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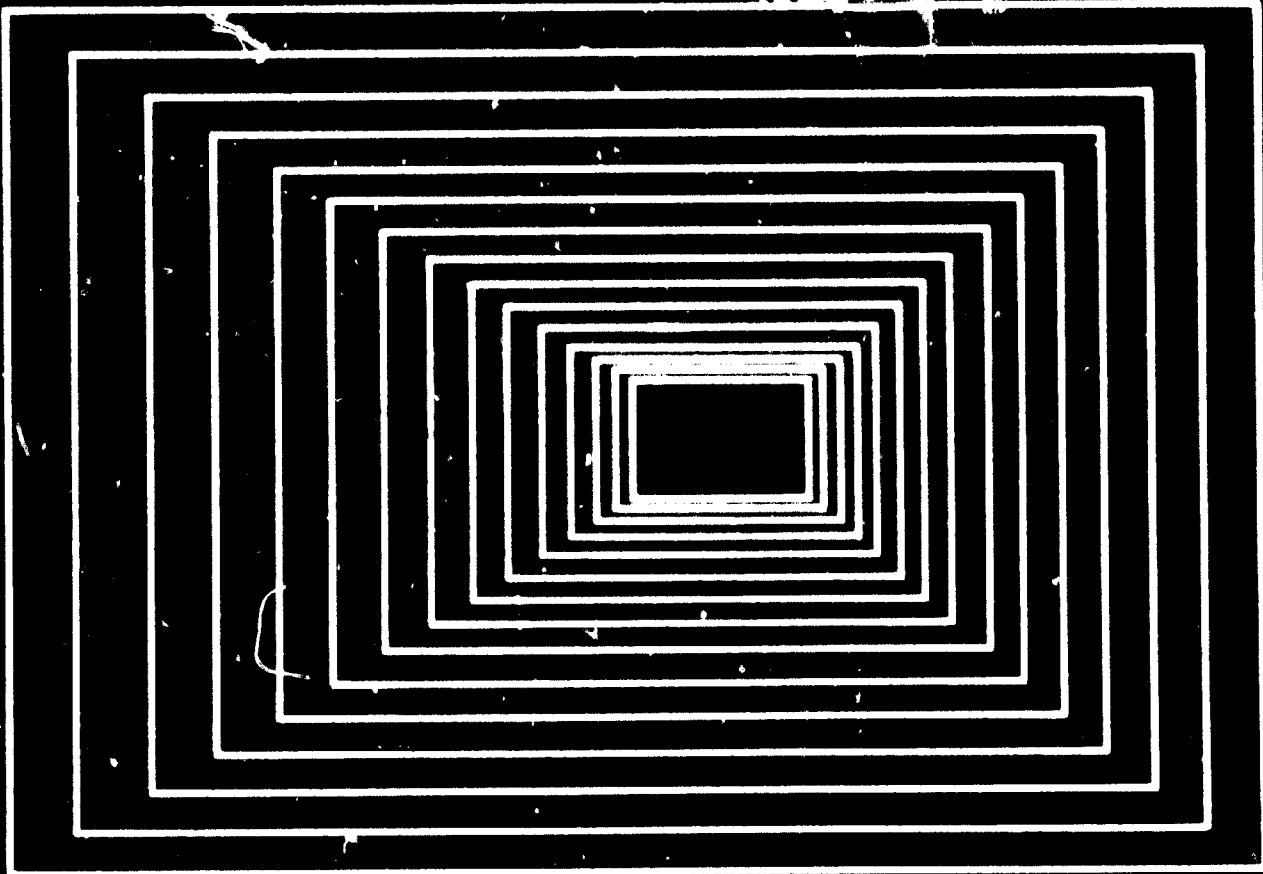
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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION



**INDUSTRY 2000—NEW PERSPECTIVES**

**UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION**  
**Vienna**

**INDUSTRY 2000—  
NEW PERSPECTIVES**



**UNITED NATIONS**  
**New York, 1979**

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## FOREWORD

A Study on International Industrial Co-operation was launched initially by UNIDO in response to resolution 3362 (S-VII) of the seventh special session of the United Nations General Assembly held in September 1975, which called for member countries to conduct the Study jointly. Paragraph 7, part IV of resolution 3362 stated: "A joint study should be undertaken by all Governments under the auspices of the United Nations Industrial Development Organization, in consultation with the Secretary General of the United Nations Conference on Trade and Development, making full use of the knowledge, experience and capacity existing in the United Nations system of methods and mechanisms for diversified financial and technical co-operation which are geared to the special and changing requirements of international industrial co-operation, as well as of a general set of guidelines for bilateral industrial co-operation. A progress report on this study should be submitted to the General Assembly at its thirty-first session." A meeting of eminent persons was held by UNIDO in Vienna in September 1976, as a result of which it was agreed that UNIDO would compile the Study for consideration by member countries. A draft of the Study was presented for discussion before a second meeting of eminent persons held by UNIDO in Vienna in June 1979 and at a United Nations Inter-Agency Meeting in July 1979. The final draft of the Study presented herein under the sole responsibility of UNIDO, is for consideration of the member states in accordance with resolution 3362 (S-VII) and for discussion at the Third General Conference of UNIDO to be held in January and February 1980, in New Delhi, India.

In the broader context of its presentation, we have renamed the Study *Industry 2000—New Perspectives*. The Study is based on the fundamental principle that the restructuring of the world economy must assume, and in fact coincide with, the restructuring of world industry. Practical, innovative mechanisms for accelerating international resource flows within and to the South have been presented, as concrete steps towards reaching the Lima target for industrialisation of the Third World, and building a new international economic order.

This volume comprises two parts. Part I is intended to act as a negotiating document at the Third General Conference. It contains

UNIDO's view of evolving international developments, and what is seen as a new opportunity for global co-operation to reduce the present sharp differences between the rich and the poor countries. UNIDO trusts that with the right international strategies, industry can be used as a major instrument for improving the standard of life in the developing countries, where three quarters of the world's population lives. Eight major proposals calling for new initiatives in international co-operation towards this end are presented in part I.

Part II contains a comprehensive review and analysis of the problems and prospects of industrialising the Third World. In essence it provides the supporting arguments for the major proposals presented in part I.

Some additional volumes are also being published to be available to the Third General Conference. These will contain the background material to the Study, and cover individual functional areas in which international resource flows take place, with an overview of each subject area, as well as some selected consultants' papers.

By presenting this final draft of the Joint Study and the additional volumes on *Industry 2000 – New Perspectives* we hope that UNIDO will have made a modest but positive contribution to the urgent task of mobilising the world's industrial resources, to alleviate the misery of those who do not have and may not be prepared to wait much longer.

**Abd-El Rahman Khane**  
*Executive Director*

*Vienna, August 1979*

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## EXPLANATORY NOTES

Regional classifications, industrial classifications, trade classifications and symbols used in statistical tables, unless otherwise indicated, follow those adopted in the United Nations Statistical Yearbook.

The following classification of economic groupings is used in the text in conformity with the classification adopted by the United Nations Statistical Office: "Developing countries" includes the Caribbean area, Central and South America, Africa (other than South Africa), the Asian Middle East (other than Israel) and East and South-East Asia (other than Japan). "Developed market economies" includes North America (Canada and the United States of America), Europe (other than Eastern Europe), Australia, Israel, Japan, New Zealand and South Africa. "Centrally planned economies" includes Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania and the Union of Soviet Socialist Republics, but not Albania, China, the Democratic People's Republic of Korea, Mongolia and Viet Nam. In some tables the classification may differ from that given above, depending on the source cited.

For stylistic reasons certain other denominations of country groups are also used in the text. The words "South", "Third World" and corresponding forms refer to all developing countries. The word "North" and corresponding forms refer to the industrialised market economy countries, broadly synonymous with the OECD area. "Socialist countries", "East" and corresponding forms refer to "centrally planned economies" as above. "Industrialised countries" refers to the developed market economy countries and the centrally planned economies in Europe. These definitions are not rigorous, however.

"Manufacturing", as well as "Industry" includes the industry groups listed in Major Division 3 of the International Standard Industrial Classification of all Economic Activities (ISIC) (United Nations publication, Sales No. 71.XVII.8) throughout this volume, unless otherwise indicated.

Dates divided by a slash (1960/61) indicate a crop year or a financial year.

Dates divided by a hyphen (1960-1965) indicate the full period involved, including the beginning and end years.

References to dollars (\$) are to United States dollars, unless otherwise stated.

The term "billion" signifies a thousand million.

Annual rates of growth or change refer to annual compound rates, unless otherwise specified.

### *In tables:*

Apparent arithmetical discrepancies, such as details and percentages that do not add precisely to totals, are owing to rounding of the basic data or to differences in rounding of numbers known to different degrees of precision;

Three dots (. . .) indicate that data are not available or are not separately reported;

A dash (-) indicates that the amount is nil or negligible;

A blank indicates that the item is not applicable;

A minus sign before a figure (-2) denotes a deficit or decrease, except as indicated.

The names of countries are those in current official use.



### Abbreviations

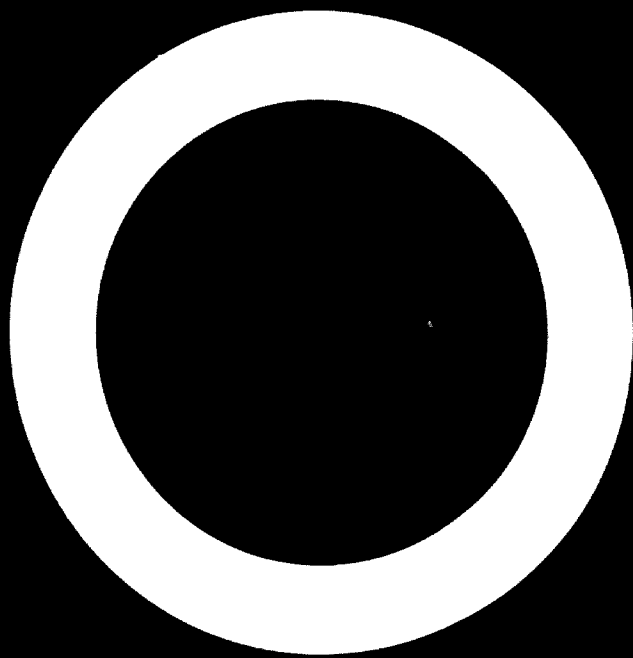
The following abbreviations are used in this volume. The use of DC for *Developing Countries* and LDC for *Least Developed Countries* according to the official UN definition (30 specially listed countries) should be observed. The words "Developed Countries" are as far as possible avoided.

ACP	African Caribbean and Pacific States in association with The European Economic Community
CIEC	Conference on International Economic Co-operation
CMEA	Council for Mutual Economic Assistance
CPE	Centrally Planned Economies
DAC	Development Assistance Committee of OECD
DC	Developing Countries
DEG	Development Corporation of the Federal Republic of Germany
DFI	Direct Foreign Investment
DMEC	Developed Market Economy Countries
ECE	UN Economic Commission for Europe
EEC	European Economic Community
EFTA	European Free Trade Association
FDA	Food and Drug Administration of the U.S.
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GNP	Gross National Product
GSP	Generalised System of Preferences
IBRD	International Bank for Reconstruction and Development (The World Bank)
IC	Industrialised Countries (including DMEC and CPE)
ICC	International Chamber of Commerce
ICOR	Incremental Capital Output Ratio
ICPO	Investment Co-operative Programme Office (of UNIDO)
IDA	International Development Association
IFC	International Finance Corporation (of the World Bank)
ILO	International Labour Organisation
IMF	International Monetary Fund
INPADOC	International Patent Documentation Centre
INTAL	Instituto para La Integración de América Latina
INTIB	Industrial and Technological Information Bank (of UNIDO)
LDC	Least Developed Countries (according to UN definitions)
MNC	Third World Multinational Corporation
MSA	Most Seriously Affected (Countries)
MVA	Manufacturing Value Added
NIEO	New International Economic Order
NTB	Non Tariff Barrier to Trade
OAPI	African Intellectual Property Organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
OPEC	Organisation of Petroleum Exporting Countries
R+D	Research and Development
SDR	Special Drawing Rights
SEC	Servicio Latinoamericano de Cooperación Empresarial
SITC	Standard International Trade Classification
TCDC	Technical Co-operation among Developing Countries
TIES	Technical Information Exchange System (of UNIDO)
TNC	Transnational Corporation

<b>UNCITRAL</b>	<b>United Nations Commission on International Trade Law</b>
<b>UNCSTD</b>	<b>United Nations Conference on Science and Technology for Development</b>
<b>UNCTAD</b>	<b>United Nations Conference on Trade and Development</b>
<b>UNCTC</b>	<b>United Nations Centre on Transnational Corporations</b>
<b>UNDP</b>	<b>United Nations Development Programme</b>
<b>UNESCO</b>	<b>United Nations Educational, Scientific and Cultural Organisation</b>
<b>UNIDO</b>	<b>United Nations Industrial Development Organisation</b>
<b>UNITAR</b>	<b>United Nations Institute for Training and Research</b>
<b>WIPO</b>	<b>World Intellectual Property Organisation</b>

*Subsidiary material*

Unpublished special reports, and other material commissioned for this study to which explicit reference is made in the text are available for consultation with the UNIDO Secretariat.



## Preface

Unheralded by any international conference, the early manifestations of a new international economic order have already arrived. A new global interdependence in the vital areas of finance, energy, raw materials and technology has developed in recent years between industrialised and developing nations. Growing realisation that the Third World's buying power is helping significantly to contain the impact of the recession in the industrialised countries, provides welcome relief in a hitherto gloomy picture of unilateral dependence of the South on the North. Coupled with the new global interdependence has come an impetus for greater Third World collective self-reliance, in order to strengthen the performance of the developing countries in the global trading framework.

The accelerated depletion of non-renewable energy resources is expected to have a fundamental impact on the structure of industry and on the style of our lives. Costs of traditional and non-traditional forms of energy will remain at permanently high levels, thus changing factor proportions employed in industrial output. In consequence, a new generation of energy-saving technology will have to be created, providing another platform for global interdependence and co-operation.

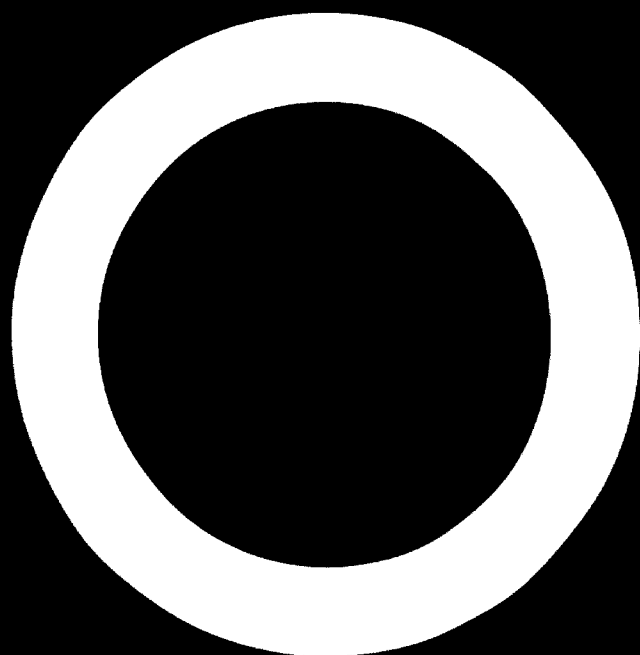
Finally, the role and objective of industrialisation will have to be directed more deliberately towards alleviating the lives of the people, for man must remain at the centre of things. To attain this objective national development policies would have to rely more on growth from within. We call this an "endogenous industrialisation strategy".

Although the beginning of a new international economic order is dimly visible, joint and deliberate action by the international community must be taken without delay, to direct and accelerate the momentum which has recently set in.

The study submitted herewith comprises two parts. Part I presents a Charter for Global Industrial Co-operation. Eight major proposals for new mechanisms of international co-operation are presented in chapter 2 which are not covered by existing mandates of any international organisation. The Conference will, therefore, need to designate international organisations or bodies which should undertake implementation of those proposals that are approved. Chapter 3 contains nine recommendations for supporting programmes two of which do not require any particular action on the part of an institution, while the others are covered by existing mandates of international organisations, particularly UNIDO and could therefore be implemented if the necessary additional resources are made available. Part I as a whole, is therefore intended to act as a negotiating document for the Third General Conference.

The presentation of the major proposals in part I is necessarily condensed, but the detailed background and analyses of these proposals are given in part II—The Supporting Analysis— which deals with the subject areas in the same order as in part I. The reader who is interested in acquiring a further detailed picture of the concepts and proposals presented in part I is therefore invited to refer to corresponding sections in part II, the cross references being indicated on pages 17 and 45. Additional volumes are being published separately within the scope of this study, and will make available to the Conference the fuller background material from which parts I and II of this volume have been synthesised.

**PART ONE**  
**A Charter for Global Industrial  
Co-operation**



# **Chapter 1. Towards a New International Economic Order**

## **1.1 THE WORLD AT A WATERSHED**

International discussions of industrialisation, whether in the industrialised or developing countries, have traditionally been conducted in the institutional context within which transfers of commodities, technology and financial capital take place. Since the advent of the industrial revolution, the developing countries, some of which are rich in natural resources, have operated in an international order primarily geared to sustaining economic development in the industrialised countries. This order has been perpetuated through a division of the world into producers and exporters of primary products on the one hand and producers and exporters of manufactures on the other. Mr. Raoul Prebisch emphasised this aspect of the "centreperiphery relationship", in which the South (developing countries) is dependent on the North (developed market economy countries) for its engine of growth, its supply of finance, and its source of technology. Confronted with its poverty, overpopulation and underdevelopment, the South accepts the urgency to industrialise rapidly, but feels the constraint of institutional factors which perpetuate an unequal international distribution of economic power. Consequently, the South has ardently tried to prevail upon the North to work towards a new international economic order (NIEO), based on more equitable sharing of opportunities, resources and rewards.

As viewed from the North, the plea for a NIEO has appeared unsustainable and untimely. Poverty in the developing countries has been ascribed to low productivity, inappropriate domestic policies and inadequate national effort. International institutional readjustment by itself therefore cannot provide the remedy; nor does it seem urgent to the North, since dependency has been perceived as one-sided. The engine of growth lies in the North because of its command over technology and industry, which in turn shape the international power structure.

These two divergent viewpoints of the South and the North on the need for a NIEO have hitherto prevented a resolution of the present impasse, because the mutuality of interests has not sufficiently been recognised. Fortunately, however, the force of economic developments has initiated changes which international dialogues have failed to achieve. International economic relationships have begun to be altered by a new global interdependence readily apparent in the current North/South trade flows, and in the common concern over energy. It has been the Third World's sustained buying power over the past



six years that has significantly mitigated the effects of recession in the North. According to evaluations made by the European Community, in the Community area alone there would have been 3 million more unemployed—9 million instead of 6 million—if the oil-exporting and non-oil producing developing countries had not sustained their imports of manufactures from the North, through their higher growth rates and their financing operations. If the developing countries had followed the example of the industrialised countries after 1973 and cut back on their growth and their imports, the recession in the industrialised countries would have been far more serious. In 1975, while the European Economic Community (EEC) exports to the United States fell by 17 per cent and those to the European Free Trade Association (EFTA) countries fell by 3.3 per cent, exports to the developing countries increased by 25 per cent. In 1977, 37.7 per cent of the EEC's exports went to the developing countries, against 44.3 per cent to the OECD group, while 25 per cent of all US exports were absorbed by the Third World.<sup>1</sup>

Through these past six difficult years, the non-oil Third World countries kept themselves buoyant largely by borrowing recycled OPEC funds loaned by Northern banks. Without this their buying power would have been strongly reduced. It was done, however, at the cost of putting themselves deep into debt. In 1973, the Third World's combined deficits for the year were around \$11 billion; in 1978, they were over \$30 billion; in 1979, the International Monetary Fund estimates that the deficit for the year will rise to \$40 billion.

If the developing countries are unable to borrow the new OPEC surpluses, the excess liquidity will be left to accumulate in the Eurocredit market, further aggravating monetary disruption. "The present equilibrium of the world economy depends to a considerable degree on a continuing flow of private lending to the non-oil producing developing countries (and to the Soviet Union and Eastern Europe) on a scale unheard of before 1974 and would be called in question by any impediment to the flow."<sup>2</sup> Further borrowing, however, would need to be supported by greater credit-worthiness, which can only be maintained in the long run by expanding exports from the developing to the industrialised countries. The old argument that protectionism must be instituted to save jobs in the North is no longer valid. In a recent report the Organisation for Economic Co-operation and Development (OECD)<sup>3</sup> found that trade with the newly industrialising developing countries created a net gain of 900,000 jobs in the North, in *each* of the years 1973–1977. The industrialised countries need the spur to efficiency and the curb to inflation provided by this competition. Finally, the protectionist route, the OECD concludes, would push the Third World into a downward spiral of impaired credit-worthiness, inability to service debt repayments, and declining economic activity. The overall effect of this, they say, would be further adverse consequences for the industrialised world. The interdependence between the industrialised and the developing countries is

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<sup>1</sup> *Commission of the European Communities, Europe – Third World Interdependence*, Brussels, February 1979.

<sup>2</sup> *Commission of the European Communities, Annual Economic Review, 1978–79*, Brussels, October 1978.

<sup>3</sup> OECD, *The Impact of the Newly Industrialising Countries*, Paris, 1979.

making itself transparent through the critical items of finance, energy, raw materials, trade and technology. A clear appreciation of this emerging North/South interdependence leads to some of the major proposals for new forms of international co-operation presented in part I, chapter 2.

The new global interdependence introduces a mutuality of interest between the North and the South which can only be established on a lasting basis with the industrialisation of the South. Thereby, the North would have an increasingly viable trading partner in the South as purchasing power keeps expanding there. The industrialisation process can greatly be stimulated if the South pursues, *pari passu*, a policy of collective self-reliance, to reinforce national self-help with Southern resource transfers and co-operation. Although the ultimate objective of international economic relations is one of global interdependence from a position of equality, it seems unlikely that it can be achieved without the South pursuing deliberate policies to increase the degree of collective self-reliance for some time to come. Major proposals for international co-operation in this direction are also presented in part I, chapter 2.

### *The Energy Situation*

Developments relating to energy are bound to have a fundamental impact on the pattern of industrialisation and the framework of international co-operation within which it will take place. According to one scenario used in UNIDO estimates, total world energy requirements would increase annually at 4.5 per cent. Assuming that oil will comprise half of the total primary energy requirement, a critical global oil shortage is expected to occur by the end of the 1980s. The South presently consumes about 15 per cent of world oil production. Because of its limited ability to develop alternative energy sources within the next decade, as well as its low per capita consumption, it is estimated that the oil requirements of the South would grow at about 8 per cent annually. This would imply that the total oil requirements of the South alone by the year 2000 would just exceed total world availability. Consequently, as a first step in dealing with these constraints on industrial growth, it is clear that both the North and the South would have to pursue active conservation measures, whose scope is clearly greater in the North because of its much higher level of consumption and considerable wastage.

It is possible that the North will eventually develop new sources of energy to sustain its economies and help them grow.<sup>4</sup> However, these new energy sources are likely to cost more than the present level of oil prices,<sup>5</sup> so that the factor proportions employed in industrial production will permanently change. In consequence, technological innovation will once again pick up, leading to new processes and products which would be less energy-intensive. A whole new

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<sup>4</sup> The World Bank expects energy production in the ICs to increase about 3 per cent a year between 1975 and 1990 with coal and nuclear power each accounting for about 40 per cent of the anticipated increase. See *World Development Report*, 1979.

<sup>5</sup> A plant which has been operating in the USA for two years, is producing oil from coal, but the oil is costing \$30 a barrel.

generation of appropriate technology will need to be developed, and if this turns out to be more labour-intensive, the South might acquire new comparative advantages. Some moves are already discernible in the North for commencing to develop the new technology and take other appropriate measures. In an 11-year programme announced by the EEC, it aims progressively to reduce the ratio of economic growth to energy consumption from the current quotient of 1.0 to below 0.7 by the year 1990. It also plans to invest around \$50 billion every year, to develop new processes and products. Three conclusions seem to emerge. First, the new investment should act as an important accelerator, and partly combat the present recession. Second, the South would need to keep in step to ensure that its emerging industrial structure is not only based on the new energy-saving technology, but also takes full advantage of its resource endowments and comparative advantages. Third, present life styles, particularly in the industrialised countries, may have to undergo a radical and painful change. The future industrial society may, in the event, be based on greater rather than less human effort.

Unless special collective efforts are made in the South to develop its own new generation of appropriate technology, the dependence of the South on the North for technology will once again be perpetuated, leaving the new Northern technology to be "adapted" for Southern use. The new technology might render much of the fixed productive assets in the North obsolete, requiring expensive scrapping, to make way for new processes. Since industrialisation in the South is only emerging, the opportunity should be taken of installing new plant and equipment incorporating the new appropriate technology, thus avoiding the hardship of incurring massive plant obsolescence. Considering the magnitude of the problems, and their widespread implications, world energy policy concerns both the global interdependence and collective self-reliance policy frameworks. Endeavours to solve the problems of alternative energy sources and to establish patterns of energy-saving industrialisation, pose a challenge for the international community as a whole.

### *Conclusion*

The world economy today faces its gravest crisis since World War II. Economic stagnation in the North continues to deepen. In essence, it is born out of the inability to continue national demand management policies without aggravating inflation, the increasing exhaustion of natural resources, the declining relative importance of public investment, and the levelling off of technological innovation as a spur to private investment. At the same time, we witness the new phenomenon of the emergence of a group of developing countries in the South with capital surpluses derived from exports of raw materials, especially oil, rather than from industrial output. These two developments together, perhaps more than others, have lately conspired to bring the North and South into a new relationship of global interdependence, improving the climate for attempting orderly and deliberate changes in international institutions and resource transfers in order to accelerate and direct the new momentum.

## 1.2. INTERNATIONAL AND NATIONAL STRATEGIES TOWARDS A NEW ORDER

Progress towards a new international economic order requires clearly defined and deliberate strategies at the international level. These strategies would be aimed at creating a new framework of global relationships, which would allow equitable forms of interaction in order to maximise welfare stemming from the use of the world's resources. One strategy would involve adjusting and improving the results flowing from global interdependence. Another strategy would lead the South to pursue, *pari passu*, a policy of collective self-reliance, in order to improve co-operative utilisation of the resources available within the South, while strengthening its position as a viable partner in the framework of global interdependence. Eight major proposals for new initiatives in international co-operation, reflecting these complementary strategies, are presented in part I, chapter 2.

### 1.2.1. Global Interdependence

Although the global interdependence strategy has grown out of earlier relationships between the industrialised (ICs) and developing countries (DCs), its policy prescriptions do not imply the continuation of the status quo. The South no longer can be viewed as a passive recipient of institutionalised aid or a hapless participant in global relationships. It has become an active partner in shaping the international economy as a mutuality of interest between ICs and DCs evolves. The significance of global interdependence implies that industrialised countries must now consider the long-range effects of their policies not only on themselves but on developing countries as well. Significant increases in DC participation in Northern-based international institutions and in global decision-making may be one possible consequence of the dynamism of change imparted by global interdependence. A first requirement for instituting order in the process of change is a forum to give the ICs and the DCs "the possibility of looking to the future together".<sup>6</sup> One such forum is provided by UNIDO's *System of Consultations*, which organises sector-oriented examinations of industrial plans and problems, bringing together on equal footing governments, public and private enterprises and trade unions from the ICs as well as the DCs. It has already been demonstrated that the sector focus which prevails in the consultation meetings, allows the best possibility of making concrete progress towards international industrial restructuring.

Consultations already have covered the iron and steel, fertilizer, petrochemical, leather and leather products, vegetable oils and fats and agricultural machinery industries. In 1980 and 1981, further consultations will be convened on most of these sectors and on agro-based, capital goods and pharmaceutical industries. In addition, discussions will be held on industrial manpower training and industrial financing.

<sup>6</sup> Preface by Claude Cheysson to *Commission of the European Communities, Europe - Third World Interdependence*, Brussels, February 1979.

### 1.2.2. Third World Collective Self-Reliance

The terms of global interdependence have been established by the industrialised countries which control most of the world's production, finance, technology, and trade. The North has articulated its own group interests through such organisations as OECD, the EEC, the Group of Ten, and the Trilateral Commission. A network of intellectual, cultural, military and business exchanges has developed through centuries of interdependence and migration. The centrally planned economies of the East have similar mechanisms for effective inter-country exchanges. In comparison, the concept of Third World collective self-reliance is modest indeed—building bridges across the South, where colonially-imposed North/South patterns of language, communications, commerce, transport, administration and legal systems still predominate. While the momentum of change in the international order may be gradual, it must at the same time be achieved within a politically and socially acceptable time-frame. The Third World must, therefore, of necessity improve its negotiating position against the organised strength of the industrialised countries.

The fledgling attempts of the South to develop collective self-reliance have been significant: the non-aligned movement, the formation of the Group of 77 within UNCTAD, the Third World Forum. The growth of trade, investment, technology and skill flows between developing countries on a commercial basis provides an increasingly solid foundation to these initiatives. In adopting a common negotiating position toward the ICs for industrialisation purposes, collective self-reliance has encouraged demands in the broader areas of access to international capital markets, access to IC markets for DC industrial exports, international monetary reform linked with greater and more "automatic" development assistance, the regulation of transnational corporations through codes of conduct, and technology transfers on more favourable terms. The work of the UN system in defining areas of Economic Co-operation among Developing Countries (ECDC) and Technical Co-operation among Developing Countries (TCDC) has extended collective self-reliance much beyond the negotiating framework and the role of a bargaining instrument.

Regional economic integration schemes have been the most ambitious institutional form of collective self-reliance in economic terms, with trade liberalisation and customs unions constituting the first step. Joint programming of production follows. All the major DC regions have shared some of this experience, but the stalemates reached in many of these ventures are easier to see than any consistent and deepening process of co-operation. The wholistic or "integrative" approach commonly pursued up to now has reduced the feasibility of addressing specific problems of regional co-operation. Suggestions for new criteria are made in part II, chapter 1.

The past decade has witnessed a perceptible increase in technology flows between DCs in the shape of trade in technology-intensive manufactures, turnkey sales, and joint ventures, although they remain relatively small compared to North/South flows. Technological co-operation among DCs, however, is based on technologies acquired from the North. Nevertheless, the classification of technical information, the identification of potential users, the

establishment of vital support activities, the study of purchasing behaviour of international organisations and governments, the negotiations and elaboration of new legal arrangements for DC exports, the formulation of DC preferential systems and the encouragement of DC co-operative efforts to harness their technological resources, are rich areas for South/South activity. One example of co-operation may be found in national technology institutes. "Centres of excellence" can be identified and given a regional or Third World vocation of transmitting know-how.

Various proposals for collective self-reliance in manpower skills have been raised by the Fifth Conference of Heads of State or Government of Non-Aligned Countries (August 1976) and by other fora. Among them: the creation of skilled manpower pools or data banks, co-ordination of education and manpower planning, co-ordination of on-the-job training, specially designed technical assistance programmes administered by DCs, establishment of joint DC consultancy agencies and services, linking capital transfers from resource-rich/skill-poor countries with the supply of professional manpower from resource-poor/skill-rich DCs through joint financing of schemes or loans and grants.

The co-ordination of terms and conditions governing migrant labour is a growing need. The flows of industrial goods, technology and investment among DCs have been accompanied by increasingly significant migration of Third World peoples. Estimates indicate that between 1973 and 1979 Iran and Saudi Arabia each received more than one million immigrants from DCs; at least 350,000 have migrated to Libya, Kuwait and the United Arab Emirates. While unskilled labour has predominated, skilled immigrants have provided vital industrial inputs. A clear indication of the potential for much greater flows among DCs is provided by the evidence of massive migration of skills to Northern countries. The US, Canada and United Kingdom receive 75 per cent of the total South/North "brain drain" or reverse flow of technology; engineers from the DCs represented 28 per cent of the incremental stock of engineers in the USA in the early 1970s. The imputed value of skilled migration from all DCs to the three industrialised countries has been estimated at \$46 billion a year, almost equal to the combined Official Development Assistance (ODA) from these countries in the same period.<sup>7</sup>

The potential for collective self-reliance in finance is great because of the OPEC surpluses currently being deposited in Northern-based or -dominated global institutions and banks, which in turn lend the surpluses to DCs. The concentration of major financial institutions in the North as well as of skilled personnel and information has precluded the evolution of direct South/South financial links which would offer obvious advantages to both DC borrowers and lenders.

Alternative sources of financial supply and demand would result in geographic and institutional diversification. Cost could be lowered by capturing the profits made by Northern intermediaries. Direct South/South lending also would allow greater control over the pattern of fund use/portfolio spread and of

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<sup>7</sup> See UNCTAD document TD/239 on Technology, Development Aspects of the Reverse Transfer of Technology, UNCTAD V, Manila 1979.

maturities, serving the lender's national interest and cutting cumbersome and expensive red tape for the borrower.

All areas of South/South co-operation – trade, production, technology, manpower training and utilisation – require major financial investment that may be better and more easily provided through direct transactions among DCs. Proposals for achieving South/South financial co-operation are described at length in part I, chapter 2 and part II, chapter 5 of the study.

### **1.2.3. Synthesis of International Strategies**

Global interdependence and collective self-reliance must be viewed as complementary rather than conflicting strategies for industrial development and the achievement of the NIEO. A strategy of global interdependence alone might lead to marginal improvements in the Old Economic Order, continuing the frustrations of developing countries. The ultimate objective of equality in international economic relations can be achieved only if the South pursues deliberate policies to strengthen its economies and its negotiating position through increasing collective self-reliance. This study recognises that developing countries need to pursue both strategies. Individual DCs will no doubt aim for a balance most suitable to their particular needs. IC involvement would primarily lie in global interdependence strategies.

### **1.2.4. National Industrialisation Strategies**

While international strategies will determine the routes to the NIEO, individual developing countries will also need appropriate national strategies to reach their own industrial and social goals. Having made its domestic policy choices, each developing country will have to ensure that the nature and extent of its international linkages contribute most to the fulfilment of its industrialisation objectives.

Developing countries have by and large followed two national strategies for industrialisation. The first is that of export promotion, in which the country exploits to the limit its comparative advantages to increase its exports, and then plans to plough the revenues back into a more diversified industrial structure to satisfy domestic requirements. Under the second strategy, that of import substitution, the developing country attempts to produce at home what it imports from abroad.

In the traditional strategy of export promotion, industrial investment decisions are influenced by external demand; under import substitution, demand stimulators are generated internally but by an upper income group whose choices often reflect colonially-imposed or external standards. Neither strategy has accommodated successfully the human needs of the bulk of the population in DCs, because their lack of purchasing power prevents these needs from being transformed into effective demand. Moreover, the record of these two strategies suggests that in following them, developing countries may have

traded their previous dependencies on the North for a new form of dependency on export markets or imports of capital goods, industrial raw materials, technology and management. A third strategy, endogenous industrialisation, is therefore prescribed which would anticipate the needs of the population and tailor the industrial production structure to produce goods to fulfil them. By definition, the dynamics of growth would come from within the country, calling for a much greater emphasis on self-help or self-reliance. In carrying out this strategy, income would be generated directly in the hands of the rural and urban poor to help them satisfy their minimum needs for food, clothing, shelter, medical care, education, and transportation. Projects would stress a low capital/labour ratio, use less energy, and encourage greater use of local skills, entrepreneurial resources, materials, capital goods, and technology. The roles of small and medium-size industry would be expanded. There would be a symbiotic interaction between farms and industry at the rural level, leading to greater equality in the rural-urban terms of trade. A positive economic role would devolve on the government through the creation of enterprises producing industrial and public goods.

The endogenous industrialisation strategy is not to be equated with a closed door policy or autarky. The international exchange of goods and services is assumed to constitute an important element in the process of development, but care should be given to fitting the international flows of finance, technology, imported materials and components to the productive structure deemed most suited for furthering the social objectives in the DCs. This strategy, based on human needs, emphasises the role of industrial development in alleviating the poverty that prevails in the urban and rural areas of most developing countries.

### **1.3. THE INDUSTRIAL DEVELOPMENT RECORD CONSIDERED\***

*Overall Performance*—Before new strategies can be employed, the record of previous efforts must be considered. In the last 30 years, many national and international attempts in the public and private sectors have been made to narrow the gap between the North and the South. At the macro-level, the performance of the developing countries looks encouraging. Real income per capita in the Third World more than doubled between 1950 and 1975; the average annual increase in Gross Domestic Product (GDP) was 5.4 per cent, higher than ever before; MVA (at 1975 prices) grew at annual rates of approximately 7–8 per cent from 1960 to 1976; the average share of manufacturing in GDP rose from 15 to 23 per cent.

*Unequal Progress Among DCs*—A closer examination, however, reveals a far dimmer picture. Not all DCs shared equally in the fruits of industrial development. High economic growth was experienced by only a few developing countries: the majority of the Third World living in countries with per capita incomes below \$200 a year experienced the slowest growth in both GDP and MVA; some countries declined absolutely. Brazil, Mexico, Argentina, and the

\* Data for this section are drawn from the special issue of the Industrial Development Survey prepared by UNIDO for the Third General Conference, document ID/CONF. 4/2 (ID/229).



Republic of Korea accounted for over half of the total MVA increases in the Third World between 1966 and 1975. The nations classified as "least developed countries" (LDCs) by the United Nations showed no increase in their share of world manufacturing output.

*Increased Poverty*—Within individual DCs, too, the distribution of benefits has been skewed. Widespread evidence indicates that income distribution has worsened in the majority of low-income developing countries: experience is mixed among the middle- and high-income DCs. The incomes of the poor, particularly those in the lowest 20 per cent of the income scale and those living in the rural areas, have declined even in absolute terms. For instance, in seven Asian countries studied over the period 1955 to 1970, the proportion of the population below a poverty level based on nutritional standards had risen or remained the same. Other signs of poverty—high rates of infant mortality, illiteracy, landlessness and unemployment—have become increasingly apparent even in countries that have experienced high rates of industrial and GDP growth. Projecting economic trends on the basis of current strategies, the World Bank predicts that 600 million persons may still be living in absolute poverty by the year 2000.<sup>9</sup>

*Rural-Urban Migration*—One factor that has caused the increase in inequality at low income levels has been the result of structural transformation of developing country economies from agrarian, rural settings (where assets and incomes are more equally distributed) to industrial, urban ones (where distribution is more skewed). Concentration of industrial investment in urban areas has stimulated rural-urban migration, swelling marginal slum occupations in the cities and drawing together people who are denied access to tolerable levels of housing, sanitation, drinking water, medical and educational facilities, or regular, remunerative and socially productive employment.

*Industrial Employment*—Great hope had been placed on the growth of manufacturing industry as a solution for under- and unemployment in developing countries, but the sheer magnitude of the employment problem in most countries makes this an impossible task in the short term. A manufacturing sector employing 20 per cent of the labour force would need to increase employment by 15 per cent per year merely to absorb the increment in a total work force growing at an annual rate of 3 per cent.

Overall, a disturbingly large number of DCs shows a declining share of both industry and manufacturing in total labour force utilisation. This decline is to be judged against a background where total unemployment and underemployment in developing countries in the mid-1970s was estimated by the International Labour Organisation (ILO) at 300 million persons, after a sharp increase of 46 per cent in unemployment over the period 1960–1973. The World Bank estimates that 550 million more jobs will have to be created within the DC economies by the year 2000.<sup>10</sup>

*Local Needs Ignored*—In most cases, too, industrialisation in DCs has not taken into account local needs. Generally, the pattern of industrialisation has

<sup>9</sup> *The World Bank*, World Development Report 1979, Washington, D.C., August 1979.

<sup>10</sup> *The World Bank*, World Development Report 1979, Washington, D.C., August 1979.

been determined by the pull of existing, highly inequitable economic and social structures whether international or national. The needs of the poor, with negligible purchasing power, have not been reflected to any marked degree in the production structure of the modern manufacturing sector, while the consumption preferences of the higher income groups, as seen in the patterns of consumer goods output, have been moulded substantially by the tastes and values of Northern populations. The final mix of modern industry, which has determined the choice of technologies, has worked in favour of imported processes based on large-scale production, heavy use of capital and only limited call on the greatest resource of the DCs – people – and on locally available skills and raw materials. The same pattern of industrial resource allocation has significantly weakened linkages between industry and other sectors of the economy, contributing little to a general increase in productivity and exacerbating urban-rural, traditional-modern and agriculture-industry dichotomies instead of encouraging interaction among them.

*Imperfect Technology Flows*—The steady development of technological capacity in a select number of DCs is shown by their increasing depth, diversity and volume of technology exports and direct foreign investments. Exports of machinery and equipment, sales of turnkey plants, provision of consultancy services and training of personnel by DCs have all expanded in recent years, but again a close look reveals disturbing facts. DCs as a group have accounted for no more than 10 per cent of the global technology flows, most of it going to about six countries. In terms of the global stock of scientists and engineers engaged in research and development (R + D), DCs had only 12.6 per cent in 1973 (9.4 per cent in Asia, 2.0 per cent in Latin America and the Caribbean, 1.2 per cent in Africa). As a proportion of world R + D expenditure, the DC share was even less (2 per cent in 1973, of which 1.63 per cent was in Asia), indicating an average expenditure of 0.35 per cent of Gross National Product (GNP), against 2.29 per cent in ICs. National and international actions to redress the continuing dependency of the South on the North for technology will therefore remain a priority item on the policy agenda.

*Increased Foreign Debt*—Among the primary motives for industrialisation was the desire of developing countries to lessen their dependence on the North by relying on industrial output to provide a growing surplus for reinvestment and capital accumulation. However, actual experience has highlighted the huge growth of external DC debt. The total debts of DCs have risen from \$17.9 billion in 1960 to \$244 billion in 1977. Debt service has correspondingly risen from \$2.6 billion to \$36.6 billion. Between 1970 and 1977, the “debt service to debt ratio” increased from 12 per cent to 15 per cent. Similarly, the “interest to debt ratio” rose from about 3.5 per cent to about 5.5 per cent.

The problems of external debt have to be considered in conjunction with the frequent crises caused by deficits in the balance of payments. As already stated, the pattern of import-substituting industrialisation undertaken by most DCs has made them increasingly vulnerable to dependence on imports of intermediate and capital goods to sustain that process. At the same time, the neglect of the agricultural sector and particularly of food production has led to the need to import an increasing proportion of essential food requirements. As

these imports have taken precedence over industrial inputs in the use of scarce foreign exchange, industrial investment has suffered.

*Dominance of TNCs*—The phenomenal post-World War II growth of transnational corporations (TNCs) has been amply documented. By 1973, the market value of international production of TNCs was equal to one third of the world's gross output outside centrally planned economies. Although their rate of growth in the 1960s (double that of world output) had slowed in the 1970s, their activities had grown in areas outside of production such as finance, technology and advertising, which enhanced their control of DC industrial processes and decision-making. The great majority of Direct Foreign Investment (DFI) has originated in the TNCs. The total DFI stock in DCs by 1976 was largely controlled by TNCs in five OECD countries, which together made up 82 per cent, most of it in Third World countries having over \$700 of per capita incomes, large internal markets and/or rich natural resources.

TNCs exercise control over their subsidiaries as well as over other enterprises with which they collaborate in developing countries, through licences for foreign technology, management contracts, franchising arrangements and supplier contracts for intermediate inputs, and through leverage obtained from equity capital or loans. The influence of TNCs on the pattern of DC demand for industrial consumer goods has made itself felt through massive advertising expenditures, overwhelmingly controlled by Northern agencies. The TNCs similarly have controlled much of the world trade in manufactures, of which an increasing proportion is intra-firm in nature, with IC parent companies exporting three times as much of manufactures in DCs as their DC subsidiaries export to the ICs.

The effects of this influence on DC development objectives and capacity for future industrial and technological growth have been long debated, but it is clear that decisions taken in TNC headquarters are based on assessments of profit-making potential from world-wide location of production facilities, as well as demand and supply conditions. For reasons of their own corporate objectives, TNCs have not contributed significantly towards solving DC problems of poverty, unemployment or the satisfaction of human needs. Only DCs with established infrastructures of engineering and technology and clearly defined national strategies and policies have been able to bargain successfully with the TNCs, and make use of the TNCs' undoubted technological wealth and market power.

*Armaments Manufacture*—The building up of defence industries in the Third World has exerted a major influence on the pattern and nature of DC industrialisation. Attempts to substitute various imports and build up some degree of self-sufficiency in the manufacture, maintenance and control of weapons systems have been an essential ingredient in the import-substitution strategy of the larger Third World countries. Domestic arms production in the DCs has been correlated with a relatively high level of industrial and technological capacity, since the skills required in the manufacture of weapons are more specialised, being based on more advanced technology than for most industrial branches, and the structure of the industry usually requires a wide network of sub-contractors. Self-reliance in military industrialisation appears to

be a feasible proposition for only a handful of DCs, where it has so far proved to be a partial success. As in other industrial areas, co-production and joint venture arrangements with IC producers have become increasingly common, and 18 DCs are now undertaking the licensed production of weapons systems, although component assembly for TNC producers is the usual extent of DC participation. Dependence on western technology and systems of organisation has had a major influence on the whole style and character of Third World military and defence strategy, while conversely, continuation of this dependency has become increasingly important for weapons producers in the ICs, for whose financial viability Third World markets have become critical.

#### 1.4. THE LIMA TARGET AND THE NIEO

The frustrations of the past and the hopes for the future have led to an awareness in both the North and the South of the need for a new set of international economic relationships which would facilitate the implementation of relevant national policies for economic, and particularly industrial development. A concrete formulation of industrialisation objectives was articulated in the *Lima Declaration and Plan of Action*, which emerged from the Second General Conference of UNIDO in 1975. The Lima Plan called for, *inter alia*, national and international efforts to achieve a target figure of at least 25 per cent of the world industrial output by developing countries by the year 2000. In 1975, the DCs' share of Manufacturing Value Added (MVA) was 8.6 per cent. Even the most liberal estimate of growth rates indicates that in the absence of special measures, the DC share of world MVA would be a little over 20 per cent by the year 2000. The outlook may be more pessimistic if there is a prolonged continuation of the current recession in the North, the deepset currency instabilities and deficits in the balance of payments and trade.

The requirements of the Lima target in *annual manufacturing investment* by the year 2000 are placed at \$450 to \$500 billion (at 1975 prices). Calculated on the basis of data from the UNIDO Lido model projection, the estimate implies that the proportion of total investment allocated to industry will have to rise from 18 per cent in 1975 to between 22 per cent and 25 per cent by the year 2000. The total inflow of foreign capital for the needs of the whole economy, may need to be as much as \$750 billion – or almost 6 per cent of the GDP of ICs. Perhaps about \$100 to \$150 billion of this external flow would be invested in industry. Direct foreign investments (DFI) in terms of the target might have to increase to even ten times its present level if it is to maintain its present share in manufacturing investment. Trade projections suggest that even if DC exports of manufactures to the North reached an estimated limit of 65 per cent of the value of manufactured imports from the North, the Lima target would not be reached.

Validity of these projections would of course depend on international economic conditions. In any event, despite the enormity of the requirements, UNIDO believes the 25 per cent goal can be achieved through a combination of global interdependence, Third World collective self-reliance, and appropriate national industrial development strategies.

## 1.5. THE TASK AHEAD

The time has passed to discuss the feasibility of a new international economic order. It is upon us without being invited by international consensus. The task before us now is to identify institutions and mechanisms that will impart a deliberate and orderly transition, allowing maximum prosperity for the North and the South as they face the challenges of the new millenium. The question for UNIDO's Third General Conference is not *whether* to act, but *what* action to choose – and *how soon* North and South can respond to the reality and challenges of the NIEO. The next chapter presents eight major proposals for action, based on an industrial structure more appropriate to the ends and means which will be in sight towards the year 2000, and a new life style which may not be as highly consumption-oriented as it is presently in the North, but nevertheless, more satisfying.

## Chapter 2. Major Proposals for Action

*(See also  
supporting  
discussion  
in part II)*

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### 2.1. INTRODUCTION

In the preceding chapter, the evolution of the New International Economic Order, the record of past development efforts, the Lima target and new international development strategies were discussed. The conclusion was that action is needed to encourage a peaceable transition to the NIEO and to reach the Lima target which specifies that at least 25 per cent of the world industrial capacity should belong to the developing countries by the year 2000. In this chapter, *eight major proposals* for action in the areas of international financial flows, international industrial enterprise co-operation, technology, and trade are presented. The proposals are classified according to strategies introduced in chapter 1: falling under "Third World Collective Self-Reliance" or within the "Framework of Global Interdependence". These major proposals contain

important initiatives for international co-operation which require specific endorsement and support from the Third General Conference of UNIDO, in order to give the organisations designated by the Conference the necessary mandates for the new functions so that they may commence to undertake their tasks.

## **2.2. INTERNATIONAL FINANCIAL FLOWS**

### **2.2.1. Issues and New Concepts**

Attainment of the Lima target places the problem of financial resources for industrialisation at the centre of international development policy. Estimates of the magnitudes of required capital inflows vary, primarily because of uncertainty regarding the extent to which countries of the South will be able to generate internal savings and improve their balance of payments positions. Nevertheless, under plausible assumptions, it is estimated that net annual industrial investment in the South would have to reach a level of about \$450 to \$500 billion by the year 2000 if the Lima target is to be attained, about one third of which may have to be covered by external flows. The fundamental challenge for international policy on finance therefore lies in two areas:

- (i) Identification of means to increase the volume and improve the terms of aggregate North/South, East/South and South/South financial flows required to meet overall development goals;
- (ii) Identification of financial mechanisms to support changes in North/South and South/South patterns of investment, technology, and trade.

Policy proposals have, however, to be formulated within the constraints of a number of major empirical factors which have evolved over the past decade or so, and are likely to persist to the end of the century, namely:

(i) The significant (and likely to continue) accumulation of excess liquidity in the North, caused by balance of payments surpluses of certain industrialised countries and the initial cycling of the surpluses of some of the oil-exporting countries of the South.

(ii) The high rate of inflation, severe monetary and exchange rate instabilities, and pronounced underutilisation of human and productive resources which are expected to continue to make the international financial system increasingly fragile. With the growing interdependence of the world economy, these have generated a degree of uncertainty which has further depressed incentives to invest in industry in both industrialised countries and the Third World.

(iii) A marked change in the composition of capital inflows to the South showing a relative increase in external financing on commercial terms, with three or four of the more advanced developing countries being the major recipients of such flows. Official finance, in addition to diminishing its relative share, has tended to concentrate on rural development and human needs in the poorer developing countries.

(iv) A marked increase in the external debt and debt service burdens of developing countries, making those countries with weaker debt management policies particularly sensitive to changes in the global economy.

(v) The preference of commercial lending for large borrowers over small, whether these be countries or enterprises, leading to a degree of concentration of industrial capabilities in the South, both across countries and between enterprises.

These factors together prescribe that countries in the South will increasingly have to rely on commercial or semi-commercial avenues of finance. Thus, innovations or increased co-operation should be sought to:

- (i) Stabilise the flow of external finance to developing countries and guard against sudden interruptions.
- (ii) Increase the choices facing developing countries with respect to both the sources and terms of finance in order to achieve a better matching of debt servicing requirements and revenues.
- (iii) Allow greater flexibility of repayment in order to reduce the chances of financial crises in developing countries, resulting from unanticipated shortfalls in foreign exchange availability.
- (iv) Relax external constraints on the volume of finance, especially for the least developed countries and small and medium-scale industry.
- (v) Attempt a redistribution of certain risks, associated with different development strategies, between developing country borrowers and foreign lenders/investors.
- (vi) Increase the volume of official finance for industry while raising its efficiency by untying and increasing its leverage through new forms of co-financing.
- (vii) At the enterprise or project level, facilitate South/South flows of finance and technology, thereby making a greater volume of more appropriate resources available, and correspondingly reducing dependence on the North. At the same time, steps should be taken to ensure an adequate and stable aggregate flow from the North to the South on terms acceptable to developing countries. Further, financial flows should be structured to increase the likelihood of project success by incorporating, where feasible, incentives for improved design, performance and management. This may suggest a selective repackaging of finance with technology, capital goods and management flows through new, non-TNC mechanisms, in particular through agreements with the smaller firms from both market economy and centrally planned industrialised countries, as well as with firms from more industrialised parts of the Third World. The possibility of increasing links at the enterprise rather than at the national level, calls for governments to be aware of the activities of their enterprises, and to advise them where necessary. This is particularly true in the case of barter and buy-back arrangements.



### **2.2.2. Proposal No. 1: International Industrial Finance Agency** (Collective Self-Reliance)

This proposal for setting up an International Industrial Finance Agency seeks to promote South/South co-operation in financing industrialisation by converting financial surpluses available in some developing countries into durable forms of long-term investment in the Third World. In doing so, it will avoid the present intermediation of Northern financial institutions. It will operate on a basis which will yield a remunerative rate of return to subscribers of its capital through appropriate investments and placements of funds. It will also incorporate the functions of an export credit fund for exports of manufactures and technology from developing countries to the South and to the industrialised countries.

#### *Background*

The case for such an agency derives from two broad sets of considerations. First, progress towards the Lima target would require a significant expansion of investment in industry beyond the levels that can be expected of existing channels for investment, whether financed through domestic savings in developing countries or from foreign sources. Many of the existing channels for investment in developing countries now derive their financing from developing country surpluses filtered through various forms of Northern intermediation. The creation of a separate financing agency, under suitable management and professional staff with experience of the workings of the market place, ought to permit quicker generation of many more industrial ventures than is possible under present international mechanisms.

Second, the proposed agency would meet certain needs of both suppliers and recipients of investment funds which present mechanisms do not satisfactorily fulfil. Investors from the Third World, especially those whose financial surpluses are based on non-renewable resources, feel the need for investing in instruments which are protected against inflation. In this sense, investments made through the medium of the Agency in equities, would offer to the subscriber to its capital the kind of protection provided by an inflation-indexed bond. The supplier would also have the assurance that the capital value of investments placed in the Third World in this way, would be relatively more stable because of geographical diversification of risk free from the potential control of the North.

From the standpoint of Third World users of funds, the institution would offer the possibility of obtaining equity investment in a manner acceptable to many Third World governments, on terms which respect sensitivities concerning national control, sovereignty and domestic objectives, and confer upon the Third World investor the safeguards and degree of security expected by any foreign investor. Finally, through its institution-building activities it would add to the number of commercially viable investment projects in developing countries. Financing mechanisms could be found within the Agency which

would also provide *export credit financing* for export promotion of industrial output, especially in the area of technologically sophisticated goods and services, within the South as well as to the industrialised countries.

### *Membership and Funding*

It is recommended that membership of this Agency be open to governments and financial entities of developing countries, and that the initial resources of the Agency consist of paid-in and callable share capital in agreed proportions. The initial paid-in capital of the Agency is envisaged to be of the order of \$500 million, leaving 90 per cent as callable capital.

It is recognised that a number of technical problems would have to be resolved. They include capitalisation and voting powers among participants; the number of windows for its various finance activities; the scale, distribution and terms of finance among members; relationships between the Agency and central and commercial banks; arrangements with other finance institutions, exporters and importers; relationships between the Agency and non-Third World entities. These issues would form the subject of negotiations in the appropriate body entrusted with setting up of the Agency.

### *Operations*

The Agency will carry out the following functions:

(1) It will use its own funds to provide finance in conventional and innovative forms of debt and equity to productive enterprises, particularly industry in the Third World. Depending on the capital structure of the Agency, it ought to be possible for it to function *inter alia* as an investment trust, placing some portion of its funds in a diversified portfolio of investment instruments in the Third World. It is envisaged that the Agency can complement this purely financing function by also acting in the nature of a Third World investment bank; it will in this manner put together financing packages for the development of commercially viable industrial ventures, entering into suitable co-financing arrangements with private banks. To the extent to which the Agency caters to the entire Third World, it will pay particular attention to the setting up of multicountry or multinational industries, taking account of particular regional circumstances and of the need to expand export markets. In connection with the last point, the Agency would be equipped to provide the necessary export credit support.

(2) The Agency would also be expected to develop and promote new financial instruments analogous to the financial innovations that have taken place in recent years in the Euro-market, such as floating rate notes and certificates of deposit. It is not attempted here to anticipate the precise character of innovative possibilities, but it might, for example, examine the feasibility of instruments such as commodity-indexed and trade-indexed bonds.<sup>1</sup> Looking

<sup>1</sup> See part I, chapter 3 and part II, chapter 5.

beyond the narrow area of financial instruments, it could also examine the feasibility of establishing variants of the joint investment company, a form which has been resorted to extensively in arrangements between oil-exporting and other Third World countries.

UNIDO requests the Third General Conference to approve the establishment of an International Industrial Finance Agency and to designate an appropriate agency to initiate steps with member countries, international organisations and international and regional financial institutions to set up the Agency.

### **2.2.3. Proposal No. 2: Global Fund for the Stimulation of Industry (Global Interdependence)**

The proposal for a Global Fund for the Stimulation of Industry starts with a recognition of the crisis in the international economy: global recession coupled with global inflation and instability of the international monetary and financial systems. The Global Fund seeks to make quick-disbursing programme-financing loans to developing countries, of extended maturities between 12–20 years, in significant amounts building up to an annual level of over \$15 billion, with a total callable capital in the range of \$75–\$100 billion.

#### *Background*

The rationale for the proposal is as follows: the world economy has been sustained during the current prolonged recession by the buying power of the developing countries. Today the developing countries absorb 25 per cent of US exports and 40 per cent of EEC exports. In 1975, when the European Community reached a low point in the recession and its exports to other industrialised declined—by 17 per cent to the USA and by 3.3 per cent to other industrialised countries—it was exports to the developing countries which increased substantially by 25 per cent.<sup>2</sup> This buoyancy of Third World purchasing power largely helped to contain unemployment in the industrialised countries. It has been estimated that 3 million more people would have been unemployed in the European Community area alone, if capital deficit developing countries had cut their imports of manufactured goods to balance their outflows arising from the oil price adjustments since 1973.

The purchasing power of developing countries derives from their export earnings and from their net international borrowings. In recent years, however, it was substantially increased borrowing which sustained their demand, especially as their export earnings had tended to suffer in a climate of international recession; thus, between 1972 and 1977, net external capital inflows to these countries increased from \$20.4 billion to \$57.1 billion, for the most part on

<sup>2</sup> See *Commission of the European Communities, Europe and the Third World, A Study of Interdependence*, Brussels, 1979, p. 54.

non-concessional terms.<sup>3</sup> It is generally accepted that the present macro-economic equilibrium of the world economy depends significantly on developing countries' borrowings from the private banking system, and borrowing must continue to increase if the momentum of world growth is to be maintained. For example, in 1978, had there not been an addition of nearly \$40 billion to world trade as a result of private bank lending to developing countries, the recession in industrialised countries would have been more intense.

What is new in the present situation is that doubts are being entertained for at least two reasons about the ability of the private banking system to cope with the recent strains of recycling additional financial surpluses. Countries that have borrowed in the past are reducing their borrowings significantly because of prudent debt management. In the meanwhile, the short-term flow of funds into the private banking system is likely to increase substantially in the wake of recent oil price adjustments. Not only is the viability of private banks threatened in this situation of an excess supply of loanable funds, but also unless an effective mechanism is found for rechanneling surplus liquidity, there will be an intensification of global recession, which will *inter alia*, further exacerbate protectionist tendencies in the North.

The essence of the solution is to channel these funds through a mechanism supported by a collective guarantee of the international community to the widest possible range of DC borrowers who individually might not otherwise have access to the private banking system. The expansionary impetus so provided by the Global Fund would make the international atmosphere more conducive to the lowering of tariff and non-tariff barriers, which discriminate against manufactured exports of the South and hamper the restructuring of industry between the North and the South.

The essential way of providing a collective guarantee is through the mechanism of a Global Fund for the Stimulation of Industry, with an initial paid-in capital<sup>4</sup> contributed by industrialised and developing countries for initial expenses, accompanied by substantial (say, 90 per cent to 95 per cent) callable capital which, in effect would constitute a system of limited joint and several guarantees against which the fund could borrow in the market place. Its functioning in this respect would be precisely analogous to that of the World Bank which borrows in capital markets against its 90 per cent callable capital, with two important differences. First, the total amount to be raised by the Global Fund would be used for programme rather than project lending, so that the necessary momentum can continue to be imparted to the world economy in the same manner in which private bank lending has been able to do in recent years. Such programme loans would, of course, be spent on industrial goods.

<sup>3</sup> "The present equilibrium of the world economy depends to a considerable degree on continuing flow of private lending to the non-oil producing countries (and to the Soviet Union and Eastern Europe) on a scale unheard of before 1974 and would be called in question by any impediment to that flow. This flow of lending is also of interest to the Community context — because a significant proportion of the loans has been made by banks resident in the EEC." *Commission of the European Communities, Annual Economic Review 1978 — 1979*, Brussels, 1978, p. 82.

<sup>4</sup> The initial paid-in capital will range from 5 per cent to 10 per cent of the Fund's total callable capital of \$75 — 100 billion; assuming cautiously that the total loans ought not to exceed capital, the paid-in amount would have a lower limit of \$3.75 billion.

Second, an interest subsidy element will apply to a maximum of 25 per cent of the Global Fund's lending operations, so that it can reach out to the least developed and most seriously affected countries, whose overall circumstances require concessional financing. One method of financing this subsidy element would be IC government contributions to an interest subsidisation account, evaluated as a small proportion of the value of incremental industrial exports from these countries to the DCs, financed from the proceeds of the Fund.

### *The International Consensus*

In the essential respects described above, the Global Fund falls squarely within an international consensus which has been evolving gradually over the past year or so, and which was further confirmed at UNCTAD V<sup>5</sup> in Manila. The proposal for a global fund represents a particular mechanism for bringing about what has been termed "the massive transfer of resources", which was the subject of a consensus resolution and which has also received the endorsement of senior officials of international institutions.<sup>6</sup> The consensus at UNCTAD V held that "substantially increased transfers of resources to developing countries are an indispensable factor for accelerating their pace of development and could help stimulate global economic activity, particularly in a medium to long-term perspective". It further specified that operational proposals for such transfers should be formulated in time for decisions to be taken by the relevant bodies, either before the next special session of the General Assembly or on that occasion, and to take into account the possibility of interest subsidy mechanisms.

The consensus also specified a set of guidelines to be observed by proposals for substantially increased resource flows. Proposals should:

- (i) be compatible with the development priorities of developing countries and should take due account of their debt servicing capacity over the longer term;
- (ii) give special attention to all developing countries which depend primarily on concessional funds for external financing for their development, particularly the least developed among developing countries;
- (iii) be largely raised in international financial markets for project development and execution and programme finance purpose.<sup>7</sup>

The present proposal for a Global Fund for the Stimulation of Industry addresses itself to the programme financing aspects, this being the quickest way of accomplishing the global stimulus that is needed; a framework for industrial project development (International Industrial Finance Agency) has been elaborated in Proposal No. 1.

<sup>5</sup> Resolution 129 (V) Part IV, UNCTAD, Manila, 1979.

<sup>6</sup> See the statements of *Mr. Jacques de Larosière* and *Mr. Jean Ripert* to UNCTAD V at Manila, 1979.

<sup>7</sup> Resolution 129 (V), *ibid.*

The aspect of inflation must be squarely addressed in appraising the international consensus on proposals for massive resource transfers. This consensus was summarised by Mr. Jacques de Larosière, IMF managing director, in his UNCTAD address. He argued that action extending beyond the scope of what may prudently be available through the International Monetary Fund was necessary in the case of "countries that are deeply embedded in underdevelopment". In his view, in such cases "domestic policy adjustments would not be sufficient, even if they are supported by considerable medium-term credits", such as are available from the IMF. He continued: "In such cases, monetary mechanisms must not be used alone, as there is the risk of their breaking down or causing members to endure intolerable levels of deflation. It is the transfer of greater real resources that is at issue."

### *Membership and Decision-Making*

The founding members of the Global Fund would be governments of industrialised and developing countries, with a decisive role being played by the latter. Programme lending on a substantial scale would have to be accompanied by a degree of policy conditionality and forward planning which would be necessary to enable countries to bring about the required changes in their economic structures. Conditionality, as exercised by multilateral financing institutions, is perceived by developing countries to be perhaps over-rigid, with the result that borrowing from private banks on a relatively permissive scale has become an attractive proposition, to the extent that private bank financing is sometimes held to have abdicated from the responsibility of imposing any conditions at all. For policy conditionality to be acceptable to the developing countries, the governing and management structures of the Global Fund must be seen to embody a decisive weight of developing countries in approving loans. From the standpoint of raising money from the capital markets and for establishing the market standing of the Fund, the device of qualified majorities of votes can be used for decision-making by the Governing Body of the Fund. Conditionality at the level of country borrowings, which is inseparable from responsible economic management, can be acceptable only if, through the medium of the Global Fund, recipient countries are seen in effect to discipline themselves, by having a majority of their representatives both on the governing body and at crucial levels of management. Precedents for a decision-making structure of this type, already exist in the case of the International Fund for Agricultural Development (IFAD) and the Common Fund set up under UNCTAD's Integrated Programme for Commodities.

Technical problems that would have to be resolved in an appropriate forum for negotiation include: capital structure and voting powers among member countries; the scale, distribution and terms of finance among members; relationships between the Global Fund and International Agencies, Central Banks, finance institutions; and in particular, agreement regarding the conditionality issue and its mode of implementation.

## Operations

Even with full guarantees from its member governments, it would be some time before the Fund could establish a sufficiently high standing on international capital markets to allow it to obtain its financing on the most favourable terms. It is important, however, that programme lending begins fairly rapidly in amounts which go some way towards off-setting any reduction in financial flows from private banks, whether for the reason of reluctance on the part of lenders or prudence on the part of borrowers.

In this transition period of three to four years, a possible approach might be that borrowing could proceed on negotiated terms from countries with large reserves. It might, therefore, be necessary for about one half of the Global Fund's requirements, during this period, to be acquired on the basis of negotiated loans from both capital surplus industrialised countries and capital surplus developing countries. In this connexion, it is envisaged that capital surplus developing countries might undertake to make negotiated purchases of bond issues during the transition period, similar arrangements being undertaken by other countries with large reserves. If such loan financing arrangements could be agreed during the transitional period, it is envisaged that the Global Fund would fairly rapidly be able to obtain the remainder of its needs in the international capital markets. At the end of the transition period, it is envisaged that the Global Fund would obtain all its borrowing from the international capital markets.

It may be noted that implementation would be facilitated if developing countries whose names are well known in the international capital markets were to associate themselves with the Global Fund from its inception, through their participation in a system of limited joint and several guarantees. Thus the Global Fund could begin initially solely on the basis of interested countries; in other words, this phase could operate precisely in the manner envisaged by the Mexican Proposal<sup>a</sup> without the formal paying in of capital subscriptions. At a later stage the Global Fund could be negotiated on a wider basis.

This transition period can help industrialised countries set in motion measures of structural readjustment/redeployment to be implemented over the medium term *pari passu* with the onset of economic recovery. In the context of the expansionary impact of the Fund, they would also find it easier to accept gradual increases in their imports of manufactures from developing countries.

