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OVERVIEW

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OVERVIEW

TRENDS IN INTERNATIONAL PRODUCTION

The role of TNCs in the globalizing world economy is increasing,...

International production continues to grow as transnational corporations (TNCs) expand their role in the globalizing world economy. Recent estimates suggest there are about 65,000 TNCs today, with about 850,000 foreign affiliates across the globe. Their economic impact can be measured in different ways. In 2001, foreign affiliates accounted for about 54 million employees, compared to 24 million in 1990; their sales of almost $19 trillion were more than twice as high as world exports in 2001, compared to 1990 when both were roughly equal; and the stock of outward foreign direct investment (FDI), increased from $1.7 trillion to $6.6 trillion over the same period. Foreign affiliates now account for one-tenth of world GDP and one-third of world exports. Moreover, if the value of worldwide TNC activities associated with non-equity relationships (e.g. international subcontracting, licensing, contract manufacturers) is considered, TNCs would account for even larger shares in these global aggregates.

The world's largest TNCs dominate this picture. For example, in 2000, the top 100 non-financial TNCs (with Vodafone Group, General Electric and ExxonMobil Corporation in the lead) accounted for more than half of the total sales and employment of foreign affiliates. Mainly as a result of major mergers and acquisitions (M&As) in 2000, the foreign assets of the 100 largest TNCs increased by 20 per cent in 2000, their foreign employment by 19 per cent and their sales by 15 per cent. M&As also affected industrial composition, resulting in an increase in the number of telecom and media companies on the list. All this, of course, represents only a snapshot of the situation just before the global economic slowdown took hold, the euphoria about new technology firms and the stock market at large evaporated, and the problem of auditing irregularities in a number of TNCs emerged.

For the first time since UNCTAD started collecting data on the largest TNCs, a record five firms headquartered in developing economies – Hutchinson Whampoa (Hong Kong, China); Petronas (Malaysia); Cemex (Mexico); Petróleos de Venezuela (Venezuela); and LG Electronics (Republic of Korea) – made it to the top 100 list for 2000. These are also the companies that have mainly driven the continued transnationalization of the top 50 companies from developing countries (see table IV.10). These top 50 were less affected by stock market rallies and the cross-border M&A wave. Consequently, their overall foreign assets, sales and employment expanded more modestly, as is evident if the top five companies are excluded from the list.

Data for the top 25 TNCs in Central and Eastern Europe (CEE) confirm that Russian TNCs are larger and more globally spread than other TNCs from this region. Lukoil, for example, with foreign assets of more than $4 billion, is on par with some of the largest TNCs from developing countries. In 2000, most of these top 25 TNCs continued to grow, with their expansion abroad surpassing that of their operations at home. However, not all top TNCs in the region are on a growth path. Some Czech, Slovak and Polish firms are undergoing major restructuring, which often involves withdrawing from foreign activities.

The expansion of international production is driven by a combination of factors that play out differently for different industries and for different countries. Three forces are the main drivers. The first is policy liberalization: opening up national markets and allowing all kinds of FDI and non-equity arrangements. In 2001, 208 changes in FDI laws were made by 71 countries. More than 90 per cent aimed at making the investment climate more favourable to inward FDI. In addition, last year, as many as 97 countries were involved in the conclusion of 158 bilateral investment treaties, bringing the total of such treaties to 2,099 by the end of

2001. Similarly, 67 new double taxation treaties, were concluded. Moreover, the investment issue figured prominently at the Fourth WTO Ministerial Conference in Doha, Qatar, in November 2001. Part of the follow-up work involves a substantial effort to help developing countries evaluate better the implications of closer multilateral cooperation in the investment area for their development process.

The second force is rapid technological change, with its rising costs and risks, which makes it imperative for firms to tap world markets and to share these costs and risks. On the other hand, falling transport and communication costs – the "death"of distance – have made it economical to integrate distant operations and ship products and components across the globe in the search for efficiency. This is contributing, in particular, to efficiency-seeking FDI, with important implications for the export competitiveness of countries (Parts Two and Three).

The third force, a result of the previous two, is increasing competition. Heightened competition compels firms to explore new ways of increasing their efficiency, including by extending their international reach to new markets at an early stage and by shifting certain production activities to reduce costs. It also results in international production taking new forms, with new ownership and contractual arrangements, and new activities being located in new sites abroad.

...although FDI flows declined sharply in 2001 as a result of the economic slowdown,...

These driving forces are long-term in nature. The investment behaviour of firms is also strongly influenced by short-term changes in business cycles, testified by recent trends in FDI. After the record high levels of 2000, global flows declined sharply in 2001 – for the first time in a decade. This was mainly the result of the weakening of the global economy, notably in the world's three largest economies which all fell into recession, and a consequent drop in the value of cross-border M&As. The total value of cross-border M&As completed in 2001 ($594 billion) was only half that in 2000. The number of cross-border M&As also declined, from more than 7,800 in 2000 to some 6,000 in 2001. The number of cross-border deals worth over $1 billion fell from 175 to 113, their total value falling from $866 billion to $378 billion.

As a result, the decline in FDI was mainly concentrated in developed economies, in which FDI inflows shrank by 59 per cent, compared to 14 per cent in developing economies. Inflows to Central and Eastern Europe as a whole remained stable. World inflows of FDI amounted to $735 billion, of which $503 billion went to developed economies, $205 billion to developing economies and the remaining $27 billion to the transition economies of CEE. The shares of developing countries and those of CEE in global FDI inflows reached 28 per cent and 4 per cent respectively in 2001, compared to an average of 18 per cent and 2 per cent in the preceding two years. The 49 LDCs remain marginal recipients, with only 2 per cent of all FDI to developing countries or 0.5 per cent of the global total.

The economic slowdown has intensified competitive pressures, accentuating the need to search for lower-cost locations. This may result in increased FDI in activities that benefit from relocation to, or expansion in, low-wage economies. Outflows may also rise from countries in which domestic markets were growing slower than foreign markets. There are signs that both factors have contributed to the recent increase in Japanese FDI to China and the growth of flows to CEE.

Meanwhile, flows to the developing world and to CEE remain unevenly distributed. In 2001, the five largest recipients attracted 62 per cent of the total inflows to developing countries, while the corresponding figure for CEE was 74 per cent. Among the top 10 country gainers in terms of absolute increases, eight were developing countries, led by Mexico, China and South Africa. Conversely, among the 10 countries experiencing the steepest declines in FDI inflows, eight were developed countries; Belgium and Luxembourg, the United States and Germany reported the sharpest declines.

