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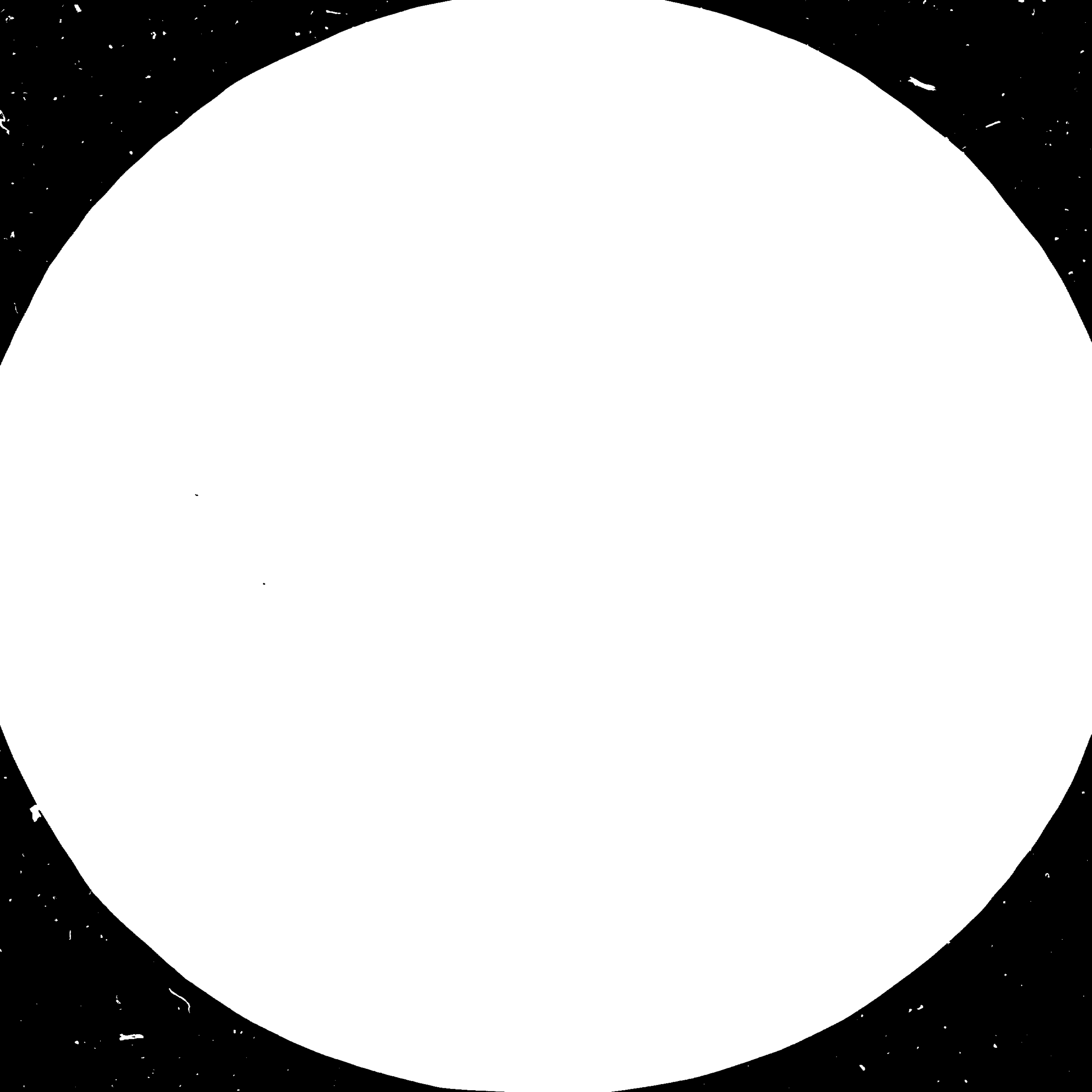

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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

No. 12

13948-E

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ID/SER.M/12

INDUSTRY AND DEVELOPMENT No. 12

with 13948-E

ABSTRACT
Ref.: Sales No. E.84.II.B.4, F.84.II.B.4 and S.84.II.B.4
(ID/SER.M/12)
June 1984
New York

INDUSTRY AND DEVELOPMENT
No. 12

INDUSTRIE ET DEVELOPPEMENT
Nº 12

INDUSTRIA Y DESARROLLO
Núm. 12

ABSTRACT / SOMMAIRE / EXTRACTO

Printed in Austria
V.84-87218—July 1984—12,300

ID/SER.M/12/Abstract
English/French/Spanish

ABSTRACT

The importance of the external environment for industrial development in developing countries

Abd-El Rahman Khane

Stagnating world trade, falling primary commodity prices and increasing interest and debt service costs have, since 1980, led through contractions on both the supply and demand sides to a sharp drop in industrial growth in developing countries. For Latin America the main problem is seen to be debt-financing, and for Africa the fall in primary commodity prices and internal difficulties are identified as the chief problems, whereas Asia has continued to do relatively well, although reduced trading opportunities have caused some decline in previously very high growth rates. It is suggested that short-term international action is needed to increase rates of industrial capacity utilization in the South, while long-term action is required to help revive and implement industrial investment projects delayed by the recession, and barriers to exports of manufactures from developing countries need to be reduced. Measures to strengthen South-South industrial co-operation are also suggested.

The international economic environment and industrialization possibilities in developing countries

Assar Lindbeck

The author examines possible changes in the international economy, as well as certain related domestic changes, which would allow increased industrial growth and high productivity in the developing countries. The emphasis is on long-term issues. Covered are: recent experiences of the developing countries in industrialization; trends and prospects in developed countries; interrelations between developing and developed economies; possible reform of North-South relations; strengthening of South-South relations; and domestic policy options for developing countries. It is argued that both the rate of industrial productivity growth and productive capacity must be increased in developing countries; to help achieve this, markets in developed countries need to expand and be open to exporters in developing countries, adequate capital and credit must be provided to developing countries, South-South trade and other economic ties should be stimulated and, within developing countries, institutions and policies need to be reformed to allow greater allocative flexibility in economic decision-making.

The interrupted industrial revolution of the third world: prospects and policies for resumption

Ajit Singh

The author briefly describes the impact of world recession on industrialization in the South, focusing on reduced export demand, the fall in commodity prices and the increase in interest rate and debt burdens.

He argues that developing countries need to grow at rates of 6-7 per cent for gross domestic product (GDP) and about 10 per cent for manufacturing. Relations between industrial output, employment and productivity are analysed; low productivity growth in the South may reflect efficient use of the non-scarce resource, labour, and the recent drop in capital utilization is related to recessionary world conditions. The end of world recession will not mean a recovery to conditions of the 1960s, so the South will need to rely more on internal dynamics, including increased South-South co-operation. Trade with the North will remain important, but the extraordinary expansion in the economies of the Republic of Korea, Singapore, the area Hong Kong and Taiwan Province of China will not be easily duplicated. Policy recommendations are provided for sub-Saharan Africa, Latin American debtor countries, large semi-industrial countries and small countries that need to be more heavily involved in South-South trade. In an appendix, Japanese industrial policy is discussed as a possible model for large semi-industrial countries.

The second chapter in North-South relations

Goran Ohlin

It is argued that, even with an economic recovery under way in parts of the North, prospects are not good for a return to the high rates, by historic standards, of world economic growth in the period from the end of the Second World War to the early 1970s. Several factors at present mitigate against a return to high growth rates. The previous period represented a historic upturn, as described by Schumpeter's theory of innovation, and a new upturn will take some time to develop. Moreover, structural adjustment in the North has, for various reasons, become increasingly difficult to achieve, and factors such as the possibility of another oil price increase and the continuing debt problem of many developing countries will inhibit investment. To some extent, increased South-South co-operation on a bilateral level, using counter trade as a financial mechanism, will help, but it would still be realistic to revise international economic strategies to reflect lowered expectations.

Industrialization: where do we stand? where are we going?

H. W. Singer

The author, one of the advocates within the United Nations in the early 1950s of import-substituting industrialization (ISI), argues that although such strategies often failed in comparison with export-oriented industrialization (EOI), the present and prospective world economy makes ISI again of interest. He shows why, around 1950, ISI seemed reasonable and why it failed to work as envisaged. It is argued that successful EOI was achieved in a period of rapid world expansion, that if it were adopted by many developing countries the problem of "fallacy of composition" would arise and that, taking the Republic of Korea as an example, the relative importance of EOI within a policy package may have been overrated. A programme of ISI and EOI sequentially combined, which would have the best features of both strategies, is suggested.

Industrializing small countries

Helen Hughes

Small countries that are attempting to industrialize will generally need to be more "open" than large ones; a small market means that economies of scale in production may be difficult to achieve, so that protection and import substitution become very costly. Industrial activities will need to be specialized and carefully chosen to match resource availabilities, and the range of exports will be narrow, taking into account the high costs of external transport for most small countries. Experience shows that the benefits of forming common markets for the small countries of a region are usually outweighed by the corresponding costs of import substitution, structural rigidities and increased bureaucracy, since the markets thus formed remain relatively small. Small countries will tend to have fewer of the required skills and technologies available locally than large countries do, so that education and training need to be accompanied by liberal immigration and emigration policies and acceptance into the economy of suitable small and medium-sized foreign firms. Government in some small countries is too large for national needs, thus increasing the cost of economic activities, but an inherent advantage of smallness is that it allows considerable political cohesion, so that policies can be quickly and flexibly decided with few compromises. Instead of relying on a structure of incentives and restrictions, the most successful small countries have reduced government to a minimum, kept external trade and investment policies open and created a macro-policy framework allowing prices to reflect world market conditions; this strategy has remained viable even under recent world economic conditions.

Brazil and the IMF: prologue to the third letter of intent

Edmar Bacha

Brazil's debt problem has caused letters of intent agreed with IMF in order to obtain financing of the external deficit to become increasingly restrictive for the domestic economy, thus leading to severe recession. The author argues against this restrictiveness. The IMF rules are asymmetrical, imposing adjustment on debtor but not on surplus countries, and the required rate of adjustment is too rapid; in the case of Brazil, adjustment through recession would reduce GDP by about 5 per cent and domestic expenditure by about 6.5 per cent, too much in view of the country's social problems. Adjustment through internal recession is justified when the cause of the external deficit is excessive internal demand, but in the case of Brazil the cause is external recession, a fact ignored by IMF in setting its conditions for financing. These conditions have focused on internal factors such as inflation and government spending and borrowing, which, according to the author, are not within the jurisdiction of IMF, instead of on policies aimed more directly at the external deficit.

The emergence of military industries in the South: longer term implications

Miguels Wionczek

Although quantitative data on imports, production and exports of armaments in developing countries are not generally available, existing information suggests not only that imports are large but also that several newly industrializing countries have recently been rapidly expanding both production and exports, even competing with exports from developed countries; this evolution is briefly described. The author argues that this development reflects a high state of technological and managerial achievement, which could be diverted into non-arms industries, particularly in capital and intermediate goods, thus providing the core of a successful industrialization programme.

SOMMAIRE

L'importance de l'environnement international pour l'industrialisation des pays en développement

Abd-El Rahman Khane

La stagnation des échanges mondiaux, la chute des prix des produits primaires, la hausse des taux d'intérêt et l'alourdissement du service de la dette ont provoqué, depuis le début des années 80, des contractions de l'offre et de la demande qui se sont traduites par une chute brutale de la croissance industrielle des pays en développement. Pour l'Amérique latine, le problème principal est celui du financement de la dette alors qu'en Afrique, les facteurs essentiels sont la chute du prix des produits primaires et les difficultés internes; en Asie, par contre, la situation est relativement satisfaisante, même si la contraction des marchés a entraîné un certain ralentissement de taux de croissance qui avaient été jusque-là très élevés. Il conviendrait de mener une action à court terme au niveau international pour accroître les taux d'utilisation de la capacité industrielle du Sud et d'entreprendre une action à long terme pour faciliter la relance et la réalisation des projets d'investissement industriel mis en sommeil du fait de la récession tout en réduisant les obstacles aux exportations des produits manufacturés des pays en développement. Des mesures visant à renforcer la coopération industrielle entre les pays du Sud sont également proposées.

L'environnement économique international et les possibilités d'industrialisation des pays en développement

Assar Lindbeck

L'auteur examine les modifications qu'il faudrait apporter à la situation économique internationale ainsi que certaines mesures connexes à prendre au niveau national pour accélérer la croissance industrielle et renforcer la productivité des pays en développement. Mettant l'accent sur les mesures à long terme, il traite les questions suivantes : bilan de l'industrialisation des pays en développement au cours de la période récente; tendances et perspectives des pays développés; interrelations entre l'économie des pays en développement et celles des pays développés; réforme possible des relations Nord-Sud; renforcement des relations Sud-Sud; enfin options offertes aux pays en développement au niveau national. Il conviendrait d'accroître aussi bien le taux de croissance de la productivité industrielle que la capacité de production des pays en développement; pour faciliter cette entreprise, il faut que les marchés des pays avancés se développent et s'ouvrent aux exportateurs des pays en développement, que les pays en développement reçoivent les capitaux et les crédits nécessaires, que les échanges commerciaux et les autres liens économiques entre les pays du Sud soient stimulés et que dans les pays en développement, les institutions et les politiques soient réorientées afin que le processus de prise de décision en matière économique béneficie d'une plus grande souplesse en ce qui concerne les allocations.

Interruption de la révolution industrielle du tiers monde : perspectives de reprise et politiques à appliquer à cette fin

Ajit Singh

L'auteur décrit brièvement les répercussions de la récession mondiale sur l'industrialisation du Sud, s'attachant en particulier à la réduction des exportations, à la chute des prix des produits primaires et à la hausse des taux d'intérêt ainsi qu'à l'alourdissement du fardeau de la dette.

Il faudrait que le taux de croissance du produit intérieur brut (PIB) des pays en développement soit de l'ordre de 6 à 7 % et celui de la production manufacturière de l'ordre de 10 %. L'auteur analyse les rapports entre la production industrielle, l'emploi et la productivité; il explique pourquoi on peut constater une faible productivité dans le Sud malgré une utilisation efficace de ressources abondantes, en particulier en ce qui concerne la main-d'oeuvre et il lie la chute récente de l'utilisation du capital à la récession au niveau mondial. La fin de cette récession ne se traduira pas par un retour à la situation des années 60; il faudra donc que les pays du Sud fassent davantage appel à une dynamique interne et en particulier renforcent leur coopération. Les échanges commerciaux avec le Nord continueront à être importants mais il ne sera pas facile d'imiter l'expansion extraordinaire des économies de la République de Corée, de Singapour, du territoire de Hongkong et de la province chinoise de Taïwan. L'article contient également des recommandations pour les pays débiteurs de l'Afrique sub-saharienne et de l'Amérique latine, grands pays semi-industrialisés et petits pays qui ont besoin de participer plus activement aux échanges commerciaux Sud-Sud. Dans une annexe, la politique industrielle du Japon est décrite comme un modèle possible pour les grands pays semi-industrialisés.

Le deuxième chapitre des relations Nord-Sud

Goran Ohlin

Même si on constate un rétablissement de l'économie dans certaines régions du Nord, il y a peu de chances que l'on assiste à un retour des taux élevés de la croissance économique qui ont été enregistrés entre la fin de la deuxième guerre mondiale et le début des années 70. A l'heure actuelle, plusieurs facteurs jouent à l'encontre d'un tel retour. La période citée représente une progression historique, semblable à celle que décrit Schumpeter dans l'exposé de sa théorie sur l'innovation et il faudra un certain temps pour que les conditions d'une nouvelle progression soient réunies. De plus, le Nord a eu, pour diverses raisons, de plus en plus de difficultés à procéder à ses ajustements de structure et des facteurs tels que la possibilité d'une nouvelle hausse du prix du pétrole et le problème permanent de la dette de nombreux pays en développement jouent contre les investissements. Dans une certaine mesure, un renforcement de la coopération Sud-Sud sur une base bilatérale, faisant appel à des échanges compensés en tant que mécanismes financiers, permettra d'améliorer la situation mais il serait quand même réaliste de réviser les stratégies internationales pour tenir compte de perspectives en baisse.

Industrialisation : situation et perspectives

H. W. Singer

L'auteur, qui avait été aux Nations Unies, au début des années 60, l'un des partisans de la théorie de l'industrialisation par remplacement des importations, explique pourquoi, même si ces stratégies ont souvent connu moins de succès que les stratégies d'industrialisation orientées vers l'exportation, la situation actuelle de l'économie mondiale et ses perspectives lui redonnent de l'intérêt. L'auteur montre pourquoi, dans les années 50, cette théorie paraissait raisonnable et pourquoi elle n'a pas répondu aux espoirs placés en elle. Les stratégies d'industrialisation orientée vers l'exportation ont réussi dans une période d'expansion rapide au niveau mondial et si elles devaient être adoptées par de nombreux pays en développement, on verrait se poser le problème de la "fausseté de la composition"; en ce qui concerne la République de Corée, par exemple, on a pu surestimer l'importance de la stratégie d'industrialisation orientée vers l'exportation dans la stratégie d'ensemble. L'auteur suggère un programme comportant l'utilisation échelonnée des deux stratégies, ce qui permettrait de tirer le meilleur parti de chacune d'elles.

L'industrialisation des petits pays

Helen Hugues

Les petits pays qui s'efforcent de s'industrialiser doivent en général être plus "ouverts" que les grands; pour un petit marché, il risque d'être difficile de réaliser des économies d'échelle dans la production, de sorte que la protection et la substitution des importations sont très onéreuses. Les activités industrielles doivent être spécialisées et soigneusement choisies compte tenu de la dotation en ressources; la gamme d'exportations sera très étroite, vu le coût élevé des transports extérieurs pour la plupart des petits pays. L'expérience prouve que les avantages qu'il y a à constituer des marchés communs entre petits pays d'une région sont en général contrebalancés par le coût de la substitution des importations, les rigidités structurelles et l'alourdissement de la bureaucratie, car les marchés ainsi constitués restent relativement petits. Les petits pays tendent à disposer localement de moins des compétences et techniques requises que les grands pays, de sorte que l'enseignement et la formation doivent s'accompagner de politiques libérales d'immigration et d'émigration et d'une acceptation au sein de l'économie de petites et moyennes entreprises étrangères appropriées. Dans certains petits pays, l'administration est trop lourde par rapport aux besoins nationaux, ce qui augmente le coût des activités économiques, mais la petitesse a pour avantage inhérent de permettre une cohésion politique considérable, de sorte que les politiques peuvent être décidées avec rapidité et souplesse et sont rarement assorties de compromis. Au lieu de se fonder sur une structure d'incitations et de restrictions, les petits pays qui ont eu le plus de réussite ont réduit l'administration à un minimum, appliqué des politiques ouvertes en matière de commerce extérieur et d'investissements et constitué un cadre macro-économique dans lequel les prix sont fonction des conditions sur le marché mondial; cette stratégie reste viable, même dans la situation économique mondiale de ces dernières années.

Le Brésil et le FMI : prologue à la troisième lettre d'intention

Edmar Bacha

Du fait du problème de la dette du Brésil, les lettres d'intention convenues entre ce pays et le FMI afin d'obtenir un financement du déficit extérieur se sont faites de plus en plus restrictives pour l'économie nationale, ce qui a conduit à une sévère récession. L'auteur se prononce contre ces restrictions. Les règles du FMI sont asymétriques; elles imposent un ajustement aux débiteurs, mais non aux pays excédentaires et le taux d'ajustement requis est trop rapide; dans le cas du Brésil, l'ajustement par la récession réduirait le PIB d'environ 5 % et les dépenses intérieures de 6,5 % à peu près, ce qui est excessif vu les problèmes sociaux du pays. L'ajustement par la récession interne est justifié lorsque la cause du déficit extérieur est une demande intérieure excessive; mais, dans le cas du Brésil, cette cause est la récession extérieure, fait que le FMI ignore lorsqu'il fixe ses conditions de financement. Celles-ci, au lieu de s'orienter vers des politiques visant plus directement le déficit extérieur, sont axées sur des facteurs internes tels que l'inflation et les dépenses et emprunts des pouvoirs publics qui, de l'avis de l'auteur, ne sont pas du domaine de compétences du FMI.

L'apparition d'industries militaires dans le Sud : incidences à long terme

Miguel S. Wionczek

Bien que l'on ne dispose en général pas de données quantitatives sur les importations, la production et les exportations d'armements dans les pays en développement, les renseignements disponibles semblent indiquer non seulement que ces importations sont fortes, mais également que plusieurs pays nouvellement industrialisés ont récemment développé rapidement leur production et leurs exportations, entrant même en concurrence avec les pays développés; l'auteur décrit brièvement cette tendance. Pour lui, celle-ci prouve la présence de compétences élevées en matière de techniques et de gestion, compétences qui pourraient être détournées vers les industries civiles, notamment celles des biens d'équipement et des biens intermédiaires, ce qui permettrait de constituer le noyau d'un programme d'industrialisation fructueux.

EXTRACTO

La importancia del medio externo en la industrialización de los países en desarrollo

Abd-El Rahman Khane

Desde 1980, el estancamiento del comercio mundial, la caída de los precios de los productos primarios y los costos cada vez mayores de los intereses y del servicio de la deuda han dado lugar, mediante un proceso de contracción de la oferta y la demanda, a un fuerte descenso del crecimiento industrial de los países en desarrollo. En América Latina el principal problema es la financiación de la deuda, en el caso de Africa la caída de los precios de los productos primarios y las dificultades internas constituyen los mayores problemas, mientras que Asia ha continuado manteniendo una posición relativamente buena, aunque la reducción de las oportunidades de comercio ha ocasionado una ligera disminución en las tasas de crecimiento anteriormente muy elevadas. En el artículo se sugiere la necesidad de que se adopten medidas a corto plazo, a nivel internacional, para mejorar las tasas de utilización de la capacidad industrial en el Sur, y medidas a largo plazo para ayudar a revitalizar y aplicar los proyectos de inversión industrial demorados por la recesión y reducir las barreras a la exportación de manufacturas de los países en desarrollo. Asimismo se sugiere la adopción de medidas para fortalecer la cooperación industrial Sur-Sur.

El ambiente económico internacional y las posibilidades de industrialización de los países en desarrollo

Assar Lindbeck

El autor examina la posible evolución de la economía internacional así como ciertos cambios internos conexos que permitirían un mayor crecimiento industrial y una elevada productividad en los países en desarrollo. Se hace hincapié en las cuestiones a largo plazo. Entre los temas examinados figuran los siguientes: experiencias recientes de los países en desarrollo en materia de industrialización; tendencias y perspectivas en los países desarrollados; interrelaciones entre economías desarrolladas y en desarrollo; posible reforma de las relaciones Norte-Sur; fortalecimiento de las relaciones Sur-Sur; y opciones de política interna para los países en desarrollo. Se afirma que es necesario aumentar la tasa de crecimiento de la productividad industrial y la capacidad productiva de los países en desarrollo; para ayudar a lograr este propósito, es necesario ampliar los mercados de los países desarrollados y abrirlos a los exportadores de los países en desarrollo, suministrar capital y crédito en volumen adecuado a los países en desarrollo, estimular el comercio Sur-Sur y otras vinculaciones económicas y reformar, las instituciones y las políticas de los países en desarrollo, para dar mayor flexibilidad de asignación al proceso de adopción de decisiones económicas.

La revolución industrial interrumpida del tercer mundo: perspectivas y políticas para su reanudación

Ajit Singh

El autor describe brevemente la repercusión de la recesión mundial en la industrialización del Sur, prestando especial atención a la reducción de la demanda de productos de exportación, la caída de los precios de los productos básicos y el aumento de las tasas de intereses y de los pagos por servicio de la deuda. Sostiene que los países en desarrollo deben alcanzar tasas de crecimiento entre el 6 y el 7% del producto interno bruto (PIB) y de alrededor del 10% en la actividad manufacturera. Se analizan las relaciones entre la producción industrial, el empleo y la productividad; el bajo índice de aumento de la productividad en el Sur podría deberse a la eficaz utilización del recurso del que no se carece, la mano de obra, y la reciente reducción en la utilización del capital guarda relación con las condiciones mundiales de recesión. El final de la recesión mundial no significará una recuperación en la que imperen nuevamente las condiciones del decenio de 1960, de modo que el Sur deberá recurrir en mayor grado a la dinámica interna, incluida una mayor cooperación Sur-Sur. El comercio con el Norte seguirá siendo importante, pero no será fácil emular la extraordinaria expansión obtenida por las economías de la República de Corea, Singapur, la zona de Hong Kong y la provincia de Taiwan de China. Se ofrecen recomendaciones de política para el Africa Subsahariana, los países deudores latinoamericanos, los países grandes semiindustrializados y los países pequeños que requieren una mayor participación en el comercio Sur-Sur. En el apéndice se examina la política industrial japonesa como posible modelo para los países grandes semiindustrializados.

El segundo capítulo de las relaciones Norte-Sur

Goran Ohlin

El autor sostiene que no obstante el proceso de recuperación económica en marcha en algunas partes del Norte, no se vislumbran buenas perspectivas para un retorno a las elevadas tasas, según las normas históricas, del crecimiento económico mundial registrado durante el período que va desde el final de la Segunda Guerra Mundial hasta el comienzo del decenio de 1970. En la actualidad son varios los factores que dificultan un retorno a tasas de crecimiento elevadas. El período anterior representó una reactivación histórica, tal como se describe en la teoría de la innovación de Schumpeter, y se requerirá cierto tiempo para que se produzca una nueva reactivación de la economía. Además, por diversas razones, el ajuste estructural del Norte es cada vez más difícil de alcanzar, y algunos factores, tales como la posibilidad de otro aumento de los precios del petróleo y el continuo problema del endeudamiento de muchos países en desarrollo inhibirán la inversión. Hasta cierto punto, sería útil establecer una mayor cooperación Sur-Sur en el plano bilateral, utilizando el comercio de contraparte como mecanismo financiero, aunque convendría siempre revisar las estrategias económicas internacionales a fin de dar cabida a previsiones menos ambiciosas.

Industrialización: ¿Dónde estamos? ¿Hacia dónde vamos?

H.W. Singer

El autor, que a comienzos del decenio de 1950, fue uno de los propugnadores dentro del sistema de las Naciones Unidas de la industrialización mediante la sustitución de importaciones, sostiene que si bien tales estrategias por lo común no han dado el resultado apetecido en comparación con la industrialización orientada a la exportación, la economía mundial actual y futura hacen que la industrialización mediante la sustitución de importaciones revista interés nuevamente. El autor explica por qué este sistema parecía razonable y por qué no dio los resultados esperados en el decenio de 1950. Se afirma que la industrialización orientada a la exportación se alcanzó con éxito en un período de rápida expansión mundial, que si muchos países en desarrollo adoptaran esta política surgiría un problema de "falacia de composición" y que, tomando como ejemplo a la República de Corea, podría haberse exagerado la importancia relativa de la industrialización orientada a la exportación dentro de un conjunto de políticas. Se sugiere un programa que combine consecutivamente la industrialización mediante sustitución de importaciones con la industrialización orientada a la exportación que reúna las mejores características de ambas estrategias.

La industrialización de los países pequeños

Helen Hughes

Un país pequeño con afán de industrialización por lo general deberá ser más "abierto" que un país grande; con un mercado reducido es difícil alcanzar economías de escala en la producción, de modo que la protección y la sustitución de importaciones llegan a ser sumamente costosos. Será necesario que las actividades industriales alcancen un alto grado de especialización y que se seleccionen cuidadosamente de modo que correspondan a las disponibilidades de recursos, y la gama de exportaciones deberá ser reducida, teniendo en cuenta los altos costos del transporte externo en la mayoría de los países pequeños. La experiencia demuestra que los beneficios de formar mercados comunes para los países pequeños de una región son generalmente superados por los correspondientes costos de la sustitución de importaciones, las rigideces estructurales y el aumento de la burocracia, ya que los mercados así constituidos permanecen relativamente pequeños. Los países pequeños no suelen disponer localmente de las aptitudes requeridas ni de las tecnologías que existen en los países grandes, de modo que la enseñanza y la capacitación deben ir acompañadas de políticas de inmigración y emigración liberales y de aceptación en la economía de aquellas empresas extranjeras medianas y pequeñas que sean convenientes. La organización administrativa de algunos países pequeños rebasa las necesidades nacionales, lo que encarece las actividades económicas, mientras que una ventaja inherente de una plantilla reducida es que permite una considerable cohesión política, de manera que las políticas se pueden adoptar con rapidez y flexibilidad, con muy pocas concesiones. En lugar de depender de una estructura de incentivos y restricciones, los países pequeños más prósperos han reducido el aparato estatal a un mínimo, han mantenido una política abierta de comercio exterior e inversión y han creado una estructura macropolítica en la cual los precios reflejan las condiciones del mercado internacional; esta estrategia se ha mantenido viable, incluso bajo las recientes condiciones económicas internacionales.

El Brasil y el FMI: prólogo de la tercera carta de intención

Edmar Bacha

El problema de la deuda del Brasil ha dado lugar a que las cartas de intención acordadas con el FMI para obtener la financiación de la deuda externa sean cada vez más restrictivas para la economía nacional, originando así una grave recesión. El autor expone sus argumentos en contra de este carácter restrictivo. Las normas del FMI son asimétricas, imponen ajustes a los países deudores y no a los superavitarios, y la tasa de ajuste requerida es demasiado rápida; en el caso del Brasil, el proceso de ajuste mediante la recesión reduciría el PIB en un 5% aproximadamente y los gastos internos en un 6,5% aproximadamente, cifras demasiado elevadas habida cuenta de los problemas sociales del país. El ajuste mediante la recesión interna se justifica cuando la causa del déficit externo es una demanda interna excesiva, pero en el caso del Brasil la causa es la recesión externa, hecho que el FMI pasa por alto al fijar sus condiciones de financiación. Estas condiciones se han centrado en factores internos tales como la inflación y los gastos y empréstitos del sector público que, según el autor, no son de la esfera de competencia del FMI, en vez de centrarse en políticas más directamente encaminadas a aliviar el déficit externo.

La aparición de industrias militares en el Sur: repercusiones a largo plazo

Miguel S. Wionczek

Aunque por lo general no se dispone de datos cuantitativos sobre la importación, la producción o la exportación de armamentos en los países en desarrollo, de la información existente se infiere no sólo la existencia de un gran volumen de comercio de importación sino también el hecho de que en varios países de reciente industrialización se ha registrado un rápido aumento tanto de la producción como de la exportación, incluso en competencia con las exportaciones de los países desarrollados; toda esta evolución se describe brevemente. El autor sostiene que esa situación refleja un alto nivel de logro tecnológico y administrativo, que podría encaminarse hacia industrias ajenas al sector de armamentos, especialmente las de bienes de capital e intermedios, para constituir así el núcleo de un programa de industrialización eficaz.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna

INDUSTRY AND DEVELOPMENT

No. 12

UNITED NATIONS
New York, 1984

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AIMS AND SCOPE OF *INDUSTRY AND DEVELOPMENT*

Industry and Development attempts to provide a link between practitioners and theorists working on economic and related aspects of industrialization. The focus of the journal is on applied economics, particularly in areas emphasized in the Lima Declaration and Plan of Action on Industrial Development and Co-operation.

The journal is published an average of four times a year as an integral part of the work programme of the Division for Industrial Studies of the United Nations Industrial Development Organization. It is prepared under the general guidance of a Supervisory Panel, composed of staff members from the Division, with the Head of the Global and Conceptual Studies Branch as its chairman. Responsibility for the detailed supervision of a specific issue is rotated among the members of the Panel. The responsible member for this issue was J. Cody.

The Supervisory Panel of *Industry and Development* welcomes readers' opinions and comments.

