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IMPLICATIONS OF THE RELATIONSHIP BETWEEN TRADE AND INVESTMENT FOR DEVELOPMENT AND ECONOMIC GROWTH

Work Undertaken in Other Intergovernmental Organizations

Addendum

At its meeting of 2 and 3 June 1997, the Working Group requested the WTO Secretariat to prepare a paper which would present the results of work undertaken in other intergovernmental organizations on the subjects covered by Item I of the Checklist of Issues Suggested for Study (WT/WGTI/M/1, paragraph 11). Pursuant to this request, the Secretariat invited UNCTAD and other intergovernmental organizations working in this area to provide a summary description of work carried out on these subjects.

This addendum reproduces the contribution from the UNIDO.

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FACTORS INFLUENCING INDUSTRIAL INVESTMENT PROMOTION

1. The Impact of Globalization

The evolution of the world economy has reached a state described as "globalization" of markets for goods, services, technologies, finance, and labour. This phenomenon has been characterized by increased trade and capital flows, a greater international division of labour based on specialization and comparative advantage, expanded transnational networks and enterprise alliances, and extensive communications and information systems. Globalization has accelerated in the past few years and is bound to have a resounding impact on overall economic and social development far into the future.

Globalization presents a challenge to developing countries in their efforts to survive and grow in a highly competitive world. To succeed, they need to build on their specific strengths and advantages and adopt the technologies most suited to their resources and needs.

For enterprises in developing countries, access to natural resources and availability of cheap labour are no longer the overriding factors in achieving international competitiveness. Increasingly, comparative advantage is being based on technological capability and innovation; ability to apply and adapt new technologies in production processes; continuous upgrading of human skills; flexible organization and aggressive marketing; and ability to establish appropriate linkages with global corporations in the form of subcontracting, product mix, foreign direct investment, licensing and strategic alliances.

It is against this backdrop of globalization that industrial investment promotion in developing countries should be looked at in the current years.

2. The Roles of Foreign Direct Investment (FDI) and Domestic Investment

The significant increase in international capital flows in recent years has been a distinctive feature of globalization. Since the mid-1980s, there has been a surge in international capital flows and a growing integration of international financial markets. For example, global flows of foreign direct investment (FDI), which totalled US\$52 billion in 1980, had risen dramatically to US\$350 billion in 1996. The growth of FDI and portfolio investment has in turn allowed firms greater national and worldwide access to capital to finance further development and globalization.

The 1990s have also been characterized by radical changes in the composition of capital flows to many developing countries. In contrast to earlier periods that were dominated by official aid flows and commercial bank lending to public sector borrowers, recent capital flows have increasingly consisted of private direct investment and portfolio flows to private sector borrowers. By 1994, private flows represented 57% of net resource flows to developing countries, a reversal of the situation in the 1980s, when private financing accounted for only one third of external financing.

Developing countries and economies in transition have experienced a significant increase in inflows of FDI in recent years. More than a third of total world FDI currently goes to developing countries, compared to 20% in the first half of the 1980s. FDI flows to economies in transition reached \$11 billion in 1993, much of the inflow being invested in privatized manufacturing enterprises. The inflow of FDI has contributed to the growth of manufacturing exports, which have increased much more rapidly than total manufacturing output.

At the global level, the distribution of FDI is heavily concentrated in a small number of developing countries, the 10 largest recipients accounting for 88 per cent of all FDI flows to developing countries in 1994. On a regional basis, Asia accounts for more than a half of FDI, and sub-Saharan Africa for about 3 per cent.

To add some perspective on the above, even if FDI flows gain further momentum and are more evenly spread among developing countries, the bulk of total capital formation will still have to come from domestic investors and savings. For regions such as Africa, where savings rates are low, meeting this requirement for domestic investment and capital formation is problematic; not surprisingly, higher overall growth rates have been difficult to attain.

Global FDI flows have indeed been rising since the mid-1980s, but in recent years they have accounted for only a small percentage of total investment. For example, in 1992 they provided about 10% of total investment (likely to be changing rapidly if re-investment is also included).