It could be argued that 2001 saw a return of FDI to "normal" levels after the hectic M&A activity of the previous two years. In developing countries and economies in transition, FDI proved fairly resilient despite the global economic downturn and the tragic events of September 11. This resilience is more pronounced in comparison to inflows of portfolio investment

and bank lending. On a net basis (inflows less outflows), FDI flows were the only positive component of private capital flows to developing countries and transition economies during 2000-2001. The total of net private capital flows was projected to be a low of $31 billion in 2001.

Despite the dampening impact of weak demand in the largest economies, the longer-term prospects for FDI remain promising. A number of surveys of investment plans suggest that major TNCs are likely to continue their international expansion. More specifically, they suggest that the most preferred destinations will include large developed-country markets (such as the United States, Germany, the United Kingdom and France), as well as a number of key destinations in developing countries (especially China, Brazil, Mexico and South Africa) and in CEE (e.g. Poland, Hungary and the Czech Republic). Interestingly, many of these developing countries and economies in transition have been especially successful in attracting export-oriented FDI.

...with major regional differences,...

Recent developments in FDI vary significantly between different regions. As already mentioned, the slowdown in FDI activity in 2001 was mainly related to developed countries. Both outflows and inflows of FDI fell sharply in these countries, by more than half, to $581 billion and $503 billion, respectively, after reaching a peak in 2000. The United States, despite the economic slowdown and the events of September 11, retained its position as the largest FDI recipient, but inflows more than halved, down to $124 billion. The country regained its position as the world's largest investor, although outflows of $114 billion reflected a decline of 30 per cent. Major partners for inward and outward FDI were again the European Union (EU) countries; nevertheless, the importance of the North American Free Trade Agreement (NAFTA) partners as a destination for United States FDI increased, partly due to the acquisition of Banamex (Mexico) by Citigroup. Regarding inward FDI, cross-border M&As continued to be the primary mode of entry, led by the acquisition of VoiceStream Wireless Corp. by Deutsche Telekom for $29.4 billion, the largest cross-border M&A deal worldwide in 2001.

Inflows and outflows to and from the European Union in 2001 dropped by about 60 per cent to $323 billion and $365 billion, respectively. This was mainly due to a decline in M&A-related FDI. Inflows to the United Kingdom (the main recipient in Western Europe) and Germany declined the most, while those to France, Greece and Italy increased. Declines in outward FDI were even greater, the only exceptions being Ireland, Italy and Portugal. As in previous years, outflows comprised mainly cross-border M&As. France became the largest outward investor of the region, followed by Belgium and Luxembourg. Intraregional flows accounted for an increased share of FDI in the EU.

Countries of other Western Europe experienced similar developments, with Switzerland accounting for 75 per cent of FDI to these countries. Among other developed countries, FDI outflows from Japan grew in 2001, while domestic investment as well as inward FDI declined, mainly due to the prolonged economic recession in that country. FDI flows to and from Australia and New Zealand, countries that have closer economic ties to the Asia-Pacific region, were less affected by developments in the United States than was Canada, where inflows fell by 60 per cent.

FDI inflows to developing countries also fell, from $238 billion in 2000 to $205 billion in 2001. However, the bulk of this decline was limited to a relatively small number of host countries. In particular, three economies – Argentina, Brazil and Hong Kong, China – saw a decline in FDI inflows amounting to as much as $57 billion. Africa remains a marginal recipient of FDI, even though FDI inflows rose from $9 billion in 2000 to more than $17 billion in 2001. At first sight this increase looks impressive, but it masks the fact that for most African countries FDI flows remained at more or less the same level as in 2000. The increase by $8 billion was largely due to a few large FDI projects, notably in South Africa and Morocco, and the way they are reflected in FDI statistics. However, although the continent received only 2 per cent of global FDI inflows, relative to its economic size, the amount of FDI to Africa did not differ much from that to other developing regions. Also, the overall pattern hides some dynamic developments at the country level, including

least developed countries (LDCs) such as Uganda. Furthermore, there are indications that certain policy initiatives, notably the African Growth and Opportunity Act (AGOA), of the United States, have contributed to increased FDI in some countries that benefit from improved market access.

Recent figures also show that the sectoral composition of FDI inflows into the African continent is changing. While more than half of FDI flows went into the primary sector, particularly into oil and petroleum, FDI flows into service industries (such as banking and finance, and transport) have become almost as important over the past two years. This suggests a gradual broadening of investment opportunities over time, albeit at a slow pace.

FDI inflows to the developing countries of Asia and the Pacific fell from $134 billion in 2000 to $102 billion in 2001. Much of the decline was due to an over 60 per cent drop in flows to Hong Kong, China from a record level of $62 billion in 2000. Hence, excluding Hong Kong, China, inflows in 2001 reached the same level as in the peak years of the 1990s. While inflows remained stagnant in North-East and South-East Asia, they increased significantly in South and Central Asia (by 32 per cent and 88 per cent, respectively). The share of the Asia-Pacific region in world inflows rose from 9 per cent in 2000 to nearly 14 per cent in 2001. Within these overall trends, economies performed unevenly in 2001. China regained its position – lost to Hong Kong, China in 2000 – as the largest FDI recipient in the region as well as in the developing world as a whole. India, Kazakhstan, Singapore and Turkey were significant recipients in their respective subregions. The Association of South-East Asian Nations (ASEAN) saw a fall in FDI levels in recent years, causing some concern among its member States: FDI inflows to this region during 2000-2001 were only $12 billion per annum, which corresponds to only about one-third of the peak in 1996-1997. Outward FDI from developing Asia, at about $32 billion in 2001, hit its lowest level since the mid-1990s, mainly because of a fall in outflows from the largest traditional investor, Hong Kong, China. Chinese TNCs are becoming more visible in world markets.

FDI into Latin America and the Caribbean declined for the second consecutive year, mainly because of a significant drop in FDI to Brazil, where the privatization process of the past few years has almost stopped, and Argentina, where the economic and financial crisis has discouraged any new investments. Meanwhile, Mexico became the largest regional recipient with the acquisition of the bank Banamex by Citicorp (United States) for $12.5 billion. Outflows from Latin American economies remained modest and mainly directed at other countries in the region.