ID/SER.M/12

UNITED NATIONS PUBLICATION
Sales No.: E.84.II.B.4
00900P

Preface

This issue of Industry and Development has been especially prepared for the Fourth General Conference of the United Nations Industrial Development Organization (UNIOD), to be held at Vienna from 2 to 18 August 1984. The focus is on current policy issues in industrial development, including the action that needs to be taken by the international community in the post-recessionary period, and special topics include the particular problems of small countries, restrictions by the International Monetary Fund (IMF) on debtor countries (specifically Brazil), and the implications of the growth of armaments industries in developing countries. Many of the ideas presented in these articles will undoubtedly be of interest to participants in the Conference, as well as to our regular readers. The articles have been written by eminent economists particularly concerned with economic development issues and the Executive Director of UNIDO has provided a perspective on the relationship between the external environment and industrialization prospects for developing countries. The Supervisory Panel of Industry and Development wishes to thank all contributors. The articles by Messrs. Lindbeck and Singh were originally written as contributions to the preparatory work for the Conference.

Explanatory notes

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

The term "billion" signifies a thousand million.

The following abbreviations are used in this publications:

BIS	Bank for International Settlements
ECA	Economic Commission for Africa
ECLA	Economic Commission for Latin America
EEC	European Economic Community
GDP	gross domestic product
GNP	gross national product
IMF	International Monetary Fund
MVA	manufacturing value added
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of Petroleum Exporting Countries
PSBR	public sector borrowing requirements
SELA	Latin American Economic System
UNCTAD	United Nations Conference on Trade and Development

THE IMPORTANCE OF THE EXTERNAL ENVIRONMENT FOR INDUSTRIAL DEVELOPMENT IN DEVELOPING COUNTRIES

Abd-El Rahman Khane*

The process of industrialization in developing countries depends first and foremost on national efforts and domestic policies. The external environment - that is, links with other countries, mainly through trade and finance - has, however, become increasingly important. The present article considers how this external environment has adversely affected the process of industrialization in recent years and how the external environment might be made more favourable to rapid industrialization in developing countries in the future.

The Fourth General Conference will be convened against a more complex and difficult set of external circumstances than those prevailing four years ago, when the Third General Conference of UNIDO met at New Delhi. In 1980, it was widely assumed that the world economy would continue to grow, although perhaps at a somewhat slower rate than in the 1950s and 1960s. But, as is now well known, the recession that started in the industrialized market-economy countries in 1980 lasted longer than any recession since the 1930s and its impact on the developing countries has been much more serious, partly because the interest rates payable on accumulated external debts reached extraordinarily high levels.

Although the level of economic activity has started to rise encouragingly in North America, Japan and Western Europe have been somewhat slower to recover. As a result, the full benefits of the emergence from the 1980-1982 recession are as yet uncertain and they are only slowly reaching the developing countries. After a marked slow-down in growth in 1981 and 1982, industrial output increased more rapidly in Asia in 1983, but in Latin America the level of economic activity was lower in 1983 than in 1980, while the rate of industrial growth in most African countries in the period 1981-1983 was disappointing. Preliminary estimates suggest that the growth of industrial output in the South as a whole over the period 1981-1983 averaged approximately 3 per cent a year compared with the annual growth target of 9 per cent adopted in the International Development Strategy for the Third United Nations Development Decade,** which began in 1981.

It was mainly the deterioration in the external environment, particularly after 1980, that slowed down the industrialization process in developing countries. If the process of industrialization is to be both sustained and rapid, there must be expanding markets both at home and abroad and a continued high level of investment in new production facilities. These pre-conditions for rapid industrialization have not been present in many developing countries since 1980, when a fall in export earn-

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**See General Assembly resolution 35/56, annex, para. 29.

ings and a rise in debt-servicing costs led to reduced imports and a slowdown in the growth of domestic demand. The output of existing industries has been reduced both by this decline in demand and, on the supply side, by inadequate availability of foreign exchange to purchase imported raw materials, spare parts and other essential supplies. Most serious of all, the momentum of investment in new industrial capacities has been lost as both domestic savings and Government revenues have declined and as external financing has become more expensive and more difficult to obtain.

The events of recent years confirm what the developing countries have been stating for the past 10 years, namely, that the existing international economic order does not provide a world economic environment in which they can achieve their goal of rapid economic and social development. The main reason for this has been the increasing inability of developing countries to earn sufficient foreign exchange to support rapid economic growth, as reflected by the rise in their current account deficit from $31 billion in 1979 to $59 billion in 1980 and $118 billion in both 1981 and 1982. A major part of this growing deficit was financed by commercial bank borrowing, which proved to be too expensive and raised the external debt-servicing burden to a level that was not sustainable in a period (1981-1983) in which the volume of world trade had stopped growing. The developing countries' current-account deficit was reduced appreciably in 1983, but this was achieved mainly by a reduction in imports at the expense of economic growth.

The biggest reduction in imports was in Latin America, which is the most industrialized region of the South, having contributed about 50 per cent of the total industrial output of the South in 1980. The impact of the international debt crisis and very high inflation rates on the economies and social fabric of the Latin American countries needs to be stressed; those countries are being forced to adopt policies that contract the level of economic activity at a time when rapid growth is required to satisfy the needs of an expanding population. On the basis of a report prepared jointly by the Economic Commission for Latin America (ECLA) and the Latin American Economic System (SELA), the Latin American countries have argued that they should not be pressed into paying more in debt servicing than the demands of continued economic development would allow. They feel that the way to repay their debt is by expanding output rather than by postponing growth and sacrificing the welfare of their people. Their claims have become even more urgent with the further rise in interest rates in April and May 1984.

Most Asian countries were less vulnerable to the unfavourable external environment and saw no more than a slowing down of their fairly rapid pace of industrialization. The debt-service payments of Asian countries were less of a burden and were kept up to date, export earnings were sustained, the level of imports was more or less maintained and a small decline in the inflow of external capital was offset by the continued high rate of domestic savings. These countries responded to the recession by curbing the growth of government expenditure and postponing the start of new industrial projects, in particular those with high foreign-exchange costs. One impact of the recession has been to postpone the time when Asian countries can become more self-sufficient in basic industries like steel, petrochemicals and capital goods. Another impact has been a slowing down of the fast growth of exports of manufactured goods. Asia is more dependent than other regions on international acceptance of the South's need to expand its exports of manufactured goods to the North in future years.

The external environment is perhaps most important of all for African countries. They rely more heavily on exports of primary commodities, whose average price fell by about 25 per cent during the recession. In many African countries, much of the government revenues is derived from exports of food crops and minerals, while a high proportion of new investment in the industrial sector is sponsored by Governments. In addition to declining export earnings, sub-Saharan Africa faced a slow-down in concessionary financial assistance; it also encountered higher costs for obtaining external financing on non-concessional terms. These problems were exacerbated by a severe drought that swept the continent, adding further distress to a food situation that the Economic Commission for Africa (ECA) has described as "the single most important concern in the region".

Industrial output in African countries has therefore been adversely affected from both sides. On the supply side, foreign exchange shortages have kept their import-dependent industries short of raw materials, other inputs and spare parts. On the demand side, the recession has reduced incomes, particularly in the dominant agricultural sector, and the level of demand in general. As a result, industrial output actually declined from the previous year's level in 10 countries of the region in 1981 and in 13 countries in 1982.

As the world economy emerges from the recession, the developing countries face two types of constraint on their industrialization. The first is of a short-term nature, namely, an insufficiency of the foreign exchange that will allow developing countries to import the raw materials, other supplies, spare parts and additional machinery and equipment needed to operate their existing industries at high rates of capacity utilization. As demand for industrial goods picks up in the biennium 1984-1985, it will become increasingly important to maximize industrial output from existing plants. A short-term programme of international action is therefore needed to help developing countries to increase the level of industrial output from their existing industries.

Two components of such a programme could be envisaged. The first component would comprise advisory missions to diagnose the reasons for the low utilization of capacity available in existing industrial plants and to suggest ways to facilitate more efficient plant operations. The second component would consist of external financial assistance specifically aimed at providing additional foreign exchange for an expanded programme of imports of raw materials, other supplies and spare parts, as well as the additional industrial machinery and equipment that might be required to revitalize the industrial sector. The need for such special programmes is already well recognized. For example, a Special Assistance Programme approved by the Executive Directors of the World Bank in February 1983 specifically recognized the need to help developing countries restore their development efforts despite adverse external circumstances.*

The second type of constraint, calling for long-term solutions, is typified by the low level of investment in industry. While maximization

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*For a brief description of the Programme, see The World Bank Annual Report 1983 (Washington D.C., World Bank, 1983), p. 39.

of the output of existing industries is indeed the most urgent immediate goal, the need to revive the level of new investment in industry is imperative if industrial growth is to be restored to its previous high rate. The recession caused the postponement, or in some cases even cancellation, of many new industrial projects in most developing countries. This has seriously affected the strategy of the industrially more advanced developing countries, which consisted of establishing industries in the 1980s to produce basic products like steel and chemicals, as well as capital goods. In other words, although investment plans had been made that would lay the basis for an expansion of industrial output after 1985, these plans have not been put into effect. The start of many of these new industrial projects appears likely to be postponed beyond 1984, because many developing countries still need to restrain the level of imports in the current less favourable climate for expanding exports and attracting the required large inflows of external finance.

A long-term programme of international action is therefore needed to assist developing countries in reviving and implementing plans to establish new industrial projects that have been postponed during the recession. The greatest need is for developing countries to expand their production of basic industries like chemicals, paper and steel and to develop the capital-goods industries producing fabricated metal products, machinery and transport equipment. Most of these projects are capital-intensive and have a high foreign-exchange component. Because some developing countries have high debt-servicing burdens in relation to their present level of export earnings, special types of project financing need to be considered. Some possible new ways were considered at the Consultation on Industrial Financing organized by UNIDO in 1982. More recently, some multilateral financing institutions such as the World Bank have begun to make increased use of co-financing opportunities. The development of such a comprehensive international programme is a complex task, but without it the flow of financing for new industrial projects is likely to be inadequate in the coming years. There is no need to emphasize how such a programme would in turn benefit the industries in the industrialized countries, which would supply part of the new machinery and equipment required.

The International Development Strategy adopted by the General Assembly calls for far-reaching changes in the structure of world industrial production. Part of this change will occur naturally if economic growth in developing countries is faster than in industrialized countries and if the range of industrial goods they produce broadens further, thereby reducing the need for imports from industrialized countries. But far-reaching changes can only be achieved if the developing countries continue to increase their share in world exports of manufacturing goods.

The need for developing countries to expand their exports of manufactured goods has been quantified by the World Bank, whose estimates suggest that the contribution of manufactured goods to the total export earnings of the developing countries might need to increase from about 30 per cent in 1980 to about 45 per cent in 1990. This goal would imply that the volume of such exports in 1990 would be about 2.5 times the level in 1980, and that the developing countries' share of the North's domestic markets for manufactured goods, which doubled from 1.7 per cent in 1970 to 3.4 per cent in 1980, would need to double again to about 7 per cent in 1990.

Such an increase in market penetration could be absorbed by the North in an expanding world economy, but the growing pressures for protection by industries in the industrialized countries now make the prospects for such a large increase uncertain. Some of the industries in which exports were most successfully promoted in the 1970s - clothing and textiles, footwear and leather products - are now to a greater or lesser extent constrained by import quotas. Exports of iron and steel have also been limited by import restrictions and there is a danger that exports of petrochemicals may encounter similar resistance. It is therefore essential that the present trend towards increased protectionism be halted and reversed.

If the international community were to adopt these three sets of measures, namely, a special short-term programme for financing the import needs of industrialization, a long-term programme for financing the establishment of new industrial projects and policies to reduce the barriers to exports of manufactured goods by developing countries, the external environment for industrialization in developing countries in the coming years would be greatly improved. Indeed, provided the world economic recovery, which started in industrialized countries in 1983, can be sustained through 1984 and 1985, the external environment for the industrialization of developing countries could be much more favourable. The main remaining constraint will be the high cost of interest payments on external debts that many developing countries have to continue to bear.

Developing countries will be preoccupied in 1984 and 1985 with the need to lay the foundation for a return to faster industrial growth, while coping with an acute shortage of foreign exchange that will be the legacy of the prolonged recession. Most developing countries have already begun to adapt their economic and industrial development strategies to the conditions likely to prevail in the remaining years of the 1980s. One can already discern a new emphasis on:

(a) Measures to increase capacity utilization in existing manufacturing plants as an alternative to building new capacities;

(b) Greater scrutiny of investment in new industrial projects with a view to reducing the foreign exchange content of both capital and operating costs that have been approved;

(c) Measures that will encourage local industry to rely more on domestic raw materials and supplies and less on imports;

(d) Policies that will further reduce the level of imports of food and consumer goods so as to leave more foreign exchange available for imports of the capital goods and the raw materials that are required for industrialization;

(e) Policies that stimulate production of a broader range of agricultural and industrial products for export to the North.

The changed external evnironment has also encouraged many developing countries to promote greater reliance on supplies of manufactured goods from other developing countries through counter-trade agreements and other trade arrangements. These arrangements involve trade in oil, raw materials and food, as well as in manufactured goods. They build on the substantial volume of trade that has already developed within regions of

the South, but to an increasing extent they also involve trade between countries in different regions - Africa and Latin America, Asia and the Middle East, Asia and Africa etc. In the near future, one can expect these efforts to be intensified and be supported by new arrangements for settling international payments, including acceptance of payment in local currency to a certain extent in order to overcome the continuing shortage of hard currencies.

As developing countries develop closer trading ties and find that foreign exchange is not available to import sufficient quantities of basic and capital goods from the North, greater efforts will be made to locate alternative sources of supply in the South. These efforts need to be marshalled and co-ordinated by a special programme on South-South industrial co-operation aimed at identifying industries in developing countries with excess capacity available for export and matching them with the import needs of other developing countries.

Although the range of products in the basic and capital-goods industries produced in the South has broadened considerably in the last 20 years, there is still a very wide range of products that are not produced in the South. A second component of a special programme on South-South industrial co-operation should be aimed at identifying these gaps in the industrial structure of the South. This programme should assess the present and future market requirements of all the regions in the South and see how they might be met by joint planning of new industries at the subregional, regional and interregional levels.

Such initiatives, which developing countries can take themselves, would be a natural response to the changed external environment. Basically, they would aim at making the South more collectively self-reliant and hence less vulnerable to the external shocks which have been experienced in recent years. The South needs to develop a much stronger and more broadly diversified industrial base, if it is to make a significant contribution to future growth of the world economy. Viewed in this broad context the steps that developing countries might take to adjust their economies so that their economic development is less vulnerable to the external economic environment would deserve the support of all concerned, including UNIDO.

In recent years, UNIDO has adapted its ongoing programme of activities to support implementation of the Caracas Programme of Action adopted by the High-level Conference on Economic Co-operation among Developing Countries, held at Caracas from 13 to 19 May 1981 (A/36/333, annex). UNIDO also has convened ministerial solidarity meetings to identify and promote opportunities for co-operation in the industrial development of individual countries, most of them least developed countries. In addition, it has assisted in the identification and promotion of joint industrial projects by groups of developing countries in Africa, Asia and Latin America. An exchange of information on technology among developing countries has been promoted, as has the establishment of new technological institutions to serve the specific needs of developing countries, and increased use has been made of opportunities for industrial training in developing countries.

A number of specific ways in which the international community can create a more favourable external climate for the industrialization of developing countries have been outlined in the present article, including

a short-term programme for financing the import needs of industrialization in developing countries, a long-term programme for financing the establishment of new industrial projects, and policies that would reduce the barriers to exports of manufactured goods by developing countries. These three programmes acknowledge the continuing interdependence of North and South in the areas of international finance and international trade. Like the challenge posed by the international debt crisis, they will test the creative ability of the international community to devise solutions that will lift the world economy out of its present malaise.

The external environment, however, is not confined to North-South relations; it also involves the emerging relations among the developing countries themselves. The developing countries already import about 15 per cent of their total import requirements of manufactured goods from within the South. Two ways have been suggested here to increase the proportion in the future, namely, a programme to identify the import needs of developing countries and assess the extent to which these needs could be supplied by using excess capacities available in industries in other developing countries and a second, longer-term, programme to identify gaps in the industrial structure of the South and suggest how they might be filled by joint planning of new industries at the subregional, regional and interregional levels. These two programmes acknowledge the growing industrial interdependence of the developing countries and the need to make greater use of the potential for increasing industrial output that this interdependence offers

THE INTERNATIONAL ECONOMIC ENVIRONMENT AND INDUSTRIALIZATION POSSIBILITIES IN DEVELOPING COUNTRIES

Assar Lindbeck*

Introduction

For a number of years the state of the world's economy has been disappointing, largely owing to the long and deep-seated recessions that plagued the members of the Organisation for Economic Co-operation and Development (OECD) in the mid-1970s and early 1980s, and their strongly negative, if somewhat delayed, effects on developing countries from about 1979/80 onwards. Although there are, of course, important lessons to be drawn from what has happened, any discussion of the long-term economic prospects for developing countries should not be unduly coloured by shortterm events. Long-term growth and development problems supersede both "ordinary" business cylces and deep "stagflation-type" recessions such as those experienced in the periods 1974-1976 and 1980-1983. This is why the present report will focus on the long-term post-world-recession problems of the developing countries, in the context of the world economy. The only issues that will be considered are those that have left their mark on the growth prospects for the world economy. The short-term implications of long-term policy strategies will, of course, also have to be taken into account, as long-term policies are in practice the sum of a great number of short-term policy decisions.

In recent decades, United Nations conferences on long-term development problems of the developing countries have been concerned largely with the international economic environment of the South. These external issues are certainly of the utmost importance and will continue to be so in the future. Indeed, a successful build-up of productive capacity in the developing countries depends heavily on a favourable international environment. Moreover, the interdependence of developed and developing countries, through trade in manufactures, commodity markets, finance, investment and technology, have not only become more pronounced in recent years but are also better understood. Nevertheless, when international cyclical economic conditions improve again in the developed countries, the relative importance of domestic conditions for the economic performance of the developing countries will increase. Thus, even though the recent drastic deterioration in the economic situation in developing countries was largely initiated by events in the outside world, it is important to recognize also the role of domestic conditions: institutions, mechanisms, attitudes and policies.

Three aspects of the international, or external, conditions will be emphasized in this report: access to the markets in developed countries, largely an issue of market expansion and protectionism; the possibility of

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generating an adequate and sustained flow of capital and credit to the developing countries; and the possibility of bringing about increased economic interaction and co-operation among developing countries. On the last issue, the developing countries have both an opportunity and a responsibility to show that it is possible to arrange more equitable international relations than those that have so far dominated the economic relations between North and South.

Two questions will be focused on when considering domestic, or internal, conditions, namely: the immaterial infrastructure, or human resources, with emphasis on technological competence, managerial skill and entrepreneurship; and the strength and efficiency of domestic markets and the economic incentives of households and firms. The main reason for this emphasis is that a strong case will be made for policies that stimulate the growth of domestic productivity and allocative flexibility. Indeed, in view of the very poor productivity performance of developing countries so far, improvement of the growth of productivity and of the allocative flexibility of developing countries may be regarded as the main theme of this report as far as internal reforms and policies are concerned.

By considering the internal factors on an equal footing with the external ones, it may be possible to introduce a new approach to the discussion of economic development, with more concern for the macroand micro-economic environment of the actual decision-makers in the production system, namely, individuals in the large firms and small entrepreneurs.

Needless to say, the developing countries devote a great deal of time and attention to the pursuit of domestic reforms, although such reforms are neither a substitute nor a prerequisite for improvements in the international economic environment of those countries. The credibility of the demands by developing countries for the "outside world" to change its institutions and policies would probably be enhanced, nevertheless, if the developing countries themselves showed more concern for the importance of the economic structures within their own countries.

RECENT EXPERIENCES WITH INDUSTRIALIZATION IN DEVELOPING COUNTRIES*

It is admittedly a truism, but nonetheless worth restating here, that the elimination of poverty and underemployment and the building up of acceptable living conditions in the developing countries within a reasonable period of time depend on a rapid rate of economic growth in these countries. Given current population trends, there is a strong motivation to achieve growth targets for gross domestic product (GDP) of 6-7 per cent a year. This would usually mean that production (value added) in manufacturing would have to grow even faster, in fact at a rate of some 10 per cent a year for developing countries as a group. It is in the light of

*For a detailed assessment, see Industry in a Changing World, special issue of the Industrial Development Survey for the Fourth General Conference of UNIDO (United Nations publication, Sales No. E.83.II.B.6). When no reference is made in the present report to other statistical sources, data are obtained from that survey. China is not included in the statistics.

such ambitions that the actual growth performance in developing countries in recent decades, including the disappointing figures that began to show up at the very end of the 1970s, should be seen.

The rate of economic growth of course increased sharply after the Second World War in the developing countries, even more so, in fact, than in the developed countries. In the period 1960-1973, the rate of real growth in GDP seems to have been about 1 percentage point higher in the developing countries than in OECD countries, and in the period 1973-1982 it was about 2 percentage points higher. These differences are, however, largely wiped out in per capita calculations. As a result of the more rapid growth in GDP in developing than in developed countries, the share of the former in world GDP increased from about 14.8 per cent in 1938 to about 15.3 per cent in 1970 and to about 17.3 per cent in 1980.*

The faster rate of growth in output in developing countries is noticeable in the manufacturing sector as well. The growth rate of manufacturing value added in the developing countries exceeded the rate in the rest of the world by 1.7 percentage points in the period 1963-1973 and by 2.4 percentage points in the period 1973-1980. As a consequence, the developing countries increased their share of world manufacturing value added (MVA) from about 6 per cent in 1938 to 8 per cent in 1963 and to about 11 per cent in 1982. These achievements are of course less pronounced on a per capita basis, and the rate of increase in labour productivity has, as will be emphasized below, been very slow. Moreover, practically the entire relative gain in the post war period took place before 1978.

The increased importance of manufactures in the developing countries is also reflected in the export sector. The share of manufactures in the total non-oil exports of the developing countries has increased from about 13 per cent in 1960 to no less than 48 per cent in 1980. The still rather modest level of sophistication of manufacturing in developing countries, however, is reflected in the fact that while about 70 per cent of the developed market economies' exports of manufactures are finished goods, ready for use, the corresponding figure in 1980 for developing countries is just below 40 per cent.

Moreoever, the bulk of the output of manufactures of the developing countries is produced by a very small group of countries. For instance, in 1980 10 developing countries accounted for about 70 per cent of the manufacturing value added of all developing countries. One country, Brazil, accounted for almost a quarter of the MVA of the developing countries. Together with China (Taiwan Province), the area of Hong Kong, Indonesia, Iran, the Republic of Korea, Singapore and Thailand, Brazil experienced a rapid growth in manufacturing output in the period 1963-1980, while three other large countries - Argentina, Chile and Venezuela - showed a significant decline in their respective shares of the total manufacturing output of developing countries.

The developing countries in the lowest income range (per capita gross national product (GNP) of less than $295 in 1978) saw a gradual decline in their share of the total MVA of developing countries from the early 1960s

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*Centrally planned economies are included on the basis of their net material balances.

to the early 1980s. In 1980 they accounted for only about 11 per cent of the total MVA of the developing countries, while their share in the population of the developing countries was 51 per cent. For the least developed countries, the figures are even more startling, as these countries in the last two decades have accounted for only about 1.5 per cent of the MVA of developing countries, although their share in the population of those countries has been about 10 per cent throughout the period. Moreover, while the figure for their share in output has shown a downward trend, their share in population has been increasing.

These figures reflect a rather general observation in development economics, namely that the manufacturing sector expands most rapidly at intermediate levels of per capita income, and that its share of GDP tends to increase in countries that have reached those income levels. One obvious reason is that the demand for non-processed agricultural products at such levels does not rise rapidly with income, in contrast to the demand for manufacturing products, including processed food. Another reason is that a rapid rate of capital accumulation, which helps to bring about the rapid increase in per capita income, at the same time increases the comparative advantage of capital-intensive sectors, for example a number of branches of manufacturing, in contrast to most services and traditional agriculture. The same argument can be made for human capital, in the form of education and on-the-job training. For at the same time as a rapid accumulation of human capital boosts per capita income, the very same process will gradually change comparative advantages in favour of skill-intensive activities and products, like parts of manufacturing, in particular, of course, sophisticated forms of manufacturing output (although at very high levels of per capita income sophisticated services seem to be even more strongly stimulated by the accumulation of human capital).

In order to avoid painting too schematic a picture, it is important to point out that a number of factors are responsible for the marked variations in individual countries. The availability of natural resources is one such factor. For instance, the share of agriculture, which in 1980 ranged from about 5 per cent to about 38 per cent of GDP in developing countries, varies considerably even among countries at comparable levels of per capita income. The size of the domestic market is another important factor that influences the production structure, in particular within manufacturing, as small countries more than large ones have to specialize to be able to exploit comparative advantage and returns to scale. Differences in the economic system and the economic policies pursued, for instance the emphasis on import substitution and export promotion respectively, also have a considerable influence on the production structure, and not just on the relative size of the foreign trade sector.

Granting the existance of such variations, it is nevertheless true that modernization and economic growth are regularly accompanied by an increased share of manufacturing in total output and employment (at the per capita income level of the developing countries), that the increased importance of manufacture is particularly pronounced at intermediate levels of economic development, and that this tendency for manufacturing to grow in relative importance disappears only at very high levels of per capita income.

It is, of course, impossible to make reliable forecasts of future trends of manufacturing production in different parts of the world. Assuming, however, that the tendencies apparent in the period 1960-1980

will continue, the developing countries could hypothetically account for about 16 per cent of total manufacturing output in the world in the year 2000, compared with the target of 25 per cent set in the Lima Declaration and Plan of Action on Industrial Developmet and Co-operation, 1/ while they could be expected to account for more than 70 per cent of the world's population. This shows just how slow the progress is in reallocating manufacturing productive capacity to developing countries.

ECONOMIC TRENDS IN DEVELOPED COUNTRIES

Reasons for the deterioration of economic performance

That there has been a deterioration in the performance of the developed market economies during the last decade is obvious: the GNP growth rate has been cut by about half; the level of short-term macro-economic instability has increased; unemployment rates have doubled or even trebled; and, until recently, inflation has been rising.

The slow-down in the growth rate of GNP was to some extent inevitable, as the extraordinarily rapid growth rate in the 1950s and 1960s was partly due to uniquely favourable circumstances. For instance, the rapid productivity growth rate in the first two decades after the Second World War was enhanced by the post-war economic reconstruction, by the vast delayed outflow of labour from low-productivity agriculture and by the once-and-for-all liberalization of international transactions after the protectionist and autarkical tendencies in the 1930s and 1940s. In the case of developed countries other than the United States of America, productivity growth was also facilitated by the process of catching up with United States technology. These favourable factors were bound to disappear sooner or later. It is also a well-known fact that the ever-increasing share of GNP that in the last decade has been devoted to services, in particular to public services, and to environmental improvements of various kinds, has reduced the overall productivity growth rate of the national economy.

The increased short-term macro-economic instability in the OECD countries, by contrast, was largely the result of a series of specific, partly accidental, macro-economic "shocks" that impinged upon these economies. Obvious examples are the explosion of international liquidity around 1970 (largely due to speculation against the dollar); the supply shocks in connection with the drastic increases in oil prices in 1973 and 1979; the so-called "real wage explosions" in several European countries around 1970 and 1975 (in particular in relation to the falling productivity trend after 1973); and the often rather erratic policy responses by Governments to these events. These events were reflected not only in drastically increased unemployment and high and fluctuating inflation but also in violent fluctuations in exchange rates, interest rates and prices of raw materials.

The long-term growth potential of the OECD economies was seriously damaged by this short-term macro-economic instability, which further accentuated the unavoidable slow-down in the growth of productivity and output. For instance, the length and depth of the last two recessions meant that the reallocation of resources was slowed down because of the reduced demand for factors of production, even in sectors with good

long-term growth prospects. Moreover, capital formation was seriously hurt by the low level of capacity utilization, the cyclical fall in profits and the high real interest rates, as well as by the increased uncertainties about relative prices, macro-economic developments and government policy.

It may be argued, however, that the recent deterioration in both the short-term and the long-term performance of the developed market economies to some extent also reflects changes in the basic functioning of these economies.

First of all, the rising inflationary trend from the mid-1960s can be viewed, at least partly, as an adjustment of wage and price behaviour to the expectation of unions and firms that the Government will guarantee full employment regardless of what happens to wages and prices. Thus, the gradual increase in the inflation trend would probably sooner or later have resulted in a more restrictive economic policy, with higher interest rates and greater unemployment, even without the specific inflationary "shocks" that impinged upon these economies in the 1970s. In other words, the stagflation in the 1970s and early 1980s should be regarded as a result not only of a number of specific, "accidental" shocks, including the supply shocks, but also of changes in the behaviour patterns of firms and unions, and the restrictive economic policies that were subsequently induced by these changes, in particular the very high interest rates.

Secondly, the increased instability of exchange rates and interest rates is not only a consequence of accidental disturbances. The increase in the instability of exchange rates is also due to deviations in macro-economic trends in individual countries with a strong economic interdependence, in particular as reflected in highly integrated financial markets, while the wider fluctuations in interest rates reflect both a stronger determination on the part of Governments to fight inflation through monetary policies and increased emphasis, in the pursuit of such policies, on control of the money stock rather than interest rates.

Thirdly, there seems to have been not only a cyclical drop in profits, but also a trend-wise long-term fall in the profitability of firms in the developed countries, most pronounced in manufacturing. In some countries this is partly a result of overvalued currencies, or alternatively formulated, excessive real wages - in situations where profits were also squeezed by the increases in the relative prices of various intermediary inputs, such as oil and, temporarily in the early 1970s, raw materials.

The falling rate of return on physical assets in the developed countries may also, however, be regarded as an expression of increased international competition and shifts in the comparative advantages in some manufacturing sectors in favour of developing countries. To the extent that this is the case, the falling rate of return on investment in some manufacturing sectors in the developed countries is a normal consequence of more competitive markets, and a signal that it is reasonable to shift the allocation of investment in such sectors to developing countries.

The ability of developed countries to make such reallocations seems, however, to have been reduced because of a long-term deterioration in the flexibility of the basic allocative mechanisms of the developed countries.

There is evidence of increased demands by employees and firms for help from Governments to resist both reductions in relative income and contractions of productive capacity in sectors with deteriorating comparative advantages.

These various developments have, of course, both accentuated traditional protectionism and stimulated the use of selective subsidies to ailing sectors and firms in many developed countries. In other words, at a time when the need is greater than ever before for a reallocation of productive capacity in the world economy, with a redeployment of certain types of manufacture production to the developing countries, not only macro-economic developments but also some changes in the basic functioning of the economic systems of the developed countries of the West have reduced the ability and willingness of these countries to pursue such reallocations.

Likely developments

One important question is whether the deterioration in the performance of the developed Western economies in the last decade will continue indefinitely or whether it is likely to improve in the medium or long term. The cyclical situation of the early 1980s is not under discussion. After all, business upswings have occurred regularly after every recession in the last one or two hundred years, and even, indeed, after the major depressions in 1921-1922 and 1931-1936 and there is no compelling reason why such an upswing should not occur after the recession of the early 1980s, although the speed with which the recovery will take place is uncertain.

It would be foolish to attempt to forecast with any degree of precision the probable general performance of the developed Western economies over one or two decades. Nevertheless, the expression of some opinion is unavoidable. As a starting point, it may be argued that it is not very likely that the developed Western economies will be exposed in the coming decade to shocks of the severity experienced in the last one. In particular, it is not very likely that oil-price shocks of the magnitude experienced in 1973 and 1979 will occur again. The obvious reason is that the gross underpricing of oil before 1973 has now been rectified (perhaps excessively so for a while), and that the opening of new oil fields, substitutions on the production and consumption side and higher energy efficiency have reduced the importance of oil produced by members of the Organization of Oil Exporting Countries (OPEC) for the energy requirements of the world economy. This is an important point, as it was the abruptness of the oil price increases of the 1970s that had such profound effects on the world's economy. Indeed, as events turned out, several oil-exporting countries also encountered severe economic problems in the wake of the oil price increases, owing to an overexpansion of domestic demand, a distorted income relation and investments that were poorly allocated and managed in connection with the rush to spend the higher oil revenues. Indeed, among the group of middle-income countries, the oil exporters have experienced a slower rate of GNP growth than the oil importers. This experience points to the risks of having a large, high-profit sector that squeezes profits in other sectors - the so called "Dutch disease" (reflecting the consequences for other sectors of the natural gas boom in the Netherlands). These consequences were, of course, exacerbated by the subsequent world recessions, accentuated as the latter were by the oil price increases.