On the other hand, since 1986 the share of domestic private investment in total investment has remained stable at about 60%, making it the most important source of investment in developing countries. The situation is similar in the economies in transition, where there is increasing evidence that private investment is the fastest-growing component of total investment. In Poland, for example, the rate of growth of private investment is twice the rate of public investment (5.8% compared with 2.2% in 1993).

Thus, while FDI is important for the industrial development of developing countries and economies in transition, it should be recognized from the outset that industrial as well as other investments will have to be financed predominantly from domestic sources, and that the role for foreign capital, when available, is only to supplement national efforts.

Nevertheless, FDI is essential to the establishment or rebuilding of competitive market structures by developing countries and economies in transition. It provides much needed managerial skills, know-how, new technologies and, most importantly, market access. It can therefore be an important catalyst for sustained economic growth.

3. The New Competitive Environment and New Production Networks

The emergence of more flexible approaches to production combined with the escalating costs of research and development (R&D) and shorter production life cycles, has forced firms to search for wider markets and to combine their competitive advantage with those of other firms in strategic alliances and interfirm networks. Concentration by firms on exploiting their core competencies - that is, their main line of business expertise - has required the forging of new relationships with partners in the private and the public sector. The conclusion of alliances with other firms enables companies to acquire new product or process technologies, to share the costs, to spread the risks of high capital outlays, particularly for R&D, and to gain access to new distribution channels and markets.

Transnational corporations (TNCs) have increasingly developed intra-firm networks and alliances on a regional basis, using a regional headquarters for the coordination of operations. As a result, the clustering of FDI around major regional locations has become more pronounced in recent years. Relatively few manufacturing activities or firms are truly globalized (that is, operating in all or most regions of the world), and a large part of the developing world has not been able to derive significant benefits from the resource flows.

Accelerated FDI as a prominent feature of globalization reflects the increasing importance of integrated cross-border value-added activities of TNCs.

Underlying and reinforcing the globalization process have been technological advances in bio-technology, microelectronics and new materials, as well as the new organizational structure of enterprises. New technologies have led to the introduction of flexible production systems in the context of mass customization, a new form of industrial organization which provides for large-scale production while at the same time meeting consumer demand for quality and diversity. Mass customization is further characterized by the use of flexible machinery, often applying microelectronics-based technologies, and by production in small customized batches in response to specific consumer requirements.

The imperatives of competitiveness have led many firms to reduce the emphasis on their own value added to final products, and to concentrate on their core competencies. They have thus contracted out, or "outsourced", non-core value-added activities - such as the production of components and the provision of services. This has led to new and innovative sub-contracting possibilities with small- and medium-scale industries (SMIs) in developing countries and economies in transition, a process which should result in a further extension of global manufacturing networks. The requirements of production in small customized batches - particularly the flexible input and delivery schedules - and the new emphasis on quality, reliability and zero defects have made it necessary for firms to develop close relationships with their suppliers, both domestic and foreign.

4. Technological Innovation and the New Competitive Environment

The growing integration of the global economy and the accelerating rate of technological change have created a new competitive environment for all countries. Competition has become increasingly borderless, encompassing nearly all sectors of the economy in both domestic and export markets. At the same time, the continuous and rapid improvement of available technologies has made national innovation systems and the technological and innovative capabilities of individual enterprises increasingly important as determinants of competitiveness.

Under such conditions, international competition is taking a form distinctly different from the traditional one of price competition. Competitiveness now arises from possessing technological knowledge, rather than from minimizing the costs of production using a given type of technology. Effective application of knowledge leads to improved machinery, new products, reduction of costs and improvements in productivity, all of which are important parameters of competitiveness. To survive in the new environment, traditional approaches to competition will need to be radically altered. Continuous efforts must therefore be made by developing countries, no longer able to rely solely on lower prices and wages as the basis for their competitiveness, to upgrade their technological capabilities.