FDI in the 49 LDCs was small in absolute terms, but it continued to make a contribution to local capital formation, as shown by the high share of FDI in gross domestic capital formation in a number of those countries. As a percentage of total investment, it averaged 7 per cent for LDCs as a group during 1998-2000, compared to 13 per cent for all other developing countries. However, FDI flows to LDCs are highly concentrated, though the share of the top five recipients is lower now than it was in the late 1980s. More than 90 per cent of these flows were through greenfield investments rather than cross-border M&As. In 2001, despite the general economic slowdown, FDI in LDCs rose to $3.8 billion, mainly as a result of increased flows to Angola. Official development assistance (ODA) remains the largest component of external financial flows to LDCs, even though it declined in absolute and relative terms between 1995 and 2000. LDCs as a whole received $12.5 billion in bilateral and multilateral ODA in net terms in 2000, compared to $16.8 billion in 1990. For bilateral ODA, the amounts declined from $9.9 billion to $7.7 billion during this period. FDI, on the other hand, has become more prominent: 28 LDCs experienced simultaneous increases in FDI and decreases in bilateral ODA during the 1990s. But only in seven LDCs (Angola, Equatorial Guinea, the Gambia, Lesotho, Myanmar, the Sudan and Togo), did FDI inflows exceed bilateral ODA in 2000, and three of them are major oil exporters. Since most LDCs rely on ODA as their major source of finance, and ODA and FDI are not substitutes for each other, this decline in ODA is worrying.

LDCs themselves have begun to promote their countries more actively to foreign investors. Investment promotion agencies have been established in 38 LDCs, 28 of which have joined the World Association of Investment Promotion Agencies. Moreover, at the end of 2001, 41 LDCs had concluded a total of 292 bilateral

investment treaties and 138 double taxation treaties. Finally, a growing number of LDCs are now signatories to relevant multilateral agreements. For example, as of June 2002, 20 LDCs had acceded to the Convention on the Recognition and Enforcement of Foreign Arbitral Awards; 37 LDCs had ratified or signed the Convention on the Settlement of Investment Disputes between States and Nationals of other States; 34 LDCs were members (another six in the process of becoming members) of the Multilateral Investment Guarantee Agency; and 30 LDCs were members of the World Trade Organization.

FDI inflows to ($27 billion) and outflows from ($4 billion) CEE remained at levels comparable to those of 2000. FDI inflows increased in 14 of the region's 19 countries, and the region's share of world FDI inflows rose from 2 per cent in 2000 to 3.7 per cent in 2001. Five countries (Poland, the Czech Republic, the Russian Federation, Hungary and Slovakia) accounted for more than three-quarters of the region's inflows in 2001. FDI outflows from CEE declined somewhat in 2001, due to a slowdown in flows from the Russian Federation, which accounts for three-quarters of the outward FDI from the region.

…as well as national differences, as revealed in two UNCTAD indices developed for benchmarking inward FDI performance and potential.

While the role of TNC activity is increasing in most parts of the world, there are notable differences by country. Benchmarking the performance and potential of individual economies in attracting FDI, as measured by UNCTAD's Inward FDI Performance Index and Inward FDI Potential Index, respectively, can provide useful data to policy-makers and analysts on the relative performance of countries.

According to the Inward FDI Performance Index, which compares the ratio of a country's share in global FDI flows to its share in global GDP, an index value of one implies that a country's share of global FDI is equal to that country's share of world GDP. Countries with an index value higher than one attract more FDI than may be expected on the basis of the relative size of their GDP. On the basis of this measure, during the period 1998-2000, the developed world as a whole was more or less balanced in terms of the FDI it received, although the EU reported the highest score (1.7) and Japan the lowest (0.1). In terms of changes during the past decade, Africa experienced a fall in its score (from 0.8 during 1988-1990 to 0.5 during 1998-2000), while Latin America's improved significantly (from 0.9 to 1.4). East and South-East Asia had scores above one (1.7 during 1988-1990 and 1.2 during 1998-2000), while West and South Asia, by contrast, reported low scores over the past decade (0.1-0.2). CEE had a score close to one.

The country rankings for FDI performance yield interesting findings. The top 20 countries included 5 small developed countries, 12 developing economies and 3 from CEE. The 20 countries with the lowest scores were mainly developing countries, including several LDCs, but they also included some developed countries, such as Japan and Greece. The greatest gains in the Performance Index over the past decade were those for Angola, Panama, Nicaragua and Armenia, whereas the largest declines were recorded for Oman, Greece, Botswana and Sierra Leone.

UNCTAD's Inward FDI Potential Index ranks countries according to their potential for attracting FDI. This Index is based on structural factors that tend to change only slowly. As a result, the index values are fairly stable over time. The top 20 economies in 1998-2000 by this measure were developed countries or high-income developing economies, while the bottom 20 ranks were all held by developing countries.

The ranking of countries according to both the Performance and Potential Indices yields the following matrix:

- countries with high FDI performance (i.e. above the mid-point of the ranking by performance of all countries) and high potential (i.e. above the mid-point of the ranking by potential of all countries): the "front-runners";

- countries with high FDI performance (i.e. above the mid-point of the ranking by performance of all countries) and low potential (i.e. below the mid-point of the ranking by potential of all countries): the "above-potential economies";

- countries with low FDI performance (i.e. below the mid-point of the ranking by performance of all countries) and high potential (i.e. above the mid-point of the ranking by potential of all countries): the "below-potential economies"; and

- countries with low FDI performance (i.e. below the mid-point of the ranking by performance of all countries) and low potential (i.e. below the mid-point of the ranking by potential of all countries): the "under-performers."

In 1998-2000, there were 42 front-runners, i.e. countries that combined strong potential with strong performance. This group included industrialized countries such as France, Germany, Sweden, Switzerland and the United Kingdom; the Asian "tigers", including newer ones, such as Hong Kong, China, Malaysia, Singapore and Thailand; and a number of Latin American countries, such as Argentina and Chile. It also included strong entrants to the FDI scene such as Costa Rica, Hungary, Ireland and Poland.

The above-potential economies comprised mainly those without strong structural capabilities that have done well in attracting FDI; most of them are relatively poor and lack a strong industrial base. Brazil and China are notable exceptions, which were nevertheless, also part of this group. The below-potential economies included many rich and relatively industrialized economies that have a weak FDI performance because of policy preferences and a tradition of low reliance on FDI (Italy, Japan, Republic of Korea and Taiwan Province of China, especially in the earlier period), unfavourable political and social factors or weak competitiveness (not captured by the variables used here). The United States fell within this category, along with some developing countries that are relatively capital-abundant (e.g. Saudi Arabia) and in which FDI flows may not adequately reflect the extent of TNC participation because of non-equity forms or a reliance on local financing. The 42 under-performers were generally poor countries that, for economic or other reasons, did not attract their expected share of global FDI.