The repercussions of the oil price shocks are likely to subside over the coming years, and this will help the world economy to revert to a smoother pattern. There is also at least a possibility that labour unions, employers' associations and Governments in developed countries have learned the danger of real wage explosions and wide fluctuations in exchange rates and interest rates.

Moreover, as inflation has now been brought down dramatically in the major OECD countries, and as this has occurred at the cost of a large capacity slack and high unemployment, it is reasonable to assume that more expansionary economic policies will be pursued in the near future than during the last decade, and that therefore capacity utilization (for capital as well as labour) will, on the average, be somewhat higher in the coming decade than in the last decade. This assessment presupposes, in today's strongly international economic interdependence, that Governments in several major developed countries will simultaneously pursue a macro-economic policy that allows a cyclical recovery.

The improvement in capacity utilization will most likely take place at a rather moderate speed for the group of developed countries as a whole, because of the ambitions of Governments in the major countries to avoid a new round of high inflation. Owing to the large labour slack within firms, and the previous retardation of the outflow of labour from the household sector, it is likely that unemployment will fall rather slowly in the next 5 or 10 years - from the 30 million level prevailing in 1984. Thus unemployment will probably continue to be a severe problem in the developed market economies in the coming decade. This is an important legacy of the two recent deep recessions.

The trend towards prolonged unemployment is accentuated by the fact that the low level of capital accumulation in the last decade and the increased obsolescence of part of the existing capital stock have made it impossible to employ the entire labour force at existing real and relative wage rates. There is therefore a risk that traditional Keynesian-type unemployment in the coming decade may be amplified by structural unemployment; this is because the factors of production are not mobile enough between various production sectors, with induced "mismatches" between the composition of demand and supply, and because real and relative wage rates are not flexible enough. Such limited mobility and flexibility could also induce technological unemployment, as future technological development will most likely require drastic changes in the allocation of labour and relative wage rates.

For these reasons, it is important to get investment activity going again in the developed countries. To a considerable extent, renewed investment will result automatically from an increased capacity utilization, although the likelihood of a new investment boom will also depend on the possibilities for lowering capital costs by reducing real interest rates. It is possible, but not self-evident, that this boom will follow automatically on receding inflationary expectations and lessened macro-economic uncertainty.* What may, however, retard, stop or even reverse

*The high real interest rates in recent years reflect the frequently observed phenomenon that a movement from high to low inflation is connected with rising real interest rates, as lenders and borrowers do not revise their expectations regarding inflation downwards until a certain period of time has elapsed, possibly as much as a year or two.

such a reduction of real interest rates is not only increased credit demand by the private sector and some resurgence of inflation but also a possible inability of Governments to reduce the large budget deficits during the next business upswing, which would depress the aggregate saving ratio and crowd out private credit demand.

Thus, even though investment activity will most likely be stimulated by increased capacity utilization in developed countries, compared with the depressed levels prevailing at the end of the 1970s and the early 1980s, it is far from certain that capital formation can be brought up to the levels of the 1950s and 1960s. Since the rapid growth rate of total productivity during those periods, as explained earlier, partly reflected a uniquely favourable situation, it is reasonable to expect that the capacity growth rate of OECD countries in the future, while it will be more rapid than during the 1970s and early 1980s, will be slower than it was in the 1950s and 1960s. A capacity growth rate of 3 per cent a year is probably more realisitic than the 4-5 per cent that characterized rates in the 1950s and 1960s in the developed countries, even though GNP may temporarily increase somewhat faster during the cyclical recovery from the 1980-1983 recession, at least in some countries.

A more speculative issue is whether the previous trend in the developed countries towards less allocative flexibility will be reversed or not. On the one hand, it may be argued that some of the factors that have contributed to the recent reduction in the allocative flexibility of several OECD economies are likely to stay, for example an unwillingness to accept a deterioration in relative incomes, and demands for specific job security, as reflected in the ambitions of the labour force to stay in "accustomed" branches, geographical regions and firms. Moreoever, distortions of exchange rates, partly an effect of national economic policies, have created artificial trading disadvantages for some countries (such as the United States of America), thus generating additional protectionist pressures.

On the other hand, increased capacity utilization and possibly also higher profits would be expected to improve the reallocation process by creating more expanding sectors, and perhaps also by reducing protectionist pressure somewhat. Moreover, the remaining pool of unemployed labour, and the willingness of many people in the household sector to move into the open labour market, may very well increase the elasticity of the supply of labour in relation to the 1960s and early 1970s. It is, of course, also possible that both politicians and the general public have increasingly started to realize the long-run economic costs of a rigid economic system that cannot easily adapt to new circumstances. For instance, in several industrial countries young people have recently become less "choosy" about jobs, in the sense that they are more willing to take jobs in the manufacturing industry and in services like retailing and cleaning, which a few years ago were regarded as unacceptable. This may help to reduce the "mismatches" between labour demand and labour supply.

Assuming, hopefully, that the latter types of factors dominate the former, it can be predicted that the allocative flexibility of developed countries will improve again in the future. As long as unemployment is still high by historical standards, however, protectionism is not likely to subside drastically, and this should moderate any optimism about the possibilities for the developed countries to shift rapidly from sectors that are losing their comparative advantages.

Recent and likely future trends in centrally planned economies

One of the most pronounced long-term developments in the world economy during the period after the Second World War has been the industrialization of the centrally planned economies. Thus, while throughout the period 1963-1982 the share of the developing countries in world manufacturing value added increased from about 8 to about 11 per cent, the corresponding share of the socialist countries rose from about 15 to about 25 per cent. This rise reflects not only a rather rapid growth of total output in those countries but also a heavy concentration on manufacturing.

As in the developed market economies, a pronounced slow-down may be seen in the rate of growth in the centrally planned economies in the last decade for the economy as a whole as well as for manufacturing. This is partly a natural consequence of higher income levels. It would also seem, however, that the economic systems of the centrally planned econ- omies are not conducive to productivity growth in the more differentiated types of economies that are emerging in these countries.

The general direction of structural change within manufacturing among the more developed of the centrally planned economies is broadly similar to the structural trends in the developed market economies, with a gradually greater role for the engineering and chemical industries, matched by a relative decline in the textiles, clothing and food industries. The service sector, however, is developing much more slowly. A tendency to rely more heavily on decentralized decision-making and markets may be detected in some of the centrally planned economies, and this might increase their innovative and productivity-enhancing capacity. If such trends continue, the future relation of the centrally planned economies to the rest of the world will certainly be influenced.

INTERRELATIONS BETWEEN DEVELOPING COUNTRIES AND DEVELOPED MARKET ECONOMIES

Impulses from developed market economies to developing countries

As noted above, recent trends in the developed market economies are known to have seriously damaged the international economic environment of the developing countries. Some of the most important effects have been:

(a) A serious blow to the export demand of the products of developing countries, resulting from low capacity utilization, slow GNP growth, inflexibility, and protectionism in the developed countries that has often discriminated against developing countries;

(b) High real interest rates, as a result of restrictive monetary policy combined with inflationary expectations, large budget deficits and great uncertainty;

(c) An at least temporary collapse in the relative prices of a great number of primary commodities;

(d) Strongly negative effects on the balance of payments of some developing countries, and related difficulties in financing imports and servicing the foreign debt;

(e) A reduced willingness on the part of the developed countries to give foreign aid and technical assistance to developing countries, reflected also in a fall in the quality of the aid, which has become "tied" to a greater degree than it used to be.

The serious consequences of all this for developing countries are well documented. For instance, as pointed out recently by the Secretary-General of the United Nations Conference on Trade and Development (UNCTAD), the political forces in developed countries in the field of trade policy have "shifted away from the question of how developing countries should be helped to compete with other suppliers in the markets of the industrialized countries to that of how the domestic suppliers in those countries can be protected against developing country exports" (TD/271, p. 32).

It is true that the internationalization of credit and capital markets in the 1960s and 1970s helped many developing countries, in particular the so-called newly industrializing countries, to keep up their domestic economic activity by incurring drastically increased foreign debts, and that those countries' heavy borrowing counteracted the economic downturn in the entire world economy. Indeed, development was strongly stimulated by changes on the supply side of international financial markets, including the supply of "oil-money", and the eagerness of Western banks to expand their lending on the basis of their increased financial funds. As is now realized, however, this heavy borrowing has backfired. One reason is that the use of the borrowed funds was not always conducive to long-term economic growth. But perhaps an even more important reason was the subsequent rise of interest rates to unexpected and unprecedented levels, at the same time as the possibilities of servicing the debt were being eroded by the drastic deterioration in export markets and the related collapse in the terms of trade of primary commodities. Moreover, even though it was quite rational to borrow in the short term to avoid being locked into very high interest rates for long periods, the short maturity of debt has strongly accentuated the liquidity problems for many developing countries. This problem of liquidity not only influences government policies, which may be forced into a more restrictive stance than would otherwise be thought desirable, but it also affects individual firms, in particular in the case of investment decisions, as funds cannot be obtained even for projects with good economic potential.

Rather than mulling over the problems and failures of the immediate past, however, it is more profitable to investigate the implications for developing countries of probable future trends in the OECD economies. Assuming that the above assessment of future trends is realistic, it can be shown that even with this rather optimistic scenario the international economic environment poses serious problems for the developing countries.

It is true that the export markets for the developing countries would recover given a higher rate of capacity utilization and a return to a higher level of capacity growth than in the 1970s. If the developed countries were to improve the allocative flexibility of their economies, some reduction in protectionist pressure in these countries could perhaps also be hoped for. The long-term trend for the terms of trade for primary commodities would also become somewhat brighter, which would increase the incomes of several developing countries, though it would hurt some developing countries that are heavy net importers of primary commodities.

Both an improvement of the export markets and a partial recovery in the terms of trade for primary commodities would certainly make it possible to increase investment activity in the manufacturing sector of developing countries in relation to the catastrophic levels of recent years. The investment activities of transnational corporations would be expected to improve as well, though the quantitative importance of this factor depends strongly on government policies towards these firms in developed as well as in developing countries.

Improvements in export markets would also improve the debt service situation. A gradual fall in real interest rates, which may or may not occur, would accentuate this effect.

The prospects of continued very high levels of unemployment in the developed countries and the related pressure on Governments to adopt protectionist policies bring into question the extent to which developing country exports can really gain from a future cyclical upswing in the developed countries. Moreover, it is obvious that not even fairly favourable developments in the OECD economies can eliminate the need both for a consolidation of existing debts and for a major improvement in the future availability of long-term and short-term credit on reasonable terms. The maturity pattern of recently acquired debts of developing countries is simply not adequate for development purposes.

It is also likely that some difficult problems will emerge for developing and semi-developed countries in connection with the emigration (temporary as well as permanent) of unskilled labour to developed countries. Not only may the prolonged unemployment problems in the OECD countries perpetuate the existing resistance to immigration of unskilled workers to these countries but the increased willingness of young people in developed countries to take low-prestige jobs will reduce the need for immigration of unskilled labour from developing and semi-developed countries, with obvious consequences for the labour market situation in several of these countries.

Impulses from developing countries to developed market economies

That the economic performance of the OECD countries is important for the economies of the developing countries is well understood today. Indeed, this understanding is the basis for the perennial suggestions of fundamental reforms in the economic relations between North and South. It is important, however, to realize that economic trends in developing countries today have a profound influence on the OECD economies as well as markets for exports, as sources of imports of important products, as outlets for real and financial investment, and often also as sources of manpower and human capital. There has thus been a dramatically increased interest on the part of OECD countries in contributing to a successful economic performance by the developing countries. Mutual interest has been strengthened by the greatly increased economic interdependence between North and South.

For instance, the proportion of the combined exports of manufactured goods of the United States, Japan and the European Economic Community (EEC) (excluding EEC intra-trade) that goes to developing countries has increased from about 31 per cent in 1970 to about 40 per cent in 1980. By way of comparison, the combined share of imports by the same group of countries from the developing countries rose from 10 to 19 per cent of the

total imports of manufactured goods of the former. Indeed, the OECD area as a whole has a considerable trade surplus with the developing countries (though the United States has a deficit) - a fact that has not been appreciated enough in general discussions in OECD countries, when complaints are made that trade with developing countries destroys jobs in the developed countries. In fact, for the same group of developed countries, manufactured exports to developing countries were in 1980 four times higher than manufactured imports from developing countries.*

Indeed, studies indicate that more jobs have been created by the growth of exports to developing countries than have been lost by growth of imports from these countries. Of course, while the jobs that are lost are often in labour-intensive, low-technology activities and in "smoke- stack" industries, those that are gained are often in sectors that are using human capital skill intensively. Thus the shift in the composition of the demand for labour is exactly what is needed to improve living standards and to bring about better working conditions in developed countries in the long run, though the short-term income losses and social tensions that often accompany these developments tend to create strong political pressures to slow down, or even to stop or reverse, the real-locative process.

It is also worth noticing that developing countries account for sizeable shares of OECD imports of many specific products of crucial importance for the production process in developed countries - imports that could not easily, or without heavy expenditure, be replaced by domestic production. In addition to oil, obvious examples are natural gas, coal, iron ore, bauxite, copper, rubber and a number of minor metals.**

Though direct foreign investment in manufacturing in developing countries by firms based in developed countries represent a rather small share of total investment in manufacturing in the OECD countries, they are of considerable importance for specific firms in those countries. While such investment increased in real terms from 1960 to 1970, they have subsequently declined. 2/

Trends in financial investment have, of course, until recently gone the other way. For instance, according to available data (which are probably incomplete) the total gross financial claims of the OECD countries on developing countries have increased from $US 220 billion in 1976

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*More specifically, no less than 39 per cent of exports of manufactures from the United States (36 per cent of total exports) goes to developing countries today. The corresponding figure for Japan is 45 per cent (45 per cent also in the case of total exports) and for EEC (the latter area being regarded as a consolidated unit) the figure is 38 per cent (37 per cent of total exports). This should be compared with the imports of manufactures to these various areas from the developing countries, amounting to 21 per cent, 27 per cent and 15 per cent respectively.

**Quantitative information from World Bank, Commodity Trade and Price Trends; and "World trade by commodity classes and regions", Monthly Bulletin of Statistics, May 1983.

to $US 625 billion in 1982. As a consequence, by the end of 1981 the share of developing countries in the liabilities of banks in the reporting area of the Bank for International Settlements (BIS) was no less than 31 per cent, and the corresponding figure for claims was 35 per cent. For several individual banks, the claims on developing countries are often several times the countries' equity capital. All this vividly illustrates the importance for the Western financial system of a sound economic and financial performance in the developing countries, an issue that is now becoming much more fully understood.

These various developments, resulting in a strong interdependence between developed and developing countries, have involved the two groups of countries in a chain of circumstances in which there is an international transmission of changes in long-term economic growth trends and of macro-economic fluctuations.

A weak economic performance in developing countries can thus be expected to have important consequences for the OECD countries.

First of all, if the developing countries stagnate, or if they are forced to cut back their imports drastically, the export industries in developed countries will be severely hurt. For instance, a 10 per cent drop in imports of manufactures by developing countries, uniformally distributed, would reduce total manufactured exports by 3.9 per cent for the United States, by 4.5 per cent for Japan and by 3.8 per cent for EEC.

A setback in the economic performance of the developing countries would also reduce the opportunities for real investments by Western corporations in these countries, which would hurt both groups of countries, as such investments often increase overall efficiency in the allocation of economic resources in the world economy. This would further reduce the ability of developing countries to supply important products to developed countries, with a risk of disturbing the production process in developed countries as well.

A more imminent danger is that a number of developing countries might be unable to service their debts; this could obviously lead financial institutions in Western countries into the bankruptcy and the ensuing financial crisis could lead to serious world-wide macro-economic repercussions. Moreoever, if the debt problem cannot be handled in a satisfactory way, developing countries will be forced to restrict drastically their imports from the developed countries. This is another example of how the two recent world-wide recersions and the policies then pursued have left an important legacy that will impinge strongly on the mediumand long-term growth prospects of the world economy.

INTERRELATIONS BETWEEN DEVELOPING COUNTRIES AND DEVELOPED SOCIALIST COUNTRIES

The interdependence between the centrally planned economies and the developing countries has so far been quite limited, except for a few specific developing countries. This holds good for trade, investment, finance and technology.

It is also interesting to note that manufactures occupy a very small place in the exports from developing countries to centrally planned

economies, while they play a relatively more important role in the trade flows in the opposite direction (as is also the case for trade between developing countries and developed market economies). Indeed, manufacturing exports to centrally planned economies from developing countries, as a share of total exports of manufactures from these countries, declined from about 10 per cent in 1970 to about 5 per cent in 1980. On the other hand, the developing countries accounted for roughly 19 per cent of the total exports of manufactures by the centrally planned economies throughout the period 1970-1980. Another way to highlight the same issue is to note that while manufactures accounted for about 61 per cent of total imports from member states of the Council for Mutual Economic Assistance (CMEA) in 1979, they represented only about 8 per cent of the imports from developing countries. While the exports of developing countries to the centrally planned economies are dominated by agriculture products, fuel and crude materials, trade flows in the opposite direction are dominated by producers' capital goods.

There are several reasons for expecting an increase in trade between developing and centrally planned economies in the future. One reason is that several of these countries will most likely shift to a greater emphasis on consumption, which could be expected to result in domestic demand for a more differentiated consumption basket. Developing countries will thus have a chance to increase their exports to centrally planned economies not only of tropical and semi-tropical agricultural products but also of various types of agro-based manufactured goods and other manufactured consumer goods. It is more difficult to forecast what types of goods will account for the increased exports of the centrally planned economies to developing countries. Products using moderately capital-intensive production techniques and middle-level know-how are, however, likely candidates.

Along with a build-up of productive capacity in manufactures in developing countries, these countries can also be expected to acquire a production structure that is becoming more and more like that of some centrally planned economies. Although this will lead to growing competition between the manufacturing sector of some developing countries and that of some centrally planned economies competitors in various markets, the very same development could also open up possibilities for increased intrasectoral trade between the two groups of countries, which would be stimulated by higher incomes and hence a more differentiated demand structure in both groups of countries.

Whether there will also be increased flows of finance, direct investment and technology between centrally planned economies and developing countries is largely a question of the future policies of the Governments of these few countries - an issue about which it is difficult to make useful forecasts.

OPTIONS FOR NORTH-SOUTH RELATIONS

A discussion of the basic options for developing countries may conveniently be divided into three broad issues: North-South relations; possibilities of greater South-South integration and co-operation; and internal reforms within the developing countries.

The issue of North-South relations concerns the possibilities of creating and perpetuating a favourable external economic environment for economic growth in the developing countries. As this is a multifaceted problem, it is possible to take up only a few of its most important aspects here.

First of all, a successful long-term international reallocation of manufacturing productive capacity in favour of developing countries requires that the developed market countries keep their markets open, in other words, that they avoid protectionism and also that they keep a tight rein on their attempts to bail out ailing firms and sectors. This is perhaps the most important contribution that the developed market economies can make to the industrialization process in the developing countries in the long term. To achieve it requires not only reasonably high levels of capacity utilization and a reasonably rapid rate of economic growth; it also presupposes considerable allocative flexibility, which may be facilitated by positive adjustment policies by the Governments of developed countries.

One reason why protectionist actions in the developed market economies tend to discriminate against developing countries is that trade between these groups of countries often implies "inter-industry" rather than "intra-industry" trade. An expansion of the former usually requires a much more troublesome reallocation of resources than expansion of the latter. For while an expansion of inter-industry trade means that labour and capital have to leave their plant, and often also the geographical regions in which the factors are engaged, a reallocation of resources in connection with increased intrasectoral trade can often be accomplished by reallocations within firms. Moreover, the production sectors in developed countries that are feeling the pinch of competition from developing countries are often dominated by large and old-established firms, in which strong interest groups have had time to emerge among both firms and employees. This fact boosts the protectionist pressures.

In their requests to developed countries to eliminate protectionism against them, the developing countries have a very strong case, as open markets in the developed countries in the long term are favourable not only to developing countries but also to the world as a whole, in that they reallocate resources in the world economy in conformity with comparative advantages. Few observers would deny that such a reallocation must include a fast build-up of industrial capacity in the developing countries and that the developed market economies, for such a process to take place, have to shift resources away from several traditional manufacturing sectors to sectors of production that fit the developed countries better in the long run, both in manufacturing and services. Often the type of production involved will require highly specialized skills and a proximity to research and development facilities. In many cases, this will imply the production of new types of goods and services. A pronounced protectionist stance by the developed countries will not only block the industrialization process of the developing countries but will also interfere with the achievement of improved living standards in the developed countries themselves.

It is thus of the utmost importance that the developing countries should continue to put forward concrete proposals and demands for increasing access to markets in the developed countries. These demands have to include the progressive elimination, according to a fixed timetable, of protectionist measures against the exports of the developing

countries, not least in manufacturing, including quotas and the so-called "voluntary" restraints, also encompassing those that have accompanied the generalized system of preferences. Increased active participation by the developing countries in the General Agreement on Tariffs and Trade (GATT) may also be a useful means of pressing this point with representatives of developed countries.

If some developed countries nevertheless resort, temporarily or permanently, to protectionism in certain sectors, it will then be extremely important for them to announce their intention in advance, so that developing countries can avoid a badly damaging misallocation of their scarce resources for investment. This is particularly important for newcomers among the exporters from developing countries, as they are often especially hard hit by protectionist actions.

Secondly, the above discussion shows how important it is to ensure that capacity utilization, capacity growth and macro-economic policies in the developed countries are conducive to the economic performance of the developing countries. Without a reasonably high and stable level of capacity utilization, and a reasonably rapid growth rate, it is impossible to achieve favourable market conditions for the exports of the developing countries, including a fair amount of stability in the prices of primary commodities. To achieve this, an active stabilization policy in the developed countries is certainly necessary. One complication that arises with an active stabilization policy, however, is that it will often create violent swings in interest rates and exchange rates, and these fluctuations, too, can have a disruptive influence on developing countries. A delicate trade-off is therefore necessary between stability of the target variables of economic policy, such as the unemployment rate and inflation, on the one hand, and stability of the instruments of stabilization policy on the other hand. The conditions for this trade-off can be improved by choosing adequate policy tools. Though this is mainly a domestic problem of the developed countries, recent experience shows that it is important for the repercussions on other countries to be taken into account when policy strategies are chosen in individual countries, in particular in the major developed countries.

Thirdly, it is also well understood today that drastic reforms are necessary in North-South relations in the financial markets, both to reduce the acute debt problem and to guarantee sufficient future capital flows. In the short term, it is necessary to transform short-term debt into long-term debt to avoid a permanent preoccupation with the rolling-over of debt and related uncertainties in the financial markets. Moreover, for some countries the problem is not only one of liquidity, related to an unfavourable maturity pattern of debt and temporarily high interest rates. Some countries may simply have borrowed too much on commercial terms, considering the returns that they have been able to obtain on the borrowed funds.

This is not the place for a detailed discussion of how to achieve a consolidation of the debt situation and to guarantee a satisfactory flow of financial resources in the future. It is, however, important to point out that many practical and useful reforms are possible in this field. For instance, the banks in the OECD countries may themselves transform part of the short-term debt into long-term debt instruments, in co-operation with other types of credit institutes, which in some cases will require government approval and support. It may also be necessary to make some institutional reforms to prevent losses for the depositors in

Western banks - without necessarily bailing out the shareholders, who should have kept a more careful watch over lending policies.

Governments may also help to create new "intermediation institutes" between banks and debtors in developing countries. These intermediation institutes may then take over part of the claims on the debtor countries and instead offer the banks claims on themselves. To clarify to banks that they, as well as the debtor countries, have to be more careful in supplying credit that is used for consumption or bad investment, rather than for an efficient capacity built-up, it is probably reasonable to expect that some banks will have to make losses in the process. Under present conditions, postponements for a number of years of debt-service payments may also be necessary in some cases.

Moreover, considering the magnitude and the international character of the problem, participation by intergovernmental institutions like the International Monetary Fund (IMF) and the World Bank has to play an important part both in the consolidation of the debt situation and in the provision of future capital flows on realistic terms. A main reason is that private banks have become more careful, and hence more restrictive, in the wake of the severe debt problems experienced in connection with loans made both to developing countries and to some centrally planned economies. Thus, the international banking community cannot be expected by itself to play the same important part in financing balance-of-payment deficits of the developing countries as it did during the 1970s. This would to some extent force The IMF and the World Bank to play new roles and to modify their criteria for financial engagements.

In contrast, unilaterally declared moratoria of debt payments by a number of developing countries would certainly not be in the long-term interest of the world economy, as such actions would threaten to destroy the international financial markets for a long time to come.

Obviously, both a solution to the acute debt problem and a continuation of a steady capital flow to developing countries require that developing countries have good access not only to international financial markets but also to export markets in developed countries. Thus, to avoid serious financial problems and severe setbacks of the economies of both developed and developing countries, there has to be a certain minimum of consistency between debt service, capital movements and trade flows. This simple point cannot be stressed too much.

A fourth important issue in North-South relations concerns the mechanism of international technological flows. It is quite clear that such flows are potentially crucial for a successful industrialization of the developing countries. In the case of conventional technologies, there are several alternative and complementary mechanisms that have been found useful: the purchase of machines and intermediary inputs, the granting of patents and production under licence, as well as the establishment of subsidiaries of transnational firms, joint ventures, studies abroad etc. For most industries employing conventional techniques, the prospects for future technological flows are probably as good as ever. This is important for developing countries, as most of their investments probably have to build on such conventional techniques, in industries characterized by "technological maturity". In new technological fields, however, there is an obvious possibility that the technological protectionism of developed countries may be accentuated, and that many new technologies of potential importance for developing countries will therefore not be easy to acquire.

Developing countries have good reasons for insisting that such technological protectionism is reduced to a minimum.

Fifthly, it may also be a good idea for the developing countries to align themselves with consumer interests in the developed countries, as a way of reducing the strong influence of special producer interests - firms as well as labour organizations - on policies in the developed countries. It is important for developing countries to consider how such a union with consumer interests in the developed countries can be brought about.* For instance, associations of manufacturing firms in the consumer goods sector in developing countries may make contact with the consumer co-operative movements in OECD countries, as such movements to some extent operate as a pressure group for consumers in these countries. Organized co-operation with associations of retailers in the OECD countries may also be a useful way of joining pressure groups with interests similar to those of manufacturing firms in the developing countries. Information and advertising campaigns in the developed countries designed to convince consumers in these countries that they can benefit from buying from developing countries are also worth considering.

In all these cases, conflicts can easily arise with specific producers and labour-union interests in developed countries, but this is a price that may sometimes have to be paid.

Sixthly, the centrally planned economies should of course also be urged to open up their markets to products from the developing countries. Indeed, it is hard to see why the socialist countries should have less responsibility than the OECD countries for doing so, particularly since the centrally planned economies, as pointed out earlier, often and increasingly compete with developing countries in "third markets", i.e. in the developed market economies, with rather similar products. Strategic arguments concerning self-reliance and national defence can hardly be an argument for them not to open up their markets to products from developing countries, considering how small a part trade with developing countries plays today; moreover, the developing countries cannot possibly be expected to impose embargoes, at least not in a co-ordinated manner.

Furthermore, recent experiences with unstable markets and a proliferation of protectionism in the developed market economies imply that a diversification of the exports of the developing countries could look more attractive than it used to. One important element of such a diversification could be increased exports to the centrally planned economies, whereby the total market risks of the exports of each developing country could be reduced.

Most likely, much of the future trade expansion between centrally planned economies and developing countries will be based on long-term agreements. More flexible, and perhaps also rather unconventional trade arrangements may also be expected in the future. Some of these may also include firms in the developed market economies. In fact, some such

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*A modest start has been made in the agreed terms of reference for the UNIDO Consultations, in which is is stated that consumer groups should be represented in the Consultations (UNIDO, The System of Consultations (PI/84), para. 23).

arrangements already exist. One example is the tripartite agreements that have been concluded between enterprises in a socialist country, a developing country and a developed market economy. The Western firm then often has the role of subcontractor and may be paid in the currency of the developing country, earned by the socialist country as part of its trade surplus with the developing country. A further extension of the relations between developing countries and socialist countries may be expected beyond trade in goods, in which the latter, for instance, could not only supply equipment but could also train personnel.

Thus, the case for stronger economic relations between developing countries and centrally planned economies is in principle a strong one. For such relations to be of real value for the developing countries, however, the socialist countries have to permit a drastic increase in the access to their markets of exports from developing countries, in particular for manufacturing products.

Lastly, in addition to the policy changes in developed countries discussed above, it has become increasingly clear in recent years that the basic rules that regulate the international trading and payments system need to be systematically reviewed.

The Bretton Woods and GATT systems have in many respects served the world's economy well, as reflected in the enormous expansion of world trade and capital movements during the period after the Second World War. The world economic situation is certainly quite different now, however, from what it was when these systems were set up in the late 1940s. An obvious illustration of this is the increasing tensions between a highly, and increasingly internationalized, economic system and nationally based political systems. Another illustration is the drastic changes that have come about in the relative economic importance in the world's economy of different nations and groups of nations.

So far, the adjustments of the Bretton Woods and GATT systems have been made on an ad hoc basis, rather than by grand design, as when the systems were originally created. Obvious examples are the exchange rate rules (or absence of them), the principles of balance-of-payment adjustments, the conditionality rules of IMF and World Bank lending, the supply of international reserves, the regulation of international credit and capital flows, the co-ordination (or rather the lack of it) of macroeconomic policies of individual nations and the roles of protectionist devices and selective subsidies. In all these fields, the need to take a comprehensive look at the international trading and payments rules is overwhelming.

To summarize, improved North-South economic relations presuppose both changes within individual developed countries and revisions of international rules in trade and finance. The most important changes within individual developed countries are probably: (a) a removal of protectionism; (b) a more successful macro-economic policy, so that the level of capacity utilization and the growth rate can be kept at reasonably high levels; and (c) increased stability of financial markets. These changes, however, also require, in many cases, improvements in the functioning of some basic economic mechanisms in developed countries, including higher allocative flexibility, by way of better functioning domestic markets, for labour and capital, a redirection of economic incentives in favour of productive effort, reforms of the system of wage formation to reduce the inflationary bias in these economies etc. Indeed,

in addition to the demands for reforms of the international rules of trade and finance, the quest for an improvement of the external economic environment of developing countries turns out to be mainly a list of desirable changes in mechanisms and policies within developed countries.

OPTIONS FOR SOUTH-SOUTH RELATIONS

During the first phase of modernization in the 1950s, 1960s and 1970s, it was natural for developing countries to be heavily dependent on the developed countries in trade, finance, direct investment and technology. As time passes, however, not only will the relations between developed and developing countries change character - by being characterized more and more by mutual interdependence than by one-sided dependence but the possibilities of a mutually beneficial interaction between different developing countries may also be expected to increase, as these countries gradually build up both their productive capacity and their ability to participate as active partners in international exchange. By way of comparison, when the present developed market economies were developing nations about a century ago, they were engaged in a strong mutual economic exchange in trade, finance and technology. They did not need, for their development, large and rich markets outside the group of what were then "developing countries". Thus, even if future international economic transactions between developed and developing countries are potentially highly beneficial for both parties, it is clear that a strong case can be made for greatly increased economic transactions among developing countries as well.

There are many reasons for this. In particular, unexploited possibilities for trade among these countries, based on comparative advantage and economies of scale, certainly exist and may be expected to increase over the years as productive capacity is built up. Indeed, in the 1970s, before the deep international recession of the early 1980s, trade among developing countries grew faster than their trade with the rest of the world. By way of comparison, looking at economic relations between developed countries, both a similarity of income levels and geographical proximity seem to have strongly enhanced international economic transactions, in particular trade in manufacturing. This seems to be the case in particular for trade within various production sectors, i.e. "intra-industry trade". This type of trade also tends to increase rapidly as income rises, making it possible for individual countries to bring about a more differentiated basket of domestic use of consumer and producer goods, without having to abstain from division of labour and the exploitation of returns to scale in production. In other words, intra-sectoral trade tends to expand hand in hand with the growth in per capita income, in order to satisfy the greater demand for product variety without any loss of efficiency in production. This type of trade may therefore be expected to increase rapidly between developing countries as their per capita income advances. With the growing sophistication of the labour force, trade in services, such as finance, insurance and various types of information, may also expand rapidly among developing countries. It is also likely that world trade in raw materials may be increasingly concentrated among developing countries, as many developing countries can be expected to take over industries that process raw materials - the so-called "smoke-stack industries".