UNIDO requests the Third General Conference to approve the Global Fund for the Stimulation of Industry and to designate an appropriate agency to initiate negotiations with member countries, international organisations, and international and regional financial institutions to set up the Fund.

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<sup>a</sup> The Mexican proposal placed before the Interim Committee of the IMF, May - June 1978, Mexico City.

## 2.3. INTERNATIONAL INDUSTRIAL ENTERPRISE CO-OPERATION

### 2.3.1. Issues and New Concepts

Direct Foreign Investment (DFI) is a conventional form of North/South interaction, which has offered developing countries a convenient and useful packaged form of resource transfers, to initiate and help the industrialisation process. It involves the effective control of enterprises located in one country by residents of another country. For definitional purposes, "effective control" is inferred from the ownership of at least 25 per cent of the voting stock by an entity organised by residents of the foreign country. This conception, which prevails mainly for purposes of statistical evaluation, does not fully capture evolutions in investment-related international relationships between enterprises.

Inter-enterprise relationships today range across a spectrum which covers the ownership/affiliate nexus to more recently instituted methods of indirect control. A characteristic feature of the new forms of inter-enterprise relationships is that the equity component (holding of stock by the controlling foreign entity) is increasingly giving way to non-equity arrangements stipulated on a contractual basis, while control is exercised by the foreign company through non-corporate instruments of influence. For example, equity control is being replaced by influence through the use of loans and suppliers credits, and corporate dependency of the subsidiary on the parent company is being replaced by control exercised via management contracts, technical assistance agreements and production sharing and service contracts. Even in the absence of formal corporate control, the influence of one enterprise over another can now be exercised by a combination of contractual agreements, superior bargaining power or access to better information systems.

Such developments make an exclusive reliance on traditional concepts of DFI in foreign investment policies inadequate. The effectiveness of policy formulations along traditional lines would now be impaired, in as much as they would not capture the whole range of current international inter-enterprise relationships. Such relationships should more appropriately be grouped under the notion of *international industrial enterprise co-operation* in order to encompass the widest possible range of activities.

International industrial enterprise co-operation includes all forms of long-term industrial interaction between a developing country enterprise and a foreign enterprise with matching mutual performances. Explicit in this interaction would be the institutionalisation of a community of interest in a specific project with the existence of a lasting interest in co-operation. Such co-operation allows for an inclusion of East/West and East/South relations in discussing industrial interaction. In these cases, conventional DFI through wholly-owned subsidiaries is absent in most instances, but functionally comparable long-term co-operation exists through the delivery of industrial plant, in return for payment in terms of the resultant output.

In addition, another important development in the structure of industrial interaction must be taken into account: the change in North/South commercial



transactions (e.g. purchases of equipment). Conventional forms of selling industrial equipment and technology have been extended to include technical assistance, the design of industrial complexes, civil engineering and other types of long-term relationships. This has emerged from East/West relations where forms of industrial co-operation (e. g. supply of technology and complete plant in exchange for output) have been designed to fulfil co-operative functions that would otherwise require equity investment; commercial transactions and investment or quasi-investment transactions have thus tended to converge.

To summarise, there is no longer a single type of industrial interaction between countries. Instead there is a process where new elements and combinations may be found. This process could lead to the evolution of new types of inter-enterprise relationships, which combine some elements of a corporate, investment-related character and others derived from commercial transactions (e. g. performance guarantees).

On the basis of this realisation, three broad issues determine the problem areas which affect new "mechanisms and methods" required to develop international industrial enterprise co-operation into the future.

The first set of issues concerns the roles and responsibilities of the actors involved in such activity. The actors, as such, are industrialised country enterprises (whether they be from Northern or from the socialist countries), the home country governments of these enterprises, and the host developing country governments and enterprises. If international industrial enterprise co-operation is intended to contribute in an increased and steady manner to development needs, the notion of interdependence between these actors is critically important.

The second set of issues is the weight given to each actor in formulating national and international policies for co-operation. Thus far, foreign actors have been able to exert considerable power over developing countries. In particular, TNCs have attained a degree of market and political power which provides possibilities of their following business policies sometimes not conforming with the interests of developing countries. At the same time, enterprises from developing countries, whether public or private, are rarely able to capture a significant share of business on national, regional or international levels. Mechanisms would, therefore, have to be designed to increase the performance of both industrialised and developing country-based enterprises so that they may be able better to support development strategies chosen by developing countries. This means that a conscious balance will have to be maintained between control and promotion measures in international co-operative mechanisms.

Finally, mechanisms will have to penetrate to the enterprise level. The mechanisms of international co-operation presented here seek to stabilise these different forms of co-operation, and possibly establish some institutional support to reinforce suitable contractual relationships.

These broad policy issues are directly connected with the assumptions which underlie the proposals advanced here. Specifically:

(i) There is a need to promote co-responsibility of the actors involved in enterprise level co-operation for development.

(ii) The operational objectives for co-operation should include performance for development on the one hand and the stability of relations on the other. Performance and stability are complementary aspects, since the failure to perform in accordance with the requirements of a given developing country will endanger the stability of economic relationships. Conversely, stability of contractual relationships may itself act as a stimulus to performance at an acceptable level.

(iii) The results of co-operation can be improved if different possible forms of co-operation are considered. Objectives of co-operation may be served equally well by instruments which facilitate inter-enterprise co-operation between IC and DC enterprises and international co-operation. Examples of the former would be model contractual arrangements, bargaining assistance, corporatively structured forms of organisation etc. In the latter case, use could be made of intergovernmental agreements and activities undertaken by international organisations to direct or influence institutional or attitudinal aspects of international industrial co-operation.

### *New Forms of Legal and Contractual Relationships*

The institutionalisation of communities of interest fair and acceptable to both parties is, in the long run, best promoted by a transformation of the present international legal framework into a structurally revised new one which is more balanced and acceptable to all participants. This transformation can only come about through a long process culminating in a new international industrial development law.

Long-term practices of institutions and wide acceptance of model devices may finally enable the assembly of a body of international law applicable to industrial enterprise co-operation. Many separate transactions which are presently negotiated by the parties concerned may be gradually regularised and subject to a standardised treatment. In this way the body of law to be formed will gain a dynamic feature, since it will redirect transactions in such a way as to better serve the common objectives of the parties concerned.

The need for increased flexibility in contractual relations, coupled with increased stability was discussed above. Possibilities to meet these needs would be increased if commonly accepted rules and procedures for contract adaptation and dispute settlements were available. A direct involvement of the governments concerned would also enhance this. Such co-responsibility could be achieved through an extended and improved use of intergovernmental agreements, both on the general framework level and on the project level.

Once the institutional framework and the instruments for constructing new contractual forms for co-operation have been set up, these can gradually be expanded in various directions. Investment insurance, regional investment guarantees, methods for extending performance guarantees and corresponding

risk insurance, harmonisation of investment incentives, etc. are examples of areas which could be covered.

Parallel to these activities the work of strengthening the bargaining capacity of the developing country should proceed both by providing technical bargaining assistance and by providing new options for enterprise co-operation, e. g. increased involvement of small- and medium-sized investors.

### **2.3.2. Proposal No. 3: Commission for International Industrial Development Law** (Global Interdependence)

It is proposed that the international community consider the establishment of a *Commission for International Industrial Development Law*. International industrial co-operation today takes place under legal rules, principles and concepts combined in what can be termed "international economic law". This law has its roots in commercial and economic dealings between and among industrialised countries and is heavily geared towards protecting the interests of capital- and technology-exporting countries. It has a considerable, though often indirect, impact on the negotiations between developing countries and foreign investors. This defensive nature of international economic law should be changed. An active, dynamic legal framework, which would make a more meaningful contribution towards Third World industrialisation is necessary. The new system of international industrial development law could thus provide the legal dimension of the NIEO.

#### *Background*

Developing countries have at present little potential to develop, co-ordinate, and particularly to advocate their alternative legal concepts, due to: (a) an absence of institutions corresponding to the powerful and well-funded industrialised country institutions, (b) educational and academic dependence and (c) the absence of communication and opinion-building mechanisms. For these reasons, an international body ought to be designated the task of providing alternative legal concepts, analysing and disseminating relevant information on the international practice of industrial contracting and assisting in preparing guidelines, model contracts, uniform terms and multilateral conventions. Among the presently existing institutions, the United Nations Commission on International Trade Law (UNCITRAL) has a related task, although it is primarily oriented at unification of commercial law.

#### *Operations*

The proposed Commission should consist of high-level experts in international industrial development law. It would meet periodically to supervise, evaluate and direct legal activities outlined in this section. A small secretariat

would assist the Commission in its functions and co-ordinate with competent international organisations. Its functions would primarily be:

- To formulate a system of international industrial development law.
- To design contract guidelines, model contracts and manuals, in co-operation with competent bodies in the UN system, covering such subjects as turnkey contracts, compensation and buy-back arrangements, co-production investment contracts, intergovernmental agreements.
- To provide negotiating assistance to developing countries in matters of international industrial co-operation.
- To prepare and co-ordinate proposals for the harmonisation of industrial law.
- To organise workshops and seminars to train legal experts from DCs. Here, co-operation with the UN university system and the United Nations Institute for Training and Research (UNITAR) would seem highly useful. Training should emphasise contract negotiation.

The proposed Commission and its secretariat could function as the main supervisory body for a programme to improve negotiating capability and generate new contractual mechanisms for industrial enterprise co-operation.

UNIDO requests the Third General Conference to endorse the proposal and designate a body for initiating discussions with UN agencies in order to set up the Commission for International Industrial Development Law.

### **2.3.3. Proposal No. 4: System for the Resolution of Industrial Conflicts** (Global Interdependence)

At present the search for effective preventive conflict resolution is fraught with controversies between developing countries and TNCs. TNCs and their home states insist on their own national law and jurisdiction respectively, on international arbitration and on legal principles derived from traditional international law. The international institutional mechanisms used in this context are primarily the International Centre for the Settlement of Investment Disputes and the International Chamber of Commerce (ICC) Court of Arbitration.

Many international commercial disputes—including investment disputes—are referred to the ICC's Court of Arbitration which recently has introduced facilities for contract adaptation and technical expertise. There is a large number of additional facilities for international arbitration, notably within the Council of Mutual Economic Assistance (CMEA) and for CMEA/West relations which rely on national and regional arbitration centres. These have served as models for this proposal.

The insistence by investors and industrialised countries on international arbitration has met with stiff and growing resistance from developing countries. The Latin American reluctance based on the Calvo-doctrine is now shared by some other developing countries. In order to remain responsive to such

reservations, and yet meet the needs for satisfactory arbitration, a three-tiered system is proposed, to be used by the developing countries as they deem feasible.

### *Organisation*

A regionally decentralised system of conflict resolution is proposed, which would link national and regional arbitration centres to the global level for purposes of co-ordination and supervision and for the provision of technical assistance.

#### *National Arbitration Centres*

For many host countries, only national arbitration is acceptable. Efforts to render such arbitration centres sufficiently expert and experienced so as to make them acceptable to foreign enterprises should be encouraged. A number of countries and arbitration organisations are already providing technical assistance for setting up national arbitration centres in developing countries, be it through ad-hoc expert advice, co-operation agreements or participation in respective international arbitration bodies. The envisaged assistance should enable national arbitration of contract claims for non-performance, contract adaptation and technical issues.

#### *Regional Arbitration Centres*

Regional arbitration centres could be a forum to articulate developing country concepts which would be acceptable to all parties to a dispute. Regional arbitration centres could be attached to the UN Regional Economic Commissions in order to give them more weight and to distinguish them from existing institutions. These centres could apply UNCITRAL procedural rules in a modified form. They could provide facilities for contract adaptation, technical expertise and fact-finding, and conciliation and summary hearings.

#### *International Centre*

At the apex, a centre for the global system for resolution of industrial conflicts would be responsible for co-ordinating technical assistance to be given to national and regional arbitration centres. Through co-ordination and information sharing, it would link arbitration with the various legal programmes on the global scale. As an umbrella organisation, it would not engage in actual arbitration, but support national and regional arbitration centres with advice, assistance, expertise and information.

UNIDO requests the Third General Conference to endorse the proposal and designate a body for initiating negotiations with appropriate international, national and regional organisations to develop the System for the Resolution of Industrial Conflicts.

## **2.4. INTERNATIONAL FLOWS OF TECHNOLOGY**

### **2.4.1. Issues and New Concepts**

Industrial transformation depends critically on the nature and speed of changes in technology. Many developing countries of different sizes, political perspectives and levels of development have, during the past decade, expressed increasing concern over problems associated with the improvement of their technological capabilities. Broad aspects that have been in focus have concerned certain difficulties in acquiring and controlling technologies, as well as in producing indigenous technologies to meet economic and social needs of developing countries.

Intrinsic difficulties in generalising about problems in the field of technology need to be mentioned, since they have a direct bearing on the nature and content of the proposals advanced here. First, as applied knowledge of processes of production, technology spans an immense, heterogeneous set of items, across sectors of production and in terms of accumulated capacities within and between economies. To speak of "technology" as an abstraction may conceal more than it reveals. Second, the agents of industrial technological change and implementation are varied, from theoretical scientists to shop-floor workers. Each agent operates in distinct spheres of activity, defined by distinct motivational principles and functional characteristics. Third, the methods and rationale behind the diffusion of technology are varied; some technologies may be utilised simply because they are the most familiar ones available, others on the basis of profit calculations alone and yet others on non-market, public-good or social welfare criteria.

Thus far, most technological innovation has taken place through the dispersed activities of these agents of technological change, operating on the different motivational principles involved. The distribution of technological capacities between nations is such that technology has come to play the role of an instrument of power in the international economic system.

Developing countries' policies towards technology cannot be anodyne or neutral; they must recognise that technology, if it is to realise its unfulfilled promise, will only do so when those groups wanting to use it have a clear conception of why they are using it and what ends they hope to achieve. It is only in such a context that technology can contribute to a form of industrialisation capable of helping to alleviate poverty and simultaneously providing opportunities for greater participation of people in the decision-making processes which affect their own lives.

In many developing countries, governments are trying to elevate some technological choices from criteria of enterprise level profit calculations to those

of social objectives and broader welfare considerations. A considerable amount of expertise in governmental and private sector decision-making has already been accumulated in these countries to select, acquire and generate technologies. In support of national problem-solving efforts, international bodies, such as UNCTAD, ILO, the World Bank and UNIDO itself have initiated programmes to identify problems and suggest solutions which would enhance technological capabilities of developing countries.

At the most fundamental level, two sets of problems have been identified. The first set concerns issues concerning the acquisition and creation of technologies by developing countries, and the second concerns their diffusion. When viewed against development objectives, problems of acquisition pertain to the monetary and non-monetary costs of acquisition emerging from the degree of imperfection of technology markets and the consequent market power enjoyed by technology holders in the contemporary international system. Developing countries have often acquired techniques which are not consistent with their factor endowments. Technologies acquired frequently have not been oriented to fulfilling fundamental needs, because these needs are not expressed in terms of effective demand in the market place, given the income distributional profiles in developing countries. The growing global energy constraints have added a new dimension, as was discussed in chapter 1, leading to international developments in the economic system which are bound to create a need for new less energy-intensive technologies.

For the second set of problems concerning the diffusion of technology, enhancement of the technological capacities of developing countries involves a progression of abilities from (a) assimilation and (b) modification to (c) replication of imported technologies. Two further stages of (d) technological creation and (e) export of technology involve the construction, consultancy, financial and marketing skills that surround the core production process. While the overwhelming concern of developing countries is with the first three stages, evidence suggests that a growing number will become increasingly involved in the latter aspects of technological development as they emphasise technological self-reliance.

The thrust of the proposals advanced here is towards assisting in the attainment of a measure of technological self-reliance in developing countries. It has been widely accepted that there is a strong justification for planning and control over flows of technology. However, because there is an enormous concentration of global technological capacities in a few industrialised countries, there can be no alternatives for the developing countries in the foreseeable future to obtaining their industrial know-how from the industrialised countries. "Technological self-reliance" then, has to do not only with assimilating, adapting and improving upon imported technology, but also with the creation of local research and development capacities expected to generate products and processes appropriate to domestic needs, resources and income levels. The latter is undoubtedly important, and becomes feasible after a period of apprenticeship spent in assimilating imported technology, a period during which it is vital to avoid or limit the worst effects of imported technology on the domestic industrial structure, economy and society, by channelling its use (protective

enclosures), unpackaging it from foreign control elements and employing it as an instrument for improving local capability. Among the negative effects must be listed the direct cost of technology imports, such as payments for patents, licences, royalties and other services, and the absence of linkages between local firms and local research institutions and consequent disinterest in, and inhibition of local innovation.

The objective of technological self-reliance signifies the maximisation of choice through increased knowledge and capability, developing the evaluative skills which permit appropriate choices of techniques, bargaining skills which make possible improved terms for technology imports, research and development skills which enable firms to unpackage technology, purchase components from least-cost suppliers, develop elements of the package themselves or extend the technology in order to diversify product lines. The basic choice is evidently that of the nature of output (what to produce) which, through the drawing up of detailed product specifications, narrowly limits the range of choice with respect to the source or supplier of technology (how it is to be acquired).

Against these objectives, the major proposals advanced attempt to:

- (i) Assist developing countries to acquire technology widening the range of choices, and support their capability to generate technology.
- (ii) Co-ordinate and focus already existing dispersed efforts at solving certain problems of acquisition and generation of technology relevant to development requirements.
- (iii) Promote technological self-reliance by providing for inter-developing country exchanges of skills and experience, as well as appropriate transfers from the industrialised countries.

#### **2.4.2. Proposal No. 5: International Industrial Technology Institute (Collective Self-Reliance)**

The most obvious feature of the present industrial technology environment for developing countries is the dispersion of sources of innovation and their application in industrial production mainly through the market. Large numbers of bodies are involved in the selection, generation, assimilation, adaptation and diffusion of technologies. These are mostly private enterprises, together with a few public sector corporations, research institutes and government co-ordinating departments, which are either national or regional in location. Consequently, there is no *one* international body for industrial technology concerned with developing countries.<sup>9</sup> The principal source of industrial technologies is North-based TNCs, from which they can be purchased by developing countries, embodied in equipment, packaged in DFI or unpackaged. Dispersion means that the major functions below are not being handled in any systematic manner: developing country governments and enterprises need a focal point.

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<sup>9</sup> UNCTAD, ILO, the World Bank and UNIDO, amongst others, currently have programmes covering the transfer of technology.



## Objectives

The proposed Institute would fill the need for a focal point for developing country governments and enterprises involved in improving their industrial technologies. It would not initiate or implement technological development, but would provide these services:

(a) *Monitoring and providing information* regarding terms and conditions of acquiring available technologies; modifications to imported technologies, new technology advances in developing and industrialised countries, and research efforts being undertaken by developing countries particularly in generating energy-saving technology appropriate to the resource endowments and needs of these countries.

(b) *Financing to catalyse ongoing and new research efforts* through supplementary funds (seed capital), to organise the exchange of experience, and to assist dissemination and diffusion of tested technologies through market and public channels. Stimulating technology flows between developing countries would be of particular concern.

(c) *Evaluating and sifting* priorities in research efforts, pointing out the dangers of duplication and ensuring the minimum concentration required for effective implementation.

Three major streams of industrial technology would be of concern to the *International Industrial Technology Institute*:

(i) *Modern, mainstream technologies imported from the Industrialised Countries*—These are the bulk of industrial technology, mostly acquired on commercial terms. The problem is in selection of sources and processes, acquisition on the most favourable terms, transfer and diffusion among domestic users, assimilation, adaptation, replication, and export. The need is to supply government technology planners with information on alternative sources and terms, to locate developing country enterprises that have successfully unpackaged and modified/adapted these technologies to their conditions, to identify the factors that have led to their success, to study their transferability to other developing countries, and to facilitate their transfer and export. Specific obstacles to Southern technology transfer and export may also be identified by the Institute, which can initiate proposals for their removal, rather than undertake corrective measures itself.

(ii) *Modern new technologies produced in the South*—These technologies, produced mainly by public corporations and research bodies, meet local needs and optimise local resources (e. g. nutritional supplements, tropical drugs, alcohol engines). The Institute would help to strengthen these efforts through financial support and scientific inputs from other countries.

(iii) *Intermediate, small-scale, new technologies generated in the South*—These would emerge from research undertaken (a) fresh by nationally and regionally based bodies with their own workshops, testing and production facilities (e.g. Las Gaviotas in Colombia and the Regional Centre for the Transfer of Technology in Bangalore, India) and (b) build on traditional skills and technologies to increase their productivity. The fields covered by (a) and (b)

would be oriented basically towards the consumption needs of low-income groups in cities and rural areas (e.g. cooking utensils and energy sources, furniture, construction materials), as well as simple tools for cultivation and irrigation, weaving, carpentry, blacksmithy, leatherwork, brick-making, etc. The Institute would essentially undertake the same set of activities as under item (ii) above, i.e. supplementary finance, technical inputs, organisation of exchange of experience, creation of propagation and distribution channels, co-ordination of efforts to avoid duplication and enhance concentration.

The Institute should attempt to seek and promote the application of technologies in the following areas:

(1) *Energy*

Attempts should be made to seek alternatives to fossil fuels and to investigate their applicability in developing countries, e.g. mini-hydro plants, solar energy, bio-gas plants. Production processes should be sought and promoted which combine human and mechanical energy in such a way as to result in a net saving of fossil fuel inputs.

(2) *Human Needs Development*

Co-ordinated activities with other institutions should be undertaken for the development of indigenously available construction materials, nutritional supplements, drugs and health care systems, mass communications (e.g. audio-visual systems) which are more appropriate to the needs and incomes of developing country populations, especially those located in non-metropolitan areas.

(3) *Agriculture-Related Technology*

Consideration might be given to the development of energy-saving methods of cultivation, irrigation, pest-control and the production of fertilizers based largely on organic matter.

(4) *Mining and Mineral Processing*

Technologies for mining and mineral processing which are appropriate especially for countries with smaller endowments and the need to adopt energy-saving methods of extraction and processing.

### *Organisation*

The underlying concepts of this proposal have been advanced in many other fora. What is important, though, is the particular co-ordinating role that the Institute would play in the stimulation of technological innovation.

Given its service function, the Institute would have to act as a non-profit making, autonomous body that could be affiliated to the UN system of Specialised Agencies. It would act on demand from developing country governments, public sector corporations, private enterprises and a wide variety of non-governmental organisations including research centres, voluntary service organisations and co-operatives of developing country producers and consumers. It could charge service fees for some of its services (e.g. information supply on activities concerned with the commercial stream of technologies) in order to provide others free of charge (e.g. generation and improvement of "village-level" technologies).

Since the Institute is not intended to have a large body of staff of its own it will make use of the agents of technological innovation in the South as follows for the three streams of technology concerned:

- (i) For imported Northern technologies, loose consultative bodies of foremen, engineers and managerial staff from productive enterprises could be sponsored by the Institute, to provide inter-developing country exchanges of experience in technological innovation in particular industrial sectors.
- (ii) For South-based technologies, expert assistance would mainly be sought from representatives of industry ministries of the developing countries, public and private sector corporations, research institutes and departments for co-ordination of science and technology.
- (iii) The intermediate technologies would require the most flexible organisation based on study tours and exchanges of skilled personnel, lightly capped by representatives from non-governmental centres and institutes (such as the Intermediate Technology Development Group, London).

In order to co-ordinate the three wings of the Institute's activities, to encourage interaction between their activities and to set overall priorities, a Board of Directors with rotating developing country membership (divided among governments, private enterprises, and scientists/engineers in an independent capacity) would be set up and be assisted by a small evaluation unit that would draw on the monitoring activities of the Institute.

Financing should be left as flexible as possible, with the option of absorbing trust funds for specific projects, contributions from international organisations, bilateral government inputs, and private voluntary donations, apart from the fees charged for some of the Institute's services.

Liaison with other national, regional and international bodies engaged in similar activities is absolutely critical to the Institute's effectiveness. For instance, in the third stream of technologies, the Institute would collaborate closely with the recently sponsored US-based Appropriate Technology Institute. For its monitoring function, it would rely heavily on the services of UNIDO's Industrial Technology Information Exchange Scheme.

UNIDO requests the Third General Conference to endorse the proposal to set up an International Industrial Technology Institute and designate an agency for initiating appropriate steps with international, national and regional organisations in order to negotiate and set up the Institute.

#### **2.4.3. Proposal No. 6: International Centre for the Joint Acquisition of Technology** (Collective Self-Reliance)

A key problem for developing countries in formulating a technology purchasing strategy is the acquisition of necessary know-how on modalities of technology transfer. That know-how in part covers the collection and organisation of technology availabilities, information on other developing countries'

preferences for technologies, and the basis of negotiation with technology suppliers. The nature of technology acquisition, then, is such that transacting in technology markets requires considerable skills. In order for developing countries to economise on the skills involved in collecting relevant information and in negotiating, it is proposed that an *International Centre for the Joint Acquisition of Technology* be instituted. In this area, proposals and initiatives have already been advanced by specialised agencies of the UN system in recent years, but they have remained for the most part at the level of recommendations. Institutional steps have yet to be taken.

### *Operations*

The Centre for the Joint Acquisition of Technology would negotiate master contracts with process suppliers on the best available terms and conditions, in order that developing country purchasers could, individually or collectively obtain technologies on these terms directly from the process suppliers in most cases. An extremely powerful element in the joint purchasing procedure would be the fact that a supplier securing such a contract would be winning a master contract, i. e. winning the chance to supply many developing countries at the same time and possibly the right to supply them with technologies over extended periods of time. Obviously, the prospects of contracting in this manner would provide the Centre with strong leverage in bargaining over terms and conditions of technology transfer. In those sectors where technology can be embodied at different levels, a joint purchasing organisation progressively can extend its activities into increasingly complex fields.

The sectoral priorities of the facility would be similar to the Technology Institute with which it should have close linkages. Joint acquisition is thus a first but central step in the process of getting developing countries to work together with respect to technological choice. By its nature, this facility would be open to countries with different political and economic approaches to the question of technological development, since all may stand to gain from savings in acquisition costs.

Experiments in the pharmaceutical industry provide a few insights into some of the possibilities and problems which could be associated with the establishment of such a centre. Many areas of technology may not involve the same amount of standardisation as exists in the drug industry, and operation in several sectors places heavy demands on provision of staff and finance. On the other hand, some features of the pharmaceutical experience could be utilised in establishing such an organisation. These features may involve the following:

Basic lists of equipment and technologies on a product-wise basis could be established. On the basis of such lists, potential suppliers could be identified. Quality guarantee and performance certificates could be issued either by the Centre itself or by reputable independent organisations based in both industrialised countries and developing countries for suppliers or potential suppliers.

Information on certified techniques and suppliers, as well as possible terms and conditions of acquisition could be provided to DC entities, who may have

corresponding demands. The joint acquisition facility would provide appropriate negotiation facilities as well as institutional and contractual information in order to enable DC buyers to negotiate suitable financial and non-financial terms of technology acquisition. Negotiation facilities would include the provision of suitably qualified advisors from its own staff as well as consultants from its rosters.

Initial funding would be required for a pilot project. With the expansion of this facility, however, a system of service fees could be developed to be paid by users of the facility and these in time should cover operating costs.

UNIDO requests the Third General Conference to approve the establishment of an International Centre for the Joint Acquisition of Technology and to designate an agency to initiate steps with national and international organisations to set up the Centre.

#### **2.4.4. Proposal No. 7: International Patent Examination Centre (Global Interdependence)**

Patent laws have been established in 120 countries, of which 84 are developing countries. However, these laws are merely based on laws and practices instituted in industrialised countries, or inherited from colonial times. While the examination and modification of patent legislation<sup>10</sup> is already under way at both international and national levels, there are still significant practical problems associated with the institutional process of obtaining and using patents. Industrialised countries have a far more sophisticated administrative procedure for evaluating and monitoring the grant, use and termination of patents taken out in their territories. It is doubtful whether, even if they could, developing countries should devote scarce human resources to matters which are often connected with the award of protection to foreign investors. However, given that the vast majority of DCs are involved in the system, technical information on these matters is required.<sup>11</sup>

#### *Objectives*

A proposed International Patent Examination Centre would serve to realise the economies of scale associated with dissemination of technical and legal information on what are, after all, the same patents in different countries. This information would represent a genuine transfer of knowledge from the industrialised countries and thereby save time and other resources in the developing countries.

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<sup>10</sup> At the international level such modification is under way through an on-going revision of the Paris Convention under the aegis of WIPO, which is scheduled to be reviewed at a Diplomatic Conference in February/March 1980.

<sup>11</sup> See part II, chapter 7, section 7.4.3. for a more detailed analysis of the issues touched upon here.

In dealing with applications from foreign and domestic inventors, developing country administrations only rarely have adequate facilities to evaluate the degree of novelty of a proposed patented invention, its industrial applicability or the grounds for nullifying the application. The information system of the Patent Examination Centre could provide information, free of charge and as quickly as possible, on the results of initial examination of patent applications in other countries, on the results of significant national or international administrative or legal decisions taken elsewhere regarding a patent, and finally notification of dates of expiry of patents. The dissemination of information, which is the prime purpose of this centre, could be through regional and national public bodies in the developing countries, as well as directly to private enterprises.

The dissemination of information would be facilitated by translating the material into the various languages of the UN, assembling and classifying it for each reference, calling meetings at which interpretation and use of the results could be improved. In addition, it could promote the cross flow of patent information between regional centres. Assistance in this activity would clearly be drawn from current programmes of WIPO and especially from the "Agreements of Co-operation" which WIPO and the International Patent Documentation Centre (INPADOC) in Vienna, are carrying out. The INPADOC information bank could be organised on the basis of sectoral product and process priorities specified by the participating developing countries.

A centre of this type would not need to confine its activities to patents. Important issues are raised by the current debate on appropriate products. Two rather different issues are involved here; one relates to the advertising of products which, although not intrinsically dangerous, nevertheless has pernicious effects when used by people living on low incomes; the other to products which, after extensive examination in the ICs, are found to be intrinsically dangerous. Most, though not quite all, of the problems under these two headings arise in the chemical and food industries. While it may be difficult at the international level to grapple with the advertising problems raised by the first item, the second issue could be handled via international exchanges of information. It is well known, for example, that the Food and Drug Administration (FDA) of the US has more sophisticated procedures for examining and testing products than does any other agency in the world dealing with similar sets of items. The activities of the FDA are not limited to isolated tests of products but include frequent re-evaluations of items in relation to their characteristics and their efficacy in accomplishing their stated purposes. If the FDA, and similar agencies in other ICs, were to make available their findings to the Centre on a regular basis and at zero or minimal cost, this information could be of considerable value to DCs in two vital areas (food and health). Thus, at practically no cost DCs could be better equipped to deal with some of the worst abuses which have been found in recent years and are related to the deluge of new products appearing on DC markets.

UNIDO requests the Third General Conference to endorse the proposal for an International Patent Examination Centre and to designate an agency for initiating appropriate steps with countries and other organisations and to negotiate and set up the Centre.

## 2.5. INTERNATIONAL TRADE IN INDUSTRIAL PRODUCTS

### 2.5.1. Issues and New Concepts

Restructuring international economic relationships requires building up the productive structure of the South, but industrial growth and the accompanying factor movements must be complemented by changes in the volume and direction of world trade. Expanded world trade would provide a two-fold contribution to Southern industrial development: 1) Southern countries would be able to alleviate constraints of small domestic markets, thus improving their resource allocation and raising productivity; 2) they would earn foreign exchange in order to be able to import their producer and capital goods.

World trade in the post-war period expanded vigorously until the early 1970s. The increase was uneven across sectors (chemicals and machinery expanded fastest), but in general the growth of most industrial sector exports was satisfactory. Furthermore, the share of manufactures in total world trade (excluding mineral fuels) has increased from roughly 60 per cent in 1960 to 75 per cent in 1976.

However, although the share of manufactures in total exports of developing countries (excluding fuels) has increased from 20 per cent in 1960, to about 45 per cent in 1976, the share (of the developing countries) in total world manufactured exports is still very low, having risen from 4 per cent in 1960 to only 7 per cent in 1975. Two other problems remain. First, the intercountry distribution of manufacturing exports shows a marked degree of concentration. Within the group of developing countries, Mexico, the Republic of Korea, Brazil and India dominate the export trade. Second, a substantial part of the expansion of the volume of trade consists of non-market transactions insofar as they take place within TNCs.

The expected growth of exports of manufactures from the South, within existing industrial and institutional structures, will in all likelihood be inadequate for the achievement of the Lima target. Projections made for this study indicate that the exports of manufactured goods from developing countries will grow considerably faster (13 per cent per annum) than the imports of manufactures by these countries (9.5 per cent per annum). This computation of growth rates yields the conclusion that the ratio of DC exports of manufactures to DC imports of manufactures will increase from 23.7 per cent in 1974 to about 65 per cent on 2000. Despite the increased ratio, the deficit on the balance of manufacturing trade would increase in absolute terms from \$62.9 billion (at 1974 prices) to \$275 billion in the year 2000.<sup>12</sup> Under the assumptions of the projections, the corresponding share of manufacturing value added for developing countries would be only 20 per cent by the year 2000, about five percentage points short of the Lima target.

Policy measures are therefore needed to ensure that the share of developing countries in world manufacturing trade increases. International co-operation could ease the discriminatory nature of existing tariff structures,

<sup>12</sup> See part II, chapter 9.

which are biased in favour of imports of raw materials; eliminate the often subtle effects of non-tariff barriers, such as complicated licensing requirements and government purchasing policies that fall disproportionately on the exports from DCs because many of their products are particularly sensitive to such barriers; and formulate effective long-term adjustment policies, which could minimise the costs of dislocation due to industrial restructuring in the North and lead to a more efficient international division of labour.

### **2.5.2. Proposal No. 8: Manufacturing Trade Target (Global Interdependence)**

A fair share of the future world trade in manufactured goods must be secured for the developing countries, if the Lima target is to be reached. This necessitates greater balance between the imports by the South of capital goods and equipment from the ICs and its exports of manufactured goods to the ICs.

The proposal is therefore made to adopt a target for manufactured exports from developing countries to the ICs for the 1980s and to the end of the century. The target would act as a counterpart to the Lima target in deliberations in international trade policy.

Such a target could be motivated by a desired balance of manufacturing trade between developing and industrialised countries. The above mentioned projections indicate that the ratio of exports to imports of manufactured goods in developed countries would be 65 per cent by the year 2000 if present trends continue.

The manufacturing trade target, proposed herein, would postulate that the value of manufactured imports made by the South from the industrialised countries, should be covered to the extent of 50 per cent by 1990 and 100 per cent by the year 2000 by the value of exports of manufactures from the South to the industrialised countries.

Some supportive steps that could be undertaken in association with the target are:

(i) Trade negotiations towards improving access to the markets of industrialised countries. A systematic market search for new trade possibilities, as well as various marketing and sales promotion activities, could also be undertaken in the industrialised countries;

(ii) A reporting system of new market possibilities could be developed for the service of developing country exporters.

(iii) A similar systematic dissemination of information could be attempted, on different countries' plans for trade and manufacturing development. Models for appropriate information systems already exist in the OECD, the EEC and other regional bodies. A linking of these regional information systems could be effected.

(iv) Technical standards, quality requirements and consumer protection measures in the North may operate as barriers to the exports of manufactures from developing countries. These barriers may often be due to a mere lack of



knowledge of standards on the part of the exporter. A systematic collection and dissemination of relevant information of this type may help alleviate the effects of such barriers.

(v) Co-operative marketing activities could be organised for developing countries' manufacturing output. The most direct method would be the organisation of Third World multinational enterprises. In addition, marketing efforts could be undertaken in the form of exhibitions of products, training of sales personnel, invitations and study tours of the developing countries by buyers from the industrialised countries. These could be organised for capital goods, capital intensive final goods and manufactured consumer goods;

(vi) Finally, the overall progress in achieving the trade target could be measured and reported with widespread publicity. The reporting should be done on a countrywide basis, so that a statement of the import and export position could be provided for each industrialised country. The information could be collected from existing UN data and widely disseminated.

UNIDO requests the Third General Conference to adopt the trade target for manufactured exports from developing countries, and to designate an agency to undertake the supporting activities relating to this target as described above.

## Chapter 3. Recommendations for Supporting Programmes

		<i>(See also supporting discussion in part II)</i>	
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### 3.1. INTRODUCTION

Many of the eight Major Proposals for Action advanced in chapter 2 require new mechanisms along global interdependence and collective self-reliance approaches in industrial development. By contrast, the nine supporting programmes recommended in the following sections lie within the existing mandates of international organisations, particularly UNIDO, and can be

implemented rapidly. The Third General Conference of UNIDO is asked to approve the nine recommendations for supporting programmes which would reinforce the eight previous major proposals.

### 3.2. RESTRUCTURING AND REDEPLOYMENT

Redeployment of industries from the North to the South can be viewed as a form of international co-operation for resource transfers which establish productive facilities in the developing countries. General Assembly resolutions 3362 (S-VII) and 31/163 have, *inter alia*, urged the industrialised countries to encourage the redeployment of specific industries to the developing countries and have asked UNIDO to prepare studies which would include policy recommendations for the promotion of redeployment and the identification of industries amenable to redeployment. In calling for a gradual restructuring of world industrial production, the Lima target took implicit note of the necessity of industrial redeployment. More recently, resolution 131, passed at UNCTAD V, on Protection and Structural Adjustment, called for a containment of protectionism which would militate against natural tendencies towards structural adjustments and a more efficient international division of labour.

Despite the wide recognition of this method of industrial capital formation in developing countries, the redeployment process faces three major constraints: 1) small and medium-sized firms in industrialised countries lack the staff, experience, relevant information, and international contacts necessary for establishing and maintaining a co-operation scheme with developing countries; 2) well-conceived industrial project proposals and defined priority areas for investment are not readily available in the developing countries, making it difficult to match the priorities of developing countries with the potentials of specific industries in the industrialised countries; 3) industrialised country enterprises are confronted with uncertainties about government policies which would affect, *inter alia*, the importation of goods and components as well as resource transfers. The following recommendations deal with these constraints.

#### 3.2.1. Recommendation No. 1: Extended Use of UNIDO's System of Consultations (Global Interdependence)

UNIDO's System of Consultations has been discussed elsewhere in this study as a forum where representatives of the industrialised and developing countries can meet as equal partners to discuss problems of industrialisation. A nondisruptive international restructuring of industrial production, however, requires an *institutionalised arrangement of regular consultations between partners in development*. An extended use of the UNIDO System of Consultations could provide international exchange of views and recommendations affecting the gradual restructuring of world industrial production. Such extended use would cover: (1) placing the System of Consultations on a permanent

footing; (2) widening its scope to cover all important industrial sectors; (3) effective regional implementation measures to follow through on its recommendations.

Two ongoing UNIDO programmes—studies of structural changes in the industrialised countries, and the investment promotion programme—reinforce the effectiveness of its consultation system as a mechanism for orderly handling of restructuring. Studies already completed have provided valuable and precise insights into some of the structural adjustments the developed market economy countries could undertake, in response to changes in the international division of labour. Examinations of adjustment policies among the centrally planned economy countries have found that redeployment in these countries is viewed as a form of industrial co-operation with developing countries within the framework of both countries' long-term plans, strategies and prospects. Such studies suggest that the adoption of *anticipatory adjustment policies* in individual industrialised countries would ensure non-disruptive development and also co-operation with developing countries. To follow through from the studies of structural changes in industrialised countries, UNIDO's programme of investment promotion is currently working at the enterprise level in these countries to match potential resource transfers arising from restructuring with defined needs for similar industrial investments in the developing countries.

The Third General Conference is requested to endorse UNIDO's System of Consultations as a dynamic instrument of international industrial co-operation, place it on a permanent footing, and recommend the granting of adequate resources for its extended use.

### **3.3. INTERNATIONAL FINANCIAL FLOWS**

Three recommendations for supporting programmes are made in this category. The first may be considered an expression of the Third World Collective Self-Reliance strategy; the second and third fall within the Framework of Global Interdependence.

#### **3.3.1. Recommendation No. 2: Industrial Finance Information and Negotiation Network** (Collective Self-Reliance)

This proposed network would provide for the sharing of experience to use Northern transnational banks and export credits more effectively. The network's objectives are indicated by the title: information and negotiation. The network would be charged with the collection and dispersal of operationally useful information about markets, lenders and borrowers, specific trends (margins, maturities, fees), and the more general movements (international liquidity or the competing demand for loans from TNCs or industrialised

countries). The information provided to borrowers would extend beyond terms on credit agreements and data about mechanisms for developing country access to external finance. It would also indicate the advantages and costs of different options on borrowing, training and technical assistance. The network would provide assistance in negotiating loans and export credit agreements. These functions would demand highly skilled, mobile negotiators unconnected to suppliers or lending institutions, who have an appreciation of the needs and capabilities of specific countries. Developing countries seeking similar services in the North can find them in the market place, but at a high price and through channels that do not easily allow informed judgements to be made about the quality of services rendered.

A beginning has been made in rendering such services through UNIDO's Investment Promotion Programme, under the mandate granted by General Assembly resolution 2152 (XXI). The Third General Conference is requested to endorse the recommendation for setting up the Information Network, which would require strengthening UNIDO's Investment Promotion Programme.

### **3.3.2. Recommendation No. 3: Promotion of Risk Capital Financial Instruments** (Global Interdependence)

In order to facilitate financial risk transfer other than through direct foreign investment, non-voting or non-controlling equity type financial instruments should be developed and promoted, especially for the expansion of intra-Third World investment. These instruments may be attractive to both investors and users of funds in high-risk industrial activities, such as in countries largely dependent on the processing of raw materials and products which face significant market price fluctuations. They offer an advantage over straight debt financing, because interest or dividend payments can be designed to fluctuate with profits or output.

For specific financing instruments, risk transfer can be achieved through conventional equity instruments as well as through the use of *commodity-indexed* bonds and *trade-indexed* bonds,<sup>1</sup> which could be sold internationally and intraregionally through orthodox channels. With commodity-indexed bonds, the interest payable can be linked to a commodity price or basket of commodity prices or indices through an appropriate formula. Similarly, trade-linked bonds can carry a return based on the trading performance of the issuing country; in this way both investors and users of funds can share in trading profit/losses.

The Third General Conference is requested to support this recommendation; no institutional action is required.

<sup>1</sup> See part II, chapter 5, section 5.5.2.(i) for fuller details.

**3.3.3. Recommendation No. 4: Promotion of Barter or Buy-Back Related Long-Term Investment**  
(Global Interdependence)

Barter or buy-back related investment may be contemplated as a means of transferring industrial capacity from industrialised to developing countries. The arrangements could be placed in the class of financing associated with risk transferral and with orthodox debt. Such agreements, although being second-best forms of exchange, would provide an effective method of increasing the volume of investment for industrial projects, of broadening the choice of sources for external investment and of gaining access to new markets while serving as a viable alternative to DFI. However, the conclusions of such agreements depend crucially on the knowledge of opportunities and the negotiating capabilities of developing countries. Co-operative efforts could be undertaken to:

- Provide technical assistance to developing countries in order to help them determine their objectives, plans and negotiating strategies, as well as in the formulation of barter laws.
- Promote means through which financial institutions can facilitate barter and buy-back related investment arrangements.

The Third General Conference is requested to support this recommendation; no institutional action is required.

**3.4. INTERNATIONAL INDUSTRIAL ENTERPRISE CO-OPERATION**

The community of interest between the different actors of industrial co-operation can be articulated and promoted through instruments relating to the micro-level of enterprise co-operation as well as the macro-level, and by activities undertaken by international organisations to influence the institutional and attitudinal framework of industrial co-operation. The following recommendations, within the framework of global interdependence, consider all three approaches.

**3.4.1. Recommendation No. 5: Extended Use of Intergovernmental Agreements**  
(Global Interdependence)

A major instrument of industrial co-operation at the macro-level is the bilateral intergovernmental agreement, which can be concluded as a general declaration of intent, for specific sectors or individual projects. Although intergovernmental agreements may take highly varied forms, reflecting the differing degree of state intervention and extending from abstract and general agreements (framework agreements) down to very concrete project agreements, past experience suggests that considerable expansion and improvement of present practices are possible. A broader description of East/West, East/South,

West/South and South/South agreements as well as improved forms of intergovernmental agreements for international industrial co-operation may be found in part II, chapter 6.

This recommendation calls for the elaboration of model agreements, negotiating guidelines, and manuals for intergovernmental framework and project agreements. Intergovernmental *framework agreements* should provide for procedures and joint institutions for co-operative programming, project preparation, evaluation, implementation, and performance monitoring. A joint process of selection of enterprises might be a first step towards greater co-responsibility of governments. Negotiation of uniform terms in such areas as turn-key contracts, employment of foreign experts, and technical assistance should be undertaken. Intergovernmental *project agreements* need to encourage the co-responsibility of market economy governments through such provisions as increased performance guarantees and encouragement of buy-back arrangements. Expert groups, under the guidance of the proposed Commission for Industrial Development Law,<sup>2</sup> could draw upon work already done by UNIDO, The Economic Commission for Europe, the Council of Mutual Economic Assistance, and regional integration bodies of developing countries.

The Third General Conference is requested to endorse this concept, and to encourage further assistance in this direction by the above institutions.

#### **3.4.2. Recommendation No. 6: Mobilising the Potential of Medium-Sized Enterprises and Other Non-TNCs** (Global Interdependence)

Small and medium-sized enterprises offer an alternative to TNCs, but barriers between potential partners from developing and industrialised countries exist which can only be overcome with special assistance during the bargaining, implementation and operational phase of a project. The present structure of international industrial co-operation favours TNCs as against smaller enterprises, particularly those from developing countries. A programme to promote the contribution of these smaller enterprises would be oriented towards providing them with preferential conditions to compensate them for existing competitive disadvantages, thus providing mutual benefits to both home and host states.

Certain programmes of this type already exist in individual industrialised countries and international organisations to help non-TNC actors redress competitive disadvantages, by providing them with information or investment opportunities. UNIDO has been active in this area through its Investment Promotion Programme, and Investment Promotion Offices which presently are located in a few countries in the North. These may be extended to other countries, including some in the South and the East.

Such industrial co-operation, however, needs to be broadened and better structured in a tripartite organisation made up of home and host states and an international agency. The role of the home countries would be to establish

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<sup>2</sup> See chapter 2, proposal No. 3.

national bodies responsible for national promotion activities and the execution of actual projects. They should evaluate project proposals jointly with the international agency and the host states, and should give performance guarantees wherever necessary and provide a comprehensive guarantee to the investors for a specified minimum rate of return. The host countries would have to establish a project pipeline and adequate institutions to monitor contracts and performance. They should also provide adequate guarantees for the stability of the contractual conditions. The role of the international organisation would mainly be to reduce the risks involved for host and home states, in so far as the latter are developing countries. It would supply supportive operations, find financing for co-operative projects approved by the three parties, and co-operate in the selection of investors. If the home country is another developing country the international agency might consider ways of supporting the credibility of performance guarantees given to the host country.

A programme to facilitate and promote co-operation with non-TNCs would at first have a match-making function, i. e. identifying and bringing together feasible projects and partners. It would have to provide a service of information and advice for partners in home and host countries, concentrating on financing options and technical, economic and legal elements of co-operation projects.

The Third General Conference is requested to endorse this recommendation and support the granting of additional resources to extend UNIDO's present activities in this field.

### **3.5. INTERNATIONAL FLOWS OF TECHNOLOGY**

The possibilities of technological redeployment, broadly analogous to the issue of industrial redeployment, need to be considered as a means of enhancing developing country technological capabilities. The attraction of TNC research and development (R + D) is relevant only to the few developing countries which have relatively large internal markets, advanced industrial structures, good education systems with substantial numbers of local, skilled personnel available and some level of technological capacity. For these countries the relocation may offer benefits as long as it can be ensured that the results of innovation are directed towards producing goods, techniques and experience relevant to local needs. Such industrial R + D should also create favourable externalities as far as internationally directed R + D is concerned. Even if product and process innovations are aimed at meeting the TNCs' international requirements, local skills developed through such R + D would endow benefits to the domestic industrial structure.



### **3.5.1. Recommendation No. 7: Relocation of Industrial Research and Development** (Global Interdependence)

At the international level, assuming national policies are adequate, co-operative measures between industrialised and developing countries would have to include: (1) stability regarding the terms on which investments are made; (2) freedom of activity within the R + D establishment once set up; (3) provision of adequate infrastructural facilities; (4) provision of technical and financial assistance, including full access to other R + D establishments by TNC parent companies, as required.

Although new international mechanisms can be established to deal specifically with the relocation of industrial R + D, it may nevertheless be better to tie up this kind of relocation with the more general relocation of industrial production facilities. On its part, in the field of industry, through its ongoing programme UNIDO is acting as a brokerage organisation which collects information on offers and demands, and attempts to bring interested parties together. At a deeper level, UNIDO could help in the negotiation of agreements and in the provision of guidelines for them. Thus, UNIDO effectively would develop significant policy weight with regard to the relocation process.

The Third General Conference is requested to endorse this recommendation and to support the granting of additional resources to extend UNIDO's present activities in this field.

## **3.6. MINING AND MINERAL PROCESSING**

The minerals sector of developing country economies merits being singled out here for several reasons. First, it is a sector in which problems of the structure of international financial, technological and commodity flows converge. Second, the natural resource base of a country, of which minerals form a vital and sometimes dominant part, is often regarded as part of a national patrimony; therefore, its exploitation by foreign enterprise is a sensitive issue. Third, minerals are generally exported in a raw state, which to many developing countries may mean an economic loss as well as a continuation of past patterns of an international division of labour. Fourth, minerals are often regarded as the resource base upon which a modern industrial structure might be erected. Fifth, minerals make up much of the overall trade between developing and industrialised countries and are of especially vital importance to a substantial subset of developing countries.

The overwhelming emphasis in international proposals has been on the relationship of TNCs operating in this sector and developing country governments. The following recommendation stresses relationships *among* mineral-producing countries, but both Third World Collective Self-Reliance and Global Interdependence strategies are involved.

### **3.6.1. Recommendation No. 8: Joint efforts for Marketing, Exploration, Processing and Financing (Collective Self-Reliance)**

The Lima Declaration and Plan of Action called for co-operative action between mineral-producing developing countries. The ramifications of such co-operation in the areas of marketing, exploration and processing and the financing of mineral processing are discussed below:

*Marketing*—Detailed investigations should be made towards establishing a *collective marketing organisation* which would stress the advantages of joint action while reflecting the nature of the market for the mineral in question. The collective developing country marketing organisation might first reduce the proportion of unprocessed minerals to be exported at low prices and specify minimum amounts to be sold in processed form. Such an organisation could assemble an experienced staff with access to information and potential consumers and help to eliminate or reduce the discrimination against processed minerals in ocean shipping rates charged by the liner conferences.

*Exploration and Processing*—Joint mineral exploration ventures undertaken by groups of developing countries would help alleviate economic risks and constraints. The establishment of *regional processing facilities*, run by DC multinational corporations, could overcome some of the economic disadvantages of processing within a single producing country. The countries involved would need to work out arrangements to distribute equitably benefits from any such regional processing. Feasibility studies for such projects would have to take into account the technical problems involved.

*Financing of Mineral Processing*—Until now international financing institutions have played only a limited role in supporting processing projects. Greater participation would markedly improve the likelihood that DC processing projects would be able to put together a package of capital funding. The World Bank and the regional development banks should consider financing fully integrated projects, rather than only mining. The international banks could also assist in putting together regional processing projects by providing planning assistance and financing feasibility studies.

The above activities may be integrated under some of the functions of the International Industrial Finance Agency proposed in chapter 2.

The Third General Conference is requested to endorse this recommendation and encourage endeavours on the part of international organisations in this field.

### **3.7. INCREASING THE ABSORPTIVE CAPACITY OF DEVELOPING COUNTRIES**

Resource transfers of industrial investments in developing countries will only be relevant if there is a sufficient absorptive capacity for these transfers. Past experience demonstrates that the problem of insufficient absorptive

capacity has been a persistent impediment in efforts to deploy external resources in development programmes. This problem has been particularly acute for the least developed countries. Although it emerges from fundamental structural constraints in these economies, it may be alleviated to an extent by sustained efforts in the identification and preparation of industrial projects.

### **3.7.1. Recommendation No. 9: Industrial Project Preparation Facility for Developing Countries**

It is recommended that a new *Industrial Project Preparation Facility* is instituted. While the activities of this facility would be intended to benefit all developing countries, a special emphasis would be placed on project identification and preparation for the least developed countries.

#### *Objectives*

The identification and preparation of project feasibility studies is a prerequisite for new investment in industry, and yet many developing countries and amongst them least developed countries in particular, find it very difficult to obtain financing for this activity (especially when foreign experts have to be employed) from bilateral or multilateral sources. Lack of interest on the part of financing institutions mainly stems from the high risk factor associated with this activity, since only 10 per cent to 20 per cent of the projects prepared may eventually be implemented. The mechanism recommended here benefits from the experience of UNIDO's past and on-going programmes, and departs from the current situation in these respects:

- (i) It will constitute an independent revolving fund which will undertake industrial project feasibility studies. The projects themselves will be implemented by other institutions.
- (ii) It will promote South/South co-operation to the extent that it will draw mainly on the services of developing country consultants (although it may use those from the industrialised countries whenever necessary) in the preparation of feasibility studies. It would base investment proposals, to the greatest extent possible, on collective self-reliance with regard to technology, capital goods and markets.
- (iii) For the least developed countries, investigative emphasis will be placed on agriculture-related industry, the processing of primary commodities, and the setting up of small and medium-sized industries in such areas as textiles and leather.

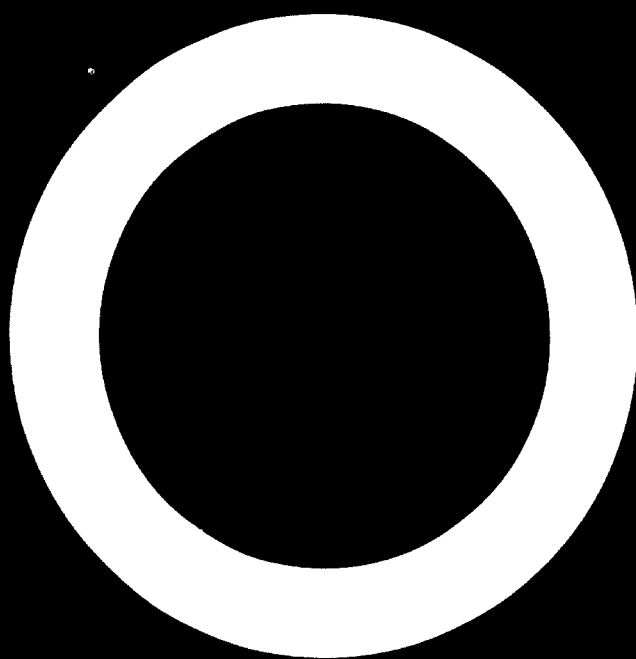
The facility would be used to prepare industrial projects with project costs between \$2.5 million and \$250 million.<sup>3</sup> An annual target of 250 project preparations would be aimed at. Assuming that the average foreign exchange

<sup>3</sup> Project preparation costs for projects of below \$2.5 million could be defrayed from the United Nations Industrial Development Fund operated by UNIDO.

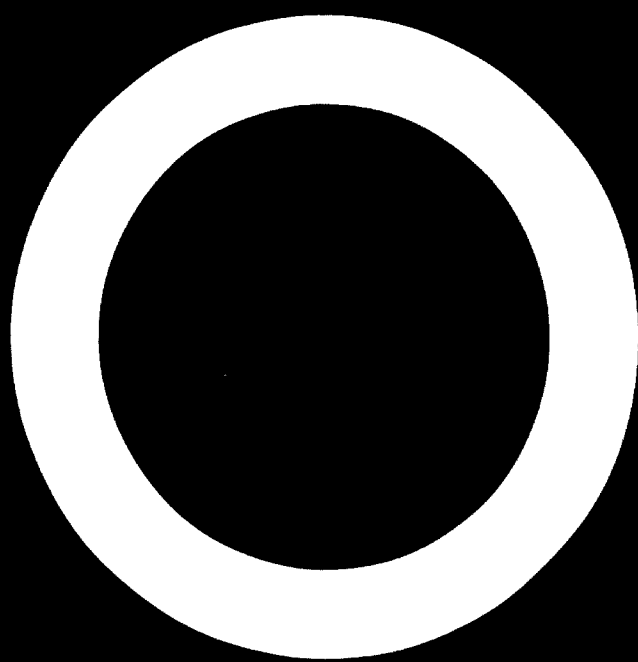
cost of preparation per project may be around \$40,000, annual funding of \$10 million would be required. If only about two out of every ten prepared projects are eventually implemented, annual funding of \$10 million would support the implementation of about 50 projects each year. Successfully implemented projects would be required to pay back the initial cost of project preparation plus an additional margin, in order to incorporate a revolving element in the funding of the proposed project preparation facility.

It is suggested that this facility be funded by grants from member countries, and from bilateral and multilateral financing agencies.

UNIDO requests the Third General Conference to endorse the proposal to set up an industrial project preparation facility and authorise UNIDO in extension of its present activities to initiate appropriate steps with member countries and international and regional organisations to negotiate and set up the facility.



**PART TWO**  
**The Supporting Analysis**



# **Chapter 1. The Quest for Global Equity: Need for a New International Economic Order**

## **1.1. THE INTERNATIONAL SETTING**

No item has ranked higher on the agenda of international discussion in recent years than the question of the nature of the economic relations between rich and poor countries.<sup>1</sup> It is now widely recognised that the institutional context within which transfers of commodities, technology and financial capital take place are "manifestly inadequate for the needs of the world community as a whole. The charge against the old order in the past was that it worked well for the affluent and against the poor. It cannot now even be said that it works well for the affluent."<sup>2</sup> Problems and tensions not only between the rich and the poor countries, but also among the rich, threaten to destroy the very fabric of global economic relationships. The crisis of the old order is readily apparent, but the shape of a new order is only just emerging. It is not yet clear whether the international community will have the foresight, goodwill and courage to agree on a concerted plan to overcome the inertia of institutions and ideas created for a different kind of world.

Many of the existing international bodies and the philosophy they embody were the products of decades of depression and war, of a world still carved up into colonial empires, and of a configuration of power relations between nations in which domination by two competing super powers was the central feature. The preoccupation of the industrialised countries at the end of World War II was with the task of reconstruction. Fears of a post-war depression, of a possible resumption of the tariff wars and competitive devaluations typical of the 1930s, were uppermost in the minds of the negotiators of the Havana Charter and the Bretton Woods Agreement. Plans for the post-war reconstruction of the international economy therefore assumed:

- (a) that the United States would take on the mantle of economic leadership of the western world;
- (b) that subsequently emerging nations would follow this lead, and adhere to the principles of free, multilateral exchange;

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<sup>1</sup> Discussions at, for example, the Sixth and Seventh Special Sessions of the General Assembly, 1974 and 1975; Second General Conference of UNIDO, 1975; Conference on International Economic Co-operation, Paris, 1976.

<sup>2</sup> Kurt Waldheim, 1975, as quoted in: Reshaping the International Order, New York, 1976.



- (c) that ascribing to the principles of free, multilateral exchange would best ensure diffusion of industrial growth and technical progress among the poorer countries.

Under these assumptions it was believed that economic progress in the industrialised areas would spread automatically to the poorer, primary producing countries. Industrialisation in the North would push up wage rates in the North as well as the prices offered to the South for its products: the first of these trends would tilt the relative cost advantage in favour of the South, while the second would expand purchasing power there. Both of these effects would, when coupled with free international movement of commodities and productive factors, induce the industrial development of the South. The poorer countries would move into the realm of labour-intensive manufactures and assume higher degrees of processing of their primary products, while the North would shift more towards specialising in capital-intensive manufactures and services. Thus, the commodity composition of world trade would evolve in harmony with the shifts in comparative costs and the factor movements that went with it. Such was the theory: the reality has, of course, been different.

In 1977 the developing countries accounted for at most about 9 per cent of manufacturing value added (MVA) on a global basis, while accounting for about 70 per cent of the world's population. The Third World's shares of world industrial production and exports of manufactured goods have changed in the recent past in the directions indicated in the table below.

**Table 1 (1). Shares of Developing Countries in Production and Trade in Manufactures 1960-1977**

(Percentages)	1960	1970	1974	1975	1977
In world manufacturing value added	6.9	7.3	8.2	8.6	9
In world trade in manufactured goods	4	5	7	7	8 <sup>a</sup>

*Source:* MVA: World Industry since 1960: Progress and Prospects (UNIDO, 1979) Trade: Handbook of International Trade and Development Statistics. (UNCTAD, 1979).

<sup>a</sup> 1976.

At best this represents an improvement in the relative share of the South in world industry of about 2 per cent over nearly two decades. If this trend were simply to continue, then by the year 2000 the South can expect to reach about 14 per cent of world industrial production. Furthermore, the small gains that can be expected in the absence of major restructuring would be far from evenly distributed. Over the past two decades the rate of growth of manufacturing in the South has been highest in the intermediate and higher income countries. For the least developed group the actual performance has been the worst, and the prospects for the future, in the absence of drastic action, continue to look dismal.

Developing countries with per capita income below \$265 (1975) contain 60 per cent of the total population in the Third World, but have experienced the

slowest rate of MVA growth (5.2 per cent p.a. from 1966 to 1975); while the highest income DCs grew the fastest. A total of only ten DCs accounted for nearly three quarters of the total DC increase in MVA in the period of fastest growth (1966 to 1975); while four of them (Brazil, Mexico, Argentina and the Republic of Korea) were responsible for more than half the total (52.2 per cent). The large number of developing countries with total populations of less than one million have hardly experienced any industrialisation at all. The same holds true of most countries in the least developed category. In short, the picture is a very uneven one for the developing countries as a whole, and MVA increases have benefited least those countries where the majority of the DC population lives. "Closing the gap with the West", has hardly occurred for the majority of developing countries, as the modest increase in the MVA share of developing countries in the world total clearly shows.

## **1.2. NEED FOR A NEW INTERNATIONAL ECONOMIC ORDER (NIEO)**

What has gone wrong in the orthodox scenario? The developing countries blame their poverty on disparities in the international distribution of economic power, while the industrialised countries pin responsibility on incorrect domestic policies pursued by the developing countries. These two divergent viewpoints have hitherto prevented a consideration of the present impasse, with insufficient recognition of the mutuality of interests which is really involved, in two clear directions.

First, it is evident that the problem of poverty in the Third World can only be tackled through concerted action on both the internal and external fronts, and that external readjustments alone would not be a sufficient solution. Second, recurrent balance of payments and currency crises in the North indicate that the old order is no longer functioning well even for the industrialised countries. New institutions and new rules of the game ought now to appear on the agenda of international discussion, not just because the poor countries need to be accommodated, but because the global interrelations of North and South need to be rebuilt on an entirely new basis, in the interest of both parties.

From the point of view of the South (the Third World) the present world order is no longer acceptable because it is felt that the institutions and arrangements are tilted heavily in favour of the North. Certain elements of the relationships between the developing and the industrialised countries that the former find particularly burdensome are:

- (a) the division of the world into exporters of primary products and exporters of manufactures;
- (b) the unfavourable terms of trade for the products of DCs;
- (c) the one-sided dependence of the developing countries on the industrialised countries for finance;
- (d) the one-sided dependence of the developing countries on the industrialised countries for technology;

- (e) the dependence of most developing countries on the industrialised countries for their engine of growth through the need to obtain access to external markets, as well as receive direct foreign investment, the bulk of it through transnational corporations.

Of these areas of concern, the first is of paramount importance, and gives rise to the aspirations of the Third World to reshape the international power structure, which is grounded on the command that the industrialised countries have, over technology and industry. Industrialisation thus forms the central plank in the charter of demands tabled by the South. However, even if it is assumed that industrialisation could be achieved through much the same mechanisms as applied in the North, and that the necessary modifications in present institutions and relationships could be accomplished, this would not by itself automatically satisfy the aspirations of the South that lie behind the demands for a new international economic order. They go much further than the quantitative targets, and involve certain fundamental political realities. Among these are the problems of ownership of national resources and control over the direction, rate and structure of capital formation. In pursuing their aims, the developing countries often do not have the same intensity of commitment to the principles of free enterprise as many in the North, and are prepared to use their government institutions to influence the pattern of economic development, especially industrialisation, so as to help achieve broader social and political objectives. High on the list of these objectives is the goal of fostering a greater degree of national economic independence. That goal is often identified with breaking the established international division of labour, and explicitly repudiating the principles of free international exchange on which the conventional scenario is premised.

### **1.3. STRATEGIES FOR THE ACHIEVEMENT OF A NEW INTERNATIONAL ECONOMIC ORDER**

#### **1.3.1. The Options and the Synthesis**

Attempts made in the last few years to achieve some progress in moving towards a NIEO through international discussions have not been successful. Nevertheless, the urgency and the need still remain. In order to achieve tangible results, the South must formulate and adopt a clear-cut strategy for international action, remembering that its future really lies in its own hands.

Broadly speaking, the South could follow two principal paths towards the NIEO: it can aim at expanding the degree of South/South co-operation, with a view to collectively enhancing development prospects and reducing dependency on the North; or it can seek to improve the terms on which it continues to deepen and broaden its contacts with the North. The first may be termed Collective Self-Reliance, the second Development Through Global Interdependence. They are often seen as alternatives, with the first being conceived as being more radical than the second; but, as will become evident in the discussion to follow, both strategies may be pursued simultaneously.

### *Third World Collective Self-Reliance: Economic Co-operation among Developing Countries*

The first alternative implies the strengthening of a collective self-reliant development strategy among the developing countries, in order to make use of the resources collectively available in the South. On the surface such a strategy would seem feasible. A greater flow of trade could be channelled into intra-South patterns. The South has within it most or all the raw materials and energy supplies it might need, and ample land for food production. Manufacturing skills can be learned, and Southern capital resources mobilised. The notion that the South should move more in the direction of collective co-operation is no more radical than the pursuit of similar strategies among the industrialised countries. The economic and financial co-operation groups of the EEC and CMEA are obvious cases in point. The establishment of OECD and the Group of Ten represent collective arrangements among the industrialised countries for mutual co-operation in the field of economic development and financial management. Comparable arrangements exist in the fields of scientific and military co-operation.

Attempts by the Third World, or groups within the Third World, to achieve similar degrees of co-operation in the fields of trade, finance, transfer of technology, and research and development can therefore be seen as the establishment of counterpart arrangements to those already existing in the industrialised countries. Not only would they be a means for political co-operation among countries with similar economic problems to achieve economic growth, but the increase in co-operation would in fact be a natural consequence of such economic growth. Given the common problems of the South, it is not only desirable but inevitable that economic co-operation among developing countries should indeed increase.

### *Development Through Global Interdependence*

The pursuit of global interdependence does not imply the continuation of the status quo in North/South relations. However, it does incorporate the concept that the economic growth of the industrialised countries and the developing countries is interdependent, and that growth will proceed from taking advantage of the international division of labour and differences in factor prices and resource endowment through increased trade, finance and technology flows on a North/South basis. In order to avoid the rigidities of the Old Economic Order, it would require significant modifications in developing country participation in the North-based international institutions, and in global decision making. However, the danger clearly exists that pursuit of development merely through global interdependence may lead to only marginal improvements in the Old Economic Order, so that the push for the developing countries to catch up is frustrated, as it has been over the last thirty years.