What policy implications emerge from this analysis? For front-runners wishing to remain important recipients of FDI, the issue is one of retaining their competitive edge in terms of FDI attraction. The under-performers may need to improve various aspects of their investment environment to upgrade their position in the Potential Index. Countries that move from under-performers to above-potential economies have to strive to build their competitive potential quickly to retain their edge in attracting investors. Similarly, for countries that retain high potential but slide in FDI attraction, there may be a need to address investor perceptions and undertake more targeted efforts to promote existing locational advantages.

TNCs AND EXPORT COMPETITIVENESS

Improving export competitiveness helps countries develop…

An important consideration for policy-makers when promoting development is to improve "export competitiveness". While export competitiveness starts with increasing international market shares, it goes far beyond that. It involves diversifying the export basket, sustaining higher rates of export growth over time, upgrading the technological and skill content of export activity, and expanding the base of domestic firms able to compete internationally so that competitiveness becomes sustainable and is accompanied by rising incomes. Competitive exports allow countries to earn more foreign exchange, and so to import the products, services and technologies they need to raise productivity and living standards. Greater competitiveness also allows countries to diversify away from dependence on a few primary commodity exports and move up the skills and technology ladder, which is essential for increasing local value added and sustaining rising wages. It permits a greater realization of economies of scale and scope by offering larger and more diverse markets. Exporting feeds back into the capacities that underlie competitiveness: it exposes enterprises to higher standards, provides them with opportunities for easier access to information and subjects them to greater competitive pressures, thereby encouraging domestic enterprises to make more vigorous efforts to acquire new skills and capabilities. Ideally, attaining increased market

shares should be accompanied by all these other benefits in order to maximize the developmental impact.

However, these developmental impacts from improved export competitiveness cannot be taken for granted. For example, if all economies aim at exporting the same products at the same time, most of them may well become worse off. Similarly, in the absence of adequate national policies to strengthen national capabilities and increase local value added, an expansion in market shares may not produce the expected benefits.

TNCs can help raise competitiveness in developing countries and economies in transition, but tapping their potential is not easy. Attracting export-oriented TNC activities is itself an intensely competitive business – and even successful countries may find it difficult to sustain competitiveness as their wages rise and market conditions change. Coherent and consistent policy support is essential to ensure that attracting export-oriented TNC activities is embedded in a broader national development strategy. Export competitiveness is important and challenging, but it needs to be seen as a means to an end – namely development.

…and the changing international production systems of TNCs can play a key role, …

Through equity and non-equity links, TNCs account for substantial shares of exports in a number of developing countries, and their role spans all sectors. In the primary sector, besides minerals and petroleum, TNCs can contribute to the development of resource-based exports in such areas as food processing and horticulture. In manufacturing, TNCs tend to be the leaders in export-oriented production and marketing, especially for the most dynamic products, for which linking up to marketing and distribution networks is crucial. Their international production systems can take various forms, ranging from production-driven, FDI-based systems involving intra-firm trade among affiliates to looser, buyer-driven, non-equity-based networks of independent suppliers (as in international subcontracting and contract manufacturing). The increased tradability of services offers new opportunities for exports, the Indian software industry being the best-known example so far. Opportunities also extend to such services as regional headquarters, procurement centres, shared-services centres and R&D activities.

With the spread of global value chains in many low- and medium-technology activities, TNCs are now involved in the whole spectrum of manufactured exports. In some low-technology segments, other players are also active, and TNCs often assume the role of coordinating local producers in addition to setting up their own affiliates. In many technologically complex activities, TNCs are particularly important because a large proportion of trade is internal to their international production systems. Trade in parts and components, especially those of the dynamic industries, has assumed more importance, indicating an increasing trend towards trade specialization associated with international production systems. The most dynamic products in world trade are found mainly in non-resource-based manufactures, particularly electronics, automotive and apparel. TNCs have played an important role in the export expansion of these products, albeit in different ways. They can play a similar role in other products and industries, using similar strategies.

The growth of international production systems reflects the response of TNCs to dramatic changes in the global economic environment: technological change, policy liberalization and increased competition. Falling barriers to international transactions allow TNCs to locate different parts of their production processes, including various service functions, across the globe, to take advantage of fine differences in costs, resources, logistics and markets. They exhibit an unending search for enhanced competitive advantage through the optimal geographic configuration of their activities. What is distinct about the rise of international production systems as opposed to earlier TNC operations is, first, the intensity of integration both on a regional and a global scale and, second, the emphasis on the efficiency of the system as a whole. Global markets therefore increasingly involve competition between entire production systems, orchestrated by TNCs, rather than between individual factories or firms.

Three core elements of international production systems are critical in this context: governance, global value chains and geographic configuration. Governance concerns the structure of control that determines the geographic and

functional distribution of business activities and ensures their coordination. Governance in international production systems occurs in various forms. These range from ownership (or equity) linkages that provide direct managerial supervision, to various non-equity linkages in which formally independent intermediaries – suppliers, producers and sales outlets – are linked through a variety of relationships such as franchising, licensing, subcontracting, marketing contracts, common technical standards or stable, trust-based business relationships. Equity-based governance systems internalize control and allow stronger protection of firm-specific advantages. Where these advantages lie in brand names and marketing, more externalized forms of control may suffice.

The second element of an international production system is the organization and distribution of production activities and other functions, in what is commonly known as the global value chain. It extends from technology development, through production, to distribution and marketing. Value chains are becoming fragmented, as business functions are differentiated into ever more specialized activities. In many industries, TNCs have recently tended to focus more on the knowledge-intensive, less tangible, functions of the value chain such as product definition, R&D, managerial services, and marketing and brand management. In consequence, contract manufacturers have grown rapidly.

The third element of international production systems, which holds particular interest for developing countries, is their geographic configuration. The past 15 years have seen great changes in the determinants of the optimal location of TNC activities, and hence in the geographic distribution of technology, production and marketing activities within international production systems. Production has been internationally dispersed for decades, but the trend towards integration on ever larger geographic scales is relatively new. Supply chains have extended to new areas of the globe and integrated formerly distinct regional production activities. However, while distance might matter less for many transactions (due to improved information and communication technology), proximity to main markets remains important for certain products.

