned on the reserves (*TDR 1999*: 124). Further, the fact that real interest rates remained high, while domestic growth rates, after initially increasing, eventually stagnated, made it difficult, if not impossible, to reduce the debt burden, irrespective of the restrictiveness of government financial policies, and despite large primary budget surpluses.

Factor services became an increasingly important component of the current-account balance for countries that engaged in successful disinflation by relying on capital inflows.

2. Policy autonomy and effectiveness

The new policy orientation, particularly in countries applying exchange-rate-based stabilization programmes under free capital mobility, resulted in fundamental changes in the way the economies responded to payments or fiscal imbalances, as well as in the scope and effect of macroeconomic policies. However, the expectation that the new policy regime would provide almost automatic adjustment to payments or fiscal imbalances without too great a sacrifice in terms of growth proved to be unfounded.

For example, in Argentina, policy makers ignored the rapid increase in the external deficit in the course of stabilization on the grounds that owing to the Convertibility Law, which made it impossible for the central bank to exercise policy autonomy, an autonomous adjustment mechanism would operate similar to that presumed to have existed under the gold standard. It was believed that an external deficit would result in the erosion of foreign-exchange reserves, and thus lead to a decline in the domestic money supply. This, in turn, would cause domestic wages and prices to fall, thereby restoring external competitiveness, despite the fixed nominal exchange rate. Exports would consequently increase and imports decrease until external balance was achieved. However, this automatic adjustment process can severely affect output and employment if wages and the prices of non-tradeables are sticky downwards. Considerable deflation is then needed to achieve an adjustment in the real exchange rate and external balance. This was the case in Argentina in the aftermath of the Mexican crisis of 1994–1995, when the external balance could not be restored despite unemployment rates exceeding 15 per cent.

Furthermore, such a process of adjustment can be disrupted by excessive capital flows. When private capital inflows exceed the level needed to finance the current-account deficit, as was initially the case in most countries in the region that used exchange-rate-based stabilization programmes, external deficits fail to curb the growth of money supply and bring about an orderly adjustment in the real exchange rate, even when wages are fully flexible. Conversely, when mounting deficits eventually result in a sharp reversal of private capital flows, reserves will decline much further than the amount of the current-account deficit, leading to a deflationary overkill. In other words, while a currency-board regime "ties the hands" of central bankers by removing their control over money creation, and thus the risk of political influence in favour of inflation, with open capital markets it simply places monetary policy in the hands of international investors, whose only ob-

jective is to maximize the return on their international investments.

There is an equivalent argument for automatic adjustment of the fiscal balance, since the central bank cannot monetize government debt unless it also acquires foreign exchange. Thus, when tax receipts fail to cover public expenditures, the government must either increase taxation, reduce spending, or raise borrowing from the private sector. On this view, any of these responses should have the same general effect of curbing domestic demand and creating downward pressure on wages and prices, causing imports to fall, and external demand to expand sufficiently to offset the fall in internal demand. However, this adjustment mechanism can also be rendered inoperative because of capital inflows. This was the case in Argentina during the first half of the decade, when revenues from the sale of State-owned property allowed the Government to continue to run deficits, thus delaying adjustment.

A currency-board regime "ties the hands" of central bankers by removing their control over money creation, and places monetary policy in the hands of international investors.

This means that financial markets cannot be relied upon to bring about orderly adjustment in fiscal and current-account imbalances. As long as private lenders are willing to finance deficits, the automatic adjustment mechanisms may not function as expected. Private capital flows tend to offset and postpone market-based adjustment to external and internal imbalances. When such flows are suddenly reversed as a result of mounting deficits, adjustment occurs in the form of a deep and costly financial crisis.

When fiscal expenditures and current payments are increasingly dominated by interest payments, the impact of fiscal retrenchment on budget and current-account balances is greatly reduced.

Changes in the composition of the budget and external accounts, resulting from a build-up of external and internal debt, also affect the way economies respond to traditional macroeconomic policy measures for payments adjustment. By cutting government expenditures, Keynesian policies aim to create a fiscal surplus that is reflected in an improvement in the balance of payments, as declining domestic demand reduces imports and the resulting excess productive capacity is directed to exports. But when fiscal expenditures are increasingly dominated by interest payments on outstanding debt, and current payments abroad have an increasing factor services component in the form of interest payments, dividends and profit remittances, the impact of fiscal retrenchment on budget and current-account balances is greatly reduced. In other words, the amount of deflation needed to attain any given improvement in the budget and external accounts will be higher, the greater the share of factor service payments in the budget and the external account.