The objective of the NIEO must clearly be to strengthen the South so that it can participate in an interdependent international economy from a position of

economic, financial and technological strength comparable to that of the industrialised countries. Therefore the ultimate target must be an international economy based on global interdependence and equality, but whether this can be achieved in a reasonable time-span through the present notion of global interdependence alone is very doubtful. At the same time, it is equally clear that any sudden and drastic reduction in North/South interdependence will lead to a decline in economic growth among both groups in the short and medium term. Therefore it would be desirable that the Third World's existing pattern of trade, financial and technological flows be modified gradually, but within a changing framework of economic relationships with the industrialised countries.

### *Synthesis of the Two Approaches*

While the momentum of change in the international economic order may be gradual, it must at the same time successfully install a NIEO within a time-frame which is politically and socially acceptable to the Third World. And the only effective way in which the Third World can ensure such an outcome would be for it to strengthen its bargaining power through increasing the degree of collective self-reliance.

Therefore, the two paths to the NIEO outlined above may not be as diametrically opposed as they may appear at first glance, or at least, not incompatible. Although the ultimate objective of international economic relations is one of global interdependence from a position of equality, it seems unlikely that it can be achieved without the South pursuing deliberate policies to increase the degree of collective self-reliance for some time to come. Increased self-reliance and reduced dependency on the North is a necessary condition for meeting the above objective. Thus the South might well aim at:

- (i) increasing the relative extent of its exchanges of commodities, capital and techniques with other developing countries thereby reducing the impact that the imbalance of global power might have on the South's internal development; and
- (ii) increasing the bargaining strength of the South in order to achieve more equity in the terms on which the exchanges with the North take place.

In preparing this study, it was recognised that it would be necessary for developing countries to undertake a parallel pursuit of both of the above strategies. A variety of recommendations and proposed new mechanisms are presented, some of which might be viewed as inclining towards the collective self-reliance strategy, some towards the global interdependence strategy. Individual developing countries will no doubt aim for that balance of strategies most suitable to their particular situation, while the industrialised countries' scope for immediate action is likely to be more confined to those mechanisms concerned with continued global interdependence. In any event, the study is predicated on the major premise that a world free of poverty and hunger, on the scale on which these currently exist, can only help, and not harm the rich countries of today. A Third World which is economically and financially more

viable, would greatly strengthen the benefits of international economic interrelations, flowing not only to the South, but also to the North. It is on an explicit recognition that such a community of interests exists, that the case for a New International Economic Order rests.

### **1.3.2. Collective Self-Reliance and International Flows of Resources**

The concept of global interdependence and its practical implications are well-known and have long been a focus for political action, and also for economic research.<sup>3</sup> The notion of collective self-reliance is much more recent and is still vaguely defined. This section is devoted to a short discussion of the concept of collective self-reliance and its particular implications for international resource flows in the fields of investment, finance, technology and trade which are in the centre of interest in this study.

One aspect of collective self-reliance is expressed in the fact that the Third World countries have managed to maintain a common negotiating position towards the North with much greater success than seemed likely to observers at the beginning of this decade. The first opportunity for translating discontent into effective demands came with the oil embargo of October 1973. The success of the oil price adjustments became the major driving force for collective self-reliance in March 1975 when a common front was established between OPEC and other developing countries (DCs) at Algiers. One such common cause of the DCs is that of confronting the much more tightly knit political formations of the industrialised countries. The developed market economies have highly effective international fora for the definition and articulation of their own group interests, both of an official and informal nature (the OECD, the Group of Ten, EEC, the Trilateral Commission etc.). Even more important is the enormous network of channels for intellectual, cultural, military and business exchange that have developed through centuries of interdependence and migration. The centrally planned economies (CPEs) have similar mechanisms for their own inter-country exchanges. Compared with these webs, the DCs' attempts at breaking through colonially-imposed, centre-periphery patterns that run in a North/South direction—to build "bridges across the South"—are rather modest. The use of international organisations, where the numbers rather than the poverty count, e.g. the non-aligned movement, the formation of the Group of 77 within UNCTAD, and the Third World Forum have drawn public attention. A visible expression of collective self-reliance has been the adoption of a common negotiating position of DCs towards the ICs in demanding access to international capital markets, access to IC markets for their industrial exports, international monetary reform linked with greater and more "automatic" development assistance, the regulation of TNCs through codes of conduct, and technology transfer on more favourable terms.

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<sup>3</sup> For a recent evaluation of the economic prospects under global interdependence, see OECD, INTERFUTURES, Final Report, Paris, June 1979. For some special aspects concerning trade and employment effects see: OECD, The Impact of the Newly Industrialising Countries, Paris, 1979, and EEC, Europe—Third World Interdependence Facts and Figures, Brussels, 1979.

The work of UNCTAD and UNDP, assisted by the UN Regional Economic Commissions and Specialised Agencies, in defining the areas of Economic Co-operation among Developing Countries (ECDC), and Technical Co-operation among Developing Countries (TCDC), has extended collective self-reliance much beyond the negotiation framework and its role as a bargaining instrument. This has been achieved first, by studying the significance of the underlying trends in intra-DC resource flows and linkages, and then by identifying common problem areas that are amenable to solutions of a different nature from those available in ICs, and which would be made possible only through co-operative action by two or more developing countries. Some of these which are of particular relevance to DC industrialisation and to the international flows of resources treated in this study are discussed below.

### *Regional Economic Integration Schemes*

The most ambitious institutional form of collective self-reliance, in industry as in other sectors of the economy, has been that of regional economic integration. All the major DC regions have shared some experience in this field, but the general assessment of progress can only lead to very qualified enthusiasm. It is easier to point to the pitfalls, the political disagreements and stalemates reached in many of these ventures than to any consistent and deepening process of co-operation. The genuine difficulties and threats that face collective self-reliance are nowhere made more evident than in the experience of regional economic integration. Other, related forms of economic co-operation have been based, for the most part, on geographically contiguous DCs sharing a river basin or lake area. These groupings include countries with very large differences and imbalances in industrial structures that cause initial problems. Invariably, DCs have accorded priority to industrial development in these schemes, designating other potential advantages of integration as secondary. It becomes difficult, however, to ensure an equitable distribution of industrial capacity when those countries that are favoured by their own established industrial structures, tend to attract the lion's share of fresh investments within the region, and are able to reap most of the benefits of trade liberalisation, resulting in a widening income gap between rich and poor countries of the group. Available mechanisms have not been able to correct this basic problem of industrial "balance" within the region.

A broad assessment of the integration experience leads to the conclusion that the commonly pursued wholistic approach of emphasising joint and harmonised efforts has been less successful. Better results could perhaps be achieved by concentrating on trying to expand the production frontier; by planning together to engage in new activities, and bringing about qualitative changes in local capabilities; by enhancing decision-making power vis-à-vis the rest of the world; and by emphasising non-market interventions in areas where externalities and "public goods" characteristics are prevalent. All these would require a larger role for national governments as well as for newly created regional institutions. The initial thrust must be on defining policies and projects

which would give visible results, in order to enlist the support of significant domestic forces. Criteria have to be established for:

- (i) the locational distribution of activities and the resultant trade-offs between efficiency and equity;
- (ii) trade-offs between domestic development and the necessary foreign inputs;
- (iii) trade-offs between externalities and other non-market reflected outcomes of the integration process and the latter's negative effects on other national objectives (e.g. employment creation, income distribution).

Once these problems have been overcome, steps would have to be taken to establish:

- (i) an intergovernmental authority requiring political representation at the highest level to make and sustain decisions and implement them rapidly in the face of opposition from sub-national interest groups;
- (ii) a mechanism to ensure that the activities actually undertaken pursue the integration objectives, often not reflected through market forces.

The instruments for collective self-reliance include multinational marketing and production enterprises which have been studied by UNCTAD over the past few years.

#### *Collective Self-Reliance in Technology*

The brunt of technology co-operation among DCs has to be based initially on currently available technologies acquired from the ICs. Policies for collective self-reliance will therefore have to emphasise aspects of promotion and protection, using institutional mechanisms to handle:

- (i) the provision of technical information, classified by items, suppliers, quality and possible costs;
- (ii) identification of potential users and the essential brokerage between sellers and buyers;
- (iii) establishment of the vital support activities covering consulting engineering, international trading companies and financial assistance, the last including credit arrangements for buyers and sellers plus provision of insurances and financial guarantees;
- (iv) the understanding of purchasing behaviour of international organisations and governments, which can offer valuable markets to suppliers, particularly when the latter are medium and small firms;
- (v) the negotiation and elaboration of new legal arrangements capable of adapting concepts and practices to the requirements of DC exporters;
- (vi) formulation of preferential systems designed to give DC exporters genuine opportunities in IC markets and, most importantly, to stimulate the growth of intra-DC trade in technology;



- (vii) sponsoring of co-operative efforts by DCs to harness their technological resources towards the joint production and maximum use of technologies appropriate to their needs and resources and to monitor the technological developments in the ICs.

One example of such co-operation may be found in exchanges between national technology institutes—the concept of identifying “centres of excellence” in particular sectors or branches of industry, that can be given a regional or Third World vocation of transmitting know-how by a small initial injection of finance from international organisations or intergovernmental agreements (UNDP through its TCDC activities and regional funds, is helping such centres in food processing, textiles, leather, etc.).

### *Collective Self-Reliance in Skills*

Flows of industrial goods, technology and investment among DCs have been accompanied by large and growing movements of labour within the Third World. While unskilled labour has predominated, skilled immigrants have provided a vital input to the industrialisation effort of the receiving countries. The outflow of skills to the ICs, however, is still much more significant. For India, in 1975–1976 the outflow of engineers represented 25 per cent of the total numbers graduating annually, for Sri Lanka 18 per cent, for the Philippines 11 per cent. At the IC receiving end, engineers from the DCs represented 28 per cent of the incremental stock of engineers in the United States in the early 1970s. 76 per cent of them were in the most productive period of their lives, at the ages of 30–44. The imputed value of skilled migration from all DCs to the USA, Canada and the UK in the period 1961–1972 has been estimated at \$46 billion, or \$3.8 billion per year,<sup>4</sup> an amount that is almost as large as ODA flows from these countries to the DCs over the same period. These figures give some indication of the loss to the Third World in human capital, which could otherwise have been channelled for their own collective gain.

Among the skilled personnel working in other developing countries, those with industrial and scientific skills represent a significant proportion, with doctors, nurses, teachers and accountants comprising large categories along with engineers. In contrast to the DC personnel who migrate to ICs, those going to other DCs tend to go for shorter periods, usually without their families, while the professionals among them tend to hold much more privileged and important functions in the host countries than those migrating to ICs.

Various proposals for collective self-reliance in skills have been mooted on the basis of these grounds, by the Fifth Conference of Heads of State or Government of Non-Aligned Countries (August 1976) and by UNCTAD. Among them are:

- (i) the creation of data banks on skilled manpower availabilities, to exchange information on occupational categories, job opportunities and prospective applicants;

<sup>4</sup> See UNCTAD, TD 239. Technology.

- (ii) co-ordination of education and manpower planning in order to organise educational investment and skill transfer among DCs on the basis of comparative advantage; also to establish joint Third World training institutions in particular disciplines on a cost-sharing principle between countries;
- (iii) co-ordination of on-the-job training schemes;
- (iv) establishment of specially designed technical assistance programmes, administered by DCs, possibly through the TCDC arrangements established at Buenos Aires in 1978;
- (v) establishment of joint consultancy agencies and services drawing on indigenous skills and resources, and growing out of DC experience in adapting and replicating technology, encouraged by preferential treatment to DC agencies in executing industrialisation programmes;
- (vi) linking of capital transfers from resource-rich/skill-poor countries with the supply of professional manpower from resource-poor/skill-rich DCs through joint financing of schemes or loans and grants;
- (vii) harmonisation of the terms and conditions governing employment of migrants, perhaps through standard agreements on remuneration and security for different skill categories in labour contracts.

Proposals for co-operative action would have to face the constraints imposed by dealing with countries with different ideologies and development levels, having traditional North/South links and entrenched interest groups among their own professional communities.

### *Collective Self-Reliance in Finance*

The potential for collective self-reliance in finance is very great. The massive surpluses generated annually by OPEC members are being deposited in North-based or North-dominated global institutions and banks, from which they are being lent to the South in ways controlled by the North. The major quantum of South borrowing is *de facto* from other South economies via Northern intermediaries, using mechanisms such as commercial bank credits, IMF credit tranche and special facility drawings, medium and long-term bilateral, international organisation and private development loans. The reason is that the prior concentration of major institutions, skilled personnel and information in the North makes it much easier and less risky to use the traditional channels. To do it directly on a South/South basis would involve difficult experimentation with new channels and also the initial identification of common interests between at least some lenders and some borrowers from the South.

Mutual interests between Southern lenders and borrowers in financial proposals for collective self-reliance may be built in the following ways:

- (i) increase of security through the creation of alternative sources of financial supply and demand in order to diversify geographically and institutionally;
- (ii) lowering of costs by capturing the profits made by Northern intermediaries, and linking South/South aid with loans by using it to subsidise interest rates and provide loan insurance;
- (iii) provision of direct lending to increase control over the pattern of fund use/portfolio spread, and serve the lender's national interests, by cutting cumbersome and expensive red tape for the borrower;
- (iv) helping to reduce investment project costs in DCs by offering borrowers finance for their capital goods imports from the North, independent of financial strings that may be attached to the purchases if credit is also sought from the Northern exporters.

Some proposals for new mechanisms which build on these interests are described at length in chapter 5. below.

#### **1.4. THE LINKS BETWEEN INTERNATIONAL AND NATIONAL STRATEGIES**

While international strategies will determine the routes towards a NIEO, at another level, individual developing countries will also be vitally concerned with national strategies for reaching their industrial and social goals. Three possible types of national strategies are discussed in the following chapter. Having made its policy choices in the domestic field, the central problem for each developing country would then be to ascertain the nature and extent of international linkages which would be likely to contribute the most to the fulfilment of its industrialisation objectives. In principle, international contacts can be advantageous or disadvantageous depending on which groups in the international system control those contacts and how they utilise their control. Through these control mechanisms international linkages will affect the type and rate of industrial growth in each country.

The array of linkages available is ample. It covers the means of production (this includes technology, finance and direct foreign investment); the location of production (particularly influenced by direct foreign investment); the distribution of output (reflected in trade channels and the marketing of industrial products); and the composition of production (influenced by research and development, as well as by advertising which affects consumer patterns).

The significance of each of these linkages or control mechanisms alters over time and from country to country. The critical issue at any moment for the developing country in question is to discover which entities (nationally and internationally) have the effective decision-making power, and what are the distributive and other impacts of the use of that power. On that basis it would then be possible to consider what mechanisms of international co-operation could most usefully be devised, in order to change outcomes which are felt to be unsatisfactory.

## **Chapter 2. Industrialisation: Objectives and Strategies**

### **2.1. THE ROLE OF INDUSTRIALISATION IN THE DEVELOPMENT PROCESS**

#### **2.1.1. The Record of Industrial Performance in Development**

The importance that the South attaches to the role of industrialisation in furthering national development objectives stems in part from the identification of the power and wealth of the North with its dominant role in manufacturing, and the weakness and poverty of the South with its preoccupation with agriculture and other primary production. It results, too, from the observed correlation of a high percentage of industrial products in total GNP with a high per capita income in the North. It results also from the need to generate additional employment opportunities to absorb an expanding population, without reducing per capita incomes further, as increased employment in agriculture often threatens to do. And it results from the fear that the long-run trend of the commodity terms of trade will continue to be against primary products, and in favour of manufactured goods. The hopes for raising per capita income in the South thus pointed in the direction of fostering broad-based industrial growth. In brief, for the newly emerging countries of the post-war period, industrialisation was seen as synonymous with development, and development implied catching up with the advanced countries, using basically the same means. Industrialisation along the lines of the advanced countries would, it was believed, yield similar results not only in terms of the growth of physical welfare, but also in terms of elimination of poverty and employment creation.

This close identification with the means as well as the ends of the development process achieved by the advanced countries, was mainly responsible for shaping the form of industrialisation in the Third World which we now perceive. Throughout the 1950s and 1960s many of the DCs chose to force the pace of industrial growth by granting huge fiscal incentives to Northern entrepreneurs, as well as to Southern ones, to build large-scale plants producing the same type of products and using the same techniques as the North did. Sometimes the Southern country's state apparatus also became directly involved in the industrialisation process, but without changing, in most cases, its

fundamentally imitative character. The strategy adopted was expected to yield fast results, although it explicitly discriminated against the rural sector and traditional small-scale industry, in favour of large-scale urban development.

In undertaking such imitative industrialisation, DCs too often overlooked the real social costs which had been inflicted by the industrial development process in the North, where the initial consequences for much of the population were far from the furthering of social justice, the raising of living standards, or the improvement of the quality of life. While it is possible that with the improved instruments of economic and social policy now available, the South might in the future be successful in avoiding some of the initial hardships suffered by the North, the unfavourable side effects of industrialisation have always to be kept in mind, making the use of enlightened social policy an essential adjunct of industrial development strategies.

While GNP per capita for DCs as a whole did tend to rise perceptibly, it soon became evident that there were other important economic and social objectives that had to be met, such as expanding employment opportunities relative to population growth and eradicating poverty, neither of which, contrary to earlier expectations, happened automatically as a consequence of GNP growth. There is widespread evidence that *income distribution* has worsened in the majority of low-income developing countries, while the experience is mixed, among middle- and high-income DCs.<sup>1</sup> The real incomes of the poor, particularly those in the lowest 20 per cent of the income scale, have declined even in absolute terms, the worst affected being those in rural areas. The development towards smaller or greater income inequality has been determined by the set of initial structural conditions and the distribution of assets and incomes. One factor that has caused increased inequality at low income levels has been the structural transformation of the economy from an agrarian, rural setting where assets and incomes are more equally distributed, to an industrial, urban one where distribution is more skewed. Within the rural areas, the proportion of the population below a poverty line constructed on nutritional standards has been seen to fall or remain the same over the period 1955–1970, in seven Asian countries studied where three quarters of the world's poor are estimated to live.

In addition to low income levels and protein-calorie deficiencies, *other signs of poverty* have become increasingly apparent even in countries that have experienced high rates of industrial and GDP growth, e.g. high rates of infant mortality, illiteracy, landlessness and unemployment. Concentration of industrial investment in urban areas, by stimulating rural-urban migration, has led to the swelling of marginal slum occupations in the cities, with people who are denied access to tolerable levels of housing, sanitation, drinking water, medical and educational facilities or regular, remunerative and socially productive employment.

Great hopes had been placed on the growth of manufacturing industry to solve the problems of *under- and unemployment* in developing countries. The sheer magnitude of the employment problems of most countries makes this an

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<sup>1</sup> See *Hollis Chenery et al.*, *Redistribution with Growth*, Johns Hopkins Press, 1975.

impossible task in the short term. A manufacturing sector employing 20 per cent of the labour force would need to increase employment by 15 per cent per year merely to absorb the increment in a total work force growing at an annual rate of 3 per cent. With normal increases in labour productivity the required rate of increase of manufacturing employment would have to be at least 18 per cent. This can be compared to actual annual growth rates in manufacturing employment since 1960, which have fluctuated in the range 2–4 per cent for most developing countries whereas annual growth rates of urban population have been 4–5 per cent. In a few cases very high growth rates of 8–24 per cent have been registered, but there have, on the other hand, also been negative rates. An important qualification ought to be made to these figures. The traditional manufacturing sector composed mostly of small dispersed units, frequently based on part-time family labour, has been largely neglected by industrial statistics. This is in spite of the fact that traditional industries continue to absorb the majority of a valuable reserve of skills and entrepreneurship.

Overall, a disturbingly large number of DCs has shown a declining share of both industry and manufacturing in total labour force utilisation, at the same time as total unemployment and underemployment in the mid-1970s has been estimated by the ILO at 300 million persons, after a sharp increase of 46 per cent in unemployment over the period 1960–1973.

The very *composition of industrial output* has a social dimension that must be kept clearly in mind. Most industrial production in the modern sector of DCs has taken place to meet existing patterns of demand for final consumer goods, whether for the domestic or international markets. Since the poor have scarce purchasing power, their needs have not been reflected to any marked degree in the demand structure of the modern sector. The products of traditional industry (textiles, leather goods, processed foods and oils) have, on the other hand, continued to serve them through decentralised and often archaic forms of industrial organisation. The consumption patterns of the higher income groups, whose preferences determine the national market for industrial consumer goods, have been moulded to a large degree by the tastes and values of the Northern populations. For these reasons, the final product mix of modern industry which has determined the choice of technologies has worked in favour of imported processes based on large-scale production, heavy use of capital and limited call on locally available inputs of skills and raw materials.

### **2.1.2. The Goals of Industrialisation**

The growth of GNP, or of industrial production, is by no means a complete and accurate barometer of social progress. By itself it indicates nothing about the composition of output, the distribution of output, or the underlying social and institutional conditions in which GNP growth takes place. Growth is thus only a necessary, but not a sufficient condition for economic progress. Furthermore, industrial growth per se, must always be counterbalanced by growth of agriculture, services, and basic infrastructure, if social goals are to be met.<sup>2</sup>

<sup>2</sup> *Economic and Social Council, E/AC.54/19, 23 February 1979, page 6.*

A major motive for industrialisation can thus be defined as the desire to achieve balanced economic growth. This includes the goal of integrating the large subsistence economies of most developing countries with the modern urban, mining and plantation enclaves established by the colonial powers. The former sector of the economy is associated with traditional social structures and cultures, whereas the centres of decision-making, the administration, modern services and infrastructure are concentrated in the latter sector. This form of dualism appears to have been accentuated in the majority of developing countries by the industrialisation process, with the existing pattern of allocation of resources to industry worsening urban-rural, traditional-modern and agriculture-industry dichotomies, instead of encouraging interactions between them. The concentration of industrial ownership and control in the hands of the state bureaucracy, TNC affiliates and a limited number of local entrepreneurs have often served to polarise rather than integrate national societies, and to increase social conflict. The poor linkages between sectors have also meant that the contribution of modern industrial technologies to raising productivity has been disappointing.

On the other hand, it is certainly true that several of the larger DCs, now considered in the semi-industrialised category, have established an impressive capacity for industrial training, for research, for absorbing, adapting and generating modern industrial technology, while building up a considerable fund of industrial entrepreneurs and administrators. Their industrial structures are vertically integrated and highly diversified in terms of the range of products, and the infrastructure created for industry allows for a rapid future growth of supply. At the level of the factory shopfloor, there is evidence of considerable on-the-job learning and efficient adaptation of imported processes. Management skills allow these DCs' industrialists to negotiate successfully and undertake investments in developed countries. However, this only applies to a small minority of DCs. It is, moreover, doubtful whether the factors that have contributed to their present position, such as market size, resource endowment, historical evolution of education, entrepreneurship and skills, and the development of modern social institutions, are possible to replicate for the majority of DCs. Nor indeed is there any a priori reason to think such a replication is desirable.

In addition to the evident lack of balance in the growth process, and the failure of the strategies followed to eradicate basic social problems, another major area of concern appeared during the post war decades. The emerging nations of the South became increasingly aware that many aspects of the growth process, as it was then unfolding, simply reinforced many of the ties of dependency that they had hoped to have broken in the decolonisation process. These ties of dependency on the economic front took the form of reliance on externally derived investment funds, techniques, and markets, on terms and conditions largely dictated by the North. On the one hand, it is clear that many DCs have greatly diversified their exports and, specifically, reduced their dependence on a single, or limited number of primary commodities. In this process of diversification, manufactured exports have played the most important part. On the other hand, during the period 1964 to 1975, all but one of the

leading DC exporters of manufactures recorded a growing deficit in their manufactured trade with the industrial countries, the total deficit for this group of DCs growing from \$6 billion to \$28 billion.

Even the semi-industrialised DCs continue to rely on imports for a significant proportion of their requirements of capital goods and machinery, while their manufactured exports consist, in the main, of the traditionally labour-intensive items of textiles, clothing and leather goods. At the same time, many of the industrialising DCs have become increasingly dependent on imports of essential items, particularly food, in part because their desire for industrial growth has taken precedence over the immediate requirements of the agricultural sector. The resulting deficit in the balance of payments has sometimes meant periodic curtailment of imports of capital and intermediate goods for industry, thereby disturbing the stability required for long-term industrial investment. Neglect of the agricultural sector has also had the impact of reducing the domestic market for manufactures, and constraining the supply of agricultural raw materials for industry.

From this broad review of the record of industrialisation, it seems clear that industrialisation is far from being a simple or complete solution to socio-economic ills. It requires that countries take a careful inventory of their resources and potentialities, problems and prospects, and plan their progress carefully with due account both on their domestic economic structures, and on the world context in which they find themselves.

The target structure of industrialisation may be generalised in the following fashion:

(i) *Economic growth*: in order to provide employment opportunities, export earnings, income and economic stability. These objectives must be reached over the short run. For a continuous achievement of these short-run goals, a sustained growth over the long term is needed, through adequate capital accumulation which is generated by the industrialisation process.

(ii) *Distribution goals*: covering, for instance, the interpersonal distribution of income, the allocation of resources over time, the intersectoral distribution of production through a network of interlocking branches, and regional distribution of production and income, for instance, between rural and urban sectors.

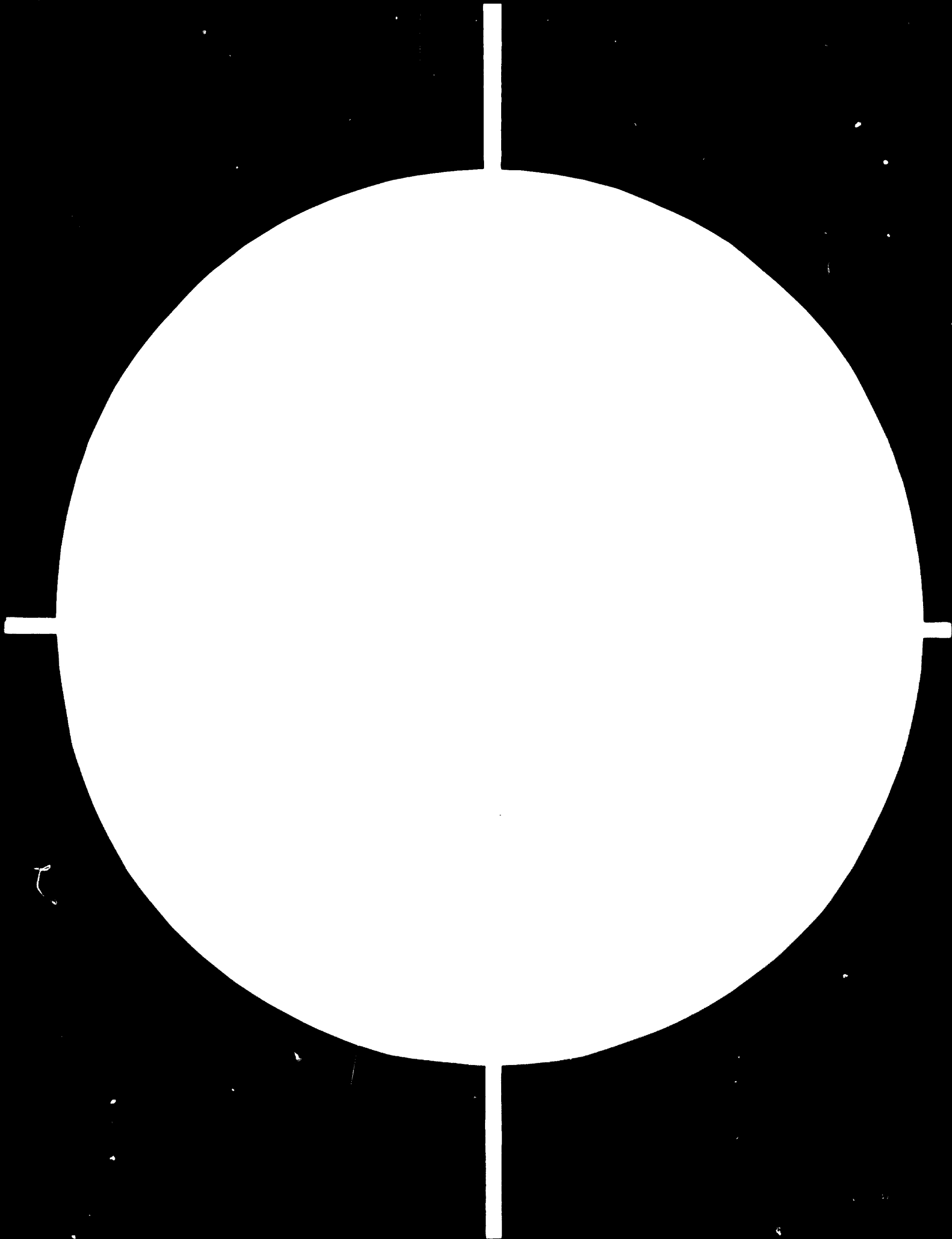
(iii) *Social and other indirect goals*: for achieving non-economic goals. Indeed, as we will discuss below, the industrialisation strategies of certain countries may be directed principally towards social or socio-political goals. Industrial growth can expand the occupational choice of the population of a country, promote greater equality in social as well as economic terms, promote national pride, national self-reliance, and national independence for countries which were until recently colonies of the Northern powers. It can also expand the tax base on which a modern state structure can be erected, and thus make possible the provision of a wide range of social overhead capital. Thus, for purposes of political and social, as well as future economic development, industrialisation has a central role to play.



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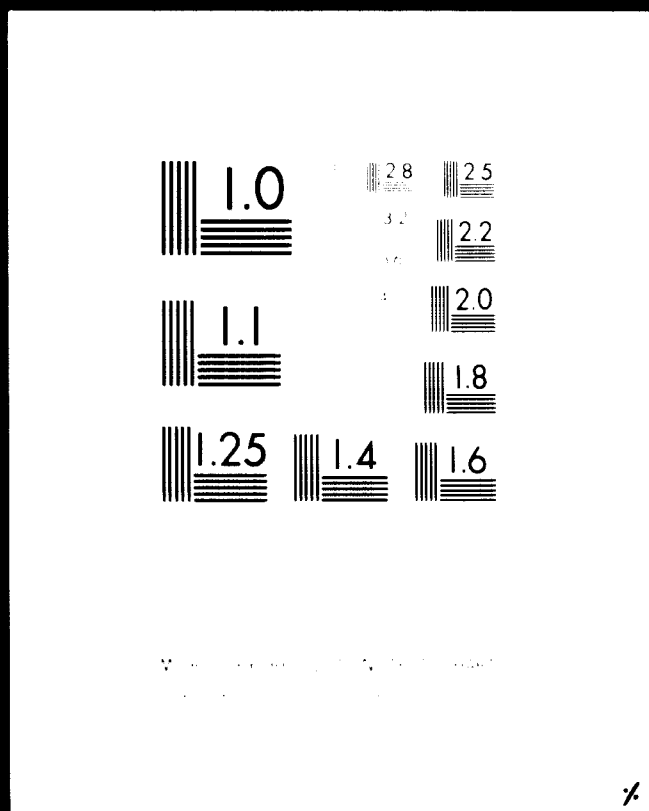


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### 2.1.3. National Industrialisation Strategies

Governments of all countries must take some account of all elements in the list of objectives presented in the previous section. They will, however, place widely different weights on the individual objectives, depending on factors like, for instance, the political legacy of colonialism, the political ideology, the resource endowment, the size and geographical position of the country, as well as the strength and importance of other actors (for instance, TNCs, national enterprises, trade unions). The contrast between policies aiming at creating big export surpluses in the short run and policies oriented towards the meeting of human needs makes this difference clearer.

There is a correlation between the relative weights placed on different objectives and the degree of reliance on market forces and interventionist policies. More specifically, greater weight on distributional, social and other indirect goals presupposes a greater role for interventionist policies and government influence. The concept of an industrialisation strategy takes as its *sine qua non* the need for some positive state action. And the actual tools available to the DCs were products of the experience of the industrial countries during the first half of this century. Specifically, there was a newly recognised capacity of governments to manage the level of aggregate demand and thereby dampen fluctuations in national income, while abstaining from more specific forms of intervention. At the same time the newly emerging socialist group of countries demonstrated a capacity for micro-economic control and regulation. In evolving their philosophy of state action DCs today have typically drawn on the experience of both of these groups, albeit in widely differing proportions.

Development plans of various DCs have diverged for many reasons. The nature of their government institutions differs widely depending in part on the legacy of colonialism and in part on the internal dynamics of their political processes. Their factor endowments are also different, and this automatically alters the range of possible policy options different countries may have. And their existing positions within the current international economic order are, of course, quite disparate.

Two conclusions follow. First, the notion of industrialisation strategy itself may be misleading if it is conceived to be a systematic, consistent and sustained effort in a particular direction. More likely, these strategies are the results of responses by particular actors to obstacles and influences over which they have little or no decision-making control. Second, any taxonomy of strategies will fail to capture the complexities of real situations, in particular those which emerge from insufficient information being available to planners, and the inappropriateness of policy tools.

However, despite these qualifications, analytical clarity is served by a classification of possible industrialisation strategies. In our study we have used three main categories.

The first, and indeed the second as well, could be referred to as the classical strategies followed by DCs in the sense that they were typical of the 1950s and 1960s when growth, and virtually growth alone, dominated their list of political

priorities. The first strategy is that of *export promotion*, whereby the fundamental factor shaping the commodity configuration of a country's industrial development is the structure of world demand.

A country might begin by exploiting to the limit the possibilities of drawing export revenues from its current primary product exports, and base its industrialisation hopes on ploughing the revenues back into further processing facilities, again taking the structure of world demand as the crucial determinant. Combined with a stress on export of labour-intensive manufactures such a strategy implies that the country pins its industrialisation hopes on its ability to exploit its relatively abundant factors of production—cheap labour or natural resources—within the broad confines of the existing international division of labour.

The mechanisms used to supply the demand can vary. Direct foreign investment can play a role in building up manufacturing capacity. TNCs can be persuaded to step up the degree of processing of the resource base within the country, with or without participation by the host country's entrepreneurs and government. Technological choice is constricted by the state of the world market, and the country's industrialisation prospects remain tied to the vagaries of external demand.

The second classical strategy is that of *import substitution*. Countries following this strategy will accept the existing configuration of domestic demand, and implicitly the distribution of income among social groups, and attempt to produce at home what they formerly acquired abroad. There are many possible mechanisms by which the home demand for the formerly imported goods can be satisfied. But one of the simplest (administratively) is the attraction of direct foreign investment. Foreign enterprises in effect assume the combined functions of providing the necessary risk capital, technology and organisational capacities necessary for the establishment of plant and equipment to serve an already existing demand. Alternatively, the government or national entrepreneurs of the host country could engage in a range of joint venture or licensing agreements with the foreign producer to replicate the foreign production facilities in the country. But whatever the precise institutional form, the effects are, broadly speaking, the same. The process of industrialisation is based on processes and patterns pioneered abroad and is to some degree directed from abroad. Instead of being a mechanism by which a country can begin its march along the road of self-sustained industrialisation, the import-substitution path may well serve simply to reinforce the status quo set of international power relations.

Under the above two strategies the indicators used for making industrial investment decisions are determined by either external demand or internal demand mainly expressed by the elite. On account of a lack of purchasing power, human needs of the bulk of the population in the developing countries are often not transformed into effective demand. A third strategy of industrialisation can therefore be prescribed, which would anticipate these human needs, and seek to tailor the industrial production structure to produce goods to fulfil these needs. In carrying out this strategy, income would also be generated directly in the hands of the rural and urban poor to help them to satisfy their

minimum needs for food, clothing, shelter, medical care, education and transportation. This strategy, which UNIDO would wish to call *endogenous industrialisation*, would therefore be different from the two classical strategies in regard to the indicator used for making investment decisions, as well as in attempting to generate income directly in the hands of the people who need it most, rather than depend on subsequent transfers mainly through fiscal means. By definition, the dynamics of growth would come from within the country, calling for a much greater emphasis on self-help or self-reliance, and an urge to make maximum use of domestic resources. Projects would stress a low capital/labour ratio, use less energy, and encourage greater use of local skills, entrepreneurial resources, materials, capital goods and technology.

In order to generate employment and income in the hands of the rural and urban poor, the strategy would involve an expanded role for small and medium industry. A basic feature of the strategy aimed at creating a positive impact on poverty would be a close and indeed symbiotic interaction between farms and industrial enterprises at the rural level, leading to greater equality in the rural-urban terms of trade. Finally, as a strategy based on human needs which as yet are unable to express themselves as effective demand in the market place, the development process would call for a positive economic role for the government, particularly through the creation of enterprises producing not only industrial, but also public goods.

An endogenous industrialisation strategy would depend more on the use and creation of local resources by emphasising projects with the following characteristics:

- use of skills locally available, and developing more and new skills
- low capital/labour ratio as compared with existing types of industrialisation
- use of local entrepreneurial resources
- use of local materials and parts
- use of locally produced capital goods
- use of local technology.

These characteristics taken together, are likely to involve a large element of *rural* industrialisation which should form an essential element of the endogenous strategy. The vast majority of people living in the Third World are to be found in the rural areas. Any reorientation of the industrialisation pattern must begin with this basic fact. At the same time it must also recognise that a pattern of industrialisation closely integrated with the non-farm rural poor cannot serve as a substitute for other reforms badly needed in most rural areas. Enterprises would ideally produce intermediate as well as final goods to meet the changing demands of local agriculture. In this way transport costs may be minimised and surplus labour may be absorbed.

An industrialisation process which is need-based and therefore more resource-using, would also entail a new role for the governments. Industrial planning all too often has meant a vast network of controls over the industrial sector administered by a rapidly growing bureaucracy. Instead of this controlling function, governments would have to try to facilitate the development of local skills and participation.

An endogenous type of industrialisation strategy also has implications for scale of plant and choice of techniques. It envisages an expanded role for small and medium-sized industries which can alleviate high levels of unemployment and income inequality, and at the same time assist the growth of overall national income. Small and medium industry has also come to be associated with the notion of "appropriate" technology, that is to say, with industrial techniques that are appropriate to the resource and factor endowment of the DCs.

The endogenous industrialisation strategy is not to be equated with a closed door policy or autarky. The exchange of goods and services internationally is assumed to constitute an important element in the process of development of the Third World. To the extent that international actors are necessary or useful, care would be given to fitting the flows of finance, technology, and imported materials and components to the productive structure deemed most suited for furthering the social objectives of the strategy. The following section analyses some relations between an endogenous industrialisation strategy and international resource flows.

## **2.2. ENDOGENOUS INDUSTRIALISATION AND INTERNATIONAL FLOWS OF RESOURCES**

It is of overriding importance to underline from the beginning that *endogenous industrialisation does not mean a break with the international system or so-called "de-linking"*. It does, however, carry a notion of interventionist economic policies aiming at establishing selective and planned links with the international environment. Sources, areas and mechanisms for the transactions must be carefully identified and controlled.

In the following, the implications of endogenous industrialisation on the major areas covered in this study will briefly be examined.

### **2.2.1. The Impact of International Trade**

The exchange of goods and services between countries is assumed to constitute an important element of endogenous industrialisation. The role of trade in the national economic structure will also stand more as a function of resource endowments, market size, and level of economic advance than of government policies that assign it a particular function. Very small countries will inevitably find their capacity for controlling their participation in international trade severely constrained by the narrowness of domestic markets and resources, and of the inability to diversify and specialise in the production of manufactured goods through internal trade alone. The larger DCs will have greater room for manoeuvre, but since even they possess only a minute fraction of the world stock of capital, technology and skills, it is essential for them to be able to draw on this stock for their own growth through trade. Possession of substantial natural resources – agricultural mineral and fuel – facing a steady or buoyant external demand, acts as a further incentive to trade, and increases the

capital available to the country for industrialisation. The principle of selectivity in international contacts inherent in this national strategy nevertheless remains valid in the trade area. Surveillance and control over trade will be necessary not only to ensure maximum gain for the country but also to distribute the gains within the country.

Very few countries – and this includes the 19th century early industrialisers following the British lead – have been able to begin a process of industrialisation without attempting to replace manufactured imports through protective policies. At the same time, it is clear that import-substitution has not meant increased self-reliance in the majority of cases: rather, the nature of dependency has changed from dependency on the supply of final consumer goods to dependency on the supply of raw material, intermediate and capital goods imports, and increased inputs of foreign technology, skills and finance. The net result may have been a rise in dependency, not only in the balance of payments sense, but also in terms of control over the national economy and future room for manoeuvre.

Even countries undertaking extremely ambitious operations in order to grow through their own efforts, will nevertheless require substantial imports of capital equipment in the early stages of industrialisation; they will probably require a steady stream of technology-intensive imports in the future as well, in particular branches of manufacturing undergoing rapid technological transformation, to better exploit domestic natural resources, for security and defence requirements, etc. But it is the nature of domestic resources and the pattern of local demand which should mould the structure of production and the pattern of trade with other countries.

### **2.2.2. The Impact of International Transfer of Technology**

Endogenous industrialisation signifies that the justification for planning and control over selective flows in the technology areas is even stronger than in trade. Given the enormous concentration of global technological capacity in a few ICs, there can be no alternatives for the developing countries in the foreseeable future to obtaining most of their industrial know-how from the North. There is little realism in the calls for a totally different set of “appropriate” technologies for the DCs while cutting off technology imports. The financial resources, research, technical skills, machine tools capacity and, above all, markets for new technologies on the scale required, do not yet exist in the Third World. “Endogenous technology” has presently more to do with assimilating, adapting and improving upon imported technology than with the creation of local research and development capacities. It is undoubtedly important to generate products and processes appropriate to domestic needs, resources, income levels and tastes, but it becomes feasible only after an apprenticeship period. During this period, it is vital to avoid or limit the worst effects of imported technology on the domestic industrial structure.

The choice between using foreign technology rather than developing it autonomously, or acquiring it through e. g. the use of foreign technical journals,



purchase and taking apart of equipment embodying technology, or the direct observation of scientists and engineers, is crucial to the question of technological self-help. Evidence suggests that restrictive clauses contained in licensing agreements such as those prohibiting exports, or calling for the transfer to the supplier of innovations or improvements on the imported technology reduce the licensee's incentive to develop technology. Technological apprenticeship is not encouraged through licensing, and opportunities for learning-by-doing are lost. Imports of machinery also tend to be made from parent companies or licensors so that this avenue for choice appears to be inhibited by licensing. Unless the state takes special initiatives to encourage innovation, firms relying on licensed technology also do little R + D.

### 2.2.3. The Impact of External Finance

Many countries have successfully sustained high growth rates in the past with very little foreign capital. The experience of the socialist countries since World War II and of Japan are of particular relevance in this context. Given certain conditions, external capital inflows are therefore not essential for fast growth. Domestic savings and capital formation must in any case be the basis for an industrialisation, aiming at economic independence. However, analysis of the actual patterns of development of most DCs shows that they are unlikely to make the political and structural changes necessary for self-financed industrialisation in the near future. Most of them would continue to need large external capital inputs for some time to come.

The relationship between endogenous industrialisation and external finance varies considerably between the numerous sources: aid, other forms of official assistance, debt relief, export credits, portfolio investment and private bank loans and other forms.

Aid has been closely linked with metropolitan-colony historical flows, military "aid", tied purchases in the donor countries, and, in general, political and economic leverage on national policies that have made it difficult to reconcile with nondependent economic growth. Nevertheless, aid remains indispensable for the resource-poor, low-income developing countries that can neither afford, nor have access to, the resources of private capital markets and direct investment. Aid, however, has been growing slowly – at about 3 per cent per annum since the 1950s, and only a minor proportion has gone to the industrial sector.

Private financial flows have acquired major significance only in the past five years, although export credits were offered in the 1950s to stimulate IC industries. The latter carry short-term (3–7 years) maturities and are of a tied nature, leading to large equipment imports embodying capital-intensive technologies. Private banks began to replace IC governments and multilateral aid agencies as the principal source of medium and long-term external financing for DCs in the mid-1970s. The potentially unstable feature of this last component of external finance is the fact that Euromarket activities are outside the realm of control of both domestic monetary authorities and international official financial

agencies. A recent study of eleven major DC borrowers in the Euromarket shows that the attitude of international private lenders to determining the credit-worthiness of prospective borrowers is similar to that of foreign investors, concerned more with political stability, large market size and broad mineral resource base than with the quality of domestic economic management, or the use to be made of the loans.

The crucial link between external financing and endogenous industrialisation lies in the country's ability and capacity to manage its debt. Several countries have managed to accumulate large international reserves which can be used as a cushion against further payment deficits and as a guarantee that their debt obligations do not affect their credit-worthiness and negotiating capacity with suppliers of external finance. Effective debt management enhances endogenous industrialisation while still having recourse to foreign funds. The important result is to avoid prejudicing high rates of development investment, with the concomitant high import levels. Countries that have become heavily dependent through debt put at risk their own prospects for growth by having to cut back on essential imports.

The elements of debt management reside in operating on the terms on which the debt has initially occurred, the use made of the borrowed capital and the external environment facing the borrower during the period of repayment. Part of self-reliance in financial matters may be defined as developing the abilities to manage debt, in various fields such as training, marketing, pricing and information use. Small borrowers, for instance, who are distant from the main financial centres in the North, have little information on the nature and changes of private financial markets, and have to turn to expensive and possibly inappropriate advice from investment and merchant banks that are not conversant with their development problems. The information required should enable borrowers to shop among alternative sources, to spot trends and market innovations: these might encompass trends in margins, maturities and fees related to the terms of loans, general trends in international liquidity, competing demands for loans from TNCs and OECD governments, and innovations in the standard form of contract.

The question of whether increased international financial flows for DC industrialisation are consistent with endogenous industrialisation cannot be answered in aggregate terms. The pattern of industrialisation and composition of industrial output will determine the degree of dependence on imported capital equipment and intermediate goods for which foreign exchange would continue to be required. However, both on the supply and demand sides, issues of finance for industrialisation cannot be easily separated from issues of finance for the rest of the economy; consequently, financial self-reliance has to be a matter of national rather than sectoral economic policy.

#### **2.2.4. The Impact of Direct Foreign Investment**

The concepts of direct foreign investment (DFI) and endogenous industrialisation appear to be a contradiction in terms. Foreign investment as such

defines a relationship where investments in a developing country are effectively controlled by the foreign sources, usually through an equity participation. Control, of course, can also be exercised through other forms of payment for transferred assets, such as licenses for foreign technology, management contracts, franchising arrangements and supplier contracts for intermediate inputs. Nevertheless, it is certainly conceivable for DFI to play a significant role in particular industrial branches without necessarily influencing the overall pattern and direction of industrial growth; moreover, if its use is consciously controlled and limited in ways that increase domestic capacities it can make a positive contribution to national self-reliance.

A discussion of DFI inevitably focuses on the principal channel through which it is transmitted, the transnational corporation (TNC) – which accounts for over two thirds of all DFI – although governments, public enterprises and non-TNC private investors also undertake foreign investment. The policy principles that emerge from the following analysis of TNC activities, however, should retain their validity for other forms of DFI.

### 2.3. THE IMPACT OF TRANSNATIONAL CORPORATIONS

It is the size, worldwide distribution, production knowledge and concentration of human and physical capital that have made the transnational corporations (TNCs) the most powerful source of investment in the world economy. The TNC has the ability to attract and deploy high-calibre personnel, set up worldwide procurement facilities and marketing networks, use a financial reputation to obtain large quantities of capital on reasonable terms, and take advantage of the accumulated and continually expanding stock of research and development of the parent company. However, it is also this strength of the TNCs that constitutes its major shortcoming from the viewpoint of DC host economies. The package approach of the activities of the TNC threatens to displace domestic efforts by inhibiting the creation and mobilisation of indigenous savings, enterprise, management and technology. The vast current literature on TNCs,<sup>3</sup> and the debate regarding their control in various international fora,<sup>4</sup> give room for only a very selective summary here of those points that relate to encouraging endogenous industrialisation in the DCs. The policy debate is deeply influenced by the number of different actors involved, and by the difference of their interests: DC host governments, local enterprises, the TNCs themselves and their local affiliates, parent governments, national and international unions in DCs and ICs, and international organisations and agreements. Most of these entities are far from monolithic in their perceptions. To take one example, host governments can be decomposed into several ministries, legislative bodies and courts, all concerned with the impact of TNCs, but from different viewpoints.

<sup>3</sup> A good review is contained in *S. Lall and P. Streeten*, "Foreign Investment, Transnationals and Developing Countries", London, Macmillan 1977.

<sup>4</sup> See *H. Schwamm and D. Germidis*: Codes of Conduct for Multinational Companies: Issues and Positions, ECSIM, Geneva, 1977.

At the outset, four points may be highlighted that have emerged from recent debate concerning TNC-DC relationships.

(i) Awareness of the significance and spread of the changes in relationships brought about, *inter alia*, by: the diversification of DFI sources from the USA and UK to other OECD member countries; the rapid growth of managerial, technical and bargaining skills in DCs, both at the enterprise and government levels; the changing universe of cross-national enterprises through the entry of multinational state enterprises, particularly Third World multinationals and joint ventures; and the tendency of North-based TNCs to move away from equity participation towards outright technology sales and other forms of enterprise collaboration.

(ii) Continuing concentration of TNC activity in only a small proportion of Third World countries – those with growing markets and substantial natural resources. Contrary to a common opinion, it is only rarely that cheap labour has been of sufficient attraction for TNCs to set up processing zones in low-income, resource-poor DCs.

(iii) The trade-off between controls and incentives which sets limits to the regulations on investing TNCs that host governments can implement, before they become unacceptable impediments to TNC corporate objectives.

(iv) The fact that the case for TNC investment in DCs has to be built on the offer of access to the productive knowledge and marketing abilities of TNCs, rather than on their financial contribution. The net financial input of TNCs is small, and costlier than other forms of credit.

The main issue regarding TNC activities arises from the fact that there is no a priori reason why the objective functions of developing countries and transnational corporations should match. TNC activities in DCs must be seen in relation to the objectives and perceived interests of the global corporation, rather than to the domestic goals and productive systems of the host DC economies. These global corporations have developed production organisations, management, technologies, and marketing systems in order to meet conditions in the ICs where their major markets lie, and then transposed them to their DC affiliates with little modification. Judging by their success in the markets of most DCs, these systems appear to have matched the interests of controlling groups and existing demand structures, although mass needs and factor endowments in a particular country might have warranted a different set of products, processes and techniques. Studies of management behaviour in TNC affiliates show that the major enterprise decisions are taken in the head offices of the corporations, including those involving investment planning, budgeting and personnel appointments, usually avoiding interference from both home and host governments.

The government of a developing country will have a set of decision-making criteria different from that of the TNC. In pursuing a policy of endogenous industrialisation, the government will be concerned with the full utilisation of its domestic human and natural resources, allocating investments among sectors and products according to social criteria. Conflicts might immediately appear whenever a TNC seeks to establish an industry to assemble components or

produce spare parts in a vertically integrated international structure. The processes at the DC end would be low-skill and labour-intensive. The host country, rather than industrialising, would in most instances be exporting labour time, and the much larger gains to the other factors such as capital, know-how, enterprise, management and marketing would accrue to outsiders. It may be argued that TNCs pursue global economic efficiency, but host governments are legitimately concerned with national efficiency, equity and autonomy. By and large the distribution of benefits seems to favour the TNC as producer-seller rather than the consumers in DCs; hence the conflict.

The major national problem with TNCs and DFI in general, however, is that of control, since the location abroad of the centre of decision-making eludes local government control over sections of its economic policies. Monetary regulation can be overcome by borrowing from the parent company; transfer pricing as a mechanism may be used for avoiding taxation, foreign exchange regulations, anti-monopoly policies, price control, etc.

The realignment of TNC activities with DC development objectives means establishment of some element of national control over production and investment decisions, in order to rectify deficiencies. More positively, developing countries need to make their greatest effort in transferring to themselves some of the capabilities for which TNCs have become an indispensable source: technological know-how and marketing. The over-concentration of R + D expenditure and technological innovation in industry in the hands of the TNCs is well recognised. This is particularly so because most of the TNC R + D expenditure is on the applied side, in order to produce marketable innovations from scientific advances.

Empirical studies have demonstrated that fiscal concessions or other incentives from the host country have little influence on the investment decisions by TNCs. On the other hand, the growth prospects of the host economy are of major importance. National macro-economic policies, sectoral strategies, and plans that govern the shape and duration of investment are therefore the principal bargaining instruments, on the basis of a national economy that is strong enough to attract the investor.

The important prerequisite for a DC government wishing to enter the bargaining process with some chance of success is to have a very clear formulation of its domestic industrial strategy, clearly indicating what the desirable role for DFI is, in what branches or sub-branches of industry, and under what general conditions. This kind of national formulation, which indicates a certain stability of economic and social conditions for the foreign investor, may be more welcome to the latter, in preference to a totally laissez-faire attitude that presages instability and uncertainty in the future. The DC government will then have to judge the results of the trade-off between equity control and other forms of corporate dominance, in order to determine what option will yield the best returns at lowest risk and costs. It will have to have available the results of sectoral analyses of past effects of foreign investment in the industrial sector, of the impact of past legislative strictures on e. g. restrictive business practices, as well as the results of cost/benefit calculations at the project level. Together, these data should give a sufficiently

comprehensive view to enable the government to determine the upper and lower limits of the bargaining range consistent with its overall retention of decision-making power.

There has been a common presumption that DCs might benefit more from non-TNC DFI, particularly from small and medium size foreign investors. At the same time, several IC governments appear favourably disposed towards providing their small entrepreneurs with financial, training and other encouragement to invest in developing countries. There is inadequate empirical evidence to show that the welfare impact of non-TNC foreign enterprises will be necessarily more favourable to the host economies, or even sufficiently high to outweigh the disadvantages of not possessing the same access to frontier technologies, worldwide markets, capital sources, etc. as available through the TNCs. Furthermore, it may be the size and oligopoly features of TNCs that allow them to invest abroad in the first place: in other words, the small enterprise may need subsidies from either home or host governments, or both, to accept the high costs and risks of investing abroad, and these subsidies might make the net contribution negative.

#### **2.4. CONCLUDING REMARKS ON ENDOGENOUS INDUSTRIALISATION**

To summarise the underlying theme of this section, endogenous industrialisation has been discussed with reference to the four main areas where international resource flows take place: trade, technology, finance and direct foreign investment. The functional discussion should have made it clear that endogenous industrialisation is not viewed as an end-state, so that one might be able to point to a country that can be said to have reached this stage at a given moment in time. Instead, it is seen both as a dynamic process and as a guiding or motivating principle. It can be used therefore as a criterion by which governments and other actors can view any proposal for international industrial co-operation. The simplest criterion would be that of deciding whether the country's participation in a particular co-operative proposal would enhance national capabilities for making the fullest possible use of domestic resources, and thus contribute directly to national development. Choices, however, will usually not be so simple, since various trade-offs in self-reliance are likely: between the present and the future, between the different branches of industry; between one functional area of co-operation and another. For instance, DFI may be welcomed today in order to acquire technologies that will enhance the local capability for future generation of technology; similarly loans for setting up capital goods industries should allow future autonomy of production at the expense of current financial dependence. One would therefore have to examine the expected future benefit and cost streams to judge whether the extent of reliance on foreign sources is likely eventually to diminish.

## Chapter 3. Towards the Lima Target: Prospects and Retrospect

### 3.1. PAST TRENDS AND PRESENT STRUCTURE OF INDUSTRIALISATION

The past trends and present structures of industrial development have been analysed in great detail by UNIDO in the special issue of the Industrial Development Survey for the Third General Conference.<sup>1</sup> In this section only a very broad-brush characterisation of the industrial development is given, as a background to the discussion of prospects, contained in the following section.

The international economic order installed after the Second World War had a reasonable record of success. Progress was made towards multilateral tariff reduction, and towards a system of freely convertible currencies. Within this context, trade and production in the industrialised countries moved forward quickly. Whereas between 1913 and 1938 total manufacturing output rose by 2.5 per cent annually and total international trade in all commodities by merely 0.5 per cent per annum, the record in more recent decades has been much more impressive until the mid-1970s, when a pronounced slowdown in production and trade in manufactures became evident. For the growth rates of GDP much the same trend has been in evidence, the third quarter of the century showing a marked improvement in performance over earlier decades.

**Table 3 (1). Exports and Production of Manufactured Goods in Developed Market Economies, 1948-1976**  
(Annual percentage changes in quantity indices)

	1948-58	1958-70	1970-76	1970-74	1974-76
Exports	7.2	10.0	8.0	9.9	4.4
Production	4.8	6.3	3.7	5.3	0.4
Exports/Production	1.5	1.6	2.2	1.9	

*Source:* UN Yearbook of International Trade Statistics 1977 (Derived from the quantum index in special table F).

For the DCs the pattern has been similar. Long-run historical data on manufacturing are not readily available. In terms of GDP it has been estimated that the growth rate of the areas which now are defined as developing market economies ran at about 2 per cent annually up to 1930, whereas the growth rate between 1950 and 1970 typically has been over 5 per cent. Since 1970 the

<sup>1</sup> UNIDO: World Industry since 1960: Progress and Prospects, Vienna 1979.

growth of GDP has in fact been better in the developing than in the industrialised countries. For a more recent period, growth data of manufacturing can be quoted from the Industrial Development Survey.<sup>2</sup> The following table shows the development since 1960 in DCs, Developed Market Economies and Centrally Planned Economies. It is clear from the table that the growth of the DCs has been faster than the growth in the DMECs (except in 1976) and that the two last years the growth has been faster also than in the CPEs.

Despite the impressive record of the recent past in aggregate terms, the distribution of the gains from GDP growth and the industrialisation process has been far from equitable between countries. The process of liberalisation has favoured the trade of the already developed countries.<sup>3</sup> Only a few developing countries have benefited significantly from the general phenomenon of post-war expansion: for some the gains have been marginal; others have lost absolutely.<sup>4</sup> The distribution of industrial capacity and its growth have been highly unequal, with about a dozen DCs accounting for the lion's share, and with countries at the higher-income end of the DC spectrum favoured with the best performance. Although some of the countries with the highest industrial capacities also account for a large proportion of the total Third World population (China, India, Brazil), the vast majority of DCs have scarcely embarked on the path of modern industrialisation.

The Third World can hardly be said to have progressed in its original objective of catching up with the countries of the North. The DCs have remained with a minor share of world manufacturing capacity and exports, and largely failed to diminish their dependence on the countries of the North as the major source of industrial innovation and capital imports, in providing markets for their industrial output, or as sources of finance and investment in industrial plant. From the Industrial Development Survey the following figures of the share of the developing countries in world manufacturing value added can be quoted:<sup>5</sup>

	1960	1965	1970	1975	1977
Share of DCs in world MVA (%)	6.9	6.9	7.3	8.6	9.0

As is well known, this is the target variable for the Lima Declaration and Plan of Action, following which it should reach the level of at least 25 per cent by the year 2000.

### 3.2. SCENARIOS FOR THE FUTURE WORLD ECONOMY

Since 1975, the persistent world recession, and deepset problems affecting currencies, balances of payments and trade, have made the international

<sup>2</sup> UNIDO, *op. cit.*, table II.4.

<sup>3</sup> See chapter 9 below and underlying studies.

<sup>4</sup> See also chapter 2 above and underlying studies.

<sup>5</sup> UNIDO, *op. cit.*, table II.1. Underlying MVA figures are expressed at constant 1970 US dollars. The share for 1977 is preliminary.



economic outlook extremely uncertain. Nevertheless, several projections for the development of the world economy up to the year 2000 are available. As an illustration, certain key data for the manufacturing sector taken from four different projections are presented in table 3 (2).

**Table 3 (2). Growth Rates of World Manufacturing Value Added, by Economic Grouping, 1960–1977**  
(Annual percentage changes)

Year	Developing Countries	Developed Market Economies	Centrally Planned Economies
1960–1965	6.7	6.7	9.1
1965–1970	6.0	5.3	9.4
1970–1975	8.7	3.2	9.0
1976	8.5	9.0	7.8
1977	10.4	4.1	7.8

A systematic and in-depth analysis of several possible scenarios for the future development of international relations and the world economy has recently been undertaken within the so-called Interfutures project in OECD. Certain data on manufacturing are given in table 3 (3). The content of the

**Table 3 (3). Projected Development of Manufacturing Industry up to the Year 2000**  
(Per cent; constant prices)

	Leontieff- Scenario X	Interfutures Scenario			UNIDO Scenario	
		"A"	"B2"	"C"	IDS: "Hist. Growth"	Chapter 9 below
<b>A. Annual Growth from Base Year</b>						
Industrialised Countries	4	4.3	3.8	2.8	5.7	4.4
Developing Countries	8	7.6	7.1	6.4	8.0	8.5
<b>B. DC Share of World MVA by the Year 2000</b>						
	18	16.4	16.7	19.1	13.9	20.1
Price basis	1970	1970	1970	1970	1970	1974
Base year	1975	1975	1975	1975	1975	1974

Sources: Leontieff *et al.*, *The Future of the World Economy* (UN 1977; UN Sales No. E.76.II.A.6). INTERFUTURES, Final Report (OECD, Fut 78(10); Paris 1979). UNIDO, *World Industry Since 1960: Progress and Prospects* (Vienna 1979). Special projection, for the present study (see chapter 9 below).

Note: The Leontieff-Scenario is a "business-as-usual" scenario, but very ambitious concerning the developing countries. The Interfutures scenarios are described in some detail in this section. Scenario A is a "business-as-usual" scenario, whereas scenario B2 is one of intensified redeployment and scenario C a "de-linking" scenario. The scenario from the UNIDO Survey: *World Industry Since 1960* is based on historical growth rates. The scenario from chapter 9 of the present study is the one underlying the trade projections attempting to show maximum possible growth of DC manufacturing exports. For further descriptions and definitions see sources.

corresponding scenarios will be briefly reviewed here, although it is fully recognised that they are conceived from the optic of the industrialised countries and that they cover only a very narrow range of possible future developments.

In the first scenario ("Scenario A"), it is assumed that the process of integration of North and South will continue into the near future, much as it has in the recent past. The international economic environment will be typified by the same type of agreements, the same kind of negotiation for preferential access to markets, the same form of factor movements as in the previous two and a half decades. The North will continue to grow along much the same path as at present, even if the rate of growth is somewhat slower. South/South co-operation would increase in importance, but, on balance, the scenario assumes that North/South integration will continue to take precedence. The DCs' annual rate of growth of manufacturing value added is assumed to run at 7.6 per cent compared to 4.3 per cent in the ICs, and by the year 2000 the South might reach slightly more than 16 per cent of the world's manufacturing output. To help make it possible, aid flows from North to South would accelerate until they reached the long desired target of one per cent of the North's GNP by the year 2000. The scenario envisages no major crises in the international financial mechanism and long-run equilibrium in the balance of payments between North and South.

This scenario in many ways represents the most favourable prognosis one could expect for the world economy, given the existing patterns of factor and commodity flows and the structure of current international institutions. There are, however, strong reasons for doubting its realism. It ignores the recent pattern of deepening structural crises in the international payments mechanism, the problem of energy resources, and the rising tide of Southern discontent over the economic status quo. Furthermore, even under this alternative, a number of strongly negative features become evident:

- (i) The Lima target of 25 per cent of world MVA being produced in the South would not be reached despite the expectation of a substantial shift in the global distribution of manufacturing capacity.
- (ii) While GNP would rise fairly quickly in absolute terms in the South, the disparity between North and South would be hardly reduced.
- (iii) The least developed countries would experience no improvement in their position in absolute or in relative terms.
- (iv) There would be no diminution in the existing relations of dependency between North and South.

Two other scenarios give projections that might appear to be somewhat more realistic. In "scenario B2", growth in the industrialised countries would slow down markedly, while demand would be directed towards goods that have lower energy and raw material content. Consumption of services would rise sharply, and the working day would be reduced. The DCs would move into many of the fields abandoned by the ICs, especially in the field of cheaper ranges of manufactures. The role of TNCs in this specialisation process would be accentuated. But the growth of demand in the North would not be sufficient to

sustain the desired rate of manufacturing growth in the South. Hence, the South would have energetically to develop alternative markets, either in the individual developing countries or among groups of them. South/South co-operation would therefore be greater than under "Scenario A", but the overall prospects of industrial growth would be poorer. A prerequisite for this scenario is the emergence of new values in the ICs and of a will to participate actively in a profound change of the way in which the social product is obtained and distributed. Since social consensus cannot be assumed, this scenario will be characterised by internal conflicts within and between the developed societies and also between them and the developing countries. The problems of debt and solvency of developing countries would be more difficult than in the previously described scenario and the liberalisation of trade movements would be endangered.

A third scenario ("Scenario C") assumes confrontation between North and South. The flows of goods and capital would be curbed, and restricted to complementary fields—the North would permit capital outflows into raw materials and other resource extraction in the South, but not into the building up of potentially competitive industries. The economic hegemony of the strong ICs would be further strengthened. Strong regional blocs would develop in both North and South. All in all, this scenario is the one with the most pessimistic growth prospects for the manufacturing industry in the developing countries. Since the rate of growth would slow down even more in the industrialised countries, the DC share of world manufacturing would be higher than in the other scenarios. But this relative success would be bought at a high price. Its viability and permanence would depend on the degree to which the South could substitute existing North/South relationships with intra-South links. This would have to be done in spite of mounting threats to Southern cohesion. Present tensions North/South would be replicated within the South and richer developing countries would be offered—or apply for—special relationships with various groups of industrialised countries. It should be emphasised that this scenario represents "de-linking" and not "collective self-reliance".

The scenarios outlined above, and other similar ones, are very different as to methods, purposes, time-span and results. Yet despite this heterogeneity, there are certain broad similarities between them. They are all based on the assumption that growth of the ICs will slow down—whether by a little or a lot—and that serious structural problems will grow within their economies. Most scenarios also expect deepening problems in the international payments mechanisms. And under all the scenarios, most of the structural movements anticipated would have unfavourable implications for the future prospects of the DCs.

Even given a comparatively favourable outlook, impediments to technological and financial transfers and declining growth prospects in the North would compound the difficulties of achieving the Lima target. But both the institutional and policy impediments might well worsen. The rising trend towards protection of labour-intensive industries such as textiles in the North, is a major threat to Southern industrial aspirations. Furthermore, huge capital requirements are envisaged in the North for such purposes as achieving alternatives to

dependence on petroleum-based energy, for investments in environmental protection, and for investments in other increasingly capital-intensive activities. The prospects for huge concessional resource transfers to the developing countries would remain bleak under such circumstances.

Within the present international economic order and in the absence of fairly drastic changes in global economic policy, the Lima target will be difficult to achieve. In the next section, an attempt is made to describe the specific requirements of the Lima target in the subject areas treated in this study.

### 3.3. REQUIREMENTS OF THE LIMA TARGET

#### *Growth Rates*

The Lima target stipulates that 25 per cent of the world manufacturing output should be produced in the developing countries by the year 2000. The following table gives a review of certain estimates of the growth rates in manufacturing and GDP which would be required to reach the target.