Whereas the growth of international production systems is well recognized, less well known is the growing tendency for firms, even large TNCs, to specialize more narrowly and to contract out more and more functions to independent firms, spreading them internationally to take advantage of differences in costs and logistics. Some are even opting out of production altogether, leaving contract manufacturers to handle it while they focus on innovation and marketing. The main suppliers and contract manufacturers are themselves often large TNCs, with global "footprints" matching those of their principals, and with their own subcontractors and suppliers. However, TNCs also increasingly use national suppliers and contractors in host economies. Specialization does not stop there: leading TNCs are also entering into joint innovation arrangements with other firms – competitors, suppliers or buyers – and with institutions like research laboratories and universities. Thus, the emerging global production system is increasingly open in terms of ownership, but with tighter coordination by lead players in each international production system.

…providing opportunities as well as challenges for developing countries and economies in transition, …

Changing corporate strategies and production systems open new possibilities for developing countries and economies in transition to enter technology-intensive and export-oriented activities they could not otherwise undertake, and to become a part of international production systems. At the same time, the increasing demands put on key suppliers raise the barriers to market entry for the smaller and newer suppliers from developing countries and economies in transition which do not possess the capabilities and competitive advantages that modern production systems require.

Improved export competitiveness can have significant consequences. In terms of market shares, only 20 economies together account for over three-quarters of the value of world trade. Developed countries, especially Germany, Japan and the United States, are major traders. However, it is mainly developing economies, such as China, The Republic of Korea, Mexico, Malaysia, Thailand, Taiwan Province of China,

Singapore and The Philippines, and economies in transition, such as Hungary, that accounted for the largest gains in market share during 1985-2000. In fact, with their recent market-share gains, seven of these economies now belong to the 20 largest exporters in the world. In other words, dramatic changes are taking place in the composition of world trade, and a number of developing countries and economies in transition are among the principal beneficiaries.

The growth of exports from many of these winner countries is directly linked to the expansion of international production systems, especially in the electronics and automotive industries. For example, foreign affiliates now account for about half or more of exports of manufactures in a few of these countries. However, such systems tend to be concentrated by country, region and activity. It is possible that the export dynamism seen in the "winners" will spread to other developing countries and economies in transition as international production gathers pace and increases in scope, but to date the bulk of such TNC-related export activity – especially in the most dynamic segments of world trade – is concentrated in a handful of countries, mainly in East and South-East Asia and in regions contiguous to North America and the European Union. At the same time, though, TNCs are also significant players in many countries that are not major global exporters.

Each of the six countries selected for further analysis in *WIR02* – China, Costa Rica, Hungary, Ireland, Mexico and the Republic of Korea – experienced not only a sharp increase in market shares, but also a shift in their export repertoire: from non-dynamic to dynamic products and from low-technology to medium- and high-technology activities. Asian winner countries gained market shares in all principal markets (Japanese, European and North American), while those from other regions advanced mainly in a regional context. Western and Eastern European countries gained mainly in European markets, and countries in Latin America and the Caribbean have mainly in North American markets.

In all of them, TNCs have played an important role in expanding exports, either through equity or non-equity relationships. But large as the share of TNC activities is in the exports of these countries, it varies considerably. Of the leading exporters, the Republic of Korea is an example of a winner with a relatively small presence by way of inward FDI, although non-equity links have played a role in enhancing the competitiveness of large domestic companies, which are at the heart of the Korean economy. The other winners, especially in non-resource-based manufactures – the most dynamic in world trade – have relied on TNCs to boost their export performance. China, Costa Rica, Hungary, Ireland and Mexico became export winners mainly by relying on FDI to generate their most dynamic exports. Beyond that, each country had its own specific advantages that enabled it to become linked to international production systems. China's advantage is the size of its economy, which allows economies of scale and helps expand exports. For Hungary, Ireland and Mexico it is their preferential access to a major market. In Costa Rica and Ireland, national policy in the form of a proactive approach to attracting high-technology FDI and linking up to international supplier networks has been an important factor.

…but the development gains from export expansion cannot be taken for granted.

Improving export competitiveness is important and challenging, but it is not an end in itself. It is a means to an end: the promotion of development. This raises the question of the benefits resulting from TNC-associated trade, beginning with improving the trade balance and continuing with upgrading export operations and sustaining them over time. Even though export-oriented FDI helps to increase exports, foreign affiliates also import. In some cases, net foreign exchange earnings may be small, and high export values may coexist with low levels of value added. In each case, the issue is how host developing countries can most benefit from the assets that TNCs command. Much depends on the strategies pursued by TNCs, on the one hand, and the corresponding host-country capabilities and policies, on the other.

Over-dependence on TNCs for export competitiveness has its own drawbacks. TNCs may focus solely on the static comparative advantages of a host country. While this might resolve some of the short-term, efficiency-related problems of TNCs, it means that a number of the longer-term benefits that can be associated with export-oriented foreign affiliates may

fail to materialize in the host country. In particular, dynamic comparative advantages may not be developed and affiliates may not embed themselves in the local economy by building linkages to the domestic entrepreneurial community, by further developing labour skills, or by introducing more complex technologies.

Upgrading exports involves both an improvement in the efficiency of production and a restructuring of static to dynamic comparative advantage. The starting point is that specialization in different segments of international production systems may imply different benefits and competitive prospects. There is therefore reason for concern that specialization in labour-intensive segments, even of high-technology exports, may, in some instances, be undesirable; it may provide few benefits in training or technology and meagre spillovers to the local economy. Besides, the competitive edge of low-cost labour may disappear as wages rise. On the other hand, labour-intensive exports are economically beneficial as long as local value added is positive at world prices, even if it does not rise at the same pace as exports. In fact, where surplus labour is unlikely to be used in more remunerative or economically desirable activities, it is in the interest of the countries concerned to use it in export-oriented production. Any theory of comparative advantage would suggest that these countries should specialize in labour-intensive processes at the beginning of their export drive; the question is whether they can subsequently upgrade and sustain their exports.

TNCs can contribute to the upgrading of a country's competitiveness either by investing in higher-value-added activities in industries in which they have not invested before, or by shifting within an industry, from low-productivity, low-technology, labour-intensive activities to high-productivity, high-technology, knowledge-based ones. This underlines the importance of ensuring the sustainability of export-oriented foreign affiliates. If these foreign affiliates are to become embedded in host economies, they need to upgrade as well as progressively establish backward linkages with domestic enterprises. Where such linkage creation takes place, the exports involved are not only likely to be more sustainable and broadly beneficial for the host countries, but also to involve higher domestic value added and contribute to strengthening the competitiveness of the domestic enterprise sector – the bedrock of economic development. The success of the national industrialization strategies of a number of (mainly Asian) countries that have combined efforts to attract export-oriented TNC activities with the development of domestic capabilities, serves as a model to others.