Experience shows, however, that the development of successful international exchange depends very much on sophisticated and properly designed rules, institutions and incentives. Thus, if the potential of international economic transactions among developing countries is to be fully exploited, it will be important to facilitate the emergence of rules and institutions that are conducive to these developments. Indeed, there is a strong case for developing countries to make organized attempts to co-operate with each other in the build-up of such rules and institutions, in particular internationally oriented institutions. UNIDO should play an important role in this. Some rather general suggestions follow regarding useful avenues for such co-operation.

The first, and most obvious, example is the formation of free trade arrangements, and perhaps also common markets, between developing countries. There are, of course, already various arrangements of this type, such as the Andean Common Market, the Associations of South-East Asian Nations (ASEAN), the Caribbean Community etc., though these have certainly not yet been developed to their full potential. There are thus good reasons for looking very carefully into ways of eliminating the obstacles to arrangements of this type or into the desirability of avoiding regionalization in a system of freer trade among developing countries.

One particularly important benefit of trade liberalization among developing countries is the added flexibility it gives to domestic markets. It is interesting to note that the trade liberalization of the OECD countries in the 1950s had the side-effect of breaking down many of the domestic rigidities and regulations. There is, however, always a risk that after a while, once the effects of freer trade on domestic allocation of resources have been felt, new types of protectionist devices may be built up. The neo-mercantile policies of the developed countries in the 1970s, which took the form of selective subsidies, including specific trade discrimination against the developing countries, are an obvious example of this.

A second point worth noting is that expanded South-South trade requires the development of marketing institutions that specialize in such activities, in contrast to North-South trade, for which specific marketing institutions already exist. Indeed, Governments in developing countries are well advised to remove existing obstacles for the development of such institutions. In some cases it may even be necessary for the Government to create firms that specialize in South-South trade, although there is no need for these firms to be owned or operated by the State.

Common infrastructure investment by two or more developing countries is another possible important means of future co-operation. Such investment would not only involve joint ventures in physical infrastructure for countries with a close geographical proximity. Joint ventures in the field of non-material infrastructure, in particular in technical research, education, training and research and development could also be very important. Indeed, for many, and perhaps all, developing countries, such common institutions could clearly represent a challenge for the future. In many cases, it would also be extremely important to involve some developed countries with a high level of competence in the relevant fields.

A third point is that South-South economic interaction would also

be stimulated by the establishment of more transnational firms owned by interests in the developing countries. Indeed, developments along these lines have already started, for instance in India and in the area of Hong Kong. New legislation and bilateral or multilateral agreements between Governments of developed countries are clearly needed to exploit the potentials fully. Reforms of the rules and regulations of credit and foreign exchange markets would also be required.

Fourthly, legislative action and international negotiations are also necessary to make it possible to integrate various markets for services between developing countries, for instance in the fields of finance and insurance. It should then be possible to draw on experience with the integration of service markets among developed countries - both to exploit the possibilities fully, for instance to deal with protectionism in these markets, and to avoid the negative side effects as much as possible. An integration of financial markets would, to be efficient, however, require a greater degree of convertibility of the currencies of developing countries, which would in many cases require more realistic exchange rates, which are important for other reasons as well.

Fifthly, it is also important to realize that strong international integration between various developing countries requires that individual countries will refrain from adopting far-reaching import-substitution policies. Increased economic integration between the countries of the South contradicts any far-reaching forms of import substitution policy adopted by individual developing countries. To resist the temptation to adopt further import-substitution policies should not, however, be regarded as a sacrifice. Economic research has convincingly shown the disadvantages of pronounced import substitution policies. This is not surprising, as most developing countries are hardly any larger than major Western cities as economic units. Even though a comparison of developing countries with Western cities is rather brave, it is nevertheless interesting to note that no responsible person seems to have suggested import substitution policies for these cities.

Finally, it must be emphasized that stronger South-South co-operation and interaction should be considered not so much a substitute for as a complement to North-South relations.

DOMESTIC OPTIONS FOR DEVELOPING COUNTRIES

The discussion of policy strategies has thus far emphasized the international economic environment of the developing countries. It is equally important, however, to consider the internal conditions within the various countries. Their importance is illustrated by the varying successes, or failures, of various developing countries in using the existing international economic environment for domestic economic development. These variations in economic performance are also found among groups of countries that have experienced rather similar changes in their external environment, such as the groups of oil-exporting and oil-importing countries.

Many developing countries have been quite successful in achieving a high level of savings and investment. In fact, both gross capital formation and gross saving in developing countries seem to be about 25 per cent of GNP (for the period 1976-1979). Moveover, industrial production has in the 1970s grown at a rather impressive rate. It is now time,

however, to bring about a more efficient allocation and management of investment and production and to speed up the rate of technological development with a view to increasing productivity at a faster rate. For instance, while output in manufacturing increased annually by 5 per cent in the period 1973-1980, the accompanying increase in labour input was 4.2 per cent, which implies that the increase in labour productivity was only 0.8 per cent. This is a very poor performance compared with the average for developed countries in the post-world war period. For instance, in the period 1960-1973, when output growth in manufacturing was rapid in the OECD countries, labour productivity increased by about 5.8 per cent a year, and in the period of slower output growth in 1973-1978, labour productivity increased by 3.4 per cent a year. 3/ Many developing countries are simply getting too small an increase in output and labour productivity from their investment (the marginal ratios of capital to output are unnecessarily high).

It is not possible, and hardly appropriate, to prescribe recommendations for individual countries in this report. All have their own historical background, their unique natural and human resources, and their own principles, ideologies and political limitations. It is also difficult to prescribe general principles that are equally appropriate for all developing countries. Indeed, one of the most striking tendencies during the last decades has been the increased heterogeneity of the group of developing countries. There is, nevertheless, enough experience to conclude that certain types of reforms of policies and institutional would be helpful for a great number of developing countries. It is with this limited ambition that the following ideas are expressed on conceivable future domestic reforms.

The relative importance of the various points differs considerably between for instance the small and rapidly growing newly industrialized countries (where the upgrading of product quality has become a crucial factor), the large developing countries (where production for the domestic market is more important), the oil-exporting developing countries (where investment "rushes" of poorly allocated and implemented investment have to be avoided), and, finally the least developed countries (where the highest priorities have to be given to basic education, sanitation and agricultural development, as well as to the mobilization of domestic and foreign saving for a "take-off" process of economic modernization). It is also obvious that recommendations for domestic policies have to differ substantially for market-oriented mixed economies and developing countries that rely mainly on State ownership and central planning. The discussion on internal reforms refers mainly to the former types of economies, though several of the points are certainly important for economies characterized by State ownership and central planning as well.

When considering reforms of domestic policies and institutions, it is important to be clear about the specific purpose of the reforms, which is to promote industrialization and productivity growth in manufacturing in ways that are conducive to the development of the entire national economy. The reason for emphasizing industrialization is not only that UNIDO is designed to do just that, but also that industrialization sooner or later is a key to economic development, as illustrated by several hundreds of years of experience in various countries throughout the world.

The other sectors, such as services and agriculture, should not, of course, be forgotten either. For instance, an industrialization process

is easily hurt, or may even fail, if agriculture is neglected. The reason for this is not only that higher incomes in non-agricultural sectors require an increased supply of food for consumption among the income-earners in those sectors. Agriculture is important also as a supplier of intermediate products for industry. Practically all outputs of agriculture serve, except in some of the least developed countries, as inputs into industry, particularly, of course, in the food-processing industries. Experience has also shown the importance of the agricultural sector as a market for the products of manufacturing - including both goods for final consumption by the farm population and intermediary products of various types in agriculture, machines, building materials and fertilizers being the most obvious examples. Indeed, as the bulk of the population for a long time to come will be working in agriculture, the successful development of agriculture is crucial to national economic development. A modernization of agriculture will be important also for achieving a geographically dispersed income growth in society - both among regions and population groups. The purpose is not only to give all population groups a chance to participate in the developing process, but also to prevent congestion, or even chaos, in some of the large urban agglomerations. Obvious policy tools for this purpose are, besides a dynamic development of agriculture, public services and tax and transfer systems that redistribute income among regions and population groups.

It is also well known that long periods of improving productivity in agriculture preceded the industrial revolution in the present developed countries in the eighteenth and nineteenth centuries. Moreover, some of the present developed countries have for a long time been successful exporters of agriculture products - Australia, Canada, Denmark, New Zealand and the United States being obvious examples. But sooner or later a pronounced industrialization process will be necessary to generate greatly improved incomes and living conditions.

The main question is, then, what internal conditions in the present developing countries have, in particular, restricted the industrialization process, and what can be done to remove these obstacles and, indeed, replace them by conditions that are as favourable to the industrialization process as possible. It then becomes important to emphasize that the purpose of these proposals is not to favour manufacturing at the expense of other sectors. Basically, all types of productive effort depend to a considerable extent on some basic features of the social, political and economic environment with which firms and individuals have to contend. Thus, policy prescriptions for stimulative economic development in general are usually also highly favourable to the manufacturing sector, and vice versa. It is also possible, however, to consider some specific features of society that are particularly important for the manufacturing sector alone. If these features are made more favourable for manufacturing production, several other sectors will often benefit from them too, owing to the linkages between the various sectors, as illustrated above by the relations between agriculture and manufacturing. Moveover, if the rate of increase of total productivity can be increased in manufacturing, so that larger output increases can be achieved with given investment outlays, larger resources will be available for investment in other sectors. For these reasons, a more rapid rate of productivity increase in manufacturing should be welcomed by other sectors as well. Similarly, a rapid increase in the labour productivity of agriculture will not only widen the markets for manufactured output but will also help to create the expectation among managers of manufacturing firms that real wage rates will go up gradually in the future, and that a

rationalization of production (i.e. productivity increases) will therefore be necessary.

For these general reasons, a one-sided critique of the outside world, without considering the need for some reforms in domestic mechanisms, institutions and policies, should, if possible, be avoided. Indeed, economic modernization implies not just increased output and higher productivity but also, and to a great extent as a prerequisite, reforms and modifications in economic and social mechanisms and institutions. For reasons of space, only a few examples can be given here.

For instance, it need hardly be mentioned that economic development has to be accompanied by the development of laws, rules and public institutions that are different from those that prevail in traditional or colonial-type societies. Obvious examples are laws that regulate and enforce contracts in all fields of economic activity and that protect property rights; labour-management relations that allow an efficient and socially responsible use of the labour force; an efficiently functioning public infrastructure in such fields as transportation, energy, education, research, technical standardization and information; and tax systems that make it possible to finance an expanding public sector, to disperse the benefits of growth and to make the Government less dependent on tariffs as a source of income.

Moreover, it is extremely important that the rules of the economic games should be reasonably stable, so that the various agents of the economic system can predict the relation between productive performance and rewards. Increased "game stability" would also increase respect for the rules and hence reduce the risks of various types of cheating and corruption.

However, what will be emphasized in particular in this report is the importance of releasing decentralized initiatives and of building up human resources.

Initiatives, incentives and the functioning of markets

To bring about domestic reforms that release initiatives requires a strengthening of productivity-enhancing economic incentives and improvements in the functioning of markets for labour, capital, goods and services. Some developing countries (and some developed ones) have made it very difficult for people with ideas and ambitions to take productive initiatives on their own. Government regulation of production, investment, trade, prices and wages often prevent productive initiative among energetic and creative people and organizations. It is not always understood that reforms that released individual initiatives preceded and paralleled the industrialization and modernization process in the present developed countries over the last 200 years.

To release vigorous initiatives in the production system also requires an appropriate incentive system. In many countries, policy-makers and public administrators do not seem to be fully aware of the fact that the incentive systems in their countries are often very unfavourable to economic modernization, capital accumulation and productivity growth; this point is often regarded as particularly important for mixed economies, but it is highly relevant for centrally planned economies as well. Existing incentives and regulations often direct resources away from

high-productivity to low-productivity activities, as well as to rent-seeking activities, with a view to exploiting the returns from bargaining with government authorities. Different forms of corruption breed in such an environment. It is mainly when public authorities have something to sell - such as licences for production, investment, imports, exports, credit etc. - that corruption becomes a serious problem. It is therefore important to replace negative productivity-restraining regulations and incentive systems with policies that allow, and indeed stimulate, high-productivity initiatives, flexibility and a more efficient allocation of resources, and that reduce the scope for corruption.

Obvious examples of inappropriate incentive systems include are highly overvalued exchange rates, which keep the profitability level of large parts of the manufacturing sector on levels that are too low for the successful expansion of production, investment and employment. It is also well known that the tariff structure often distorts the comparative advantages, and hence directs the allocation of resources in ways that are not in the best long-term interests of the country. Moreover, low profitability, often in combination with aggressive (politically directed) investment by State enterprises, have often squeezed out private economic activities in some parts of manufacturing. As a result, the mix of private and state activity has often shifted in favour of the latter without any apparent economic rationale.

Indeed, the efficiency of investment is in many countries a particularly severe problem for State enterprises, which have often invested without much concern for profitability, simply because decision-makers in the public sector have not looked very carefully at the rate of return on capital investment. Indeed, many examples of irresponsible borrowing and investment during the last decade are found among State enterprises. To force the managers of firms to look at rates of return on capital, rather than on some arbitrarily chosen output targets, is crucial for future success in many developing countries.

If politicians and public administrators concentrated more on the general rules concerning economic incentives and the public infrastructure (physical as well as intangible) and if they intervened less in individual firms, a more efficient allocation of investment could often be achieved. This, however, presupposes that managers of individual firms, as well as of publicly owned firms, have strong incentives to watch the rate of return of the capital stock that they are administering.

Human resources

It is by now also understood that one of the important tasks of the development process is to develop human resources, in the widest sense of the term, from elementary training to the training of advanced specialists in engineering, management and research. What has perhaps not always been appreciated is the importance of middle-level management, including engineers and technical personnel, as well as market-oriented consulting firms. In all developing countries there is also an enormous need to improve upon the system of vocational training.

It is not within the scope of the present report to determine exactly how the accumulation of human resources can be achieved. The topic is simply too large and complex, as demonstrated by the fact that while most

people in the developing countries live in rural areas, where they are not reached very effectively by formal education, it may in some cases be important for developing countries to catch up with major developments in newly emerging areas of technology, such as biotechnology, genetic engineering and dataand micro-processors. Moreover, it is useful for various countries to experiment with different strategies so that a wide variety of possibilities can be tried, which will increase the pool of international knowledge that is available for developing countries in the future.

To keep the efforts to develop human skills within the limits of the resources of developing countries, each country has of course to be quite selective. Without generalizing too broadly, it may be argued that a dramatic shift of the proportions of the resources that are devoted to various subjects - at primary, secondary and advanced levels - is sorely needed in most developing countries. For instance, from the point of view of enhancing economic development, technical and managerial training is often underemphasized in relation to training in the humanitarian and social sciences. It also seems that the physical infrastructure, i.e. buildings for various institutions, is often given priority over such intangibles as training programmes, training of instructors, fellowships, laboratory equipment, instruments, literature and new learning aids.

It is also important that public efforts in the field of education and training should recognize the need to build up competence that is relevant at the micro-economic levels of society, in particular within individual firms. For that reason, it is important that production firms should be used as much as possible for education, training and research and development. Tax concessions to firms that contribute in that process, and increased public support for research and development could conceivably be used.

Needless to say, it is important that developing countries should not just imitate the technical and managerial training and research that is pursued in developed market economies. Many branches of technology and management have to be developed by the developing countries themselves, though in many cases in co-operation with institutions in developed countries. Obvious examples are tropical agriculture, soil analysis and management for developing countries, integrated development in arid areas, aquaculture and tropical medicine. In manufacturing too, however, it is important that indigenous technological development, directed to the specific needs of developing countries, should be stimulated. To develop labour-intensive technologies is perhaps the most obvious example. Research and training to promote local entrepreneurship in small and medium-sized industrial enterprises, with special concern for specific conditions in the various developing countries, is another obvious example.

Though technical assistance from developed countries is an important input into the build-up of domestic competence in the technical and managerial fields, the bulk of the work has of course to be done in and by the developing countries themselves. By way of comparison, some of the present developed market economies that started their industrialization quite late, but proved to be exceptionally successful - the Federal Republic of Germany, Japan and Sweden - emphasized domestic technical schools at all levels quite early in their modernization process. The same holds for some of the most successful newly industrialized countries in recent decades.

Training of students abroad is important but this method has narrow limits, considering the enormous scale of the necesary build-up of competence in the field of technology and human resources in general. Moreover, heavy reliance on the training of students abroad accentuates the brain-drain problem. In the case of training through practical work in Western firms, there seems to be an increasing reluctance on the part of industry in developed countries to take trainees at high levels, owing to the need to protect confidential information.

For these reasons, it may be a good idea for developing countries, in their negotiations for foreign aid and technical assistance for financing the development of human resources for industrialization, to give priority to the training of trainees.

A few developing countries already have a fairly ample supply of highly competent scientists, engineers and techicians. With proper institutional conditions in such developing countries, it should be possible to allocate a much larger fraction of world spending on research and development to these countries in future - by firms owned by developing countries as well as by transnationals from developed countries. Such a development is facilitated by the fact that the salaries of the technicians and scientists in those countries are only a small fraction of the salaries of people with similar competence in developed countries. A development of that type could also help to reduce the braindrain to developed countries - an issue that has to be faced sooner or later. Perhaps some contribution to a solution of that problem could be made by stimulating transnational firms to place some of their research and development activities in developing countries.

Besides technological competence, the two most important bottlenecks in human resources are perhaps managerial skills and entrepreneurship, in both the private and the public sector.

The role of managerial skills is not only a question of the competence of managers at the top level. Particular attention has to be directed to middle-level management, supervisory staff and people providing specialized services at the middle level, for example procurement and inventory management, production management, control research and marketing, tool-room service, testing of raw materials and products, machine assembly and equipment maintenance, staff recruitment, advertising and project development.

At least equally important for economic modernization and industrialization is the development of entrepreneurial capabilities. This is well put in the report on critical capabilities required for industrial development, submitted to the high-level expert group meeting held at Yaoundé preparatory to the Fourth General Conference of UNIDO:

> "What needs to be firmly stated is that it is entrepreneurs in the private and public sectors (their quantity, orientation, abilities, sectoral distribution, etc.) that determine whether industrialization will at all take place and whether this can be at an accelerated or a slow pace. It is also entrepreneurs that create the demand for industrial manpower and industrial employment and help to develop the technical elements of local culture by undertaking the innovations of social and material inventions. Any effort, therefore, which is devoted to enlarging the supply of entrepreneurs, to improving the quality of their functioning, inducing their transfer

from well established or over-crowded areas of production to new ones where their presence and activities are essential for organizing the production of new product lines, etc. must be a prime consideration of policy-makers and planners " (ID/WG.394/3, p. 5.)

The experiences of many countries over the years illustrate the enormous role of entrepreneurship in the domestic development process, not least in small and medium-sized firms and newly started businesses. Because of the difficulties of quantifying the importance of this factor, it can easily disappear both in domestic development plans and in the political and administrative discussions, which are often concentrated on existing firms and large firms. All developing countries that opt for industrialization and modernization are, however, strongly urged to facilitate the emergence of vital entrepreneurship by pursuing formal education and training programmes and also, in particular, by stimulating entrepreneurial initiatives. It is only by giving a large number of people the chance to try their hand at entrepreneurship that those with talent can be spotted. It does not make much sense to have private entrepreneurship if the entrepreneurs are drastically prevented from acting, because of rigid and explicit government regulations, or tax or subsidy systems that induce existing entrepreneurs to engage in short-term financial speculation or "rent-seeking" activities, while continuously bargaining for favours from government authorities. Indeed, as stated in the report on critical capabilities required for development:

> "When the role of indigenous entrepreneurship came to be recognized, attention tended to concentrate on their needs for financial resources (credit) rather than on ways that particular environments helped or hindered the entrepreneurial function" (ibid.).

It is also important to stimulate indigenous entrepreneurship in order to avoid excessive dependence on foreign entrepreneurs and foreign transnational firms, even though these, when they do not dominate a country, can stimulate domestic entrepreneurs and raise their aspiration level.

Domestic aspects of external relations

It is well known that in the 1960s and 1970s some developing countries made spectacular economic progress, partly with the help of an export-oriented development strategy. These countries are also known, however, to be encountering serious problems with regard to their access to export markets, and in some cases with regard to their foreign debt, and some of these problems may be accentuated if many more developing countries try to follow the same development strategy. There are nevertheless certain things that can be done to facilitate export-oriented development strategies - in addition to convincing developed countries of the importance of letting their markets expand and stay open, and of contributing to a steady flow of credit and capital.

First of all, the reforms in domestic production incentives that have already been discussed, for example the elimination of productivity-reducing regulations and the stimulation of decentralized initiatives and entrepreneurships, are particularly important for export markets, as these require a particularly flexible domestic production system. Indeed, when more developing countries at quite different levels of real wages enter

as competitors on world markets, very high flexibility will be required of individual countries if they are to be successful, owing to the continuously changing competitive situations.

Developing countries will also be well advised, however, to try to avoid crowding their export goods into the same types and products and qualities as most other developing countries. Indeed, whenever possible, they should endeavour to diversify both products and markets, thereby minimizing both the risks of protectionist policies in developed countries and the consequences of such policies, should they arise. For it is often not the aggregate value of imports from developing countries that triggers protectionist policies in developed countries, but rather disturbances in specific sectors in specific countries.

Of course, there are limits to such diversification. It is often forgotten that many developing countries have the potential to engage in production, with a great measure of success, in many different types of industrial branches. The conventional definitions of industrial branches should not be allowed to act as a brake on the imagination. Indeed, it is not really the industrial branch as such that is important when looking for comparative advantages in production, but rather the type of activity involved, regardless of which branch it is in.

Another important point to consider for externally oriented policies in developing countries is the great danger of borrowing for the purpose of expanding either consumption or poorly allocated and managed investment. Thus, a future concentration of borrowing for investment rather than consumption purposes, and improvements in the domestic mechanisms that allocate investment, are particularly crucial for countries that borrow heavily abroad. Looking back at the experiences of the last decade, the main mistake of developing countries would seem to have been a poor allocation of investments rather than an increased consumption on the basis of borrowed funds. For instance, in the case of middle-income countries, the share of GDP that goes to consumption has fallen from about 84.5 to 77.5 per cent from 1965 to 1982, and the investment ratio has risen from 21.6 to 26.5 per cent. In the case of the non-oil-exporting middle-income countries, the ratio of imports to GNP rose from 24.4 to 33.5 per cent of GDP. Indeed, the deterioration of the current account from -2.7 to -6.8 per cent of GDP between 1965 and 1982 for the latter group of countries should really be classified as over-absorption and low allocative efficiency of investment rather than over-consumption.

Moreover, for developing countries that are anxious to play host to transnational corporations, it is important to provide a reasonably favourable environment for them - in terms of rates of returns on investment, certainty about continuous operations, and reassurances about respect for property rights, including the possibility of distributing profits to the home country. The often rather negative attitudes in developing countries towards transnational firms in the last decades have made many of these firms reluctant to invest in developing countries. Many have simply lost confidence in developing countries as a hospitable environment - just as many developing countries had earlier lost confidence in the transnational firms. Now that the Governments of several developing countries have come to believe that transnational corporations could make an important contribution to the industrialization process, more hospitable attitudes and policies towards those firms will be necessary in order to restore confidence. This holds true regardless of

whether a Government plans to allow foreign-owned subsidiaries to operate in its country or wants to confine the activities of transnational firms to joint ventures. Needless to say, mutually acceptable rules of conduct are necessary in the relations between Governments and transnational corporations.

It is also important to realize that the types of foreign direct investment that are made in a developing country are greatly influenced by the choice between import substitution and export-oriented incentives in the domestic economy. Export-oriented incentive structures tend to result in direct investments that are oriented towards world markets rather than towards the domestic markets. Often this means that more technologically dynamic types of foreign direct investment will materialize than would be the case with import substitution policies. For instance, the possibility of being a part of the international product-cycle, in which new products flow from high-wage countries to low-wage countries over a period of time, is much greater in countries with export-oriented strategies in manufacturing than in countries with import-substitution strategies.

CONCLUSION

Economic development is a process that embrace all sectors of the national production system. Indeed, there is no good reason to discriminate against any specific sector in favour of others. Even without discrimination in favour of manufacturing, the facilitation of industrialization is a necessity for the developing countries. The idea that has sometimes been expressed that developing countries should play down, or even avoid, industrialization, is a dangerous form of day-dreaming.

It is also important to confirm previous statements by UNIDO that the successful industrialization of developing countries presupposes a drastic increase in the share of developing countries in total world production of manufacturing goods. It was exactly to make this point, strongly and concretely, that the Lima target of 25 per cent of manufacturing output within a few decades was codified. 1/ What has to be emphasized much more strongly than before, however, is the need to speed up the rate of productivity growth in developing countries, as their performance in this respect has been quite poor so far, particularly in view of the high investment ratio involved (and accompanying rapid increase in capital stock).

To make such a development possible, both the international economic environment and domestic conditions have to be more conducive to a broadly based industrialization process, with a rapid build-up of industrial capacity in developing countries and related reallocations of manufacturing production in the world economy, as well as a rapid rate of domestic productivity growth in developing countries. It is therefore important that developing countries make demands not only on the international institutional arrangements and policies of developed countries, but also on their own policies and institutional arrangements. Thus not only North-South and South-South economic interactions but also external and internal reforms should be considered as complementary rather than as substitutes.

It is easy to make lists of potentially favourable factors for a successful industrialization process in the developing countries. It is more difficult to set priorities. Even though the present report has deliberately made a rather narrow selection of points of relevance for the developing process, the number of issues that have been touched upon is still quite large. It may therefore be worth while restating that the most urgent problems to be dealt with in order to facilitate the industrialization process are probably the need to ensure: (a) that the export markets in developed countries will expand and be kept open; (b) that sufficient flows of capital and credit are provided for developing countries; (c) that South-South economic interaction is stimulated; and (d) that reforms of institutions, mechanisms and policies within the developing countries themselves are implemented, so that the market opportunities, at home and abroad, can be judged. In addition to physical infrastructure, many important domestic reforms have been recommended, and particular emphasis has been placed on efficient economic incentives and competence in technology, management and entrepreneurship, as well as on institutional and political reforms that release initiatives, so that such competence can be fruitfully used.

To summarize very briefly the main thrust of this report, increased productive capacity and productivity in manufacturing in the developing countries is a precondition for any substantial improvement in living standards in the long term. This requires continuous adjustments in the production structure and hence requires great allocative flexibility in both developed and developing countries. A successful reallocation of productive capacity to developing countries therefore presupposes a reasonably high level of capacity utilization and abstinence from protectionism in the developed market economies, as well as a continuous flow of financial resources and technical know-how to the developing countries. These are basic demands that developing countries can, and should, place on the outside world.

It is equally true, however, that the developing countries themselves have to improve their own domestic institutions and mechanisms to make markets flexible and incentives appropriate, and to build up capacity in human resources, including technology, management and entrepreneurship. In other words, it is important that developing countries should accentuate their attempts to increase domestic productivity. Not only is increased labour productivity the only realistic foundation for a substantial long-term increase in living conditions in developing countries; it will also expand the domestic markets, and this is a crucial element in economic development, as foreign markets will always represent only a modest fraction of the domestic markets. Moreover, if productivity increases can be brought about in all sectors of the economy - agriculture and services as well as manufacturing - this will create expectations among managers in all sectors about rising real wage rates, thereby enhancing the interest of management in productivity-raising measures.

It should be reaffirmed, in conclusion, that the successful industrialization of the developing countries is not only a necessity but also a realistic possibility. Indeed, to quote the report on world industrial development: dynamics of growth through co-operation, submitted to the high-level expert group meeting held at Lima preparatory to the Fourth General Conference of UNIDO:

"The South offers a growth frontier to the global economy just as the American West did during the 18th and 19th centuries. It

offers enormous scope for absorption of technology and employment of surplus labour. It contains a wealth of natural resources and investment opportunities, extensive potential consumer markets, and an abundance of initiative, incentive, and enterprise." (ID/WG.391/9, p. 3.)

Notes

1/ Report of the Second General Conference of the United Nations Industrial Development Organization, Lima, Peru, 12-26 March 1975 (ID/CONF.3/31), chap. IV.

2/ Organisation for Economic Co-operation and Development, Development Co-operation Review.

3/ A. Lindbeck, "The recent slowdown of productivity growth", Economic Journal, March 1983.

THE INTERRUPTED INDUSTRIAL REVOLUTION OF THE THIRD WORLD: PROSPECTS AND POLICIES FOR RESUMPTION

Ajit Singh*

A. The industrial crisis in the third world

During the two decades 1960-1980, third world countries made rapid industrial progress; many of them in Asia and Latin America embarked on a veritable industrial revolution. The third world's share of world industrial production is still very small. However, it increased by nearly 50 per cent over the 20 year period - from a little under 7 per cent in 1960 to over 10 per cent in 1980. This was accompanied by an impressive transformation of the productive structure of the third world economies: the share of industry in national production increased considerably, from an average of 13 per cent in 1960 to nearly 20 per cent in 1980. Equally significantly, industrial progress was not confined to consumer goods or light industries but took place on a wide front. The developing countries' share of the world output in heavy industry, for example, rose from 4.9 per cent in 1960 to 6.2 per cent in 1976, while that in light industries increased from 11.6 per cent to 12.4 per cent over the same period. Many third world countries emerged as important exporters of manufactured products to the advanced economies during these two decades.**

These achievements are being seriously jeopardized by the world economic recession of the last four years. As can be seen in table 1, since 1980 there has been a sharp deceleration in economic growth in the developing countries, notwithstanding the continuing good performance of China, India and other Asian countries. In 1981 and 1982, there was on average little or no increase in per capita GDP in the third world countries, and the latest World Bank estimates point to an average fall of more than 1 per cent in per capita GDP in 1983 in the developing countries (World Bank, [4]).

There has been a similar retrogression in third world industrial development. UNIDO statistics indicate that the average rate of growth of manufacturing production in the developing countries was 8.0 per cent per annum during 1963-1973 and fell to 5.8 per cent during 1973-1980. There appears to have been little or no increase in industrial production during 1981-1982 [5]. Although China, India, the Republic of Korea and some other countries of eastern Asia have continued to expand their industries recently, there is evidence of sharp declines in industrial production and of de-industrialization in many countries in Africa and in Latin America. For example in the United Republic of Tanzania, which is typical of

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**Statistics quoted in this paragraph are from the United Nation Conference on Trade and Development (UNCTAD) [1, 2]. Figures are averages for the developing countries as a whole and thus conceal the wide variations in the industrial progress of individual countries.

Table 1. Growth of GDP by major economic groupings, 1960-1982

Country group	1980 GDP (billions of dollars)	Average annual growth (percentage)				
		1960-1973	1973-1979	1980	1981	1982 a/
All developing countries	2 231	6.0	5.1	3.0	2.0	1.9
Low-income	544	4.5	5.1	6.1	3.7	3.7
Asia	492	4.6	5.6	6.6	4.1	3.9
China	283	5.5	6.3	6.8	3.0	4.0
India	159	3.6	4.4	6.6	5.6	2.8
Africa	52	3.5	1.5	1.2	0.1	0.8
Middle-income oil importers	920	6.3	5.5	4.2	1.1	1.1
East Asia and Pacific	204	8.2	8.5	3.6	6.9	4.2
Middle East and North Africa	28	5.2	2.9	4.7	0.1	2.7
Sub-Saharan African b/	43	5.5	3.7	4.0	3.7	4.0
Southern Europe	201	6.7	5.0	1.5	2.4	2.2
Latin America and Caribbean	444	5.6	4.9	5.7	-2.4	-1.2
Middle-income oil exporters	687	7.0	4.8	-1.3	1.5	1.9
High-income oil exporters	221	10.7	7.5	7.5	-1.8	-11.7
Industrial countries	7 395	5.0	2.8	1.3	1.0	-0.2

Source: World Bank [3].

a/ Estimated.

b/ Does not include South Africa.

low-income sub-Saharan African economies, manufacturing production has fallen by more than 25 per cent in each of the last two years. Capacity utilization in industry is at present about 20 per cent. It is uncertain whether the country's existing manufacturing structure will ever be viable again, even after the world economy revives. In Latin America in the most advanced countries, Brazil and Mexico, there has been a sharp decline in industrial output, employment and capacity utilization over the last two years.* Again, the long-term viability of the existing manufacturing sector in these countries and the industrial strategies pursued by them in the past are questionable.