**Table 3 (4). Growth of Manufacturing Value Added Needed for Achieving the Lima Target**  
(Annual percentage rates)

		<i>Manufacturing</i>	<i>GDP</i>
UNIDO:	The "Lima-Scenario" (1975 - 2000)		
	Industrialised countries	4.9	4.6
	Developing countries	10.5	8.8
UNIDO:	The Lido model, "Economic Core Scenario" (1975 - 2000)		
	Industrialised countries	4.6	4
	Developing countries	9.8	8.1
UNCTAD	(1972 - 2000)		
	Industrialised countries	4.7	...
	Developing countries	9.3	...

*Sources:* UNIDO, *World Industry Since 1960: Progress and Prospects* (Vienna 1979); UNCTAD, *Restructuring of World Industry. New Dimensions for Trade Co-operation* (UN 1978; UN Sales No. E.77.II.D.7); Internal working material in UNIDO.

While these calculations embody different methodologies and assumptions, they do yield broadly comparable results. Long-term GDP growth of the DCs must run at about double the rate of the ICs, if the Lima target is to be achieved. If the rate of growth of manufacturing were 4-5 per cent in the ICs, it would have to be 9-10 per cent in the South, compared to an actual growth rate in the South of around 7 per cent over the period 1960-1975.<sup>6</sup> If the ICs were to continue to grow at the rates of the 1960s and the early years of the 1970s, the South would have to grow at over 11 per cent per annum. However, it is unlikely that the ICs will be able to continue to grow at the rapid rate typical of this period. Both DMEC and Socialist Eastern European countries are expected to

<sup>6</sup> UNIDO, *World Industry Since 1960: Progress and Prospects*, Vienna 1979, Table II.4.

decelerate over the next few decades.<sup>7</sup> The acceleration of the DCs necessary to achieve the Lima target will be proportionately less, but with the growth assumptions currently used (cf. table 3 (2) above) it would still be about 9–10 per cent annually. It may be more difficult for the DCs to accelerate their own growth rates in the face of a deceleration in the North, with the expected attendant reduction in the North's capacity to absorb Southern manufactures and provide productive factors.

### *Investment and Financing Requirements*

The requirements of the Lima target in terms of *Annual manufacturing investment* by the year 2000 are roughly estimated at \$450–500 billion (measured at constant 1975 prices). This calculation is based on data from the Lido model projection briefly presented in the table above.<sup>8</sup> It implies that the proportion of total investment which is allocated to industry, will have to rise from 18 per cent in 1975 to 22–25 per cent by the year 2000.

To the extent that domestic savings in the South are inadequate—and under most realistic assumptions they would appear to be so—reliance would have to be put on *inflows of foreign capital*. In chapter 5 of this study it is estimated that by the year 2000 the total net foreign capital inflow for the needs of the whole economy, under certain circumstances, may need to be as large as \$750 billion at 1975 prices for the Lima target to be met. This would correspond to almost 6 per cent of the GDP of the ICs. Of this total capital inflow of course, only a fraction, say between \$100 and 200 billion, would be invested in industry.

The financing and investment aspects are discussed in detail in chapters 5 and 6. It should be pointed out here that achievement of the Lima target would necessitate a considerable acceleration in all sources of financing. *Direct foreign investment* which is one of the subject areas of the study, would probably have to increase to even ten times its present annual level, if it were to maintain the same share in financing of manufacturing investment as at present. Chapter 6 contains an extensive discussion of alternative forms of enterprise co-operation.

### *Trade and Technology Requirements*

The requirements of the Lima target with regard to *trade* in manufactured goods are discussed in chapter 9. These projections imply that export of manufactures from the DCs even to the limit of the absorptive capacity of the ICs, would not be high enough to permit growth of industry in the DCs compatible with the Lima target. Even if the exports of manufactured goods from the DCs to the ICs cover as much as 65 per cent of their imports of

<sup>7</sup> ECE, "Overall Economic Perspective for the ECE Region up to 1990", ECE/EC.AD 117.

<sup>8</sup> The Lido model gives value added growth rates for sectors and investment figures for the economy as a whole. The estimates of manufacturing investments have been derived through an additional assumption of ICOR-values of 3 or slightly higher.

manufactures from the developed countries in the year 2000, the Lima target will not be reached. In 1974 the corresponding figure was less than 25 per cent.

The requirements of the Lima target relating to *technology flows* cannot be computed in the same way as has been done for investment, trade and finance. This problem is discussed in chapter 7, and the requirements in the form of qualitative changes in the nature and terms of technology transfers are spelled out.

### 3.4. CONCLUSIONS

The preceding analysis of industrial trends and requirements has been on a very general and somewhat abstract level. It has not been possible in this particular context to make a disaggregated analysis, e. g. as to sectors or regions.<sup>9</sup> But there are certain conclusions that can be drawn from this very broad analysis and which are relevant for the approach taken in this study.

First it seems reasonable to expect that global economic and industrial development for a long time will be characterised by slower growth than in the 1960s and 1970s. At the same time, for different reasons, attempts will be made by several groups of countries to increase their share of a world market, which is growing at a slower rate than before. If this takes place in a competitive framework, developing countries may benefit from comparative cost advantages. It is more likely, however, that it will lead to increased protectionism, isolationism and possible conflicts within and between countries. In any case, the political will and economic capability of the North to make concessional financial and other resource transfers might remain limited. Second, the Lima target may be difficult to reach, since its growth and market access requirements are of such enormous magnitudes that they may not be forthcoming without drastic political changes.<sup>10</sup> Third, there is a great need now to develop new mechanisms, methods and instruments for stimulating the industrialisation of the developing countries. Such new methods must clearly be based on the principle of mutual benefits for all participating countries concerned, if they are to win approval at all.

One other conclusion stems from a study of overall economic tendencies, which reinforces the principle expounded in chapter 2 above. Many features of the expected, or most likely, developments detract from the interests of the industrialised countries, and would prevent full utilisation of their resources, particularly in the 1980s. Increased co-operation with the developing countries would, far from constituting a threat, offer new possibilities for the revival of production and employment also in the North. In a recent OECD study<sup>11</sup>

<sup>9</sup> For a disaggregated analysis of past trends, as well as some projections, see UNIDO, *World Industry Since 1960: Progress and Prospects*, Vienna 1979. The UNIDO Secretariat, particularly the Negotiations Section and the International Centre for Industrial Studies, issues regularly studies on conditions and prospects for different regions and industries. For reference, see e. g. *Annual Report of the Executive Director*, UNIDO 1978. Appendices E and J.

<sup>10</sup> For an opposite view see *Tinbergen and Singer in: Industry and Development*, no. 3, 1979.

<sup>11</sup> OECD, *The Impact of the Newly Industrialising Countries*, Paris, 1979.

evidence is presented of a considerable positive net employment effect 1973–1977 in the OECD area stemming from its trade with newly industrialising countries. These potentialities could be utilised better and quicker if the South, to a growing extent, were able to act as a strong and independent partner in the co-operation.

The analysis and conclusions briefly referred to above, form the background for the approach of this study, which is to propose new forms and methods for increased international co-operation in the field of industry, based upon the dual principle of global interdependence and collective self-reliance.

# Chapter 4. Towards the Lima Target: Restructuring and Redeployment

## RECOMMENDATION FOR SUPPORTING PROGRAMMES

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### 4.1. INTRODUCTION

Changes in the international division of labour are continuously brought about by the international flows of goods and services. The NIEO and the Lima target require an intensification in the international exchange of manufactured goods and hence in industrial specialisation.

Specialisation according to comparative advantages by definition creates a net increase in income to the world economic system. But there are also costs involved in the specialisation process. Some units will no longer be competitive and will have to be closed down and the resources put to use elsewhere. This represents a cost for the employees – and maybe owners – of these plants, often in the form of intermediate structural unemployment. The benefits will accrue to employees and owners in the expanding industries, or to the consumers of goods made cheaper by the specialisation. The adjustment process will entail a reconciliation of costs and benefits of specialisation and the distribution of the net gains arising from specialisation.

A process of increased specialisation meets less resistance in a climate of growth and business confidence. The general demand for labour will be high and profitable investment opportunities will be at hand. In a climate of recession and stagnation the situation is different. The advantages of continued specialisation still exist, but it becomes more difficult to match the gains and the costs of adjustment, particularly at the local level. This has led in many cases to protective tendencies, to subsidies and hidden support of ailing industries.

The restructuring of the world industry that will be necessary for achieving the Lima target must be brought about *inter alia* by improved market access and



by adjustment policies in the ICs.<sup>1</sup> Economic factors and political ideologies will determine to what extent the adjustment process will be organised i. e. take place with a minimum of disruption and involve IC government intervention.

One feature in the international re-structuring process which has been given special emphasis in international discussion during recent years is the concept of redeployment of industries.<sup>2</sup> It should be stated at the outset that the redeployment of industries in this context does not necessarily imply the dismantling of uncompetitive industrial capacity in one country and its re-establishment in another. The concept of redeployment is broadly defined here as a form of international industrial co-operation for resource transfers aimed at establishing productive capacities in the developing countries, with a view to increasing these countries' share in total world industrial production, on the basis of each country's factor and skill endowment, development objectives and other socio-economic considerations. Redeployment in this wide sense would thus mean the shift of production factors from one production activity and/or location to another.

The remaining part of this chapter is devoted to a discussion of redeployment problems as defined above. It starts with a review of some practical issues and problems concerned, based on the experiences of a study programme on redeployment within UNIDO and of the UNIDO System of Consultations. Thereafter some guiding principles for future international co-operation in this field are outlined and the chapter ends with concrete recommendations for action by developed countries, developing countries and international organisations.

## **4.2. UNIDO EXPERIENCE OF THE ISSUES INVOLVED**

### **4.2.1. Possibilities and Constraints for Redeployment**

Redeployment can be seen to involve decision-making by (a) the entrepreneur in the developed country; (b) the company or partner in the developing country; (c) the government of the developing country; and (d) the government of the developed country. The precise role of the governments can be expected to vary according to the economic system in the country in question. The developing country government generally assumes a role for (a) defining national development objectives and priorities; (b) establishing a set of policies to direct and regulate foreign trade and the flow and allocation of resources; and (c) defining the forms of international industrial co-operation it desires, and the products involved. Similarly, the government of the developed country generally assumes a role of determining at least the framework for the operation of the country's enterprises and for its external trade relations.

<sup>1</sup> See Resolution UNCTAD 131 (V) on Protectionism and Structural Adjustment.

<sup>2</sup> See, for instance, General Assembly Resolutions 3362 (S-VIII) and 31/163 where developed countries are urged to encourage redeployment of certain of their industries to developing countries. In the same resolutions UNIDO is requested to prepare studies including policy recommendations for promoting redeployment.

UNIDO has undertaken surveys at the enterprise level in a number of developed countries to ascertain industrial entrepreneurs' interest in and motivation for participating in redeployment activities. The surveys reveal that significant interest and motivation exist for redeployment of certain industrial capacities to the developing countries. In practically all industrial subsectors, companies indicate that they consider redeployment a means of rationalising their production or making better use of existing resources. Apart from motives of cost reduction and the need to respond to changes in internal demand, the companies state another important reason for considering a resource transfer to a developing country: appreciation of the fact that if a continued commercial link is to be maintained with the developing countries, the companies must participate on a longer-term basis in the establishment of industries in those countries. The surveys and subsequent follow-up activities also showed, however, that various constraints in developed and developing countries seem to impede realisation of the redeployment potential. These are briefly described below.

First, small- and medium-sized firms in developed countries frequently lack the staff, experience and international contacts needed for establishing and maintaining a co-operation scheme with a developing country. The companies in the developed countries seem also to lack up-to-date information on those facts about developing countries which are considered crucial for any redeployment decision. Second, there is sometimes a lack of well conceived industrial projects and of defined areas of investment priorities in developing countries. Thus, there may be no well functioning mechanism or established process by which the priorities of the developing (host) country and the development potential of industry in the developed countries can be matched.

Third, and very importantly, companies in developed countries seem to be confronted with uncertainties as to government policies in both developed and developing countries affecting, *inter alia*, the importation of goods and components and the transfer of resources. There are indeed indications that policies and regulations in developed countries impede the realisation of industrial redeployment opportunities. Companies fear that the envisaged re-import of the products of the redeployed industries may be hindered by the application of tariff and/or non-tariff barriers in the developed country or regional grouping in question. There are also indications that various policies, regulations or practices in developed countries increasingly seem to impede actual capital transfers and/or the planned relocation of some of a company's activities to a developing country. This is so, even if such a relocation would be commercially called for and would constitute a normal step in the adjustment or specialisation process within an industrial company. Such restrictive policies in developed countries are the result both of uncertainties related to international developments, and of the concern for maintaining employment.

However, the pressure on the developed market economy countries to adjust their industrial production and employment structure, is only to a very limited extent due to the increasing importation of manufactures from the

developing countries. This is demonstrated in recent UNIDO studies.<sup>3</sup> The pressure for adjustment would appear to stem more from the combined effect of technological change, shifts in demand and domestic policies, and changes in international trade patterns resulting from changes in relations with other developed countries, including the centrally planned economies, then from changes in trade patterns with developing countries.

Although structural crises in the developed countries would need to be met by forceful policy measures on the part of the governments concerned, such measures should not be directed against the developing countries, disrupting resource flows to, and trade with, those countries. The latter type of measures is based on the illusion that trade patterns with the developing countries are a significant determinant of structural problems, and that these problems can be exported to the Third World.<sup>4</sup>

Changes in industrial structure are caused by a combination of three major forces: first, a change in product-mix due to changes in the national and international demand structure; second, a change in the production process leading to a rising capital intensity, and a rapidly rising labour productivity in most industrial branches; third, a change in the geographical distribution of productive capacity

Rising productivity has by far been the greatest cause of recent structural change. During the past ten to twenty years, international competition and rising wages in the developed countries have brought about an acceleration in the rates of technological change and rationalisation of industrial production processes.

The second most important factor determining the rapidity of structural change has been change in the composition of final demand. The continuing appearance of new products and changes in income distribution mean dramatic shifts in the composition of demand both for consumer goods and capital goods. During the past two decades, developments in the electronics industry alone have left few products or production processes unaffected. The geographical relocation of industrial productive capacities ranks third as a determinant of structural change. Such relocation is not primarily occurring as redeployment to the developing countries, but first and foremost as an increase in specialisation among the developed countries. Despite the fact that redeployment has been gaining momentum and importance for the developed countries, displacement of labour by productivity increases surpassed displacement by imports from developing countries by a ratio exceeding 20 to 1. During the past ten to fifteen years, these factors have produced a similar pattern of structural change in all the countries investigated.

During the past decade, cost structures and labour market conditions in some developed countries have led firms to redeploy industry to other countries, including developing countries in order to retain international competitiveness.

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<sup>3</sup> The Impact of Trade with Developing Countries on Employment in Developed Countries – Empirical Evidence from Recent Research, Working Papers on Structural Changes No. 3, UNIDO/ICIS/85.

<sup>4</sup> *Commission of the European Communities, Europe and the Third World – A Study on Interdependence*, Luxembourg, 1979.

High labour cost, newly levied environmental costs, and rising raw material and energy costs in developed countries have contributed to make a growing number of developing countries more economic producers in certain industrial activities. Such developing countries possess vigorous management, an abundant supply of labour, greater access to raw materials, lower anti-pollution costs, and growing access to modern world-wide transport and communication facilities. The introduction of protectionist policies or other measures by the developed countries could delay the impact of the competitiveness of industry located in the developing countries, but it would result in more painful readjustments in the ICs, the longer the delay. It is in the long-term interest of the industrialised countries that the international division of labour should continue to develop along the lines established during the past decade: continued growth of labour-intensive and raw material-intensive industry in the developing countries; increasing redeployment of capital-intensive production in the late stages of the product cycle to the developing countries; maintenance of capital-intensive sectors in the early stages of the product cycle in the developed countries; and maintenance and expansion of skill-intensive industry – industry requiring a more sophisticated service sector, expensive R+D facilities, and a better educated labour force – in the developed countries.

#### **4.2.2. UNIDO's System of Consultations**

The Lima Conference recommended that UNIDO should include among its activities a System of continuing Consultations at the global, regional and sectoral levels with a view to facilitating the restructuring of certain productive capacities existing in developed countries and the creation of new industrial facilities in developing countries. UNIDO should also serve as a forum for negotiation of agreements in the field of industry between developed and developing countries and among developing countries themselves at the request of the countries concerned.

Consultations have already been convened at the sectoral level covering the iron and steel, fertilizer, petrochemical, leather and leather products, vegetable oils and fats and agricultural machinery industries in the period of 1977 – 1979. In 1980 and 1981, further consultations will be convened on most of these sectors and on three additional sectors: the agro-based, capital goods and pharmaceutical industries; in addition, consultations will be convened on industrial manpower training and industrial financing, topics which have proved to be important in all sectors of industry and require global discussions.

The conclusions and recommendations of a consultation meeting provide a basis for their subsequent implementation by all parties concerned. The consultations have shown, however, that some of the issues that are suggested for discussion cannot be finalised without an element of negotiation between the interested parties. Consultations are also helping UNIDO to play its central co-ordinating role in the field of industry by providing a global forum for (a) assessment of world-wide changes in various industrial sectors, (b) identification of industrial sectors and projects in which investment can be promoted, (c)

consideration of alternative technologies and (d) a context in which UNIDO technical assistance can subsequently be requested.

Among the seven industrial sectors that have been the subject of consultations, results have been achieved which give a broad indication on such issues as:

- (a) the developing countries' share of sectoral world production by 2000;
- (b) the problems developing countries face in achieving the sectoral goals and a basis for negotiation and co-operation;
- (c) the need to develop improved and longer-term forms of international co-operation for establishing the production facilities in developing countries specific to the industrial sectors covered by consultations;
- (d) the need to improve the terms and conditions of financing required for the establishment of plants and associated infra-structure in developing countries;
- (e) the scope for greater co-operation between developing countries themselves;
- (f) the establishment of a mechanism to monitor progress in creating new industrial capacity in both developing and developed countries.

#### **4.3. GUIDING PRINCIPLES FOR FUTURE CO-OPERATION**

(i) The first principle is the acceptance by industrialised countries' decision-makers of the continuing redeployment process in its widest sense. This implies, first, for the governments of the industrialised market economy countries, the facilitating of structural adjustments to the changing international division of labour, including the acceptance of imports of manufactures from developing countries. Second, the acceptance of redeployment implies that appropriate support be given by relevant public bodies in industrialised market economy countries to the actual resource transfers ("direct", "active" redeployment) by industrial enterprises to developing countries. For industrialised centrally planned economy countries, redeployment can be seen as industrial co-operation with developing countries within the framework of both countries' long-term plans, strategies and prospects. An acceptance of redeployment in this sense by the industrialised centrally planned economy countries would imply a further increase of these governments' bilateral co-operation schemes with developing countries, both in regard to resource transfers and to the import of manufactures from the developing countries.

(ii) The second principle relates to various preconditions to redeployment as conceived by the developing countries, despite acceptance of redeployment as an important instrument of industrialisation. Redeployment should not contribute to unacceptable environmental pollution, increased one-sided dependence, and the transfer of uneconomic technology. It should not rely on foreign initiatives, and should be conceived in conformity with the development plans and industrial policies of the developing countries. For this reason, a continuing

dialogue is imperative, since redeployment implies a wide range of instruments and represents a very complex problem of co-operation, involving parties with different interests. The developing countries, therefore, seem to advocate a more active role for governments in the redeployment process. They have, in addition, suggested that UNIDO conceive redeployment as a long-term activity in which UNIDO would serve as a catalyst in the redeployment process. UNIDO might propose areas, instruments and systems of co-operation that would allow developing countries to improve their use of domestic resources, to reduce dependence and to increase industrial integration and domestic industrial value added. Thus, redeployment should focus on the long-term industrial restructuring process and should not lead to a mere short-term relocation of non-profitable and polluting industries. Developing countries have committed themselves to accelerating this process, by adopting policies aimed at overcoming existing obstacles and increasing redeployment.

(iii) The third principle derives from the fact that foreign firms, obviously redeploying on a purely commercial basis, are frequently charged with having (a) introduced unsuitable products and inappropriate technologies; (b) applied centralised management, which implies dependence and impedes independent managerial developments; (c) produced inefficiently behind high tariff barriers; (d) employed various restrictive practices in regard to exports; and (e) made arrangements and policies on transfer prices, royalties, interest and management fees which minimise local profits and taxes. In order to rectify these shortcomings of international co-operation, developing countries should attempt to improve their policies regulating direct foreign investment.

(iv) The fourth principle entails identification of constraints in developing countries in absorbing and reaping the benefits of redeployment. Previous analyses of such constraints in some developing countries have pointed often to the smallness of markets and the lack of the requisite production factors, such as skilled manpower, capital, material inputs, and technical and social infrastructure as being the main obstacles, which may appear difficult to alter in the short term. UNIDO research, however, reveals that behind these constraints lie other shortcomings, which are more concrete, yet changeable. Market size is not always a constraint and sometimes arises because of lack of effective domestic demand. It should also be pointed out that there are problems to be overcome in enlarging markets by means of co-operation between neighbouring developing countries.

#### **4.4. RECOMMENDATION FOR SUPPORTING PROGRAMMES**

##### *Within the Framework of Global Interdependence*

#### **4.4.1. Extended Use of UNIDO's System of Consultations**

A non-disruptive international restructuring of industrial production would, for economic, social and political reasons, require *an institutionalised arrangement of regular consultations between the partners in development*. It is proposed that the UNIDO System of Consultations gradually be expanded so as

to assume the responsibility for this function. The system of consultations could provide a forum for an international exchange of views and information affecting a gradual restructuring of world industrial production.

Two ongoing programmes of UNIDO reinforce the effectiveness of its consultation system as a mechanism for orderly handling of structural change. Studies already completed by UNIDO have provided valuable and precise insights into some of the structural adjustments the developed market economy countries could make, in response to changes in the international division of labour. Examinations of adjustment policies among the centrally planned economy countries have found that redeployment in these countries is viewed as a form of industrial co-operation with developing countries within the framework of both countries' long-term plans, strategies and prospects. Such studies suggest that the adoption of anticipatory adjustment policies in individual ICs would ensure non-disruptive development of the ICs and also co-operation with DCs. As a counterpart to the studies of structural changes in ICs, UNIDO's programme of investment promotion is currently working at the enterprise level in the ICs, in order to match potential resource transfers arising from restructuring, with defined needs for similar industrial investments in the DCs. These two macro- and micro-programmes impart a welcome degree of practicability into the proceedings of the consultation system.

The UNIDO System of Consultations provides a forum in which the realisation of the restructuring of world industrial capacity and questions of redeployment can be discussed in a specific and concrete way. Discussions can relate to industrial sectors or to topics, such as industrial financing. The system should be expanded to cover additional industrial sectors. So far consultations have been arranged for six industrial sectors in 1977-1979. For 1980 and 1981 consultations will be convened on most of these and a further three industrial sectors. The latter will, however, be fairly aggregate sectors: agro-based, capital goods and pharmaceutical industries. There is therefore scope for expansion and disaggregation. It is also important that an effective regional implementation of the recommendations and conclusions emanating from the consultation is secured.

Further steps must be taken to make still more effective use of the system of continuing consultations. If the South develops and expresses its own views on restructuring and redeployment in this forum, the System of Consultations can become an effective new instrument of international industrial co-operation.

## **4.5. ADDITIONAL SUGGESTIONS**

### *Within the Framework of Global Interdependence*

#### **4.5.1. Suggestions for Policy Analysis and Public Support for the Adjustment in ICs as well as Studies of Structural Changes and Policies**

A prerequisite for an accelerated industrial redeployment process would be the establishment in individual developed countries of anticipatory adjustment policies that would ensure a non-disruptive development of—on the one

hand—the developed country in question and—on the other—of co-operation with developing countries. To this end such policies should form a coherent set of measures affecting internal socio-economic developments and foreign trade and co-operation with developing countries. The policies should be designed to reconcile with established national objectives, prospects, and aspirations of developing countries for a new international division of labour.

It is recommended that particular attention is given to *the establishment of analytical instruments for facilitating such adjustment policies*. As a basis for anticipatory policies, ex post structural analyses and prospective analyses of structural changes would need to be undertaken in the individual developed countries on a continuous basis. This entails an assessment of the effects of the various determinants of structural changes in industry and a regular surveillance of pertinent trends in industrial subsectors as to the development of technology, final demand, and international trade. If adjustment is to be undertaken in a systematic way and if socio-economic disruptions are to be minimised, the question of social costs and adjustment limitations need to be taken into account. An awareness of the costs, limitations and implications of adjustment constitutes an essential prerequisite for effective and smooth restructuring.

In order to facilitate redeployment of industries, support should be provided in the industrialised countries to individual industrial companies. This would help small- and medium-sized industrial companies—which do not possess the required experience and resources for initiating and carrying out on their own a transfer of investible resources, know-how, etc. to developing countries—to become involved in international industrial co-operation. A suitable form of official support to industrial redeployment, possibly directed primarily to the less advanced of the developing countries, might be the *establishment in individual developed countries of a public fund for equity investment in the developing countries*. Such a fund would permit further investible resources to be borrowed on the capital market and could also pre-finance relevant market and pre-investment studies in developing countries. The fund would thus supplement the enterprises' investible and other resources required for redeployment and would also reduce risks for the entrepreneur. The fund could be used specifically to direct resources to a particular region of developing countries.

Rather than subsidising ailing industries through protection and exporting adjustment needs to trading partners, a range of policies and measures need to be established to ensure adjustment through timely reallocation of resources in the domestic economy, as well as the redeployment of certain industrial capacities to developing countries.

Various measures have been applied or can be applied to support domestic adjustment in the individual developed countries by facilitating the acquisition of new skills, the mobility of manpower, the development of technologies for new products and processes, and the application of these technologies. Among such measures, the *establishment of national public funds for financing structural adjustments* may prove to be an appropriate instrument to supplement market mechanisms. Such a fund would have to be integrated in the general adjustment policy package but designed to meet a specified purpose.



A regular exchange of *experience and views on adjustment policies* in individual developed countries and an analysis of their domestic and international implications as well as of their consistency with other policies and measures, would need to be undertaken at the national and international levels. To this end, it is proposed that suitable institutional arrangements be conceived.

In order to enable decision-makers in developed and developing countries to obtain regularly an overview of current and expected international developments in the manufacturing industry, the *prospective analyses of structural changes need to be pursued on an international level*.<sup>5</sup> It is suggested that the international community pursue studies on (a) structural changes in developed countries, (b) industrial development plans and prospects in developing countries and (c) world-wide sector developments. Developed countries – market economies as well as centrally planned economy countries – are called upon to participate in these efforts. These studies would be consolidated and disseminated on a regular basis and serve as an important input, both for adjustment policies in developed countries and for formulation of strategies and policies in the developing countries. An international exchange of pertinent data should be organised.

#### **4.5.2. Expanded Redeployment Services**

Previous studies showed that there is a need for a greater degree of international activity in functioning as a catalyst and as an information source at the project level in order to bring together the partners in the redeployment process. It is proposed that services be provided to potential partners at the industry level by dissemination (1) of development plans and project information and (2) of pertinent data on rules, regulations and conditions in developing countries, on current and anticipated redeployment opportunities in the developed countries, and on international development in individual industrial subsectors.

UNIDO's Investment Co-operative Programme has already embarked on a programme of this kind. This programme has brought to the attention of a number of interested firms in developed countries the possibilities existing for them to co-operate in the setting up of projects desired by specific developing countries, and it has placed these firms in contact with potential partners.

It is proposed that activities in this field be gradually expanded and strengthened and that it serves as a central point for the various bilateral redeployment institutions and funds.

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<sup>5</sup> In pursuance of GA Resolutions 31/163 and 33/78, the UNIDO Secretariat has been undertaking a series of studies relating to redeployment of industries from developed to developing countries and to structural adjustment in developed countries. The research programme on redeployment covers a very broad spectrum of relevant interconnected issues and is being reported on regularly to the Industrial Development Board and to the General Assembly. See ID/B/222.

## Chapter 5. International Financial Flows

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### 5.1. INTRODUCTION

Shifting industrial production towards the South, as envisaged in the Lima target, requires a corresponding change in world patterns of investment, technology generation and diffusion, and trade. Since financial considerations have an important place in each of these, the attainment of the Lima target will require changes in the pattern of international finance as well. Furthermore, since the aggregate financial requirement associated with the Lima target far outstrips the savings capacity of the developing world, a continued high level of North/South financial flows will be required. Thus the financial challenge is twofold, namely to:

- (i) identify means to increase the volume and improve the terms of aggregate North/South and South/South financial flows required to meet overall development goals;
- (ii) identify financial policies, instruments and mechanisms to support changes in North/South and South/South patterns of investment, technology and trade.

It should be noted that this chapter of the study deals exclusively with external finance. Wider measures have to be taken *within* developing countries also to increase savings ratios and to reduce the investment-savings gap: the attainment of the Lima target is primarily in the hands of the developing countries themselves, using largely their own resources.<sup>1</sup>

<sup>1</sup> See the discussion in UNIDO, *World Industry since 1960: Progress and Prospects*, Vienna, 1979, chapter IX, Financing Industrial Development.

## 5.2. AN OVERVIEW OF THE INTERNATIONAL FINANCIAL SYSTEM

There are two sets of factors which in recent years have dominated the international financial system and which are likely to continue in the foreseeable future; first, the accumulation of excess liquidity in the private banks in the North; second, the continuing high rate of inflation, the severe monetary and exchange rate instability and the pronounced underutilisation of human and productive resources.

There are complex interrelationships between the factors mentioned; taken together, however, their impact has been to make the International Financial System prone to crises and increasingly fragile. With growing interdependence of the world economy, this has generated a degree of uncertainty which has depressed incentives to invest in industry in both industrialised countries and the Third World. As a consequence, in the developed market economy countries, there have been stagnant growth rates coupled with historically severe inflation. This has led to increased protectionism in the North, tending to deepen the present recession and retard the progress of the South.

Some of the trends discussed above will be briefly illustrated in the following. The development of *prices* is illustrated by table 5 (1), which shows that consumer prices in certain major market economy industrialised countries rose at an annual average rate of over 10 per cent between 1972 and 1977 as against 3.6 per cent in 1960–1970. The change in manufacturing *capacity utilisation* is illustrated in figure A. The utilisation rates have been calculated at below 85 per cent in 1977 for a number of the major market economy industrialised countries. It is clearly seen from figure A that this is significantly below the utilisation rates in the period 1966–1974.

**Table 5 (1). Seven Major Industrial Countries: Dispersion of Inflation Rates, 1960–1977 (Percentage)**

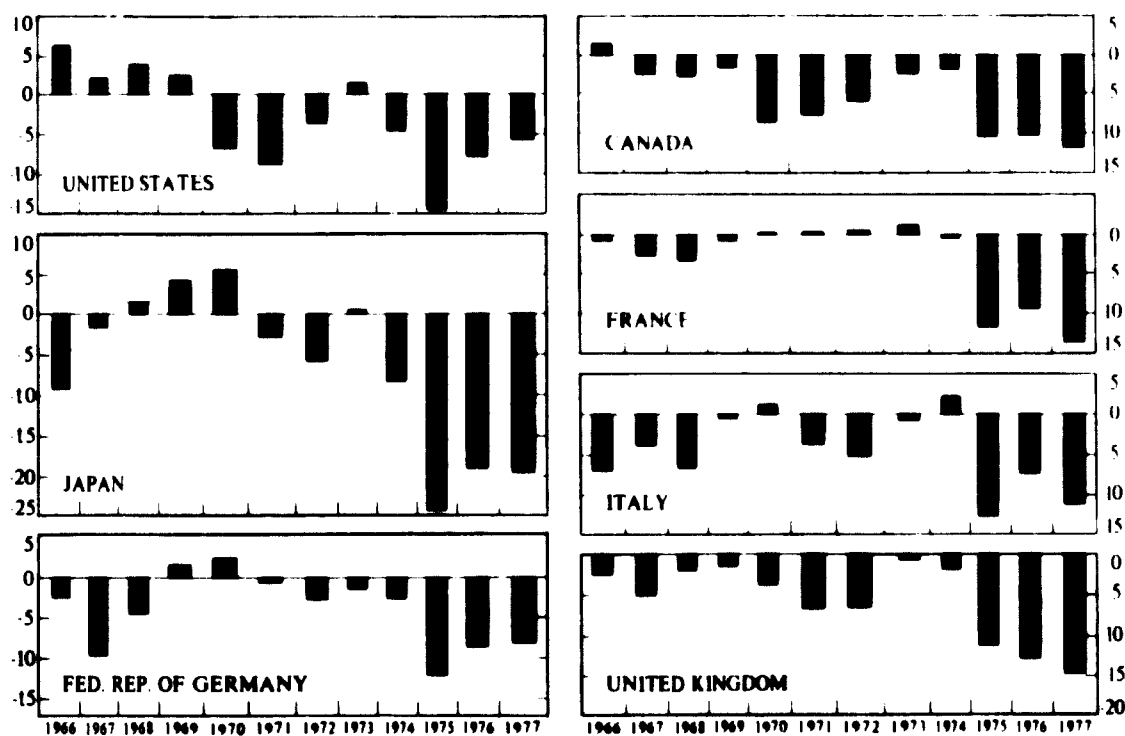
	Mean Rate of Inflation <sup>a</sup>	Dispersion of Inflation <sup>b</sup>
1960–1970 average	3.6	1.5
1972	5.3	1.1
1973	8.6	1.9
1974	14.6	5.4
1975	12.9	5.5
1976	10.0	4.5
1977	9.8	4.5
1972–1977 average	10.2	3.8

Source: IMF, International Financial Statistics.

<sup>a</sup> The (unweighted) average annual rates of change of consumer prices for the United States, Canada, Japan, France, the Federal Republic of Germany, Italy, and the United Kingdom.

<sup>b</sup> The measure of dispersion used is the standard deviation of inflation rates among the seven countries.

**Figure A. Major Industrial Countries: Output Gaps in Manufacturing, 1966–1977\***  
(Percentage of potential output)



\* Difference between actual and potential output.

The combination of rising prices, underutilised resources and slow growth has been termed stagflation. On the monetary side, it has been accompanied by an extreme instability in exchange rates and interest rates, as shown in table 5 (2) and 5 (3) respectively.

The factors identified have brought about a fundamental change in the international financial system, in so far as the economic health of the main industrialised market economy countries has been considerably affected. Change in shares of world official reserves is illustrated in table 5 (4): in 1960 a group of 11 industrialised countries held 77 per cent of IMF members' official reserves, and in 1977 the corresponding figure had fallen to 50 per cent. As can be inferred from the table the relative positions of individual countries within the group of eleven have also undergone major changes.

The influence of the industrialised countries on the financial system has been further weakened by the upsurge of the Eurocredit markets, in which the deposits now exceed total official reserves, including gold and IMF reserves. Deposits in these markets have grown from about \$15 billion in 1964 to about \$500 billion in 1979; these markets emerged in the 1950s and are based on currencies being held on deposit in bank accounts outside the country of currency issue. The major currency in use is the US dollar, with about 80 per cent of the funds currently held in dollars. Other major currencies are Deutsche Mark, French Franc, Yen. The growth of the Eurocredit markets is illustrated in table 5 (5).

The deposits in this market are primarily short-term, with upwards of 90 per cent of funds being on deposit for periods of much less than one year: the

Transnational Banks have been able to transform these liquid funds into loans whose maturities have varied with supply/demand market conditions. At end 1978 average maturities were in the range 7–10 years, but in earlier years maturities have averaged 3–5 years for considerable periods. The major depositors and borrowers in this market are now government authorities from developed and developing countries, and Transnational Corporations. Borrowers interest costs are based on a “spread” or margin above the rates at which banks borrow from each other, namely the London Interbank Offer Rate (LIBOR) and the Singapore Interbank Offer Rate (SIBOR). These base rates are related to the discount rates applied by Central Banks of the country whose currency is used in the loan transaction, with the result that interest rates charged to borrowers and offered to lenders have fluctuated very considerably. Table 5 (2) and 5 (3) indicate the range of fluctuation and hence of uncertainty of exchange rates and of interest rates in this matter.

**Table 5 (2). Index of Change in Major Currency Exchange Rates Against US Dollars  
1975–1978**  
(First quarter 1975 = 100)

	<i>DM</i>	<i>SwFr</i>	<i>Yen</i>	<i>FrFr</i>	<i>Sig</i>	<i>Lira</i>
1975 (1st quarter)	100	100	100	100	100	100
1975 (2nd quarter)	99.3	98.9	100.2	105.0	97.3	101.4
1975 (3rd quarter)	91.6	93.5	98.4	98.4	89.1	95.0
1975 (4th quarter)	90.0	94.0	96.6	96.8	85.4	93.8
1976 (1st quarter)	90.8	96.6	97.0	94.8	83.6	83.8
1976 (2nd quarter)	91.4	99.8	98.0	91.1	75.6	74.1
1976 (3rd quarter)	92.3	100.5	100.7	87.3	73.9	76.0
1976 (4th quarter)	97.1	101.8	99.8	88.2	69.1	73.9
1977 (1st quarter)	97.6	98.9	102.7	86.0	71.7	72.2
1977 (2nd quarter)	99.0	99.1	106.5	86.5	71.9	72.0
1977 (3rd quarter)	101.3	103.9	110.1	87.6	72.6	72.2
1977 (4th quarter)	105.2	114.2	118.7	88.6	76.0	72.7
1978 (1st quarter)	112.6	129.2	123.5	90.1	80.6	74.0
1978 (2nd quarter)	112.8	130.0	132.9	93.0	76.7	74.0
1978 (3rd quarter)	116.4	148.8	152.2	97.6	80.8	76.1
1978 (4th quarter)	124.8	153.2	154.0	99.6	83.0	76.6

Source: International Financial Statistics, IMF, April 1979.

**Table 5 (3). Eurocurrency Deposit Rates—January to December, 1978**  
(Prime Banks' bid rates in London, at or near end-of-month)

	1978											
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
<i>US dollars</i>												
One month	7.06	6.62	7.62	7.25	7.69	8.19	8.06	8.56	9.19	9.62	11.62	11.00
Three months	7.25	7.19	7.50	7.62	8.00	8.69	8.50	8.87	9.44	11.37	11.56	11.69
Six months	7.62	7.62	7.81	7.87	8.44	9.19	8.81	9.25	9.69	11.87	11.87	12.31
Twelve months	7.87	7.94	8.00	8.00	8.56	9.19	9.00	9.25	9.69	11.87	11.62	12.00
<i>Deutschmark</i>												
One month	2.87	3.19	3.31	3.31	3.44	3.31	3.44	3.31	3.31	3.12	3.37	3.19
Three months	2.94	3.19	3.31	3.31	3.44	3.37	3.50	3.44	3.56	3.50	3.69	3.31
Six months	3.00	3.19	3.31	3.44	3.56	3.50	3.75	3.62	3.62	3.56	3.94	3.69
Twelve months	3.19	3.19	3.31	3.50	3.69	3.69	4.00	3.87	3.75	3.75	4.12	3.81
<i>Swiss franc</i>												
One month	0.31	0.12	0.44	0.62	1.06	1.31	1.56	0.44	0.50	0.00	0.19	-0.6
Three months	0.75	0.31	0.56	0.87	1.31	1.50	1.69	0.69	0.94	0.12	0.31	0.00
Six months	1.37	0.50	0.81	1.19	1.62	1.94	2.00	1.06	1.06	0.31	0.56	0.12
Twelve months	2.00	1.00	1.25	1.44	1.87	2.19	2.19	1.19	1.31	0.62	1.44	0.62
<i>Pound sterling</i>												
One month	6.75	7.00	6.87	10.00	10.00	10.75	10.75	11.00	12.37	10.50	12.87	12.00
Three months	6.75	7.69	7.37	10.12	10.56	11.37	10.87	11.37	12.75	11.87	13.50	12.62
Six months	7.25	8.12	8.00	10.37	11.12	12.00	11.25	11.75	13.00	12.62	14.06	13.25
Twelve months	7.56	8.37	8.31	10.37	11.81	12.12	11.50	11.75	12.75	12.87	13.87	13.00
<i>French franc</i>												
One month	11.50	12.00	8.87	8.87	9.00	9.87	8.37	8.00	11.25	7.00	8.12	10.50
Three months	13.25	12.87	8.87	9.37	9.25	10.00	9.12	8.87	10.25	8.75	9.19	9.87
Six months	13.37	12.00	9.37	9.75	9.75	10.37	9.87	9.37	10.25	10.00	9.31	9.87
Twelve months	13.37	12.00	9.87	10.37	10.50	11.00	10.37	10.00	10.25	10.87	10.37	10.25
<i>Japanese yen</i>												
One month	2.12	2.69	-25	1.50	2.44	2.56	0.44	1.19	2.81	0.75	0.31	-69
Three months	2.94	2.50	1.19	2.12	2.69	2.94	1.56	2.50	2.81	2.44	0.31	0.62
Six months	3.31	3.25	2.56	2.87	3.31	3.62	2.31	2.81	3.12	3.31	2.37	1.87
Twelve months	3.50	3.50	3.62	3.81	3.94	4.12	2.87	3.25	3.25	3.31	2.94	2.19

Source: *World Financial Markets*, Morgan Guaranty Trust Company of New York.

**Table 5 (4). Distribution of Reserves of 11 Industrialised Countries, End of Years  
1960 and 1970-1977**  
(Billions of SDRs)

	1960	1970	1971	1972	1973	1974	1975	1976	1977
<b>Industrial Countries</b>									
Belgium- Luxembourg	1.5	2.8	3.2	3.6	4.2	4.4	5.0	4.5	4.7
Canada	2.0	4.7	5.3	5.6	4.8	4.8	4.5	5.0	3.8
France	2.3	5.0	7.6	9.2	7.4	7.2	10.8	8.4	8.4
Germany, Fed. Rep. of	7.0	13.6	17.2	21.9	27.5	26.5	26.5	30.0	32.7
Italy	3.3	5.4	6.3	5.6	5.3	5.7	4.1	5.7	9.6
Japan	1.9	4.8	14.1	16.9	10.2	11.0	10.9	14.3	19.1
Netherlands	1.9	3.2	3.5	4.4	5.4	5.7	6.1	6.4	6.6
Sweden	0.5	0.8	1.0	1.5	2.1	1.4	2.6	2.1	3.0
Switzerland	2.3	5.1	6.4	7.0	7.1	7.4	8.9	11.2	11.4
United Kingdom	5.1	2.8	8.1	5.2	5.4	5.7	4.7	3.6	17.3
United States	19.4	14.5	12.1	12.1	11.9	13.1	13.6	15.8	16.0
<b>Total, ind. countries</b>	<b>47.2</b>	<b>62.2</b>	<b>84.8</b>	<b>93.0</b>	<b>91.2</b>	<b>92.7</b>	<b>97.7</b>	<b>107.0</b>	<b>132.7</b>
<b>Total, all IFM members</b>	<b>61.2</b>	<b>93.2</b>	<b>123.2</b>	<b>146.8</b>	<b>132.6</b>	<b>180.2</b>	<b>194.5</b>	<b>222.4</b>	<b>262.8</b>

Source: IMF, International Financial Statistics.

**Table 5 (5). Growth of the Eurocredit Market, 1965-1979**  
(US \$ billion)

End of Period	Total	Percentage increase over prior year	US \$ portion (per cent)
1965	15.1	--	77
1966	19.9	32	81
1967	24.5	23	81
1968	37.4	53	81
1969	57.8	55	82
1970	78.3	35	77
1971	100.1	28	71
1972	131.8	32	75
1973	187.6	44	70
1974	214.1	14	73
1975	258.1	20	74
1976	286.8	11	76
1977	321.0	12	78
1978	392.6	22	81
1979	500 (estimate)	n. a.	n. a.

Sources: 1965-1975, Part I, Table 1, P. A. Wellons, *Borrowing by Developing Countries on the Euro-currency Market*, OECD, Development Centre, Paris, 1977; 1976-1978, Calculated from *Borrowing in International Capital Markets*, EC 181/784, World Bank, Washington, D.C., 1979.

The above mentioned phenomena and market characteristics are of major importance to developing countries, who since 1975 have borrowed more than 50 per cent of loans floated in this market as shown in table 5 (6). Equally important to developing countries are changes which may occur in the functioning of this market, whether these changes are market determined or determined by the regulatory authorities of the market economy industrialised countries.

**Table 5 (6). Borrowing by Developing Countries on the Eurocredit Markets 1973-1979**

<i>Year</i>	<i>Total Annual Borrowing (US \$ Billion)</i>	<i>Developing Country Borrowing (US \$ Billion)</i>	<i>DC Borrowing as a percentage of Total Borrowing (per cent)</i>
1973	20.8	7.0	34
1974	28.5	9.7	34
1975	20.6	12.5	61
1976	28.7	17.3	60
1977	34.2	20.3	59
1978	71.6	37.9	53
1979	circa 100 (estimate)	n. a.	n. a.

*Source: World Bank, Borrowing in International Capital Markets, various issues.*

### 5.2.1. Specific Issues and Problems

(i) *The pattern of financial flows to developing countries has changed markedly.* The net external capital inflows received by developing countries increased from \$20.4 billion in 1972 to \$57.1 billion in 1977. This represents an increase of about 23 per cent per year in money terms, or 9 per cent per year in real terms.

Between 1970 and 1977, total receipts from abroad of all developing countries, including Southern Europe, almost quadrupled from \$16.7 billion to \$63.9 billion. At the same time, ODA little more than doubled, from \$8.0 billions to \$19.5 billion, while non-concessional flows increased five-fold, from \$8.7 billion to \$44.4 billion. In real terms, therefore, ODA grew at less than 3 per cent per year over 1970-1977, the greatest part of the growth being in non-concessional flows. The bulk of the increases in total external flows to the DCs came from two sources, off-shore/Eurocurrency lending was almost as important as ODA which still was the single most important source of external finance, the respective flows being \$17.8 billion and \$19.5 billion over the course of the year.<sup>2</sup> Non-concessionary sources provided more than 85 per cent of the external financing for industry in 1977.

The rapid increase in international financial flows has meant that in 1977

<sup>2</sup> Revised figures place Eurocurrency lending at \$21.8 billion in 1977, thus exceeding ODA in that year. See p. 17, *World Bank, Borrowing in the International Capital Markets, EC-181/784, March 1979.*



OECD countries experienced a total net financial outflow equal to more than 1 per cent of their GNP. However, ODA represented only 0.31 per cent of GNP, lower than in some previous years. The contribution of centrally planned economies to ODA was much lower in relative terms than that of the OECD. By contrast OPEC countries have provided over 2.0 per cent of their GNP in aid each year since 1974.

There has been a polarisation in the pattern of developing country borrowing, with concessional finance increasingly concentrated on least developed countries while other developing countries rely more on non-concessional flows. This has resulted in part from a switch in lending policies of bilateral and multilateral aid agencies towards applying soft loans to rural development and basic needs in the poorer countries, and in part from the greater investment opportunities and perceived creditworthiness of the higher income developing countries in the eyes of international bank lenders. Industrial development in the latter countries has had to rely increasingly on non-concessional sources of finance, such as international bank lending, private foreign investment and export credits.

It has been calculated that about 18 per cent of total gross domestic investment in developing countries has been devoted to industry which UNIDO estimates at about \$30 billion in 1975, at 1975 prices.<sup>3</sup> Because of the problem of fungibility, i. e. external funds releasing resources elsewhere in the economy for other uses, it is difficult to estimate in any meaningful way the proportion of investment in industry which is supplied externally, but in 1975 it may have been around \$11 billion, or about one third of total investment. By 1977 it may have risen to about \$14 billion, approximately 40 per cent.

In this connection, it should be noted that the available Eurocredit statistical sources show only about 15 per cent of developing country loans, in the period 1976 – 1978, as floated *directly* by industrial entities, the other major borrowing entities being the bank and finance sector and the petroleum and natural gas sector.<sup>4</sup> It is likely, however, that the finance institutions on-lend a considerable portion of their external funds for industrial purposes. With respect to the petroleum and natural gas sectors, it is known that in a number of major developing countries the companies carrying out these activities have considerable industrial processing and indeed manufacturing linkages associated with oil and natural gas exploration. While the latter are not strictly classified as industrial activities, there may well be a considerable flow of their external finance which may be invested in manufacturing activities. Thus, taking eurocredit borrowing destined to finance institutions as well as the oil and natural gas sector into account, eurocredit borrowing ultimately used for industrial investment might well exceed 40 per cent of the total.<sup>5</sup>

(ii) *Financing the investment requirements of the Lima target requires substantially greater capital flows.* According to the latest UNIDO estimates, the

<sup>3</sup> See UNIDO, op. cit. p. 288 and Financial Flows: Statistical Background, consultant paper prepared for this study by R. A. Kitchen.

<sup>4</sup> See *World Bank*, Borrowing in International Capital Markets, EC 181/784, Washington, D.C. 1979.

<sup>5</sup> *World Bank*, op. cit., p. 119.

achievement of the Lima target may require an annual investment in developing country industrial capacity of \$450–500 billion by the year 2000, out of a total annual Third World investment in all sectors of around \$2,000 billion (measured at constant 1975 prices). At these levels the proportion of investment which is allocated to industry may have to increase from about 18 per cent in 1975 to 22–25 per cent by the year 2000, implying that rather greater priority will need to be given to investment in industry as against investment elsewhere in the economy.

The exact extent of the total foreign capital inflows required to meet the Lima target will depend upon the developing countries' savings ratios, currency convertibility, balance of trade, and outflows of repayments, interest, and dividends. Any projection of these variables over a 20 year period, can only be at the very best, an illustration of magnitudes involved. The projections made by the UNIDO Secretariat and referred to in chapter 3 above, imply an increase in the ratio of investment to GDP of the DCs from around 20 per cent in 1975 to more than 30 per cent in the year 2000. The domestic savings ratio on the other hand may perhaps reach only some 25 per cent by the latter year.<sup>6</sup> These figures would imply a considerable savings gap, which would have to be covered by external inflows. Assuming an inflow of ODA amounting to 1 per cent of the GDP of the industrialised countries, the remaining financing requirement<sup>7</sup> could be estimated to anything up to \$750 billion as compared to \$60 billion in 1975. As shown in chapter 9 below, the projections entail a remaining deficit on the balance of manufacturing trade. If this deficit were to be eliminated, the financing requirements would be reduced as well below \$500 billion. It appears from the figures that substantial efforts will be required to generate capital flows to the developing countries to meet the Lima target. (Note that the above figures are all at constant 1975 dollars, that China is not included in any of the country groups and that they apply to the whole economy, not just the manufacturing sector.)

(iii) *The debt and debt service burden of developing countries is large and growing rapidly.* Total debt of developing countries ran up from \$74 billion in 1970 to \$244 billion at the end of 1977. Over the same period, annual debt service increased from \$9 billion to \$36.6 billion.<sup>8</sup> Thus while debt increased threefold, annual debt service increased fourfold. The debt service burden has grown more rapidly than debt because of the increasing proportion of non-concessional inflows relative to official inflows, which brings with it shorter maturities and higher interest rates. Variable interest rates associated with commercial borrowing makes debt forecasting, and hence debt management, more difficult for borrowing countries. Furthermore, dependence on medium-term private finance, whether of export credit or eurocredits, has produced a problem of bunching of maturities.

The debt problem is not evenly spread among developing countries.<sup>9</sup> At the

<sup>6</sup> See paper prepared for this study by R. Kitchen, Financial Flows, Statistical Background.

<sup>7</sup> Further assumptions include i. a. payment of interests and dividends of about \$400 billion.

<sup>8</sup> Figures include Southern European countries, for which debt at the end 1976 was \$19.2 billion, and for which debt service during 1976 was \$3.2 billion.

<sup>9</sup> See UNIDO, op. cit., pp. 299–301.

end of 1976, well over one third of the debt was accounted for by four borrowers (Brazil, Mexico, India and Indonesia), and two thirds by 20 borrowers. Many of these large borrowers depend on maintaining their rapid economic growth to continue servicing their increasing debt. But many smaller borrowers which number about 50 countries, may be more vulnerable despite their relatively smaller debt load if their lack of economic diversification exposes them to sudden balance of payments difficulties through an unexpected fall in export earnings or a rise in import costs.

Debt service problems may arise through circumstances beyond the control of the country concerned. Many developing countries' ability to service debt is vulnerable to sudden changes outside their control, such as commodity price changes, declines in international economic activity, reduced access to markets and natural disasters. Losses on bank lending to developing countries in recent years have, however, been lower than losses on their domestic lending; indeed, such lending has been extremely profitable for the transnational banks. This can be inferred from the fact that in 1976, more than half of the total profits of the ten leading US banks was derived from eurocurrency lending which had quadrupled over the preceding 5 years. In 1977, about 70 per cent of the total earnings of the two largest New York banks was derived from external lending. Information on the leading European banks shows a similar general pattern of high profits from external operations. It should be noted that more than half the loans from the Eurocurrency markets were taken by developing countries in 1976, 1977 and 1978. Experiences of the twelve developing countries involved in debt rescheduling between 1965 and 1978 suggest that a more flexible and sympathetic approach to the problem by the IMF is required in the future.

(iv) *Changes in policies of industrialised countries towards their own domestic financial markets* often have serious repercussions on the availability and terms of finance for developing countries. Industrialised countries' governments often resort to credit allocation, interest rate ceilings, controls on international capital flows and other interventions in their financial markets for domestic policy purposes or for stabilising their balance of payments position. In this connection, changes in the regulatory environment could become critical. The danger may be that regulatory measures designed to assure the stability of transnational banks could unwittingly cause sudden changes in the availability of finance to individual developing countries: this could trigger off the type of debt crises that regulatory measures are intended to prevent.<sup>10</sup> Moreover, given the current fragility and instability of the international financial system, such debt crises may not be easy to isolate and may spread both inside and outside other developing countries. Thus current discussion on the regulation of the Eurocurrency markets could conceivably damage the borrowing prospects of developing countries. Some industrialised countries may not be aware of these effects or, even if they are, may give these impacts little weight while formulating their policies.

(v) *There is a trend against increased official resource transfers for industrial development.* Official transfers are increasingly targeted towards the

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<sup>10</sup> *World Bank, World Development Report, 1978, Washington, D.C., 1978, p. 24.*

poorest countries, rural development and human needs and, as a result, are less available for industrial development. Over 1975–1978, World Bank lending to industry and industrial development finance companies declined in absolute terms, and in relative terms from 33 per cent to 20 per cent of the Bank's total lending in 1978, although it has picked up somewhat in 1979.

**Table 5 (7). World Bank Group Lending to Industry, 1975–1978**  
(US \$ million)

	1975	1976	1977	1978	1979
IDFD/DFC <sup>a</sup>	543.7	743.6	756.2	909.9	676.8
Industry (Direct)	760.3	606.0	587.0	391.8	842.5
Non-project	520.0	229.0	216.5	155.0	381.5
IFC <sup>b</sup>	211.7	245.3	258.9	338.4	419.3
Total Industry	2 035.7	1 823.9	1 818.6	1 795.1	2 320.1
Total IBRD/IDA/IFC	6 107.5	6 877.7	7 175.7	8 749.1	10 288.1
Industry as percentage of Total IBRD/IDA/IFC	33.3%	26.5%	25.3%	20.5%	22.6%

Source: IFC and World Bank Annual Reports (1979 are Bank estimates).

<sup>a</sup> Lending by IBRD.

<sup>b</sup> These figures overstate IFC investment to industry to the extent that a small part of these investments have non-industrial uses.

A large portion of official finance available for industrial development remains tied to capital goods purchases, so that its value is reduced and distortions are introduced into development programmes. Further, official finance tied to capital goods imports from the North hinders a shift towards new patterns of investment, resource allocation and production, continuing to favour North/South flows of capital intensive goods over domestic sources or newly emerging developing country suppliers of capital goods and less capital-intensive technology.

(vi) *There is increasing reliance on Transnational Banks as sources of finance.* This reliance has come about because of the relative ease of access to transnational banks (as compared to the multilateral finance institutions) and their substantial flexibility in lending. Net borrowing from transnational banks rose from \$0.6 billion in 1970 to \$37.9 billion in 1978. This has increased the market power of these commercial banks, and more importantly has exposed developing country borrowers to risks with regard to refinancing, in that commercial banks may be either unable or unwilling to continue to extend credit on the basis they have in the past and, as a result, either shorten maturities or reduce the total volume of lending. There are a variety of reasons why this may take place. It may occur because of changes in the banks' own economic fortunes or because of changes in the policies of industrialised country governments towards their own banks' foreign lending activities, and for this reason this threat should be on the agenda of international discussions. An additional effect of the increased reliance on commercial bank sources is that it reinforces developing countries' almost exclusive reliance on debt instruments at the national level in contrast to financing at the enterprise level. One result of this shift towards national debt financing is that governments as borrowers bear the bulk of the risks associated with the provision of finance at the project level.

Another is that it does not link foreign sources of finance with specific industrial projects and thereby dilutes the stakes of the foreign investor/lender in the outcomes of these projects. In many cases this has had negative impacts on the incentives for performance by foreign suppliers of capital goods, technology or management advice.

(vii) *International financial mechanisms which have evolved appear to be more favourable to larger borrowers than to smaller entities*, both because of the greater sophistication of the larger borrowers and the greater interest of the international financial community in these large borrowers. This in turn is due to the lower risk involved in lending to larger units, and to economies of scale in lending activity. The preference given large borrowers has implications not only for the relative ability of large and small countries to tap international markets for development purposes, but also for the relative ability of large and small firms or enterprises within given countries: most Third World countries and industrial firms are small. Thus existing international financial relationships lead to a sharp concentration of economic power within key countries and within key groups in certain countries, giving transnational banks near dominant positions.

(viii) *A large number of developing countries explicitly or implicitly discourage international financial linkages at the level of specific enterprises or firms*. The government or quasi government finance entities incur debt by international borrowing and channel this debt finance to individual enterprises. Further, as an increasing number of developing countries reserve key sectors of the economy for development by public or mixed enterprises, the ability to distinguish between the enterprise and the state is clouded. As a result, it is often difficult to determine whether internationally borrowed funds, on commercial terms, are being used economically and effectively. This presents no problem for those few Third World countries which have evolved sophisticated systems for allocating capital and controlling the performance of public enterprises, but not many have yet gained this expertise. Increasing difficulties with the management of large-scale externally-oriented enterprises, especially when these include the involvement of TNCs, either on an ownership or contractual basis, suggests that there is a major need to find new financial instruments which will allow some international financial linkages at the project or enterprise level, even in those countries where direct private foreign investment is either not feasible or not desirable.

(ix) *The absence of South based financial institutions and South to South financial linkages inhibits the growth of financing centres in the South and at the same time consolidates their dependence on the North*. There are many problems DCs face in mobilising financial capital within themselves of which the low level of per capita income and savings is only one.<sup>11</sup> Despite generally low income, there are pockets of investible funds within DCs that could in theory be mobilised for industrial investment to help ease the DCs dependence on the North, however slightly, and to facilitate the achievement of the Lima target. In general, however, such mobilisation has been inadequate. Capital has appeared all too often to be more mobile internationally and intra-sectorally than it has

<sup>11</sup> For a brief discussion of these problems see UNIDO, *op. cit.* pp. 301 – 314.

been intranationally and intersectorally. Thus funds accumulated by DC entrepreneurs in commodity and exchange dealing, import-export trade, government securities and real estate tend to be reinvested in these sectors, leaving a gap in the DC capital market for long-term investment funds for industry which foreign capital has to fill. DC entrepreneurs furthermore will often divert their savings abroad – into real estate, commodity speculation and industrialised country government securities, rather than run the perceived risks of long-term investment in the productive capacity of their home economies. While the establishment of more and larger South-based financial institutions, financial markets and appropriate financial instruments will not by itself guarantee that the intra-South flow of funds will be increased, it will make that development more likely and thus appears to be a prerequisite of achieving that goal.

Although the South through the emerging NIEO, as manifested in OPEC, has increased its possibilities for financial independence, there have been two major impediments to the use of these surplus funds for purposes of expanding industrial growth in the South. The first is that there are considerable demands for industrial investment within some oil exporting developing countries and this may leave little for investment elsewhere. But even assuming the latter is overcome in the future, another difficulty remains: the capital surplus developing countries have typically preferred to invest surpluses through Northern banks and North controlled institutions, Northern industrial enterprises and the like. Investors must be convinced that investment in Southern industry and institutions holds out equal security and equal prospects of a high rate of return. Collective self-reliance requires that where surplus funds have expanded, not only should portfolio preferences be shifted in terms of locality and sector, but South-based financial institutions and appropriate financial instruments which can efficiently and effectively intermediate the changing pattern of investment flows, should be evolved. The need for new South based financial institutions goes much beyond the question of the current surpluses of a small group of developing countries. At present developing countries with debt rescheduling or balance of payments difficulties are overdependent on North based transnational banks and multilateral agencies which are dominated by industrialised countries. In a different context, manufactured exports of developing countries are inhibited for the most part by the weakness of national export credit and insurance schemes which are not comparable to those in the North. There is thus scope not only for an extension of the regional payments union concept, perhaps in an interregional dimension, but also for self-reliant export credit arrangements. It can be seen that there is a pressing need to create new institutional arrangements whose primary objective will be to reduce the financial dependency of the developing countries on the industrialised countries, and it is these new arrangements which will embody the New International Financial Order.

### **5.3. GUIDING PRINCIPLES FOR FUTURE CO-OPERATION**

Various scenarios can be designed for the implementation of a New International Economic Order depending on the priority given to the strategy of

furthering Third World Collective Self-Reliance on the one hand, and improving the terms for the South within the framework of Global Interdependence on the other. The two strategies, of course, have to reinforce each other, the distinction between them being made partially for purposes of analytical clarity. In the area of financial flows these ideas can be put in concrete form through the construction of new arrangements for the direct recycling of Southern surplus resources to Southern borrowers, thus increasing collective self-reliance in the South, or alternatively, improving the terms of South/North integration through new arrangements reflecting South/North partnership.

Given the objectives of the NIEO, two paths should be followed concurrently: the elaboration of a development strategy based on strengthening South/South links and a movement towards a better system of interdependence, different in essence from the relationships of the old economic order. The two paths are not seen as being conflicting. Rather it is envisaged that the first will grow up alongside the second, and gradually replace it in the South as collective self-reliance increases.

### **5.3.1. A New Financial Order Through South/South Co-operation: Third World Collective Self-Reliance**

The demands of the South for the New International Economic Order form a consistent whole based on the view that substantial and lasting adjustment in the prices for raw materials, coupled with a reduction of debt and more favourable terms for international technology transfer, constitute the best means for improving the financing of a new stage of industrialisation and modernisation of the South.

#### *The Role of OPEC Member Countries*

One frequently discussed possibility for the achievement of the financial targets and objectives of a NIEO has been through mobilisation of surplus funds such as those of certain oil exporting developing countries. The oil price adjustment of October 1973 was an important turning point in world financial—and indeed political—history. Some countries in the South looked at the collective action of OPEC as a possible model for forming other commodity associations aiming at improving the South's terms of trade with the North, and for building a potential pool of Southern financial resources to further Southern economic objectives. In the event, very little else along these lines has so far materialised. Circumstances in the petroleum industry were in many respects unique. And surpluses have to some extent dwindled away and have been eroded by inflation—though the possibility exists that they can be revived and given a fundamental role in the financial restructuring that the NIEO requires.

Even if some Third World countries can be expected to generate future surpluses, other problems must be kept in mind. Surplus Southern funds, for the most part denominated in dollars, are recycled through the Northern transnatio-

nal banks, both to the capital deficit oil producers as well as to semi-industrialised Third World countries. In the long run, this should change: Third World banking and finance institutions will eventually grow so as to take care of any recycling themselves. New financing instruments can be evolved for channelling these funds directly to Southern users, thus strengthening the collective stand of the South on which an NIEO is predicated. Furthermore, the new flows would not take the form of providing concessionary finance to the least developed countries—OPEC has already been extremely generous in this respect.<sup>12</sup> Rather, it is in the provision of nonconcessional flows which could be used profitably for fostering industrial development on a broad front that the new financial mechanisms will be useful. Furthermore, by recycling a significant part of these surpluses to the South for real capital formation, the few capital surplus developing countries would reduce the effect of the potential vulnerability which could stem from their surpluses being tied up in Northern financial assets.

There are sound economic reasons for channelling a significant part of these surpluses directly into long-term loans and other forms of portfolio finance with equity features for DCs. Some investments in developing countries, because of untapped natural resources and other unrealised economic opportunities, may yield much higher returns than placements in the Western world: financial market friction and market imperfection, lack of knowledge and information, etc. may leave attractive investment opportunities unrecognised. Investing in economies with high growth potential—and the industrial sector of some of the developing countries has been or is capable of growing at much faster rates than that of any industrialised economy—can be extremely profitable. A further argument is the need for diversification as a hedge against risk. Investing in developing countries is generally held to involve high risks. But the concentration of placements in a small number of Western financial centres may also leave oil exporting developing countries vulnerable to actions that may be taken by these industrialised countries. No agreement was reached with the industrialised countries at CIEC in Paris, 1977, with regard to protection of the financial assets of the oil exporting developing countries.<sup>13</sup>

### **5.3.2. A New Financial Order Through Global Interdependence**

Traditionally, the emphasis in discussions of international financing of development has been on finding ways to increase the volume of finance. This in large part reflected the fact that much international finance used to be of a concessionary nature. However, with increasing reliance on commercial finance, maximising the volume of external financial flows is no longer overriding: returns from invested funds have to exceed the costs of borrowed funds, and careful economic calculation is necessary. The decision regarding the magnitude of external finance involves a crucial trade-off between the additional resources

<sup>12</sup> See UNIDO, *op. cit.*

<sup>13</sup> UN *General Assembly: Development and International Economic Co-operation: Implementation of the Decisions adopted by the General Assembly at its Seventh Special Session. Report on the Conference on International Economic Co-operation, A/31/478/Add.1, 9 August 1977, p. 150.*



it makes available for current consumption or investment, and the claims against future resources it represents. Further, the cost or burden implied by future claims depends not only on the total magnitude of external claims but on the relationship between debt service requirements and resources available for debt service under particular sets of future circumstances: the time stream of future revenues and expenditures. Thus there must be a close interaction between decisions relating to sources of financing, terms of financing and the volume of financing. As a result, a more complex set of specific guiding principles emerges.

Innovations or increased co-operation should be sought to:

- (i) stabilise the flow of external finance and safeguard against sudden interruptions;
- (ii) increase the choice of developing countries in terms of both sources and terms of finance to allow better matching of debt service repayments with revenues;
- (iii) allow greater flexibility of repayment in order to reduce the chance of financial crises resulting from unanticipated revenue shortfalls;
- (iv) relax external constraints on the volume of finance, since industrial projects in countries perceived by commercial bankers to be not credit worthy can often offer a commercial rate of return;
- (v) distribute certain risks associated with development strategies to foreign lenders/investors by means of financial instruments which carry the profit sharing attribute though not the control attribute of conventional direct foreign investment;
- (vi) increase the volume of official finance for industry, while raising its value through untying and increasing its leverage through new forms of co-financing;
- (vii) reduce financial dependency on financial sources and institutions based in industrialised countries through the promotion of direct financial links between developing countries;
- (viii) at the enterprise or project level, seek innovations to facilitate South/South flows of finance and technology, thereby making a greater volume of more appropriate resources available, and reducing dependence on the North.