5. Acquiring Foreign Technologies

The transfer of foreign technologies can be conducted in various ways. The formal channels include such methods as the import of machinery and capital goods, non-equity licensing and other contractual modes, FDI, strategic alliances and outward FDI. The informal methods, on the other hand, include the exchange of views, information flows through publications and publication networks, migration of skilled workers, various forms of official government assistance and cooperation, demonstrations and imitation.

(a) Technology transfer through foreign direct investment

FDI is growing in importance as a channel of technology transfer. Technologies, in this case, are packaged with the organizational structure and managerial systems of the foreign investors. In addition to transferring technology, FDI can also be a very efficient means of sharing capital, skills, brand names and access to international markets under appropriate conditions. It also has beneficial

spillover effects on local skill formation through demonstration, technological learning and competition. The reliance of developing countries and areas on FDI as a mode of technology transfer varies considerably. Brazil, Hong Kong, Mexico, Singapore and the ASEAN countries have depended highly on this form of technology transfer, and they have consistently ranked among the ten leading recipients of FDI inflows during the past decade. In contrast, the Republic of Korea and Chinese Taipei show relatively low levels of dependence on FDI. However, many Least Developed Countries (LDCs) appear not to have felt the beneficial effects of FDI.

The direction of FDI flows is determined by various factors. The more important determinants include political and economic stability, an established industrial infrastructure, the availability of a pool of low-cost labour, natural resources, a sizeable market and export-processing zones. Proximity to technology support is often another important factor in attracting FDI. Investments will also tend to flow to host countries which can supply high-quality parts and components, a skilled labour force and a good information infrastructure. Countries which lack these advantages will lose FDI to those which have them, resulting in an even greater concentration of FDI in the more advanced developing countries.

The possibility and pace of technology transfer through FDI depends on the technical competence and learning ability of the host countries. It also depends on the willingness of the foreign investors to increase the participation of local personnel. Increased levels of local recruitment in key technical and management positions will hasten the transfer.

(b) Technology transfer through strategic alliances

A new form of technology partnerships, involving inter-enterprise cooperation or strategic alliances, has recently emerged, and is rapidly gaining importance. Although such alliances may take many forms, they usually involve a two-way flow of resources, in contrast to conventional FDI and licensing. The precise terms of such agreements may include cross-licensing between firms with complementary assets or technologies, or the transfer of resources through an exchange of equity stakes between the partners.

However, developing countries, especially LDCs, do not have a significant presence in this form of technology transfer. More than 95% of the strategic technology partnerships are concentrated within the industrialized countries. Among the industrialized countries, the triad of Western Europe, Japan and the United States accounted for nearly 92%. Partnerships between the triad and the NIEs (Newly Industrializing Economies) accounted for 2.3% of the total number of alliances, while those between the triad and the LDCs accounted for a mere 1.5%.

New generic technologies dominated strategic technology alliances within the triad. Such technologies are more commonly transferred to LDCs through technology transfer agreements. More than 50% of strategic alliances entered into by NIEs involve generic technologies. The pattern supports the view that the distribution of technological cooperation is related to the factor endowment of the partners, particularly human capital. It also suggests that strategic partnerships in high technology industries are a suboptimal means of transferring technology if the stages of economic development of the partners differ considerably.

(c) Technology transfer through outward FDI

Another new way of gaining access to key technologies and other strategic assets for developing countries is through direct investments in industrialized countries. This method is more applicable to the advanced developing countries which have accumulated sufficient capital surpluses as a result of their rapid economic growth. During the past few decades, thriving venture capital markets in the

industrialized countries, especially in the United States, have led to a proliferation of innovative start-ups and spin-offs from existing firms in various technologies. The difficulty in raising the capital required to commercialize the innovations have created opportunities for NIEs to inject equity into the innovative firms. A number of firms from the Republic of Korea and Chinese Taipei have thus acquired equity stakes in small electronic firms in Silicon Valley and elsewhere in the United States.