The basic difficulty is that, while policy on government spending may influence imports and exports of goods and services, the debt-service component of fiscal expenditures and the factor-service component of external expenditures are determined by other factors such as international interest rates, the maturity structure of the debt, and repatriation patterns, over which governments have little direct control. For instance, if restrictive demand policies raise the international risk premiums, because investors view declining growth as increasing the likelihood of an exchange-rate adjustment or the reversal of a stabilization policy, the resulting increase in interest costs may more than offset the impact of any improvement in domestic absorption on the current account.

D. Structural adjustment and imbalances

The new policy orientation in Latin America proved effective in fighting inflation by relying on capital inflows and stable exchange rates, but it also resulted in a rapid accumulation of external obligations and eroded international competitiveness. Indeed, debt burdens similar to those of the earlier crisis returned, although the type of debt changed from syndicated bank loans to bond issues, while current accounts continued to deteriorate and constrained growth. Furthermore, the rapid accumulation of domestic assets in the hands of foreigners was not associated either with the faster capital formation or increased export potential needed to generate foreign exchange to service foreign obligations. Overall, the Latin American experience does not support the underlying logic of the new policy approach, that an import-substitution growth strategy could effectively be replaced by an outward-oriented strategy simply by eliminating inflation and opening up markets to foreign trade and investment flows so as to raise efficiency and accelerate growth through rapid capital accumulation, structural change and productivity growth.

1. *Transformation of the production structure*

As seen in chapter V, the new policy regime proved to be no better at providing support for transformation of the domestic production structure than the previous policies of import substitution. One of the greatest difficulties faced by inward-looking development had been the failure to boost productivity sufficiently to allow real wages to increase without damaging competitiveness and the external balance. As inflation and the external balance were directly linked, problems arose when nominal wages increased more rapidly than productivity. In many cases, this imbalance led to rising domestic prices, an appreciation of the real exchange rate and a loss of foreign reserves, necessitating restrictions on imports. Devaluation of the currency to restore competitiveness only fed domestic inflation by increasing the prices of imported goods; when nominal wages adjusted in response, an inflationary spiral was the result. The increase in real wages in excess of productivity growth thus had a counterpart in rising price levels and a growing external deficit, which could not be financed through capital inflows. This was further aggravated by declining terms of trade. The resulting payments crises were usually resolved, with IMF support, by introducing austerity measures (cuts in public spending, higher taxes and restrictions on domestic credit expansion) to lower demand until growth was reduced to the point where imports had fallen sufficiently to restore the external balance. In other words, the burden of adjustment to deal with the gap between real wages and productivity growth on the one hand, and overvalued exchange rates on the other, fell on income.

The new policy approach thus sought an alternative solution through trade liberalization. It was designed not only to open up to competition from foreign producers to dampen domestic prices, but also, most importantly, to expand export earnings through increased productivity and the introduction of new processes and products aimed at improving the competitiveness of domestic pro-

ducers. It was expected that higher productivity would allow wages to rise without creating inflationary spirals and balance-of-payments problems. The adjustment process was thus crucially dependent on accelerating productivity growth and increasing export potential through technical progress. However, the economic policies designed to fight inflation have failed to address other important prices, such as interest rates and exchange rates, that have an important impact on capital accumulation and technological progress.

As already noted, the market response to the changing relative prices brought about by liberalization in most countries was an increase in exports of resource-based products, which did not need much support or protection in view of the comparative advantage of the countries in these sectors. Machinery and equipment industries on the other hand, that had benefited from extensive protection, operated with higher import content, and supplied domestic markets, found it much more difficult to expand exports, as their competitiveness was eroded by the elimination of tariffs and an appreciation of the real exchange rate. Similarly, capital was substituted for labour, as the cost of imported capital goods fell relative to domestic labour costs, thus raising capital intensity.