These guiding principles have the objective of increasing the range of choice available to developing countries and providing some insulation from external events which at present limit their financial flexibility. They would allow developing countries to tailor external financing so as to minimise the debt burden and hence increase their ability to make use of external finance in pursuit of their development goals.

In addition to increasing the range of financing options open to developing countries, steps must be taken to deal with the problems of countries currently in a state of financial crisis. Much of the public debate over developing country borrowing has focussed on the *ex post* aspect, at times at the expense of discussions for improving financing conditions *ex ante*. An important guiding principle is that the two issues should not be allowed to cloud each other, since

quite different solutions are required. The primary focus should be placed on structuring external finance so as to minimise the risk of crisis. However, a realistic appraisal of developing country prospects suggests that even with major improvements in the terms and structure of external financing, financial crises will occur. Thus, a New International Financial Order must include effective mechanisms which would minimise the economic and human costs of financial crises.

#### **5.4. PROPOSALS FOR PROMOTING INTERNATIONAL CO-OPERATION**

Developing countries will find in the range of mechanisms proposed herein individual mechanisms suitable to their individual external financing and development strategies, given that there is considerable variation in these strategies.<sup>14</sup> While some of the mechanisms (e.g. new global financing instruments or institutions) are intended to be used by all, others (e.g. relating to Eurocurrency borrowing) may only appeal to those countries which intend to use that market.<sup>15</sup>

The proposals fall into three categories:

(a) proposals designed to give meaning and content to the concept of collective self-reliance within the South, by setting up an *International Industrial Finance Agency*, whose main task will be to serve as a channel for intra-Third World investment as well as to help build financial institutions, instruments and arrangements which can themselves serve as conduits for intra-Third World financial flows. This agency will contain a *Third World export credit* fund, designed to provide financial backing for the export, particularly of capital goods and technology, primarily within the Third World and sometimes to the industrialised countries.

(b) a proposal based on the "massive transfer" concept, involving a *Global Fund for the Stimulation of Industry*, designed to stimulate the stagnating economies of the market-oriented industrialised countries, and provide long-term, chiefly non-concessionary, financing to developing countries mainly for industrial imports from the industrialised countries.

(c) proposals which take the existing financial system as given, but are designed to enable developing countries to make better use of the system. It is envisaged that the international actors in the financial system, including the World Bank Group, regional and sub-regional development banks, can be persuaded to make marginal changes in their activities, by adopting new functions and instruments to accelerate industrialisation in the developing countries.

<sup>14</sup> For a discussion, see chapter 2 above.

<sup>15</sup> See Expert Group Meeting on Industrial Financing, Final Report, ID/W9.287/10 and System of Consultations, ID/B/223, UNIDO, Vienna.

## MAJOR PROPOSALS FOR ACTION UNDER THIRD WORLD COLLECTIVE SELF-RELIANCE

### 5.4.1. International Industrial Finance Agency

A basic aim of South/South financial co-operation is the establishment of institutional arrangements controlled by and located in the South to facilitate the long-term investment on non-concessional terms of surplus funds from the capital rich countries of the South, e.g. certain oil-exporting developing countries and other Third World countries to the industrial sector in other developing countries including those which are well advanced along the road to industrialisation.<sup>16</sup> The justification for these institutional arrangements lies in the need to establish direct links between the suppliers of capital and the users of capital without the requirement of having Northern financing institutions, banks and enterprises interposed between capital surplus and capital deficit countries of the South. As indicated above, not only has a significant proportion of the funds used for Third World industrial investment originated in the South, but also the profits of the Transnational Banks providing this intermediation have been very considerable.

In this connection, it should be noted that even ignoring the possible disadvantages sometimes associated with direct foreign investment and the Transnational Corporations such as restrictions on the transfer of technology, transfer pricing, export market restrictions etc., it should be recognised that these same foreign enterprises often obtain a significant proportion of their own financial requirements by borrowing in the Eurocredit markets: there is the phenomenon of Transnational Corporations borrowing directly or indirectly from Third World sources, and then using their borrowed funds for direct foreign investment elsewhere in the Third World. A related phenomenon is the great concern sometimes expressed by eminent persons in the North about the equity holdings and control of developing countries in Northern industrial firms, including Transnational Corporations.<sup>17</sup>

The strengthening of these direct links, since they exist in rudimentary form at the present time, is particularly relevant in the area of industrial finance, the most dynamic sector in developing countries, since there are mutual benefits to be gained by both the surplus and deficit developing countries. More specifically, it opens to capital deficit developing countries the possibility of long-term financing on commercial terms in both debt and equity forms from sources of investment which, while requiring the conventional degree of security associated with such investment, may be more responsive to broader issues involving national control and sovereignty. Moreover, financial resources obtained in an

<sup>16</sup> See UNIDO, *op. cit.* pp. 39-42.

<sup>17</sup> For the report of a recent debate see *International Herald Tribune*, July 18, 1979. See earlier discussions and reports in *The Wall Street Journal*, 22 Jan. 1974, 26 Feb., 5 March 1975. See also US Senate, Committee on Banking, Housing and Urban Affairs, Subcommittee on Securities, *Foreign Investment Act of 1975: Hearings 94th Congress, 1st Session and Hearings 93rd Congress 1st Session. Serial No. 93-71.*

unpackaged form, i.e. separate from the package of finance, technology and management which comprises direct foreign investment, is often more desirable to those developing countries which, while holding high capability in specific industrial sectors, lack financial resources.

With regard to public and private investors there can be several advantages. While requiring conventional investor protection these investors see the importance of investing at least a part of their savings, particularly where the savings are based on non-renewable natural resources, in financial instruments which provide a measure of protection against inflation. Equally important are benefits to be derived from placing at least a part of their investment portfolios in countries of the world outside the control or potential control of countries of the North; financial theory advises the rational investor concerned with long-term returns to diversify his portfolio: risk diversification applies to all types of risks.<sup>18</sup>

The institutional arrangements indicated above encompass the whole range of conventional banks, stock markets, investment houses, etc. necessary to facilitate financial intermediation between capital investor and capital user, together with appropriate legal, monetary and other governmental intermediators, insofar as these reconcile with the social, cultural and economic needs of specific Third World countries. Direct financial links between developing countries are still in their infancy, although a number of South based financial institutions have developed a strong, effective and justifiable presence on the international financial markets of the North, with the result that many developing countries have directly benefited from transfers on commercial terms often associated with investment from the North of a DFI or non-DFI character.<sup>19</sup>

It is therefore proposed that an intergovernmental finance agency be founded by developing countries, in the nature of an International Industrial Finance Agency,<sup>20</sup> with the following aims:

- (i) to further the economic development of developing countries by encouraging the growth of productive enterprises, particularly by direct financial linkages between developing countries;

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<sup>18</sup> A return that could have been earned on a diversified portfolio of 110 securities issued in four Latin American countries over 1958 to 1968 has been calculated. The average annual return on this portfolio was found to have been over 6 percentage points *above* the return on the Standard and Poor's 500 Composite Index (of shares on the New York Stock Exchange) over the same period. See *Development Committee*, *Developing Country Access to Capital Markets*, Washington, D. C., 1978, pp. 91-92, "Risk and Return on Investment in Developing Country Securities". Also see *Lessard*, *International Portfolio Diversification: An Analysis for a Group of Latin American Countries*, *Journal of Finance*, June 1973, pp. 619-633. See also *Lessard and Wellons*, *Financing Development: Innovation in Private Capital Markets*, April 1979, paper commissioned for this study.

<sup>19</sup> See paper by *A. K. Basak*, *Industrial Investments in the Arab World: The Challenge of the Oil Income*, October 1977.

<sup>20</sup> While there is some similarity between this proposed agency and the International Fund for Agricultural Development, there are significant differences in its orientation towards industry, South/South linkage and the promotion of additional investment channels, its emphasis on non-concessional funds, and the mixed public/private institution emphasis.

- (ii) in association with public and private investors in developing countries, to assist in the promotion, financing, establishment, improvement and expansion of productive enterprises, including regional and subregional industrial enterprises, which would contribute to the development of its member countries, with and without the guarantee of repayment by member governments, as appropriate;
- (iii) to seek to bring together industrial project and programme investment opportunities, domestic and other developing country sources of capital, technology and management;
- (iv) to seek to stimulate, and to help create conditions conducive to the flow of private and public resources, originating principally within and between developing countries, through the promotion of financial instruments, advice, arrangements and institutions appropriate to the social, cultural and economic environment of member countries;
- (v) to foster mutual benefit and self-reliance between all developing countries.

It is envisaged that membership of this Agency would be open to governments and financial entities of all developing countries, and that the initial resources of the Agency would consist of paid-up and callable share capital in agreed proportions. The initially paid-in capital of the Agency is envisaged to be of the order of \$500 million, having 90 per cent as callable capital. The Agency would be authorized to augment its resources by the issue of debt instruments in international markets and through earnings accumulated from its operations. It will operate on a basis which will yield a remunerative rate of return to subscribers of its capital, through appropriate investments and placement of funds.

It is recognised that a number of technical problems would have to be resolved in an appropriate forum for negotiation. These issues include capitalisation and voting powers among participants; the number of windows for its various finance activities, the scale, distribution and terms of finance among members; relationships between the Agency and central and commercial banks; arrangements with other finance institutions, exporters and importers; relationships between the Agency and non-Third World entities, etc.

It is envisaged that while control of this Agency would be wholly in the hands of Third World entities, this would not preclude mutual arrangements, on appropriate terms, with governmental, intergovernmental and private institutions and enterprises of the industrialised countries. However, its bias would be towards the Third World and accordingly it would be neutral with respect to private enterprise, direct foreign investment and transnational corporations, recognising the diversity of developing country perceptions of these latter phenomena. While there is some similarity between the aims of the institution proposed here and the aims of the World Bank affiliate the International Finance Corporation, there are also significant differences: this proposal aims towards direct financial linkages within the Third World and expects to make widespread use of private enterprises from the South as well as the North.

## Operations

Using its own management and professional staff for financial and project operations, the Agency would be a channel for public and private finance originating within the Third World destined for investment within the Third World, and it would invest its own resources in new productive enterprises and in the expansion, modernisation and diversification of existing enterprises.

It would also seek to stimulate, and to associate itself with the direct flow of public and private capital, technology and management between Third World countries. It is envisaged that in its project operations, fundamental consideration would be given to control by Third World entities, financial viability and national economic viability. In recognising that many developing countries are relatively small with limited markets, and that there are significant economies of scale in the production of certain industrial goods, the Agency will give attention to the promotion and financing of viable regional, subregional and multicountry industrial enterprises.

While the Agency would itself be a channel for finance in both debt and equity forms, its second main task would be to foster the growth of additional channels of direct linkage between Third World entities. Thus, in concert with Third World governments acting bilaterally/regionally/intraregionally/multilaterally, it should assist in the promotion, strengthening and development of financial institutions, particularly specialist industrial financial institutions, through which direct linkage could be accomplished.<sup>21</sup>

In keeping with its main thrust towards direct linkage and collective self-reliance, it is envisaged that the Agency would also be innovative with regard to the financial instruments used with the Third World.

Thus while the specific financial instruments used by the latter institutions will include the conventional instruments, such as long-term bank loans, underwriting and the purchase of equity shares, bond issues etc., a number of new financial instruments identified in the later parts of this chapter might be equally appropriate, e.g. national and regional unit investment trusts, commodity-indexed bonds, trade-indexed bonds, flexible credit lines, bank loans indexed to commodity prices etc. It must be emphasised that concurrent with changing industrial technology of the North, there is in the North the development and application of new financial technology in response to the needs of changing markets: the floating rate note, certificates of deposit etc. In a like manner, financial instruments reflecting the needs of the developing countries – both of the suppliers of finance and the users of finance – have also to be developed.<sup>22</sup> Thus an important activity of this Agency charged with the promotional activity identified above, would be the development of new financial instruments to facilitate exchange and investment among the nations of the South. The search for and application of new financial instruments is of crucial importance. The

<sup>21</sup> The concept of direct South to South linkage seems to have escaped the Development Committee. See *Development Committee, Developing Country Access to Capital Markets*, Washington, D. C. 1978.

<sup>22</sup> The Development Committee has identified a number of new financial instruments to facilitate North/South interchanges which are of great interest. See *Development Committee*, op. cit.

activity of the Agency would go well beyond the introduction of "conventional" debt and equity instruments into financial arrangements for profit sharing and risk sharing at the enterprise and national levels without control features, i.e. non-voting and non-controlling equity instruments. It must be emphasised that the financial arrangements and instruments developed in Western Europe in the 19th century and earlier, came into use to serve the economic and social needs of specific societies with specific needs;<sup>23</sup> it cannot be assumed that these social and economic conditions are replicated in the Third World in 1979.

Thus some Third World countries perceive risks in using the mechanism of DFI, in particular the mechanism of the Transnational Corporation; they may prefer either to dispense with the DFI mechanism, or to limit DFI only to specific industrial branches.<sup>24</sup> Alternatively, they seek to control Transnational Corporations; this control may be either inadequate and thus unsuccessful, or if adequate may deter the TNC from co-operating with the developing country. To the extent that the latter does occur, innovations have to be sought to substitute for the TNC's presence: national and regional unit investment trusts, bonds indexed to commodity prices, trade-linked bonds, flexible credit lines, bank loans indexed to commodity prices,<sup>25</sup> etc. Another alternative may be the joint investment company, an innovation which has been resorted to in arrangements between oil-exporting and other Third World countries. Yet another alternative may be conventional DFI which incorporates the "fade out" principle, whereby the foreign partner contracts in advance that the developing country partner becomes the owner and controller of the business under certain conditions.<sup>26</sup>

One task of the Agency will be to provide export financing through a *Third World Export Credit Fund*. A number of developing countries have increased their industrial capability in the capital goods and producer goods sectors<sup>27</sup> to the extent where they have been able to compete successfully with a wide range of these goods produced by industrialised countries; Third World producers have been able to compete successfully in the markets of both developing and industrialised countries. There is, however, a need for a new mechanism through which developing country exports in the latter sectors could be strengthened in a manner mutually beneficial to Third World purchasers and producers. In order to encourage South/South and South/North trade in capital goods and to assist in making the conditions on which these goods are purchased competitive with

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<sup>23</sup> The Stock Exchange was founded in London in 1773; joint stock banks (other than the Bank of England) were founded in England in 1826. Before 1773 and 1826 the social and economic need for these institutions was either unrecognised or non-existent. The Moscow Narodny Bank was established in London in 1919; in 1959 it was sub-titled 'Bank for East-West Trade'. The same rationale, i.e. social and economic need by the 'actors' concerned, applies to the founding of both sets of finance institutions.

<sup>24</sup> For example, see "Industrial Priorities in Mexico", by *Leopoldo Solis*, in *Industrial Priorities in Developing Countries*, UNIDO, 1979. This latter publication examines industrial policies, *inter alia*, regarding direct foreign investment in Brazil, India, Mexico, the Republic of Korea and Turkey.

<sup>25</sup> See Section 5.5.2. on the promotion of new risk capital finance instruments.

<sup>26</sup> See p. 83-85, *A new United Nations Structure for Global Economic Co-operation*, UN, New York, 1975.

<sup>27</sup> See paper by *Sanjaya Lall*, *Third World Technology Transfer and Third World TNCs*, commissioned for this study. See also below.

products from the industrialised countries, it is proposed that a *Third World Export Credit Fund* should be established.<sup>28</sup>

It is envisaged that this Fund will be based on capital subscribed and partly paid up from a group of developing countries, the capital so subscribed being augmented by long-term bank borrowing and bond issues on both the international capital markets and developing country markets.

The Fund's main task would be to refinance credit, made available by domestic banking sources, of five years or more, by arranging for the rediscounting of export bills drawn on external importers and accepted in the conventional manner, using its own first class name to secure more favourable terms than would otherwise be available. Where such rediscounting is not appropriate, it would use its own and borrowed resources. Its primary function would be to provide export credits for South/South trade in capital and producer goods, but it could also provide credits for Southern exports to the North. An important element of the Fund is that the discounting of export paper or on-lending of borrowed funds to developing country governments or quasi-government entities, whether in the form of buyers or suppliers credits, would be on terms comparable with those terms by which industrialised countries make credit available to their own industrial capital goods producers, as appropriate.

Consideration might be given to arrangements for the provision of buyers credits, or semi-commercial terms, as appropriate, to the poorer members, these funds being constrained to purchase manufactured goods and services strictly from Third World member countries.

These issues and the proposal as a whole requires that consultations take place between appropriate Third World entities on a bilateral/regional/intraregional basis, to determine how the problems identified can be overcome.

*Technology exports among developing countries* have grown significantly in recent years.<sup>29</sup> A major problem with this trade, however, is the inadequacy of financial support. The Fund would, therefore, have a special task in this area. Several developing countries have already attempted to offer financial assistance to corporations exporting technology abroad in various forms. Present financial arrangements have, however three areas of weakness:

- Export and import credit arrangements for both buyers and sellers of technology in developing countries;
- Insurance facilities which would allow adequate cover for the transactions;
- Financial guarantees for tenders and other forms of international bidding for technology contracts.

As is well known, credit, insurance, and guarantee systems allow the realisation of economies of scale and hence a relatively small input of financial

<sup>28</sup> In this connection, some of the features of BLADEX, the Banco Latino-Americano des Exportaciones, opened on January 1, 1979 in Panama, might serve as a useful model.

<sup>29</sup> See, for example, P. O'Brien, A. Hasnain and E. Lechuga-Jiménez, *Direct Foreign Investment and Technology Exports among Developing Countries*, paper for this study, Vienna, January 1979.



resources through the fund should be sufficient for several technology exporters to receive support. At the same time, international action of this type ought to provide more acceptable risk coverage for those cases where developing country exports of technology have to compete with prospective sales from the industrialised countries.

#### WITHIN THE FRAMEWORK OF GLOBAL INTERDEPENDENCE

##### 5.4.2. Global Fund for the Stimulation of Industry

One very important proposal contained in this study is for a *Global Fund for the Stimulation of Industry*. This proposal starts from a recognition of the crisis in the international economy: global recession coupled with global inflation and instability of the international monetary and financial systems. The Global Fund for the Stimulation of Industry seeks to make quick disbursing programme financing loans to developing countries, of extended maturities between 12–20 years, in significant amounts building up to an annual level of over \$15 billion, with a total callable capital in the range of \$75–\$100 billion.

##### *Background*

The rationale for the proposal for a Global Fund for the Stimulation of Industry is as follows. The world economy has been sustained during a period of unprecedented recession in recent years by the buying power of the developing countries. Today they account for 25 per cent of US exports and 40 per cent of EEC exports. In 1975, a time when the European Community had reached the lowest point of the recession, and the European Community's exports to other industrialised countries were declining – by 17 per cent to the US and by 3.3 per cent to other industrialised countries – it was exports to the developing countries that were increasing substantially by 25 per cent.<sup>30</sup> One result of this buoyancy of Third World purchasing power was that unemployment in the developed world was significantly less than it might have been; there would have been at least 3 million more unemployed in the Community area alone, if capital deficit developing countries had been obliged to cut their imports of manufactured goods by the amount needed to pay as a result of price adjustments after 1973. However, the level of unemployment has remained high, between 2.2 per cent for Japan and 7.7 per cent for Canada, with the EEC countries lying between this range.

Manufacturing capacity utilisation rates for 1977, as indicated earlier, have been calculated at below 85 per cent for a number of the major market economy industrialised countries, and for all these countries, stand at levels significantly below average utilisation rates for the 1964–1974 period as shown in figure A. Accompanying this underutilised capacity have been the steep rises in prices

<sup>30</sup> See *Commission of the European Communities, Europe and the Third World, A Study of Interdependence*, Brussels, 1978, p. 54.

which have occurred in the 1972–1977 period in certain major market economy industrialised countries where the rate has averaged about 10 per cent p.a., with certain countries showing even higher rates, as indicated in table 5 (1). Moreover, there seems to be every indication that these steeply increased rates of inflation will continue for a considerable period.

The purchasing power of developing countries derives from their export earnings and from their net international borrowings. In recent years, however, it was substantially increased borrowings which sustained their demand, especially as their export earnings had tended to suffer in a climate of international recession: thus, between 1972 and 1977, net external capital inflows increased<sup>31</sup> from \$20.4 billion to \$57.1 billion, for the most part on non-concessional terms. It is generally accepted that the present macro-economic equilibrium of the world economy depends significantly on developing countries' borrowings from the Northern private banking system, and borrowing must continue to increase if the momentum of world growth is to be maintained. For example, had the addition in 1978 of nearly \$40 billion to world trade through private bank lending to developing countries not taken place, recession in industrialised countries would have been that much more intensified.

What is new in the present situation is that doubts are being entertained about the ability of the private banking system to cope with the additional strains recently imposed upon it, for recycling additional financial surpluses for at least two reasons. Countries that have borrowed in the past are for reasons of prudent debt management cutting back on their borrowings significantly. In the meanwhile the short-term flow of funds into the private banking system is likely to increase substantially in the wake of recent oil price adjustments. The viability of private banks is threatened in such a situation of demand/supply imbalance for funds; also, unless an effective mechanism is found for rechanneling surplus liquidity, there is no alternative to a further intensification of global recession, further aggravating protectionist tendencies.

There seems to be a reluctance to recognise that the international financial system has changed considerably since 1973; it has changed even more since 1944: the share of the main market economy industrialised countries fell from 77 per cent of IMF members' official reserves in 1960 to 50 per cent in 1977. Accompanying this, the shares within the 50 per cent figure of the industrialised countries have changed considerably as indicated in table 5 (4) earlier. The influence of the industrialised countries has been weakened still further by the Eurocredit markets, where deposits now exceed total official reserves.

The recycling of additions to international liquidity has been accomplished by the Eurocurrency financial markets, where deposits grew from about \$15 billion in 1964 to about \$500 billion in 1979. What gives cause for concern is

<sup>31</sup> "The present equilibrium of the world economy depends to a considerable degree on a continuing flow of private lending to the non-oil producing developing countries (and to the Soviet Union and Eastern Europe) on a scale unheard of before 1974 and would be called in question by any impediment to that flow. This flow of lending is also of interest in the Community context—because a significant proportion of the loans has been made by banks resident in the EEC." *Commission of the European Communities, Annual Economic Review 1978–1979*, Brussels, 1978, p. 8.2.

that it is feared that the additional strains imposed upon this market could have serious consequences. Deposits in the Eurocurrency market are primarily short-term, with upwards of 90 per cent of deposits being for periods of significantly less than one year. The major private banks have been able to transform these liquid funds into medium-term lending. Problems arise in this market because of the very considerable Interbank lending which supports the market, i. e. banks lending to one another in order to maintain the borrowing of their large customers, and also problems which could occur, if one or a number of their large borrowers were to fail. In this connection, mention might be made of the banking crisis which occurred in the mid-1970s, when two not particularly large banks, one in the United States and one in the Federal Republic of Germany, failed. At that time it was thought by a number of observers that the private banking system as a whole was considerably affected by the failure of these two banks.<sup>32</sup>

In this connection, one of the significant results of the growth of the Eurocurrency markets in the 1973-79 period was that although developing countries were the major borrowers, access to these funds was very unevenly distributed with six developing countries accounting for about three quarters of all Euromarket borrowing by developing countries.<sup>33</sup> While 50 to 60 other developing countries have had occasional access to these markets, to some developing countries the market is closed. The Global Fund proposal contains the commitment to allocate 20-25 per cent of its funds to the least developed and most seriously affected countries.

The essence of the solution is to channel these funds under a mechanism of collective guarantee of the international community to the widest possible range of DC borrowers who, taken separately, might not otherwise have access to the private banking system. The expansionary impetus so provided by the Global Fund would make the international atmosphere more conducive both to the lowering of tariff and non-tariff barriers which discriminate against manufactured exports of the South, as well as to the restructuring of industry from the North to the South.

The essential way of providing this collective guarantee is through the mechanism of a Global Fund for the Stimulation of Industry, with a modest initial paid-in capital<sup>34</sup> contributed by industrialised and developing countries for initial expenses, accompanied by substantial, say 90 per cent to 95 per cent callable capital which in effect would constitute a system of limited joint and several guarantees against which the Fund could borrow in the market place. Its functioning in this respect would be precisely analogous to the functioning of the World Bank which borrows in capital markets against its 90 per cent callable capital. The crucial difference, however, is that the total amount to be raised by the Global Fund will be utilised for programme rather than project lending, so that the necessary momentum can continue to be imparted to the world

<sup>32</sup> See *Euromoney*, 1974 and 1975 issues, London.

<sup>33</sup> *World Bank*, *Borrowing in International Capital Markets*, various issues, EC-181.

<sup>34</sup> The initial paid-in capital will range from 5 per cent to 10 per cent of the Fund's total callable capital of \$75-\$100 billion; assuming cautiously that the total loans ought not to exceed capital, the paid-in amount would have a lower limit of \$3.75 billion.

economy in precisely the same manner in which private bank lending has been able to do in recent years. It goes without saying that such programme loans will be spent on industrial goods. A second crucial difference is that an interest subsidy element will of necessity attach to the Global Fund's lending operations, so that it can reach out to the least developed countries and the most seriously affected countries, whose overall circumstances require the resort to concessional finance.

One method of financing this subsidy element would be IC government contributions to an interest subsidisation account, evaluated as a small proportion of the value of incremental industrial exports from these countries to the DCs, financed from the proceeds of the Fund.

The Global Fund for the Stimulation of Industry has been drawn up on the basis of a number of common elements taken from several disparate earlier proposals which have called for a co-ordinated global stimulation programme.<sup>35</sup>

It takes their positive elements and integrates these into a new conceptual framework for the mutual benefit of industrialised and developing countries. The Global Fund proposal contains the general outlines of a co-ordinated strategy, incorporating mutually supportive and reinforcing elements, which are designed to promote non-inflationary growth in both developing and industrialised countries, thus leading to some reduction in unemployment and of imbalances in international payments.

### *The International Consensus*

In the essential respects described above, the Global Fund falls squarely within an International Consensus which has been gradually evolving over the past year or so, and which was further confirmed at UNCTAD V in Manila.<sup>36</sup> The proposal for a Global Fund represents a particular mechanism for bringing about what has been termed "the massive transfer of resources" which was the subject of a consensus resolution and which has also received the endorsement of senior officials of international institutions.<sup>37</sup> The consensus at UNCTAD V held that "substantially increased transfers of resources to developing countries are an indispensable factor for accelerating their pace of development and could help stimulate global economic activity, particularly in a medium- to long-term perspective". It further specified that operational proposals to give effect to such transfers should be formulated in time for decisions to be taken by the relevant bodies either before the next special session of the General Assembly or on that same occasion, and to take into account the possibility of interest subsidy mechanisms.

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<sup>35</sup> R. E. Muller and D. H. Moore (TASC), A Description and Preliminary Evaluation of Proposals for Global Stimulation, consultant paper submitted to UNIDO for this study, March 1979. For a recent contribution to the debate, see Jayawardena, L., Towards a New Economic Order: Some Issues for Discussion. The Third World as an Engine of World Growth, Speech before Sri Lanka Association for the Advancement of Science, December 1978.

<sup>36</sup> Resolution 129 (V) part IV, UNCTAD, Manila, 1979.

<sup>37</sup> See the statements of Mr. de Larosière and Mr. Ripert to UNCTAD at Manila, 1979.

The consensus also specified a set of guidelines to be observed by proposals for substantially increased resource flows. Proposals should:

- “(i) be compatible with the development priorities of developing countries and should take due account of their debt servicing capacity over the longer term;
- (ii) give special attention to all developing countries which depend primarily on concessional funds for external financing for their development, particularly the least developed among developing countries;
- (iii) be largely raised in international financial markets for project development and execution and programme finance purposes.”<sup>38</sup>

The present proposal for a Global Fund for the Stimulation of Industry addresses itself to the programme financing aspects, as shown in this outline, as being the readiest way of accomplishing the global stimulus that is needed; a framework for industrial project development is elaborated in a previous proposal, for an International Industrial Finance Agency. The Global Fund also meets the requirements of these guidelines by incorporating an interest subsidy representing the differences between the cost of funds in capital markets, and the terms acceptable to countries requiring concessional finance. What is necessary to emphasise at this stage is that the innovative element in the proposal consists not so much in the idea of a massive annual transfer of resources but in the fact that it is raised in the context of furthering the hope that the stimulus to industry in the developed world, that would be created in the medium term, would both revive industry and maintain economic activity in a non-inflationary manner.

It is the aspect of inflation which requires to be frontally addressed in appraising the international consensus on proposals for massive resource transfers. This consensus appears adequately summarised by Mr. de Larosière, the managing director of the IMF, in his UNCTAD address, where he argued that action extending beyond the scope of what may prudently be available through the International Monetary Fund was necessary in the case of “countries that are deeply embedded in underdevelopment”. In his view, in such cases “domestic policy adjustments would not be sufficient, even if they are supported by considerable medium-term credits”, through the IMF. He continued: “In such cases, monetary mechanisms must not be used alone, as there is the risk of their breaking down or causing members to endure intolerable levels of deflation. It is the transfer of greater real resources that is at issue.”

It is against this background, which summarises a consensus about inflation, and also defines the limits beyond which action through the IMF framework should not prudently be undertaken, that the case for a separate programme financing mechanism, for longer-term disbursements as envisaged in the Global Fund, must be made.

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<sup>38</sup> Resolution 129 (V), UNCTAD, 1979.

## *Membership and Decision-Making*

The founder members of the Global Fund would be governments of industrialised and developing countries, with a decisive role being played by the latter. Programme lending on a substantial scale would have to be accompanied by that degree of policy conditionality and forward planning necessary to enable countries to bring about the necessary changes in their economic structures. Conditionality as exercised by multilateral financing institutions is perceived by developing countries to be perhaps over-rigid, with the result that borrowing from private banks on arguably too permissive a scale has become an attractive proposition, to the point when private bank financing is sometimes held to have abdicated from the responsibility of imposing any conditions at all.

More specifically, it is perceived by a number of developing countries that the conditionality provisions imposed by the multilateral financing institutions bring sudden changes in their domestic economies, with these sudden changes often accompanied by significant social unrest, and in the short run at least sudden fluctuations in the disposable incomes received by different social classes. Moreover, the impact of these changes has often been a significant degree of social and economic dislocation. Thus, for policy conditionality to be acceptable to the developing countries, the governing and management structures of the Global Fund must be seen to embody a decisive weight of developing country decision-making for purposes of approving loans to developing countries. From the standpoint of raising money from the capital markets and for establishing the market standing of the Fund, the device of qualified majorities of votes can be resorted to for decision-making by the Governing Body of the Fund.

Conditionality at the level of country borrowings, which is inseparable from responsible economic management, can be acceptable only if, through the medium of the Global Fund, recipient countries are seen in effect to discipline themselves by having a majority of their representatives both on the governing body and at crucial levels of management. Precedents for a decision-making structure of this type already exist in the case of the International Fund for Agricultural Development (IFAD) and the Common Fund set up under UNCTAD's Integrated Programme for Commodities.

It is recognised that many technical problems would have to be resolved in an appropriate forum for negotiation. These issues include capital structure and voting powers among member countries; the scale, distribution and terms of finance among members; relationships between the Global Fund and International Agencies, Central Banks, finance institutions; and in particular, agreement will have to be reached on the conditionality issue and its mode of implementation.

## *Operations*

Even with full guarantees from its member governments, it would be some time before the new Fund could establish that high standing on international

capital markets which would allow it to obtain its financing on the most favourable terms. It is important, however, that programme lending begins fairly rapidly in amounts which go some way towards off-setting any reduction in financial flows from private banks, whether for the reason of reluctance on the part of lenders or prudence on the part of borrowers.

In this transition period of three or four years, a possible approach might be that borrowing could proceed on negotiated terms from countries with large reserves. Thus, it might be possible for about one half of the Global Fund's requirements during this period to be on the basis of negotiated loans from both capital-surplus industrialised countries and capital-surplus developing countries. In this connection, it is envisaged that capital-surplus developing countries might undertake to make negotiated purchases of bond issues during this transition period, and similar arrangements might be possible with other countries with large reserves. If such a means of loan financing could be agreed during the transitional period, the Global Fund would be able fairly rapidly to obtain the remainder of its needs in the international capital markets. At the end of the transition period, the Global Fund would obtain all its borrowing from the international capital markets.

It is to be noted that if those developing countries whose names are well known in the international capital markets, were also to associate themselves with the Global Fund from its inception, through their participation in a system of limited joint and several guarantees, this would enable action to be taken fairly rapidly. Thus the Global Fund could begin initially solely on the basis of interested countries; in other words, this phase can operate precisely in the manner envisaged by the Mexican Proposal<sup>39</sup> without the formal paying-in of capital subscription for the reason that at a later stage the Global Fund could be negotiated on a universal basis.

This transition period can be availed of by industrialised countries to set in motion measures of structural readjustment/redeployment to be implemented over the medium term *pari passu* with the onset of economic recovery. Industrialised countries would in the context of the expansionary impact of the Fund find it easier to accept gradual increases in their imports of manufactures from developing countries.

## **5.5. RECOMMENDATIONS FOR SUPPORTING PROGRAMMES**

### *Under Third World Collective Self-Reliance*

#### **5.5.1. Industrial Finance Information and Negotiation Network**

The Network could provide two basic services needed to permit developing countries to use transnational banks and export credits more effectively: financial information and assistance in negotiations.

<sup>39</sup> The Mexican proposal placed before the Interim Committee of the IMF, May – June 1978, Mexico City.

Prospective borrowers need to be concerned with trends in specific terms (margins, maturities, fees) as well as more general trends (international liquidity or the competing demand for loans from transnational corporations or OECD governments),<sup>40</sup> together with quality and price information on capital goods. In planning financing policies in respect of borrowing in the Eurocredit markets borrowing governments need to anticipate changes, such as proposed or actual regulation either of international banking activities in general or of lending to developing countries specifically, and borrowers should keep abreast of innovations in the markets. In dealing with lenders, it is extremely useful to be able to point to a precedent for a proposed change in the standard form of contract. Similar considerations apply with respect to the use of suppliers credits, where purchasers/borrowers need to have the information to exercise sound judgement.

Borrowers also need to know about differences among lenders, including currency preferences, and also about the scope for negotiation, between different lenders in the case of syndicated credits, and between various suppliers in the case of suppliers credits. Any useful information and negotiation system must differentiate among lending banks to the extent that differences have operational consequences for borrowers. Preliminary research suggests that differences in the corporate strategies of the major international banks make some banks more responsive to DCs, and definable groups of banks allocate and price their resources differently among DCs. If bank lending strategies are classified according to specialisation and risk/yield policies, one discovers variations in pricing and allocation according to whether in a strategic sense DC business is integral to the bank, an important constituent of the bank's operations, or merely derivative of another market segment, such as transnational corporations.

For a borrower, financing needs vary, and there are times when it is important to tap or avoid one or another of these types of banks. But less experienced borrowers, thousands of miles from a financial centre, are hard pressed to identify differences among banks: contacts with the central banks of OECD countries could prove counter-productive; the Central Bank X may recommend a commercial bank Y to an inquiring DC because the bank's margins on DC loans are above average and so the bank is judged safe. However, the developing country borrower seeks just the opposite. Similar considerations may apply with respect to currencies: loans denominated in a currency that the borrower does not earn in the bulk of his export trade may be regarded as inherently risky,<sup>41</sup> even where interest rates appear low; in any event, loans in the Eurocredit markets carry floating interest rates, and as shown in table 5 (3) earlier, fluctuations in these rates have been very considerable. Thus perceptive judgements have to be made with respect to both choice of bank and of currency. The Network must therefore provide information about banks'

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<sup>40</sup> Data from the World Bank and IMF do not fill the needs of less experienced borrowers: more and faster analysis is necessary. A regional initiative with some of the elements of this proposal is being considered in Latin America through the Centro de Estudios Monetarios Latinoamericanos (C.E.M.L.A.) in Mexico City.

<sup>41</sup> See Lessard and Wellons, *op. cit.*, p. 73.



reputations and services and about currencies, in a way that enables a prospective borrower to identify what it means to use one major international bank instead of another.

The clear need for cross-fertilization between developing countries prompts the suggestion that the Network provide information to borrowers that goes beyond simple terms on loan agreements. One finds among DCs a wide range of instruments and institutions that serve as mechanisms for access to finance from international banks. The Network should provide not merely general data about these mechanisms, but an indication of their advantages and costs, together with training and technical assistance.<sup>42</sup>

The second major function of the Network could be to assist in negotiations of loan and export credit agreements. This extremely difficult function demands highly skilled, mobile negotiators not connected with suppliers enterprises or lending institutions who bring a good sense of the needs and capabilities of the specific country. Assuming that the personnel requirements can be met, the negotiators must prove their worth and this requires a high degree of institutional credibility in the organisation responsible for this Network. It should be emphasised that in borrowing funds from transnational banks, developing countries pay commercial prices for these funds: the transnational banks, i. e. lenders, are vendors of medium-term funds in a market in which information is scarce. Information on the attributes of banks/vendors, prices charged, currency, conditions of contract, etc. is of central importance; this may help to explain why the profits of transnational banks on their external lending operations have been so considerable, as indicated in section 5.2.1. above.

It is to be noted that the recent activity of the World Bank and the IFC, in assisting the access of developing countries to capital markets and in co-financing, which is supported elsewhere in this study and in which further innovation is suggested (see section 5.5.2.), consists *inter alia* of the provision of information to transnational banks on developing countries' economic management, economic and financial policies, etc. as well as project related information.<sup>43</sup> All this information is provided to prospective banks/lenders/vendors of finance. Similarly, it is felt that developing countries might be given reverse information on prospective banks/lenders/vendors of finance as well as their policies and the impact of currencies used.

## WITHIN THE FRAMEWORK OF GLOBAL INTERDEPENDENCE

### 5.5.2. Promotion of Risk Capital Financial Instruments

A number of innovative financing techniques, relatively independent of the goodwill of industrialised country regulatory authorities and of interest to investors in certain developing countries is proposed below. These techniques

<sup>42</sup> For UNIDO activity in this area, see UNIDO, Annual Report of the Executive Director, 1978.

<sup>43</sup> For greater detail, see *Development Committee, Developing Country Access to Capital Markets*, Washington D.C., 1978, under the heading "General and Specific Mechanisms to Improve Access", pp. 73-75.

offer particular attractions where risks inherent in specific production activities are high, such as in the processing of raw materials and other products where price fluctuations are significant. The objectives of improving the international flow of risk capital are to increase the volume of total resource flows and to adjust the balance between fixed interest non-risk flows and risk-sharing (i. e. equity portfolio) resource flows. In this connection it is recognised that the problem associated with straight debt financing is that such financing normally carries with it the contractual commitment to repay fixed sums of capital and interest over a fixed period of time; moreover, such fixed-term bank finance has normally been available only for terms well short of the periods required for prudent financing of long-term industrial projects. The latter is particularly the case with respect to investments involving the processing of mineral resources and to investments involving major integrated industrial projects, as in the petrochemical and fertilizer fields and in other industries basic to the foundation of a process of modern industrialisation. It is fully recognised that asking investors to bear part of the risk associated with industrial projects would require an appropriate premium for the bearing of such risks. However, it may be an acceptable trade-off for a number of developing countries to share some of their profits, when such profits occur, with external investors.

(i) *New Instruments for Shifting of Risks – Commodity or Trade-Indexed Bonds*

The development and promotion of innovations designed to shift risks internationally should be vigorously pursued. Interesting financial instruments for many countries heavily dependent on a small set of commodity exports appear to be narrowly-drawn contracts which shift the risks of commodity price fluctuations, risks which by and large are outside a country's control. These include *long-term futures contracts* and *long-term sales contracts* (Which serve to stabilise revenues but do not provide a time transfer of resources) and *commodity-indexed bonds* which combine the functions of time and risk transfer.

The primary advantage of such instruments from the producer countries' viewpoint is that they shift risk without shifting control. From a capital market perspective, these instruments could provide an attractive return for the risks they involve: the return on commodity-indexed bonds could be tied to a product price or commodity index; when prices rise, investor returns would rise in tandem, and so also would producer countries' ability to pay. The converse would occur with a fall in commodity prices.<sup>44</sup> Investors would still face the risk that a government might default on the contract, but this risk is not likely to be any greater than that of conventional bonds. A possible advantage of commodity-indexed bonds relative to long-term contracts is that the securities could be sold on a recurring, competitive basis rather than through infrequent bargaining sessions typical of long-term sales contracts. However, both types of instruments are complementary, and the choice between them depends on a wide variety of

<sup>44</sup> See *Lessard and Wellons*, op. cit., pp. 90–94. Also see *D. Lessard*, Risk Efficient External Financing Strategies for Commodity-Producing Countries, Working Paper, Sloane School of Management, MIT, Cambridge, Mass., November 1977, and *Cuadernos de Economia*, August 1977.

industry and country specifics. Commodity-indexed bonds appear to have an advantage in dealing with countries with open well-developed capital markets and hence for South/North risk transfers. Long-term contracts, in contrast, are likely to be more suitable for risk transfers among developing countries, and between developing countries and socialist countries.

An instrument to shift risks associated with overall trade flows could have attractions to those developing countries which choose industrialisation strategies premised on a significant volume of manufactured exports. These countries are exposed to fluctuations in export revenues due to fluctuations in aggregate world economic activity, changes in the conditions of international trade including industrialised country protectionism, and changes in competition from other exporters. Such developing countries might wish to share the risks/rewards of overcoming such problems through the issue of a *trade-indexed bond*. The terms of such bonds would have to be drawn narrowly to make the bonds acceptable to foreign investors, since such investors have no control over export activities. A trade-indexed bond could carry provisions similar to a cumulative preferred share in which investors would be entitled to a particular periodic cash payment (which could be a dividend, interest, or principal payment depending on the specific contractual vehicle) as long as the country's export trade in particular defined products or to specific markets, exceeded a certain level. Any shortfall should be carried forward at a commercial rate of interest, repayment falling under the same constraint.

(ii) *New Opportunities for Foreign Portfolio Investment*

The orthodox method of dealing with risk is direct foreign investment. The innovations below as well as currently acceptable arrangements such as joint ventures provide risk-transfer without some of the unwanted aspects of DFI. Opportunities for foreign portfolio investment exist at present in a number of Third World countries. International agencies could greatly facilitate foreign portfolio flows, including South to South flows in particular, by engaging in activities designed to promote, regulate, co-ordinate and control such flows; in substantive terms, such activities can be implemented through forms of technical assistance,<sup>45</sup> including institution building and consultations/negotiations at the national, regional, intraregional and international levels. These activities would have the following objectives:

(a) To promote foreign portfolio flows to certain Third World countries by a *code of conduct* subscribed to and agreed to by those developing countries which find such arrangements acceptable; this code of conduct will be designed to protect foreign portfolio investment and to ensure that foreign portfolio investors would obtain a fair return on their investment. This recommendation is made in the recognition that this form of financial transfer may be more acceptable to certain developing countries than direct foreign investment which can involve losses through exercise of sovereign authority, unconnected with the financial risk/reward attributes of equity investment. If such measures were pursued vigorously, it should be done concurrently with the establishment of an

<sup>45</sup> The IFC has provided valuable assistance to a number of developing countries in work designed to improve the operation of their domestic capital markets. See IFC Annual Report 1978.

appropriate regulatory framework to protect the fragile and limited equity markets existing in those Third World countries. Individual developing countries could be assisted in establishing their own *national investment trusts* which will allow foreign investors to participate in a selected set of local securities. In this way, the extent of foreign ownership of developing countries' enterprises could be controlled, since only indirect rather than direct access to local capital markets would be allowed. Where appropriate, special incentive provisions could be made within the above mentioned code of conduct to facilitate, promote and encourage financial resource transfers from other parts of the Third World, both intraregionally and interregionally. Thus the formation of *regional industrial investment unions* will be promoted, as a means to allow investors/institutions within a region/subregion to participate in firms based within specific regions. Equally, such arrangements would allow an industrial firm located in a specific country to broaden and deepen its financial base, thus improving its industrial capability. Similar arrangements, containing appropriate guarantee provisions and safeguards are envisaged as a means of promoting portfolio flows on an intraregional basis, particularly from capital-surplus developing countries. By these means, the mobilisation of capital from both individual investors and institutions (e. g. pension funds and insurance companies) may be increased and allocated with greater economic efficiency, and opportunities will be provided for Third World investors to directly make use of their savings resources without the recycling intermediation of Transnational Banks. While it is recognised that such financing instruments would be viable for any type of productive investment, including investment in such areas as agriculture or tourism or in the modern services industries, the largest single sector which could benefit in many developing countries from such non-concessional financial transfers would be the industrial sector.

(b) At a global level, and based upon the type of national regulatory frameworks envisaged above, a collaborative international regulatory framework should be promoted, through which financial institutions (of a transnational or intergovernmental nature) would create investment trusts whose shares could be sold to private and/or public investors, thus providing these investors with an internationally diversified package of developing country equity securities. Within this framework, the promotion of an *International Industrial Investment Trust*, as well as *Regional Industrial Investment Trusts* should receive attention.<sup>46</sup> Special incentive provisions should be provided to facilitate intra-Third World financial resource flows. In this regard it is recognised that certain Third World investors are not interested in exercising management prerogatives and control, but are more interested in obtaining investment vehicles which provide a prudent measure of protection against inflation in countries outside the direct control of Northern governments and their regulatory agencies.

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<sup>46</sup> For a discussion of some of the issues see *Development Committee*, op. cit., pp. 87 - 103.

### 5.5.3. Promotion of Barter or Buy-Back Related Long-Term Investment

At the enterprise level, financial flows from the North should be structured to increase the likelihood of project success, where feasible, by incorporating incentives for design, performance and management. This may suggest some selective re-packaging of finance with technology, capital goods and management flows through some new non-DFI financial instruments which may run counter to the unpackaging approach.

The possibility of increasing linkages at the enterprise rather than the national level calls for governments to be aware of the activities of their enterprises, and to advise them where necessary. This is particularly true in the case of barter and buy-back arrangements, and the experience of socialist countries of Eastern Europe in this regard can be instructive.

Issues arising from the degree of liability accruing to vendors of turnkey plant for the proper functioning of plants are stressed in the discussion in chapter 6 on intragovernmental framework agreements and turnkey projects. While barter forms of exchange are often only theoretically second-best, a direct link between investment and quantity/quality of plant output exists in the forms of barter-like or buy-back investment arrangements; these arrangements can therefore be placed in the class of financing associated both with risk transferal and with orthodox debt. In this connection it is important to recognise that to a considerable extent the development of stable long-term exchange between two groups of industrialised countries, namely the market economy countries of the West and the centrally planned economies of Eastern Europe, has been much facilitated by the development of this form of exchange which, while providing for the transfer of financial resources and of technology on equitable and mutually beneficial terms, has stopped well short of the foreign control and dilution of sovereignty characteristics of direct foreign investment.<sup>47</sup>

An essential prerequisite for a successful buy-back arrangement is that the developing country is well informed not only about its own market alternatives, but equally about those of its contractual partner, i. e. a systematic monitoring of international price movements and of development in international product markets. Since developing countries generally possess less developed market intelligence systems than their industrialised partners, they are often at a disadvantage. Successful development of barter-related investment projects will require that the information gaps be filled. The participation of a financing institution is usually a necessary condition for closing these investment gaps, but many banks are unwilling to become active in this area.<sup>48</sup>

Another prerequisite for negotiations of barter-like exchange is sound knowledge about international norms and standards of industrial goods. Successful practical experience in barter trade has indicated that it is also necessary to have access to a well developed machinery of domestic economic and industrial administration. Developing countries entering into negotiations

<sup>47</sup> See, UNIDO, Possibilities for Increasing Trade and Economic Co-operation between Socialist Countries and Developing Countries with Special Regard to Payments Arrangements, ID/WG.287/9, December 1978.

<sup>48</sup> Ibid.

on barter-like investment arrangements without well determined objectives, plans and negotiating strategies are clearly at a disadvantage.

It would seem that barter-related investment arrangements could be an effective way of increasing the volume of investment for industrial projects, of broadening the choice of sources for external investment, of gaining access to new sales markets, and of facilitating the transfer of technology through ensuring a degree of commitment by the equipment supplier.<sup>49</sup> It is recognised that a barter-related investment arrangement can sometimes be a second-best way of facilitating these exchanges. However, it is equally recognised that in many cases the only alternative may be direct foreign investment through a transnational corporation and that some developing countries sometimes prefer not to use this alternative. Arrangements would be facilitated by the following activities:

- Provision of information and advice to developing countries about market alternatives of goods exchanges as well as on international norms and specifications;
- Provision of technical assistance in determining objectives, plans and negotiating strategies;
- Technical assistance in the drafting of barter laws;
- Promotion of means by which financial institutions can facilitate barter and buy-back related investment arrangements.

## **5.6. ADDITIONAL SUGGESTIONS**

### *Within the Framework of Global Interdependence*

#### **5.6.1. Facilitating the Access for the South to the Financial Markets of the Industrial Countries**

There are several institutional changes which could be agreed upon very quickly which would improve the terms of access of the South to Northern capital markets. With regard to Official Development Assistance authorities with the responsibility for the allocation of ODA should recognise that there is a strong case for the allocation of a greater proportion of ODA finance to industry, in particular circumstances. Specifically, greater attention needs to be directed towards the provision of finance to small- and medium-scale industries in general, and in particular to such industries in those developing countries which do not have access to foreign capital on commercial terms, and also to industry generally in the least developed countries. It should furthermore be recognised that decisions with regard to capital allocation, whether by aid agencies, multilateral or bilateral, or by developing country authorities as to the use of concessional finance should take into account not only macro-economic

<sup>49</sup> See the Report of the Expert Group Meeting on Buy-Back Agreements, UNIDO/EX.78, Vienna, 29–30 March 1979.

balance-of-payments constraints but also the expected rates of economic return as well as the overhead costs associated with the provision of finance. Developing countries should attempt to reverse recent trends in aid agency lending policies which discriminate against the provision of ODA on concessional or non-concessional terms to industry.<sup>50</sup> It is important that industry should be recognised as the most dynamic sector of most developing economies, and that it is industrial development which is most likely to accelerate economic growth. Present aid policies merely serve to perpetuate the *status quo*, the old international economic order. It should be emphasised that over 85 per cent of external financing for industry is from non-concessional sources.

In connection with the availability of financial resources on commercial or near-commercial terms the regulatory authorities of industrialised-country governments should show a degree of flexibility with regard to the financial instruments, including new financial instruments used for the provision of transfers to developing countries. It is appropriate to notice that these regulatory authorities have been very sensitive and flexible with regard to a new environment within their domestic financial markets, witness the accelerated growth of the market for short-term financial paper, certificates of deposit (CDs), the acceptance of barter and buy-back related investment mechanisms, as well as industrial leasing to facilitate long-term exchange with the socialist countries of Eastern Europe, the complex network of holding companies, subsidiary branches, etc. All represent a dynamic response to a changing domestic financial, economic and political environment. Greater attention needs to be directed by these regulatory authorities to the opportunities for mutual advantage arising from the changed conditions in many developing countries, where for a number of reasons orthodox direct foreign investment may, in many cases, not be the appropriate means for the provision of industrial capital on commercial terms. It must be emphasised, therefore, that increased attention should be given to non-DFI forms of commercial financial transfer.

### *The Promotion of Levered Official Transfers*

In order to improve the effectiveness of the limited official finance available, multilateral and bilateral aid agencies should seek to utilise the gearing principle more fully and actively than in the past, by combining aid with transnational bank lending.<sup>51</sup> This should be done by assisting bank lending to those developing countries which do not otherwise have access to the Eurocurrency and other commercial markets and by facilitating bank lending to countries who are up against their borrowing limits; it is recognised that such activities would have to be accompanied by careful economic calculations.

Aid agencies may assist access to commercial bank finance in the following ways:

<sup>50</sup> It is estimated that about 5 per cent of bilateral ODA went to the manufacturing sector in 1975-76. See OECD, Development Co-operation, 1976 Review, Paris, 1976.

<sup>51</sup> The World Bank and the IFC have become active in this area in recent years. See IFC, Annual Report 1978, pp. 10-12.

- Co-financing associated with bilateral ODA;
- Providing repayment guarantees;
- Providing funds to stabilise interest rates or repayment schedules at an agreed level;
- Providing funds to safeguard borrowers against the effect of appreciation of the loan currency against the borrower's currency.

As such measures would be used to assist borrowers who would not otherwise have access to the market, they would serve to increase significantly the total volume of financial flows. Moreover, the volume of aid involved could be very small relative to the total loans assisted. It is clear, of course, that these suggestions are meaningful strictly within the context of the appropriate economic and financial analysis. It is not intended that risks be removed from conventional bank lending, nor that poor countries be burdened with repayment for equipment supplied primarily by way of subsidy to the equipment manufacturer: technical assistance to this end may be necessary.

The two bilateral financing institutions, one based on the EEC group, the other based on the CMEA group, should be strengthened so as to more effectively provide finance to industry in the developing countries with which these groups are associated. Equally, there needs to be a strengthening of the linkages between these institutions and the appropriate organisations of the UN family. It is suggested that these finance institutions pay particular attention to the channelling of concessional and non-concessional resources to medium- and small-scale industrial enterprises in their developing country members via the medium of the industrial development banks in these countries.<sup>52</sup> In this connection, the emphasis placed here on small- and medium-scale industry is a strict reflection of economic reality in developing countries; small markets, populations and resource bases characterise many developing countries.

It is recognised that for this financing activity to take place on a significant scale, the institutional strengthening of the industrial development banks referred to may be required. In particular, it should be noted that the African, Caribbean and Pacific group in association with the EEC comprises a considerable proportion of the world's least developed, most seriously affected, geographically disadvantaged, small developing countries. The central problem associated with the financing of small/medium-scale industry is that overhead administrative costs are high relative to amounts disbursed: appraisal/disbursement/supervisory costs etc. are relatively large for small projects, and it would be inefficient for the bilateral institutions to lend directly at the enterprise level. It should be emphasised that the national industrial development banks have the possibility of collecting information more economically on domestic industrial projects, have considerable knowledge of local economic, social and industrial conditions as well as government regulations, and can be in a good position to provide a sensitive supportive service to their industrial clients. For these reasons, the European bilateral specialist financing institutions would need to

<sup>52</sup> The European Investment Bank has been used by the EEC as a channel for industrial credit to ACP states.



delegate a very significant part of their responsibility, other than general regulations incorporating interest rates and lending floors etc. and other than the responsibility for periodic audit of the use of funds to local industrial development banks. Special attention would have to be given to strengthening these industrial development banks which are an essential part of industrial infrastructure.<sup>53</sup> The bilateral institutions identified could also facilitate the use of non-concessional credit, raised in the Euromarkets, by their developing country members. In this connection it is envisaged that the bilateral institutions could in time assist in introducing a number of their clients to the international financial markets.

### *The Promotion of Access to Industrialised Country Capital Markets*

In addition to measures to improve the level and effectiveness of official flows to industry, there is ample scope for actions that would improve the terms of access of DCs to IC capital markets. Thus, market economy industrialised countries might be persuaded to accept the principle of giving developing countries equal access to their domestic capital markets with home country borrowers and preferential access vis-à-vis other foreign borrowers. In particular, preferential access should involve relaxing of a number of constraints for developing country borrowers, except for those constraints necessary for the protection of domestic investors. Developing country borrowers should be given the same access to the issue calendar as home country borrowers. Ceilings on developing country issues should be removed where foreign exchange holdings permit, and other special requirements for developing countries should similarly be removed.

In view of the fact that potential developing country borrowers might find their access to industrialised country capital markets restricted because of their perceived high risk, borrowers and industrialised country governments should consider co-financing bonds for projects or programmes which involve the industrialised country's aid agency or development finance agency (DFA).

Co-financing can take different forms. It can consist of purchase by the investor from the DFA of participations in its investment in the project.<sup>54</sup> In such a case, the DFA virtually acts as trustee for the investor. Another form for co-financing would be investment in bonds issued by the project direct to the investor on the basis that the project has been appraised by the DFA which will also invest in it. Yet another possibility is parallel investment in a separate part of the borrower's programme, the entire programme having been appraised by the DFA which will invest in a different part of it.

In addition, the market economy industrialised countries should agree on measures to extend the South's access to their bond markets, in particular by facilitating the issue and listing of bonds on their capital markets; consideration

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<sup>53</sup> The World Bank has recognised the importance of Industrial Development Banks and Development Finance Companies as an important base for industrial financing.

<sup>54</sup> This arrangement is much favoured by the IFC. See IFC, Annual Report 1978, Washington D.C., 1978.

might be given to some relaxation of exchange control regulations in appropriate cases. It is recognised that all these suggestions regarding capital market access, many of which were discussed in the Development Committee, would need to be promoted in several ways involving the education and the flow of information to both prospective borrowers and investors.<sup>55</sup>

### **5.6.2. Improving DC Access to Commercial Bank Funds**

(i) Borrowing countries can increase their borrowing by permitting a wider range of their financial institutions, generally commercial banks, to borrow from international banks and relend the funds to local borrowers who would not otherwise have access to external credit. The lack of diversity among local borrowers can hinder the ability of a country to draw on credit from the Eurocurrency market. Industrialised country laws and concepts of prudence limit a lender's willingness to lend a lot to any one borrower. The Borrowing requirements of separate developing country entities are low but scale is valuable: high thresholds for entry, such as the \$10 million minimum often cited as necessary for syndication, restrict the access of the many local entities that are too small to use such large financing. Some device is required to aggregate otherwise credit-worthy borrowers so that they can achieve the minimum scale or reduce the cost of borrowing. Intermediation by domestic banks, mentioned above, is one such device. A country can expand its own channels to external credit by permitting local financial institutions to borrow internationally and relend the funds to local borrowers who do not otherwise have access to external credit. Such a proposal envisions the transfer of all risks (except the local borrower's default) from the intermediary bank to the borrower. If interest rates float, so does the local borrower's rate, and where exchange rates fluctuate, the local borrower bears the risk. Government authorities can decide whether local borrowers receive foreign or local currency, and indeed, they can manipulate cost, risk, and use, to accomplish various national policies. Technical assistance is required to facilitate this borrowing which could also be assisted by co-financing arrangements where appropriate. It is fully recognised that in this area the provision of technical assistance might well be necessary in order to provide an effective regulatory framework by national governments who adopt this strategy. Technical assistance in controlling bank borrowing etc. may be required.

(ii) The volume of developing country borrowing can be increased by encouraging a group of smaller, second-line OECD banks, who have not yet developed a tradition of developing country lending, to increase their lending to developing countries. This concept needs to be actively promoted among potential borrowers and lenders and in certain cases may need to be supported by co-financing from bilateral or multilateral agencies.

(iii) In order to avoid bad debt structures arising from international bank borrowing, borrowers and lenders should be encouraged to make greater use of

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<sup>55</sup> See *Development Committee, Developing Country Access to Capital Markets*, Washington D.C., 1978.

two loan forms already in existence, flexible credit lines and tied deposits. Likewise conventional loan agreements could be modified so that flexibility in repayment is incorporated. Other innovations suggested are bank lending linked to an index or to commodity prices and contingent product financing (i.e. involvement of banks in barter-linked investment). These innovations will need to be actively encouraged. In order to improve the maturities of bank credit in the context of a developing country's economic cycle, flexibility could be introduced into the repayment schedule. The cost of bank credit could be reduced by rationalising the fee and interest structure by eliminating special one-time payments that confuse the true costs in the eyes of other borrowers and lenders. Commercial banks should be willing to accept long-term deposits, from capital surplus developing countries, that are explicitly to be loaned on to capital-deficit developing countries. The tied deposit transfers from the depositor to the bank the risk of default by the borrower, which is normal in all such intermediating activities. The tied deposit also permits a flexible repayment schedule during the life of the loan since the depositor is known and committed to a long-term deposit. While such a scheme could be left to the vagaries of the international financial market, it would be more effective if a multilateral agency would initiate and co-ordinate the relation between banks and appropriate developing countries.

Within the range of maturities prevailing at any time, nothing other than convention prohibits banks and borrowers from negotiating a flexible repayment schedule at the outset. Balloon repayments are not alien to loan agreements now, so nothing requires repayment by regular and equal instalments. The novelty lies in asking banks to accept formally and in advance an arrangement that appears increasingly to be accepted in practice: the experience of the past several years demonstrates that if developing country borrowers encounter repayment problems, lenders will reschedule, formally or informally, rather than declare default. There are two main obstacles for making such arrangements explicit. Lenders prefer to retain the legal power to act if trouble threatens a borrower. The lender's real power lies in his ability to withhold net increases in credit in the future, a power that persists regardless of whether a default may be declared. Secondly, lenders see a contractual obligation to repay fixed amounts at certain times as imposing a discipline on a borrower: yet banks frequently use the open-ended line of credit or overdraft facility in corporate finance.

A flexible repayment procedure could be developed, which would embody a fixed repayment schedule subject to certain contingencies. For general purpose loans, these events could include commodity prices falling below a fixed amount or trade receipts falling short of a specified amount. For true project loans, even now one contingency is the project's success. If the contingency occurs, the agreement would permit delays in amortisation but require continuing payment of interest and, in all likelihood, payment of a premium for the additional administrative costs of the lenders. But because the event is within the terms of the contract, it constitutes neither a default nor a problem loan for the bank. Such a procedure recognises that borrowing countries differ profoundly from companies in that, despite debt problems, the countries will

continue to exist while the companies may be liquidated. International banks know and act on this reality now, and OECD country regulators should also do so. To accomplish this requires co-ordinated action, which calls in turn for a recognition of this reality by an appropriate multilateral body.

(iv) Tax considerations may lead to commercial banks restricting loans to borrowers in countries where they cannot obtain tax credits for use against home country tax obligations. Double taxation agreements which contain tax sparing covenants to eliminate the impact of home country tax laws on the way in which banks allocate resources to developing countries need to be promoted and developed.

(v) The Central Bankers of some of the major OECD countries (the Group of Ten) have met formally and informally on a regular basis in recent years in order to discuss and to reach measures of agreement with respect to policies regarding international monetary issues, particularly the current regime of managed floating exchange rates and off-shore bank lending (i.e. activities in the Eurocurrency markets). Neither the capital-surplus nor capital-deficit developing countries have participated in these discussions, although one consequence of the notion of global interdependence is that such participation would be both useful and equitable; in addition, banking prudence does suggest that since certain Third World actors are major participants in the International Monetary System, as both lenders to and borrowers from the system, the concurrence of these actors should be sought.

It is therefore suggested that the Third World should become actively involved in the current debate on a regular basis in an appropriate forum, on issues concerning increased control and regulation of the Eurocurrency markets in order to protect its interests as the major borrower and to ensure that the industrialised countries do not agree on measures prejudicial to Third World interests. An important objective of these discussions would be to arrive at a series of agreed measures, incorporating perhaps an informal code of conduct, to which all the major participants and controllers of these markets (from the North and the South) could be asked to subscribe.

# Chapter 6. International Industrial Enterprise Co-operation

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## 6.1. INTRODUCTION

One of the principal instruments through which modern industrial capacity in the South has been built up is direct foreign investment (DFI) by Northern entrepreneurs.<sup>1</sup> By standard definition, private direct foreign investment is made in enterprises located in one country, but effectively controlled by residents of another. Recently there have been considerable changes in the organisational and legal pattern of industrial investment abroad. The investment pattern of corporation subsidiaries under foreign control, has given way more and more to arrangements where corporate control is replaced by non-corporate, non-equity structures. It is therefore necessary to widen the concept of DFI to cover these and similar forms of North/South interaction. "Industrial Enterprise Co-operation"<sup>2</sup> is hence understood to encompass all economic

<sup>1</sup> See, for example, the analysis in *D. Morawetz, Twenty Five Years of Economic Development 1950 to 1975*, Washington, D.C., 1977, p. 61.

<sup>2</sup> See *Th. W. Wälde, Methods and Mechanisms for International Industrial Enterprise Co-operation - Supporting Arguments and Analyses*, major paper prepared for this study, Vienna, August 1979.

interactions between a developing country and a foreign enterprise, in which there is some institutionalisation of a community of interest in the project, and where there is a lasting interest in co-operation. Forms for such co-operation cover the traditional corporate subsidiaries, various types of corporate and non-equity joint ventures, contractual packages containing management agreements and provisions for loan financing, and in certain instances, contracts for the installation of industrial complexes.

### 6.1.1. A Statistical Overview of DFI

In spite of what just has been said, the following background picture is confined to traditional DFI, by statistical necessity. Furthermore, a great deal of international (within and outside the UN), governmental and private discussion has taken place in recent years on the question of DFI's contribution to the national development efforts of the Third World. The extent of the available analyses and data is too vast to receive adequate review here. This section of the study will therefore provide a brief sketch of the dimensions of the existing investments, and projections of the possible formation in the DCs. Three points are covered:

- (i) The importance of DFI in overall North/South capital flows.
- (ii) The regional distribution of DFI, both between DCs and ICs and within DCs.
- (iii) The sectoral composition of DFI directed towards DCs and the importance of DFI for industry.

#### (i) *DFI in relation to North/South financial flows*

Between 1970 and 1976, the nominal value of total DAC<sup>3</sup> bilateral flows to DCs and eight Southern European countries increased from \$12.9 billion to \$31.8 billion, an increase of over 250 per cent over the six years. The real increases were, of course, much smaller as a result of global inflation and the impact of the falling value of the dollar. In 1970, official bilateral flows accounted for about 50 per cent of DAC – DC financial flows, whereas by 1976 their share was reduced to 40 per cent. If the trend were to be sustained, then the transfer of capital from the North to the South would be more along the avenue of private commercial transactions than public channels. This trend would be reinforced by the tendency for bilateral development aid to be a major victim of financial cutbacks in the North.

Trends in composition of private bilateral flows are given in table 6 (1).

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<sup>3</sup> DAC = Development Assistance Committee of the OECD comprising member countries of the OECD.

**Table 6 (1). Shares of DFI, Portfolio Investment and Export Credits, in Private Bilateral Flows DACs to DCs, 1970 – 1976**  
(Percentage of total)

Year	1970	1974	1975	1976
DFI	55.4	52.9	52.8	39.8
Portfolio Investment	11.2	28.5	26.4	31.8
Export Credits	33.4	18.6	20.8	28.4

Source: UNCTC, *Transnational Corporations in World Development. A Re-examination*, New York, 1978.

It can be seen that in this six-year period, the relative share of DFI going to the countries in question actually decreased in favour of portfolio investment.

The recent changes in the composition of capital flows have primarily been caused by two major developments in the international economy during the 1970s. First, recessionary tendencies in the OECD countries, combined with structural dislocation caused by oil price adjustments, created business uncertainty which militated against new investments being undertaken by the transnational corporate sector. Second, as far as DFI from the OECD group to the DCs is concerned, the increasing concern of DC states over control and regulation of foreign ventures in their territories, created a relatively more difficult business climate, reinforcing the trend away from sustained growth in this activity.

(ii) *Regional distribution of DFI*

The industrial assets held abroad by the DMECs in ICs are distributed as follows:

**Table 6 (2). Shares in World Stocks of Direct Foreign Investment held by Selected DMECs 1971 and 1976**  
(Percentage of total)

Country	1971	1976
U.S.	52.3	47.6
U.K.	15.2	11.2
France	4.6	4.1
FRG	4.6	6.9
Canada	4.1	3.9
Japan	2.8	6.7
Italy	1.9	1.0
Others	14.7	8.6

Source: UNCTC, *op. cit.* III-32.