Thus, the Fourth General Conference of UNIDO will be meeting against this background of extremely unfavourable industrial development in large parts of the third world. From the point of view of the third world countries, the first task of the Conference must clearly be to examine policies and measures that would halt and reverse the process of de-industrialization which is affecting many of them. Equally importantly, the second central task of the Fourth General Conference should be to address the longer-term policy issues involved in resuming or continuing industrial revolutions in third world countries in the difficult but realistic context of a long-term deceleration in the rate of growth of the world economy. Thus, the central theme of the Conference should be the continuing industrial revolution in the third world: (a) its undeniable achievements so far; (b) its present serious difficulties; (c) its absolute necessity nevertheless; and (d) how to extend and deepen it in a world economic environment that is unlikely to be as propitious as it was between 1950 and 1973.

B. The world economic crisis and third world industrial development

The most important ways in which the slow-down in world economic activity since 1979 has affected industrial and economic development in the third world are the following: (a) a reduction in the demand for third world products, particularly commodity and mineral exports; (b) as a consequence of (a) a fall in commodity prices and hence adverse movements in the terms of trade; (c) an increase in the real burden of interest and debt service payments partly owing to (a) and (b) and partly owing to an enormous increase in interest rates; and (d) a reduction in aid and other capital flows.

During 1981-1982, commodity prices fell by 25 per cent in United States dollar terms, the largest continuous decline in more than three decades (see table 2). In real terms, i.e. deflated by the price index of manufactures exported by the developing countries, the fall was 20 per cent, and it brought commodity prices to their lowest level since the Second World War - 16 per cent below the previous lowest point reached in 1975 (International Monetary Fund, [6]). Although prices rose during 1983, they still remain very low in historical perspective. For the non-oil-producing developing countries, the external terms of trade fell by 10 per cent during 1978-1980; they fell further by 7 per cent during 1981-

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*In Mexico, manufacturing production had increased at a rate of about 6 per cent per annum between 1977-1981. It declined by 2 1/2 per cent in 1982 and by an estimated 5 per cent in 1983. Real wages fell by almost 25 per cent in 1983.

Table 2. Non-oil primary commodity prices in nominal and real terms, 1957-1982 (1975 = 100)

Year	Nominal (United States dollar terms)					Deflated (by the price of manufactures) a/				
	All	Food	Beverages	Agricultural raw materials	Metals	All	Food	Beverages	Agricultural raw materials	Metals
1957	57	40	77	74	59	127	90	171	163	131
1958	53	38	77	61	55	118	84	172	138	123
1959	52	38	65	68	53	117	85	147	154	121
1960	52	37	60	71	54	115	82	134	158	121
1961	50	36	57	66	54	109	79	124	145	119
1962	49	37	56	63	53	106	80	121	138	115
1963	52	44	54	65	52	113	95	118	142	114
1964	55	42	62	65	65	118	90	134	139	139
1965	54	39	57	63	71	113	82	118	132	149
1966	56	37	59	65	77	114	80	121	133	158
1967	52	40	59	59	65	106	81	119	119	132
1968	52	39	60	57	67	106	78	123	116	137
1969	56	42	62	61	74	110	82	121	119	145
1970	58	44	70	55	78	107	82	130	103	145
1971	55	45	65	55	67	96	78	113	96	118
1972	62	51	71	72	68	100	83	113	116	109
1973	95	79	87	129	99	132	109	121	178	136
1974	122	127	104	125	124	139	143	118	143	142
1975	100	100	100	100	100	100	100	100	100	100
1976	113	82	192	124	106	112	81	189	125	105
1977	137	79	332	128	114	125	72	304	117	104
1978	130	90	241	138	120	103	71	192	109	95
1979	152	102	255	168	156	106	71	178	117	109
1980	166	137	224	175	172	105	86	141	110	108
1981	142	118	174	158	148	94	78	115	105	98
1982	125	93	178	136	135	84	63	121	92	91

Source: International Monetary Fund [6].

a/ Based on the United Nations index of the price of manufactures exported by the developed countries.

1982, in spite of the substantial stabilization of oil prices. With respect to interest rates, the average interest rate on all outstanding debts of the non-oil-producing developing countries -- including the large amounts owed to official creditors and subject to concessional interest rates - rose from 6 per cent during the period 1976-1979 to 9.25 per cent in 1980 and 10.75 per cent in 1981. In 1982, the rate fell back to 10 per cent. However, the increase in real interest rates - nominal interest rates corrected for inflation or more suitably for the developing countries using their export prices as a deflator -- since 1976-1979 has been gigantic*.

The three factors (a), (b) and (c) above have played havoc with the balance-of-payments situation of the non-oil-producing developing countries. Their combined current account deficit rose to $108 billion in 1981 and to $87 billion in 1982, about twice the average annual level during 1977-1980. However, as the annual report of the International Monetary Fund (IMF) for 1983 points out:

> "For the oil importing developing countries, <u>the entire deterioration of the combined current account balance from 1978 to 1981 can be ascribed essentially to these three adverse factors</u>. Indeed, the deterioration of their oil trade balance and their non-oil terms of trade, together with the large excess of the rise in their external payments of interest over the increase in interest earnings on their reserves and other financial assets abroad, amounted to nearly $80 billion over these three years, against a cumulative increase of only $53 billion in their total current account deficit." (International Monetary Fund [7], author's italics.)

From both an analytical and policy point of view, the following aspects of the world economic crisis in relation to the developing countries seem to deserve special attention.

First, the deterioration in the balance-of-payments position of the developing countries, which as seen above is mainly due to external factors, has far-reaching consequences for all spheres of the economy, real as well as financial. The external payments constraint can become so binding that a country has to curtail not only the imports of luxuries or other consumer goods but also the essential imports required for maintaining existing levels of domestic production. Because the necessary complementary inputs in the form of industrial raw materials, spare parts etc. can no longer be imported into such countries as Brazil, Mexico or the United Republic of Tanzania, the level of industrial capacity utilization has become low and industrial production has declined. The dollar value of Mexico's imports fell almost 40 per cent in 1982 and 70 per cent from the first quarter of 1982 to first quarter of 1983. The fall in the dollar value of Brazil's imports was 12 per cent and 23 per cent in the corresponding periods (World Bank [4]). Similarly in the United Republic of Tanzania, it is estimated that the level of imports today is 25 per cent below that in 1970.

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*An indication of this increase is provided by World Bank [3]. The real Eurodollar rate - using developing countries' export prices as a deflator - increased from about -5 per cent in 1976-1979 to +20 per cent in 1981 and about +18 per cent in 1982. (World Bank [3], p. 9, figure 2.3).

Reduced industrial production has adverse effects on other parts of the economy. Thus agricultural production becomes handicapped directly as well as indirectly by the non-availability of foreign and domestic industrial inputs (e.g. fertilizers), transportation or incentive goods for farmers (which again are mainly industrial). Decreases in agricultural and industrial production in turn generate inflation and disequilibrium in government finances. Because sales and excise taxes on industrial production and import duties are a major source of government revenue in many developing countries, the balance-of-payments constraint is directly and indirectly responsible for the enormous increases in budget deficits or the public sector borrowing requirements in many developing countries. Again taking the United Republic of Tanzania as an example, it has been estimated that if industry were operating at a normal level of capacity utilization instead of its present low level, sales and excise tax revenues would be doubled, which would not only eliminate the current fiscal deficit but also make a sizeable contribution to the capital account (see JASPA/ILO [8]).

The second important point concerning the present world economic crisis is that it is not some random event but has been caused by the structural features of the world trade and payments system and the economic policies of the advanced countries. The highly restrictive policies of monetary restraint followed in the United Kingdom of Great Britain and Northern Ireland, the United States of America and other advanced countries since 1979 have been directly responsible for the extraordinary economic slump the world has witnessed in the last few years. It is also significant that the main cause of the slump is not protection but what could be called a system of "beggar-my-neighbour" competitive deflation. In the present trading and financial situation, a country that attempts to balance its payments or reduce inflation by deflating its economy, even without creating any trade barriers, pushes other countries into deficit. The net outcome is a vicious circle of deflation. This is what the world economy is suffering from today rather than beggar-my-neighbour protection.* It is the lack of barriers to the movements of capital in the advance countries, particularly the short-term capital movements, that has played a major role in the process of competitive deflation.

Thirdly, an implication of the earlier analysis is that if the world economy were to revive, the developing countries would in general gain through exactly the same channels in which they are now disadvantaged, i.e. through increased commodity prices, increased export demand and hopefully through increased aid and capital flows. However, the initiative and ability to undertake measures for such a recovery lie entirely with the United States and other advanced countries. There is little the developing countries (because of their small share of world economic activity) can do to increase world economic growth.

It is fashionable these days to stress the two-way interdependence between the third world countries and the industrial countries. At one level this is certainly correct, since in 1982 the developing countries accounted for 27 per cent of the total exports from the Organisation for Economic Co-operation and Development (OECD) and for about 40 per cent of

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*This argument is developed further in Singh [9]. See also Larsen, Llewellyn and Potter [10].

United States exports. In the second half of the 1970s, the South provided a net stimulus to OECD economies because of its faster rate of growth of production and hence its rapid expansion of demand for OECD imports, financed largely by foreign borrowings. However, in 1982, with a contraction of imports by many developing countries, the South's netcontribution to OECD economic activity was mostly negative. The developing countries were forced to reduce their imports owing to lack of foreign-exchange earnings, which was largely due to economic policies followed earlier by the leading OECD countries.

There is a fundamental asymmetry in the interrelationship between the developing and the developed countries, which derives from the former's need for imports of capital goods and technology and therefore for hard-currency earnings. But the latter are essentially determined by the rate of growth of the OECD economies, which in turn is mainly governed by the economic policies of and the interactions within the OECD. As the OECD economists Larsen, Llewellyn and Potter observe:

> "In the short term, non-OECD markets can occasionally grow buoyantly and somewhat independently of general world conditions. The most notable recent cases are the years immediately following each of the two large oil price rises, when OPEC countries adjusted expenditure to newly-acquired revenue fairly rapidly and, in 1978 and from 1981, even ran down reserves; at the same time, demand from non-oil developing countries was held up by sizeable borrowing through international markets. But such a boost to OECD activity from outside the area comes to an end as the non-OECD countries reach the limit of what can be sustainably financed, whether out of reserves or by increasing indebtedness: over a run of years, non-OECD imports are constrained by their export proceeds. Furthermore the growth of the value of non-OECD exports is determined in substantial part by the growth of the value of the relevant imports of OECD countries, largely primary commodities. As a first approximation, OECD import volumes of primary commodities rise and fall broadly in proportion with OECD GNP." [10]*

The fourth aspect of the present world economic crisis which deserves attention is that the events of the last few years may not simply be a temporary phenomenon but instead heralds a long-term deceleration in the expansion of world economic activity. This would have extremely serious implications for long-term industrial and economic policies in the developing countries. These issues are examined in section E.

C. The necessity for continued industrial revolution in the third world

Despite the present unfavourable world economy, there are compelling economic and social reasons for third world industry to continue to expand at a fast pace and for the industrial revolutions in the third world to continue. In view of the present crisis in and alleged failures of third world industry, many critics would not regard this statement as self evident. It may, therefore, be useful to briefly spell out the analytical argument.

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*See also Professor Sir Arthur Lewis's Nobel lecture (Lewis [11] and the paper by Taylor [12]).

The starting point for the analysis is the enormous problem that is a result of the growing population and labour force in third world countries and the lack of employment opportunities. For example, it is estimated that in Mexico, in spite of a recent decline in the rat ˆ population growth, the labour force in the coming decade will continue increase at 3.5 per cent per annum (because of previous population growth). Over the period 1950-1973, the rate of growth of productivity in the Mexican economy as a whole was also about 3.5 per cent per annum (Brailovsky [13]). This suggests that the Mexican economy needs to expand at a rate of about 7 per cent per annum to provide jobs for new entrants to the labour force alone; however, there is also an existing pool of unemployed and underemployed. It is estimated that the Brazilian economy would have to grow at a rate of at least 6 per cent per annum to provide employment opportunities for the young people entering the labour market [14].

Turning to the basic needs of the people for food, shelter, clothing etc., it is important to stress that the satisfaction of basic needs on a sustainable basis requires economic growth in the sense of the development of an economy's productive potential. Although at any time a redistribution of national output may enable a society to better meet the basic needs of its people, needs can only be met on a long-term basis if there is expansion of the national economy. Economic growth generates increased employment and household incomes; equally importantly, it increases government revenues, which may be spent on health, education, water supply and other basic needs of the people.* The International Labour Organisation (ILO), which first put forward the concept of basic needs, estimated in 1976 that if the minimal needs of the poorest 20 per cent of the third world population are to be satisfied by the end of the century, national incomes in the third world countries will need to grow on average at a rate of 7 to 8 per cent per annum.**

It has been argued that economic growth should not be an essential objective for the developing countries, since it does not necessarily enable a nation to achieve economic development. That is certainly true, but it would be a mistake to assume that economic development can be achieved without economic growth. Precisely because the benefits of economic growth do not trickle down automatically through the market to the disadvantaged groups in society, the State has to intervene on their behalf through appropriate fiscal and other policies. However, the ability of the State to intervene depends on the growth of public revenues, which in turn is a function of the expansion of the economy, for otherwise the result will only be inflation.

Thus, to create adequate employment opportunities for the new entrants to the labour force and to meet the minimal basic needs of the people, it is essential for the third world economies to grow at a rate of

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*For a fuller discussion of these issues, see Singh [15].

**This calculation in fact allowed for feasible redistributing of incomes within the developing countries. See International Labour Organisation [16].

6 to 7 per cent per annum.* There is, however, much empirical literature that indicates a close relationship between long-run economic growth and industrialization. This is supported by a systematic body of economic thought, which not only explains why manufacturing industry should expand faster than the economy as a whole during the course of economic development but would also assign strategic causal significance toindustry in raising the overall rate of growth of productivity in the economy. This analysis of the growth process also suggests that, within manufacturing, capital goods industries need to grow at a faster rate than consumer goods industries as the economy expands.**

Economic research suggests that, at the level of per capita GDP of a typical third world economy, a one per cent increase in GDP normally entails a 1.5 per cent increase in manufacturing production.*** Thus, if the developing countries are to expand their economies at a rate of 6 to 7 per cent per annum, their manufacturing industries would need to grow at a rate of about 10 per cent per annum. In other words, the industrial revolution in these economies must continue.

In 1975, the Second General Conference of UNIDO adopted the Lima Declaration and Plan of Action on Industrial Development and Co-operation.**** The Lima declaration, noting that the developing countries constituted 70 per cent of the world's population and generated less than 7 per cent of industrial production, called for accelerated industrial development and for the developing countries' share of world industrial production to rise to at least 25 per cent by the year 2000. The Fourth General Conference of UNIDO should not only reaffirm this commitment but, as the foregoing analysis indicates, should go beyond that. For if there is a long-term deceleration in the rate of economic and industrial growth in the advanced countries, the developing countries may be able to meet the Lima target at a much lower rate of industrial development than 10 per cent per annum.***** However, although the Lima target would be achieved, the minimum basic needs of the people in the third world would not be met even over the next generation, and adequate employment opportunities for the growing labour force would not be forthcoming.

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*Essentially for these reasons, the International Development Strategy for the Third United Nations Development Decade stated that "the average annual rate of growth of gross domestic product for the developing countries as a whole during the Decade [1980s] should be 7 per cent" (General Assembly resolution 35/56 of 5 December 1980, para. 20).

**For a fuller discussion and for references to the literature, the reader is referred to Singh [17].

***See for example UNIDO [18]; Chenery and Syrquin [19].

****Report of the Second General Conference of the United Nations Industrial Development Organization (ID/CONF.3/31), chap. IV.

*****UNIDO indicated that if over the period 1975-2000 industry in the developing countries were to expand at a rate of 10 per cent per annum and that in developed countries at 5 per cent per annum, the Lima target would be met [18]. Between 1970 and 1980, the actual rate of increase of manufacturing value added in developing countries was 8.0 per cent per annum and that in developed countries was 3.7 per cent per annum.

D. Structural characteristics of third world industrial development

It was noted in section A that the long-term record of third world industrial development during the last two decades has been very hopeful. During the 1970s manufacturing production in the developing countries increased at a rate of 8 per cent per annum, a slightly higher rate than in the 1960s (see table 3). This contrasts sharply with the experience of developed countries where during the last decade there was a sizeable decrease in manufacturing growth. Industrial progress in the third world has by no means been equally distributed between countries - it would not be expected to in view of the wide diversity in the levels of social,political and economic development in countries at the beginning of the period being examined. Nevertheless, many developing countries, including the largest ones where the bulk of the third world population lives, have managed to train an industrial labour force and to create a scientific, technical and industrial infrastructure, which indicates that they are in principle now capable of carrying forward an industrial revolution. In fact, in a long-term perspective, countries such as Brazil, China, India, Mexico or the Republic of Korea are at present at the same or even higher level of industrial development (in a number of significant dimensions) as Japan was during the mid-1950s. The long-term question before these countries is why they cannot emulate over the next three decades Japan's industrial history of the last 30 years.

Table 3. Average annual growth of manufacturing production in major economic groupings, 1960-1980
(Percentage)

	1960-1970	1970-1980
Developing countries	7.6	8.0
Developed market economy countries	5.9	3.7
Centrally planned economy countries	9.0	7.3
World average	6.6	4.9

Source: United Nations Conference on Trade and Development [1].

Comparative data on certain significant long-term structural characteristics of third world industrial development during the period 1960-1975 are shown in table 4. It can be seen that not only industrial production but also industrial employment in the developing countries has been expanding quite fast. It increased at a rate of 5 per cent per annum during the period 1960-1975. This is considerably higher than the rate of growth of population in the developing countries, although it is somewhat lower than the rate of urbanization. Table 4 also indicates that in the developed market economies, unlike in the developing countries, there has been a decline in the growth of industrial employment since the mid1960s. More importantly, there is evidence of a marked change in the previously observed relationship between growth of output and employment in the developed market economies. Whereas up to the mid-1960s the elasticity of manufacturing employment with respect to manufacturing output was approximately 0.5, since then the value of this elasticity has fallen substantially.* In the developing countries, on the other hand, there does not

*See also Kaldor [20], Singh [21].

appear to be a significant structural break in the relationships between these variables. A 1 per cent increase in industrial output continues to be associated on average with an 0.7 to 0.8 per cent growth in industrial employment in these economies.

Table 4. Average annual growth rates a/ of manufacturing output (volume), employment and productivity in developing, developed market economy and centrally planned economy countries, 1960-1975 and 1968-1975
(Percentage)

	1960-1975			1968-1975		
	Output	Employment	Productivity	Output	Employment	Productivity
Developing countries	7.4	4.9	2.4	9.1	7.0	2.0
Developed market economies	5.7	0.9	4.8	4.1	0.4	3.7
Centrally planned economies	10.0	3.4	6.4	10.7	2.6	7.9
World average b/	7.1	2.8	4.2	6.5	2.9	3.5

Source: [18].

a/ Based on regression on time.

b/ Based on statistics from 85 developing and 35 developed countries (28 developed market economies and 7 centrally-planned economies), excluding Albania, China, Democratic People's Republic of Korea, Mongolia and Viet Nam.

Owing to the greater value of the employment elasticity in the developing countries, the developed market economies have recorded a higher rate of growth of productivity, despite their lower rate of expansion of manufacturing production. This must inevitably further widen the gap in the levels of industrial productivity between the two groups of countries. Nevertheless, since the third world countries suffer from widespread underutilization of labour and there is a relatively large gap between the levels of productivity in manufacturing and other sectors in these economies, industrial development would have helped to reduce the differences in GDP per capita between the developing and the developed countries.

Thus the lower rate of growth of industrial productivity in the labour-surplus third world economies relative to that in the advanced countries cannot by itself be regarded as an indicator of "inefficient" use of resources by the developing countries. With the large increase in unemployment and growing underutilization of labour in the advanced countries as well during the last decade, it is interesting in this regard to compare the experience of the United States with Western Europe. Between 1973 and 1983, the United States economy grew at a rate of 2.2 per cent per annum whereas the growth rate in the European Economic Community (EEC) was 2 per cent per annum. However, in the EEC, with stagnant employment

(i.e. no reduction in unemployment), productivity also increased at a rate of 2 per cent per annum. In the United States, on the other hand, there was an impressive growth of employment but productivity growth was a meagre 0.3 per cent per annum. Nevertheless, it would be difficult to conclude from this that the United States economy utilized its resources more inefficiently than the EEC countries during that last decade.*

More disaggregated and microeconomic data as well as an examination of productivity trends over time, particularly of capital productivity, would be required to assess whether or not industrial resource utilization in the third world is becoming more inefficient. As a single aggregate indicator, changes in the incremental capital output ratio would be a useful measure. However, proper interpretation would require that careful attention be given to two factors: first, to structural changes, e.g. an increase in the ratio may simply reflect structural changes in the economy towards perhaps heavy industry and second, and more important, to the effects of the world economic crisis on the balance of payments and hence on capacity utilization. The available evidence does not seem to support the view that resource utilization in developing countries in general has become more inefficient over time and hence has been responsible for the industrial crisis that those countries are currently experiencing. Rather the evidence is far more in accord with the alternative hypothesis that the underutilization of capacity and the third world's industrial crisis are a consequence of the major changes in the world economic situation, as outlined earlier.**

This point is particularly important in relation to Brazil, Mexico and many other newly industrializing countries which are heavily in debt. The extremely serious economic difficulties which these countries are facing at present cannot be justifiably blamed on inefficient resource utilization. These economies borrowed heavily during the 1970s when the real interest rates were negative. The real economies of the borrowing newly industrializing countries performed very well in terms of industrial and overall production, the growth of exports, investment and domestic savings.*** As Avramovic rightly observes: "... these countries have proven that they can absorb mordern technology, organize efficient production, penetrate the international market at an extraordinary speed,

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*The source of the statistics in this paragraph is Financial Times, 13 February 1984. Between 1973 and 1981, unemployment in the EEC countries increased by 6 million people (from 2.6 to 8.8 per cent of the labour force), largely owing to an increase in the labour force. See further Cambridge Economic Policy Review [22].

**For evidence on long-term changes in efficiency of resource utilization in a number of developing countries, see for example [18]. There are a number of studies for individual countries. For Mexico, see for example Brailovsky [13]; for the United Republic of Tanzania, see JASPA/ILO [8].

***The developing countries' overall exports of manufactures increased at a faster rate in the 1970s than in the 1960s, at an average annual rate of 12 per cent (in constant 1978 prices) compared to 8.5 per cent for total world trade in manufactures in the 1970s. The developing countries' rate of investment as a proportion of GDP increased from 19 per cent to 25 per cent. See Avramovic [23].

manage their economies in a satisfactory manner with a few exceptions ..." [23]. The extraordinary increase in interest rates that has taken place since 1979 and the factors discussed in section B are directly responsible for the industrial crisis in the developing countries, rather than their intrinsic supply-side inefficiencies in utilizing their industrial resources.* The present economic crisis in most developing countries is caused by liquidity rather than solvency; over the longer term and with more favourable world economic conditions, developing countries are capable of paying their debts.**

Finally, it is important to stress that although inefficient resource utilization is not the cause of the third world's industrial crisis, more efficient resource utilization would nevertheless be undoubtedly beneficial. This question will be discussed further in the following sections.

E. Industrial prospects for the 1980s and 1990s: the elements of a policy framework

The quarter century before the collapse of the Bretton Woods system and the oil price rise of the early 1970s was a golden age for the Western industrial economies and in many ways for the world economy as a whole.*** The average annual growth rate of GNP in OECD countries from 1950 to 1973 was 4.9 per cent, compared with 1.9 per cent between 1913-1950 and 2.5 per cent during 1870-1913 (Reynolds [27]). For more than two decades, until 1973, countries such as France, the Federal Republic of Germany and the United Kingdom maintained virtually full employment, an unusual phenomenon for developed market economies. In fact, those countries were able not only to employ their own labour forces but also to give jobs to a significant number of workers from abroad. In the 1960s in France and the Federal Republic of Germany, immigrant workers constituted about 10 per cent of the employed labour force. In this "golden age", a number of third world nations also made major industrial strides.

The historically high long-term rates of growth of output, consumption and employment achieved by the advanced countries in the 1950s and 1960s were accompanied by an enormous increase in world trade. World exports of manufactures grew at an unprecedented long-term rate of over 10 per cent per annum - an expansion in which a number of third world countries also participated.

However, over the past decade, the rate of expansion of both world trade and of world economic activity has dropped by 50 per cent or more.

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*This is not to suggest that the developing countries did not make any avoidable economic policy errors, for example in policies on import or exchange rate policies. Errors become particularly glaring with hindsight, but they were no different than similar policy errors that macroeconomic managers make in advance countries. For an analysis of these issues in Mexico, see Singh [24, 25], Taylor [26].

**See, for example, the Economic Report of the President, the United States Council of Economic Advisors, 1983.

***There is no implication here that these two events were the causes of the demise of the "golden age" - they only mark significant landmarks in economic history of the period following the Second World War.

In the formulation of economic and industrial policy for third world countries, a major parameter to be determined is the probable future long-term rate of growth of the world economy. Is it likely to go back to its previous rate of 1950-1973, or is it more likely that the much reduced rate experienced during the past decade will continue (which is much more in line with the record from 1850 to 1950)? Although no firm answers can be provided to this question, there are a number of important factors that suggest that the world economy may grow much more slowly than it did in the golden age.* Thus, the third world countries have to contend with the probability that the rate of growth of the world economy during the next decade may not be significantly greater than it was between 1973 and 1983.

The crucial consequence for the third world of the expected long-term deceleration in world economic growth is that world trade will expand much more slowly than in the golden age. It was noted in section C that the third world countries require an annual rate of economic growth of 6 to 7 per cent and of industrial growth of about 10 per cent for compelling economic and social reasons, namely, to reduce absolute poverty and to expand employment opportunities for a growing and increasingly urban population. If overall trade increased very slowly, then even if there were no tariff or non-tariff barriers in advanced countries to imports of third world manufactures, the latter would still probably only be able to grow at a pace inadequate to generate the socially required rates of economic expansion in the developing countries. Furthermore, the slower growth of world economic activity may mean that the adverse movements in the terms of trade that the developing countries have experienced during the last decade may not be reversed.

The conclusion that follows from this analysis is that for the countries of the South to continue with their industrial revolutions during the next 10 years, they will have to rely much more on their internal dynamics - on the growth of internal demand rather than on world market forces - to generate economic expansion. They will need more import substitution, more internal technological development and more economic and technological co-operation between themselves.

Such a change in economic strategy raises a whole range of economic policy issues, some of which will be outlined in the next section. However, it must be recognized at the very outset that an economic programme is easier for the large semi-industrial countries such as Brazil, India or Mexico to implement than for the smaller or less developed economies. This is for two reasons. First, the large size of the former means that they are, in principle, much more capable of insulating themselves from the impulses of the world economy; foreign trade normally accounts for a relatively smaller proportion of their GDP because they usually have large enough internal markets for reaping economies of scale. In principle, the rate of growth of such economies is therefore much less dependent on the growth of world economy. Secondly, the semi-industrial economies already possess fairly diversified industrial sectors with trained labour and managerial and organizational skills, so that on the supply side they have the possibility of self-sustained internal growth to a degree that is much less open to economies at lower levels of industrialization.

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*See, for example, Reynolds [27], Olsen [28], Kindleberger [29].

It should be emphasized, however, that the policy emphasis on internal growth in large developing countries does not mean that export opportunities or the export effort should be neglected. For example, many semi-industrial countries have an enormous export potential in the Middle Eastern markets (in contention with the industrial countries) as well as in other developing economies. Some of them (e.g. China, India and the Republic of Korea) also have opportunities for increasing their foreign exchange earnings by exporting labour to the Middle Eastern oil producers In view of the external financial gap which many semi-industrial countries will be facing for a long time to come - one major reason being previous debt accumulations - it is clearly necessary for them to make full use of opportunities that will be of benefit to themselves as well as to the Middle East oil producers. Similarly, they should seek to extend their exports to the advanced countries to the extent that is possible. (See also section F). The main burden of the analysis presented here is that, in order for the newly industrializing countries to continue to achieve fast growth in a slow-growing world economy, the essential dynamics will have to be provided increasingly by internal factors rather than by the external economy.

The problems that small countries face in such a situation are far more difficult; in the case of some small countries problems may even be intractable. Small countries must necessarily rely on trade and specialization in order to achieve industrial development.* There have therefore been a number of schemes for the establishment of common markets of contiguous countries to promote these aims. However, integration schemes in the developing economies have not been conspicuously successful to date. The main reason is the large difference in the level of development of the various countries; in a free trade situation, the more developed regions or countries have a tendency to develop even further without commensurate development in the less developed regions (Kaldor, [31]). For example, it can certainly be argued that industrial development in, for example, the United Republic of Tanzania was aided by that country's withdrawal from the East African Community and thus from competition with the more advanced Kenyan manufacturing industry. Nevertheless, industrialization in smaller developing countries does require much more intra-developing country trade, which is more likely to increase and to aid the development of

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*It has sometimes been argued that the level of economic activity even in the large semi-industrial countries is no greater than in some cities of the North, and hence growth based on internal markets will not be efficient. However, the size of GDP of many large semi-industrial economies is today similar to that of some medium-sized European countries; it is also much greater than that of either Germany or the United States in the last quarter of the nineteenth century when these countries used protection to aid industrial growth. More importantly, this argument totally ignores the powerful theoretical and empirical objections to free trade that the late industrializers have expressed since Frederich List. (See, for example, Singh [21]; Kaldor [30].) Thus, in a small country with no free trade, industrial growth may be inefficient; however, with free trade, a small country may experience no growth at all and may, in fact, de-industrialize. It must, however, be stressed that the opposition to free trade with respect to developing countries does not imply preference for autarchy or no trade; rather it is an argument in favour of planned, mutually beneficial trade, which is often not the case with free trade. See also the discussion in the text below.

all participating countries, if it is planned, than free trade. The international development agencies such as UNIDO can play an important role by helping to create and implement such arrangements. (South-South trade will be discussed further in section F.)