The decline in the domestic machinery and equipment industries meant a reduction in domestic research and development (R&D). This problem was aggravated by the privatization of State-owned enterprises, often leading to a dismantling of their technology and engineering departments. Under import-substitution policies, these enterprises, along with public institutions and universities, had accounted for about 80 per cent of total R&D expenditures. In countries such as Argentina and Brazil, in the short space of 20 years after the Second World War, a vast techno-scientific infrastructure had been created within the public sector, financed by the State-owned development banks. Many public enterprises in sectors such as telecommunications, energy and transportation had established their own technical laboratories that played an active role in training and human capital formation. With the opening up of the economy to trade and the privatization of public enterprises, these institutions ceased to play a key role, and these functions were frequently wound up as part of measures to improve short-term profitability. When firms were privatized through sales to foreigners, responsibility for technical research and engineering design was usually transferred to the home office of the acquiring foreign companies.[5]

The Latin American experience does not support the underlying logic of the new policy approach, that an import-substitution growth strategy could effectively be replaced by an outward-oriented strategy simply by eliminating inflation and opening up markets.

Thus, in addition to the problems of incompatibility of macroeconomic, trade and financial policies, designed to achieve greater stability and efficiency along with rapid capital accumulation and growth, the shift to the new policy regime resulted in a serious setback to the development and introduction of new technology. Consequently, as seen in the previous chapter, the response to the new, more open competitive conditions was to shift the composition of output and exports away from those sectors that had the greatest potential for productivity growth as well as to reduce demand for labour.

Clearly, the origin of any improvement in the performance of an overall economy is to be found in the decisions of individual firms and entrepreneurs. Any process of overall restructuring to increase productivity should involve what Schumpeter termed "creative destruction". New, more innovative, productive and efficient firms enter the market to drive existing producers out of it. The strength of the overall investment regime had a strong bearing on the pace and direction of this process, as shown in chapters IV and V. The nationality of firms also matters. In the case of international investment or trade, there is a possibility of "destruction" occurring in the host or importing country with "creation" following in the exporting or home country of the TNCs. It has been reported, for instance, that some 7,000 Chil-

ean firms closed down between the mid-1970s and early 1980s, most of them medium-sized, when the Chilean economy opened up rapidly to foreign competition (Mizala, 1992). Similarly, in Argentina some 15,000 firms were driven out of the market during the trade liberalization process initiated in the late 1970s. Most of these small- and medium-sized firms were in labour-intensive sectors, which explains the sharp fall in the share of those sectors in total output. These firms were replaced by larger, mainly foreign-owned firms, or joint ventures with foreign firms, whose R&D and engineering capabilities were located in their country of origin. The result has been a reduction in domestic technological capability as well as an increased dependence on foreign R&D and on technology embodied in imported capital goods.

Thus it has been noted that in Latin America "the activities that have managed to 'forge ahead' during the last two decades are: (a) non-tradeable sectors producing services, such as telecommunications, energy or banking; (b) natural-resource-processing industries producing industrial commodities (such as pulp and paper, iron and steel and vegetable oil); (c) 'in-bond' assembly industries producing electronic equipment, TV and video sets and garments; and finally (d) the vehicle industry, which received special policy treatment during the course of the trade liberalisation episode." (Cimoli and Katz, 2003: 12) Clearly, these are not the kinds of sectors that play a major role in increasing international competitiveness through R&D and technical progress.[6]

Rapid liberalization in Latin America has produced two specific but contrasting patterns in industrial specialization. Those countries most closely linked to the United States market, either through geographical proximity or formal trade agreements, such as Mexico and the smaller Central American countries, have expanded *maquiladora*-type specialized assembly industries that produce almost exclusively for the United States market or for re-export to third countries from the United States, and create jobs for low-wage, unskilled labour. On the other hand, as noted in the previous chapter (see table 5.5), the major economies of continental South America, such as Argentina, Brazil and Chile, have expanded their resource-based industries and increased the capital-intensity of such activities, employing little labour. Both types of activity have relatively low domestic-value-added content, and neither provides the kind of transformation of the domestic production and export pattern that would allow trade to become an engine of growth.

Thus, it should not come as a surprise that export performance has also been disappointing in the first decade of the new policies compared with East Asia. Although the purchasing power of Latin American exports improved in the 1990s, more than doubling for some countries such as Argentina, Chile, Colombia, Mexico and Uruguay between 1990 and 2000, the increase was far lower than in countries such as India and China that adopted a more gradual approach to integration into the global economy (table 6.1). Moreover, import elasticities deteriorated for the three largest Latin American economies between the 1970s and 1990s. Although Brazil and Mexico succeeded in reducing their trade deficit as a percentage of GDP, this was accompanied by a significant drop in GDP growth. In Argentina, on the other hand, the increase in the growth rate was associated with a move from a trade surplus to a trade deficit.