Note: The total value of global stocks in 1971 was \$158.4 billion and in 1976 \$287.2 billion.

The figures show that in the period, there was a relative shift of industrial asset holdings, although the dominant position of the U.S. did not change. The FRG and Japan gained considerably in their share of global stocks, while the UK showed a relative decline.

Viewed from the perspective of DCs as countries of destination, the value of accumulated stocks of investment held by foreigners was estimated at \$68.2

billion in 1975, which was about 25 per cent of foreign-owned assets in the world as a whole. The value of foreign-owned stocks of assets in DCs increased by about 32 per cent between 1967 and 1971, and 57.5 per cent between 1971 and 1975. The higher growth rate in the latter four years is in part due to the effects of inflation and in part to the increased portfolio investment. On the other hand, the increase in nationalisation of TNC assets, especially in the field of extraction and processing of primary commodities, has dampened the growth of asset values. Without more precise estimates of magnitudes of these three items (i.e. capital asset increments, the extent of portfolio investments in existing productive facilities and the value of assets nationalised), the current dollar stocks data provide a very imperfect record of the historical contribution of DFI to industrial capital formation in DCs.

These stocks of industrial assets are fairly concentrated within the developing country groups, as is attested by table 6 (3).

**Table 6 (3). Intra DC Distribution of Stocks of Direct Foreign Investment 1967, 1971 and 1975**

(Billions of US\$ at current prices and per cent of total)

Group	1967		1971		1975	
	\$	%	\$	%	\$	%
OPEC countries	9.1	27.7	11.6	26.8	15.6	22.9
Tax Havens	2.3	7.0	3.9	9.0	8.9	13.0
Other DCs	21.4	65.3	27.8	64.2	43.7	64.1
Total Stocks	32.8	100.0	43.3	100.0	68.2	100.0

Source: Derived from UNCTC op. cit., table III - 47.

Not only is there a high degree of concentration between groups which are unequal in size, but within each group a fair degree of concentration persists. Thus in the OPEC group (13 countries in all) four countries - Venezuela, Indonesia, Nigeria and Iran - accounted for 16.6 per cent of the total foreign stock values in 1967, 16.8 per cent in 1971 and 11.6 per cent in 1975. This means that over half the foreign-held stock in the OPEC group was located in these four countries. The degree of concentration is more marked in the "other DCs" category. Here five countries<sup>4</sup> were the location for about 28 per cent of the total foreign stock in DCs in 1967 and 1971, and about 30 per cent of the stock in 1975. Viewed another way, these countries were host to about 75 per cent of the stocks of foreign-owned industrial assets located in non-OPEC and non-tax haven DCs. DCs with per capita incomes below \$500 were the location of 33.2 per cent of assets in 1967, 32 per cent in 1971 and 28.2 per cent in 1975, i.e., there was a gradually decreasing proportion of assets located in these countries. DFI flows have therefore tended to favour the already relatively well-off; the contribution of DFI to industrialisation will hence serve to increase international inequality in the absence of offsetting policy.

Table 6 (4) shows the geographical distribution of DFI flows over 1973 to 1976.

<sup>4</sup> The countries are: Brazil, Mexico, India, Malaysia and Argentina.



**Table 6 (4). Distribution of Direct Foreign Investment Flowing to Developing Countries 1973-1976**

(Millions of US\$ at current prices and per cent of total)

	1973		1974		1975		1976	
	\$	%	\$	%	\$	%	\$	%
Total DFI flows	6 717	(100)	7 874	(100)	11 506	(100)	7 649	(100)
of which:								
OPEC	291	4.3	390	0.5	1 243	10.8	362	4.7
Tax Havens	581	8.7	2 011	25.5	945	8.2	1 100	14.3
Other DCs	5 845	87.2	5 473	69.3	9 318	81.0	6 187	80.8
of which:								
Brazil	1 257	18.8	1 307	16.5	1 457	12.6	1 366	17.8
Mexico	252	3.7	480	6.0	393	3.4	-166	-2.2
Peru	87	1.3	457	5.8	327	2.8	159	2.1
Malaysia	139	2.0	123	1.6	73	0.8	51	0.6
Spain	509	7.6	668	8.5	578	5.0	235	3.1

Source: OECD, Development Co-operation, Annual Review (various years). *The World Bank*, Background paper, Private Direct Foreign Investment in Developing Countries. Policy Issues for Host and Home Governments and for International Institutions, table 5, December 1978.

The flow situation demonstrates inequalities similar to stocks, particularly for the category "other DCs" where five countries (Brazil, Mexico, Peru, Malaysia, and Spain) accounted for 32.1 per cent of the total flows in 1973 and for 38.4 per cent in 1974. Subsequently, these figures declined to 24.6 per cent and to below 20 per cent in 1975 and 1976.

(iii) *Sectoral composition of direct foreign investment in the developing countries*

The sectoral distribution of DFI in DCs can be gauged from the following indicators. At end 1972 44.8 per cent of the total was in extractive industries (35 per cent being in petroleum alone), 30.3 per cent in manufacturing and 24.8 per cent in other sectors (particularly service industries and finance). By end 1976, however, less than one fifth of the total was within the extractive sector due mainly to the substantial nationalisation at that stage in the petroleum industry. Since the U.S. is the country which has had, and continues to have, by far the largest interests in that area, most of this disinvestment has affected U.S. TNCs. End 1974 figures for the sectoral distribution of DFI from the U.S., UK, FRG, and Japan show that these countries had from 39 per cent to 60 per cent (according to country) of their investments in manufacturing and from 25 per cent to 43 per cent of the investments in the service sector. Figures in DFI flows in 1976 for U.S., UK and Japan show that in that year one third of the investments by these three countries were in manufacturing, and 37 per cent in the service sector. In short, the main thrust of recent DFI is towards manufacturing and services.

### 6.1.2. The Evolution from DFI to International Industrial Enterprise Co-operation

The statistical picture given above does not reflect the evolution of DFI to new forms of investment-related interaction with foreign enterprises. The characteristic feature of all those forms replacing DFI in the traditional sense is that the equity component—holding of stock by foreign enterprises in the operating company undertaking the investment—gives way increasingly to non-equity arrangements stipulated on a contractual basis, while control is still exercised by the foreign company through non-corporate instruments of influence. Equity is being replaced by the use of loans and suppliers credits; direct parent control over the subsidiary by way of corporate dependency gives way to control exercised via management contracts, technical assistance agreements, production sharing and service contracts. Even if the corporate element is absent, a corresponding control can still be exercised through the combination of contractual arrangements and the superior bargaining power and information system of the foreign enterprise.

The concept "*industrial enterprise co-operation*" would mean a long-term and complex industrial interaction between a DC and a foreign enterprise with mutual performance obligations, with some institutionalising of a community of interest in a specific project and with the existence of a lasting interest in co-operation. The advantage of using the notion of "*industrial enterprise co-operation*" is that it can also encompass the forms of industrial interaction employed in East/West and East/South relations, where DFI through completely-owned subsidiaries is mostly absent but where a functionally comparable long-term industrial co-operation through delivery of industrial plants with payment in resultant products seems to constitute a form of quasi-investment.

Furthermore, "*industrial enterprise co-operation*" allows another important development in the organisational structure of industrial interaction. Not only in the field of investment, but also in other commercial transactions between the North and the South an increasing complexity can be observed e.g. through a packaging of services and equipment resulting in some convergence of those transactions with various forms of investment. The sale of industrial equipment and technology has extended to technical assistance, design of industrial complexes, civil engineering, and the organisation of long-term interaction. This has been particularly the case in East/West relations where forms of industrial co-operation (e.g. supply of technology and complete plants in exchange for production) have been designed to fulfil co-operative functions otherwise inherent in equity investment. Another example is contracts which have been extended to include post-operational assistance and some measure of payment through production, with respective performance guarantees taking the place of the investor's risk in traditional foreign investment. Industrial enterprise co-operation seems at present the concept best suited to emphasize the shift away from DFI and from simple commercial transactions towards a new mode of interaction with more co-operation and mutually undertaken co-ordination.

## 6.2. ISSUES AND PROBLEMS

(i) *Direct foreign investment* is one means available to countries for importing capital. In principle it is comparable to official aid flows, borrowing from private intermediaries, or drawing on reserves of gold and foreign exchange. In reality, however, DFI is much more than simply a capital inflow and much more than simply one of several institutional forms which capital movements can take. Rather it is best perceived as a "package" of physical capital, technological know-how, marketing knowledge, and management. The economies of direct foreign investment are therefore best analysed not as an aspect of the economics of international financial flows, but as an aspect of the economics of industrial organisation.

*The transnational corporation* is the institutional form in which most direct foreign investment takes place. Furthermore, in international economic relations, TNCs are the most important non-governmental actors. Thus, the capital movements, technological transfers, commodity movements, and shifts in the patterns of industrial organisation referred to above as part of the package of DFI, typically take place within a corporation but across national borders. Therefore there are risks of conflicts between national governments in the DCs on the one hand and the TNCs on the other, conflicts which may be compounded by the intervention of a third set of actors, the governments of the ICs in which the TNCs are based.

The past and future role of TNCs in the industrialisation of the Third World is analysed in detail in chapter 2 above. In line with the broadening of the analysis through the concept of "International Industrial Enterprise Co-operation", the proposals in this study, however, are not limited to a particular set of actors in the co-operation process. TNCs, South-based multinational public enterprises and state agencies are all addressed. It is felt that regardless of specific forms of co-operation, all actors must observe some rules and practices of co-operation.

(ii) Relations inherently unfair to DCs still exist. These *shortcomings of an imperfect co-operation process* must be identified. Insofar as areas of structural unfairness can be pinpointed, improved institutional solutions may be the only effective answer, but this finding would presuppose a thorough analysis of existing institutions and their potential for being re-directed.

(iii) Fundamental for international industrial co-operation is a clear perception of the *community of interest* of all participants. This community is best served by creating a network of interrelated channels of transfers, contributing to the respective aims of the parties. A network of interdependence, well established and reflecting in particular the needs of an accelerated industrial development sought by several DCs, can generate benefits for all sides. The kinds of benefits received will motivate an ongoing interest in the co-operation process.

The community of interest between the agents of industrial co-operation can be articulated and promoted by instruments relating to the micro-level of enterprise co-operation (contractual arrangements; bargaining assistance; cor-

porately structured organisational mechanisms), by instruments relating to the macro-level of industrial co-operation (particularly intergovernmental agreements) and by activities undertaken by international organisations to influence the institutional and attitudinal framework of industrial co-operation.

(iv) All participants interested in the proper functioning of long-term co-operation have to shoulder their requisite share of *responsibilities*. Developing countries should undertake all efforts for setting up a political and economic basis conducive to an active involvement in co-operation. Unless they clearly and openly decide on priorities of development and the ways and means to implement them, other parties will have an opportunity to establish different priorities. Industrialised countries should assume their proper responsibilities in creating mechanisms conducive to DC requirements. Market economies are called upon to help control and redirect activities of one of the post powerful agents in co-operations, the TNCs. Centrally planned economies may also reconsider some of the methods employed, in order to further increase resource transfers.

The co-responsibility achieved can further the operational principles for co-operation, performance, and stability. *Performance* is basically geared to DCs' requirements for industrial development. Given the malperformance vulnerability of many DCs, provisions have to be made taking into account the overriding importance of performance of industrial transactions for development. Performance is positively correlated with *stability* of co-operation. Insufficient performance will endanger stable economic relations. Reversely, stability itself may act as a powerful incentive for a degree of performance acceptable to both sides. Performance and stability are of mutual interest to DCs and ICs.

(v) The institutionalisation of communities of interest fair and acceptable to both parties is, in the long run, best promoted by a *transformation of the present international legal framework* into one which is more balanced and acceptable to all participants. This transformation can only come about through a long process culminating in a new international industrial development law.<sup>5</sup>

Long-term institutional practices and wide acceptance of model devices may finally achieve a body of international law applicable to industrial enterprise co-operation. Many separate transactions, presently negotiated by the parties concerned, may be gradually standardised, redirecting transactions to better serve the common objectives of the parties concerned.

### 6.3. GUIDING PRINCIPLES

In this study the evaluation of existing methods and the formation of proposals have to rely on a set of criteria using the guidelines set forward by the

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<sup>5</sup> Methods and mechanisms proposed are oriented at the prerequisites of the co-operation process. Thus, they reflect the wide choice of alternatives available. They have also to take into account different stages of development as well as priorities of the parties concerned. The suggestions have, therefore, to be seen rather as a *tool-kit*, the tools to be used only if a concrete situation so warrants.

UN General Assembly in its resolutions relating to a New International Economic Order. These guiding principles assume that DCs have to assert authority over the terms and conditions of industrial co-operation within their national economies. The guidelines thereby express the principle of national economic sovereignty.

The guiding principles further assume that DCs have to counteract the effect of a non-national control over their national economies – often effected through TNCs – through insistence that industrial co-operation should be adapted and steered to fit the national industrial development strategy. As the DCs' partners in industrial co-operation, particularly TNCs, operate on a global scale, the necessary countervailing strategy often can not limit itself to national controls, but must entail a mechanism whereby the national sovereignty of DCs is articulated and expressed on a regional or even on a global scale. The guiding concepts outlined below are interrelated, but express distinct aspects of Third World industrialisation through international industrial enterprise co-operation with a view to bringing about a New International Economic Order.

(i) *Improvement of Third World bargaining ability*

The access of foreign investors to DCs' economies is often the result of an intensive bargaining. The degree of contribution of foreign investment to Third World industrialisation is, therefore, linked inextricably with Third World bargaining ability. Increasing that bargaining ability requires that DCs look for feasible alternatives. Alternatives could take the form of unpackaging the services the investor offers and seeking direct access to finance, technology, managerial capacities and marketing, as well as components from governments, governmental enterprises, or private enterprises in other DCs. Where unpackaging is not feasible, non-TNC foreign investment sources could be sought.

(ii) *Interdependence through mutual long-term benefits*

The goal of long-term stability in the development of the world economic system implies the replacement of present unilateral dependence with a network of interdependence. Such interdependence is best achieved and maintained when it works to the benefit of all participating partners. Procedural, substantive, and organisational instruments for co-operation have accordingly to be devised which give some stability and institutionalisation to the participants' community of interests.

In this chapter, the guiding concept of mutually beneficial interdependence implies the search for mechanisms which constitute a package, containing elements catering to the interests of all participants in industrial co-operation. To the extent feasible, individual mechanisms should provide quid-pro-quo negotiating packages.

(iii) *Stability through arrangements that promote stability and flexibility at the same time*

At present, ICs insist vigorously on "investment security" while DCs call for the absolute recognition of "national sovereignty". The study assumes that investment security is less a question of tying the hands of DCs engaged in rapid economic and social transitions than a search for instruments which, while responsive to DCs' developmental needs, provide sufficient predictability in

risky industrial commitments. The study will hence elaborate and employ a concept of "dynamic stability", i.e. a synthesis of necessary stability with required responsiveness. Innovative economic and legal instruments designed in accordance with that concept should allow for long-term planning and co-ordination. They should include methods to reduce the costs generated by conflicts between the insistence on inmutability of contractual terms by one party and demands for a fundamental revision of the terms once negotiated by the other. Such a concept should also contain compensatory mechanisms to counteract unequal development. Legal instruments employed at present in international industrial co-operation mainly express the needs of traditional commercial interaction between ICs, which are relatively equal bargaining partners. They afford protection to the interests of TNCs and capital- and technology-exporting home countries. They assume a formal equality in situations of material inequality. They tend to perpetuate unilateral dependence and to promote unequal development.

(iv) *Co-responsibility of host and home states*

Through taxation, the home states of TNCs benefit to some extent from foreign investment revenues generated in DCs. Their involvement in the investment process, usually in defensive way, is limited to cases where the question of investment protection arises. They are not involved when questions of supervision, regulation, and responsibility concerning foreign investment are at stake. New mechanisms should require IC governments to accept some form of co-responsibility. The study hence envisages package deals where home-state co-responsibility is combined with the establishment of a balanced system of conflict resolution and assurances relating to ICs vital interests concerning economic interaction with DCs.

(v) *Increase of developmental performance and responsiveness*

In response to the unequal bargaining position of the South, instruments to improve the economic developmental performance of foreign investments are suggested, particularly in industrial co-operation, where the specific and distinct vulnerability of DCs to malperformance of plant, equipment, imported components, or managerial services requires adequate protection.

(vi) *Regional enterprise co-operation*

Where possible, regional joint ventures or multinational (as distinct from transnational) enterprises should be stimulated in the South. Based on related experiences in the EEC (Societas Europaea), the CMEA (International Economic Organisation) or the Andean Pact (Empresas Multinacionales), a regional international charter should be developed. Regional joint ventures should be given privileged corporate state to protect them from frequently changing political conditions.

(vii) *The legal instruments needed to put these principles into practice are of utmost importance. Previous action in this field has focussed on three levels of activity:*

- international policy guidelines which provide minimal "rules of the game" for the relationship of TNCs with individual governments (i.e. various codes of conduct);

- regional legislation, most notably articles of the character of the Andean Pact which deal with a host of fiscal and other economic issues, in addition to those noted above;
- national measures which are of a regulatory, fiscal, or prohibitive nature.

The guiding principles behind the recommendations made in this study in the field of international enterprise co-operation, attempt to add a fourth dimension to these areas by looking at issues of a micro-economic nature, in order to provide stable, uniform and workable instruments within the broad policy framework enunciated in the current international debate. Our emphasis will be on the legal instruments. These instruments, while modest, should be regarded as a necessary supplement to the broader negotiations elsewhere in the UN system and in the international community.

## **6.4. MAJOR PROPOSALS FOR ACTION**

### *Within the Framework of Global Interdependence*

#### **6.4.1. Commission for International Industrial Development Law**

International industrial co-operation today takes place under legal rules, principles and concepts combined in what can be termed "international economic law". This law has its roots in commercial and economic dealings between and among ICs, and is heavily geared towards protecting the interests of capital and technology exporting countries. It has a considerable, though often indirect, impact on the negotiations between DCs and foreign investors. The defensive nature of international economic law should be changed. An active, dynamic legal framework, which would make an active contribution towards Third World industrialisation is necessary. This new system of international industrial development law should be the legal dimension of the NIEO.

Improved international industrial enterprise co-operation requires new mechanisms. The present mechanisms are controlled and developed by legal experts influenced by the ICs' legal tradition. This applies to several influential international arbitration institutions. DCs have at present less potential to develop, to co-ordinate, and particularly to advocate their alternative legal concepts, because they lack institutions corresponding to the powerful and well-funded IC institutions providing mechanisms for education, communication, and opinion-building. There is a need for new institutions to provide alternative legal concepts, analyse and disseminate relevant information on the international practice of industrial contracting, and assist in negotiations for guidelines, model contracts, uniform terms and multilateral conventions. Among the presently existing institutions, UNCITRAL has a related task, although oriented primarily at unification of commercial law issues. Close co-operation with the institutions proposed below is, therefore, required.

It is proposed that a Commission for Industrial Development Law be established. The Commission should consist of high-level experts in interna-

tional industrial development law. It would meet periodically to supervise, evaluate, and direct legal activities as outlined in this study. Its main mandate would be to promote the evolution of a legal environment for industrial co-operation responsive to the goals of Third World industrialisation. A small, but highly qualified secretariat would have to be created to assist the Commission in carrying out its functions in co-ordination with other organisations. Its primary tasks would be:

- Design of contracting guidelines, model contracts and manuals, in co-operation with other competent bodies (e.g. UNCITRAL, UNC-TAD, UNIDO system of consultations, and the UN Regional Economic Commissions);
- Provision of negotiating assistance to developing countries;
- Preparation and co-ordination of proposals for legal harmonisation in the area of industrial co-operation;
- Study on evolving issues concerning industrial co-operation to present alternative concepts and evaluate existing practices;
- Organise workshops and seminars to train legal experts from DCs. Here, co-operation and co-ordination with the UN university system and the UNITAR research system seem highly useful. The basic idea should be to offer future DC experts and leaders alternatives to the high-level education offered at the leading universities of industrialised countries;
- Participate and act as a focal, co-ordinating center for formal and informal systems of information-sharing and opinion-building among DCs.

The Commission and its secretariat could function as the main supervisory body for the proposed programme to generate bargaining technology and new contractual mechanisms for industrial enterprise co-operation.

#### **6.4.2. System for the Resolution of Industrial Conflicts**

##### *(i) Background*

The mechanisms and procedures used for solving differences are linked with the concepts of stability and flexibility. If a conflict can be solved through impartial procedures, an investor will have more confidence in the stability of terms negotiated and will be encouraged to assume long-term commitments. Similarly, an acceptable mechanism for dispute settlement, responsive to DC industrialisation requirements, can be an incentive for a host state to rely less on its sovereignty prerogative and choose procedures for solving conflicts which do not involve conflict escalation. Appropriate mechanisms for conflict resolution are accordingly crucial variables for achieving stability in international industrial co-operation.

At present, the search for effective conflict resolution is fraught with controversies involving DCs, TNCs, and TNCs' home states. The TNCs and



their home states insist on legal principles derived from traditional law and emphasise the laws and jurisdiction of the home state. The international mechanisms used are primarily the *International Centre for the Settlement of Investment Disputes* and the *International Chamber of Commerce (ICC) Court of Arbitration*. The latter recently added facilities for contract adaptation and for technical expertise. Other facilities for international arbitration, relying on national and regional arbitration centres, exist notably within the CMEA for CMEA/West relations. Such experience has served in part as models for proposals presented here.

The insistence by investors and ICs on international arbitration has met with stiff and growing resistance from DCs. The Latin American reluctance based on the Calvo-doctrine is now shared by some other developing countries. Legal principles and concepts which reflect a systematic bias in favour of the interests of capital- and technology-exporting countries tend to be major roadblocks to mutually advantageous mechanisms for conflict resolution. Arbitration could, however, be an effective instrument to solve conflicts in less formal, more expert and confidence-producing ways.

(ii) *Types of conflicts and requirements for new mechanisms for conflict resolution*

International industrial co-operation can lead to conflicts because of differences in the interpretation of the co-operation contract and the lack of provisions for unforeseen events. The task of the conflict resolution mechanisms extends to filling contractual gaps.

Certain matters will require qualified technical expertise, e.g. determination of acceptable at-arm's-length prices, accounting questions (such as determination of profits), functioning of an industrial plant.

In the case of alleged non-performance of a partner's obligation, the existence of a carefully balanced commission and the power to enforce awards, seem essential. It is proposed that foreign contractors post relatively high performance bonds, released upon award by the proposed national or regional arbitration centres. The bonds would constitute an important security for DCs regarding contractor performance.

Conflicts arising out of a change in an agreement's basic equilibrium require an adaptation or revision of the contract. Co-operation agreements also should provide for instruments to increase the stability of the terms of agreement. Accordingly, a system for stabilising contractual terms with appropriate sanctions has to be worked out in exchange for definite commitments of developmental performance. This could imply a partial freezing of relevant regulations. Such freezing clauses have to be accepted only to the extent they are linked on a quid-pro-quo basis to definite commitments on plant performance. Compensation bonds, released upon award by the national or regional arbitration centres, could act as a powerful incentive for compliance. Within the context of intergovernmental agreements, participating countries could lay down a legal framework for instruments of adaptation and of stabilisation of co-operation and investment contracts already negotiated.

Instruments of conflict resolution should leave as much as possible to the

jurisdiction of DC decision systems, e.g. to national arbitration centres. Where complete national arbitration is not acceptable to foreign enterprises, a division between national and international competences should be considered. Areas of disputes can thus be split (e.g. taxation to the DC, breach of agreement and compensation to a non-national institution). In this process, attempts should be made to increase the role of the Third World or the specific regions in the non-national arbitration.

(iii) *Institutional proposals for conflict resolution*

A regionally decentralised system of conflict resolution is proposed, called the *System for the Resolution of Industrial Conflicts* in which proposed national and regional arbitration centres are linked on a global level for purposes of co-ordination and supervision and for the provision of technical assistance.

(a) *National arbitration centres*

For many host countries, only national arbitration is acceptable. Efforts to render such arbitration centres expert and experienced enough to make them acceptable to foreign enterprises, should be encouraged. A number of countries and arbitration organisations are already rendering technical assistance for setting up national arbitration centres in DCs, be it through ad-hoc expert advice, co-operation agreements, or participation in respective international arbitration bodies. Further, assistance is proposed to enable national arbitration centres to deal with conflicts caused by differences in the interpretation of contract claims for non-performance, contract adaptation and technical issues.

(b) *Regional arbitration centres*

Regional arbitration centres could be a forum acceptable to all parties to a dispute and yet allow DCs to articulate their concepts. Such centres could be attached to the UN Regional Economic Commissions in order to give them more weight and to distinguish them from existing institutions. The regional arbitration centres could apply UNCITRAL procedural rules, if necessary in a modified form. In order to be better able to handle long-term industrial co-operation problems, the following facilities should be attached to the regional arbitration centres:

- *A facility for contract adaptation and filling of contractual gaps*  
Such a facility would, according to established procedural rules and substantive standards, upon referral by the parties provide a service of contract adaptation and filling of gaps;
- *A facility for technical expertise and fact-finding*  
The facility should draw upon the expertise available in the UN system and in DCs and provide a service for deciding technical disputes and fact-finding;
- *A facility for conciliation*  
Procedures, experts, and an institutional setting would be provided for conciliation upon request of the parties. Conciliation procedures should produce confidential, non-binding recommendations to the parties;

– *A facility for summary hearings*

Often, an expedient summary hearing and respective decision are necessary in co-operation projects, e.g. for filling of unforeseen gaps during project implementation or when performance bonds and bank guarantees conditioned upon a respective arbitral award are called. Here, a respective facility for summary hearings could satisfy contractor interest for a neutral decision upon the calling of bonds, but still provide security for DCs.

The proposed mechanisms would have to be co-ordinated and linked to programmes developing Third World bargaining abilities and promoting Industrial Development Law. For these reasons, a global, co-ordinating body appears warranted.

(c) *International centre*

At the apex, a centre for the global system for resolution of industrial conflicts would be responsible for co-ordinating technical assistance given to national and regional arbitration centres. In addition, it would, through co-ordination, information-sharing, and recommendations, link the arbitration with legal programmes on the global level under the responsibility of the proposed Commission (see 6.4.1. above). As an umbrella organisation, it would not engage in actual arbitration, but provide national and regional arbitration centres with advice, assistance, experts and information. It might also develop a limited appeal procedure to increase the co-ordination and the acceptability of national and regional arbitration centres.

A global system would co-operate closely with the proposed Commission for Industrial Development Law and be linked to the proposed programme to develop Third World bargaining ability. It would, as a whole, offer a variety of different conflict resolution services, to be used by countries, when and if deemed appropriate and desirable.

## **6.5. RECOMMENDATIONS FOR SUPPORTING PROGRAMMES**

### *Within a Framework of Global Interdependence*

#### **6.5.1. Extended Use of Intergovernmental Agreements**

Intergovernmental agreements may take highly varied forms, reflecting the differing degree of state intervention. They extend from abstract and general agreements down to very concrete project agreements. Agreements at the top level of intergovernmental relations frequently express general principles and are basically a declaration of the intention to provide a political environment favourable for co-operation. On the basis of such general provisions, agreements relating to co-operation in specific sectors or areas are concluded, laying down principles and methods of co-operation and organisational structures (mixed commissions and sector-oriented working groups). Finally, intergovernmental agreements can be specifically concerned with individual projects. Here, either an institutional framework is established for one specific large-scale

project or the contract for a specific project is incorporated directly into an intergovernmental agreement.

(i) *An evaluation of present practice*

(a) *East/West intergovernmental co-operation agreements*

Long-term intergovernmental agreements on industrial, technical, and scientific co-operation play a prominent role in East/West relations and are intended basically to create the preconditions for practical work leading to concrete co-operation.

The UN Economic Commission for Europe (ECE) has closely followed the development of these agreements. In late 1977 ECE had collected information on 123 individual agreements concluded between 1974 and the middle of 1977 between "ECE member countries with different economic and social systems". They have been analysed and registered in detailed lists.<sup>6</sup>

The agreements cover the following six fields:

(1) The construction of new industrial installation which meets mutual economic interests, and the extension and modernisation of existing industrial enterprises.

(2) The joint use of production capacity.

(3) The exchange of know-how, documentation, and technical information, the granting of patents and licences, the application and improvement of technical processes, the communication of the joint research results, and the training of cadres, including the exchange of specialists and trainees, and the joint organisation of expert consultations and conferences.

(4) The establishment of joint production and marketing enterprises in one of the contracting countries and (in some agreements) in third countries.

(5) Co-production and/or joint marketing in the markets of the contracting countries or of third countries.

(6) The organisation of fairs, exhibitions, and symposia in the territory of two contracting states with a view to promoting a better mutual understanding of the opportunities offered for the development of co-operation.

The actual supervision and implementation of an agreement is entrusted to a *joint commission*, which settles differences and identifies and stimulates areas of potential practical co-operation. The follow-up activities are handled by sectoral or ad hoc working groups. East/West co-operation agreements lift normal activities between Western and Eastern enterprises to the level of governmental concern even if Western governments maintain not to have formal power to force their companies to accept any concrete obligations. Furthermore, intergovernmental agreements help to create direct relations between Eastern and Western enterprises.

DCs could also attempt to obtain through intergovernmental agreements at least the concessions obtained by socialist countries. However, it is recommended that intergovernmental agreements with Western countries should be more

<sup>6</sup> ECE documents Trade/R.351 of 18 October 1977 and Trade/R.334/Rev. 2 of 28 August 1977.

specific, e.g. related to individual projects, and aim at greater government involvement than is the practice in East/West relations.

(b) *East/South intergovernmental co-operation agreements*

Socialist countries use intergovernmental agreements to a larger extent in their interaction with DCs.<sup>7</sup> Key projects are established through the co-operation of DC state sectors with socialist states, with long-term plans of each partner co-ordinated as much as possible. The characteristic feature of such agreements is that the socialist countries assume direct obligations related to credits, deliveries of equipment and performance of plants. Such projects are not subject to national regulations, but primarily to the terms of the international treaty in question.

An important issue concerns the relations between the agreement and the contract on the enterprise/project level. The content of project contracts is largely determined by the intergovernmental agreement which e.g. establishes the principles of price calculations and the delivery time. Contractual terms only reflect the terms of the agreement. The party's non-fulfilment of a civil law obligations in a contract usually means the non-fulfilment of the state's obligation under international law. This feature clearly shows the difference between intergovernmental agreements employed in East/West and West/South interaction.

The methods employed in East/South relations merit attention, as they are steps towards a sufficiently concrete set of rules for international industrial co-operation, albeit on a bilateral basis. The areas covered could be widened to include rules applicable to financing, transportation, import and export transactions, turnkey plant contracts, dispute settlement, and joint venture formation and operations.

(c) *West/South intergovernmental co-operation agreements*

Intergovernmental agreements between market economies and DCs relating to industrial investments emphasise the protection of foreign investment. Investment protection agreements have been entered into by DCs primarily in the hope of attracting investment. However, the kind of investment expected has often not been forthcoming.

Some intergovernmental agreements also have provided a framework for industrial co-operation at the enterprise level, e.g. through facilitating the establishment of joint ventures. In some cases, market economies have entered into intergovernmental agreements directly concerning and regulating project contracts, particularly in cases where the DC committed itself to provide a secure supply with vital natural resources.

The problem to be solved is hence of finding methods and mechanisms which would allow market economy governments to accept to a greater extent the principle of co-responsibility, while preserving the basic operational autonomy of enterprises characteristic of their economic system.

<sup>7</sup> See i.a. papers prepared for this study by *M. M. Boguslavsky* and *N. L. Platinova*, *Legal Aspects of Industrial Co-operation between the Soviet Union and other CMEA Member countries and the Developing Countries*, and *W. Seiffert*, *Intergovernmental Agreements as a Mechanism to Promote Third World Industrialisation through International Economic Co-operation*.

(d) *South/South intergovernmental co-operation agreements*

Where industrial co-operation agreements serve as an instrument for planned regional industrialisation, intergovernmental agreements are a prerequisite for effective industrial project co-operation. The various attempts in this field and the corresponding institutional arrangements may be broadly categorised into those employing complementarity agreements, successive allocation systems, simultaneous allocation systems and sectoral programming. Co-operation at the project level, particularly between state enterprises, has often been promoted under the umbrella of an intergovernmental agreement.

Here, the development of models of co-operation related to specific projects of bilateral or regional co-operation could be useful, making use of the co-operation experience of Latin America, CMEA and the EEC.

(ii) *Improved forms of intergovernmental agreements for international industrial co-operation*

From the analysis it seems that considerable expansion and improvement of the present practice of intergovernmental co-operation agreements are possible. The proposed methods attempt to give full credit to the principle of government co-responsibility and to the need for a greater stability of the project co-operation's legal environment; they also reflect the growing – albeit qualitatively different – role of states in international industrial co-operation.

(a) *Framework agreements between governments for industrial co-operation*

Framework agreements concern the general structure of co-operation. For DCs with a predominantly state-controlled economy, long-term programming of industrial co-operation through intergovernmental framework agreements seems warranted with individual projects effectively inserted into the co-operation programme. Intergovernmental agreements should provide for procedures and joint institutions for co-operating programming, project preparation, evaluation, implementation, and performance monitoring.

Even when a co-operating country is not a centrally planned economy, framework agreements can provide considerable support for co-operation projects and their developmental performance. As in East/West relations, they can provide a favourable setting with some, even if limited, opportunity to identify areas of project co-operation, and establish contacts for co-operation. Also, joint institutions can be set up for matching enterprises with projects in DCs.

A joint process of selection of the co-operating enterprises might be a first step towards greater co-responsibility. DCs have little information about IC enterprises; ICs, on the other hand, possess sophisticated systems of government contracting and procurement and have a considerable knowledge of performance capabilities. Information-sharing in this respect could greatly aid DCs.

Negotiation of uniform terms for individual areas of industrial co-operation are of particular importance in framework agreements. The existence of mutually acceptable uniform rules for industrial co-operation reduces the number of bargaining variables and hence bargaining costs and it assists DCs in

generating specific legal rules appropriate for complex industrial co-operation which are generally not available.

The negotiation of such sets of uniform terms between states would be greatly facilitated through appropriate assistance on the international level. The successful work of the ECE could certainly be used to a considerable extent. Valuable experience in drawing up uniform rules were made by the CMEA. Uniform terms could be drawn up on: turnkey contracts, consultants contracts, employment of foreign experts, technical assistance, transportation, buy-back and compensation provisions, penalty and performance guarantee provisions, dispute settlement, sale of machinery, repair and maintenance obligations.

(b) *Intergovernmental project agreements for industrial co-operation*

Intergovernmental agreements also could be improved in co-operation projects at the enterprise level. Such agreements would concern an individual, large-scale project, or a certain type of project already individualised and concretely envisaged in the agreement. The problem seems to be of increasing the scope of the co-responsibility of the governments of market economies.

Intergovernmental project agreements could provide for:

- a partial assumption of the risk of non-performance of enterprises by their respective home countries;
- provision for financing and market access conditions to enable the proper functioning of buy-back arrangements;
- host state guarantees relating to stability of the terms of industrial co-operation;
- host state guarantees relating to supply with energy and natural resources for the home state;
- intergovernmental co-operation to control enterprises;
- precise commitments of both sides to respect each others vital interests in order to create a package expressing a mutually beneficial interdependence (*quid-pro-quo* approach).

(iii) *Organisational structure of co-operation through improved forms of intergovernmental agreements*

The organisational structure of improved intergovernmental industrial co-operation agreements can build to some degree on present practice. The system of mixed commissions, sectoral working groups, and expert groups for the proposed elaboration of uniform terms of co-operation familiar from East/West co-operation would be appropriate. For specific intergovernmental project agreements, governments should envisage the setting up of joint enterprises to identify feasible projects for industrial co-operation, to conduct joint feasibility studies, to seek private and public sector financing and additional partnership, and eventually to implement co-operation projects.

(iv) *International action for support to and promotion of improved intergovernmental co-operation agreements*

To a certain extent, the proposals for improved methods of bilateral intergovernmental industrial co-operation are basically recommendations for

states. However, action on a multilateral level seems necessary to promote improved new forms and to prepare the groundwork for inter-state negotiations. First, it adds the necessary multilateral dimensions to bilateral agreements. Bilateral agreements are often, through unequal bargaining power, tilted towards ICs. Secondly, many of the issues and proposals are too complex to be negotiated only on a bilateral basis. Accordingly, multilateral solutions such as model framework conventions could serve as guidelines for negotiating governments.

Accordingly, it is proposed to set into motion a process of elaborating:

- model agreements, negotiating guidelines, and manuals for intergovernmental framework and project agreements;
- uniform terms for the respective areas of industrial co-operation, relying on work already done (by UNIDO; ECE; CMEA; EEC; rules of DC regional integration bodies, e.g. Andean Pact).

Such instruments should be elaborated by expert groups under the guidance of the proposed Commission for International Industrial Development Law. They could be issued ultimately as a recommendation by the Commission and be embodied in a multilateral convention.

### **6.5.2. Mobilising the Potential of Medium-Sized Enterprises and Other Non-TNCs**

In the context of bargaining assistance to DCs, small and medium-sized enterprises offer an alternative to TNCs, but barriers between potential partners from DCs and ICs exist which can only be overcome with special assistance during the bargaining, implementation, and operational phase of a project.

The present structure of international industrial co-operation favours TNCs to the detriment of smaller enterprises, particularly those from DCs. It is mostly as dependent suppliers to TNCs that they become involved in North/South or South/South industrial co-operation. Non-TNC actors, however, seem to possess a potential to contribute to Third World industrialisation: smaller companies frequently produce more efficiently at competitive costs for relatively small markets. The technologies utilised are less capital intensive and employ more labour; the production and marketing process is organisationally less sophisticated and requires lower managerial skills. Unlike TNCs, smaller enterprises do not create the problem of great economic and political power steered through a non-national global decision process. Advantages are, however, counterbalanced by substantial obstacles against the involvement of non-TNC actors in industrial co-operation. Large TNCs have greater experience and managerial capacities. Middle-sized enterprises are much more exposed to the political and economic risks of industrial co-operation in DCs. They lack the "safety net" of TNCs and can not spread the risks of failure. Also, the network of investment and trade regulations in DCs is often geared to control TNCs and is, accordingly, unmanageable for non-TNC actors possessing insufficient capacities to handle regulatory obstacles.



This situation constitutes a problem which should be solved in the interest of both DCs and ICs: DCs, as home states of non-TNC enterprises, are hindered in exploiting their potential to participate in a new international division of labour and to increase their export potential and foreign exchange earnings. DCs, as host states, could expect from a diversification of the agents of industrial co-operation a considerable contribution to their developmental objectives (e.g. transfer and generation of appropriate technology) and an increase of their bargaining power through reduced dependence on just a few powerful TNCs. A programme to promote industrial co-operation with non-TNC actors is also an instrument of South/South collective self-reliance. A programme to promote the role of non-TNC actors should hence represent a package of mutual interest of home and host states, and DCs and ICs. It would be oriented at providing preferential conditions for non-TNC actors to compensate for existing competitive disadvantages.\*

(i) *Present programmes*

The "German Development Corporation" (DEG) promotes partnership investment by enterprises (particularly medium-scale) from the FRG in DCs through equity investment or quasi-equity loans, advisory services for project planning and execution, matching of German and DC partners and investment data on selected DCs.

The industrial co-operation programme of the *Lomé Convention* aims specifically at involvement of small and medium-sized firms, even if primary importance is given to such firms in the participating DCs. However, this programme is limited to providing information, financing, and promotion. The World Bank supports the activities of small and medium-sized enterprises in DCs primarily through loans and guarantees, an expanded programme for equity participation, a programme of leasing of installation and equipment, and the formation of a corps of industry advisers. The programme is oriented at the development of small and medium-scale industry in developing countries, but not at the participation of such firms in international industrial co-operation. *UNIDO* has experience in promoting industrial co-operation and investment of small and medium-sized enterprises in context of its Investment Promotion Programme Promotion Offices in several ICs, which are mainly oriented towards promotion of small and medium-scale industrialisation in DCs and less at fostering industrial co-operation over national frontiers, particularly in the South/South context.

All these programmes indicate that promotion, matchmaking, advisory services, and strategic information for middle-sized industry co-operation are necessary to provide knowledge and experience similar to what is available in the information systems of TNCs.

(ii) *Tripartite industrial co-operation with non-TNCs*

Tripartite organisation made up of home and host states and an international agency should concentrate on reduction of risks. For the host state, this

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\* See *L. Hoffmann* and *H. Sanders*, *Industrial Co-operation in the Field of Small-Scale Foreign Direct Investment in Low Income Developing Countries*, paper prepared for this study, Vienna, March 1979.

implies the reduction of risks for non-performance and unreliability; for the home state, a policy package must provide for a reduction of the political and economic risks associated with co-operation with DCs.

A programme to facilitate and promote co-operation with non-TNCs would at first have a matchmaking function, i.e., identify and bring together feasible projects and partners. It would have to provide information and advisory services for partners in home and host countries and concentrate on financing alternatives, technical, economic, and legal elements of co-operation projects, (pre-)feasibility and project implementation analysis. Most of these objectives are already being undertaken by, e.g., UNIDO. A tripartite model of industrial co-operation should be established being composed of:

(a) *Host country*

The host country should specify its development priorities before suitable projects are identified; establish a project pipeline; set up institutions to monitor contacts and co-operation with the co-operating enterprises; specify in detail the conditions for capital transfer and repatriation, import of raw materials and capital goods, exports of products, utilisation of domestic capital and natural resources; provide guarantees for the stability of the contractual conditions.

(b) *International agency*

The international agency should find financing for co-operative projects which have been approved by the three parties, co-operate in the selection of investors, and be prepared to support the credibility of performance guarantees granted to the host country by the home country of the investor. It would thus reduce the obstacles against non-TNC co-operation created by the risk perception of the host state. The international agency could assume the roles proposed below for home states where enterprises from other DCs are involved in industrial co-operation.

(c) *Home country*

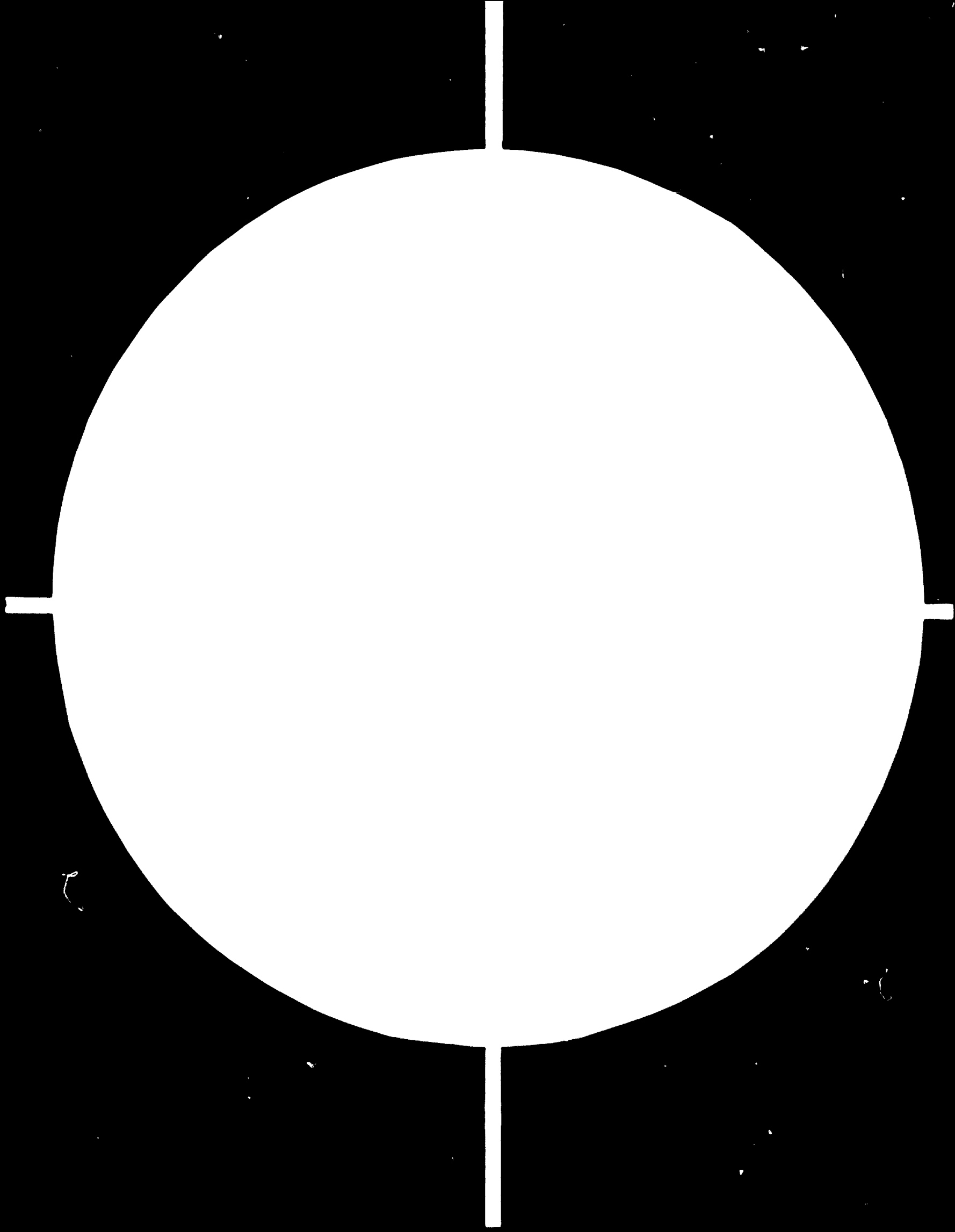
Home countries should establish a national industrial co-operation agency which would be responsible for the execution of the policy package proposed and assume the necessary informational and promotional activities. It would participate in joint evaluation of project proposals with the international agency and host states. Primarily, it would give a performance guarantee to the international agency for approved co-operation projects of its enterprises. Finally, it would provide a comprehensive guarantee to the investors and for a specified minimum rate of return. This guarantee should be tied to commitments by the enterprise; an accounting procedure should ascertain that sufficient performance incentives exist in spite of a guaranteed minimum rate of return. This guarantee should be tied to commitments by the enterprise; an accounting procedure should ascertain that sufficient performance incentives exist in spite of a guaranteed minimum rate of return. This guarantee system would reduce the risks faced by the non-TNC enterprise in industrial co-operation. It would involve the home state in the industrial co-operation process (co-responsibility), but still leave the operational autonomy to private enterprises.

Basically, the proposed policy package seeks to involve home states, host states, and the operating enterprises in a co-operation project with an

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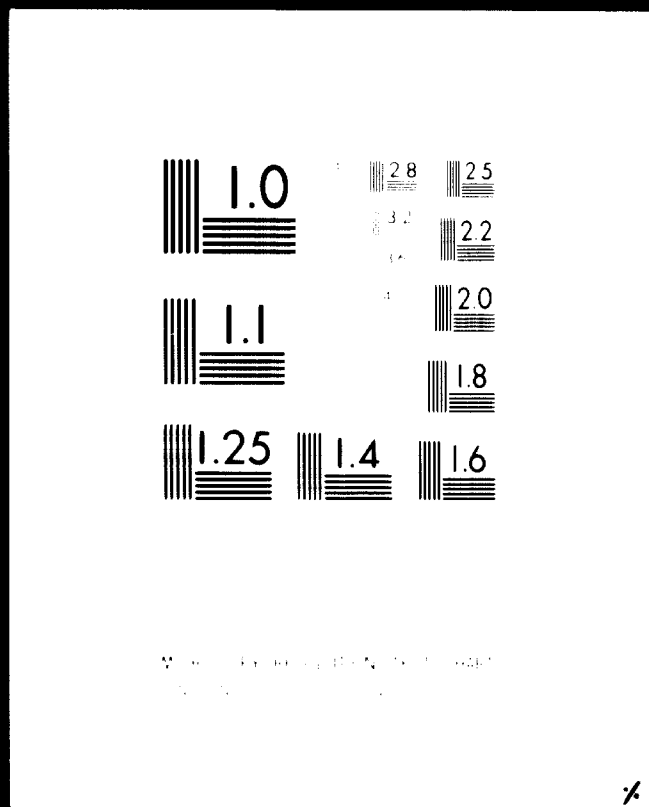


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international agency acting as a mediator. The international agency should have access to a special fund to back up guarantees for co-operation undertaken by non-TNCs from DCs.

## **6.6. ADDITIONAL SUGGESTIONS**

### *Under Third World Collective Self-Reliance*

#### **6.6.1. Harmonisation of the Legal Environment and a Corporate Statute**

Investment from other DCs might promote a form of industrial development which is more suitable to the conditions and requirements of the investment receiving DC. However, in the present situation, enterprises from DCs are at a considerable disadvantage as compared to TNCs from ICs. Accordingly, mechanisms to promote South/South industrial co-operation through preferential treatment should be promoted.

Industrial co-operation among developing countries has met serious obstacles. One of these has been that enterprises from DCs have found it very difficult to cope with a complicated, different, and often discriminating legal environment in the respective host state. Investment regulations are often geared towards controlling powerful TNCs. But in practice they have had a less negative effect on TNCs than on regional DC enterprises. Mechanisms meant to resolve the problems must hence be guided by the concept of privileged treatment for industrial co-operative ventures among DCs in order to compensate for the competitive advantages enjoyed by TNCs.

#### *Legal Harmonisation*

Experience in the context of regional integration (EEC, CMEA) has shown that *harmonisation of the legal environment* has been an essential component of regional integration and co-operation. Apart from providing a uniform legal framework for regional industrial co-operation, such legal instruments have to be geared to eliminating obstacles to industrial integration, such as various forms of restrictive practices. Accordingly, in conjunction with the secretariats of existing successful regional schemes, legal harmonisation should be further promoted, primarily on a regional basis within a framework of global co-ordination. This could be done through model codes, guidelines and appropriate consultations and negotiations. It is proposed that the following areas be selected for harmonisation: foreign investment regulations and procedures; taxation and incentives; environmental protection; consumer protection; rules regulating the international sale of goods and in industrial installations; corporate law. The last issue deserves special attention. The variety of corporate laws and regulations and the variety of different requirements in each host state (concerning incorporation; disclosure; liabilities; registration; corporate organisations; minority protection) constitutes a considerable obstacle to international co-operation among developing countries. Accordingly, through regional and

global model corporate statutes, harmonisation should be gradually obtained, ultimately through multilateral regional conventions setting up uniform corporate codes. The ASEAN and Andean Pact countries have already taken steps towards harmonising their corporate statutes, and any success they might have, would be studied with great interest.

#### *An International Corporate Statute for Regional Industrial Joint Ventures*

Another mechanism to facilitate South/South industrial co-operation would be the *elaboration of an international statute for regional industrial joint ventures*. The creation of regional or interregional enterprises has been expressly called for by the Lima Plan of Action. The promotion of Third World multinational corporations requires the construction of a corresponding adequate juridical framework. Based on similar experiences (e.g. Societas Europaea, the CMEA's International Economic Organisations, the "Empresas Multinacionales" of the Andean Pact) it is recommended that an international/regional statute for regional joint enterprises be elaborated. The statute would confer universal recognition, registration, and special privileges regarding tax treatment, investment incentives, tariff conditions, and foreign exchange terms for the respective joint venture. Admission to the statute could also be made conditional upon the fulfilling of well defined developmental requirements.

#### **6.6.2. Other Mechanisms for Increased South/South Co-operation**

Most of the mechanisms proposed for improving the terms of North/South investment are structured in a way so that they are also capable of facilitating South/South investment. Some mechanisms could be geared specifically to South/South investment. Their function would therefore be the provision of organisational vehicles and model instruments to promote South/South investment. The role of a *regional industrial investment insurance scheme* and a *regional industrial investment guarantee scheme* as well as a possible *insurance scheme for extended contractual performance risk* discussed below should be particularly stressed. Also the *programme to match middle and small-scale enterprises with DCs* can be geared to promote, to facilitate, and to reduce risks associated with investments by middle- and small-scale enterprises from other DCs. It is equally intended to open up channels of privileged investment on a South/South plane.

#### *Within the Framework of Global Interdependence*

#### **6.6.3. A Programme for International Bargaining Assistance and DC Collective Bargaining**

DCs need a stronger bargaining position vis-à-vis their major counterparts in co-operation from ICs, including the TNCs. DCs are severely weakened

through a lack of co-ordination. There is, therefore, a great need for a comprehensive *international programme to support Third World bargaining*.

At present, bargaining assistance is provided in several ways. At UNIDO, particular emphasis is put at the micro-level by rendering assistance in the fields of investment project identification, the preparation of (pre-)feasibility studies, project implementation and follow-up as well as by supplying technology assistance service and writing model contracts, as attempted in the framework of the UNIDO consultations on the fertiliser industry. Furthermore, UNIDO has set up the Industrial Technological Information Bank (INTIB) and the Technical Information Exchange System (TIES) which serve to strengthen the DC negotiating base. UNCTC is rendering advisory services and setting up an information system on TNCs and WIPO has published a guide for licensing agreements. The present assistance to DCs is oriented towards the North/South transfer of bargaining concepts and instruments. These instruments originate intra-IC commercial intercourse and are systematically biased in favour of the IC modes of business behaviour. Hence, they are not always appropriate to the specific needs of DCs. The prime objective of the proposed programme to support Third World bargaining would therefore, be to set up a communicative process among DCs to generate appropriate concepts and instruments for bargaining which could be used for the acquisition of technology and finance.

To achieve this result, co-operation should start with information sharing and gradually move towards collective bargaining. One of the many instruments to focus the process of developing appropriate bargaining techniques would be the development and improvement of terms and conditions for industrial contracting. An international framework for continued information sharing, evaluation and consultation among DC enterprises should be established leading to better terms which should not only represent the state of the art but also attempt to design innovative solutions. As a vehicle for a continuous learning process, the framework would assist DCs in formulating bargaining positions. In the long run, *model contracts* for the various types of industrial co-operation (e.g. turnkey projects, compensation and buy-back arrangements, co-production, joint ventures, investment contracts) to be specified for individual sectors (e.g. fertiliser, petrochemical, mineral processing) could evolve, providing accepted rules for international co-operation. Such rules for the various types of industrial co-operation (as has already appeared in the intra-CMEA industrial interactions) would in the long run move from voluntary recommendations to a mandatory system of industrial development law, applicable to transnational industrial interaction.

Model contracts would have to be supplemented by *negotiating manuals and guidelines*. These would provide up-to-date information on contractual practices and criteria allowing DCs to evaluate alternative contractual approaches to negotiating issues. The development of model contracts and negotiating manuals should be tied to the programme to promote an international industrial development law. The proposed Commission for Industrial Development Law should actively be involved in elaborating negotiating manuals and guidelines and thus contribute to the strengthening of DC bargaining positions.



#### 6.6.4. Methods to Improve Investment Insurance for Political Risks

The scheme suggested here consists of two parts. One part would consist of regional investment insurance schemes, which would cover traditional political investment risks for investors. The other part would be a forum for exchange of views and harmonising of insurance conditions for both regional insurance schemes and already existing national schemes. DC demands and interests may be voiced more efficiently in a system which combines institutions from South and North.

##### (i) *Regional industrial investment insurance schemes*

The regional industrial investment insurance schemes would follow the successful model of the Inter-Arab Investment Guarantee Corporation, as far as it is applicable to other regions. The regional insurance schemes would insure investment including long-term loans from participating countries within the region, and, as appropriate, from other countries as well. Risks covered would correspond to the traditional "political" investment risks, i.e. war, internal unrest and expropriation. Participating countries contribute according to funding needs and to the number of investment projects.

The regionalisation of the industrial investment insurance schemes would differentiate them from the former multilateral investment insurance like the International Investment Insurance Agency. They would have two related advantages. First, intraregional investment would be furthered and secondly South/South investment in general could be supported more effectively. To serve these aims more fully, the regional industrial investment insurance schemes would work together with investment promotion bodies, activating the potential for foreign investment among investors of member countries.

##### (ii) *Investment insurance system*

Regional industrial investment insurance schemes and existing national investment insurance schemes of ICs could be grouped together into an *investment insurance system* whose aim should be to avoid overlap or distortions caused by differences in insurance conditions. In addition, the investment insurance system would allow a more profound analysis of insurance needs and DCs' interests. By creating a forum for national as well as regional insurance schemes, DCs could exert more influence on the conditions of insurance to be applied to investment in DCs. The investment insurance system would issue recommendations on technical questions to the insurance schemes of member countries. It might also propose a model insurance contract which would attempt to accommodate the concerns of investors and DCs alike. By embarking on this course, an investment insurance system might avoid pitfalls which have caused other multilateral investment insurance proposals to falter. It would not materially affect operations of present existing investment insurance programmes in the short run. But pressure may gradually be built up among members of the system to induce changes of these programmes.

### **6.6.5. Regional Guarantees for Funding Investment Projects**

Certain industrial investment projects may be identified which would have a positive impact on development but which, for various reasons, may not be financially viable according to conventional criteria. Such projects could nevertheless be funded by external investors if they could obtain a reasonable guarantee against commercial and trading risks. Whereas individual countries may not have the financial capacity to set up the necessary guarantee schemes, co-operation on a regional basis may make it possible.

A guarantee scheme<sup>9</sup> could be carried out by an organisation where the members would be:

- A group of DC governments acting as sponsors of projects and jointly giving the necessary guarantees.
- Manufacturers, presenting project possibilities and evaluating possibilities of technical success of projects proposed.
- Development banks responsible for securing finance for projects.

Through a careful examination by this organisation, projects should be chosen where the developmental effect is secured although risk prevents the project from being financed through normal channels. Risk should be, however, relatively low and carefully controlled. In such cases, the member governments could advance a guarantee for the funds invested. It is hoped that this could lead to investment particularly from foreign small and medium enterprises, primarily from other developing countries.

The costs of operations could be covered by charging fees for the guarantees extended. These fees, however, need only to cover the current expenses for running the scheme. If a guarantee is called, the cost for this would have to be carried by the guaranteeing member governments.

It is suggested that the needs and potentialities of such regional guarantee schemes be further investigated.

### **6.6.6. Extension of Industrial Performance Guarantees and Corresponding Insurance**

In the context of policies of accelerated industrialisation, a number of DCs have opted to give priority to the packaged purchases of whole industrial complexes. The DC need for protection against insufficient performance in these cases is considerably greater than granted by legal instruments originating from inter-IC commercial transactions. Therefore, new mechanisms to obtain the envisaged plant performance have to be developed. Moreover, due to the great repercussions of industrial malperformance on the DCs' economy, a mode of protection against the "developmental damages" should be constructed.

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<sup>9</sup> A. Stockmayer, Funding Support for "Selective Access" Policies: A System of Mechanisms to Promote Investment Without Dependence, paper prepared for this study, Vienna, June 1979.

One way of ascertaining performance appears to be *the extension of the turnkey contract* through a system of obligations whereby the foreign contractor guarantees quality and quantity of output, agrees to raw materials and energy consumption norms, and eventually also accepts responsibility for marketing and for competitiveness of the plant for an extended period of time. Such guarantees would also cover the functioning of the plant with national personnel trained by the foreign contractor. This "*produit-en-main*" approach<sup>10</sup> seems to avoid some of the problems encountered with turnkey contracts. It engages the foreign contractor to a considerably greater degree in the attempt of DCs to industrialise through purchased packages of industrial complexes and skills.

However, this approach tends to perpetuate the DCs' dependence on the foreign industrial system and does not stimulate self-reliance by learning. It may also contradict policies of increasing local content in output and of generating and using "appropriate" labour-intensive technologies. It is also costlier than the normal turnkey contract. Nevertheless, in situations where policies of highly accelerated industrialisation necessitates use of packaged equipment and technology and where the envisaged performance is essential for the operation of the DC industrial system, the *produit-en-main* approach may be worthwhile for application and further development. A contractual system to obtain sufficient industrial performance and effective transfer of technology and skills in turnkey projects would have to be developed.

In traditional direct investment, the investor alone assumes risk and control; in the evolving quasi-investment type of industrial co-operation, both partners assume a share of the risk. The foreign enterprise does this through risk-associated guarantees and other performance obligations, the host state enterprise through its own contractual obligation and the repercussions of malperformance. A contractual system should contain:

- An extension of guarantees to factors which the contractor can be reasonably expected to control; e.g. quality and quantity of production, consumption of energy and raw materials, competitiveness of the output and repair and maintenance costs. The guarantees should apply beyond a short demonstration period and be based upon the performance of the plant with local personnel. Training obligation becomes very important. The contractor has to control the operations if he is to guarantee the results. The scope of guarantees and the amount of sanction should decrease parallel to the phaseout of control by the contractor;
- A system of performance incentives creating a community of interest in the industrial performance of the plants delivered, buy-back schemes for remuneration, remuneration and payments according to plant performance;
- Procedural and organisational instruments for co-ordination between the parties, including flexible mechanisms of co-management reconciling DCs' control interests and contract control requirements. These

<sup>10</sup> See N. Benchikh, *Les relations entre les entreprises transnationales et les pays sous-développés: contrat « produit-en-main » et arbitrage*, papers prepared for this study, Algiers, June 1979.

mechanisms have to provide a framework for adaptation of long-term contracts. The proposed system of co-management and performance incentives incorporate contractual and corporate elements.

Whether schemes of extended performance guarantees of the type just discussed could be implemented successfully would depend greatly on the possibility of advance agreement on damage evaluation due to non-performance and on the contractors' ability to insure this risk at a reasonable cost.

It is therefore suggested that the need for and *the possibilities of a special scheme for insurance for extended performance obligations be explored.*<sup>11</sup>

The crucial question for such an insurance scheme is whether the risks involved can be estimated and calculated in advance. It is impossible to calculate the total developmental damage due to the malperformance of one particular project, but the contracting partners could agree in advance upon some approximate sum. This amount could perhaps be expressed as a fraction or a multiple of the contract value. If this can be done, the risks in question may be insured by the traditional network of insurance companies. However, if this is found impossible or too expensive, there may be a justification for a new scheme, provided methods for reducing the premium costs could be found. Worldwide operations and a wide-spread syndication of risks could possibly achieve this.

It is suggested that investigations be made in determining 1) the need for and possibilities of calculating the developmental damages arising from malperformance of projects; and 2) the need and possibilities for an insurance coverage of extended obligations of such damages.

#### **6.6.7. Instruments for Packaging Stability and Performance**

Stability of the legal regime of foreign investment is very much a concern of Northern investors. On the other hand, the question of adequate and development-oriented performance of delivered industrial complexes and of traditional foreign investment is a matter of intensive interest to DCs. It is natural, then, to look for possibilities of combining mechanisms catering to those two concerns into a *quid-pro-quo* package. ICs have many investment insurance schemes operating at present. New investment loans and profit and service contracts can be insured against political risks (OPIC, Hermes, ECGD); however, a multilateral risk-insurance facility, sponsored by international organisations, might emphasise that investment stability concerns Southern as well as Northern countries.

The same considerations apply to performance requirements. In performance requirements granted by socialist economies, the state assumes direct liability through an intergovernmental co-operation agreement. Market economy governments have also at times assumed *de jure* or *de facto*, partial or complete responsibility for malperformance of contracts implemented under an intergovernmental framework agreement. *An institutionalisation of the quid-*

<sup>11</sup> See A. Stockmayer, *op.cit.*, pp. 26 – 30.

*pro-quo approach through intergovernmental instruments is suggested.* The investment insurance and contractual performance insurance systems discussed above constitute in themselves quid-pro-quo packages. But the necessary types of insurance could also be supplied through intergovernmental agreements, particularly on a multilateral basis.

#### **6.6.8. Harmonisation of Investment Incentives**

One of the principal instruments by which IC and DC governments try to influence the volume, form, and direction of foreign investment, is fiscal policy, particularly taxation. Of particular interest is the connection between fiscal incentives offered by host states and the developmental performance of foreign investment. While incentives are widely used to attract foreign investment, it is questionable if they have any impact on the foreign investment decision of the investor. DCs often compete amongst themselves and incentives largely counteract one another. Incentives are primarily used for attracting investment, but not, as they should be, to steer foreign investment activities according to the national industrial development plan. The problem, therefore, is how to reduce the costs of fiscal incentives to DCs while at the same time making them more effective in improving the performance of foreign investment. *Regional negotiation rounds on harmonisation of investment incentives* serve a two-fold aim. First, discussions and exchanges of information may be held on the forms and effects of incentives extended to investors. Secondly, after carefully assessing incentive measures, instances of doubling of incentives or countervailing incentives may be located. By gradually harmonising their existing national schemes common substantive and procedural rules for incentives could be developed.

On an international level, the forms for incentives for investment could be discussed between DCs and ICs. Export processing zones, measures to ensure a more equitable treatment for foreign investment, and transactions in connection with investment could be discussed jointly.

## Chapter 7. International Flows of Technology

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### 7.1. INTRODUCTION

The role of technology in the economic and social development of the Third World has been the object of numerous discussions in international organisations during the past decade.<sup>1</sup> The establishment of a domestic technological capability and of an adequate domestic capacity to absorb and transform imported technologies is in the forefront of the discussions and in the work of international organisations. International organisations such as ILO, UNCTAD, the World Bank and UNIDO have assisted in the implementation of projects in individual countries through the Technological Advisory Services

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<sup>1</sup> See *United Nations, World Plan of Action for the Application of Science and Technology to Development*, 1971. See also General Assembly resolutions 3362 (S-VII) and 3517 (XXX), 1975. Furthermore, the Lima Declaration and Plan of Action on Industrial Development and Co-operation, 1975. Cf. also UNCTAD, resolutions 112 (V) and 113 (V) adopted at the fifth session, Manila, 1979.

Programme. Special attention has been given to the development of programmes which enable DCs to transform imported technologies to meet their needs.<sup>2</sup>

The object of the present study, and of this chapter in particular, is slightly different. The stress lies on the importance of international flows of technology rather than on the national development and capacities.<sup>3</sup> This analysis takes as a starting point the role of technology in the transformation of the present industrial pattern of the South.

Industrial transformation depends critically on the nature and speed of changes in technology. During the past decade, many developing countries of different sizes, political perspectives and levels of development have expressed increasing concern over problems associated with the improvement of their technological capabilities.

It is generally accepted that technology markets have certain degrees of imperfection which permit quasi-rents to be earned by producers and suppliers of technology. What is less frequently realised, however, is the central social role played by the producers of technology in creating and circumscribing future production and consumption possibilities, often in the absence of knowledge of demands for end products and of effects on employment. This aspect of the creation of technology endows suppliers with an autonomous role in relation to current economic transactions, which provides the minimal case for social regulatory mechanisms for the creation of technology.