The strategic policy perspective outlined here is rather different from that of many orthodox economists and of international organizations such as the World Bank and IMF which advocate export-led growth as an answer to the economic problems of developing countries. It may be useful to briefly comment on this orthodox prescription. Export-led growth has often been justified on the basis of the experience of the so-called "gang of four" in Eastern Asia (the countries Republic of Korea and Singapore and the areas Hong Kong and Taiwan Province of China) which, during the last two decades, have achieved extraordinary expansion of their manufactured exports and of their domestic economies. In 1975, these four economies together accounted for only 9.5 per cent of the manufacturing value added of the developing countries but of 45 per cent of their total exports (Nayyar [32]); their total population accounted for only 2 per cent of the population of developing countries and areas. Whatever the rate of growth of the world economy, it is in principle possible for any single country or area to succeed in emulating the example of these successful exporters, although the task would be far more difficult for a late comer. There is an obvious fallacy in the view that such a strategy can succeed for all or even the leading newly industrializing countries in a slow-growing world economy. Studies by Nayyar [32] and Cline [33] suggest that even on very conservative assumptions about increased growth of exports from a small number of other newly industrializing countries and favourable assumptions about expansion of world trade, the manufactured exports of the developing countries to the advanced countries would soon exceed the latter's threshold levels of tolerance in many industries and thus invite retaliation or widespread protection. As Cline observes: "Elevator salesmen must attach a warning label that their product is safe only if not overloaded by too many passengers at one time; advocates of the East Asian export model would do well to attach a similar caveat to their prescription." [33]

Finally, in considering the elements of an appropriate policy framework for the developing countries in a rather uncertain economic environment during the next 10 years, it is also essential to examine another important conceptual issue: the notion of vulnerability of an economy to world economic forces. During the Great Depression Keynes observed:

> "We do not wish ... to be at the mercy of world forces working out, or trying to work out, some uniform equilibrium according to the ideal principles, if they can be called such, of laissez-faire capitalism ... It is my central contention ... that we all need to be as free as possible from economic changes elsewhere, in order to make our own favourite experiments ... and that a deliberate movement towards greater national self-sufficiency will make our own tasks easier." [34]

Keynes was calling attention to a significant negative aspect of international division of labour and specialization. The more a country is specialized, the more its growth will be dependent on the rise in exports - the more easily, that is, might its growth be checked by demand limits which, unlike those arising from domestic demand, the country's own

economic policy may not be able to overcome, given the specialization. The vulnerability of a country is in this sense not only a function of the degree of specialization (the import content of its production) but also depends on its level of industrial development and the nature of its specialization. _Ceteris paribus_, vulnerability, for example, will be greater if the production of exportable surpluses involves goods that are subject to stiff foreign competition or changes in the level or composition of other countries' final demand. The country's vulnerability is also greater if its exportable surpluses serve to meet imports of essential wage goods and their means of production. There is a greater possibility of insulating the growth of the economy from an insufficient rise in its import capacity if imports mainly consist of luxury goods or their means of production. Orthodox trade theory can ignore this problem of vulnerability only by assuming that there will always be full utilization of resources: if integration with the world economy leads to lower levels of overall capacity utilization, the traditional argument in terms of greater efficiency of resource utilization is no longer necessarily valid.*

In the context of the present discussion, it is interesting to reflect on the contrasting experiences during the present world economic slowdown of China and India, on the one hand, and of Brazil and Mexico, on the other. It was noted in section A (see table 1), that the world's two leading non-oil-exporting developing countries economies, China and India, have done relatively very well in the recent period despite the world economic crisis. The main reason for their success lies in the fact that since their independence, these two countries have deliberately followed policies of self-reliance, based on import-substitution, and inward-looking industrial strategies. Over the last 30 years, they have established their own technical and scientific infrastructures and developed a range of capital goods and defence industries.** The result is that today the rate of economic growth of both China and India is more or less independent of world economic growth. The indigenous factors, e.g. the weather and the growth of agriculture, are far more important in determining the expansion of these economies than the world economic situation. It is an irony of the structure of the world economy today that, in this particular respect, these two poor countries are far better placed than a rich industrial country such as France. France has had among the highest long-term rates of industrial growth in Western Europe during the last two decades; it also has huge gold reserves. It has a socialist President committed to expansion of employment and production. Yet France's economic growth is almost entirely determined by the economic policies of other Western industrial countries.

It may be argued that China and India have been successful in creating self-reliant economies because of their large size. There is some truth in that statement, but not the whole truth. France is also a large country. So are Brazil and Mexico, each of which is also much richer than either China or India. However Brazil and Mexico are today in a deep economic crisis, and unless the world economy has a spectacular revival or

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*See further Keynes [34], De Vivo and Pivetti [35] and Crotty [36].

**Among the third world countries, India has in fact emerged as the leading exporter of technology (Lall [37]).

other arrangements between the borrowers and lenders can be negotiated, these two countries are likely to be condemned to negative or very low economic growth for much of the present decade. The essential reason for the economic differences between Brazil and Mexico, on the one hand, and China and India, on the other, is that during the last 15 years the former countries chose to follow export-oriented, outward-looking industrial strategies based on multinational investment and foreign debt. As a consequence, Brazil and Mexico developed highly import-dependent industrial structures and benefited from their greater integration with the world economy. However, their industrial structures, which were suitable for the golden age, also left them vulnerable to prolonged economic disruption when the world economy ceased to expand.

F. UNIDO and industrial policies in developing countries

The translation of the policy framework outlined in section E into specific and appropriate industrial policies for a particular country requires an analysis of the individual circumstances of that country. Such a task for each of the hundred or so countries of the third world is clearly beyond the scope of the present paper. Nevertheless, some general points can be made with respect to certain groups of countries and in relation to specific policy issues. The following country groups, which are not mutually exclusive, will be considered: (a) the sub-Saharan African economies; (b) the Latin American debtor countries; (c) the large semi-industrial countries and (d) the small countries and the question of South-South trade. In each case both shortand long-term industrial policy issues will be briefly discussed, and special attention will be given to the role that UNIDO should play at the present stage of industrial development in these countries.

Sub-Saharan African economies

Among all the country groups, the industrial plight of this group of countries is the most difficult. Many of these economies are in "fundamental structural disequilibrium" in the sense that their productive systems are unable to generate sufficient exports to pay for the required imports, even at a rate of economic growth that will keep their per capita incomes constant.* This disequilibrium is not simply a short-term liquidity or financial problem but one that requires major changes in the real economy, in the structure of national production, both agricultural and industrial. In the short term, industry, because it was heavily dependent on imports, has been devastated. Industrial production, employment and capacity utilization have plummetted and there has been massive deindustrialization. The world economic crisis has forced the Governments of these countries to more or less abandon their painfully built fledgling industrial sectors and to shift resources back to export crops in order to increase export earnings.

The African Governments were certainly right in their aims during the past two decades to attempt to change the structure of their economies by reducing their dependance on commodity exports and by building up industry. However, the industries they established, although they may have

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*For a more detailed analysis of this concept, see Singh [25].

been appropriate for the golden age, have turned out to be totally unsuitable for the changed world economic conditions. These economies diversified by changing from the production of mineral or agricultural commodities to the production of some manufactures. This did not, as envisaged, reduce their degree of dependence on the world economy; instead the dependence appreciably increased because the industries that were established were highly import intensive (Wangwe [38]).

The tasks that the ministers of industry in the African countries face today are unenviable. Should the scarce foreign exchange available for industry be allocated to all the existing industries proportionately so that each can work at a very low level of capacity utilization, or would it be more in the national interest to close down some industries and allow others to operate at much higher capacity utilization so that economies of scale can be reaped and costs reduced. In the longer term, African industry can only become viable if (a) its propensity to import is reduced and (b) its import capacity is enhanced by increasing exports. Both strategies should be followed simultaneously even though (b) would be extremely difficult to implement in the present circumstances.

UNIDO can play a major role by helping to analyse for each country the shortand long-term policy choices outlined above, as well as by assisting in the formulation of industrial policies for implementing them. Industrial adjustment would of course be easier if the international community could provide more assistance, but more appropriate aid is also needed. Although there is such a high degree of underutilization of existing capacity, foreign aid still continues to be provided in many African economies for long-term projects to create new capacity. Not only do new projects inevitably entail indirect foreign exchange costs, they also absorb scarce managerial and governmental resources which could be more profitably used elsewhere. It is clear that if, instead of foreign aid being given to create new industrial capacity, a fraction of what is provided now were given for increasing production and utilization of existing capacity, it would be of far greater benefit in the present economic circumstances.

UNIDO can again play a useful role in helping to change donor attitudes and policies in this area. Aid for increasing capacity utilization need not be unconditional; it can be targeted and monitored with respect to specific industries. However, whether or not UNIDO can persuade the advanced countries to change their aid policies or to increase aid, help in analysing short-, medium- and long-term industrial adjustment problems in the Sub-Saharan African countries mentioned earlier and in implementing the required new industrial policies would be an important contribution.

Heavily indebted Latin American and other newly industrializing countries

Despite similarities in their present industrial plight (e.g. massive underutilization of capacity owing to balance-of-payments constraints), the industrial situation of the heavily indebted Latin American economies is different from that of the African countries. The Latin American debtor countries, particularly Brazil and Mexico, are at a far higher level of industrial and technological development and in a long-term sense are fully capable of sustained industrial advance. However, because of their debts, their shortto medium-term economic position is grim; it will become intolerable if the world economy does not have a period of sustained growth. The debt burden of these countries is now so large

that, even if interest rates remain at or about their present levels and world economic growth averages only 2 per cent per annum over the next few years, per capita incomes over the medium term would not grow at all and would probably decline; there would be an enormous increase in unemployment. From a social point of view, this is not a sustainable situation, and there must remain a danger that if these circumstances continue for any length of time the debtor countries may be forced into defaults or unilateral reschedulings of debt, as happened in Latin America and elsewhere in the 1930s. This would have extremely serious consequences for the financial system of the advanced countries. It is, therefore, essential that a co-operative solution to the debt problem be worked out between the lenders and borrowers which would permit the borrowing countries to adjust their economies while maintaining a reasonable rate of economic growth.*

As far as the problems of industrial adjustment in these countries are concerned, they have no choice in the short term but to greatly reduce their imports and to pursue vigorous import-substitution policies so as to maintain as high a level of economic activity as possible. However, even in the medium to longer term, such countries as Brazil and Mexico will have to reduce the import intensity of their industrial production and lower their propensity to import industrial products if they are to go back to their previous trend rates of long-term growth. In Mexico throughout the 1960s manufacturing industry grew at 10 per cent per annum while the crude elasticity of imports with respect to manufacturing production was only 0.8. With the coming of oil and the liberalization of imports during the period of the last administration, this elasticity had climbed to nearly 5 by 1981. In the present and foreseeable state of the Mexican economy, high rates of long-term growth are only possible if the import elasticity is reduced to less than its level of the 1960s. (See Brailovsky [13], Casar and Ros [39], Singh [25].)

Both shortand long-term adjustment in debtor countries will be helped if the advanced economies reduce barriers to exports from these countries. But, in order to aid adjustment and to enable the debtor countries to pay their debts, this will have to be done on a non-reciprocal basis.

The foregoing analysis suggests that the heavily indebted newly industrializing countries will need to carry out major structural changes in their industrial economies during the rest of the present decade. Clearly UNIDO should assist in this task. It should also help in promoting a co-operative, mutually beneficial international solution to the debt problem of these countries so as to make the burden of industrial adjustment less onerous.

The large semi-industrial economies

In many ways, the industrial position of the large semi-industrial countries - China, India and other newly industrializing countries that are not heavily indebted - is far easier than those of the previous two groups. However, given the level of industrial development that these

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*For an analysis of these issues in relation to Mexico, see Singh [24].

countries have now reached and the expected long-term deceleration in world economic growth, even these countries will have to thoroughly reconsider their traditional economic policies to carry forward the momentum of their industrial revolutions. Both demand and supply policies will need to be re-examined; and some important issues must be considered:

(a) In order to ensure that the large semi-industrial countries are able to achieve the desired long-term rates of growth of demand by domestic means, they will have to pay particular attention to distribution of income. This is so not only for reasons of securing social harmony as industrialization proceeds but also for narrowly economic considerations. As the third world economies expand and become internally more integrated, the under-consumptionist arguments will become much more relevant for many of them. Already there is an influential school of thought in India that argues that inequalities in income distribution have been responsible for a deceleration in the country's long-term rate of industrial growth (Nayyar [40], Dutt [41];

(b) On the supply side, with reduced international competition questions of microeconomic efficiency assume special significance. Two points may, however, be noted in this respect. First, microeconomic efficiency in the dynamic sense (e.g., the rate of growth of productivity) is essentially a function of the rate of growth of a firm's or industry's production (pace Verdoon's law). Secondly, to the extent it is agreed that x-inefficiency may be reduced by competition in the large semi-industrial economies, in principle domestic competition can be encouraged to replace foreign competition;

(c) In pursuing the path of internal growth the semi-industrial countries must also learn from the failures as well as successes of import-substitution policies practised in the past (the experience of the most successful of the import-substituting economies, namely Japan, is briefly examined in the appendix).

UNIDO can assist the group of large semi-industrial countries in the formulation and implementation of appropriate policies in all the above areas.

Small countries and South-South trade

Industrial development in small developing countries must necessarily depend on trade and specialization. The structural factors of uneven development that hinder the growth of common markets of contiguous small countries were noted in section E However, despite all the formidable difficulties, UNIDO must continue with its important work of assisting integration schemes.*

However, the question of South-South trade goes much beyond such schemes. As the leading third world countries resume their tempo of industrial growth, there will be more opportunities for mutually beneficial trade between them and with other less developed countries. In order to promote trade, the institutional and financial means of carrying out this

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*For an account of the various developing country integration schemes and the UNIDO activities in relation to them, see [42].

trade must be created, and trade must be planned to ensure that it is genuinely mutually beneficial and actually helps industrial development, even in the least developed economies. Most developing countries have neither the convertible currencies nor much of the infrastructure required for trade. UNIDO should participate actively, along with other international agencies (e.g., the United Nations Conference on Trade and Development (UNCTAD)), in helping such major long-term projects to promote trade, which will be all the more important for developing countries in a slowly growing world economy.

In conclusion, the tasks that UNIDO now faces in assisting the industrial development of developing countries are much more complex than they have been in the past. This is partly due to the world economic crisis and partly because of the differing industrial histories and different levels of industrial development which the third world countries have achieved over the past two decades. An essential argument of this paper is that, although more complex, these tasks are far from hopeless in spite of the world economic crisis and the long-term deceleration in world economic growth.

Appendix*

THE ORGANIZATION OF PRODUCTION: THE JAPANESE EXPERIENCE

The experience of Japan in the period following the Second World War is highly relevant to the developing countries, particularly the large semi-industrial economies, for a number of reasons. First, in the early 1950s Japan produced less steel than countries like Brazil, India and Mexico do today, and it was largely an exporter of labour-intensive products. Yet less than two decades later Japan was producing more than a 100 million tonnes of steel; and Japanese workers, starting from Asian wage levels, were well on the way to achieving European standards of real wages.

Second, the Japanese example is extremely important in another context: in relation to the desirability of using world prices and allocating resources according to the orthodox economic doctrine of comparative advantage. In the early 1950s, Japan, as a country with a relatively large population and a labour surplus economy, was advised by orthodox economists to specialize in labour-intensive manufacturing because of the comparative advantage. The cost of producing steel in Japan at that time was double the world production price, and therefore the advice was to produce and export textiles, for example, rather than steel. However, the Japanese rejected this prescription and instead embarked on a structural policy whose cornerstone was the rapid development of steel, chemicals, machinery and other heavy industries, regardless of their short-run comparative disadvantage. The rationale of this industrial policy was given by Vice-Minister Ojimi of the Japanese Ministry of International Trade and Industry (MITI):

> "The MITI decided to establish in Japan industries which require intensive employment of capital and technology, industries that in con-

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*This appendix is based on section III of Singh [43].

sideration of comparative cost of production should be the most inappropriate for Japan, industries such as steel, oil-refining, petro-chemicals, automobiles, aircraft, industrial machinery of all sorts, and electronics, including electronic computers. From a short-run, static viewpoint, encouragement of such industries would seem to conflict with economic rationalism. But from a long range view point these are precisely the industries where income elasticity of demand is high, technological progress is rapid, and labour productivity rises fast. It was clear that without these industries it would be difficult to employ a population of 100 million and raise their standard of living to that of Europe and America with light industries alone; whether right or wrong, Japan had to have these heavy and chemical industrial. According to Napoleon and Clausewitz, the secret of a successful strategy is the concentration of fighting power on the main battle ground; fortunately, owing to good luck and wisdom spawned by necessity, Japan has been able to concentrate its scant capital in strategic industries". (Organisation for Economic Co-operation and Development [44]).

Although in the 1950s and early 1960s this structural policy could perhaps be justified in orthodox infant industry terms, the Japanese have continued with it ever since. Recent thinking about the appropriate long-term industrial structure for Japan envisages a shift in the 1980s towards knowledge-intensive industries, such as electronic computers, electric cars, new synthetics, communications equipment, the more sophisticated products of heavy and chemical industries and software (Singh [45]).

How does Japanese industrial policy actually work? Its fundamental basis is a national consensus and a close relationship between government and enterprises. It is a highly interventionist industrial policy that would make an orthodox economist bristle. Professor Caves of Harvard University and Professor Ukeusa, have described this policy in the following terms:

"Each sector of the Japanese economy has a cliental relation to a ministry or agency of the government. The ministry, in addition to its various statutory means of dealing with the economic sector, holds a general implied administrative responsibility and authority that goes well beyond what is customary in the United States and other Western Countries. While the Ministry of International Trade and Industry (MITI) plays the most prominent role, its operations are not distinctive. The industrial bureaus of MITI proliferate sectoral targets and plans; they confer, they tinker, they exhort. This is the economics by admonition to a degree inconceivable in Washington or London. Business makes few major decisions without consulting the appropriate governmental authority; the same is true in reverse." (Caves and Ukeusa [46], p. 149.)

It is of interest to observe how conventional economic analysis assesses the operations of such an industrial policy. Again, Caves and Ukeusa noted:

"Japanese industrial policy appears in some instances to have served the nation's economic interests, in others to have hindered development. Japan's antimonopoly policy has been a hobbled and limited copy of that long used in the United States. Its enforcement has fallen far short of the U.S. model - itself hardly an example of per-

> fect adherence. Its failures have placed significant costs on the Japanese economy in the form of allocative inefficiency and diversion of rivalry into costly nonprice forms. We cannot detect any compensating gains." (Caves and Ukeusa [46], p. 157.)

Such an appraisal by orthodox neoclassical economists - and Professor Caves is certainly one of the best practitioners of this genre - is simply astonishing. It may be observed that (a) the transformation and expansion of the Japanese industrial economy over the past three decades has not only been more rapid than that of other industrial economies but it is among the most spectacular in the history of industrialization and (b) throughout this period the Japanese Government has followed an active interventionist policy. In the context of (a) and (b), Caves and Ukeusa's conclusion says less about the merits or demerits of this industrial policy than about the degeneracy of the neoclassical paradigm: a system of analysis that is unable to cope with real world situations, such as that provided by industrial development in countries like Japan. So notwithstanding the "allocative inefficiency" in Japan as perceived by orthodox economics, the developing countries have a great deal to learn about the supply side and the organization of production from the Japanese experience.

References

1. United Nations Conference on Trade and Development, Trade and Development Report (Geneva, 1981).

2. United Nations Conference on Trade and Development, Trade and Development Report (Geneva, 1982).

3. World Bank, World Development Report 1983 (Washington, D.C., 1983).

4. World Bank, World Debt Tables (Washington, D.C., 1984).

5. "Selected statistical indicators" (ID/WG.391/1, 24 February 1983).

6. International Monetary Fund, World Economic Outlook (Washington, D.C., 1983).

7. International Monetary Fund, IMF Survey, 22 August 1983.

8. JASPA/ILO, Tanzania: Basic Needs in Danger (Addis Ababa, 1982).

9. A. Singh, "Investment, economic recovery and structural change" (Cambridge, Department of Applied Economics, 1983).

10. F. Larson, J. Llewellyn and S. Potter, "International economic linkages", OECD Economic Studies, autumn 1983.

11. W. Arthur Lewis, "The slowing down of the engine of growth", American Economic Review, September 1980.

12. L. Taylor, "Back to basics, theory for rhetoric in the North-South round", World Development, vol. 10, 1982.

13. V. Brailovsky, "Industrialisation and oil in Mexico: a long term perspective" Oil or Industry?, T. Barker and V. Brailovsky, eds. (London, Academic Press, 1981).

14. Financial Times, 8 April 1983.

15. A. Singh, "The basic needs approach to development versus the new international economic order: the significance of third world industrialisation", World Development, June 1979.

16. International Labour Organisation, Employment, Growth and Basic Needs: A One World Problem (Geneva, 1976).

17. A. Singh, "Third world industrialization and the structure of the world economy", Microeconomic Analysis: Essays in Microeconomics and Economic Development, D. Currie, D. Peel and W. Peters, eds. (London, Croom Helm, 1981).

18. World Industry Since 1960: Progress and Prospects (United Nations publication, Sales No. E.79.II.B.3).

19. H. Chenery and M. Syrquin, Patterns of Development 1950-1970 (Oxford, Oxford University Press, 1975).

20. N. Kaldor, "The causes of the slow rate of growth of the U.K. economy", Inaugural lecture (Cambridge, 1966).

21. A. Singh, "UK industry and the world economy: a case of de-industrialisation?", Cambridge Journal of Economics, vol. 1, No. 2 (June 1977).

22. Cambridge Economic Policy Review (Cambridge, Department of Applied Economics, 1982).

23. D. Avramovic, "The international debt problem", statement at the Aussenwirtschaftliche Tagung 1982, Zurich (Geneva, May 1982).

24. A. Singh, "The present crisis of the Mexican economy from a Mexican perspective", The South, October 1982.

25. A. Singh, "Employment and output in a semi-industrial economy: Modelling alternative policy options in Mexico", paper prepared for the Technical Workshop on Forecasting Models and the Employment Problem, International Labour Organisation, Geneva, September 1983.

26. L. Taylor, "The crisis and thereafter: Macro economic policy problems in Mexico", paper prepared for a conference on Economic Problems of Common Concern to Mexico and the United States, University of California at Santa Cruz, November 1983.

27. L.G. Reynolds, "The spread of economic growth to the third world: 1850-1980, Journal of Economic Literature, vol. 21, No. 3 (September 1983).

28. M. Olsen, The Rise and Decline of Nations: Economic Growth, Stagflation and Social Rigidities (London, Yale University Press, 1982).

29. C.P. Kindleberger, The world economic slowdown since the 1970s, Seminar Paper No. 229 (Stockholm, Institute for International Economic Studies, November 1982).

30. N. Kaldor, "The foundations of free trade theory and their implications for the current world recession", J. Los and others, Studies in Economic Theory and Practice (Amsterdam, North Holland Publishing, 1981).

31. N. Kaldor, "The case for regional policies", The Scottish Journal of Political Economy, November 1970.

32. D. Nayyar, "International relocation of production and industrialisation in LDCs", Economic and Political Weekly, July 1983.

33. W.R. Cline, "Can the East Asian model of development be generalized", World Development, vol. 10, 1982.

34. J.M. Keynes, "National self-sufficiency", Yale Review, June 1933.

35. G. De Vivo and M. Pivetti, "International integration and the balance-of-payments constraint: the case of Italy", Cambridge Journal of Economics, March 1980.

36. J.R. Crotty, "On Keynes and capital flight", Journal of Economic Literature, vol. XXI, March 1983.

37. S. Lall, "Exports of technology by newly-industrialising countries: An overview", World Development, forthcoming.

38. S.A. Wangwe, "Industrial development strategies for Africa", World Development, vol. 11 No. 10, 1983.

39. J.I. Casar and J. Ros, "Trade and capital accumulation in a process of import substitution", Cambridge Journal of Economics, vol. 7 No. 3/4, 1983.

40. D. Nayyar, "Industrial development in India: some reflections on growth and stagnation", Economic and Political Weekly, August 1978.

41. A. Dutt, "Stagnation, income distribution and monopoly power", (Massachusetts Institute of Technology, Department of Economics, 1982).

42. "Regional integration among developing countries" (UNIDO/IS.405, 9 September 1983).

43. A. Singh, "Latin America and the world economy in the 1980's: reflections on issues of economic policy" (Quito, Latin American Institute of Social Science Research, 1982).

44. Organisation for Economic Co-operation and Development, The Industrial Policy of Japan (Paris, 1972).

45. A. Singh, "North Sea oil and the reconstruction of U.K. Industry", Deindustrialization, F. Blackaby ed. (London, Heinemann, 1980).

46. R.E. Caves and M. Ukeusa, Industrial Organisation in Japan (Washington, D.C., Brookings Institutions, 1976).

THE SECOND CHAPTER IN NORTH-SOUTH RELATIONS

Goran Ohlin*

The post-colonial North-South relationship

The wave of colonial emancipation that culminated around 1960 transformed the political map of the world. The situation of the new countries was often precarious. The concerns that arose in the North were sometimes outspokenly self-interested, whether in a short- or a long-term view, sometimes humanitarian and compassionate, and sometimes expressed in a twilight zone where notions of solidarity blended with ideas of enlightened self-interest. They all converged on the conclusion that the new countries needed support. Even Latin American countries that had been independent for over a century were included in a new perspective of world politics where development and the freedom from want and oppression seemed worthy objectives after the Second World War.

In the South, as it gradually coalesced, there was a similar diversity of attitudes. Some saw aid from the North as no more than rightful retribution. Others, more hesitant, considered it necessary to seek and accept foreign aid in order to attain reasonable development targets. Eventually, self-reliance and collective self-reliance emerged as ideological positions, although this did not seem to affect the need or demand for assistance.

As the international network of bilateral and multilateral development aid took shape, macro-economic models for the world economy were drawn up in the secretariats of the international organizations: the United Nations, the Organisation for Economic Co-operation and Development (OECD), the World Bank. They were all of similar design and in the 1960s they converged on a scenario in which continued rapid growth in the North would accommodate the kind of growth that the South could reasonably aspire to and in fact attained during that decade. It was, as it were, the five-per cent solution to international development. It kept North-South trade crudely balanced without any radical departures from historically observed propensities or elasticities. On the other hand, it did not hold out much hope for international equity. Of the growth of five per cent in gross national product (GNP), there remained, after population growth, close to 4 per cent in the North but only 2.5 per cent in the South, so the gap was widening.

Some of the aid was in the form of concessional loans and there was also a fair amount of commercial borrowing. It would be wrong to say that there was no awareness of the debt problem; on the contrary, it was examined rather closely at an early stage, in a spirit of great wariness of the explosive power of compound interest (Avramovic [1], Ohlin [2].

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But the circumstances were such that real rates of interest were low even in commercial markets and way below the growth of world trade and the world economy, and it was not until two decades later that the problem was to burst on the world scene, and then in a manner that was not really foreseen in the early discussions because growth faltered in the North rather than in the South.

Broadly speaking, what the industrialized countries were asked to share with developing countries in the international North-South philosophy of the 1960s was not so much their wealth as their growth. In foreign aid the targets so reluctantly agreed to and then disregarded by all but the smallest of the industrialized countries were derisory when set in relation to the growth rates then prevailing. An aid target of one per cent of GNP was considered unacceptable when the Pearson Commission explored the matter and recommended 0.7 per cent, which came to be widely accepted. [3] This meant directing less than a quarter of the annual increase in GNP to developing countries. In trade, similarly, it was thought that expanding markets in the North were to be shared with new producers in developing countries, not least in the interest of consumers in the industrialized countries themselves. With steady growth, adjustment problems were not expected to become serious.

The turbulence of the 1970s upset this view of the world economy. But there was a strong inclination to see the prolonged stagnation in the industrialized world as the result of the oil shocks and a determined fight against inflation, something that should not amount to more than a temporary disruption of a normal pattern of growth that could, should, and would be restored.

Even today many commentators seem to think that only wrong-headed policy-makers bar the return to a global recovery that would put world trade and output back on the rails. On the other hand, those who take a longer view of growth prospects and are less obsessed by the short-term twists and turns of policy tend to agree that growth in the industrialized world is likely to be considerably slower than in the 1960s. If this were the case it would have far-reaching implications for development and for North-South relations.

Structural malaise?

No serious forecasters expect a return to the golden age, but the reasons they give are not always the same. To make things worse it has different connotations in different languages and does not translate well.

Obviously the structural crises of the old industrialized countries are not those of Latin American structuralist theorizing. When structural rationalization was first discussed in Germany in the 1920s, it referred to the need to reorganize industries with excess capacity, and this is the situation experienced today in a range of basic industries. The apparent reasons are many and various: displacement by new processes and products, changes in international competitiveness etc. The industrial policies in effect during the last decade largely served to stave off adjustment. Industrial concentration has increased as smaller firms have been taken over by larger ones, sometimes only to be closed down. When the large companies are finally forced to undergo drastic surgery the structural

problem is more political than economic as the sudden loss of jobs, sometimes in a one-company town, inevitably transcends the concerns of the owners and becomes a social and political issue.

This asymmetry between growth and contraction is fundamental to the process of industrial development. The rise of new firms and industries is obviously not regarded as a structural problem, although it may change the industrial structure very profoundly. Contraction and closure, on the other hand, make for loss of jobs, money and tax revenues. But without contraction there can be no expansion in other lines of production.

In some cases, international competitiveness is decisive; then the problems will escalate to a political level much more readily. Pressures for public aid will arise from labour, capital, and local Government in consort. So, in one fairly well-defined sense, problems of structure are simply the industrial crises of large and visible companies that have come to the end of the line.

But there are other ideas on what structure means. Today there is much talk of the structural element of the large deficits in the public finances of industrialized countries. In this case, the distinction should be made between effects on the tax base and tax revenues that are automatic, recession-induced and effects that stem from decisions to change tax rates or introduce new expenditure. There are different schools as to budgetary policy in industrialized countries. The size of the deficits has frightened many former Keynesians into thinking that at least structural deficits must be reduced. But in this case the reference to structure is also a reminder of the political realities underlying budgetary policy, which give rise to increasing doubts about the possibility of rational fiscal policy in modern democracies. A related theme is the veto power of interest groups that may paralyse public policy in general, as in Lester Thurow's Zero-sum Society (1980). [4]

In an even larger sense, structural problems are taken to include such things as the malfunctioning of the market mechanism and the economic system as a whole, due to increasing rigidities in the labour market and distortions arising from taxes and subsidies, inappropriate regulations, and corporate power. This concern with the general institutional nature of the economy can be extended, as in the unconventional and imaginative Interfutures (1977) report from OECD, to the social system as a whole, including attitudes and values of relevance. [5] Entitlement psychology, the rejection of authority, the insistence on "quality of life" and environmental protection may then be regarded as structural parameters.

What all such conceptions of structural changes in industrial societies have in common is the conclusion that growth will not be what it was. In the light of historical experience it would not be surprising if a period of unusually rapid growth were followed by some slackening. With the wisdom of hindsight it is also frequently argued that growth in the early post-war period was abnormally rapid. It rested on a constellation of favourable circumstances that could not last or return, above all European and Japanese reconstruction and catching up with the technology of the United States and the life patterns of durable-consumption goods.

What those arguments also have in common is their inconclusiveness, their character of more or less plausible guesses. It is not surprising that they do not persuade everybody, and many economists none the less see no good reason why there should not be as much growth in the future as in the past if the right policies were followed.

Long waves

The recent stagnation has revived interest in the theories of long waves. They have long been out of fashion and been scornfully dismissed by prominent economists, except those with a historical interest. Their poor reputation is not surprising. Among old and new proponents of Kondratiev* cycles and the like, there is a bewildering variety of approaches and interpretations, some of them decidedly woolly. Even the original Kondratiev paper [6] that was published in the Union of Soviet Socialist Republics in 1925 indulged in fanciful speculation on the nature of capitalism, and Marxist economists in the West have picked this up.

The towering figure in this context is Schumpeter. He cannot be dismissed as a purveyor of science fiction. On the contrary, there are many reasons to return to the Schumpeterian concern with the mainsprings of growth in industrial society, technical change and innovation in a broad sense. Schumpeter did not argue the case for the long wave in a spurious manner. He had published his first volume on growth and cycles in 1911 without any thought of long waves, but Kondratiev came to be very prominent in his magnum opus on business cycles. [7] Schumpeter saw those long waves as the result of major innovations with a pervasive impact on the economy, extended over decades. In stylistic simplification he assigned themes to the long swings of the past: steam power for the Industrial Revolution in England in the first half of the nineteenth century, the building of the railways ending around 1900 and growth related to electricity and the automobile in the first half of this century.

In the no-man's land where to this day there is no rigorous theory of innovation and growth, Schumpeter formulated what remains the most sophisticated hypothesis of the interplay between economic and social forces that make for change and resistance to change.