In sum, it would appear that the benefits of TNC export activity can be further exploited. Technologies are changing. Processes and functions are increasingly divisible, and the boundaries of what is internal and external to firms are shifting. The diminishing cost of transport is stretching location maps. New activities are likely to join the globalization surge, including many from developing countries and economies in transition. The challenge for countries that would like to improve their export competitiveness in association with TNCs is, first, to link up with the international production systems of these firms and, next, to benefit more from them. This is where policies – and the need for national policy space – come in.

PROMOTING EXPORT-ORIENTED FDI

Policies to promote export-oriented FDI are evolving…

A priority among countries – whether rich or poor – is to upgrade and sustain exports so that they contribute more to development. Just as firms are forced to make their production systems more competitive, countries have to figure out how to move, in any industry, into higher-value-added activities. There are many ways in which TNCs can help to enhance host countries' export competitiveness. The challenge is to tap TNC potential for this purpose. In order to attract export-oriented FDI and to ensure that such investment translates into development gains, countries need to find the most effective ways to make their locations more conducive to the kind of export activities they aim to foster. Even traditionally significant recipients of export-oriented FDI need to upgrade

to sustain rising wages and maintain their competitiveness as an export base.

In line with the dynamic changes in corporate strategies affecting key export industries, the rising competition among countries and sub-national entities for export-oriented FDI, the changing regulatory environment, and the changing development objectives of countries themselves, policy formulation and implementation are evolving. While recognizing that macroeconomic stability as well as structural factors, such as technological capacity and human resources, are key in making a location competitive, the focus here is on policies related to export-oriented FDI: how to attract, upgrade and benefit from such FDI. It is beyond the scope of the *WIR02* to look into what policies are needed for upgrading human resources and technology per se. Rather, this volume focuses on other important lessons that can be drawn from the experience of developing countries and economies in transition that have successfully taken advantage of inward FDI to enhance their export competitiveness. Care must be taken, however, in applying these lessons: the effectiveness of any given policy depends on the specific economic, historical, geographical, cultural and political context.

Access to key markets is a necessary, but not sufficient, condition for attracting export-oriented activities. Although multilateral trade liberalization has been an important facilitating factor behind the emergence of international production systems and the establishment of export-oriented activities abroad by TNCs, access to developed-country markets, especially for products of export interest to developing countries, needs to be further improved. In particular, tariff peaks, tariff escalation and non-tariff barriers in agriculture, textiles and clothing need to be addressed. Meanwhile, a rise in protectionism could effectively jeopardize the prospects for poor countries to exploit their comparative advantages fully. The growing use of trade measures, such as anti-dumping and safeguards, and of targeted subsidies in developed countries all give cause for concern in this context.

Despite the erosion of preferential margins, many regional and preferential arrangements still remain important for the location of export production (e.g. in the context of the European Union and its association agreements, NAFTA, the United States Caribbean Basin Initiative and AGOA) as do various offshore production schemes. While host-country policy-makers need to be aware of opportunities arising from such arrangements, they also need to understand their limits. For example, offshore production schemes generally discourage the use of local components and may thereby restrict the upgrading of local operations. Trade preferences in and by themselves provide neither a sufficient nor a sustainable basis for developing competitive export industries (with or without FDI). The same applies to countries that have attracted export-oriented FDI thanks to unused quotas for export to countries that restricted access for textiles and clothing products under the Multifibre Arrangement. As the quotas are to be phased out by 2005, there is a risk of the relocation of existing investment to countries that offer more competitive conditions. Trade preferences need to be seen as a temporary window of opportunity that provides time to allow countries to strengthen their locational advantages.

On the part of host-country Governments, there are a number of measures that can be considered to improve the long-term attractiveness of a country as a base for export-oriented production. While the focus here is on policy measures that are directly related to FDI, it should be re-emphasized that these have to be viewed as part of broader efforts to promote development.

A key policy area is to improve access to imported inputs through trade facilitation measures. Such efforts are important, as the competitiveness of export-oriented activities (especially in non-resource-based industries) often depends, to a large extent, on imported inputs. Various countries have tried to induce more exports from foreign affiliates through export-performance requirements. However, in order not to deter inward FDI, these have normally been tied to some kind of advantage received by the investor. In an increasingly competitive environment, and in the light of WTO rules, mandatory export performance requirements are becoming more difficult to use.

In order to lower production costs and risks, many countries offer incentives aimed at inducing new or more export-oriented FDI.

The use of incentives also has evolved over time. Developed countries frequently employ financial incentives (such as outright grants), whereas fiscal measures are more common in developing countries (which cannot afford a direct drain on the government budget). Incentives have been an important element in the development strategies of many countries, especially those successful in attracting export-oriented FDI. Some of these countries have adopted an increasingly targeted approach to attracting FDI.

The challenge for developing countries wishing to use incentives in their efforts to promote export-oriented FDI is to weigh the benefits and costs involved. Where effectively implemented, incentives have typically complemented a range of other measures aimed at enhancing aspects such as the level of skills, technology and infrastructure. To compensate for major deficiencies by offering incentives may not always be a wise strategy, as it increases the risk of public funds being spent on projects that do not offer the externalities needed to warrant the incentives in the first place. Without efforts to improve the business environment, make it more conducive to attracting investment, upgrading production and embedding FDI into the local economy, there is a greater risk that investors will leave as soon as the incentives expire. Thus, subsidies should not be used as an isolated measure, but rather as part of a broader policy package.

The setting up of export processing zones (EPZs), with a view to providing efficient infrastructure and removing red tape within the confines of a limited area, is also a widely used tool in the context of promoting export-oriented FDI. In fact, most of the winners identified in Part Two of *WIR02* have established EPZs (or other schemes that share some of their characteristics), and a number of them account for a large share of non-resource-based manufactured exports. However, the performance of EPZs depends very much on other policies, notably policies that aim at enhancing human resources and creating the infrastructure necessary to attract and upgrade export-oriented FDI. Successful zones can be found in countries such as China, Costa Rica, the Dominican Republic, the Philippines and Singapore. On the other hand, there are many EPZs that have failed to attract substantial investments and where outlays have far exceeded social benefits.

As in the case of other policy areas, the nature and use of EPZs are also evolving. As already noted, the requirement to export has been relaxed in many countries in recent years, thus allowing for significant domestic sales. More domestic companies are now established in the zones and efforts are being made by Governments to encourage more linkages between foreign affiliates and domestic firms, as well as to encourage the training of local employees and the development of technical and technological infrastructure. The industrial composition of production within EPZs and other zones is also changing. While it used to be dominated by low-technology, labour-intensive, incentive-driven manufacturing activities, a number are now moving into new areas such as electronics assembly, electronic design, testing and R&D, not to mention regional headquarters and global logistics centres. In developing countries, such trends may be accelerated by the WTO disciplines in the area of export subsidies.