The response to the new, more competitive conditions was to shift the composition of output and exports away from those sectors that had the greatest potential for productivity growth, and to reduce demand for labour.

Consequently, as demonstrated in *TDR 1999*, in order to achieve any given growth rate, Latin American countries have become more dependent on external capital flows than they were before market-oriented reforms. This has made it more difficult for them to finance the import of capital goods and equipment required to sustain industrialization. By contrast, the relatively low import elasticity of demand observed during industrial development in the Republic of Korea and Taiwan Province of China suggests that they were able to draw on their domestic manufacturing to a much greater extent than were the Latin American countries, both dur-

Table 6.1

PURCHASING POWER OF EXPORTS, GDP GROWTH, IMPORT ELASTICITIES AND THE TRADE BALANCE IN 26 SELECTED DEVELOPING COUNTRIES, 1970–2000

	Purchasing power of exports (1979–1981 = 100)			*Average annual real GDP growth[a] (Per cent)*			*Import elasticity[b]*			*Trade balance (Per cent of GDP)*		
	1970–1979	*1980–1989*	*1990–2000*	*1970–1979*	*1980–1990*	*1991–2000*	*1970–1979*	*1980–1990*	*1991–2000*	*1970–1979*	*1980–1990*	*1991–2000*
Argentina	66.4	99.7	198.7	2.3	-0.7	3.6	1.8	-1.6	2.8	0.6	1.9	-1.4
Bolivia	86.4	87.7	133.9	5.2	-0.2	4.0	2.5	0.0	1.4	-6.9	-0.6	-3.0
Brazil	78.6	136.4	201.0	8.3	2.7	3.0	1.1	-0.3	2.1	-4.2	0.5	-0.7
Chile	73.7	109.2	298.8	1.0	4.2	6.4	3.3	-14.0	1.1	-14.3	-4.3	-7.4
China	52.7	155.4	465.7	4.8	10.1	10.1	3.3	2.1	0.8	..	-1.3	2.4
Colombia	76.8	116.9	230.3	5.4	3.6	2.8	1.0	0.0	1.0	-0.5	0.0	-2.0
Côte d'Ivoire	84.8	108.9	117.3	7.5	0.7	3.8	1.1	-0.6	2.0	-2.3	11.9	18.4
Ecuador	62.4	90.2	113.7	9.6	2.0	1.5	1.0	0.4	1.6	-5.3	-0.1	12.3
Egypt	60.7	88.7	110.5	6.7	5.4	4.8	2.9	1.9	0.7	-37.0	-25.4	-4.8
Ghana	127.8	65.4	108.8	-0.2	3.0	4.2	2.0	-0.1	22.4	1.9	0.2	1.5
India	81.8	136.6	315.5	3.4	5.8	6.3	1.9	0.7	1.6	-1.2	-3.5	-0.9
Indonesia	43.6	95.1	176.9	7.8	6.1	3.5	1.1	1.5	-9.9	20.9	-0.1	0.8
Kenya	117.7	92.6	181.9	6.8	4.2	2.2	1.0	0.6	1.2	-22.8	-4.7	-10.7
Malaysia	59.2	140.0	520.3	7.8	5.3	6.6	1.1	1.6	1.5	5.5	0.6	0.3
Mexico	56.8	115.7	260.4	6.2	1.1	3.1	1.2	9.1	2.9	-6.1	0.6	-1.2
Morocco	84.8	131.9	283.0	5.7	4.2	2.4	1.4	0.8	1.9	-7.7	-6.0	-6.9
Nigeria	44.1	56.5	43.3	4.3	1.6	2.3	1.8	1.6	0.3	-6.1	-19.9	6.1
Pakistan	88.0	110.6	199.1	4.4	6.3	3.5	2.6	0.6	0.7	-18.1	-8.3	-0.8
Peru	68.2	81.1	106.9	3.7	-0.1	4.8	1.5	-1.1	1.2	-3.9	-1.3	-3.3
Philippines	66.0	116.6	251.8	6.1	1.0	3.6	1.2	1.4	2.1	-4.4	-1.7	-9.1
Republic of Korea	54.1	188.2	622.8	8.7	8.9	5.5	1.2	0.8	1.8	-1.6	2.2	3.9
Taiwan Province of China	80.8	189.4	478.8	9.5	8.5	6.2	1.4	1.1	1.0	0.8	8.5	2.4
Thailand	71.1	151.8	557.4	7.3	7.6	3.5	1.3	1.4	2.7	-9.3	-2.8	2.6
Turkey	..	..	..	5.4	5.3	3.8	1.1	1.3	3.4	..	..	-4.4
Uruguay	80.6	116.3	241.1	2.8	0.5	3.2	1.9	1.5	1.2	-7.4	-0.3	-8.6
Venezuela	86.3	96.4	141.7	4.0	1.1	1.1	1.4	0.6	0.4	..	11.4	18.2