FDI flows originating in developing countries have grown significantly since the mid-1980s. Their sources are mainly the more advanced developing economies, particularly the Asian NIEs. Although their share in world FDI inflows is still small, this trend is expected to increase with the growing participation of more developing countries such as China, India and the near-NIEs in the globalized production system. The trend has widened the options for other developing countries looking for FDI inflows and technology, at least in standardized and mature industries. The LDCs may find it easier to attract FDI originating in developing countries than FDI from industrialized countries.

Prior to the mid-1980s, such FDI outflows were motivated mainly by the quest for expanded markets. The recent increase of outward FDI from developing countries to the industrialized countries seems to suggest, however, that international competitiveness increasingly outweighs market-seeking as a driving force in the investment strategy of many donor developing countries. The shift in trends coincides with a period of rising protectionist tendencies and the emergence of regional trading blocs in the global economy. In addition, the international competitiveness of East Asian NIEs such as Hong Kong, Republic of Korea and Chinese Taipei has been affected by currency appreciation, rising domestic wages and exhaustion of their quotas under the Multi-Fibre Arrangement.

The trend of increasing concentration in industrialized countries does not, however, diminish the importance of the donor developing countries as sources of FDI for other developing countries. Except for a couple of countries, the bulk of FDI from developing countries is still concentrated in other developing countries. For example, FDI flows from developing countries account for between 30 and 65% of inward FDI stocks in countries and areas such as Chile, China, Indonesia, Malaysia, Paraguay, Sri Lanka and Chinese Taipei.

6. Increasing Barriers to Industrial Development of Developing Countries

Economic liberalization and rapid technological change have changed the conditions of industrialization and international trade. The need for ever more sophisticated technologies and a highly skilled workforce has made it more difficult for developing countries to participate in globalized production. At the same time, the process of globalization has accentuated the concentration of innovative capabilities in the industrialized countries, increasing the gap in such capabilities between industrialized and developing countries, largely as a result of a wave of domestic and cross-border mergers and acquisitions by TNCs, and the ensuing build-up of an international supply structure.

Various assessments of technological capabilities starkly reveal the inferior status of developing countries, particularly the LDCs, in the global system of competition. The United States, Japan and western Europe are estimated to account for about two thirds of global R&D activities, while developing countries only undertake 5% of total world R&D. Even among developing countries, the distribution of innovative capabilities is highly uneven. The East Asian countries appear to be the most advanced, with rapidly rising levels of R&D, while the other developing countries show a stagnating or declining trend. In the countries of central and eastern Europe and of the former Soviet Union, where military and space programmes accounted for a large part of R&D expenditures in the past, the move to a market economy in recent years has brought a rapid decline in their share in world R&D.

Recent trends in global flows of FDI, which reflect the potential for technology transfer to the host countries, show a similarly unbalanced pattern of distribution. Although total global flows

of FDI have increased tremendously since the 1980s, from an average of US\$54.5 billion per year between 1981 and 1985 to an average of US\$180.4 billion per year between 1991 and 1994, industrialized countries accounted for more than 60% of the inflows during the early 1990s. On the other hand, the share of developing countries in total global flows of FDI declined from 32.7% between 1981 and 1985 to 15.2% between 1986 and 1990, before picking up to 36.1% during the early 1990s. The share of sub-Saharan Africa dropped from 1.7% to 1.3% during the same period, while that of the LDCs remained at a relatively low level, between 0.2 and 0.5%.

An analysis of private technology flows shows that East and South-East Asia, including China, accounted for about 65% of the total imports of capital goods by developing countries in 1994, thereby gaining the best access to the technologies associated with such imports. Latin America and the Caribbean came in second, while the share of sub-Saharan Africa dropped sharply from 11.1% in 1970 to 1.9% by 1994.