…in the light of WTO rules on export subsidies, …

When considering using incentives, not least in the context of EPZs, developing countries not only need to identify the most effective ones, but also to ensure that they conform with the international regulatory framework, notably WTO rules. In this context, attention is especially warranted to the role of export subsidies. Apart from the WTO members listed in Annex VII of the Agreement on Subsidies and Countervailing Measures (namely, LDCs and members listed in Annex VII until their per capita GNP reaches $1,000), other developing country members will have to eliminate export subsidies as of 1 January 2003, with the exception of those that will be granted an extension of the transition period. And even these need to consider what to do once it expires. The possibility of offering other specific incentives that do not meet the definition of prohibited subsidies remains, but any “specific” subsidy that causes adverse effects to another WTO member’s interests is actionable and potentially subject to remedial action. Furthermore, subsidized imports into another WTO member may be subject to countervailing measures by the latter, if they cause, or threaten to cause, material injury to a domestic industry providing the like product in the importing member. The provision of “specific” subsidies therefore becomes risky.

EPZs are likely to continue to play an important role in the overall strategy of countries to promote export-oriented FDI. They can continue to exempt exports by companies in these zones from indirect taxes (such as sales taxes), border taxes (e.g. consular fees) and import charges. Duty drawback and duty exemption systems are thus permissible. While duty drawback schemes may not include capital goods used to produce exported goods, many smaller WTO members may have little or no domestic production of such capital goods, and thus could consider simply lowering or eliminating import duties on such goods. Furthermore, arguably, the most structural advantages in the form of well-functioning infrastructure and streamlined administrative procedures remain unaffected. Partly in the light of this, a number of countries, including some developed ones, are beginning to turn their EPZs into industrial parks or science parks that can act as catalysts for cluster development.

There is a risk that intense competition for export-oriented FDI will translate into a race to the bottom (in social and environmental standards) and a race to the top (in incentives). Such concerns have been voiced especially in the context of EPZs. Successful EPZs should not be judged solely on their capacity to attract FDI or increase exports and foreign exchange earnings. They should also be assessed by the extent to which they help meet broader economic and social objectives. Countries that pursue more integrated policy approaches to attracting export-oriented FDI – for example by involving tripartite representation on EPZ committees, guaranteeing workers' rights (including freedom of association and collective bargaining), and upgrading skills and working conditions – have tended to attract higher-quality FDI. Singapore and Ireland are two examples of countries that have pursued more integrated policy approaches in this area. In both these countries, efforts were made to promote training, facilitate dialogue between labour and management, and provide first-class infrastructure for investors. Good labour relations and the upgrading of skills enhance productivity and competitiveness.

With regard to the risk of an incentives race to the top, while the Agreement on Subsidies and Countervailing Measures prohibits the use of export subsidies, other incentives, especially locational ones, are still widely used in both developed and developing countries to promote export-oriented FDI. As competition for export-oriented FDI increases, the risk of ever-increasing incentives by competing locations calls for further international cooperation in this area. The differences in resources available for public support to private investment also suggest that developing countries are at a disadvantage in such incentive-based competition. A reduction in the use of locational incentives by developed and developing countries should help Governments allocate more resources for the development of skills, infrastructure and other areas relevant to the attraction of export-oriented activities. At the same time, a case could be made for making certain development-oriented subsidies to foreign affiliates non-actionable under WTO rules, for example, if they serve to encourage the provision of technology, technical assistance and training to local suppliers and their personnel. However, to avoid free riding, firms receiving incentives should be required formally to commit sufficient resources on a long-term basis.

…while investment promotion becomes more targeted, …

The choice of policy instruments with regard to export-oriented FDI needs to be in tune with a country's overall development strategy. There is growing recognition that various policy tools are most effective if they are applied in a targeted and coherent manner. Because TNCs typically consider a number of potential investment locations for export-oriented FDI, the need for a focused approach to investment promotion is particularly relevant. A targeted approach is likely to be less costly in relation to the results achieved, than one in which a country attempts to attract export-oriented investment in a more ad hoc fashion. But, above all, the main reason to target is to increase the chances of attracting investment that furthers the specific development objectives of a country. This requires, among other things, that Governments determine what type of FDI is likely to have the greatest potential for linkages with indigenous investment.

An important starting point for successful targeting is a good understanding of the relative competitiveness of a host country (or an area within it) for specific activities. While an assessment of a location's strengths and weaknesses can be undertaken at various levels

of sophistication and detail, useful insights can be obtained from a relatively inexpensive rule-of-thumb approach involving an analysis of existing trade and industry patterns, consultations with existing investors (domestic and foreign), an analysis of which competing locations are exporting and what they have attracted in terms of export-oriented FDI, and an identification of other factors that might attract export-oriented FDI, including membership of free trade areas, preferential trade schemes, clusters of economic activity, and industrial parks. Such an assessment can form the basis for a narrower segmentation of the market, for example, based on economic, geographic, demographic and other criteria.

Another important element of targeting is a sound analysis of corporate strategies affecting the choice of location. In response to increased geographical and functional specialization in many industries, countries may find it useful to identify production niches through which they can link up with international production systems. The more focused the approach, the easier it is to streamline the activities of investment promotion agencies (IPAs) to meet the needs of investors. Important clues as to where to look for potential investors relate to foreign affiliates that are already established in the country. They are "living proof" of the existence of investment opportunities, and their presence may be indicative of where to search for additional investment. Their competitors, too, may potentially be prime targets, especially if the existing foreign affiliates are linked to leading TNCs. Companies that are part of the value chains of domestic as well as foreign affiliates in the host country (e.g. as buyers or suppliers) are also potential targets. Nurturing close contacts with existing firms may generate useful insights into their investment strategies and how these "related" firms make their investment decisions.

Targeting should not be a one-off initiative but a continuous learning process in which relationship-building plays a key role. Governments need to recognize the importance of dynamism in niche market identification, and be aware of the need to revise their strategies over time, as competitive conditions and corporate strategies evolve. Advantages based upon preferential market access, for example, are valuable but must fit into a clear plan for creating sustained advantage over time. IPAs can contribute to such plans, but their conceptualization and implementation also involves other agencies of government and public-private partnerships.