Some of those who pass verdict on the long cycle in Schumpeter seem not to have read him. Even such a distinguished student of technical change as Edwin Mansfield seems to think that the test is whether innovations can be shown to be bunched. [8] Innovations have been laboriously classified, from the eighteenth century to the present. Some bunching has been observed in a way that incidentally may support Schumpeter, but the approach does not seem to be too rewarding. Above all, attemps to quantify change and innovation by listing and counting identified ideas as if they were of equal consequence will not disclose

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*Although Schumpeter wrote "Kondratieff", as was customary at the time and as many authors have spelled it, recently, editors use "Kondratiev", along the now accepted rules for transcribing Russian names into English.

much about technical change, and particularly not the difference between major and minor innovations that were essential to the Schumpeterian vision. Mansfield is sceptical of long waves, but he himself points out the absurdity of a major attempt to chart the flow of innovations (Mensch, [9]) that included the zipper but not the computer. Rosenberg and Frischtak [10], who are also critical of the case for long waves, are not at all interested in the fact that such waves can be observed or are there to be explained but only in the attempts to explain them. They find no evidence that the diffusion of innovations is subject to the kind of influences Schumpeter so eloquently describes, but then it must be admitted that they change his ideas so that they become unrecognizable. They are right in pointing to the weakness of our knowledge in these matters but they under-estimate their opponent. Arthur Lewis comments:

> "Schumpeter was one of our greatest economists, with an extremely subtle mind, stored with historical data, so one cannot in half a paragraph do justice either to his argument or to the wealth of material with which it is illustrated over two large volumes." [11]

Nor can the pretence be made in a brief paper to refute the vision and thrust of the Schumpeterian approach. As Eliasson says:

> "If Schumpeter has not received the analytical wrapping that has been given Walras, it is because formalization is intrinsically harder, and because the profession hasn't tried very hard. It should, and soon." [12]

Those who have not tried at all often seem to think that the Kontratiev down-swing is due to some fortuitous dearth of innovation, hence the concern with bunching. The tendency is to identify innovation with growth. But Schumpeter's fundamental insight was that growth itself was likely to come in bursts and to have a destructive impact as well. In the first phase of the cycle innovators bid resources away from other producers, they are imitated, and the resulting demand makes for a buoyant business climate with strong booms and mild recessions. But eventually the build-up of the new technology and its necessary accompaniments bring on the second phase when increased productivity leads to the weeding out of obsolescent producers and some of the weaker newcomers too. There is a structural crisis, the booms are shorter and weaker, the down-turns longer and deeper.

Arthur Lewis sums it up as "twenty-five years of voracious investment followed by twenty-five years of somnolent digestion." Why 25 years? Well, that is what history suggests. Many things may be different now. There is the presence of a Japanese economy in which innovation is subject to special attention and a number of dynamic economies in the third world.

A belief in long waves, whatever that might mean, is not necessary to note the relevance of the Schumpeterian view to the present situation. No one who has lived through the rise of the new electronics industry from the birth of the transistor in 1949 to the present impact of microchips and computers could fail to see in this a splendid manifestation of the Schumpeterian parable. The similarities between the present situation and that of the 1920s and 1930s are also rather striking.

All this rather strengthens the conclusion that industrialized countries as a whole will not soon return to the growth rates of the 1960s.

Uncertainty and the oil market

Such a conclusion is also strengthened when the oil market, which has become a crucial pivot of the world economy, is considered. At the time of the first oil shock in the 1970s many politicians in the third world saw it as evidence of the potential of commodity power. It was objected that oil was a very special case, and soon it came to be so regarded. Oil exporters were in fact so aberrant that they had to be classified separately in statistical analyses of the world economy. This was unfortunate. Precisely because industrialized countries are, especially in the short run, so dependent on oil, what has happened in the petroleum markets provides a particularly vivid illustration of the need for new international economic orders in the post-colonial world.

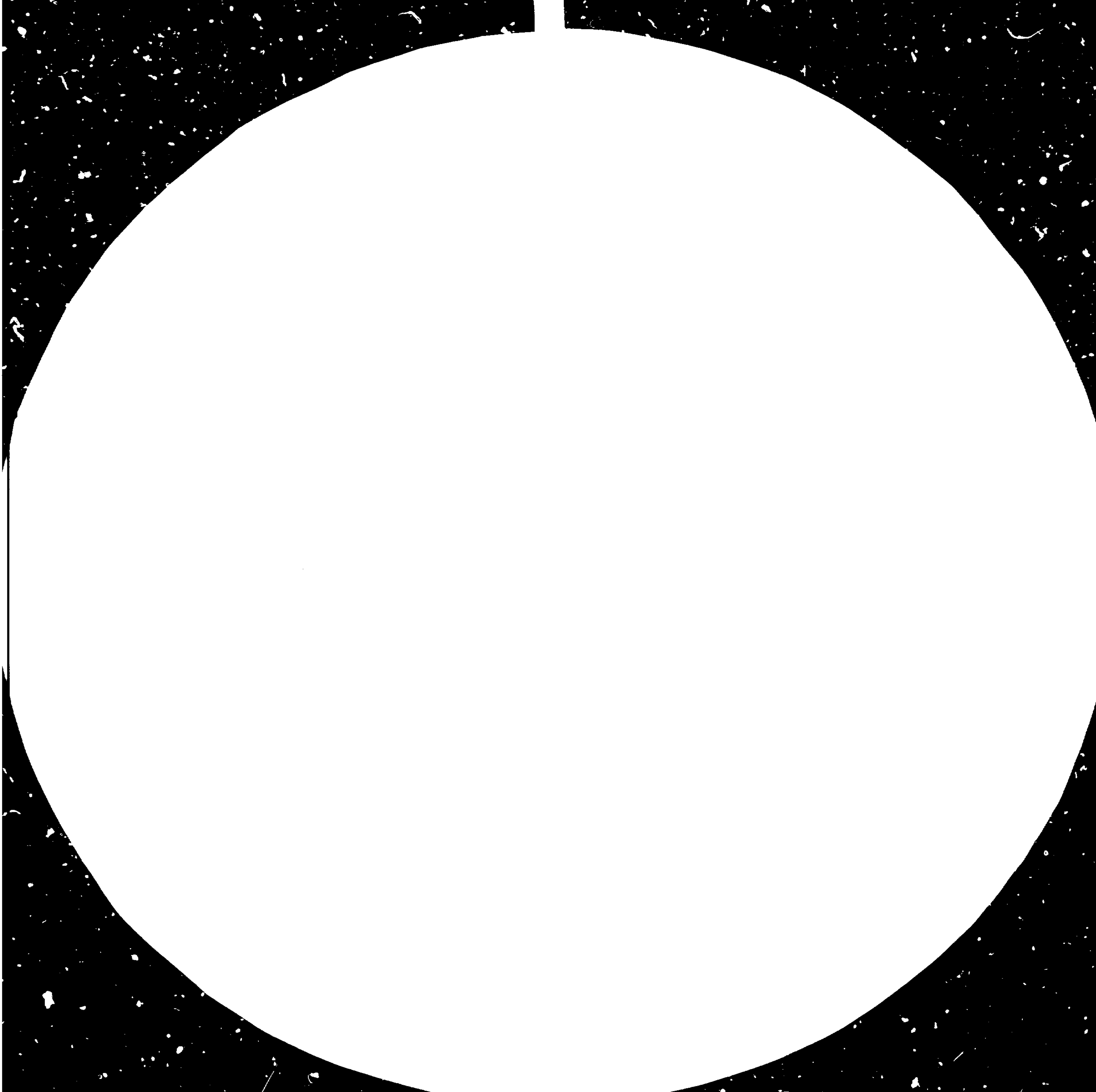
No geopolitical discussions are necessary to argue that when countries are so dependent on undisrupted supplies as the industralized countries have become, they will seek arrangements to guarantee them. From the beginning of this century, European powers without oil of their own have tried to secure their sources by political control, and the enormous cost advantage of sources in the Middle East and elsewhere also attracted United States oil companies.

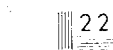
The international oil companies and their cartel have been subjected to much opprobrium, not least in connection with bribery and corruption and rough dealings in general. This, and the suspicion that the only use made of market power must be abuse, deflected attention from the fact, perhaps more easily appreciated with hindsight, that their vertical integration and horizontal co-operation produced an intricate and sophisticated system that offered the world remarkable stability in prices and supplies.

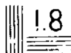
When control over Gulf oil passed into the hands of Governments in the Middle East and their cartel, the market structure changed. The OPEC price raises in the 1970s may simply have brought the price of crude closer to those of alternative energy supplies and thus conferred a pseudo-Ricardian rent on the owners. But the evidence of peace and harmony between the members of the cartel is not overwhelming. Uncertainty about energy prices hovers over the world economy, the risk of political upheavals, and the vulnerability of most consumer countries to disruption of supplies is as great as ever, although energy consumption has been reduced in response to higher prices.

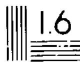
The case for a new international energy order is strong but it seems more attractive to petroleum importers than to the exporters, and is a non-starter at present.

There has been much discussion of the exact role that the oil shocks played in the trend break that occurred in the 1970s, but it cannot be denied that they set off great turmoil in the international monetary and financial system; the monetary uncertainty appears to be one of the factors deterring investment. Now that oil prices are under pressure there is a temptation to think that the storm is over, but the probability that it will all happen again is very real and cannot fail to be a damper on growth.









MICROCOPY RESOLUTION TEST CHART

Development in the South without growth in the North

If the view is accepted that the growth trend for the North over the next decade is more likely to be, say, 2 rather than 5 per cent, what follows? In the first place, many large debts will prove unsustainable. As a good rule of thumb foreign debts are manageable so long as the rate of interest is less than the rate of growth of export earnings. In recent years this has not been so, which has triggered a number of dramatic rescue operations involving, for the most part, rescheduling on current interest terms, which pushes the problem further into the future.

Most of the present debt was contracted on the premise of reasonable growth in world trade, but if income and import demand in the North instead remain sluggish for a longer period, the questions are whether the borrowers alone should pay the cost of the miscalculation, and whether they will. In Latin America, where debt service in many countries currently requires a large export surplus, some kind of moratorium or unilateral reduction of interest payments is already a live issue. Banks are naturally reluctant to start writing off debts to one client for fear of starting a cascade of demands, but they are already beginning to sell off debts to one another at a discount that suggests realistic expectations.

The dramatic scenarios of crash and collapse in the international financial system seem less and less plausible. The system has shown itself to be robust enough to absorb shocks that only a few years ago would have been considered fatal. But how soon it will be possible to restore a flow of finance to developing countries that will be adequate for the large investments that are necessary in energy and infrastructure is impossible to say given the present lack of interest of both Governments and banks in the North.

The conclusion must be that developing countries are not likely to be able to make up for sluggish export revenues by increased borrowing. Development finance may well go into a phase of more restrained growth.

South-South trade and co-operation

It is only natural to be discouraged about South-South trade prospects. In spite of decades of talk about it, there is little to show, and protection remains, for the most part, as high against exports from other developing countries as against exports from the North, and the financial constraints are as severe. But with a retreat from growth in the North and without the same flows of finance, the choice might be to settle for growth rates that would on average only just keep up with population growth or to turn seriously to the opportunities in the South itself. The expanding markets in the oil-exporting countries have already meant much to the newly industrialized countries, but they will have strong reasons to work up markets in the more populous but less prosperous regions. It will require financial facilities, but financial developments in the South have been remarkable in the last decade, and the case for international financial institutions set up by the South for the South is no longer Utopian.

Probably too much should not be expected from multilateral diplomacy in the promotion of trade between developing countries. Bilateral contacts are likely to be more effective in the exploration of this great potential. The third world is now so diversified that it should only be a matter of time before it can liberate its growth ambitions from the temporary stagnation in the North. The rise in recent years of counter-trade, the modern form of barter, is a symptom of the failure of the financial and monetary system, but it also demonstrates the opportunities and the need for international trade, and much of it has taken a South-South character.

The North-South dichotomy

The distinction between developed and developing countries grew out of the attempt to orgnize the post-colonial world at a time when the North had much to offer and the South seemed to have much to gain from solidarity and a common stand. But will the forces that have so far held together developed and developing countries in a wide variety of international negotiations continue to do so when the pattern of interests changes? The North-South talks have become increasingly unproductive and stale-mated, and the continuing differentiation between developing countries should make for types of co-operation other than joint opposition to the North. Similarly, the conflict of interest between countries in the North are intensified by the structural crises of their economies. On the other hand they will be attracted by those parts of the third world where growth can be maintained or on which they remain dependent for vital supplies.

Whether this will be good or bad will depend on whether it will strengthen and stabilize conditions for trade and finance or bring increasing tension and conflict. The purpose of this paper is not to make rash speculations, but to insist that, however strong the present recovery of the economy of the United States may seem, there are many reasons to expect growth in the old industrial centres to remain muted for a decade or more, and that it might be wiser to rethink international strategies on the basis of such a premise than to expect miracles. Governments can call for waves of growth and so can man, but will they come?

References

1. Dragoslav Avramović and others, Economic Growth and External Debt (Baltimore, Johns Hopkins Press, 1964).

2. Goran Ohlin, Aid and Indebtedness (Paris, Organization for Economic Co-operation and Development, 1966).

3. Lester B. Pearson, Partners in Development: Report of the Commission on International Development (New York, Praeger, 1969).

4. Lester C. Thurow, The Zero-Sum Society (New York, Basic Books, 1980).

5. Organization for Economic Co-operation and Development, Interfutures: A Comparative Evaluation of World Models (Paris, 1979).

6. N.D. Kondratiev, "The major economic cycles" (in Russian), Voprosy Koniunktury, vol. 1, 1925, pp. 28-79. The paper was published in abbreviated form in German the following year and caught the attention of Schumpeter and other Western scholars: "Die langen Wellen der Konjunktur", Archiv für Sozialwissenschaft, 1926. It appeared in English as "The long waves in economic life", Review of Economic Statistics, vol. 17, 1935, pp. 105-115 and has been reprinted frequently, as in Lloyds Bank Review, July 1978. With another article it reemerged in German in Die langen Wellen der Konjunktur: Beiträge zur Marxistischen Konjunktur- und Krisentheorie (Berlin, Edition Prinkipo, 1972). There have no doubt been many other translations.

7. Joseph A. Schumpeter, Business Cycles (New York, McGraw-Hill, 1939).

8. Edwin Mansfield, "Long waves and technical innovation", American Economic Review, vol. 73, 1983, pp. 141-145.

9. Gerhard Mensch, Stalemate in Technology (Cambridge, Ballinger, 1979).

10. Nathan Rosenberg and C.R. Frischtak, "Long waves and economic growth: A critical appraisal", American Economic Review, vol. 73, 1983, pp. 146-151.

11. W. Arthur Lewis, Growth and Fluctuations 1870-1913 (London, George Allen and Unwin, 1978).

12. Gunnar Eliasson and others, Policy Making in a Disorderly World Economy (Stockholm, Industrial Institute for Economic and Social Research, 1983).

INDUSTRIALIZATION: WHERE DO WE STAND? WHERE ARE WE GOING?

H.W. Singer*

The Lima target,** that the share of developing countries in total world industrial production should be increased to at least 25 per cent by the year 2000, is looking less and less likely. Between 1966 and 1980 the share of developing countries in world manufacturing value added increased steadily, but not fast enough to achieve the 25 per cent target by 2000. The increase from 8.1 per cent in 1966 to 11.0 per cent in 1980 suggests a "naive" straight-line projection to 15-16 per cent in 2000, and 2020 rather than 2000 as the achievement of the target. Moreover, since 1980, the share has been stagnating at 11 per cent, pushing the achievement date further into the future. The share of the developed market economies has declined sufficiently to put the Lima target within reach, but the lion's share of that decline went to the centrally planned economies rather than to the developing countries:*** between 1966 and 1980, 8.8 per cent went to the former and only 2.9 per cent to the developing countries. Since 1980, the whole of the declining share of the developing market economies has gone to the centrally planned economies and none to the developing countries. Thus, recent trends can be summarized as follows:

(a) Limited progress has been made in redressing the distribution of world industry in favour of the developing countries, although not at the pace targeted at Lima and not much more than in line with the increased share of world population in the developing countries;

(b) Redistribution of industry has taken place more within the industrialized countries than between industrialized and developing countries;

(c) The intensified world depression of 1980-1982 has brought the process of redistribution to a halt. This also happened during the earlier, milder recession of 1975-1977, suggesting that redistribution towards the developing countries is functionally connected to the growth of the global economy. Global stagnation hits the developing countries more and brings the process of redistribution to a halt.

The last statement is of special significance in the present context of severe recession and the widespread evidence of the multiplier effects of the recession in the industrialized countries on conditions in the developing countries. 1/ The multiplier effect between a slow-down in the

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**Adopted by the Second General Conference of the United Nations Industrial Development Organization, Lima, Peru, 12-26 March 1975 and later adopted by the United Nations General Assembly.

***China is excluded because of statistical problems.

industrialized countries and the exports of manufactures from developing countries has been estimated as no less than 8.4:1. 2/ It seems easier for developing countries, at least within the framework of the present international system and in the light of experience during the past decade, to maintain the differential* of 4-5 percentage points in their growth rate of manufacturing value added above that of industrialized countries when the world economy as a whole is growing at the healthy rate of the 1960s and early 1970s. In other words, a scenario of the industry of developing countries growing at 8-9 per cent per annum when that of industrialized countries is growing at 3-4 per cent is more plausible than a growth of 4-5 per cent for developing countries when that for industrialized countries is zero. When it is considered that the Lima target was proclaimed precisely at the end of a run of years of healthy growth in the world economy, it sounds to have been quite plausible at the time.

The connection between global growth and industrial restructuring along the lines of the Lima target has a precise national counterpart. The domestic development strategy of "redistribution with growth" recommended first by the International Labour Organisation's Employment Mission to Kenya 3/ and then a book 4/ sponsored jointly by the World Bank and Institute of Development Studies is based on the same principle, i.e., that redistribution, whether to poorer population groups or countries, is easier within the context of overall growth when it concerns the distribution of increments or improvements and one side is not made worse off in order to benefit the other.

So harmonious restructuring in the context of interdependence in a vigorously growing world economy is clearly the best scenario. But: is it within reach? There is agreement that it is not within reach in the present disorderly state of international economic relations, since the break-down of the Bretton Woods system beginning in 1971.** Disagreement begins on whether it is possible with reforms and a return to "sensible" policies all-round to return to the best scenario under something like a restored Bretton Woods system or whether a new conception is needed such as the new international economic order, which bears a striking resemblance to the Keynesian ideas preceding the Bretton Woods Conference. And what is the best course of action - the second-best course - if neither of these paths to global interdependence in a vigorous world economy proves to be feasible? So, where are we going?

Brandt Reports

The belief, or dream, of such a best solution is still the conventional wisdom, although increasingly proposals in this direction also include complementary or contingency second-best solutions, prominent

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*Required as of 1975 to achieve the Lima target; the present differential would be higher.

**On 15 August 1971 President Nixon suspended the convertibility of the dollar into gold at the fixed exchange rate forming the basis of the Bretton Woods system.

among which is the development of closer South-South links or other methods of partial rather than global integration as well as more inward-looking development and industrialization strategies. The Brandt reports, with their philosophy of mutual benefits, symbolize the attempt to travel the "best" route of global integration, while being eclectic, or ambiguous, about the choice between the return to Bretton Woods versus the new international economic order, or about the importance of partial integration along South-South lines or more inward-looking and basic needs-oriented national policies. There is a bit of everything for everybody, as perhaps is to be expected from a collective body such as the Brandt Commission. But in this very eclecticism and the inclusion of elements other than full integration into the world economy "as is", the Brandt reports turns away from the all-out advocacy of export orientation or outward-looking industrialization and the all-out condemnation of import-substitution and inward-looking industrialization that characterized the last decade of the Bretton Woods system before its clear disruption in, say, the period from 1964 to 1974.

Two non-integrationist factors emphasized in the Brandt reports that have now been broadly accepted even in the industrialized countries relate to the need for greater autonomous technological capacity in the developing countries, leading to better technological adaptation, more efficient investment processes and better bargains from the transfer of technology, and the related need for a stronger and better-informed bargaining and control position vis-a-vis the transnational corporations that have played a key role in recent industrialization in developing countries. In both these respects, the current emphasis represents a return to some of the sources of the original recommendations of import substituting industrialization (ISI), an industrialization process deriving from the potentialities of existing domestic markets as a starting point for industrialization.

Of the two Brandt reports, the first (North-South), 5/ written in 1979 before the onslaught of the New Great Depression of 1980-1982, is understandably more integrationist and more optimistic about the reformist route to integration. The second report (Common Crisis), 6/ written in 1983 is, also understandably, less concerned with industrialization policies that are by nature longer-term, and more concerned with rescue, protection and emergency action.

Import substitution: old-style and new-style

When after the Second World War, the disadvantageous position of developing countries under a system of integration into the global system "as is" was emphasized, initially by economists attached to the United Nations, and such methods of partial de-linking as ISI were advocated, developing countries export-orientation was virtually identified with primary commodity orientation. Export substitution into manufactured goods by developing countries seemed very distant then; their share of world manufactured exports around 1950 was perhaps of the order of 2-3 per cent. Hence the argument in favour of inward-looking policies was inextricably mixed up with arguments in favour of industrialization as against remaining restricted to a role of primary producers. On this, the subsequent advocates of export-oriented industrialization were in agreement with the early advocates of ISI.

On the key issue, of unfavourable tendencies both in terms of prices and export volumes for countries specializing in primary commodity exports, surely subsequent developments have justified the doctrine of "terms-of-trade pessimism". The issue could remain in some doubt during the period of great buoyancy of the world economy (say 1955-1973), although even for that period the balance of the evidence is in line with the earlier predictions, certainly if real export earnings (capacity to import) as well as only relative prices are taken into account. But today, at the beginning of 1984, there can be no doubt that the predicted terms-of-trade catastrophe has happened. At the end of 1982, non-fuel primary prices had fallen 45 per cent below the 1951 level, admittedly a peak year, in real terms compared to manufactures, and most faced falling or stagnant demand in industrialized country markets. Oil is the exception that proves the rule: the break in prices was achieved by a producer cartel, not by market forces. The view that market processes had to be set aside before countries could be expected to play a role as contented and reliable suppliers of primary commodities was pressed by Keynes and accepted at Bretton Woods. It underlay the negotiations of the International Trade Organisation (ITO) in 1947, but was then forgotten when the ITO Charter was not ratified. It was only after the failure of the ITO that terms-of-trade pessimism was preached.

The advocacy when viewed from the situation of industrialization in preference to primary commodity production, which of 1949-1950 inevitably had to be based on import substitution, was never entirely or even mainly based on price pessimism alone. Industrialization was associated with greater linkages, more dynamic effects, economies of scale, learning-by-doing and skill development. It is true that in the absence of input-output data this view was more based on intuition and the experiences of other late comers in industrialization such as the United States and Federal Republic of Germany, as embodied in the writings of Hamilton and List, and then Japan. The fact that this view proved only too popular in many developing countries where it often led to a neglect of domestic agriculture and a failure to use agriculture-industry linkages, does not disprove its validity, although it shows that it could be more readily misinterpreted or misused than its early advocates realized. Reliance on the dependability of export markets and corresponding willingness to incur indebtedness has misled developing countries at least as much as the doctrines of ISI. The lesson seems to be that no doctrine, whether ISI or export-oriented industrialization (EOI), should be a substitute for efficient investment strategies based on the circumstances and knowledge of the resources of each country and above all for higher X-efficiencies* based on greater technological capacity and the development of human capital.

With the benefit of hindsight, the possibilities of export substitution were underrated, partly because of the failure to anticipate the vigorous global growth of 1950-1973. ISI should have been proposed as a temporary and transitional strategy only; more attention should have been paid to the time sequences and linkages binding the growth of the domestic market with the development of exports; product cycles in manufactured goods should have been more closely studied; and the economic history of

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*Efficiency in combining and managing inputs in specific plants or enterprises.

the late comers, such as the United States of America and Germany in the late nineteenth century, should have been more carefully studied from this angle. But none of this invalidates the appropriateness of ISI to the role of the developing countries in the immediate post-war world of 1948-1950 as it appeared to contemporaries, overshadowed by the experiences of the Great Depression of the 1930s and with the golden years of Bretton Woods still to come.

Import substitution has now come back to the forefront of development economies in three ways:

(a) Since the developing countries have now become collective large-scale net food importers, with widening deficits, substitution of food imports by larger local food production has become a universal and fashionable sermon to the developing countries. In this field, self-sufficiency in import substitution has become not only acceptable but also universally preached. Is the objection then not so much to the idea of import substitution but to that of industrialization? Greater food self-sufficiency sets free foreign exchange resources, which are then available for increased imports of manufactured goods (from the point of view of developing countries, capital goods and other essential development inputs); is this why food ISI is so much more respectable in the eyes of conservative analysts in the North than industrial ISI, which has the opposite effect of reducing manufactured imports, at least when it is effective? Once again, the specific circumstances of the 1948-1950 world must be remembered: the developing countries were still collective food exporters, so food and agriculture could not rank as high priority for import substitution;

(b) Another way in which import substitution has come back into fashion is through the growing awareness of the "big hole" in the world economy - the absence of South-South trade. By all conventional arguments, South-South trade should be more intense than North-North trade: the developing countries are now more differentiated and the latent complementarities between them are greater than is the case for the industrialized countries. In spite of this, South-South trade has remained a minute fraction of world trade and of North-North trade. In 1980, South-South trade in manufactures was $38.6* billion while that of the developed market economies alone was $622.6 billion. That is a disparity of 16:1, but considering that the population of the South is about seven times that of the developed market economies, the real disparity per capita is about 112:1. There is nothing in economic logic nor in underlying economic reality to explain, let alone excuse, such a huge disparity. Its reduction could go a long distance towards the Lima target, and perhaps more important, the tremendous potential for trade expansion that the "big hole" implies could go a long way towards providing the global economy, and not least the industrialized countries, with the missing engine of growth. The institutional, financial, technological, logistic and, not least, the political obstacles are formidable, but the prize should surely justify steps to start filling this gaping hole. This can be conceived either as import substitution at a higher level, "collective self reliance", or as export-orientation within the Southern

*All dollars are in US dollars.

world. This ambiguity shows that in some ways the dichotomy of ISI or EOI may have outlived its usefulness, and that the future lies in a synthesis of the two;

(c) A major revival of ISI in a new and improved form is involved in the shift in development thinking towards basic needs strategies, the establishment of a reduction in poverty rather than the growth of gross national product (GNP) as the real development objective. This implies an increase in domestic mass demand of a less import-intensive nature than the demand of upper-income groups with high purchasing power for imported consumption goods. At the same time, this alliance of basic needs and ISI also creates preconditions for greater technological autonomy, use of appropriate technologies and the development of domestic capital-goods production. The latter point is of special importance since it counteracts one the of weaknesses of ISI that has been a major source of criticism, i.e., that it protects and encourages the domestic production of luxury consumption goods in limited domestic markets while giving negative effective protection and discouraging the production of capital goods and other inputs needed by the protected finishing stages. Logically, the adoption of basic needs strategies and adoption of appropriate technologies should precede the adoption of ISI, both because the new structure of demand and technology will automatically reduce import demand for manufactures without the need for specific intervention, and because ISI will then relate more to vertically integrated processes than to finished products.

Export-orientation: old-style and new-style

The favourable international setting during the "Golden Years" of the Bretton Woods era was accompanied by a shift in thinking away from ISI - and scholars turned to accumulating empirical evidence of the horrors of ISI and the blessings of EOI. This leaves three questions: First, to what extent the success stories of EOI, such as the Republic of Korea, were dependent on the specific, and from the present viewpoint temporary, background of the Golden Years? Secondly, to what extent were the EOI successes achieved by a limited group of newly industrializing countries (NICs) generalizable, that is, to what extent were the EOI praises based on a fallacy of composition? Thirdly, to what extent were the experiences and strategies of the successful export-oriented NICs correctly interpreted?

First, the data seem to contradict doubts about the dependence of EOI success upon the expanding global economy of the Golden Years. If the Golden Years are identified with the decade of the 1960s and the story pursued to the end of the 1970s (excluding the New Great Depression beginning in 1980), it is seen that the share of developing countries in world manufactured exports continued to grow, perhaps even at an accelerated rate. Over the eight years 1963-1970, this share increased only from 4.2 to 5.0 per cent but in the eight years 1971-1978 it increased from 5.2 to 8.1 per cent, at three or four times the previous rate. Thus, while the less favourable international background clearly slowed down the industrialization of the developing countries, their growth rate of manufacturing value added (MVA) fell from 8.0 per cent during the period 1963-19.3 to 5.8 per cent during 1973-1980, their export-orientation actually increased during the slow-down. Another way of measuring the degree of integration of developing country manufacturing into the world economy is by the ratio

of the shares of their participation in world export of manufactures to that of their share in world manufacturing production. This ratio increased from 0.52 in 1963 to 0.63 in 1970 and continued to increase at an accelerated pace of 0.84 in 1980. Thus, although the average export-orientation of the developing countries in manufactures was still less than that of the industrialized countries, they had come a long way within 17 years to reduce the gap in trade-orientation. The manufactured exports of the developing countries to developed market economies increased from only 11 per cent of their manufactured imports from them in 1963 to 17 per cent in 1970 and continued to grow, again at a hardly diminished rate, to 25 per cent in 1980.

There are two catches in this superficially reassuring picture. The first concerns the debt situation. In a deteriorating international climate, the continuing strengthening of the role of NIC manufacturing in the global trade picture was maintained at the cost of accumulating debts, an increasing proportion of them short-term debts at floating interest rates. Export-led growth had really become debt-led growth. This meant that the whole continued process of global integration rested on shaky foundations. More, export earnings had to be increased, not to finance continued development but in order to service increasing debts with shortened maturities and rising real rates of interest. The [illegible] catch was that the slow-down of the 1970s, even the Little Depression of 1975-1977, was but the prelude to the New Great Depression of 1980-1982 when the net inflows of capital to developing countries ceased, real rates of interest rose to unprecedented levels, industrialized country markets shrank and tightened and the impact of increased protectionism fell with special severity on the manufactured exports of the mature industries in which the developing countries had begun to establish more significant market penetration. Moreover, protectionism assumed its worst, and most intractable form, that of quantitative restrictions and controlled or managed trade. EOI turned out to be really import-oriented de-industrialization (IOD), at least in the basic and mature industries on the part of the industrialized countries; it came up hard against the facts of life when under the impact of heavy domestic unemployment the industrialized countries became unwilling to play the IOD game, also known as restructuring. As already seen, even the increase in the share of the developing countries in world industrial production disappeared; the differential that was to open the gates to reach the Lima target vanished. And this was not equally shared progress, but equally shared actual declines in manufacturing value added (MVA). Even seasoned and veteran enthusiasts of EOI were shaken:

> "The financial and economic integration of the world economy had numerous benefits, but has also contributed to the present predicament of the debtor countries ... The expansion of international markets grew to some extent beyond the control of national authorities ... The rapid development in the world economy made it difficult for national governments to adjust and adapt their economies. Economic measures in some of the larger countries had profound implications for the functioning of the international economy even though they were taken primarily with domestic objectives in view." 7/

And the Managing Director of the IMF now discusses "The benefits and constraints of interdependence". 8/ The old certainties are there no more.

In view of recent trends, a discussion of the second question about EOI, whether in the attempt to spread it more widely between developing countries it would not prove to be subject to a fallacy of composition, would be largely hypothetical. But it has been calculated (on the basis of 1976 data) that if all the developing countries had the same level of manufactured exports as Hong Kong, Republic of Korea, Singapore and Taiwan Province of China, their share in the manufactured imports of the industrialized countries would exceed 60 per cent, as distinct from an actual share of 17 per cent. 9/ Several sectors would show imports in excess of the entire domestic market.

Thirdly, concerning the proper interpretation of EOI policies, it may be useful to discuss this on the basis of the experience of the Republic of Korea, since that country is universally accepted as the leading model of successful EOI. Export-orientation is often unthinkingly identified with liberal trade policies, absence of exchange control, price systems determined by free markets, a "soft" non-distorting state etc. Because of such intuitive association, it is widely assumed that the Republic of Korea would also display these presumed characteristics of an export-oriented economy, but actual research shows such views to be a complete myth. The Republic of Korea is a country where a strong State overrides market forces without hesitation, with an effective tightly planned economy, with strict import and foreign exchange controls, an essentially nationalized banking system, and a private sector organized in Government-sponsored trade associations for easier control. It is as far removed from free market policies as it is possible to be.