Source: UNCTAD secretariat calculations, based on World Bank, *World Development Indicators, 2002*; and Thomson Financial Datastream.

a Calculated from constant national currency units.

b Ratio between average growth in merchandise imports (in current dollars) and average growth in GDP (in current dollars).

ing the earlier period when the latter were pursuing import-substituting industrialization and during the more recent period of outward-oriented growth.

2. Foreign direct investment, international trade and payments

While the region as a whole has increasingly relied on TNCs for technological change and upgrading of exports, in general FDI has not been in sectors and technologies that are capable of generating sizeable growth in productivity and value added. Indeed, much of the FDI has been in the services sector, which has little impact on the value-added content of exports. Moreover, since TNCs operating in tradeable sectors use a high proportion of imported inputs, FDI generally has had a negative impact on the current-account balance, adding to external indebtedness. In Brazil, for instance, an examination of a sample of large foreign companies has shown that between 1989 and 1997 there was a marked shift away from net exports of high-tech goods (IEDI, 2002: 12).[7] This was accompanied by a sharp increase in high-tech imports not linked to exports. Taken together, the 85 foreign companies included in the sample moved from an overall export surplus in 1989 to an overall deficit in 1997, increasing their imports at more than double the rate of growth of their exports. Furthermore, national and foreign-owned firms reacted differently to the exchange rate adjustment that occurred in 1999. National firms considerably increased their share of exports in total sales – from 12 per cent to 20 per cent – as well as the share of high-tech goods in their exports.

FDI has not been in sectors and technologies that are capable of generating sizeable growth in productivity and value added.

By contrast, foreign firms' exports fell, mainly because these went to regional markets where demand was in sharp decline, and although there was an improvement in their net balance, this was due to an even sharper decline in their imports. Despite the rise in high-tech exports of national firms, the net surplus on trade in primary commodities is still twice that in technology goods. Similar results have been reported for Argentina. An analysis of the external accounts of the 1,000 largest firms in 1997, when its economy was still experiencing high growth, shows that these firms ran large deficits on their external trade in high-tech goods, and this was the main reason why the trade deficit in Argentina doubled that year.[8] It has also been observed that foreign firms have an import coefficient roughly twice that of domestic firms while their export coefficients are broadly the same (Chudnovsky and López, 2002: 161). They have thus had a negative impact on external deficits and debt.

Moreover, their financial policies have also added to external indebtedness because they have financed a large proportion of their investment with loans, including from their parent companies. For example, foreign firms operating in Brazil have financed their expansion predominantly by means of increased indebtedness rather than increased equity; in 2000, for every dollar of equity, firms with foreign participation held almost two dollars of debt, of which 40 per cent was external and 60 per cent internal. Again, for each dollar of FDI, such firms held 2.5 dollars of debt, of which about one dollar was external and 1.5 dollars was internal (IEDI, 2003: 22). A similar pattern is discernible in Argentina, where a significant proportion of investment by foreign interests was financed by borrowing abroad, basically through the sale of negotiable paper and other financial instruments in international capital markets. Between 1992 and 1998, the non-financial private sector borrowed more than $35 billion, corresponding to nearly three quarters of the borrowing by foreign investors (Kulfas, Porta and Ramos, 2002: 19). These are all consistent with the trend observed as early as the 1970s in a study by the United States Tariff Commission covering 70 per cent of United States investments abroad in manufacturing, that multinational corporations, "in dealings with their parent company, exert a large and growing negative or adverse influence on host country balance of payments" (cited in Lissakers, 1991: 58).