There are, however, risks involved in developing a more targeted and focused strategy. Resources may be focused on attracting investments that do not materialize, or considerable efforts and resources may be devoted to seeking the wrong types of firms, or firms that would have invested in any event. Improving the overall policy environment for investment – domestic and foreign alike – should not be sacrificed to a selective focus on attracting a few firms. A realistic understanding of the strengths and weaknesses of a location as a base for export-oriented production provides a stronger base for targeting. There is an obvious risk of wishful thinking in seeking to win "high-status" TNCs if a country does not have the basic conditions to attract this type of investor (such as an educated and highly skilled workforce and excellent, low-cost infrastructure). Competition for high-profile investment projects can be intense and, for every winner there are often several losers that, in the end, may have expended considerable resources in a failed attempt to attract a project. Thus, for most developing countries, the investors to target will probably not be the top 100 TNCs (chapter IV), but smaller firms within the appropriate industry or activity.

While it is clear that adopting an investor targeting strategy can be effective in attracting FDI, it also presents considerable challenges for Governments. Effective targeting requires business-oriented IPAs with well-developed links to the private sector as well as to other branches of government. Investor targeting should be well integrated into the overall development strategy of a country, and IPAs need to work closely with other parts of government to identify and, indeed, create comparative advantages that are sustainable rather than ephemeral.

…and integrated into a comprehensive approach to meeting the competitiveness and development challenge.

To repeat, expanding exports is a means to an end: promoting development. To maximize the benefits of government intervention, the promotion of export-oriented FDI should be an integral part of the overall development

strategy of a country. The bottom line is that the degree of success of a host country in attracting and upgrading export-oriented FDI as well as in reaping development benefits from such investment relies critically on its ability to develop domestic capabilities. Indeed, some of the countries most successful in boosting export competitiveness and leveraging export-oriented FDI practised a two-pronged approach based on developing domestic capacities while targeting foreign resources and assets. Important elements of such an approach can include:

- ensuring that what is targeted through investment promotion is in line with the country's broader development and industrial strategies;
- providing a package of incentives in a focused way to encourage TNCs to invest in strategic activities (taking into account WTO rules on export subsidies);
- involving foreign affiliates in the development and upgrading of human resources;
- developing high quality infrastructure, such as EPZs and science parks; and
- providing targeted support for domestic enterprises and supplier and cluster development.

The last bullet addresses a particularly important issue. To benefit fully from export-oriented FDI, facilitate an upgrading of export-oriented activities and make them sustainable, host countries need to encourage linkages between foreign affiliates and local suppliers. Export-oriented foreign affiliates – especially if operating in enclaves – often import all or most of their input requirements of components and raw materials, assemble the product in the host country and then export the semi-finished or finished output. It is partly against this background that linkage promotion has become an increasingly important policy area. Linkages with foreign affiliates are a key channel for the diffusion of skills, knowledge and technology to domestic firms. As discussed in depth in *WIR01*, key policy instruments include information provision and matchmaking; encouraging foreign affiliates to participate in programmes aimed at upgrading domestic suppliers' technological capabilities; promoting the establishment of supplier associations or clubs; the joint provision of training; and various schemes to enhance domestic suppliers' access to finance. Meanwhile, as in other policy areas, linkage promotion strategies also have to adapt to the changing nature of corporate strategies. For example, some countries (e.g. Ireland) are abandoning the idea of promoting linkages only between local firms and foreign affiliates and, instead, promote the participation of domestic firms in supply chains of TNCs based anywhere in the world.

Linkages between domestic suppliers and foreign affiliate buyers can also take place more frequently if buyers and suppliers operate in the same spatial and industrial area. Indeed, the increasingly interdependent nature of policies on investment, trade, technology and enterprise development calls for a more integrated approach to fostering export-oriented FDI and economic development. As the development of infrastructure, business services and specialized skills often involves significant levels of investment, many countries have encouraged the formation of localized industrial clusters. Such efforts seek to create conditions that will promote dynamic interaction, learning, technology upgrading and competition among all relevant actors. A number of countries that have seen improvements in their export competitiveness over the past two decades have hosted agglomerations of mainly foreign-owned producers. Prominent examples include Ireland, Malaysia (Penang), Mexico, Singapore and a few CEE countries. However, not all export-oriented projects are good candidates to become nodes of dynamic industrial clusters. The chances of production concentrating in a limited number of locations increase when there are economies of scale at the plant level, relatively low costs per unit of output, low barriers to trade, and the presence of externalities and spillovers.

While the formation of industrial clusters can be spontaneous, resulting from the agglomeration of firms engaged in similar or related activities, increasingly, strategic government intervention can facilitate their creation. Three kinds of effort have been identified as essential for the development of clusters involving inward FDI. The first is *investment and business promotion* in a targeted manner (chapter VIII). As policy-makers have to understand the competitive needs of different industries to avoid making misdirected investments in the wrong sort of clusters, cluster diagnostics is fundamental. There is also a special need in FDI-based cluster development for close cooperation between IPAs and related government institutions.

The second is *institution-building*, which is a complex process. Agglomeration tendencies can be encouraged by the establishment of EPZs, industrial parks and other specialized facilities, often specializing in one or more industries. Institutions engaged in metrology, standards, testing and quality assurance provide the infrastructure of modern industrial activity. Their importance to competitiveness is growing as a result of increasingly stringent quality, precision, tolerance and other standards in international markets. Other relevant institutions are those responsible for initiating research, providing access to financial resources, and creating business networks and professional associations.

The third element focuses on the *training and upgrading of human resources*. For knowledge-based activities, in particular, training and upgrading of relevant human resources are key (*WIR99)*. Such efforts may involve the establishment of specialized training centres, possibly with the involvement of foreign affiliates. Another approach is to attract internationally mobile skills to complement the local skills base. In general, the more knowledge-intensive the activity, the more important it becomes for clusters to attract skills.

In conclusion, the continuous need for countries to move up the value-added ladder and improve the attractiveness of their locational advantages is a challenging task for policy-makers in developing countries. It calls for more sophisticated and comprehensive policy approaches that take into account changes in corporate strategies and international rule-making. Furthermore, at the top of the agenda should be the development of domestic capabilities, as this helps not only to attract quality FDI but is also necessary to facilitate an upgrading of existing activities. Given the potential of improved export competitiveness for promoting development, the need for developing countries to preserve sufficient policy space to pursue their development objectives also has to be recognized. Finally, the extent to which developing countries profit from new opportunities created by the emergence of international production systems depends largely on their own actions. Developed countries can also help in a number of ways: they can provide assistance for the development of institutional capacity, disseminate information about export-oriented investment opportunities, and dismantle barriers to exports from developing countries.

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