The evolution of industrialised market economies from relatively dispersed national areas to an integrated global economy has accentuated the problems of imperfection of markets and lack of social regulation in technology production. The global economy displays acute inequalities in the endowments of technological capacity, and in the flows of technology-intensive goods and services. These inequalities are indicated by the data presented in tables 7 (1) to 7 (4). It can be seen that DCs possess only 12.6 per cent of global stocks of R + D scientists and engineers, of which 9.4 per cent are concentrated in a few countries of Asia. Furthermore, IC economies absorb 97 per cent of global expenditures on technological innovation. In terms of current flows, the crude indicators in table 7 (1) show that DCs account for only 2.8 per cent to 3.2 per cent of global exports of technology-intensive goods. There are no readily available data for services, but there is little reason to suppose the picture would be much different. The problem of technological dependence, a direct result of these inequalities, is suggested by the fact (table 7 (2)) that about 90 per cent of DC imports of machinery and transport equipment come from the DMECs and only 4.6 per cent to 5.5 per cent come from other DCs.

<sup>2</sup> See, for instance, UNIDO document ID/WG.275/4/Rev. 1, Survey on the Impact of Foreign Technology in Selected Countries and Priority Sectors, 1978. Also Development and Transfer of Technology Series No. 7 (ID/208), Technologies from Developing Countries.

<sup>3</sup> A special paper on national technological development is presented by the UNIDO Secretariat to the Third General Conference.

**Table 7 (1). Distribution of Researchers among Major Regions, 1973**

	<i>Researchers (R + D Scientists and Engineers)</i>		
	<i>Total (thousands)</i>	<i>Percentage of world total</i>	<i>Per million EAP<sup>a</sup></i>
World Total	2 279	100.0	1 570
Developing Countries	288	12.6	307
Africa (excl. South Africa)	28	1.2	271
South and Middle America	46	2.0	461
Asia (excl. Japan)	241	9.4	292
Developed Countries	1 990	87.4	3 871
Eastern Europe (incl. USSR)	730	32.0	3 958
Western Europe (incl. Israel and Turkey)	387	17.0	2 441
North America	548	24.1	5 386
Other (incl. Japan, Australia)	325	14.3	4 687

*Source:* Preliminary data from the World R + D Survey, 1978. Figures are rounded, but percentages and other data are calculated with the most detailed figures available.

<sup>a</sup> Economically Active Person.

**Table 7 (2). Distribution of World R + D Expenditures among Major Regions, 1973**

	<i>In million US\$</i>	<i>Percentage of world total</i>	<i>Per EAP<sup>a</sup> in US\$</i>	<i>Percentage of GNP at market prices</i>
World Total	96 418	100.0	66.4	1.97
Developing Countries	2 770	2.9	3.0	0.25
Africa (excl. South Africa)	298	0.31	2.8	0.34
South and Middle America	902	0.94	9.0	0.37
Asia (excl. Japan)	1 571	1.63	2.1	0.34
Developed Countries	93 648	97.1	182.1	2.29
Eastern Europe (incl. USSR)	29 509	30.6	160.0	3.82
Western Europe (incl. Israel, Turkey)	21 418	22.2	135.1	1.55
North America	33 716	35.0	331.1	2.35
Other (incl. Japan, Australia)	9 005	9.3	129.8	1.76

*Source:* Preliminary data from the World R + D Survey, 1978. Figures are rounded, but percentages and other data are calculated on the most detailed figures available.

<sup>a</sup> Economically Active Person.

Although the costs of technology flows are substantial, they are secondary in importance to the fact that much of DC technology imports is packaged in investment by transnational corporations. Thus, in large measure, the problems of technology transfers to DCs simultaneously involve the issues concerning TNCs as major diffusors, if not the creators, of technology, specifically their power to distribute technology stocks over geographic space, and direct the flows of future technological innovation. These problems of global inequality



**Table 7 (3). Share of Exports of Machinery and Transport Equipment in World Exports 1973-1976**  
(Percentage)

Category	1973	1974	1975	1976
1. Developed Market Economy Countries	86.6	87.2	87.1	86.9
2. USSR	2.9	2.6	2.6	2.6
3. Other Socialist Countries of Eastern Europe	7.6	6.9	7.4	6.9
4. Latin America	0.7	0.7	0.7	0.68
5. Africa	0.05	0.07	0.02	0.04
6. West Asia	0.2	0.2	0.2	0.2
7. South and South-East Asia	1.9	2.2	1.8	2.4
8. DC (Total)	2.8	3.2	2.9	3.4
9. Socialist Countries of Asia	0.06	0.06	0.05	0.07

**Table 7 (4). DC Imports of Machinery and Transport Equipment from Different Country Groups, 1973-1976**  
(Percentage of total)

Source of DC Imports	1973	1974	1975	1976
1. DMECs	89.2	89.6	90.8	90.3
2. USSR	3.5	2.4	2.1	2.1
3. Other Socialist Countries of Eastern Europe	2.4	2.4	2.4	2.1
4. Intra-DC	4.8	5.5	4.6	5.1
5. Socialist Countries of Asia	0.02	0.02	0.02	0.03

Source of tables 7 (3) and 7 (4): UN Handbook of International Trade and Development Statistics, 1979, Appendix table A 10.

**Table 7 (5). Direct Costs of Transfer of Technology and Other Selected Foreign Exchange Flows of Developing Countries, 1968<sup>a</sup>**

Flows	Value (million US\$)	Percentage distribution
1. Direct payments for transfer of technology (patents, licenses, know-how, trademarks and management and other technical equipment)	1 500	5.8
2. Technology-related payments:		
(a) Imports (c.i.f.) of machinery and equipment (excl. passenger vehicles), and of chemicals	18 420	71.8
(b) Profit on direct foreign investment (excl. oil-producing countries)	1 721	6.7
3. Service payments on external public debt	4 022	15.7
Total payments in above categories	25 663	100.0

Source: Based on UNCTAD, TD/B/AC.11/10/Rev. 2, March 1975, p. 28.

<sup>a</sup> Excludes South-European countries.

have enhanced the needs for social policy-making institutions, while at the same time creating greater differentials in capacities for policy enforcing power. It is difficult enough to conceptualise and devise adequate national regulatory mechanisms, but even more so at the level of international institutions.

The foregoing remarks indicate that, while technology is of critical importance in industrialisation, the specific part which it has come to play in present circumstances is that of an instrument of power in the international economic system. Technology is in no sense a neutral input which, whenever it is applied, will automatically lead to economic improvements for everyone. On the contrary, it embodies the objectives of one or other economic actors and has the potential to exclude or even curtail the interests of others. Hitherto, technology strategies have been pursued by those entities which have generated most of modern industrial technology. This chapter begins from the premise that the use of technology itself cannot be undertaken in a blind or ad hoc fashion. Whatever countries or groups employ modern technology as a tool of industrial development, must themselves elaborate technological strategies. Policies towards technology cannot, therefore, themselves be anodyne or neutral; they must recognise that technology, if it is to realise its unfulfilled promise, will only do so when those groups wanting to use it have a clear conception of why they are utilising it and what ends they hope to achieve. It is only in such a context that technology can contribute to a form of industrialisation capable both of contributing towards the alleviation of poverty, and simultaneously providing the vital opportunities for greater participation of people in the decision-making processes which affect their own lives.

## **7.2. ISSUES AND PROBLEMS**

The relationships between technology and industrialisation have more dimensions than the quantitative increase in production and consumption possibilities. The composition of productive capacities and consumption goods has particular ramifications on the extent of welfare and waste generated by industrialising economies. Furthermore, the centralisation of technology-generating capacity and the global market system have reduced the indigenous technological capacities of DCs. Not only do the DCs find it difficult to get on par with ICs, but there is the constant risk of existing DC technology stocks being rendered obsolete by uncontrollable (at least from the DCs' point of view) changes in global technology frontiers, as a consequence of actions taken by actors in ICs. Thus, the process of technological change and development has, for the DCs, to be viewed within the framework of relationships with the global industrial system.

Three standardised strategies by which DCs can attempt industrialisation have been outlined in chapter 2. Their implications for technological development need to be depicted, in the sense that each path imposes constraints if the strategy were to be sustained. These are pure cases in an analytic sense and will not be found as neat trajectories in practice. In fact, it is probable to find two or more strategies co-existing within specific countries, as more or less coherent policy guides for individual sectors or groups of sectors.

For an *Export Promotion Strategy*, i.e. to sustain the export of manufactures, it is necessary for the DC to attempt to attain the global technology frontier in the exporting sector. The acquisition of technology can be embodied (in terms of plant, know-how and capital equipment) and packaged in foreign investment, or embodied but organised by domestic entrepreneurs. To achieve the position of leadership or near leadership in the export market, the eventual objective would be to use indigenous know-how and equipment to innovate in the production of the exportable manufactured item(s) in question. This would mean achieving independent and dynamic comparative advantage in the field of activity.

For an *Import Substituting Industrialisation Strategy*, it is again necessary to be at or near the world technology frontier, but the imperatives towards attaining this level would be weaker than in the first case, depending on the extent to which fiscal or other protective measures will be able to protect the sector in question from competitive imports. However, to minimise waste of resources and reduce relative inefficiencies, if they exist, an attainment of the world technology frontier ought to be contemplated within a relatively short time horizon.

For an *Endogenous Industrialisation Strategy*, the objective would be to serve mass markets in the economy. In view of the income distributional profile of DC economies, and that of their consumption needs, this strategy implies, almost inevitably, the orientation of production towards fulfilling basic domestic consumption requirements. The technological and economic distances between IC and DC mass markets preclude IC technologies or existing world frontiers from being too relevant in this context. Here, the technological choice would be to use ingredients of IC and domestic know-how to refashion productive facilities to produce basic goods, at prices and in quantities appropriate to local income distribution and market size.

Each industrialisation strategy implies a particular type or method of acquisition or production of technology, consciously followed. Hence the argument for the implementation of national technology strategies. Like economic planning, technology planning is envisaged to be in the public domain, insofar as it will require the exercise and co-ordination of social decision-making.

The broader effects of international flows of technology on DC economies have been the subject of much concern and controversy. While recognising numerous benefits arising from the transfer of IC technologies, three broad issues have caused concerns:

- (i) The resource inputs of IC technologies are frequently ill adapted to the possibilities and potentialities of DCs.
- (ii) Despite the growth of overall income, accentuation of inequalities in income distribution as a consequence of the introduction of IC technologies may make the situation of DC populations, in terms of economic welfare, worse on balance.
- (iii) The introduction of technologies in order to produce IC mass consumption goods, and to sell them via IC advertising and

marketing systems generate adverse effects on the choices, prices and appropriateness of what is produced in relation to the needs of the majority of the populations of DCs.

The controversy has yielded at least one conclusion; that it is necessary to exercise selectivity of conditions under which relations are established between DCs and world markets, and, more specifically, between DCs and transnational corporate entities.<sup>4</sup>

### 7.3. GUIDING PRINCIPLES FOR FUTURE CO-OPERATION

Unless the public authorities of developing countries are definitive in formulating and implementing national technology strategies, along with technology planning, there can be no systematic development of international co-operation.<sup>5</sup> Until now there has been, for the most part, a passive acceptance of the dominant role played by the technology holders in the global economic system. These entities are the ones which have formulated and implemented technological strategies in a consistent way. It is only slowly that consciousness has grown of the need to formulate strategies by and for those groups which are currently weak in the technological field.

International organisations can play a role in encouraging the formulation of strategies, as well as in dealing with certain aspects of the imperfections in technology markets which have been and continue to be rife. This work must be undertaken at the behest of developing countries themselves. At the same time, however, international organisations can also contribute to greater understanding on the part of the developed countries as to the roles which they can play in the technological development of the developing countries.

The basic issue is to formulate national technological strategies in combination with technology plans as the bedrock on which modes of international co-operation can be built.<sup>6</sup> This requires a taking of positions by many groups. If complaints of technological dependence are meaningful, then surely it follows that many groups have been unable to formulate positions or to exercise choice. Dependence in this sense is not something readily measurable by recourse to static indicators of financial and non-financial movements; rather, it is a question of whether or not social groups are capable of taking a stand on issues of basic concern, and of defending that stand in the face of conflicting opinions and aims. Co-operation does not imply in any sense the absence of conflicts and difficulties – what it does imply is that well-identified economic and political entities be capable of exploring together the grounds on which arrangements of mutual interest can be constructed.

<sup>4</sup> In order to analyse more accurately the role that technologies transferred via transnational corporations can carry out in DCs, see UNIDO, *The Technological Self-Reliance of Developing Countries: Issues and Prospects*, ID/WG.301/4, 14 June 1979, pp. 10–11.

<sup>5</sup> A discussion about contents of a technology plan can be found in UNCTAD, *Technology Planning in Developing Countries*, TD/238/Suppl. 1, May 1979, chapter IV.

<sup>6</sup> Though links between national technology strategies and technology plans seem not to have yet proved to be closely related. For more elaboration on this point see UNCTAD, *op. cit.*

### 7.3.1. The Objectives of International Co-operation

The *first and primary objective* of international co-operation in the technological field at the present time *must be to encourage the clear articulation of needs* by the developing countries. This is a process of research and investigation so as better to understand the problems and possibilities confronting different societies, of persuasion in order to show people how particular kinds of technology may or may not contribute to the realisation of their aims, and of diplomacy in the broader sense of convincing major actors in the world economic system that they should take positive rather than neutral or even sometimes negative roles with respect to the technological progress of the developing countries.

As compared to the focus of international co-operative endeavours in the technological field during the past few years, this primary objective represents a major switch. The past work has been both a continuation of older attempts to generate an industrial sector less heavily tied to foreign interests, and a response to rapidly changing conditions in the world economic system such that both the major corporate entities and the instruments through which they exercise their control have been altered. More recently there are some signs of a growing awareness that the only real flexibility is that which stems from an articulation of internal aims. Undoubtedly some developing countries (as well as a certain number of the industrialised countries themselves) are unlikely to become producers of technologies which they can commercialise internationally on a substantial scale within the next few years. For these countries strategy formulation may be confined to problems of choice and acquisition. For other developing countries, however, the possibilities and the problems go further and take these countries into the areas of domestic production of technology and of its export. At whatever level a particular developing country confines its activities, it will need support from other groups working on related issues and/or with similar objectives. International technology policy will do best when it provides systematic help to individual countries so that they can establish their own policies.

The *second major objective* of international co-operative mechanisms *would be to clarify that technological innovation is a high-risk activity*, not only for those groups responsible for the innovation, but also for all those who, directly or indirectly, may have to bear some of its consequences. Until now, the focus of international mechanisms has been towards the risks thrust upon developing countries in situations where they lack information and are vulnerable to major technological shifts occurring elsewhere on the one hand; and towards the various matters connected with protection against risks as perceived by technology holders on the other. This emphasis leads to far too much simplistic categorisation of the roles played by different groups. Technology holders, supplying technology as part of an investment package, have been worried about threats of nationalisation, about weak investment guarantees, about insufficiently strong industrial property laws, about possible limitations on their ability to collect and repatriate economic rents deriving from ownership of technology etc. Yet, from the side of technology users and, in particular, the

government bodies, all of these items which private technology-holding IC firms see as risk-creating elements, are seen as factors raising costs and risks for the country. The result has been the presentation of issues as a zero-sum game played within the highly confined space of North/South flows of technology.

The position adopted here is that the costs and risks issue is actually much more complex, that it cannot be presented in terms only of countries, but, rather requires attention to social class, locational and sectoral considerations. Furthermore, the cost/risk combinations are subject to continuous change not only through the introduction of fresh technologies, but also through shifting patterns of production costs and people's needs. These shifts can alter the perceived balance of advantages and disadvantages from employing particular technologies. Thus, there is a real need for much more detailed analysis of the impact of technological change.

The *third major objective* of international co-operation *should be to make the direction and nature of technological change more relevant to development needs*. This objective requires specific reference to the question of which groups control the resources for the production of new technologies and which groups have control over their utilisation and distribution. The major technological set seen at work in recent years has been the set of technologies evolved in the advanced market economies where the aim often is private profit linked with various forms of political and social control. Some of the changes which have taken place under this regime are useful and relevant to development needs; nevertheless, alternative systems have to be explored so that genuine technological alternatives can be understood.

The *fourth objective* for international co-operative mechanisms *should be the reinforcement of countervailing power in technology markets* as they exist at present. That reinforcement can take two forms: first, a reduction of obstacles to entry for potential new suppliers of technology as well, perhaps, as the provision for them of incentives to entry; and second, further improvement of the ability to negotiate more effectively with existing technology suppliers. In both senses the guiding principle here for improvement of the current situation would be to make technology markets more competitive and more transparent. This, of course, is an extension of steps taken so far, and should be done with much greater awareness not only of the technical and economic requirements, but also of the politics of technology.

The four objectives just described set the stage for the proposals advanced later. Yet before spelling out those proposals any statement of proposed guiding principles has to recognise that there are serious constraints on international co-operation which compel consideration.

### **7.3.2. The Constraints on International Co-operation in the Technology Field**

International co-operation cannot be treated as something which is by definition "a good thing". First, international co-operation obviously has some economic costs. Second, co-operation involves risks. At one level, there are

economic risks in that the expected returns to the co-operative activity may not materialise. At another level there are political risks in that some countries may be unwilling to join with others because of fears that various kinds of domination might be facilitated through the co-operation scheme. Third, co-operation may become institutionalised in such a way as to remove the possibility of fresh initiatives and imaginative approaches. All three constraints ought to be recognised from the outset lest unrealistic and/or counterproductive schemes are proposed.

Co-operation schemes themselves have several dimensions and the degree to which various countries may be prepared to enter such schemes may well depend on the particular dimensions involved. In a broad sense countries can share information, commodities and power. With respect to technology the bulk of the sharing so far has taken place through trading processes of one sort or another, and this has been supplemented to some degree by a sharing of information. Until now, the sharing of the power which can come from technological control has certainly not taken place as between the industrialised and the developing countries. Still more, this power-sharing has only slowly been visible among some of the industrialised countries themselves. The majority of the industrialised countries are still excluded from the power-sharing and, given the natural conditions facing several of them, they will presumably remain excluded.

The dimensions of co-operation as just described represent the mirror image of the objectives set out in the preceding subsection. So far, international co-operative mechanisms have aimed at a more equitable sharing of the benefits of exchange and have sought to extend the realm of information sharing. Only in a few cases has there been a serious attempt to introduce some aspects of the sharing of power into the formulation of technological strategies.

Forms of co-operation may be more or less detailed. It is possible for countries pursuing even limited technological strategies to adopt some elementary forms of co-operation or integration. The nature of co-operative mechanisms, therefore, is constrained both by the particular strategy involved and by the degree to which any country is prepared, at a given time, to engage in sharing arrangements. The countless obstacles and disappointments which have been well documented in relation to integration schemes among DCs tend to show that many of the problems were attributable to a blind adoption of co-operation arrangements completely unsuited to the economic and political situations of the countries concerned. For example, among the OECD countries the development of relations in the past three decades has always been achieved on the basis of productive systems reasonably well established in most countries belonging to the organisation. In other words, the various forms of co-operation have followed upon the existence of substantial domestic productive capacity. To apply the same kind of logic to DCs where these productive capacities are either not yet installed or, if they are, are not under the control of the countries concerned, is to tackle things the wrong way round. It should therefore be no surprise if a great deal of attention is devoted towards co-operation aimed at augmenting technological capabilities in DCs. To some extent, notwithstanding

the risks and constraints, there will have to be some sharing of power as well as information at this rather early stage, with the sharing of exchange stemming from the other two.

### **7.3.3. Scope and Objectives of Proposals and Recommendations for International Co-operation**

The chapter argues that developing countries must develop technology strategies if they are to be able to use and generate technology as an integral part of their industrial development. Technology strategies can cover four major areas, namely, choice of technology; acquisition of technology from abroad; production of technology and sale of technology.

Adequate measures of international co-operation should take all four of these areas into account since, according to the sector and the country, each one of these strategies may have relevance.

The policy proposals should be relatively modest and politically realistic. International co-operation is valuable, not as a goal in itself, but only to the extent that it can help the attainment of greater degrees of technological development for the developing countries. The proposals are also selective. An attempt has been made to address those issues which, at the present time and bearing in mind the co-operative mechanisms which have already been instituted by various governments and international organisations, appear to be amenable to international co-operation and capable of offering some benefits at relatively low cost to the developing countries. The aim of measures proposed is to offer a little more freedom of manoeuvre to those developing countries which may wish to avail themselves of it. No organisations have the power to force involvement in these schemes. Countries will participate only to the extent that they believe that the scheme has something to offer them. This approach to some extent biases the measures in favour of more modest proposals but, as will be seen, it does not necessarily remove from consideration some more ambitious schemes, the arguments for which appear to be particularly strong at the present time.

The issues addressed by the proposals may be described in the following way:

- The need to collect, classify and disseminate technical, economic and legal information;
- The need to improve the competitiveness of international technology markets with particular attention being paid to ways in which technology suppliers from the socialist countries of Eastern Europe, from China, from the developing countries themselves and from the medium- and small-size enterprises in the industrialised countries can be given greater opportunities to become involved in the markets;
- The need to improve the negotiating potential of developing countries as buyers of technology through, *inter alia*, the development of adequate multilateral institutional mechanisms;



- The need to eliminate the discriminatory technology purchasing practices of multilateral and national public agencies and to encourage them to extend preferential treatment to developing country suppliers of technological assets and services;
- The need to provide an adequate cushion against the substantial risks faced by developing countries entering technology markets whether as prospective or actual buyers, sellers or producers;
- The need to reduce the fragmentation and repetitive nature of R + D activities of developing countries.

Several United Nations bodies (UNCTAD, The World Bank, ILO, UNESCO, and UNIDO itself) are currently working in the field of technological co-operation. Other international bodies work in fields related to the technological sphere. A considerable body of suggestions and ideas has been put forward by some groups within the past three years.<sup>7</sup> Proposals advanced by all these institutions show that there is a wide convergence of views on issues pertaining to international co-operation. The specific ideas advanced in this study constitute a more selective list regarding issues which are felt to merit serious consideration at the political level in the near future.

Already existing international co-operative mechanisms and recent proposals are directed towards:

- Multilateral action to improve the terms of transfer of IC technologies to DCs;
- Information sharing at the scientific, technical and legal levels;
- Direct and indirect assistance to the development of indigenous technology and know-how in DCs;
- The relocation of some IC R + D activities to DCs;
- Training programmed for DC personnel in other DCs or in ICs;
- Non-market methods of upgrading the "prestige" of R + D oriented towards the meeting of DC needs.

These are implicitly oriented towards overcoming actual or potential market failures in the sense that movements provoked by the price system do not automatically result in the fulfilment of certain needs. The major areas for action thus far contemplated are addressed at creating new legal instruments, overcoming present juridical barriers to technology flows and bridging gaps in knowledge. Deficiencies still left by the existing mechanisms and proposals may

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<sup>7</sup> The following should be mentioned:

- The RIO Foundation;
- The LUND Group (an expert group which originally met under the aegis of UNCTAD. One year ago, it advanced a set of ideas which could be taken up as part of a programme oriented towards what UNCTAD has called "the technological transformation of the developing countries");
- The Pugwash Council;
- The Development Assistance Committee of OECD;
- The technological Policy Group of the Andean Pact which recently has advanced draft proposals for a system of financing of the technological development of the developing countries.

be identified in the areas of: articulation of DC needs, clarification and alleviation of risk burdens in technology-generating activity, and the creation of marketing potential for DC producers and suppliers of technology.

The mechanisms and proposals expressed here attempt to fill these gaps or to advance on the level of co-operation already reached by existing devices and proposals.

International co-operative mechanisms may have a limited role to play with respect to the articulation of DC needs. Here, the most fruitful area for international action may lie in conducting analytic or empirical studies designed to enhance understanding of the content and formulation of technology policies. The actual articulation of needs will be in the context of national implementation of technology policy, which like economic planning or industrialisation strategy, is a consequence of the political economy of national development efforts, as well as the conceptions and capacities of governments and non-governmental actors operating at the national level. The second and third areas, however, provide potential scope for more direct co-operative effort. As the table below suggests, the resources invested by a country increase both in quantity and in quality, as it attempts to enhance its technological capacity. This investment of national resources makes individual economies or sectors of economies more susceptible to risks posed by the actions of actual or potential competitors.

**Profile of Technological Skills**

<i>Stage of technological capacity</i>	<i>Shopfloor mechanical skills and the development of technical culture</i>	<i>Specialised design engineering and productive facilities in machine building</i>	<i>Applied and theoretical scientific knowledge</i>	<i>Domestic and international marketing capability</i>
Assimilation	x			
Modification	x	x		
Replication	x	x	x	
Creation	x	x	x	
Export	x	x	x	x

International co-operation may be able to distribute the risk burdens by matching sectoral attempts at technology generation and possibly harmonising or distributing them across countries. Secondly, international co-operative mechanisms, backed by information and finance, could attempt to undertake search and brokerage functions, in order to co-ordinate specific demands with specific sources of supply. The objective would be to introduce a greater rationality in the process of technological innovation in DCs and for DC needs in other parts of the world. These observations are taken explicitly into account in the formulation of the proposals.

## 7.4. MAJOR PROPOSALS FOR ACTION

### *Under Third World Collective Self-Reliance*

#### 7.4.1. International Industrial Technology Institute

The most obvious feature of the present industrial technology environment for DCs is the dispersion of sources of innovation and their application in industrial production mainly through the market. Large numbers of bodies are involved in the selection, generation, assimilation, adaptation and diffusion of technologies. These are mostly private enterprises, together with a few public sector corporations research institutes and government co-ordinating departments, which are either national or regional in location. Consequently, there is no *one* international body for industrial technology concerned with DCs.<sup>\*</sup> The principal source of industrial technologies is North-based TNCs, from which they can be purchased by DCs, embodied in equipment, packaged in DFI or unpackaged. Dispersion means that the major functions below are not being handled in any systematic manner: DC governments and enterprises need a focal point.

#### *Objectives*

The proposed Institute would fill the need for a focal point for DC governments and enterprises involved in improving their industrial technologies. It would not initiate or implement technological development, but would provide these services.

(a) *Monitoring and providing information* regarding terms and conditions of acquiring available technologies; modifications to imported technologies, new technology advances in DCs and ICs, and research efforts being undertaken by DCs particularly in generating energy-saving technology appropriate to the resource endowments and needs of these countries.

(b) *Financing to catalyse ongoing and new research efforts* through supplementary funds (seed capital), to organise the exchange of experience, and to assist dissemination and diffusion of tested technologies through market and public channels. Stimulating technology flows between DCs would be of particular concern.

(c) *Evaluating and sifting priorities* in research efforts, pointing out the dangers of duplication and ensuring the minimum concentration required for effective implementation.

Three major streams of industrial technology would be of concern to the International Industrial Technological Institute:

(i) *Modern, mainstream technologies imported from the ICs*—These are the bulk of industrial technology, mostly acquired on commercial terms. The

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<sup>\*</sup> UNCTAD, ILO, The World Bank and UNIDO, amongst others, currently have programmes covering the transfer of technology.

problem is in selection of sources and processes, acquisition on the most favourable terms, transfer and diffusion among domestic users, assimilation, adaptation, replication, and export. The need is to supply government technology planners with information on alternative sources and terms, to locate DC enterprises that have successfully unpackaged and modified/adapted these technologies to DC conditions, to identify the factors that have led to their success, to study their transferability to other DCs, and to facilitate their transfer and export. Specific obstacles to DC-produced technology transfer and export may also be identified by the Institute, which can initiate proposals for their removal, rather than undertake corrective measures itself.

(ii) *Modern new technologies produced in the South*—These technologies, produced mainly by public corporations and research bodies, meet local needs and optimise local resources (e. g. nutritional supplements, tropical drugs, alcohol engines). The Institute would help to strengthen these efforts through financial support and scientific inputs from other countries.

(iii) *Intermediate, small-scale, new technologies generated in the South*—These would emerge from research undertaken (a) fresh by nationally and regionally based bodies with their own workshops, testing and production facilities (e. g. Las Gaviotas in Colombia, and the Regional Centre for the Transfer of Technology in Bangalore, India) and (b) build on traditional skills and technologies to increase their productivity. The fields covered by (a) and (b) would be oriented basically towards the consumption needs of low-income groups in cities and rural areas (e. g. cooking utensils and energy sources, furniture, construction materials), as well as simple tools for cultivation and irrigation, weaving, carpentry, blacksmithy, leatherwork, artisanal occupations. The Institute would essentially undertake the same set of activities as under (ii)—i. e. supplementary finance, technical inputs, organisation of exchange of experience, creation of propagation and distribution channels, co-ordination of efforts to avoid duplication and enhance concentration.

The Institute should attempt to seek and promote the application of technologies in the following areas:

(1) *Energy*

Where necessary, attempts should be made to seek alternatives to fossil fuels and to investigate their applicability in developing countries, e. g. mini-hydro plants, solar energy, bio-gas plants. Production processes should be sought and promoted which combine human and mechanical energy in such a way as to result in a net saving of fossil fuel inputs.

(2) *Human Needs Development*

Co-ordinated activities with other institutions should be undertaken for the development of indigenously available construction materials, nutritional supplements, drugs and health care systems, mass communications (e. g. audio-visual systems) which are more appropriate to the needs and incomes of developing country populations, especially those located in non-metropolitan areas.

### (3) *Agriculture-Related Technology*

Consideration might be given to the development of energy-saving methods of cultivation, irrigation, pest-control and the production of fertilizers based largely on organic matter.

### (4) *Mining and Mineral Processing*

Technologies for mining and mineral processing which are appropriate especially for countries with smaller endowments and the need to adopt energy-saving methods of extraction and processing.

## *Organisation*

The underlying concepts of this proposal have been advanced in many other fora. What is important, though, is the particular co-ordinating role that the Institute would play in the stimulation of technological innovation.

Given its service function, the Institute would have to act as a non-profit making, autonomous body, that could be affiliated with the UN system of Specialised Agencies. It would act on demand of DC governments, public sector corporations, private enterprises and a wide variety of non-governmental organisations including research centres, voluntary service organisations and co-operatives of DC producers and consumers. It could charge service fees for some of its services (e. g. information supply on activities concerned with the commercial stream of technologies) in order to provide others free of charge (e. g. generation and improvement of "village-level" technologies).

Since the Institute is not intended to have a large body of staff of its own, it will make use of the agents of technological innovation in the South as follows for the three streams of technology concerned:

- (i) For imported Northern technologies, loose consultative bodies of foremen, engineers and managerial staff from productive enterprises could be sponsored by the Institute, to provide inter-developing country exchanges of experience in technological innovation in particular industrial sectors.
- (ii) For South-based technologies, expert assistance would mainly be sought from representatives of industry ministries of the developing countries, public and private sector corporations, research institutes and departments for co-ordination of science and technology.
- (iii) The intermediate technologies would require the most flexible organisation based on study tours and exchanges of skilled personnel, lightly capped by representatives from non-governmental centres and institutes (such as the Intermediate Technology Development Group, London).

In order to co-ordinate the three wings of the Institute's activities, to encourage interaction between their activities and to set overall priorities, a Board of Directors with rotating DC membership (divided among governments, private enterprises, and scientists/engineers in an independent capacity) would

be assisted by a small evaluation unit that would draw on the monitoring activities of the Institute.

Financing should be left as flexible as possible, with the option of absorbing trust funds for specific projects, contributions from international organisations, bilateral government inputs, and private voluntary donations, apart from the fees charged for some of the Institute's services.

Liaison with other national, regional and international bodies engaged in similar activities is absolutely critical to the Institute's effectiveness. For instance, in the third stream of technologies, the Institute would collaborate closely with the recently sponsored US-based Appropriate Technology Institute. For its monitoring function, it would rely heavily on the services of UNIDO's Industrial Technology Information Bank and Technological Information Exchange Scheme.

#### **7.4.2. International Centre for the Joint Acquisition of Technology**

A key problem for developing countries seeking to develop a technology purchasing strategy is the acquisition of the necessary know-how. That know-how in part comes from the collection and organisation of information on technological availabilities, from information on other developing countries' demands for technologies, and from technical assistance. In this sense, the objective of an *International Centre for the Joint Acquisition of Technology* would be to realise the economies of scale associated both with information and with negotiation. Some important initiatives in this field have been taken in the UN system in recent years.<sup>9</sup>

##### *Operations*

The Centre would negotiate master contracts with process suppliers on the best available terms and conditions, so that DC purchasers could, individually or collectively obtain technology on these terms directly from the process suppliers. An extremely powerful element in the joint purchasing procedure would be the fact that a supplier securing such a contract would, in effect, be winning a master contract, i. e., be winning the chance to supply many countries at the same time and possibly the right to supply over extended periods of time. Obviously, the prospects of contracts of this nature would provide the Centre with strong leverage in bargaining over terms and conditions. In those sectors where technology can be embodied at different levels, a joint purchasing organisation can progressively extend its activities into more and more complex fields. There is no need for the organisation to be conceived in a static way but rather its activities should be sensitive to changes in international market structures as well as to shifting internal requirements. What this means in practice is that a well-conceived joint purchasing schema can also be the springboard for policies

<sup>9</sup> See UNCTAD, TD/238, May 1979, p. 46.

of assimilation, modification, replication, and creation of technologies. In most industrial sectors one does not have clear separations between producers of technology and users of technology. Rather, there are gradations in the use of technology. Once this is recognised, a dynamic conception of technology strategy becomes evident with joint purchasing as the inroad for joint activities in other areas. The purchasing activity, like any other, is one which can be expected to yield learning-by-doing. In other words, the staff working with this joint acquisition of technology facility would gradually acquire specific sectoral expertise. The sectoral priorities of the Centre would be similar to the *Technology Institute*, with which it should have a close working relationship.

The situation in the pharmaceutical industry gives a few insights into some of the possibilities and problems which could be associated with the establishment of such a centre. Many areas of technology may not involve the same amount of standardisation as exists in the drug industry, and operation in several sectors certainly places heavy demands on provision of staff and finance. On the other hand, some features of the pharmaceutical experience could be utilised in establishing such an organisation. Those features may involve the following: (1) Basic lists of equipment and technologies on a product basis should be established; (2) Quality guarantee and performance certificates should be issued either by the Centre or by reputable independent organisations based in both North and South; (3) On the basis of such certificates, lists of potential suppliers could be drawn up.

The Centre would in its operations undertake to provide the following facilities to users:

(a) Information on the availability, quality, and prices of non-TNC IC and DC technologies, on the one hand, and the interests and requirements of DC purchasers on the other;

(b) The availability of alternative legal and institutional structures through which technologies may be acquired;

(c) Negotiation facilities which enable buyers and sellers to arrive at an acceptable arrangement for transfer of technology. For DC purchases, generally, the dominant objective in negotiation has been to avoid the unfavourable features observed in transactions associated with ICs and at the same time to seek conditions which maximise the internationalisation and diffusion of the acquired technology.

The facility is intended to centralise information and at the same time provide sectoral project-level negotiating fora based on the need to provide DCs with at least a minimum level of information in bargaining possibilities; to facilitate the emergence of new entrants in technology markets, and to provide a moving force behind implementing alternative methods of technology transfer. Work in this field has already commenced under UNIDO's Industrial Technology Information Bank (INTIB) and Technological Information Exchange Service (TIES), which would provide a relevant data base.

A precedent for this type of function can be found in proposed or functioning regional organisations. In Latin America, the Instituto para la Integración de América Latina (INTAL) has proposed the *Servicio Latinoame-*

*ricano de Cooperación Empresarial* (SEC),<sup>10</sup> aimed at smaller Latin American firms seeking to enter joint ventures or other technology transfer arrangements with other entities in the region. SEC offers multilevel services ranging from the provision of information on collaborative possibilities and legislative requirements in different countries to market surveys and financial possibilities for Latin American firms wishing to expand to other countries.

A similar organisation is the *EEC Centre for Industrial Development* which matches requests and offers for co-operation among small and medium-sized European firms and those potential ACP partners who might be willing to start joint ventures with these firms from the Common Market.<sup>11</sup>

The conception behind Joint Acquisition extends the SEC and the EEC centre-type institutions in a few fundamental directions. It is envisaged that the brokerage function performed by this institution will involve interregional co-operation. Furthermore, the scope of its activities will encompass non-TNC entities which generate technology in the North, and public and private DC entities. Finally, in actually participating as a party in negotiations, this facility will play a more direct role in project implementation, and in involving DC buyers in collective purchases.

Detailed information would cover:

(a) *Supply*: Banks of non-TNC technology sources in the North as well as public and private sources in the South. This information may be gathered directly as well as through data bank interlinks with other national, subregional, regional and international sources. Specific sectoral data will be collected chosen on the criteria of sectoral relevance to basic development needs;

(b) *Finances*: Sources of finance for technology transfers including IC governmental untied aid and/or other sources of international finance;

(c) *Demands*:

- For specific final technologies by various DCs with as much possible information (organised on a standard format) on the social and economic objectives of the acquiring entities;
- By DC entities wishing to reproduce technologies which have already been produced elsewhere;
- By DC entities seeking the know-how to modify existing technologies, in response to specific problems.

(d) *Legal/institutional information*: This would consist of specialised knowledge on possible forms of structuring transactions, which should be available for evaluation in relation to the constraints posed by financial conditions, the objectives of transacting parties, the legal requirements of the

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<sup>10</sup> See *Business Latin America*, 20 December 1978, p. 407. Also CELA has recently created an information office RITLA (Red. de Información Tecnológica Latinoamericana) in order to identify, evaluate, select, adopt and systematise technologies in accordance with the requirements of the Latin American countries. See *Comercio Exterior*, Vol. 28, no. 9, September 1978 and *Notas Sobre la Economía y el Desarrollo de América Latina*. (Preparadas por los Servicios de Información de la CEPAL), Nos. 293/294, May 1979, *Evaluación de la Ciudad de La Paz*, p. 16.

<sup>11</sup> See, for instance, ACP-EEC Information Service, *Business Opportunities*, no. 9, March 1979, p. XXVII.



countries of origin and destination, and the technical capacity of the acquiring economy.

With its accumulated information and expertise, joint acquisition procedure should seek to achieve the most suitable transfer terms both in relation to prices and the modality of technology transfer.

## PROPOSALS WITHIN THE FRAMEWORK OF GLOBAL INTERDEPENDENCE

### 7.4.3. International Patent Examination Centre

The international industrial property system was the subject of intense debate and of policy efforts at national and international levels during the 1970s. The World Intellectual Property Organisation (WIPO) is the main organisation concerned with this area. Preparatory work for an international diplomatic conference, to be held in Geneva from 4 February to 4 March 1980, aimed at revising the Paris Convention for the Protection of Industrial Property, has been under way for some time. The Conference is expected to be attended by the 87 countries currently belonging to the Convention, many non-member countries, and international and private organisations. WIPO is also engaged in revising its model law on inventions and its model law on trademarks.

Patent laws have already been established in 120 countries, of which 84 are DCs. However, as far as the DCs are concerned, these patent laws are merely based on laws and practices of the developed countries, or were inherited from those times when the DCs, or at least some of them, were under colonial rule.

Of the 3.5 million patents<sup>12</sup> currently in existence, only about 6 per cent (200,000) are granted by developing countries. Of those, some five sixths are held by foreigners and only one sixth—or a mere one per cent of the world total—by nationals of the developing countries. International action has recently focussed on a much needed change of the patent system. In this connection, some DCs and ICs have already stated their intention to change their national patent legislation.<sup>13</sup> The relevant consideration in the present context was expressed by the Government Experts from member countries of the Group of 77, meeting under the auspices of UNCTAD in late 1977, who noted with regard to industrial property that “the immediate and continuing task of the system should be to provide in the shortest possible time the broadest possible technical assistance to help developing countries strengthen their scientific and technological infrastructures and to train their specialists”.

Various steps have been taken during the present decade to increase accessibility to patent documentation. Before the 1970s, processing procedures in patent examination offices delayed accessibility to patent documentation by three or four years. The creation of the International Patent Documentation

<sup>12</sup> Figure calculated from statistics published by WIPO.

<sup>13</sup> See UNCTAD TD/B/AC/1/19, Rev. 1, para 404, page 64 for details.

Centre (INPADOC) in Vienna<sup>14</sup> eased these problems. The Centre was founded on 2 May 1972, on the basis of an agreement between the Republic of Austria and the World Intellectual Property Organisation (WIPO) in Geneva. It provides for a world-wide collection of patent documents. Its task is to record the bibliographic data items of patent documents and then to analyse the recorded information to provide information services. INPADOC gathers information on the bibliographic data of patents from 45 countries; only 11 are developing countries.

In spite of the increased availability of information, significant practical problems of dissemination and communication have persisted. ICs have adequate and sophisticated administrative device for evaluating and monitoring the granting, use and termination of patents taken out in their territories. But these operations require skilled people in many diverse fields. It is doubtful whether, even if they could, DCs should devote scarce human resources to efforts which basically award protection to foreign investors.

A proposed International Patent Examination Centre would serve to realise the economies of scale associated with dissemination of technical and legal information on what are, after all, the same patents in different countries. This information would represent a genuine transfer of knowledge from the industrialised countries and thereby save time and other resources in the developing countries.

In dealing with applications from foreign and domestic inventors, developing country administrations only rarely have adequate facilities to evaluate the degree of novelty of a proposed patented invention, its industrial applicability or the grounds for nullifying the application. The information system of the Patent Examination Centre could provide information, free of charge and as quickly as possible, on the results of initial examination of patent applications in other countries, on the results of significant national or international administrative or legal decisions taken elsewhere regarding a patent, and finally notification of dates of expiry of patents. The dissemination of information, which is the prime purpose of this centre, could be through regional and national public bodies in the developing countries, as well as directly to private enterprises.

Such a Centre would not need to confine its activities to patents. Important issues are raised by the current debate on appropriate products. Two rather different issues are involved here. One related to the advertising of products which, although not intrinsically dangerous, nevertheless may have pernicious effects when utilised by people living on low incomes; the other issue relates to products which are found to be inherently dangerous after extensive examination in the ICs. Most, though not quite all, of the problems under these two headings arise in the chemical and food industries. It may be difficult at an international level to grapple with the advertising problems raised by the first issue (though, of course, important court decisions in the ICs could be

<sup>14</sup> INPADOC is solely owned by the Austrian Government. Therefore, its legal form is that of a limited liability company and it appears in the Commercial Register of the Vienna Commercial Courts under the name "INPADOC, Internationales Patentdokumentationszentrum Gesellschaft m.b.H."

transmitted internationally). The second aspect could be handled via international exchanges of information. It is well known, for example, that the Food and Drug Administration (FDA) of the US has more sophisticated procedures for examining and testing products than does any other agency in the world dealing with similar items. The activities of the FDA are not limited to isolated tests of products but include frequent reevaluations of items in relation to their characteristics and their efficacy in accomplishing their stated purposes. If the FDA and/or similar agencies in other ICs were to make available their findings to DCs on a regular basis and at virtually zero cost, this information could be of considerable value to these countries in two vital areas – food and health. Thus, at practically no cost DCs would be better equipped to deal with some of the worst abuses which have been found in recent years and are related to the deluge of new products appearing in DC markets.

An International Patent Examination Centre could readily be assigned the task of disseminating this information by translating the material into the various languages of the UN, assembling and classifying it for each reference (experience on this matter might be drawn from the "Agreements of Co-operation" that INPADOC, with the help of WIPO, is carrying out with national industrial property offices and other organisations), calling meetings at which interpretation and use of the results could be improved. The implementation of this international co-operative measure depends simply upon the willingness of the ICs to share what is, generally, public information, but which is, all the same, not easily available to DCs. A measure of this type would give ICs an opportunity to extend some of their domestic standards to the international arena. Agreements, such as the one concluded in November 1978 with WIPO, UNIDO and the Austrian Patent Office on who may use the Industrial Enquiry Service and UNIDO's Industrial Technology Information Bank, might be taken as a model for other co-operative contacts of both general and specific nature.

The proposed Centre could have a role also with respect to *co-operation among developing countries*. In the field of patents, developing countries should be aware of the technological developments taking place in their enterprises and, in particular, recognise that innovation should be stimulated even where it differs from that occurring in industrialised countries. This means, among other things, that the criterion of universal or absolute novelty which is applied in patent regulations should be modified so as to offer industrial property protection to the kinds of technical progress being realised by developing country firms. This recognition should extend to the provision of preferential registration of technological innovation originating from developing country enterprises, and could be done through, for example, special patent regulations among developing countries. The International Patent Examination Centre could tackle this requirement by covering these particular technologies, co-operating with the African Intellectual Property Organisation (OAPI), and collecting the patent documents issued by the various Latin American countries.

## **7.5. RECOMMENDATION FOR SUPPORTING PROGRAMMES**

### *Within the Framework of Global Interdependence*

#### **7.5.1. Relocation of Industrial Research and Development**

The attraction of TNC R+D is relevant only to the few developing countries which have relatively large internal markets; advanced industrial structures; good education systems with substantial numbers of local, skilled personnel available; and some local technological capability. For these countries a relocation of R+D may offer benefits as long as it can be ensured that the results of innovation are widely diffused in local markets and directed towards producing goods, techniques, and experience relevant to local needs. TNCs may at the same time be interested in relocating their R + D provided that favourable externalities for internationally directed R + D are created. The dual requirements call for appropriate national policies with regard to the product range and market situation of TNCs; to the prices effectively charged for use of domestic skilled labour, finance, and material inputs; to the regulations governing licensing and technology; to policies directed towards scientific advance. Once again, the prospects for effective international co-operation are dependent upon the articulation and implementation of sensible domestic policy.

Assuming that national policies are adequate, international co-operative measures between industrialised and developing countries would have to include the following elements (which would effectively impose obligations on the developing countries which are hosts to such R+D). First, stability regarding the terms on which such investments are made. Second, freedom of activity within the R+D establishment once it is set up. Third, the provision of adequate infrastructural facilities. Fourth, the provision of technical and financial assistance, including full access to other R+D establishment by the TNC parent companies as required. Similar assistance could be given by the governments of the industrialised countries concerned.

When international co-operative measures are established among developing countries, they should satisfy the following conditions. First, a rational allocation of TNC R+D between developing countries with special emphasis on avoiding subsidy wars or "beggar-thy-neighbour" policies to attract the facilities. There is, in other words, a danger that these attempts at restructuring could lead to some idea of "R + D zones" in the same way that we have seen the proliferation of export-processing zones for manufacturing activities and tax-free zones for international banking and financial purposes. There are severe limits to the extent to which such policies could be successfully followed simultaneously by several developing countries; therefore, co-operation among them is a sine qua non for acceptable restructuring. Second, the R + D benefits must be spread in local markets on terms which are fair both to innovators and recipients. Third, since developing countries themselves now have enterprises which are becoming international, if not transnational, there should be proper encouragement for such enterprises to locate their research activities as widely as possible. The evidence available so far suggests that the nature of technologi-

cal assets held by developing country enterprises expanding abroad is such that R + D will not become too important for some time to come. Nevertheless, it is important that developing countries make due allowance from the outset for this eventuality.

Although new international mechanisms can be established to deal specifically with the relocation of industrial R + D, it may be better to tie this kind of relocation to the more general relocation of production facilities. Put another way, there is scope for a package proposal which includes, but is not confined to, relocation of R + D. An example would be the provision of information and assistance on the relocation of industrial plant and of R + D. The experience acquired by UNIDO's Investment Promotion Programme in this field should be utilised in order to improve the quality of the arrangements needed for the achievement of a more effective relocation.

## **7.6. ADDITIONAL SUGGESTIONS**

### *Under Third World Collective Self-Reliance*

#### **7.6.1. Technological Co-operation between Developing Countries**

Substantial growth has taken place in the capacity of consulting and engineering organisations in the developing countries to provide technical services outside of their national territories. Notwithstanding the numerous difficulties in the market for such services, the skill and cost levels which DC organisations can offer and maintain mean that they can compete with developed country organisations in many fields and sectors. The purchasing practices of public agencies which utilise such services remain gravely deficient in the opportunities they give to developing country enterprises.

In order to encourage the international use of these DC technological capabilities, a series of specific measures is required. First, a complete registry should be made which classifies DC consulting organisations according to the types of project capability they offer, the number of projects they could handle at any given time, and the financial conditions under which they are operating. (This last point is extremely important since a major impediment to the effective functioning of many consulting agencies in developing countries has been the irregularity of demand which has placed heavy burdens on their financial carry-over capacity.) Second, negotiations should be opened to untie IC aid policies which frequently have included clauses eliminating local consulting and engineering enterprises from participation in industrial projects. Third, even in cases where it is not possible for any one DC consulting enterprise to undertake a project, efforts should be made to seek consortia of several developing country enterprises which can learn to work together, obtaining joint experience on important projects. To carry the argument one stage further, if it is not possible even for consortia of developing country enterprises to be given project control, then DC enterprises should be associated with firms from industrialised countries as part of the international contracts. This is not to argue that the

industrialised country consulting firms should not subcontract; rather, developing country enterprises should get a share of the international agency and public sector contracts. Fourth, in order to encourage the growth of consulting firms in those developing countries with few such firms, preferential arrangements should be formulated to allow many developing country enterprises to participate in such markets. Fifth, new procedures should be developed to encourage developing country governments and public sector enterprises to direct their purchases towards developing country consulting and engineering firms. In this way, stronger bonds can be made among the developing countries; complementarity arrangements might permit the technical skills of some enterprises to be linked with resource and production possibilities of other enterprises in different countries. Sixth, efforts should be made to increase the transparency of consulting and engineering design markets by modifying the strong connections which exist (especially in the chemicals sector) among the enterprises holding processes and those supplying technological services. Often a particular project can only be carried out through the use of special processes; those processes, in turn, are leased on an exclusive basis by the process holders to consulting firms which are either their own affiliates or have concluded special arrangements with them. Monopoly over the right to use a single process may easily give a consulting enterprise control over many stages of the design and implementation of turnkey projects, thereby drastically reducing the degree of competitiveness in the markets for the project as a whole. International organisations should also examine such factors when asking for and studying tenders for projects.

#### 7.6.2. Joint DC Trademarks

Trademarks can be registered in as many countries as the owner chooses. In all countries following the Paris Convention procedures, nationals and foreigners owning trademarks enjoy equal treatment. Of the 4 million trademarks in force in the world, only 27 per cent of the global stock were registered in DCs in 1974.<sup>15</sup> Furthermore, growing transnationalisation and concentration of trademarks in the hands of some ICs are the striking features of the present trademark landscape. Therefore, it must be recognised that a serious obstacle to penetration by developing country firms of markets anywhere in the world is the existence of such protectionist features. Since much of the expansion of manufactured exports from developing countries is tied to the use of trademarks which are the property of developed country enterprises, it is difficult for developing country firms to create their own markets. In view of these characteristics, in order to avoid the problem of complementing the activities of MNCs and regional joint ventures, and because of lack of marketing infrastructure, *DCs could group together to sell under common trademarks*, jointly sharing the cost and risks of developing new markets. In addition, as was described in the Mexican Trademark Law of 1975 – twinning arrangements could be made

<sup>15</sup> Data taken from the Impact of Trademarks on the Development Process of Developing Countries, UNCTAD Document TD/B/C.6/AC.3/3, 1977.

whereby foreign and national trademarks would appear together on articles sold, with the eventual fadeout of the industrialised country trademark. Market expansion could then come under the effective control of the developing countries. This step should of course be extended to cover products sold on the basis of joint production arrangements among developing countries. In this way, all could gain from the expansion of export markets.

# Chapter 8. Mining and Mineral Processing

## RECOMMENDATION FOR SUPPORTING PROGRAMMES

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### 8.1. INTRODUCTION

The minerals sector of developing country economies occupies a particularly important – and particularly sensitive – position. It merits being singled out for special attention for several reasons. First, it is a sector in which several of the problems discussed in previous chapters concerning the structure of international financial, technological and commodity flows, converge. Second, the natural resource base of a country, of which minerals form a vital and sometimes dominant part, is often regarded as part of a national patrimony, and therefore its exploitation by foreign enterprises constitutes a sensitive issue. Third, minerals are generally exported in a raw state, which to many DCs may mean an economic loss as well as a continuation of the international division of labour imposed on them in the past. Fourth, minerals are often regarded as the basis of future industrialisation hopes; it is the resource base upon which a modern industrial structure might be erected. Fifth, minerals in their present state, form a large bulk of the overall trade between DCs and ICs and are of especially vital importance to a substantial subset of DCs.

**Table 8 (1). Countries Heavily Dependent on Non-Fuel Mineral Exports, 1973**  
(Exports of minerals as a percentage share of total exports)

<i>Country</i>	<i>%</i>	<i>Country</i>	<i>%</i>	<i>Country</i>	<i>%</i>
New Caledonia	99	Zaire	75	Peru	42
Zambia	98	Bolivia	73	Niger	39
Chile	90	Jamaica	66	Laos	31
Surinam	88	Guyana	60	Jordan	30
Mauritania	81	Papua New Guinea	55	Morocco	28
Liberia	76	Togo	47		

*Source:* UNCTAD Handbook of International Trade and Development Statistics.



Over the period 1973–1975, non-fuel minerals accounted for 25 per cent of total DC non-fuel primary product exports. In seventeen countries, non-fuel minerals accounted for 25 per cent or more of the total exports in 1973. New Caledonia, where minerals accounted for 99 per cent of its total exports, is the most extreme case, but several other developing countries were only slightly less dependent on their mineral sectors. Moreover, mineral production accounted for 25 per cent or more of GDP in six countries, and 10–25 per cent in eight others, while within the group of DCs highly dependent on mineral production and exports, fully 75 per cent of non-fuel mineral exports were concentrated in only seven mineral products. Yet in 1970 the DCs as a whole processed only 30 per cent of their non-fuel mineral products, while for the USA and Canada the ratio was 179 per cent, for Western Europe 295 per cent, and for Japan 104 per cent, reflecting the degree of processing of imported minerals by these ICs.

## 8.2. ISSUES AND PROBLEMS

The mining sector of developing countries has been one of the fields in which TNCs have typically been most active. There are many reasons for this. First, most of the mineral production of the DCs is consumed in the ICs, and the TNCs have a strategic advantage in intermediating between producer and consumer. Second, the large mining companies, which began emerging in the North as far back as in the 1980s, have accumulated over a long period of time the supply of skills and techniques required by the industry. Third, the industry is very capital-intensive, requires large amounts of support infrastructure, and has the potentiality for great economies of scale: hence the tendency for its organisation on the basis of large corporations. Fourth, since the time lags between exploration and commercial production are usually considerable, TNCs, with their established access to finance, techniques and markets, are able to start production faster and more efficiently (in the short run) than smaller-scale, less experienced national firms or parastatal enterprises could.

Reliance on the TNCs could, however, raise some important issues. One set of issues relates to the structure of control which arises from the nature of the actors. As related in chapter 2 and in chapter 6 on international industrial enterprise co-operation, the possibilities of conflict between TNCs and the host governments are many and varied, given their different sets of objectives and different time horizons within which these differing objectives are to be realised. Governments have typically relied on the TNCs for all facets of the development of their mineral sectors commencing with the exploration phase, with the result that the TNCs, not the governments of the host countries, possess the most complete knowledge of the extent of the resource base. Government decisions over taxes and royalties which have to take into account the long-term welfare of the state, are thus made on the basis of partial information supplied by TNCs.

The question of knowledge and control thus leads logically to the problem of price information. In no field does intracompany trade seem to be more prevalent than in the minerals business. Much of the Third World's mineral exports are produced in the DCs by one set of TNC mining affiliates, moved

through other affiliates, and processed for final sale in the ICs by yet other TNC affiliates. Typically, the TNCs prefer to locate further processing facilities in the ICs, where they are more familiar with the overall environment, have more security of their investments, and have easier access to funds. Furthermore, IC tariff structures and ocean shipping price structures sometimes make it very difficult to locate processing in the DCs, even if the other factors were not applicable. Given the prevalence of intracompany trade, the prices at which many minerals are traded can scarcely be regarded as reflecting free market conditions.

DC governments have good reasons for being acutely concerned with prices. The TNCs' price setting ability directly affects the terms of trade, the balance of payments, and the availability of foreign exchange. It also directly affects the apparent rate of corporate profits in the host country, and thus the amount of tax revenue the government can earn. The prices set will affect the rate of exploitation and depletion, and hence must be set in such a way as to balance current commercial interests with the long-term development goals of the state. The planning processes of a TNC are quite different from those of the government, which must aim to maximise welfare by deciding on the time stream of its receipts and expenditures, and set mineral prices with a view to their contribution to the desired flow of government revenues over the planning period. The attainment of the highest price possible over the long run must thus be seen as an essential goal of the host government's bargaining strategy.

The question of control *per se* and the question of the links between the mineral sector and the general progress of industrialisation, coincide at this point. The minerals sector can contribute to general industrialisation in two distinct ways. The first is through government revenues and foreign exchange receipts which can then be spent on infrastructure or on fostering the growth of other economic activities. This is undoubtedly the most important linkage between the mining sector and the national economy. Through its budget, the government can determine the allocation of the generated receipts and thus the actual development effect of mining. The second is through the development of linkages between the mineral sector and the rest of the economy, thus contributing to an integrated economic structure. The first will require the solution of the problems of control mentioned above; the second represents a whole host of new problems and issues.

Foreign-controlled mining ventures have tended to create enclaves in the national economy in which the most advanced capital equipment and infrastructure are concentrated, but which tend to be better integrated into the world of international trade than into the national economy. Its domestic linkages have therefore been very poor. Backward linkages, the stimulation of the growth of a domestic capital goods and general input sector, are typically very weak. While the production in the enclave is very capital-intensive, the equipment is highly specialised and largely imported, especially since the TNC will naturally prefer to select the same techniques in all its overseas operations, to ensure the most efficient use of its personnel and equipment. Given the level of sophistication of the capital equipment involved, it is likely that the backward linkages will remain very weakly developed in DC mining sectors. Hopes for using

development in the mineral sector to encourage industrial growth, must therefore be focused on other possible linkages.

Linkages through final demand, i. e. the stimulation of the production of consumer goods through the demands for factors of production in the mineral sector depend first and foremost on the distribution of income. Here again the enclave character of much mining production in DCs poses a problem. Given the capital intensity of mining, the demand for domestically supplied labour is generally low, thus limiting the amount of horizontal impact can have on the national distribution of income. Its vertical impact may be much greater for the sector's demand for highly skilled operatives at high wages: bids skills away from the rest of the economy, and tends to create an elite of workers whose incomes and association with the enclave sector can make them sociologically distinct from the population at large. This development manifests itself in a high propensity to import on the part of the enclave sector. Thus, the impact that the mining sector may have in the form of final demand linkages to the rest of the economy can also be small.

Forward linkages imply the further processing of the minerals within the producing country. On the basis of detailed investigations undertaken by UNIDO for this study of existing and planned capacities in the minerals industries, and of economies of scale in mineral processing, 24 developing countries were identified where opportunities for further mineral processing appear to exist. The size of these countries' processing capacity gaps were therefore assessed. In 1977, the 24 countries had the capacity to process only 5 per cent of their bauxite mine production into aluminium metal. The corresponding figures for other metals were 47 per cent for copper, 12 per cent for steel (iron ore), 37 per cent for lead, 43 per cent for nickel, 44 per cent for tin, and 31 per cent for zinc. A majority of the 24 identified countries have firm expansion plans for both mining and mineral processing activities. The analysis estimates that by 1983 the processing capacity gaps will have widened in absolute terms (i. e. measured in tons of metal) for five of the seven metals studied. In order to close this gap, a total investment of the order of \$180 billion (in constant 1978 dollars) would be needed, about 1 million new jobs would be created, and the export values of the seven minerals in question in the 24 countries, would increase from the present \$10 billion per year to more than \$50 billion. The required investment of \$180 billion can be contrasted with the presently planned additional investment in all developing countries, for mining as well as mineral processing, which has been projected at \$60–70 billion (in constant dollars) over the entire 13 year period from 1977 to 1990. Hence, the raising of necessary capital for mineral processing investments to close the gap would be a very difficult problem if developing countries attempted to close the gap within a relatively short period. Furthermore, energetic efforts by developing countries to expand processing capacity rapidly, could lead to the creation of substantial excess processing capacity world-wide, with sharp reductions in the profitability of processing operations. This likely result would further complicate the raising of investment capital, and would reduce the additional export proceeds to be generated by further processing activities, to a level far below the estimates given above.

The problems here are worth careful consideration, for the long-term effects of heavy investment in processing facilities might well be a massive misallocation of scarce capital resources. Excess capacity in the processing end is all too real a possibility, and might force down the prices of the products on world markets. Caught in a cost-price squeeze, the DCs might find much of the benefit of their heavy investment in further processing disappearing, but the risks could perhaps be reduced through new financing mechanisms of risk transferral, such as have been proposed in chapter 5.

One side of the problem concerns the potential market share which would need to be assessed on the basis of demand changes mainly in the ICs and of international capacity developments. The other side of the problem refers to the actual marketing of the processed output. It implies either the entrance into the prevailing international marketing system through co-operation with the TNCs or the establishment of alternative marketing channels.

The preceding analysis has been conducted at a high level of generality. To set the problem in its practical context, we might make brief mention of actual conditions prevailing in the most important of the groups of seven minerals that account for fully 75 per cent of all DC non-fuel mineral exports.

*Aluminium* is derived from bauxite whose production is typified by high costs of transportation relative to mining. On the surface, therefore, there would appear to be a good case for locating refining and smelting facilities near the mine. In fact, the bulk of the further processing facilities are located in the ICs. Part of the reason may lie in the fact that the energy costs of refining and smelting are also very high, and IC sources of cheap power may offset part of the advantages of locating in DCs to save on transport costs. (Thus, the well-known example of Jamaican and Guyanese bauxite processed into aluminium in Quebec using that province's abundant, cheap hydro-electric capacity, and then fabricated in the USA). More basic is the fact that bauxite is traded internally within six major aluminium companies that dominate the world aluminium metal industry. Hence the pressure to concentrate processing facilities in the ICs will continue to apply with full force in aluminium. So, too, will the attendant problems of price formation.

The situation with *copper* is somewhat different. DCs have fully two thirds of the world's known reserves of copper ore, and over 50 per cent of mine capacity. They have 39 per cent of smelter and 27 per cent of refining capacity. While the gap between the mine capacity and further processing capacity of the DCs in copper does not appear to be too great, none the less there are serious impediments to closing it, particularly because there are short-term global excess capacities of smelting and refining over mining. Furthermore, while DCs as a whole refine about half their copper output, there is a great variation in performance between different countries. In some, the degree of processing is marginal or non-existent, so that, when considered in isolation, the processing gap would look much greater.

*Iron and steel* occupies a unique place in developing economies, for political as well as economic reasons. Not only is iron and steel a potential cornerstone of industrialisation programmes, but it is perceived to have been the foundation on which the industrial economies were built. Given the symbolic

importance of iron and steel as well as the tremendous potential linkages to other industries, the fact that the DCs are major exporters of iron ore, while possessing very little capacity for steel production, is a particularly sensitive issue. At the same time, the existence of already well established – and often heavily protected – integrated iron and steel complexes in the ICs precludes the feasibility of a major iron and steel investment programme in the DCs being predicated on the possibility of greatly improved market access in the industrialised countries. Hence major expansion hopes in the field of iron and steel production will assume either a large domestic market or an increased potential for trade among the developing countries, or a contraction of steel capacity in the ICs.

Assuming that the problems of market access and energy supply are solved, UNIDO studies have identified at least seven countries where integrated aluminium industries could be constructed, six where copper refinery projects are feasible, seven that would support integrated steel works, and many more that could support direct-reduction “mini” steel mills. But there are major difficulties. There is a clear risk that for many of them, the cost of establishing the further processing plant might exceed the difference in price between unprocessed and processed minerals, and that the result of a major, multilateral investment programme in these three minerals might be global excess capacity.

With these problems and issues in mind, we now proceed to enumerate some basic guiding principles for future policy action.

### **8.3. GUIDING PRINCIPLES FOR FUTURE CO-OPERATION**

The range of possible policy options available to a developing country with respect to the objective of using its mineral sector for furthering its broad industrialisation policy, is bounded at the extremes by two diametrically opposed alternatives. On the one hand, it could choose to try to enforce complete on-site processing of its minerals into final form. On the other, it could choose to leave the commodity composition of its export trade intact, continuing to export minerals in a completely raw, or at best concentrated form, and squeeze out all the rents by pushing up its prices. The first option produces a maximum possible range of industries along a complete input-output chain based on the particular factor endowment the country has; the second secures the maximum in foreign exchange receipts which the government can use to further the development of any industrial sector it chooses. In between lies a wide range of possible combinations of policies relating to its resource endowment, industrial strategy, development plan, its existing position in the international division of labour, and the relative strength of other actors such as the governments of mineral-importing consuming countries, the transnational mining corporations, and the international institutions, both public and commercial, that provide finance for the mineral sector.

Whatever exact policy combination a government eventually selects, one basic guiding principle should be observed: the establishment of public control over the resource base. Public control can take many forms, from outright state

ownership of the natural resource base to simply broad supervision of the terms and rate of exploitation. It is important to note that formal ownership is not necessarily a precondition or a guarantee for effective control. Of crucial importance are rather the formal and informal control mechanisms that are built in for the various partners in the contractual agreements. The role of management should thereby be particularly stressed. To this end, the developing countries besides establishing their own state enterprises for mining and processing, are indeed currently endeavouring to negotiate and to re-negotiate relevant contracts, including management contracts with foreign entities. The importance of building up negotiating capabilities in developing countries can thus not be overemphasised. The central concern is to ensure that public authorities secure full knowledge of the extent and value of the country's resource endowment, as independently of the mineral TNCs as possible. With such knowledge the host government can proceed to try to obtain a more favourable position for its mineral exports in world markets, either working with or bypassing the mining TNCs as conditions permit.

The conditions which will permit the DCs a certain degree of freedom, are basically given by the economies of the mining industry and the status quo set of international economic power relations. For any viable project in the minerals field, no matter what degree of processing is desired, four elements must prevail. First, the mineral resources must be proven to exist in commercially viable deposits. Second, the technical expertise to develop them must be found. Third, financing must be procured. And fourth, accessible markets must exist for the output. In general, DCs have relied on TNCs to provide all four of the above requirements as a package. But by so doing they have minimised their own degrees of freedom. Consideration will therefore be given to at least partial unpackaging in the proposals below.

Let us assume for the sake of analytical simplicity that the policy options of a mineral exporting developing country are only the two boundary cases outlined above. If it chooses to squeeze the rents then it must seek to increase its market power. In general, individual DCs in isolation cannot obtain positions of market power since the location of economic mineral deposits is too dispersed. International collaboration among the developing countries producing and exporting a particular mineral would be a precondition. Here the importance of establishing prior control over the domestic resource base before entering agreements with other producers is obvious.

A country's efforts to negotiate producers' agreements with other developing countries need not necessarily involve confrontation with the TNCs. Over the next ten years the amount of mining investment necessary to bring existing plans and projects into action has been recently estimated to run as high as \$120 billion. This means that companies will have to abandon the policy of internal financing and have recourse to capital markets, unless there is a drastic change in their internal cash-flow position. Hence, mining TNCs might acquiesce in the producing countries' decision to adjust prices upward, for the effects, as with the OPEC example, might be for developing country government revenues from taxes and royalties to rise, and the internal cash-flow of the mining TNCs to increase concurrently.