Briefly, the new policies and increased FDI inflows have failed to boost domestic capital formation as the basis for transforming the composition of output towards high-value-added tradeable goods and improving export potential. The increased capital inflows needed to close the trade gap have in turn added to the external deficit, not only through increased debt servicing but also through the adverse impact of the operations of foreign-owned corporations on the current account. The result is that economic policy has had to be constantly directed towards ensuring sufficient flows of external funds, rather than encouraging domestic capital formation and productivity growth for improving the productive base and increasing international competitiveness.

E. Policy challenges

1. What went wrong?

The policy reforms that were introduced in Latin America at the end of the 1980s had two main objectives: (i) to remove distortions caused by government intervention and enhance the role of markets in economic activity; and (ii) to regain access to international capital markets in order to refinance outstanding debt and provide additional resources to finance growth. These required policy reforms designed to secure monetary and fiscal discipline, eliminate inflation, liberalize markets, remove industrial subsidies and barriers to international trade and capital flows, privatize State enterprises, and create and support financial markets. Such reforms were expected to overcome the main impediments to rapid accumulation and growth, particularly balance-of-payments and savings constraints.

Although the region has succeeded in reducing inflation and regaining rapid access to international capital markets, it is generally agreed that the results "have been disappointing ... particularly in terms of growth, employment and poverty reduction...",[9] in exactly the same areas in which import-substitution policies had failed. However, there is little agreement on why the results have been so disappointing. According to one view, the failure was due not so much to adherence to the "Washington consensus" as to deviations from it, including the premature opening of the capital account and the use of the exchange rate as a nominal anchor (i.e. policies which had not been included in the "Washington consensus", at least in its original form). Furthermore, according to this view, there were important policy slippages: some of the "first generation" reforms were neglected (e.g. reform of the labour market) and there was a failure to introduce "second generation" reforms to strengthen institutions (Williamson, 2003). In short, the governments were at fault for not applying appropriately the policies prescribed by the "Washington consensus".

This explanation of the poor policy performance leaves open the question as to whether it would have been possible, without opening the capital account, to: (i) attract the private capital needed to refinance debt and close the external deficits that had risen sharply as a result of rapid trade liberalization; or (ii) eliminate hyperinflation without using the exchange rate as a stable anchor in countries such as Argentina and Brazil that have long histories of failed stabilization plans. Clearly, policies prescribed by the "Washington consensus" encouraged the liberalization of direct investment inflows, which now consti-

tute nearly all of the capital inflows for some Latin American countries such as Brazil and Mexico, and which provided much of Argentina's external financing needs in the period 1992–2000 (see chap. II). As already pointed out, such flows have increased, rather than reduced, the external fragility of most of the recipient countries in the region.

On the other hand, while the original "Washington consensus" proposals advocated competitive exchange rates, particularly in the face of rapid trade liberalization (*TDR 1999*: 128–131), the subsequent debate has been centred on the so-called "two-corner" solution to the question of the appropriate exchange rate regime – fixed or floating. Official opinion gradually shifted in favour of the latter after the breakdown of most fixed regimes. However, as subsequent experiences in Brazil, Mexico and Turkey have shown, floating under open capital-account regimes also caused sustained nominal appreciations in exchange rates that were not corrected in an orderly way by market forces. In this respect, perhaps one of the principal failings of the "Washington consensus" was its inability to anticipate the extent of market failures in the sphere of finance – that is, the failure of international capital flows to sustain exchange rates at levels consistent with underlying economic fundamentals.

One of the principal failings of the "Washington consensus" was its inability to anticipate the extent of market failures in the sphere of finance.

In Latin America the public appears to make a clear link between currency depreciation and inflation. Thus, whatever the particular exchange rate arrangement adopted in support of a price stabilization policy – currency board, fluctuation band or crawling peg – it had to start out with some fixed and known nominal value that was expected to be maintained for some period of time if economic agents were to use it with confidence as a reference for expectations concerning the future path of prices. Further, if capital inflows are to be encouraged, foreign investors must be assured of some degree of commitment to maintaining the initial nominal rate. On the other hand, experience shows that once success in maintaining the nominal exchange rate has become embedded in market expectations, it becomes very difficult to engineer an orderly adjustment to regain competitiveness (*TDR 2001*, chap. V). For instance in Argentina, there was no domestic support to adjust the currency board; in Brazil in the period before the 1998 election, it was clear that any hint of depreciation would rekindle middle-class fears of inflation, with political consequences; and in Mexico, the announcement by the new Government in 1994, that what was already an adjustable scheme was to become slightly more flexible, was enough to trigger a wholesale collapse of the foreign-exchange market.