7. Opportunities and the Threat of Marginalization: African Countries and Least Developed Countries (LDCs)

For many African countries and LDCs the ability to attract FDI, so essential for growth, is compromised by other difficulties: domestic savings and incomes are low and markets small; growth is slow, but population growth is high, so per capita GDPs are falling; and population is sparse in many LDCs. These countries are, moreover, heavily burdened by external debt and are apparently being bypassed by FDI flows. On average, African countries received US\$3 billion of FDI each year in 1986-1994. But investment flows to Africa continued to account for less than 5% of total FDI flows to developing countries in 1991-1994.

The lack of infrastructure and supporting industrial services (repair, maintenance, information, informatics) are also considered impediments. These impediments are particularly problematic as many countries are landlocked or small island developing countries. Thus, many of the benefits of FDI - remembering that it will never, and should not, take the place of domestic investors, who are the real long-term builders of a viable competitive economy - may be bypassing African countries and LDCs. Recent figures showing that the ratio of total trade to GNP in Africa has been falling and is lower now than it was 20 years ago are a cause for concern, especially as the comparable figures for almost all other regions of the world show an increase over the same period. If African countries are to benefit from globalization, increased trade is a must.

Because of their difficulties in attracting FDI, African countries and LDCs will have to rely on ODA to supplement their own meagre resources. Unfortunately, since the early 1990s "donor fatigue" appears to have set in and FDI flows have dropped significantly in real terms. However, in sub-Saharan Africa, the manufacturing value added (MVA) now appears to be rising (1.8% in 1995 compared with 0.5% in 1994). Nevertheless, only a few countries, such as Kenya and those belonging to the CFA franc zone, have been able to sustain growth at relatively robust rates and attract FDI in recent years.

8. A New Role for Governments and the International Community

Liberalization and deregulation in recent years have firmly established the primacy of the market system, and the private sector has increasingly become the engine driving industrial development. The development of that sector, however, in developing countries and economies in transition alike, requires a new policy framework. It requires, in particular, policies to increase systemic competitiveness and export orientation; to mobilize and secure new investment, especially FDI; to ensure the inflow, absorption, adaptation and domestic diffusion of new technologies; to achieve appropriate levels of privatization; and to accelerate human resource development and training.

The emerging international environment for enterprises in developing countries and economies in transition will thus be very different from the one they were nurtured in. They are being exposed to world competition at a time when the pace of competition is intensifying and the technologies driving it are evolving even more rapidly. The growth of globalized production, under the aegis of TNCs, offers a way forward for those countries that are able to attract sufficient amounts of transnational interest. But doing this is not simply a matter of opening up the economy in a passive sense; it requires the creation of productive factors, skills and supplier systems. FDI does make a crucial contribution to these factors and skills, but it cannot replace indigenous development, for the very existence of a dynamic and competitive domestic industrial sector attracts higher quality foreign investment and allows the host economy to reap much larger benefits from the investment. It should be remembered that the ratio of FDI inflows to gross domestic capital formation in developing countries during 1985-1990 totalled less than 3% on average and reached only 4.9% in 1992. This demonstrates that even in open economies it is domestic investment, domestic policies and domestic entrepreneurial skills that drive industrial development.

There are strong complementarities between domestic and foreign investment. First, attracting greater inflows of FDI also requires stimulating local entrepreneurship, and often entails the provision of domestic counterpart funds at the same time. The establishment of joint venture agreements is frequently predicated on the availability of active and competent local partners. Small domestic firms often act as important suppliers of key components and parts for large firms. Most importantly, it is only by fully supporting the development of domestic entrepreneurship and investment that FDI can have a significant multiplier effect, and thus galvanize overall economic development, particularly in the private sector.

In designing FDI policies and promotional measures, governments should thus be careful not to discriminate against domestic investors. In general, fiscal incentives and tax rebates given to attract FDI should also be available to domestic investors. Better coordination of FDI policies with domestic investment promotion and entrepreneurship development activities is thus essential. In that regard, it may be useful to explore whether venture capital funds could be a means of fostering domestic investment in new areas of industrial activity, particularly in support of industrial restructuring, privatization and the promotion of spin-off SMIs.