Let us assume on the other hand that the country seeks to maximise the degree of processing of its resource base. It can do this in two ways. The first would be to seek to improve its indigenous capacity to develop and operate the minerals sector, including processing, with the minimum feasible outside involvement. This approach includes technical and commercial training of developing country nationals, promotion of domestic capital goods enterprises, establishment of financial intermediaries, and development of appropriate institutions to handle the government's interests in the minerals field. To the extent outside involvement remains essential in the short run, the country can acquire technical services in unpackaged forms and via e. g. turnkey projects without foreign equity participation. It might secure additional investment funds if it can participate with other producers in associations that improve its terms of trade. The process of achieving a higher degree of national freedom of action in the minerals field is slow and costly in the short run, but in the long run is likely to pay handsome dividends in terms of a dynamic learning-by-doing process. Some of the proposals in the chapters on finance and technology can facilitate this process.

Alternatively the developing country could choose to negotiate further processing arrangements through the existing TNCs. Once again, the first step would be to muster the information necessary to improve its bargaining power. It can do this through various combinations of fiscal incentives and fiscal penalties. The policy of working through the existing TNCs has the advantage of rapidity of results, and is likely to produce the greatest degree of short-run efficiency on the project level, but has, as noted before, the disadvantage of minimising the dynamic spill-over effects in the economy as a whole.

A country's choice between the two options will depend on political and economic value judgements made in the specific circumstances that apply in individual countries. In practice, it may be found that many countries would attempt to pursue both options simultaneously, using the existing institutional arrangements in the short run, while working towards building up more indigenous capacity in the long term.

Obviously, it is essential for DCs not only to respond to TNC proposals, but to take the initiative and—on the basis of its long-term industrial strategy and priorities—solicit appropriate investment projects. This could be done both from TNCs and from public entities in the industrialised countries, including centrally planned economy countries.

#### **8.4. RECOMMENDATION FOR SUPPORTING PROGRAMMES IN THE FIELD OF MINING AND MINERAL PROCESSING**

##### *Under Third World Collective Self-Reliance*

The proposals in this field are directed towards promoting joint efforts between developing countries in the areas of marketing and processing and towards the creation of adequate financial back-up arrangements to such regional schemes.

It is proposed that one institutional form in which these efforts should be undertaken could be Third World Multinational Corporations. In chapter 9 below a major proposal for action concerning such corporations is being made. This proposal could usefully be applied to the activities in mining and mineral processing discussed below.

#### **8.4.1. Joint Efforts for Marketing, Exploration, Processing and Financing**

The Lima Declaration and Plan of Action called for co-operative action between mineral producing DCs. *The establishment of a co-operative marketing organisation* may first reduce the scope for importing nations to gain access to very cheap supplies of unprocessed materials; this may then improve the economics of establishing processing facilities in the developing countries. Second, and alternatively, a group of developing countries acting together could specify minimum proportions of their output which would be sold in processed form, subject to the economic realities of the minerals market. Third, collective marketing organisations might be able to assemble experienced competent staff, having access to the wide range of contacts with potential consumers. Collective action might also have the potential for eliminating or reducing the discrimination against processed minerals in ocean shipping rates charged by the liner conferences, thus making processing in the producing countries more profitable.

The precise scope of actions by a collective marketing organisation would, of course, vary from one mineral to another, reflecting the nature of the market for the mineral in question. But in all cases, there would seem to be at least some scope for useful joint action. It is proposed that detailed investigations be made to this end.

Active efforts by groupings of mineral-exporting countries to establish *regional processing facilities run by regional multinational corporations* could overcome some of the economic disadvantages of processing within a single producing country. The countries involved would need to work out arrangements so that benefits from any such regional processing schemes were equitably distributed, and feasibility studies for such projects would have to take account of the technical problems involved, for example, in mixing crude materials from different sources. Similarly, joint mineral exploration schemes undertaken by a group of developing countries could contribute to alleviating economic risks and constraints.

Until now, international financing institutions have played only a limited role in supporting processing projects. *Greater international financial agency participation* would markedly improve the likelihood that developing country processing projects would be able to put together a package of capital funding. The World Bank and the regional development banks should consider financing fully integrated projects, thus avoiding providing isolated support only to mining. The international banks could also assist in putting together regional processing projects, by providing planning assistance and financing feasibility studies.



## 8.5. ADDITIONAL SUGGESTIONS

### *Within the Framework of Global Interdependence*

Actions by individual developing countries are grouped into two subcategories:

- Actions that are designed to affect the overall fiscal environment of the mineral sector; and
- Actions that involve detailed microeconomic intervention.

It must be stressed that proposals for policy action on the part of individual developing countries assume that TNCs and their home governments take no counteraction and that other mineral producing developing countries do not engage in a competitive scramble for mining investment and processing plant. Consultations in this area should have high priority on the international agenda.

#### **8.5.1. Fiscal Mechanisms for Increasing the Degree of Processing**

The existing patterns of tax treatment of mining firms need an overhaul. Reform of the fiscal regime could usefully follow three lines.

(i) The elimination and change of policies which subsidise the use of capital, e. g. accelerated depreciation allowances, access to institutional finance at artificially low interest rates etc. Such policies bias the choice of techniques against the best use of the developing countries' factor endowment. This decreases employment and deepens the problem of technological dependence and the adverse balance of commodity trade in capital equipment.

(ii) The elimination of depletion allowances and their replacement by depletion surcharges on other mechanisms for capturing the rent.

(iii) The establishment of a system of export taxes, inversely staggered by percentage domestic value added in the form of proportionate, lump sum levies. The purposes of this tax would be several. Primarily, it would be amenable to manipulation by individual countries in a way commensurate with their choice of exactly which point they pick on the "rent extraction—further processing" trade-off curve. The export levies will encourage further processing because the tax bracket would drop, the higher the degree of domestic processing. They would also "squeeze the rents" by virtue of raising the governments' receipts from raw exports relative to its receipts from further processed output.

By levying the taxes in lump sum form — although with discrete tax brackets according to the percentage of domestic value added in the product — the government can prevent the companies from manipulating their transfer prices to avoid taxation. It does the company no good to "underinvoice" its exports, for its tax liabilities are unaffected. Granted that if the degree of underinvoicing is large enough, in theory the company can reduce its tax bracket. But in the case of divergence between invoiced price and prices established elsewhere in the world, the difference would likely be so obvious as to permit the DC government to detect the practice.

### *Microeconomic Intervention*

Microeconomic interventions can occur at any point in the processing chain and affect any particular aspect—exploration, access to technology, financing, and marketing—of mineral projects. Only a few are singled out for special attention here.

It was stressed in the previous analysis that knowledge of the resource base is a fundamental prerequisite to rational planning of the sector. Hence DC governments should give careful consideration to stepping up the amount of independent exploration activities. Whatever other activities are permitted the mining TNCs, exploration should be unpackaged and made the exclusive preserve of the national government assisted wherever possible by international organisations.<sup>1</sup>

Once the extent of the resource base is known, actions should be geared towards improving the indigenous capacity to exploit it. The creation, through training, education and experience, of a national competence in the minerals sector by developing countries, will enhance the likelihood that their minerals will be processed locally to the maximum extent feasible. Because the process of achieving such a competence is a long-run effort, the actions listed below are suggested as temporary devices for making at least some short-term gains.

#### **8.5.2. Processing Provisions in Mineral Development Agreements and Equity in Foreign Processing Plants**

Most large-scale mining projects in developing countries are established under contractual agreements between the host government and a foreign investor, covering such topics as scope of operations, disposal of production, fiscal regime, local employment, settlement of disputes, etc. It should be possible for host governments to include in these agreements a clause relating to processing. This clause may include a provision requiring the investor to conduct a feasibility study of a processing plant and eventually to proceed to the establishment of a processing plant. Under other clauses, each mining operation would be required to devote a share of its production to the local processing plant. A further variation on this approach would be the establishment of differential royalties or export taxes on processed and unprocessed material, perhaps in the form noted above.

Where national mining output is too small to support an efficient processing plant, or where feasibility studies have shown that local processing would not be competitive, a developing country government could seek to include provisions in its mining development agreements or mineral sales contracts that provide for the government to get a share of the equity in a foreign processing plant, in exchange for supplying the raw material. While participation in a foreign processing operation would not include the training

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<sup>1</sup> UNDP has established a Revolving Fund for Natural Resource Exploration. While it is at present underutilised and therefore of limited use to DCs, it is clearly a step in this direction.

and local multiplier effect of in-country processing, it would give the mineral-producing nation a share in the added value produced by processing, and a share in the portion of the economic rent that is captured at the processing stage. Recent examples of developing country participation in foreign processing thus provide an assured market outlet as well as a share in processing gains. Similar arrangements could be negotiated by developing country producers of mineral concentrates. A variation may be for the DC to buy processing time, while retaining ownership of the mineral.

### **8.5.3. Export Processing Zones**

It is possible that export processing zones could make sense for selected mineral producing countries, especially where employment is a significant reason for seeking further processing. The heavy capital equipment investment usually required in processing, which would normally involve equipment imported from the developed nations, might be subject to customs and import duties that would have the effect of making the processing project uneconomical. A waiver of these levies, as well as a waiver of profit taxes for a limited period of time and the provision of a central, efficient administrative treatment of registrations and operations might make the project more competitive with alternative projects located in the industrialised nations. A developing country government would have to weigh the employment and export-revenue gains from such processing against the cost of the subsidies involved. It would also have to ensure adequate control over companies—in spite of the incentives given. In any event, the creation of such zones for mineral processing appears to deserve further study.

### **8.5.4. Formulation of Minerals Policies**

Transnational firms consider most developing countries as high-risk areas; in many cases, companies will not operate in these countries at all, and where they do operate, they will require a higher rate of return than they require for operations in the industrial countries. In many cases, potential investors' fears may be based simply on lack of knowledge of what developing countries' policies are and on an uncertainty of the validity of the policies over time, rather than on actual disagreement with these policies. Developing countries could take some steps to alleviate fears of transnational firms simply by publishing their established mining and mineral processing policies.

### **8.5.5. Skill Creation**

Freedom and independence in mineral policies presupposes the development of national competence and negotiation skills, in the form of knowledgeable individuals and appropriate institutions. The advantages of national ownership tend to become diluted in the absence of such competence. The national

ability to control even 100-per-cent-owned installations becomes illusory when foreign management, technology and capital are required on a wholesale basis to establish and run the projects. In contrast, execution of national control can be efficient even with very limited equity participation, once the relevant national skills and competence have been created.

For developing countries with little prior experience in the minerals field, one important step would be to *establish a minerals office within the government administration with the function of monitoring national and international mineral issues, and providing a training ground for government personnel*. Another measure could consist in building up a national bank with special interest in developing and financing the mineral sector. A third one would be the setting up of formal training institutions like a college of management or a college of mining and metallurgy, where national expertise for the mineral sector could be developed. A fourth could consist in sending personnel for training abroad, or for practice by attachment to the head offices of transnational mining corporations, or to the secretariats of international producers' bodies like AIEC, CIPEC, or IBA.

# Chapter 9. International Trade in Industrial Products

## MAJOR PROPOSAL FOR ACTION

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### 9.1. BACKGROUND AND PROSPECTS

The foregoing chapters of this study have outlined the volume and direction of factor movements necessary to achieve the Lima target and the mechanisms which might help to fulfil these requirements.

Building up the productive apparatus in the South, however, is not sufficient by itself to achieve the substantial restructuring of world economic relations that the South desires. Industrial growth and the accompanying factor movements must be complemented by changes in the volume and directions of world trade: one is impossible without the other. The vastly increased manufacturing output that would be achieved by the South if substantial progress towards the Lima target is made, must be marketed not only domestically, but also internationally.

An expansion of world trade is a vital part of a programme of spreading the benefits of industrialisation. Its contribution to Southern industrial development is twofold. Expanding trade enables the Southern countries to alleviate the constraints of small domestic markets, thus improving their resource allocation and raising productivity. It also earns them foreign exchange which is vital for furthering their development programmes.

World trade in the post-war period expanded vigorously, until the early 1970s. Overall world trade in manufactures expanded at a rate 1.5 – 2.0 times as fast as output. The increase has not, of course, been even across sectors; chemicals and machinery have expanded fastest. But in general the growth of most industrial sector exports was satisfactory. Furthermore, the share of manufactures in total world trade (excluding mineral fuels) has increased from

roughly 60 per cent in 1960 to about 75 per cent in 1976.<sup>1</sup> The relative shift to manufactures in the trade flow has occurred in all country groups, except the centrally planned economies, but has been particularly marked in the DCs. They have witnessed an overall expansion of manufactures as a share of their total trade from 20 per cent in 1960 to about 45 per cent in 1976. Thus the combined results of a comparatively fast increase in total trade and a rapidly increasing share of manufactures in that trade, has meant a rapid increase in the exports of manufactures from the DCs.<sup>2</sup>

Despite the apparently impressive performance, some major problems remain. First, the intercountry distribution of manufacturing exports shows a marked degree of concentration. Within the DC group, Mexico, Republic of Korea, Brazil and India dominate the export trade in manufactures both in absolute size, and in terms of the share of manufactures in total exports. Second, in examining aggregate data, one finds that the share of DCs in total world manufactured exports remains quite low having been 8 per cent in 1976 (see table 9 (1)). Third, a substantial part of the expansion of the volume of trade consists of non-market transactions insofar as they take place within TNCs. Fully a third of world trade is now intra-firm trade.

**Table 9 (1). Shares of World Exports of Manufactured Goods 1960, 1970 and 1976 (Percentage)**

	1960	1970	1976
Developed market economies	84	85	84
Centrally planned economies (Europe)	11	9	8
Developing countries	4	5	8
Others	1	1	1

Source: UNCTAD, Handbook of international trade and development statistics, 1979 (Annex A).

Note: Manufactured goods comprise SITC 5 to 8 except 67 and 68 (i. e. iron and steel and non-ferrous metals are not included).

It has become clear, however, that the spontaneous development of exports of manufactures from the South, that is to say, the expected future rate and pattern of their commodity exports given existing industrial structures and institutional constraints, will not be sufficient for the Lima target to be achieved.<sup>3</sup> Neither in terms of increasing the scope for industrial investment by widening markets for particular products, nor in terms of generating foreign exchange earnings, are the existing prospects very optimistic.

Projections for the trade in manufactured goods by the developing countries has been made for this study, the methodology and underlying assumptions of which are presented elsewhere.<sup>4</sup> The projection assumes a GDP growth rate in developed market economies of 3 per cent annually between

<sup>1</sup> If mineral fuels are also included in total world trade, the share of manufactured goods increased from about 55 per cent in 1960 to about 60 per cent in 1976.

<sup>2</sup> See UNIDO, World Industry since 1960: Progress and Prospects, Vienna 1979, chapter V.

<sup>3</sup> See chapter 3 above and corresponding references. For a recent evaluation see also INTERFUTURES Final Report, OECD Fut 78 (10), Paris 1979, particularly section V.1-2.

<sup>4</sup> Report for this study by Lydall, Prospects for Further Industrialisation of Developing Countries through Exports of Manufactures.

1974 and 2000. It also assumes that imports and exports of manufactured goods in this group of countries will increase *pari passu*, namely at 5.5 per cent annually, measured at constant prices. The results of the trade projections are shown in table 9 (2). They indicate that total exports of manufactured goods from the developing countries would grow considerably faster (13 per cent annually) than the imports of manufactures by the developing countries (9.5 per cent annually). Put another way, the ratio of DC exports of manufactures to DC imports of manufactures would increase from 23.7 per cent in 1974 to 63.1 per cent in 2000.<sup>5</sup> In spite of this increase there would remain a considerable deficit of manufacturing trade (measured at constant 1974 prices) which would increase in absolute terms from \$62.9 billion 1974 to \$275 billion in the year 2000.

**Table 9 (2). Projections of DC Trade in Manufactured Goods 1974–2000**  
(US \$ billion at constant 1974 prices and per cent)

Country Group	Exports from DCs		Annual Growth Rate (%)	Imports by DCs		Annual Growth Rate (%)
	1974	2000		1974	2000	
DMEC	18.5	380	12.3	77.4	595	8.2
DC	9.6	230	13.0	9.6	230	13.0
CPE	0.9	60	17.5	3.9	120	14.1
CPA	0.1	30	24.5	1.2	30	13.2
Total	29.2	700	13.0	92.1	975	9.5
	<i>Imports from DCs minus Exports to DCs</i>			<i>DC exports as % share of DC imports*</i>		
	1974	2000		1974	2000	
DMEC	-58.9	-215		23.9	63.9	
DC	..	..		..	..	
CPE	-3.0	-60		23.1	50	
CPA	-1.1	0		8.3	100	
Total	-62.9	-275		23.7	63.1	

Note: Values are at 1974 prices and exchange rates. Trade at f.o.b. values. Manufactured goods are defined as SITC No. 5+6+7+8 - (67+68).

DMEC Developed Market Economies  
DC Developing Countries  
CPE Centrally Planned Economies, Europe  
CPA Centrally Planned Economies, Asia

\* Excluding intra-DC trade.

The projections make a rough distinction between labour-intensive and capital-intensive manufactures. By the year 2000 the developing countries will have an export surplus of labour-intensive goods of roughly \$150 billion. This will be more than counter-balanced by a net import of capital-intensive goods. In 1974 the surplus of labour-intensive goods amounted to \$5 billion and the deficit on capital- and skill-intensive goods amounted to roughly \$50 billion.

<sup>5</sup> Excluding intra-DC trade.

The projections are based on relations between manufacturing trade and GDP. They are supplemented, however, by an estimate of the manufacturing growth rates that would be compatible with the projected trade growth. For manufacturing value added, the annual growth rates are, for developing countries 8.5 per cent, for developed market economies 4.0 per cent and for centrally planned economies 5.5 per cent. Higher growth rates for developing countries would require exports of manufactures that would be beyond the absorptive capacity of the developed countries (estimated by applying 1974 conditions on projected income levels). The projections point to the conclusion that, under the assumptions made, the Lima target would not be reached: the share of manufacturing value added for developing countries would amount to only about 20 per cent in the year 2000, about five percentage points short of the target.

*Trade between the developing countries* is particularly important as a vehicle for establishing collective self-reliance.<sup>6</sup> The data on South/South trade are rather weak, but it would appear, that the share of trade among DCs in world trade declined from 4.8 per cent in 1965 to 3.5 per cent in 1970. By 1976, the share had risen, however, to almost 6 per cent. These shares are measured at current prices but quantum indices also confirm the picture of a very rapid increase in South/South trade since 1970. The growth between 1970 and 1976 amounted to 9.2 per cent annually, as compared to 5.8 per cent during 1960–1970. These growth rates for the period 1970–1976 are higher than those recorded by trade flows among industrialised countries (6 per cent), and higher than total exports of DCs (5.8 per cent).

The fastest growth has taken place in machinery and transport equipment, chemicals and iron and steel, whereas the lowest growth has been in minerals and crude fertilizers, as well as clothing and textile fibers. The bulk of South to South trade is still accounted for by trade within regions, but there is a steady increase in trade between regions. The pattern of trade seems to favour trade between regions rather than trade between regional partners.

The prospects for the development of intra-Third World trade would appear to be very bright. The developing countries have widely divergent resource endowments which open up possibilities for complementary trade. At the same time developing countries often have a uniform and overlapping pattern of demand for manufactured products which affords considerable market possibilities. On both these counts, the opportunities for intra-trade appear promising.

## 9.2. ISSUES AND PROBLEMS

The central question here is how to ensure that the share of developing countries in world manufacturing trade increases in a way compatible with the achievement of the Lima target. This will not happen without special initiatives

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<sup>6</sup> See report for this study by *Ahmad*, Trade among Developing Countries as a Vehicle for Industrialisation.



for increasing market access to the North and for boosting South/South trade. Furthermore, studies of global trends point to a likely long-term deceleration of the rate of growth of world trade because of slow growth of production in the North and a decline in the ratio of trade to output growth. If these tendencies were to materialise, increased competition on world markets for manufactures and open or disguised protectionism would be likely to follow.

The projections imply that no fundamental change in trade patterns would come before the year 2000 in the absence of deliberate fundamental policy changes.<sup>7</sup> Manufactured exports from the South as a whole would increase quickly, but a large number of the developing countries might continue to supply world markets with low priced labour-intensive consumer goods, and stand as recipients for the exports of skill- and capital-intensive goods from the North. These tendencies, as well as the quantitative implications of present trends referred to above, are not in accordance with the establishment of a NIEO or with the achievement of the Lima target. The following specific issues and problems have been singled out as areas where international co-operation may help to rectify the situation.

(i) There is a need for *co-ordination of macro-economic policies* between the North and the South as well as among developing countries, to compensate for shocks or adverse trends being transmitted through the trade links.<sup>8</sup> Experience shows that such co-operation is extremely difficult to achieve. Both co-ordination of demand management policies in industrialised countries, and attempts to stabilise prices or export earnings of developing countries have often failed; but given the potentially harmful effects of the pursuit of unco-ordinated policies, efforts to harmonise should be continued.

(ii) Existing *tariff structures* are biased in favour of imports of raw materials and against goods produced with techniques of special interest to developing countries.<sup>9</sup> The General System of Preferences has been important, but has been damaged through the extensive use of escape clauses. Furthermore, existing tariff structures are flagrantly discriminatory. In theory international law guarantees that tariff barriers do not discriminate by country, only by commodity. In fact, since certain countries specialise in certain products, both forms of discrimination exist concurrently.

(iii) The often subtle effects of *non-tariff barriers* fall disproportionately on the exports from DCs, because many of their products are considered sensitive.<sup>10</sup> The use of "voluntary export restraints" and "orderly marketing agreements" has increased dramatically. Complicated licensing requirements, government purchasing policies and the enforcement of sophisticated technical standards are examples of measures which primarily affect the exports of manufactures from DCs. To this could be added a rich variety of open or disguised protection of import competing industries in the North through

<sup>7</sup> See e.g. INTERFUTURES, op. cit.

<sup>8</sup> Report for this study by *Kierzkowski*, Co-ordination of Economic Policies and the North/South Trade.

<sup>9</sup> Report for this study by *Pugel and Walter*, Market Access for Exports from Developing Countries.

<sup>10</sup> *Pugel and Walter*, op. cit.

subsidies, grants, government support, etc. The result is to provide support for certain weak sectors within the ICs and transfer the risks of innovation and new investment in those sectors to the DCs.

(iv) At present there is a bias in the North in favour of having recourse to *protection instead of adjustment policies* for ailing industries.<sup>11</sup> In order for developing countries to exploit their comparative advantages fully—which would be to the benefit of the whole world economy—the necessary structural adjustments in the South must be matched by simultaneous structural adjustments in the North. But such an adjustment is not costless and costs fall most heavily on workers (and owners) in the declining industries. Workers may be jobless for prolonged periods, must learn new skills, and perhaps must move to new locations. There is, therefore, a strong temptation to adhere to short-term protective policies rather than adjustment policies through which costs would be shared and a net benefit would accrue to the economy. Efficient adjustment policies hence are essential for expanding the possibilities of increasing market access.

(v) *South/South trade has expanded rapidly, but is still much too low.* An expansion of intra-South markets will be essential for the rapid industrial growth regardless of how much additional market access is gained in the North.<sup>12</sup>

South/South trade should serve the purpose of collective self-reliance by enabling the DCs to realise economies of scale, to overcome the limitations of domestic market size, to exploit the complementarity between their economies, to reduce exposure to risks and cyclical fluctuations and, in the long run, to foster indigenous technological development.

Available evidence shows unambiguously that the growth of DC intra-trade does not have negative effects on world trade.<sup>13</sup> Developing countries continue to increase the rate of growth of their exports to other developing countries, while absorbing increasingly larger quantities of imports from all sources. The major proportion of increase in intra-trade in manufactures has been due to “trade creation”. The increased intra-trade has created an unusually rapid growth in demand in developing countries for capital equipment and other industrial goods and increased imports from all sources.

Detailed analysis of trade creation and trade diversion effects under various preferential trading schemes among developing countries reinforces the impression that increased intra-trade has a beneficial effect on world trade as a whole. An increase in South/South trade would thus be to the advantage of the industrialised countries also and would result in strengthened global interdependence under equitable conditions.

(vi) *The future scope for South/South trade is enhanced by complementarity between the economies.* Nevertheless economic and institutional constraints provide obstacles to its increase.<sup>14</sup> Economic constraints related to the unequal distribution of income between, as well as within developing countries are one

<sup>11</sup> See chapter 4 above. Cf. *Pugel and Walter*, op. cit.

<sup>12</sup> *Ahmad*, op. cit.

<sup>13</sup> *Ahmad*, op. cit.

<sup>14</sup> Report for this study by *Nayyar*, *Limits and Obstacles to South/South trade*.

form of obstacle. Institutional factors for the most part connected with trade patterns, a commercial infrastructure and communication links (especially shipping) inherited from the colonial system are other important obstacles. Policy problems stemming from conflicts internal to the South, as well as from the inability of governments to influence the direction of trade, also hinder the development of South/South trade.

(vii) *Regional economic integration and trade liberalisation has stimulated South/South trade but has also met severe difficulties.* The experience of regional economic integration and trade liberalisation arrangement is reviewed in the background material to this study.<sup>15</sup> The benefits of such measures stand out clearly, although they are not likely to be uniformly distributed among participating countries. This problem is particularly severe when there are a few dominant countries within a group or when there are severe imbalances among member countries at the outset. Future progress in trade expansion clearly requires that gains from integration and trade liberalisation are more equitably distributed. Appropriate corrective mechanisms are necessary. Co-ordinated planning of industrial development, in which special consideration is given to the relatively less developed member countries, is essential.

Any effort to increase intra-South trade must be accompanied by a parallel development in transport, marketing networks and financial mechanisms. Monetary mechanisms to provide credit facilities and to remedy the lack of non-convertibility of currencies are particularly crucial.

### 9.3. GUIDING PRINCIPLES FOR FUTURE CO-OPERATION

Given the problems and issues that have been formulated above, certain guiding principles for the development of concrete policy proposals can be derived. These principles are those that have been followed in the trade negotiations between developing and industrialised countries over a number of years. They are summarised here, and reformulated in the light of this particular study and the requirements of the Lima target.

- (i) *A direct link between exports and imports of manufactures is needed for developing countries: it could take the form of a trade target*

A fair share of future world trade in manufactures must be secured for the developing countries. This necessitates a direct tie between the imports by the South of capital goods and equipment from the ICs and its exports of manufactured goods to the ICs. Such a link is essential if there is to be any chance at all of reaching the Lima target. It is hardly possible to define a trade target in the same way as was done with the target for manufacturing output.<sup>16</sup> The projections referred to above—in which the Lima target would still not

<sup>15</sup> *Ahmad*, op. cit.

<sup>16</sup> A target providing for an increase in "the share of developing countries in world trade in manufactures to the maximum extent possible and to at least 30 per cent of world total by the year 2000" was proposed by UNCTAD Secretariat for the Manila Conference 1979 (UNCTAD, TD 230, chapter IV).

quite be reached – would however require that the share of their GDP that the ICs spend on imports of manufactures from developing countries, should amount to more than 4 per cent by the year 2000 (in 1974 the corresponding figure was 0.5 per cent).

Another way of stating a target would be by indicating the degree to which the imports by the DCs of capital goods and equipment from the ICs should be covered by exports of manufactured goods from the DCs to the ICs. In the projection reviewed above, this figure would amount to 65 per cent by the year 2000. However, as seen above, with the particular constellation of growth rates assumed in our study, this target figure would not be adequate to assure the achievement of the Lima target. The target figure must therefore be higher.

(ii) *The role of trade must be considered in relation to the industrialisation strategy chosen by individual countries*

Trade should play its appropriate role according to the industrialisation strategy chosen by individual countries, i.e. there is no question of indiscriminate increase in trade flows at any cost.<sup>17</sup> If a country chooses primarily an export-oriented strategy, new mechanisms should aim at facilitating market access and liberalising international movements of goods and services. Methods must be found of reducing the vulnerability of these countries to global economic disturbances and recessionary impulses from abroad. The role of TNCs is particularly important in countries where export promotion is the basic strategy. The principles, outlined in chapter 6 above, aiming at changing the balance of bargaining power between TNCs and national governments apply fully in this case.

If a country chooses primarily an import substitution strategy, the emphasis should be laid on a steady movement from production of relatively simple import substitution goods to more sophisticated equipment which eventually can be exported. In the beginning of this latter process, action will be directed chiefly towards increasing market access and securing non-reciprocal treatment in a North/South context. The elimination of the particular bias in tariff structures against the exports of DCs should be pursued along with parallel action against non-tariff barriers. The development of a more sophisticated range of exports and the concomitant industrial structure will necessitate larger markets and specialisation. Hence, the South/South relationship will become focal, particularly in later stages of the development process. Principles of non-reciprocal treatment of developing countries, of exploiting the complementarity between these countries, and of generally giving preference to intra-regional trade will apply strongly. What was said about the bargaining positions between TNCs and national governments is perhaps even more important for countries following this strategy since they, in many cases, will be less attractive for foreign investors than countries following a more free market-oriented strategy.

A strategy of endogenous industrialisation is not to be equated with a closed door policy or autarky. The exchange of goods and services between

<sup>17</sup> See chapters 1 and 2 above and underlying studies. Cf. also report for this study by *Ahmad*, *The Role of Trade under Alternative Industrialisation Strategies*.

countries is assumed to constitute an important element also under this industrialisation strategy. Trade will, however, be highly selective. Inherent in the concept is preference for trade with other developing countries. Surveillance and control of trade will be necessary to ensure maximum gain for the country and also to ensure equitable distribution of these gains within the country. A detailed discussion of trade under endogenous industrialisation was presented in chapter 2 above.

(iii) *South/South trade must be vigorously developed*

A leading principle when designing new mechanisms for developing trade is that South/South trade must come in the forefront.<sup>18</sup> An intensification of trade between the developing countries will be a necessary and crucial step towards increasing other economic links between them and thus reducing their dependence on the North. Increased mutual trade will lead to increased flows of capital, technology and skills. It will also foster increased awareness of common problems and potentialities.

(iv) *The work on stabilisation of export earnings and co-ordination of policies must continue. Even loose forms of co-operation can be beneficial*

The risks of sharp and random fluctuations in production levels or export earnings must be reduced. Previous efforts in this field should be renewed, in spite of the political difficulties which have emerged from time to time. However, it is realistic to assume that it will take some time before more large-scale schemes will be effective. In the meantime, looser and simpler forms of co-operation and co-ordination of policies might not only pave the way to the larger ones; but also be beneficial by themselves. Even an increased and more efficient dissemination of information on plans and policies would be useful.

(v) *New trade links should be systematically investigated. Bilateral arrangements could provide additional benefits*

Only a fraction of possible avenues for trade in manufactured goods have been utilised so far. A systematic search for new trade possibilities should be undertaken. Bilateral agreements could provide new trade opportunities for the developing countries, without disturbing or diverting attention from already established trade relationships.<sup>19</sup> In bilateral negotiations, however, developing countries may be at a disadvantage in relation to their counterpart in the North. Methods must be found to increase the benefits of such arrangements for the developing country without the partner from the developed country losing interest in the deal. Involvements by IC governments and by international organisations may be useful in this context, even if governments and enterprises in some countries resent such interference.

(vi) *Marketing problems must receive more attention*

Marketing problems and their resolution, including elimination of non-tariff barriers to trade, should receive much greater emphasis than they have in

<sup>18</sup> This and other elements of economic co-operation between developing countries are treated in UNCTAD resolution 127 (V).

<sup>19</sup> See report for this study by Nanyar, *Bilateralism as a Policy Option*.

the past in international co-operation. For example, exporters of capital equipment, or their governments must assume some share of the responsibility for seeing that the resulting output can be sold on world markets on favourable conditions.<sup>20</sup>

(vii) *The work on regional integration and creation of free-trade areas must continue*

Previous experience from regional integration and group trading schemes among developing countries is not entirely encouraging. This is to a large extent due to special factors and problems associated with developing countries that make the principles of economic integration followed in the North more difficult to apply in the South. The classical methods of expanding markets and harmonising policies through economic integration must by no means be abolished. They may come to play a greater role as the level of development increases. However, they must be adapted to the particular problems of DCs involved, and include a conscientious attempt to achieve a fair distribution of the net benefits gained, including a reasonable balance of new industrial capacity.

#### **9.4. MAJOR PROPOSAL FOR ACTION**

It is obvious that proposals in the trade area to a large extent must cover well-known ground. Given the fundamental importance of the future development of international trade, the study would be incomplete, however, without a mention of the major improvements that are necessary, even if those have been extensively discussed in other fora. The main proposal in this section is aimed at establishing a direct link between the imports of capital goods to the South and the exports of manufactured goods from the South, in order to introduce a degree of balance in the manufacturing trade of the developing countries during the development process.

##### *Within the Framework of Global Interdependence*

#### **9.4.1. Manufacturing Trade Target**

The principle of directly linking DC imports and exports of manufactured goods was suggested above. The projections referred to in section 9.1 indicate that the value of manufactured imports from the ICs may be covered to the extent of 65 per cent by the value of exports to the ICs by the year 2000. The projections also reveal that the underlying growth rates of MVA would not be adequate to assure that the Lima target is achieved.

Accordingly, in DC/IC trade, it is necessary to increase the degree to which DC imports of manufactured goods are covered by their exports of such goods. This must be done by increasing the IC propensity to buy manufactured goods at all income levels from DCs. Some of the instruments which can be used to achieve this increase are described below. However, as a starting point it is

<sup>20</sup> See also chapter 6 above.

proposed that a target for the trade of manufactured goods between developing and industrialised countries be established, compatible with the Lima target. The target should be expressed in terms of the ratio of DC exports of manufactures to the ICs to DC imports of manufactures from the ICs. The target figure, which must be somewhat aspirational, should be placed at least at 50 per cent by the end of the 1980s and at 100 per cent by the year 2000.

The overall progress made in achieving a trade target in manufactured goods should be measured and reported with widespread publicity. The reporting should be done on an individual country basis, presenting a profile of each industrialised country exports and imports of manufactures. The data are available from UN statistics and no extra reporting would be necessary. The only extra effort required would lie in dissemination and publishing.

Apart from pursuing the international trade negotiations to achieve an improved market access for DC exports, other measures could be taken. A systematic search for new trade possibilities as well as various marketing and sales promotion activities could help to stimulate DC exports of manufactures to the industrialised countries.

(i) The first prerequisite for the success of a programme for expanding DC manufacturing exports is the acquisition of the most complete information about market possibilities. Hence *new trade possibilities for manufactured goods should be investigated through a systematic scanning of the potential network*. Complete matrices could be constructed for selection of items on the lowest possible level of the SITC. Demand and supply conditions for each column and row could be reviewed, identifying potentials for new trade. After scanning the matrices to identify theoretical potentialities, commodity experts should be consulted. As a last step, country experts should meet to discuss the most promising links.

(ii) There is also a scope for greater and more systematic dissemination of information concerning individual countries' projections, plans and policies for trade and manufacturing development. Models for such information-spreading exist with the EEC, the UN Regional Economic Commissions and the OECD. The task would be creating a fast and flexible multinational system. Regionalised information collection and systematisation would be essential. Through an intraregional computerised network certain flexibility problems could be resolved.

(iii) Technical standards, quality requirements and consumer protection measures in the North may operate as barriers for the export of DC manufactured exports. A number of codes of conduct has been set up through recent multinational trade negotiations, but it remains to be seen how efficient these codes will be. The field of technical standards as artificial barriers is of special interest. Trade obstacles often arise because of a lack of knowledge of existing technical standards, which, had they been known, would have been easily overcome by producers. The systematic collection and dissemination of information could achieve results without overwhelming costs. One element would be to screen international standardisation activities, and determine how the standards are applied and information distributed to the developing countries.

(iv) Increased information flows can be complemented by special efforts to develop Northern marketing opportunities for Southern products. One reason why TNCs hold a large part of the exports of developing countries (an estimated 40–50 per cent) is that TNCs dominate efficient distribution and marketing channels. Since this control is likely to continue, additional initiatives and promotional activities for stimulating Third World marketing should be undertaken. Control and operation should in the long run remain with Southern entities, i.e. producers associations, regional organisations, governmental enterprises or Third World multinationals. Developing countries need more export-oriented information about product design, manufacturing techniques, and marketing for capital goods or the more capital-intensive final goods. Exhibitions of products that have sold well could be organised. Participation in international fairs and exhibitions, training of sales personnel, invitations and study tours in the developing countries by Northern buyers could be elements in a marketing effort. For consumer goods, similar methods should be applied. Here, there are also opportunities for direct contacts with the consuming public.

In individual developed countries a special marketing office could be set up which would advise and assist developing countries (or only the least developed of the developing countries) regarding market access of their manufactured products. On request by a developing country the office would carry out market research and provide information on regulations concerning market access, consumer tastes, various safety rules, feedback for adaptation of developing countries' products, etc. In some of the developed countries such offices already exist.<sup>21</sup>

*A South/South aspect.* The trade target discussed above relates to manufacturing trade between the South and the ICs. But several of the supporting activities which were mentioned would be of relevance also in a South/South context. The systematic search for new trade possibilities and the attempts to match suppliers and purchasers should be undertaken also in the South/South context. Information on South/South trade opportunities is very scanty, and hence a major effort to develop information banks should be high on the agenda of policy makers. This was recognised also in UNCTAD resolution 127(V) concerning economic co-operation between developing countries.

## **9.5. ADDITIONAL SUGGESTIONS**

### *Under Third World Collective Self-Reliance*

#### **9.5.1. Pursuit of Multilateral Trade Negotiations and Regional Economic Integration Effects**

It is necessary to continue to give high priority to *multilateral negotiation and the pursuit of regional economic integration schemes at various levels.*

In 1979, eight arrangements for regional free trade areas or common

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<sup>21</sup> Such as the Import Promotion Office for Products from Developing Countries (IMPOD) in Sweden.



market arrangements were in force. Without doubt, these have stimulated intraregional trade, which has grown faster than exports to other areas. However, diversity between countries, imbalances in trade, and the inability to establish criteria for the distribution of the benefits are major stumbling blocks for further regional integration. Trade liberalisation alone is not enough to ensure a reciprocal development of industry within regions. Methods for co-ordinated planning of industrial structures will have to be devised and implemented. Liberalisation of trade, however, remains an important prerequisite for the achievement of a diversified industrial structure. It is obvious that a precondition for enlarged South/South trade is a change in tariff and non-tariff policies between developing countries, which could aim at preferential treatment of selected products from developing countries, preferably without asking for full reciprocity from the LDCs.<sup>22</sup> An international forum for trade negotiations between the developing countries themselves would appear to be useful. A creation of a vast preferential area with existing schemes as subsets is one possibility that should be explored. Any such schemes might have to be supplemented with adequate financial and payments arrangements of the type that has been treated in chapter 5 above dealing with finance, perhaps with an appropriate common payments system.

#### *Within the Framework of Global Interdependence*

##### **9.5.2. Technical Assistance in Bilateral Trade Negotiations**

One conclusion of this study is that bilateral trade arrangements can give benefits to DCs without detracting from those derived from participation in the global exchange of goods.<sup>23</sup> Such arrangements have been discussed or touched upon in the context of intergovernmental framework agreements in chapter 6 and barter-like arrangements in chapter 5. DCs should be assisted in finding bilateral trade opportunities and given technical assistance in constructing and negotiating such arrangements concerning manufactured goods.

##### **9.5.3. International Efforts to Obtain Reduction of Tariff and Non-Tariff Barriers and Measures to Stabilise Prices**

It is by now a common opinion that non-tariff barriers (NTBs) are more important than the remaining tariff barriers, and that important progress is being made in the NTB field under the present multilateral negotiating structures. But the classical obstacles to trade still impede exports from the DCs. Built-in biases in tariff structures and most favoured nation clauses still operate against the exports from developing countries, while gradual erosion of the benefits from North/South preference schemes continues to be caused by the

<sup>22</sup> During discussions at UNCTAD V in Manila, in May 1979, India offered to join in a 50 per cent tariff reduction on selected products of interest to developing countries.

<sup>23</sup> See report for this study by *Nayyar*, Limits and Obstacles to South/South Trade.

general lowering of duties. Proposed remedies include the enlargement of the GSP scheme and its liberation from various ceilings and exceptions; deeper-than-formula cuts for products of special interest for developing countries; and gradual implementation of and compensation for tariff cuts which erode the preference benefits. Since little progress has been made in recent negotiations, great scope for further initiatives in this area remain.

Export earnings stabilisation plans should be investigated to see if existing schemes could be improved and expanded to benefit DC exports of manufactured goods. To stabilise export earnings, mechanisms could take the form of buffer stocks and funds modeled on the Commodity Fund which was agreed on in principle in March 1979,<sup>24</sup> under the aegis of UNCTAD. The capital base of the proposed fund will initially be \$750 million. The prime responsibility for attempting price stability will rest with individual commodity associations. Such associations must have sufficient financial resources and their own buffer stocks, in order to hold prices to a long term trend. The participating commodity associations will be able to borrow money through a Fund deposit system. Two schemes with similar purposes are already in force, namely the IMF compensatory Financing Facility and the so-called STABEX system (under the Lomé Convention). Both these systems have proved viable, although limited in scope and magnitude.

Stabex could be improved by extending it to cover additional commodities, by increasing the size of its fund and liberalisation of its rules concerning transfers. The Stabex system is confined to countries covered by the Lomé Convention, and changes and improvements must be negotiated in that framework. The feasibility whether a similar system could be applied on a global scale should be investigated further.

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<sup>24</sup> Cf. also UNCTAD resolution 124(V).

# Chapter 10. Measures for the Least Developed Countries

## RECOMMENDATION FOR SUPPORTING PROGRAMMES

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### 10.1. ISSUES AND PROBLEMS

Thirty nations with a combined population of slightly less than 260 million (1977 estimate) or roughly 12 per cent of the population of all DCs have been designated Least Developed Countries by the United Nations.<sup>1</sup> Table 10 (1)

**Table 10 (1). Selected Indicators of Industrial Development, LDCs**

	<i>Least Developed Countries</i>	<i>All developing countries</i>
<i>Mining and fuels</i>		
Share in total GDP (\$), 1976	1.1	13.4
<i>Per capita trade in ores and metals (1975):</i>		
Exports (\$)	1.0	6.9 <sup>a</sup>
Imports (\$)	1.3	6.3 <sup>a</sup>
<i>Per capita trade in fuels (1975):</i>		
Exports (\$)	1.1	11.4 <sup>a</sup>
Imports (\$)	2.7	17.0 <sup>a</sup>
<i>Per capita energy consumption in kilograms of coal equivalent (1975)</i>	45	149
<i>Manufacturing</i>		
Share in total GDP (%), 1976	8.7	17.5
<i>Per capita trade (1975):</i>		
Exports (\$)	1.7	18.0 <sup>a</sup>
Imports (\$)	14.5	46.6 <sup>a</sup>
<i>Investment</i>		
Gross domestic investment per capita (\$), 1977 <sup>b</sup>	22	86

*Source:* UNCTAD TD/240, May 1979, Secretariat estimates, based on data of the Statistical Office of the United Nations, *The World Bank, World Development Report, 1978*, Washington D.C., 1978.

<sup>a</sup> Excluding major petroleum exporters.

<sup>b</sup> At 1967 prices.

<sup>1</sup> Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burundi, Cape Verde, Central African Empire, Chad, Comoros, Ethiopia, Gambia, Guinea, Haiti, Lao People's Democratic Republic, Lesotho, Malawi, Maldives, Mali, Nepal, Niger, Rwanda, Samoa, Somalia, Sudan, Uganda, United Republic of Tanzania, Upper Volta, Yemen Arab Republic, Yemen Democratic Republic.

presents a comparison of selected structural indicators of the level of industrial development of these countries with those of all developing countries.

Twenty of the LDCs are in Africa; nine are in Asia, of which seven belong to the South Asia/Pacific region and two to West Asia; one is located in the Americas. The distribution of these countries according to size of population, is as follows:

*LDC's Distribution of Population<sup>2</sup>*

<i>Population Size</i>	<i>No. of Countries</i>	
Less than 1 million	6	(Botswana, Cape Verde, Comoros, Gambia, Maldives and Samoa)
1-3 million	4	(Bhutan, Central African Empire, Lesotho, Yemen Democratic Republic)
3-5 million	9	(Benin, Burundi, Chad, Guinea, Haiti, Lao People's Democratic Republic, Niger, Rwanda and Somalia)
5-7 million	3	(Malawi, Mali and Upper Volta)
7-9 million	1	(Yemen Arab Republic)
More than 9 million	7	(Afghanistan, Bangladesh, Ethiopia, Nepal, Sudan, Uganda and Tanzania)

There is a wide range of impediments in the development possibilities of these countries, factors ranging from various geographic constraints, and the absence of domestic development institutions, to demographic stresses on domestic resource endowments. Given the unique configuration of impediments in each country, it is doubtful whether a generalised analysis would be sufficient to provide policy objectives which are sensitive to the particular needs of the individual countries. Nevertheless, certain observations may be made, to indicate the possible nature and direction of future national and international policy.

Despite the low level of industrialisation, there is a considerable spread in the performances of the LDCs. The per capita GDP contributed by manufacturing in 1976 ranged from \$28 (Sudan and Haiti) to \$3 (Lesotho), as compared to an overall DC average of \$88. The shares of manufacturing in GDP for the same year ranged from 20 per cent (Central African Empire) to 2 per cent (Cape Verde, Gambia, Lesotho). Annual growth rates in manufacturing output during 1960-1970 were highest in Tanzania (18.2 per cent), lowest in Laos (0.6 per cent), and dispersed around an average of 6.3 per cent. The average annual growth rate for the group declined to 3.4 per cent over 1970-1977, with the highest growth rate (12.3 per cent) being attained by the Yemen Democratic Republic. Four LDCs (Central African Empire, Gambia, Uganda and Upper Volta) have experienced negative growth rates in the manufacturing sector in this period. The economic weakness of LDCs, as a result of heavy reliance on agriculture and the production of primary commodities, is compounded by a minimal improvement in their terms of trade, over the past seventeen years.

<sup>2</sup> Source: Based on UNCTAD, TD/240/Suppl. 1, table 1.

Between 1960 and 1970, the purchasing power of the exports of the group as a whole improved by 3.4 per cent but it declined by 0.6 per cent in the 1970–1977 period. Even in the earlier period, six countries suffered an absolute decline in the purchasing power of their exports, and between 1970–1977 the number of countries which faced this adversity increased to 11.<sup>3</sup>

Present international economic trends do not augur well for the LDCs. The deterioration of their economic performance in the past 7-year period will lead to this group of countries becoming increasingly marginalised in the process of international economic development. Specifically, the problems of effective market size due to geographic, demographic or economic constraints may limit the possibilities of commercial or quasi-commercial flows acting as a source for industrial capital formation. International policy to sustain LDC development efforts has emphasised the need for increased concessional flows for industrial and economic development. In its submission to the fifth session of the conference at Manila, UNCTAD underlined this course of action as being a necessary aspect of its "Outline for a Substantial New Programme of Action for the 1980s and for the LDCs".<sup>4</sup>

The scope for international industrial co-operation in improving the development prospects of LDCs lies in North/South or South/South financial and technical assistance directed towards enhancing the preconditions of the growth of manufacturing activity. Most LDCs have a weak industrial infrastructure and a low availability of specialised skills for project identification, evaluation, implementation and operation. These deficiencies among others, make for a low absorptive capacity of investible resources. In addition to flows of finance from the North and the South there are considerable opportunities for the skill-surplus developing countries to assist the LDCs' development efforts by providing less expensive and more appropriate assistance in the identification, implementation and operation of industrial projects.

For the commercial or quasi-commercial acquisition of finance, technology and management, attempts to form regional groupings by LDCs where feasible should be encouraged, for the purpose of negotiating terms and conditions since these would provide an immediate means of enhancing their bargaining power. In addition, special preferences should be provided in wider regional groupings giving advantages to LDCs.

Finally, due attention should be given in co-operative measures for industrial development in LDCs to human needs, agriculture and primary related manufacturing, domestic production of construction materials, etc., in so far as this accords with existing national policies and efforts of LDCs. These policies can generate benefits for the largest groups of the LDC populations.

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<sup>3</sup> UNCTAD, TD/240/Suppl. 1, Basic Data on the Least Developed Countries, Manila, May 1979.

<sup>4</sup> UNCTAD, TD/240, Outline of a Substantial New Programme of Action for the Least Developed Countries, Manila 1979, page 6. Also UNCTAD V, Resolution 122 (V).

## *Guiding Principles*

In order to formulate a long-term programme to arrest the present tendency to marginalisation of the LDCs, and to help them participate on a firmer footing in international economic and political affairs, policies must be evolved which:

- Increase and stabilise non-market resource transfers to LDCs;
- Direct resources to the development of agriculture, industry and infrastructure;
- Increase LDC capacity to absorb investible resources;
- Identify possibilities and promote co-operative arrangements among LDCs in international transactions, wherever feasible.

### **10.2. RECOMMENDATION FOR A PROGRAMME TO INCREASE THE ABSORPTIVE CAPACITY OF DEVELOPING COUNTRIES**

Resource transfers of industrial investments in developing countries will only be relevant if there is a sufficient absorptive capacity for these transfers. Past experience demonstrates that the problem of insufficient absorptive capacity has been a persistent impediment in efforts to deploy external resources in development programmes. This problem is of importance for a wide range of DCs but is particularly acute for the least developed countries which motivates a discussion in this particular section. Although the problem emerges from fundamental structural constraints in these economies, it may be alleviated to an extent by sustained efforts in the identification and preparation of industrial projects.

#### **10.2.1. Industrial Project Preparation Facility for Developing Countries**

It is recommended that a new Industrial Project Preparation Facility is instituted. While the activities of this facility would be intended to benefit all developing countries, a special emphasis would be placed on project identification and preparation for the least developed countries.

#### *Objectives*

Many DCs find it very difficult to obtain financing for the identification and preparation of project feasibility studies from bilateral or multilateral sources, even though such studies are a prerequisite for new investment in industry. The lack in financing possibilities mainly stems from the high risk factor associated with this activity, since only 10 per cent to 20 per cent of the projects prepared may eventually be implemented.<sup>5</sup> The mechanism recommended here benefits

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<sup>5</sup> Lack of adequate project preparation often proves to be a constraint with World Bank operations.

from the experience of UNIDO's industrial investment promotion programme, but departs from the current situation in three respects:

- (i) It will constitute an independent revolving fund which will undertake industrial project feasibility studies. The projects themselves will be financed and implemented by other institutions.
- (ii) It will promote South/South co-operation to the extent that it will draw mainly on the services of developing country consultants (although it may use those from the ICs whenever necessary) in the preparation of feasibility studies. It would base investment proposals, to the greatest extent possible, on *collective self-reliance* with regard to technology, capital goods and markets.
- (iii) Investigative emphasis will be placed where appropriate on agriculture-related industry, the processing of primary commodities, and the setting up of small and medium-sized industries in such areas as textiles and leather processing.

The facility would be used to prepare industrial projects with a minimum estimated project cost between \$2.5 million and \$250 million. For smaller projects the project preparation cost could be met through the United Nations Industrial Development Fund. An annual target of 250 project preparations should be aimed at. Assuming that the average cost of project preparation per project may be around \$40,000, annual funding of \$10 million would be required. If only about two out of every ten prepared projects are eventually implemented, annual funding of \$10 million would support the implementation of about 50 projects each year. Successfully implemented projects would be required to pay back the initial cost of project preparation plus an additional margin, in order to incorporate a revolving element in the funding of the proposed project preparation facility.

It is proposed that this facility is funded by grants from member countries and from bilateral and multilateral financing agencies.

### **10.3. REVIEW OF OTHER PROPOSALS AND RECOMMENDATIONS**

In addition to this recommendation, specific features of the proposals and recommendations in the functional flow areas (chapters 5 to 9) need to be highlighted as being particularly applicable to LDC problems.

#### **10.3.1. Finance**

The investment savings gap in LDC is wider than in DCs generally; hence there is a need for major external financial flows to close this gap. As stressed before, these flows should be on concessional terms whenever appropriate. Least developed countries are less likely to meet commercial profitability criteria than higher income developing countries, and therefore their reliance on concessional flows will be all the greater in relative terms. However, in

appropriate cases, after careful economic calculation, use can sometimes be made of finance obtained on commercial and semi-commercial terms. Furthermore, the proposal for a *Global Fund for the Stimulation of Industry* is predicated on the notion that a share of its funds may be made available to the LDCs.

Co-financing offers real possibilities which could systematically be explored; industry-related infrastructure financed on concessional terms, together with the use of semi-commercial finance for project investment, can often prove viable.

### **10.3.2. Direct Foreign Investment**

The share of least developed countries from existing DFI flows into manufacturing is relatively low, reflecting the poor possibilities of marketing and indicating the large scale on which most DFI projects are undertaken. Furthermore, where DFI through TNCs does take place in the least developed countries, the potential for problems can be greatly increased. TNCs can be very powerful in relation to the host country, and the results of differences in objectives and time horizons between TNCs and least developed country governments can be particularly detrimental to the country's interests. Wherever feasible LDCs should be allowed to offer special incentives in regional market arrangements and special efforts should be made to ensure that LDCs benefit significantly from regional co-operative arrangements, including regional joint ventures. Given their general shortage of technical skills and support infrastructure, the proposals for stepping up the rate of information flows in order to develop more effective bargaining, and for providing technical project development assistance could benefit the LDCs considerably. But whether LDCs actually do benefit in regional and international co-operative arrangements, depends on a basic political criterion being fulfilled: the level of participation of LDC public authorities in international fora which provide for such assistance, must be increased if necessary through modest financial support, to ensure that assistance provided and decisions reached are genuinely suitable for LDCs. In this connection, it is suggested that financial arrangements should be made to facilitate the attendance and participation of LDC government officials at international and regional meetings.

### **10.3.3. Technology**

There must be a stepping up of the rate of research on "appropriate" technologies, and on finding means for least developed countries to improve the terms of acquisition of technology. In stressing a sectoral emphasis on technologies oriented towards mass needs, and for energy related research, the *International Industrial Technology Institute* underscores an area of overlap in the requirements of all developing countries, including the least developed countries. In addition, the *International Centre for the Joint Acquisition of Technology* could readily contribute to overcome the LDCs' problems of



technology acquisition. The data of the *International Patent Examination Centre*, especially the findings on "inappropriate products" would be useful to LDC authorities in defining the product mix of desired industrial output.

#### **10.3.4. Mining and Mineral Processing**

Least developed countries are often reliant on the export of one or a few primary products or minerals as shown in chapter 8. On the surface the least developed countries would therefore appear to be the leading potential beneficiaries of a programme to improve the terms on which minerals are sold abroad, and to step up the degree of local processing. However, the constraints against them following either course are particularly powerful. Least developed countries taken in isolation have little bargaining power, and possess a very low level of basic infrastructure required for building up manufacturing industry around their resource endowments. Hence their particular need to participate in producers' associations to *bargain collectively with the consuming nations* or mining TNCs. Hence too, the relevance of measures that will promote *regional joint ventures* in the processing field, as a means of collectively mobilising the necessary resources for mineral processing. And hence the need for harmonisation of LDC and DC incentive policies to prevent TNCs from using their superior bargaining power to the disadvantage of the LDCs. Once again, the low level of basic infrastructure combined with the need to acquire technical information independently of the TNCs points in the direction of measures to expand the LDCs' knowledge of the commercial viability of their resource bases.

#### **10.3.5. International Trade in Manufactures**

The requirements of the least developed countries in the trade field are obvious. They are the ones most in need of multilateral technical assistance in widening their market horizon, given their low level of basic infrastructure, and given the fact that their small domestic markets may mean a high degree of dependence on export possibilities to justify heavy investment in industry. In the field of primary product exports, the least developed countries are the most vulnerable to fluctuations in world prices, and hence they have the most to gain from mechanisms which will alleviate these fluctuations. The lack of power of the South in multilateral trade negotiations with the North, is particularly harmful to the least developed countries. International organisations must therefore make a special effort to ensure an appropriate level of LDC participation in international discussion and decision making; they must also make a particularly determined effort to provide technical assistance in the form of information flows and specialised personnel, since the LDCs are the countries usually most lacking in services infrastructure.

## **Chapter 11. A Recapitulation of the Proposed Steps towards the NIEO**

It has been described in the foregoing chapters how the existing geographic distribution of world production facilities and the institutional and legal context within which international transfers of commodities, technology, and financial capital take place, are far from adequate to meet the needs of future development in the South. The set of institutions, laws, and indeed attitudes as well, that tend to define the economic interrelations between different actors on the world stage are clearly unfair; all too often they are also inefficient, and both industrialised and developing countries can gain from a balanced and gradual programme of institutional change.

Five central areas of concern to the South in the existing pattern of international economic relations were identified in chapter 1 above:

- (a) the division of the world into exporters of primary products and exporters of manufactures;
- (b) the adverse terms of trade for the products of DCs;
- (c) the one-sided dependence of the developing countries on industrialised countries for finance;
- (d) the one-sided dependence of the developing countries on the industrialised countries for technology;
- (e) the dependence of most developing countries on the industrialised countries for their engine of growth through the need to obtain access to external markets, as well as receive direct foreign investment, the bulk of it through transnational corporations.

It is clear that any real and sustained progress towards an NIEO in general, and towards the achievement of the Lima target in particular, will require the devising of policy options and institutional mechanisms that are feasible and viable alternatives to the status quo.

There are two different, underlying international industrialisation strategies, i.e. Collective Self-Reliance and Global Interdependence, that can be applied in devising the alternative policies and mechanisms. They are aimed at expanding the degree of South/South economic exchange and co-operation and at improving the terms on which increased North/South interrelations take place. As has been argued at length in the study, the two approaches are certainly not mutually exclusive, but complementary.

Industrialisation policy has two dimensions, the national as well as international. The international dimension is in focus in this study. But national efforts are of decisive importance for the success of any international co-operative measures. A discussion of national strategies for industrialisation is contained above. The concept of industrialisation strategy may, of course, be misleading if taken to mean a systematic, consistent and sustained effort in a particular direction. Strategies are more often the results of responses by particular actors to circumstances over which they have little or no control. Nevertheless, analytical clarity may be served by a simple classification of industrialisation strategies. For this study the notions of export promotion, import substitution and endogenous industrialisation strategies have been used. The two first strategies are well known. The meaning of endogenous industrialisation, particularly in relation to the international flows of resources has been described in depth above. Endogenous industrialisation requires the stimulus for growth to come from within the country, and requires, therefore, an emphasis on self-help in terms of maximum utilisation of domestic resources. Nevertheless, the strategy incorporates a central role for growing volumes of international exchange and flows of resources. The nature and quality of linkages between a developing country and the world market will have to be improved however, to make them more appropriate to Third World industrialisation and development goals.

Following the diagnosis and the outline of international and national strategies, a number of gaps in the current international economic and institutional arrangements have been identified. To meet these deficiencies a certain number of major proposals for action or recommendations for supporting programmes have been advanced. It has been attempted to build the specific proposals upon an adequate degree of political realism, to enhance their acceptability to the international community at this juncture when the international economic situation and political opinion are particularly unfavourable for international co-operation. Consequently, the proposals and recommendations have been devised in such a way as to provide mutual benefits for participating countries, or groups of countries. Limited concessions, if any, are asked for. Wherever a proposal contains a concessional element, this is either temporary or can be financed out of incremental revenues arising from the schemes proposed. The recommended Project Preparation Facility, however, can not be predominantly self-financing.

Of the five points enumerated above the imbalance in the present division of the world into producers and exporters of primary products and exporters of manufactures, is the target for most of the proposals and recommendations. A number of instruments, aimed at changing the relations between the industrialised and the developing countries in this respect are proposed. One area where more balanced relations are needed is in the legal framework for international industrial co-operation and for the resolution of conflicts arising from such relations. The present international legal framework needs to be transformed into a new one which is more reflective of the interests of both ICs and DCs. The *Commission for International Industrial Development Law* and the *System for Resolution of Industrial Conflicts* are two major proposals through which this could be achieved.

Another way of introducing an element of equality in global interdependence would be through the recommended *permanent institutionalisation of the UNIDO System of Consultations*. This could provide international exchange of views and the formulation of recommendations affecting the restructuring of world industrial capacity, particularly if effective regional implementation measures can be taken. The consultations would be a natural first step in the establishment of many of the policy programmes proposed or recommended here.

Another recommendation is the *extended use of intergovernmental agreements*. An intensified use of this instrument could contribute to a co-responsibility of governments in projects of enterprise co-operation and permit a deepening of contractual obligations towards e.g. extended guarantees for performance in harmony with the goals for industrialisation and development of the DCs.

The special problems of the lack of absorptive capacity for investment are addressed by a recommendation for an *Industrial Project Preparation Facility* aiming at bridging a persistent gap between resources available for technical assistance and project financing. Experience from UNIDO's past and on-going programmes, shows that such a facility could be of use for a wide range of DCs, but particularly for the LDCs.

Several proposals and recommendations are addressed to the problem of one-sided financial dependence. Third World Collective Self-Reliance will be strengthened through the proposed *International Industrial Finance Agency* and the recommended *Industrial Finance Information and Negotiating Network*. The Agency would provide finance through both conventional and innovative forms to Third World enterprises. It would also finance exports and generally stimulate intra-Third World financial links. Through the Network, important financial information could be pooled and shared between DCs, thus strengthening their bargaining position when borrowing from banks or agreeing to the use of suppliers credits.

In consideration of global interdependence in finance, the major proposal for a *Global Fund for the Stimulation of Industry* plays a crucial role in advancing mutual benefits of the North and South. The proposal would provide an economic stimulus to Northern industry while helping industrial capital formation in the South by using untapped liquid resources which, if left unutilised, may have a disruptive effect on the North's financial system. Other methods for improving financial conditions are embodied in the recommended *new forms for transfer of risk capital* from the North to the South.

Technological relations are the objects of three major proposals. The development of Collective Self-Reliance comes in the forefront through the creation of the *International Industrial Technology Institute*, and the *International Centre for Joint Acquisition of Technology*. Both these proposals aim at strengthening the domestic capacity of the Third World to develop or adapt technology. The Institute would mainly draw on resources available and work being done at the national or regional and international levels. Appropriate technology and new technology for the developing countries necessitated by the energy situation would be in the focus of its activities. The Centre will attempt to

improve the conditions of technology acquisition by the South. A proposed *International Patent Examination Centre* would aim at disseminating relevant patent information from the North to the South, thereby increasing the level of know-how and information in the South. The recommendation for *relocation of industrial R + D activities* has the same aim.

The one-sided dependence in trade and investment is attacked by several proposals and recommendations. *Joint efforts for mineral processing and marketing* is recommended as one field where the potentialities for strengthening Third World collective self-reliance are particularly great. Links between North and South need, however, also be strengthened and improved, in both trade and investment. In order to change the position of the South as an exporter of raw materials and commodities and as an importer of capital goods, it is proposed that a policy target be established, which links imports and exports of manufactured goods by the South. This could be done in the form of a *target for export of manufactured goods by the South*. Other forms for changing the one-sided dependence in North/South relationships include the recommended *use of barter or barter-like investment relationships* and *the mobilising of small and medium-sized enterprises as investors*, as an alternative to traditional large scale TNC investment.

Apart from these major proposals and recommendations the study advances a number of additional suggestions, some of which could immediately be taken up by individual countries or groups of countries or by international organisations. Others would have to be explored and investigated further, and yet others would have to await a more opportune moment for their implementation. These suggestions are, however, forwarded here as matters for future discussion and further study.

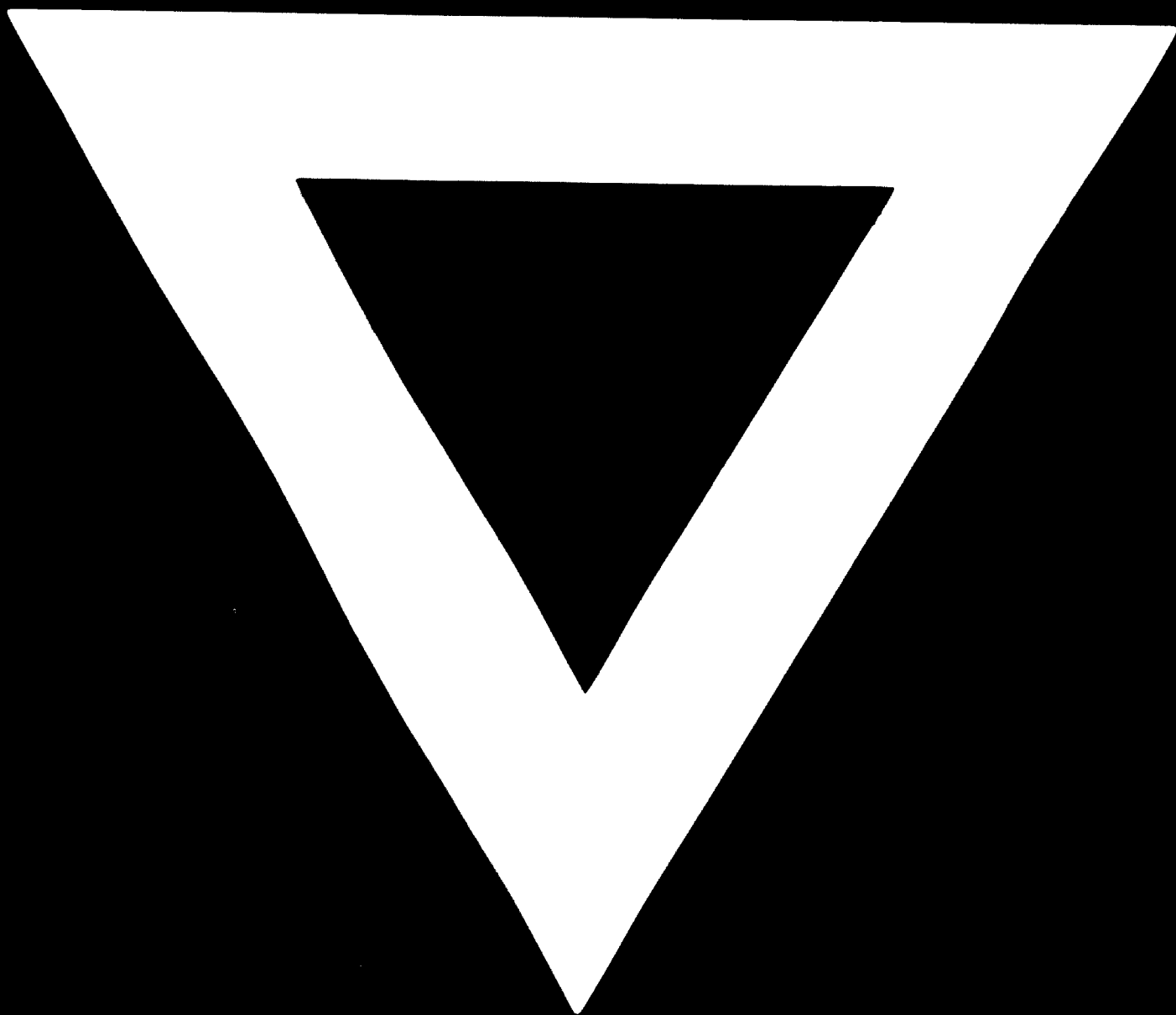
It was stated in the beginning of part I of the study that many important aspects of the NIEO have already manifested themselves. By adopting and implementing the proposals and recommendations launched here, other substantial steps towards the NIEO and its corollary, the Lima target would be taken. The pursuit of the dual strategy of Collective Self-Reliance and Global Interdependence would bring this about in a way which would be beneficial to the world community as a whole.



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