The overvaluation of exchange rates was clearly the result of strong capital inflows encouraged by the success of the Brady process – reinforced by the announcement of "Washington-consensus" style reforms – and, most importantly, by the extremely rapid and visible success in halting hyperinflation. As noted above, what was required for transforming the microeconomic incentives and production structure after the decision to discard import substitution was a process of Schumpeterian "creative destruction". But the stabilization plans seem to have reversed this process. The rapid lowering of inflation resulted in an increase in incomes and wealth first, before productive capacity was expanded and rationalized. In the presence of a more open trade regime this led to increased imports and a growing current-account deficit, which was financed by foreign investors who were attracted by the promise of higher returns. However, the creative process of technological progress and restructuring remained to be carried out, and the macroeconomic environment of high interest rates, strong exchange rates and volatile capital flows

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did little to support the new investment required for such a transformation. Thus policy reforms were unsuccessful because the "creative" element in the "destruction" process failed to bring about real transformation of the productive structure through higher investment and technological change.

2. What is to be done?

The disappointing performance delivered by the policies applied in Latin America in the 1990s has left the region with clear and binding constraints on future policy actions. The most important of these is the level of outstanding domestic and external debt, which in most countries is too high to allow rapid and steady growth. In other words, policies introduced in response to the debt crisis have left many countries in the region in conditions as fragile as those prevailing in the 1980s.

The ever-present possibility that the debt might not be serviced is the single most important reason for the excessively high international risk premiums charged on most sovereign borrowing in the region. But this only serves to increase the cost of the debt, and hence the possibility of non-payment. The belief that high domestic interest rates are required to attract the capital inflows necessary to meet the debt service keeps domestic monetary policy excessively tight. The combination of high international spreads and high nominal exchange rates leads to real interest rates that are much higher than the expected profitability of private productive assets and considerably higher than even potential growth rates, let alone the actual rates, which have been disappointing.

Policies introduced in response to the debt crisis have left many countries in the region in conditions as fragile as those prevailing in the 1980s.

These policies, designed to ensure that debt servicing is met by continued capital inflows, are pursued because of the fear that any reversal of flows would have a substantial negative impact on the exchange rate and rekindle inflation. It is believed that this would more than offset any benefits that may result from increased competitiveness and exports. Hence, the only policy tool that remains to offset the increasing debt-service burden and avoid an unsustainable rise in the ratio of government debt to income is the generation of higher primary surpluses through expenditure cuts and tax increases.[10] However, any increase in the primary surplus, to accommodate the higher cost of debt servicing, can also make it more difficult to sustain public debt by depressing economic growth. Indeed, such a response to increases in interest rates can lead to an unstable process, and eventually to default.[11] In this process, at some point the ratio of sovereign debt to national income may also reach a level at which foreign investors lose confidence and reduce their lending or even repatriate their funds; that is, the government would be unable to borrow even at very high interest rates. At this point net exports would be forced to cover not only the interest costs but also the capital outflow. This would entail a reduction in growth and employment, and would eventually lead to a financial crisis.

A viable exit from this vicious circle of low investment and growth, high interest rates, and rising indebtedness may call for direct action to reduce the burden of debt service. This was eventually tried in Argentina, but the approach came too late, was too haphazard and lacked credibility because it was repeated at excessively short intervals. Under the Brady Plan, interest rates were cut as the probability of repayment increased following the restructuring. Similarly, in the current situation, for any restructuring to be credible it must include a renegotiation of interest rates to levels closer to the real returns that can be earned from investment. This must also be accompanied by a reduction of domestic policy rates. In the last analysis, the capacity to repay debt depends on the health of the economy as a whole; debt service can be met only if countries come close to reaching their potential growth rates. Current policies to maintain debt service prevent this from occurring, and are thus unsatisfactory for both creditors and debtors alike.

A second area where a fundamental change of policy may be needed is FDI. As noted above, in Latin America, as opposed to East Asia, FDI inflows tend to contribute to financial instability because they cause a deterioration in the external accounts and an increase in the level of external obligations without generating the potential to service them. If trade is to be an engine for growth of national income and for growth of profits of TNCs, FDI must serve to improve domestic technology, increase productivity and provide for a competitive export sector in high-value-added manufactures, thereby improving the stability of the external accounts and reducing reliance on external borrowing. This may require the use of performance criteria for FDI of the kind once applied in Asia. The Mexican example shows there is no guarantee that increasing the share of TNCs' manufactured exports will generate similar increases in national income. Unless a strong export base also makes a strong contribution to domestic value added, it will not support trade as an engine of growth.

A full range of policies of the kind pursued in the more successful East Asian economies will need to be reconsidered.

While essential, a new policy approach to external debt and capital flows will not be sufficient to revitalize the Latin American economies. A full range of policies of the kind pursued in the more successful East Asian economies will need to be reconsidered. This includes policies designed to reduce dependence on foreign capital (as well as to improve its use), encourage technological progress, increase the extent to which profits are reinvested, discourage luxury consumption and speculation, and improve public investment in key areas of human and physical infrastructure. It is true that the scope for such policies has been restricted by multilateral commitments undertaken in the context of WTO negotiations or regional and preferential trade and investment agreements. However, it appears that in most countries there is more policy space than is currently being used. To determine exactly what this space is and how it could best be used requires the kind of basic research on industrial and development policies that has not been particularly fashionable in the recent period of financial orthodoxy. ■

Notes

1 According to this author, only in Argentina and Chile was trade capable of acting as an engine of growth for the entire economy.

2 According to a former Brazilian central banker, "We said from the economic point of view, it is correct for Brazil to borrow rather than adjust. ... The interest rate [on foreign loans] was negative, and there was a positive real return on money here", quoted in Lissakers (1991: 64).

3 This was not the first time the region had experienced this phenomenon. In a speech at the end of 1951 Brazilian President Getulio Vargas complained that Brazil had been experiencing negative net liquid financial outflows almost continuously from 1939 (see Moura, 1959: 26–27). According to ECLAC (1959: 29), Argentina had also experienced net outflows of about $46 billion during the period 1900–1944.

4 For example, Brazil implemented 9 stabilization plans, 15 wage policies, 19 adjustments to the exchange rate regime and 20 fiscal adjustment programmes during the 1980s (Miranda, 1996).

5 Cimoli and Katz (2003: 387–411) note that the launch of the Taurus by Ford Argentina in 1974 required 300,000 hours of work by a team of 120 engineering specialists, while today Ford employs no engineers in Argentina to produce the "world car".

6 For a similar conclusion, see Dijkstra, 2000.

7 The data represent a sample of 185 large firms, 80 with national ownership and 85 with foreign ownership, operating in Brazil from 1989 to 2000 (Instituto de Estudios para Desenvolvimento Industrial (IEDI), 2002).

8 Kulfas, Porta and Ramos (2002: 88) note that of the total commercial deficit of $2.216 billion for 1997, transnational firms operating outside the natural resources and extractive sectors accumulated a deficit of nearly $5 billion, while national firms in the same sectors registered a surplus of nearly $1 billion (estimates from a panel study of the 1,000 largest firms). In sum, for 1997, which is representative of the expansionary phases of the economy in the 1990s, the operations of foreign firms caused the total commercial deficit of the country as a whole to double.

9 This is the opinion of Williamson (2003: 2), who coined the term "Washington consensus".

10 When the sum of the real rate of growth of the economy plus the primary surplus as a per cent of GDP is less than the interest payments as a percentage of GDP, the debt/GDP ratio will grow indefinitely. On unsustainable debt burdens, see Krueger (2002).

11 If the debt/GDP ratio were 80 per cent, the interest rate 10 per cent, and the growth rate 5 per cent, a primary surplus of at least 3 per cent of GDP would be needed to stabilize the date ratio. If the interest rate were to rise to 12 per cent, the primary surplus needed would have to rise to 4.6 per cent. If, as a consequence, the growth rate were to fall, the primary surplus would need to be raised even further. The decline in growth would reduce tax revenues, making it more difficult to generate primary surpluses. Moreover, it could lead to an increase in the risk premium, thereby pushing up the interest rate further.

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