What the Republic of Korea teaches is the effective interweaving of policies of import substitution and export promotion, the use of controls to guide market forces and increase X-efficiency. The import controls and other related preferential treatment, including access to the profitable home market, are closely linked to export performance and limited to industries with export potential. Import substitution serves as a protective ring for export industries, and the home market becomes a base for exports, with domestic profits helping to finance exports and the domestic market providing the export industries with the necessary infrastructural base.

The best description of the purposeful interweaving of ISI and EOI that lies at the root of the strategy of the Republic of Korea has been given in the sequential scheme proposed by Sung Sang Park. 10/ Although put forward in the form of a general framework, it is clearly derived from that country's experience and distils their strategy. The basic principle is to find and promote industries that are both export industries and essential domestic producers so that the measures associated with ISI and EOI can both be used in proper combination and proper sequence. Park's scheme is in four stages:

1. Promotion of production of essential inputs, such as fertilizer and cement.

2. Import substitution for light and technologically easy industries, such as textiles and radios.

3. Development of industries created in stages 1 and 2 into export industries, and vertical deepening by producing inputs and intermediary products for the industries so far created.

4. Completion of import substitution by establishing domestic production of capital goods; conversion of industries producing inputs and intermediary products in stage 3 into export industries.

It will be noted that stage 1 prevents the import substitution of stage 2 to come to a premature halt for lack of vertical "depth", and that subsequently import substitution and export promotion go hand-in-hand (preventing import substitution from coming to a premature stop because of the limitations of a domestic market), until by the end of stage 4 a mature and balanced economy has emerged - in short, the Republic of Korea of today. While this particular scheme suits the conditions in the Republic of Korea, similar schemes could apply to most other developing countries, except perhaps the smallest and the largest. At any rate, such combinations and policy sequences seem a more promising approach to the industrialization problems of developing countries today than to continue with doctrinal discussions of ISI and EOI and with the swings of fashion with changing circumstances from one to the other.

Notes

1/ H.W. Singer, "North-South multipliers", World Development, vol. 11, No. 5 (1983).

2/ Ibid., pp. 452-453. This estimate is based on data in World Bank, World Development Report, 1982 (Washington, D.C.), pp. 32 and 33, in turn based on the World Bank's own global model.

3/ Employment, Incomes and Equality - Strategy for Increasing Productive Employment in Kenya (Geneva, International Labour Organisation, 1972).

4/ H. Chenery and others, Redistribution with Growth (Oxford University Press, 1974).

5/ Independent Commission on International Development Issues (Brandt Commission), North-South: A Programme for Survival (London, Pan Books, 1980).

6/ Brandt Commission, Common Crisis North-South: Cooperation for World Recovery (London, Pan Books, 1983).

7/ Barend A. de Vries, International Ramifications of the External Debt Situation, AMEX Bank Review, Special Paper No. 8 (November 1983), pp. 6-7.

8/ J. de Larosiere, Speech to the American Enterprise Institute, 5 December 1983, reported in IMF Survey, 5 December 1983, p. 380 (italics added).

9/ W.R. Cline, "Can the East Asian model of development be generalized", World Development, vol. 10, 1982, pp. 81-90.

10/ S.S. Park, Growth and Development: A Physical Output and Employment Strategy (London, Martin Robertson, 1977), pp. 129-133.

INDUSTRIALIZING SMALL COUNTRIES

Helen Hughes*

Introduction

Many developing countries have advanced into an "industrializing" stage of development. Manufacturing forms a significant proportion of their secondary employment and output, and secondary industry has grown in relation to mining, agriculture, fishing, forestry and other primary activities. Some developing countries are now newly industrialized or semi-industrialized. They are so well advanced in the industrialization process in terms of capital resources, technological strength and human skills that at the margin they are able to compete with old industrial countries. With such notable exceptions as Hong Kong and Singapore, most of the areas and countries that have been making a major industrialization effort since the Second World War are of medium or large size in population terms, that is, they have a population of more than five million.** In contrast, most of the developing countries that have yet to industrialize are small. Many of the small developing countries have only recently become independent and some are still colonies. However, they are large in number. Of the 133 developing countries for which population data are available, 78 have a population of less than 5 million, and of these 49 have a population of less than 1 million. Many of these countries are small islands in the Caribbean, the South Pacific and the Indian Ocean. Others are landlocked countries of sub-Saharan Africa and central Asia. Some have grown very strongly, others not at all (Balzic-Metzner and Hughes). Most wish to industrialize.

The small countries have an almost insignificant share of the total population of developing countries, but they are politically important at the international level, through the United Nations system of one country, one vote.

The very considerable literature concerned with industrialization has thus far given little attention specifically to the industrialization problems of small countries, although industrialization policy advice to small countries has become a major concern of international and national agencies and the consultants that serve them. Small countries are now being given much more aid to industrialize than was ever the case for medium- and large-size countries. It thus seems timely to examine the issues that arise in theory and practice when small countries begin to industrialize.

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**The cut off point commonly used for small has dropped from a population of 15 million in the 1950s to 5 million in the 1980s with increases in living standards and hence in total national incomes of small countries, and with the rise in their numbers (cf. Robinson, 1960 and Jalan, 1982).

How small is small?

Population is not, of course, a reliable indicator of size from an economic point of view. Population density is an important factor in production and in determining market size. The territories of some small countries are scattered over very large land or sea areas. Difficult terrain can exacerbate problems of distance. High domestic transport costs can thus divide a country into three, four or more very small sub-markets. Papua New Guinea is an example of a country that has both large sea distances and difficult terrain.

On the production side, the size of the population is affected by levels of education, technial skills, entrepreneurial experience, and the willingness to acquire and import such skills. If a country is prepared to specialize in production its resources will go further than if it spreads them thin and wide.

From the point of view of domestic market size, per capita income is a critical factor. The market is roughly equivalent to the product of population and per capita income.

Population growth is a factor. Rapid population growth might bring the promise of becoming a medium-size country in the future, but the costs of such growth are likely to be so great that they undermine not only economic progress but social and political stability, and thus the very viability of the country.

Important modifications thus have to be borne in mind, but population size is nevertheless the principal factor in determining how much and what sort of industrialization a country will find appropriate. A "micro-country" with a population of 100,000 or less has different options to one with a million inhabitants, and options change further as population increases to 5 million and more. An analysis of the factors that determine success in industrialization, and the experience of industrialization to date, does not, however, suggest a correlation between size and industrial success. Success depends on the appropriateness of the industrialization policies of a country to its particular conditions. The hypotheses explored in this paper relate to the four main effects that smallness has on industrialization possibilities. Firstly, small countries have very limited opportunities for import substitution strategies. Secondly, their opportunities for exploiting internal and external economies of scale in production (including sales and marketing) are limited in an absolute sense by the size of the labour force and the capacity to absorb immigrants, so that small countries are restricted in specialization options and must choose their industries carefully to ensure competitiveness and an ensuing build-up of comparative advantage in specific areas of industrial production. Thirdly, the choice of techniques of developing countries is strictly limited to those appropriate to their level of development and productivity, which must be reflected in factor prices of land, labour, capital and entrepreneurship. But, fourthly, the very limitations that smallness imposes have offsetting advantages in policy formulation and implementation, which, if properly exploited, can make industrialization in small countries remarkably successful.

Limits to import substitution and export possibilities

Some manufacturing activities can be economic, given appropriate technology choice, in even very small microcountries. Freight costs, the need for freshness etc. give natural protection. They include such semi-service activities as baking, dry cleaning, printing, bottling aerated and flavoured water, preparing structural materials for construction sites and motor vehicle and other mechanical maintenance. Beyond such manufacturing endeavours, costs of production for the domestic market quickly escalate in small countries. Even clothing and footwear manufacture has marked economies of scale and cannot compete with imports of mass consumption goods So do such early industries as grain milling, fats and oils processing for cooking and soap, food canning, brewing, weaving and cement production.

Most small countries, even the agriculturally advanced ones, do not have the quality or quantity of primary production output required for processing on an economic scale. Small coffee-producing countries are an example. In most cases it is uneconomic for them to process coffee for the domestic or the export market. It is more economic to export coffee beans and import soluble coffee.

Protection, in the form of tariffs, import restrictions or subsidies, is needed to start up all but the service-related industries, and it usually escalates with each new activity. Each increase in protection raises costs of living and wages, and reduces export opportunities in manufacturing and other sectors. The economic base of small countries is too small to make it possible to cross-subsidize exports out of domestic market rents, which is what protection in the home market with offsetting subsidies for exports means. Nor is it possible to allow protected domestic producers to become efficient through internal competition, as has happened in a number of industries in such a very large country as Brazil. In a small country there is only room for one or two producers in most industries if economies of scale are to be reaped at all. Not surprisingly, the only small areas or countries that have succeeded in industrializing have been those like Hong Kong, which did not protect manufacturing for the domestic market at all from the start, those like Singapore, which only protected manufacturing to a very limited extent, or those like Uruguay, which greatly reduced protection. The smaller a country in terms of market size, the less protection it can afford without crippling its economy. There are many examples of unsuccessful attempts at industrialization through protection by small countries.

Small countries must export, but winning export markets is difficult. Since raw material bases are generally small, particularly where agriculture has not been well developed, the option of such labour-intensive primary product processing as fruit and vegetable canning is not available.

Small countries cannot compete in mass markets that require large and regular volumes of production, such as mass consumption clothing or textiles. A small country cannot compete in industries that mean filling orders for large mail-order houses. They must find gaps in large markets. The sort of activities in which they can be successful include such items as hand-knitted clothing, specialized tropical clothing, especially if this is combined with supplying a local tourist trade, and

the supply of high-quality fresh and canned tropical fruit and flowers. A wide range of opportunities is developing in the assembly of specialized equipment. The smaller the country, however, the narrower a range of such activities it can afford if it is to benefit from external as well as internal economies of scale.

The absence of economies of scale extends to freight costs. Until trade builds up freight costs are high, and exports are difficult to develop while such costs are high. Small countries have to choose their exports carefully, particularly at the initial stage, so as not to incur heavy freight charges. They must initially produce goods for which unit freight costs are low, or goods of such high value that they can carry high freight costs. The steady lowering of real freight costs, particularly in air freight, over the past 20 years, together with the opening of new air freight routes, can reduce the problems facing small countries if savings are passed on to exporters. Unfortunately, the situation has shown little improvement because there has not been much careful analysis of the problem of high freight costs.

Should small countries form common markets to facilitate industrialization?

Several groups of small countries have attempted to overcome the handicaps of their smallness by forming regional markets during the euphoria engendered by the early experience of the European communities. It was falsely assumed that the success of the European communities grew from their trade diversion characteristics rather than from the trade creation resulting from the multilateral trade liberalization in which the communities took part in the early years. More recent events suggest, as the European Economic Community struggles with the problems relating to the common agricultural policy, that the difficulties of a customs union grow through time. Developing countries have also learned this lesson through their own experience.

A number of small Central American, Caribbean and African countries have attempted to pursue industrialization through common market and customs union arrangements. All have been unsuccessful (Vaitsos). The failure of such regional approaches to industrialization is not accidental. The total market size, ranging up to approximately 13 million for the Central American Common Market at the time of its formation, has been too small for the inward policies that they pursued to be even moderately successful, but joining together made them push import substitution further than they would otherwise have done individually. They thus lost the principal advantage of their smallness.

The Central American Common Market is the best example of the problems that beset group industrialization, because it was one of the largest, it was initially quite stable, and it went much further than the others toward import substituting industrialization. The exports of manufactures of such members as Costa Rica were undermined at the start by protection for the domestic market. Once the easy import substitution opportunities were exhausted, the artifically boosted rate of industrial growth declined, and employment opportunities stagnated. Balance of payments problems grew as more and more inputs needed to be imported regard-

less of the overall health of the constituent economies, which were highly dependent on fluctuating coffee and banana exports. Manufacturers and factory workers benefited, but at the cost of agricultural producers. Income distribution moved against agriculture and the more agriculturally oriented members of the market. Inevitably the market broke up. Although the costs of inward trade diversion were much lower in the Caribbean because the common market arrangements were not pursued very far, there were also problems. Where small countries had not thought it prudent to go the import substitution route alone, they felt that capital-intensive industrialization (for the production of consumer durables, for example) lay in their grasp once they joined with others to create larger markets. But the total market they created was still very small by international standards. Once common market arrangements are adopted, it is much more difficult to change regional policies from import substitution to exports, because the incidence of gains and costs is unevenly distributed among member countries. The common agricultural policy of the European Economic Community is a classic example. Regional arrangements necessarily increase the number of government agencies, raising the costs of government, and increasing the problems of co-ordination.

The failure of common markets does not mean that co-operation among small developing countries in a region should not be fostered. Co-operation can reduce costs for small countries in a wide range of activities important to industrialization. These include various forms of training, particularly in higher education, consultation and unification of services such as customs and maritime safety, freight services and freight cost negotiations, air services and so on. Staff exchanges can be very valuable. Other economic as well as political advantages can be won as soon as newly independent countries feel secure enough in their newly won independence to be able to give up some measure of sovereignty for a common purpose to act as a group, provided they do not become unrealistic in their policies.

Skill and technology

Small countries are generally constrained in skills at all levels of production. Initially this is because they are undeveloped. As they grow, although often slowly and painfully, skills are generated through education at home and abroad, and through learning by doing. But small countries also have a skill problem in a more fundamental sense. No country of 5 million, let alone 500,000, 50,000 or 5,000 people, can expect to have all the expertise it needs on a continuing basis even when it reaches a high level of development. Nor can it expect to use all the experts it has trained because of the continuing changes that take place in technology, trade and consumer tastes. A vigorous education and training programme must therefore be accompanied by immigration and emigration, particularly of highly skilled people.

The stress on the localization of jobs, which is sometimes taken to extremes even in medium- and large-size countries at considerable cost, is usually crippling in a small country at early stages of development. An open attitude to the employment of foreign, highly skilled and productive staff must not, of course, become an excuse for the failure to train local people to positions of responsibility. However it is one of the costs of smallness that localization takes longer and cannot go as far as in a larger country. Relatively large and rich areas and countries with

skilled labour forces such as Hong Kong and Singapore continue to rely heavily on immigrants for a large variety of skills. They both have large expatriate business communities whose operations they encourage.

Technology, including management and sales skills, and capital usually have to be imported to some degree by developing countries that wish to move rapidly into export markets. For small countries this is generally even more necessary than for large countries. But small countries that wish to use foreign technology and capital are usually not of interest to the major transnational corporations. Unless countries have rich mineral resources, large transnational corporations are likely to be deterred by the small size of potential operations. Fortunately, there are many relatively small and medium-size firms whose owners and managers wish to combine an opportunity for amenities such as that afforded by the ownership of a second home in the tropics with an extension of their manufacturing business. Some of the firms established by nationals of former colonial powers wish to continue to operate in the small countries in which they became established in colonial times. Providing such firms are not given protection or other special incentives, such as tax breaks and holidays, and have to operate in a competitive international environment, they will not be able to exploit the host country or its citizens, but will add to its development. Countries as small, undeveloped and isolated as Tonga have been able to take advantage of the availability of such entrepreneurs. This is not to say that all the entrepreneurs approaching Governments of small developing countries are genuine investors seeking to establish a business that will be competitive and profitable over the long term. Governments of small countries are besieged by so-called entrepreneurs who promise to construct plants to produce goods which it is clearly not practicable to manufacture. They demand protection and subsidies once the plant is built, on the grounds that to shut it down would mean unemployment. Some are also salesmen for ill-conceived technological panaceas for the problems of small countries. Proposals for new vegetable sources of power, for deep-sea fish farming and canning, and for new processes for making steel on a small scale, are typical. Small developing countries have to be able to distinguish between serious and efficient investors and those who seek only favours and incentives.

Costs of production

Not all the disadvantages of small countries are inherent. Some have been man-made.

The costs of infrastructural utilities - power, water and port services - tend to be higher in small countries than in medium- and large-size countries. Economies of scale are a factor, but more often poor management, leading to overmanning, and high wages are an even greater cause of high infrastructure charges.

Many small countries, notably in the Caribbean and the Pacific, have artificially inflated domestic factor costs. Land costs and wages in particular have usually risen ahead of factor productivity, making it difficult for any competitive activities, whether in agriculture, services or manufacturing to be developed. There are several reasons for this phenomenon. Primitive affluence - the relatively short hours of work needed to achieve a high standard of living in terms of food, clothing and shelter on tropical islands - is one important cause, particularly in the

Pacific. The relative ease of emigration and consequent high inflows of remittances are another contributing factor in many small countries. In some very favourably located small countries tourism provides location rents that have led to a high-level wage structure. The welfare orientation of some countries, instead of stressing the productivity increases needed for welfare improvements, has led to unrealistic wage policies which have resulted in wages rising ahead of productivity.

The structure of international and national aid flows has also contributed to unrealistic wage levels. Small countries attract much more aid per capita than large countries for political and strategic reasons. Aid becomes a form of economic rent, and not surprisingly, has the same economic consequences. Aid capital inflows raise wages in aid-related industries, notably government and construction, leading to higher expectations in other sectors. Where aid flows are substantial they also lead to the appreciation of the exchange rate, and hence make the import of manufactured goods cheaper and their export more difficult.

One of the striking features of the high cost of production in small developing countries is the large size and role of government. This is largely a colonial inheritance. Colonial Governments typically created political and bureaucratic institutions in their own image, saddling countries with unwieldy structures that will take generations to cut to economic size unless countries can take unusually courageous political measures. Fiji, modelled on the United Kingdom of Great Britain and Northern Ireland, is a typical example. For a population of some 600,000 people in 1980-1981, Fiji had 18 ministries which comprised more than 50 departments and offices. Public employees thus dominated employment in the formal sector, where they created unrealistically strong pressure for wage increases. The number of officials is clearly too large for the tasks they undertake, and supervisory skills are spread too thinly to enable decisions to be taken as quickly as would be desirable. The difficulties of co-ordination within the bureaucracy make it very difficult for manufacturers to operate. Papua New Guinea has a central Government, 19 provincial governments, and a large number of local governments for a population of some 3 million people. In addition there are statutory institutions at the national and provincial levels. Some 75 per cent of the population is still substantially in the subsistence sector, so that this superstructure serves about 750,000 people (Brogan).

Political economy of industrialization

Small areas and countries also have some policy-making advantages in industrialization. Otherwise, not only Hong Kong and Singapore, but also Barbados, Cyprus, Israel, Jordan, Malta, Mauritius, Trinidad and Tobago and Uruguay would not have moved as far toward industrialization as they have.

Some small countries have been able to persuade their citizens more quickly and easily than many medium- and large-size countries that import substitution is not the best policy in the long run. As they have not been able to go far in the import substitution direction, they have not departed from international prices. For a small country a relatively small manufacturing effort yields large results in terms of employment and the balance of payments. Several small countries have moved from high unemployment to recruiting labour abroad in a decade.

A second advantage of smallness lies in the politics of cohesion (Kuznets). Small countries are not always cohesive, as shown by the cases of Cyprus or Lebanon, but where a Government is able to unite a small country, as in Malta, Mauritius or Singapore, it seems to be much easier to lead a society toward taking some of the hard decisions that will overcome the natural and man-made obstacles that make it difficult for small countries to industrialize.

Once outward-oriented policies are adopted they are easier to maintain because the vested interests that are being fostered find exports profitable. In contrast, once an inward-oriented protectionist policy is adopted, the groups it supports through the economic rents it generates grow strongly. The interest of manufacturers focused on the domestic market lies in the preservation and extension of the distorting policies that gave rise to their initial profitability, for they do not earn their incomes from production as much as from the rents that the policy distortions create. Labour and entrepreneurial interests frequently join together to maintain and increase such rents at the expense of the rest of the community. The granting of economic favours through the legal and regulatory systems also establishes strong bureaucratic interests in favour of regulation. Bureaucrats at various levels of the hierarchy receive psychological and pecuniary benefits. Protectionist regulations breed more employment and promotion opportunities for bureaucrats. The more detailed protective regulations are, the more employment-creating they are likely to be for the bureaucracy. It is thus well established that protectionist and other rent-creating policies are harder to abolish once they are in place than outward-oriented policies are to put in place initially.

The macro-economic framework for industrialization is of very great importance. Countries that have monetary, fiscal and trade policies that correctly reflect their relative scarcities provide the correct price guidelines to manufacturers through exchange and interest rates, wage levels, land prices etc. A sound fiscal policy is the basis for an efficient and low-cost infrastructural base. An absence of inflation is critical. Malta and Singapore, for example, kept their inflation below world levels and their growth at the top of the growth league throughout the 1970s. If the macro-economic policies are appropriate and effectively administered they are scarcely noticed. Manufacturing thrives, and so do other sectors. Intersectoral allocations of investment are appropriate, so that economies do not become distorted. Too much manufacturing can be as harmful as too little. Patterns of manufacturing growth in relation to the size of countries and their level of development largely result from the similarity of past policies and must not be used as norms for adoption by developing countries (Chenery and Syrquin). For many small countries non-manufacturing and non-industrial options have much higher returns than any type of industrial activity. Services are a rapidly growing area of international trade. Once a small country decides that prudent macro-economic policies are essential to its development, such policies seem easier to introduce and maintain, partly because prices can be kept close to industrial levels and partly because small economies are relatively more manageable than medium or large-size economies.

<u>Will outward-oriented policies continue to be viable?</u>

Small developing countries are favoured by their marginality as purchases in, and suppliers to, international markets. They can buy in

cheap markets if their entrepreneurs are skilled and their sales do not affect world prices.

Even for small developing countries as a group, adding their trade, employment and capital needs together, small countries are not major suppliers in terms of world markets. However their outward-oriented policies do depend on the liberality of the framework within which they operate. Views on the degree of openness in international trade, capital and labour movements achieved by the early 1970s and trends during the last decade vary. However, it is quite widely agreed that in comparison with the 1930s and the years of the Second World War, there was a very considerable liberalization of trade in goods and services, of capital flows and of temporary as well as permanent labour flows. Liberalization was largely undertaken by the old industrial countries. The medium- and large-size developing countries in contrast increased their restrictions on most international economic transactions, particularly during the 1950s and 1960s. All would not agree that international economic relations had become more free by the early 1970s than they had ever been, but there seems to have been greater international economic freedom than at any time since the 20 years or so leading up to 1914.

The interpretation of trends since the mid-1970s is more open to debate. Further gains in trade liberalization were made through the Tokyo round of multilateral trade negotiations, and international capital and labour movements continued to expand as a result of the increase in, and shift of, petroleum rents from consumers in developed countries to producers in developing countries. On the other hand, there were increases in both border and non-border protection by developed countries, although it is impossible to reach agreement on how important these were (Hughes and Waelbroeck). There would, however, seem to be agreement that except for Hong Kong, Israel and Singapore, each of which is small and semi-industrial, market access in developed countries for small developing countries and areas increased substantially through the trade diversion policies embodied in various generalized preference and privileged market access schemes such as the Generalized Scheme of Preferences of the European Communities, Australia, Canada, Japan and the United States of America and the provisions of Lomé Convention. Protectionism in the medium- and large-size developing countries levelled off, some regional arrangements were maintained in Latin America, and some developing countries began to liberalize unilaterally. Trade among developing countries began to grow in relative as well as absolute terms, giving small developing countries many trading opportunities. For small countries, outward-oriented policies thus remained viable even in the difficult early 1980s. With recovery from the 1981-1982 recession, prospects for liberal trends are again improving. Lending to developing countries will probably be more rigorously evaluated, but that is in their interest. Those with sound policies will gain in access to capital and lower costs. Labour flows are also likely to increase.

Are incentives needed to stimulate industrialization in small countries?

Medium- and large-size countries have developed a large number of protectionist devices. These included tariffs, import restrictions, lower tariffs on inputs and capital imports than on final products to raise the level of effective protection, production and export subsidies, financial market and interest rate restrictions with privileged access to cheap credit for manufacturers, tax exemptions on profits for 5 to 10 years or

more and accelerated depreciation allowances. Drawback and other schemes have been introduced to offset the difficulties exporters have in this environment. The results have generally been chaotic. The entrepreneurs quickly learned to operate the incentive system to their advantage, and neither industrialization nor exports developed efficiently. Countries like Argentina and Brazil are examples of the difficulties that beset this route, even for relatively developed countries of medium or large size and with large domestic markets that can absorb many shocks.

The incentive structure developed has many negative and unforeseen side-effects. It tends to increase capital intensity and capital profitability, thus reducing employment opportunities and subcontracting, and increasing income inequality. Many small countries are now being urged to offer entrepreneurs some of the incentives that have proven to be failures, and to do so in competition with each other.

In the mid-1960s, when the Government of Singapore began its industrialization drive, it carefully examined the incentive options. At the time unemployment was estimated at 13 per cent, large numbers of school leavers threatened to swell the numbers of unemployed, the British armed forces were being withdrawn, wages were the highest in Asia outside Japan, and the situation seemed desperate. Unlike Hong Kong, Singapore had no tradition of manufacturing for export. The Government came to the conclusion that there were no quick solutions. It was decided to reduce what little protection existed as soon as was practicable and to limit incentives largely to tax holidays on exports. The Government focused instead on strong and well-balanced monetary, financial, fiscal, manpower and education policies, and on developing an efficient and cost-effective infrastructure. Within five years unemployment had been eliminated, Singapore had a strong economy well balanced between its traditional service sector and manufacturing, and it had become one of the fastest-growing economies in the world.

Each country has to tailor its policies to its needs, but the lessons of areas and countries such as Hong Kong, Malta, Mauritius and Singapore, which have been the most successful of the small industrializing economies, still hold. Keeping prices, including the price of land and labour, within the range set by international conditions through balanced macro-economic policy will stimulate better sectoral growth and create a better intersectoral balance than the incentives that have been found wanting in small-, medium- and large-size countries. With good macro-economic policies it is easy to attract investors, and special incentives are redundant. Without them, even large incentives prove unsuccessful.

Bibliography

Blazic-Metzner, Boris and Helen Hughes. Problems and policies in small economies. In Problems and policies in small economies. B. Jalan, ed. London, Croom Helm, 1982.

Brogan, Brian. Redirections for future policy making machinery. In Post-independence economic development of Papua New Guinea. Monograph 19. P.A.S. Dahanayake, ed. Boroko, Papua New Guinea, Institute of Applied Social and Economic Research, 1982.

Chenery, H.B. and M. Syrquin. Patterns of development, 1950-70. London, Oxford University Press, 1975.

Dommen, Edward, ed. Islands. Special Issue of World development (Oxford) 8:12, December 1980.

Hughes, Helen. Inter developing country trade and employment. In Burton Weisbrod and Helen Hughes, eds. The problems of developed countries and the international economy. London, Macmillan Press, 1983. (Human resources, employment and development, v. 3).

Hughes, Helen and Jean Waelbroeck. Can developing-country exports keep growing in the 1980s?. World economy (Amsterdam) June 1981.

Jalan, B. ed. Problems and policies in small economies. London, Croom Helen, 1982. Robinson, E.A.G., ed. Economic consequences of the size of nations. London, Macmillan, 1960.

Kuznets, S. Economic growth of small nations. In E.A.G. Robinson, ed. Economic consequences of the size of nations. London, Macmillan, 1960.

Thomas, Ian. The industrialization experience of small economies. In B. Jalan, ed. Problems and policies in small economies. London, Macmillan, 1982.

Vaitsos, C.A. Crisis in regional economic cooperation (integration) among developing countries: A survey. World development (Oxford) 6:6, June 1978.

World Bank. World development report. New York, Oxford University Press, 1983.

BRAZIL AND THE IMF: PROLOGUE TO THE THIRD LETTER OF INTENT

Edmar Bacha*

Introduction**

The first letter of intent addressed by the Government of Brazil to the International Monetary Fund (IMF) was dated 6 January 1982.*** The following month, the Government of Brazil decided on a 30 per cent devaluation of the cruzeiro in relation to the United States dollar. A second letter of intent incorporating the anticipated effects of the devaluation was signed on 24 February 1982. In mid-May, the Board of Governors of the Fund decided to withold disbursement of the second installment of a three-year loan to Brazil, allegedly because of the failure of Brazil to meet the domestic performance criteria set in the second letter. By the end of 1982, negotiations were finalizing for the third letter of intent which Brazil was to submit to the Fund in 1983.

This paper is designed to clarify various problems in the Brazilian negotiations with the Fund. The first section discusses the rules of the game for adjustment by a debtor country in the current international economic order. The second section refers to the procedures of the Fund and attempts to explain why they are open to criticism. The third section reviews the monetary approach to the balance of payments adopted by the Fund, and attempts to locate the point where unwarranted political pressure enters into the establishment of the performance criteria which give access to the resources of the Fund. The fiscal question, the public deficit, the concept of "crowding-out" and other matters are dealt with in the fourth section. The main points are summed up in the last section.

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**An earlier version of this paper was published in Portuguese both in Revista de economía política, vol. 3, No. 4 (October/December 1983); and in A. Moura-da-Silva, and others, FMI vs. Brasil: A armadilha da recessão (São Paulo, Gazeta Mercantil, November 1983). Translated from the Portuguese by Margaret Keck.

***For the events leading Brazil to the Fund, see E. Bacha, "Vicissitudes of recent stabilization attempts in Brazil and the IMF alternative," IMF Conditionality J. Williamson, ed. (Washington, D.C., Institute for International Economics, 1983). Also, E. Bacha, "The IMF and the prospects for adjustment in Brazil", Prospects for Adjustment in Argentina, Brazil, and Mexico, J.Williamson, ed. (Washington, D.C., Institute for International Economics, 1983).

Rules of the game

A country goes to the Fund because it has a balance of payments problem. The problem is typically reflected in the fact that the country cannot obtain a sufficient volume of loans on the international capital market to finance that part of its current account deficit which is not covered by direct investments. As a result, its foreign exchange reserves are rapidly used up. The Fund conditions its financial assistance on the adoption by the country of internal measures designed to adjust the balance of payments deficit, reducing it to a size that can be financed through direct investments or other normal international financial channels.

In the case of a country with a high foreign debt, much of its deficit will inevitably be related to the interest bill it has to pay to its foreign creditors. Under normal conditions, this item cannot be compressed. Hence the major part of the adjustment must be made in the trade balance, that is, in the difference between exports and imports. The fundamental objective of an adjustment programme agreed to with the Fund is therefore an improvement in the trade balance. Once this improvement is assured, the Fund can feel secure that the loan it makes to the country will be duly repaid. The Fund will thus be fulfilling its obligation to the other member States to safeguard their common endowment. The improvement in the trade balance will also be the main guarantee that the private banks and other international financial institutions can feel secure about the loans which they are willing to make to the country in the event that an agreement is negotiated with the Fund. By stressing the need for an improvement in the trade balance, the Fund will thus ensure that the international financial community continues to see it as a reliable guarantor.

These are the rules of the game of the current international economic system. They are assymetrical in that adjustment is unilaterally required of countries with unmanageable current account deficits. From a global point of view, however, for each deficit there is a surplus, since the world balance of payments is by definition in equilibrium. Thus, if there are unmanageable deficits, the surpluses to which these deficits correspond will also be unmanageable. But both the structure and the practice of the current world economic order mandate that adjustment be made by the debtor countries, and not by those with a surplus.

Less damage would result from this assymetry if the debtor countries could make the adjustment simply by combining an increase in exports with a reduction in superfluous imports. It is clear that if the productive resources of the country were fully employed at the outset, the trade balance could improve only if there were a concomitant reduction of internal demand which, on the one hand, would free the productive resources needed to export more, and on the other, would allow fewer superfluous goods to be imported. The cost of adjustment would then be expressed in the amount by which internal demand would have to be reduced.

It should be noted that this cost would be inevitable, even if the adjustment were made on the side of the countries with a surplus. In that case, adjustment would involve an increase in internal demand in those countries, which would presumably lead to an increase in imports from and a reduction in exports to the debtor countries. But, in the event that there were full employment in the latter countries, they could only

improve their trade balances in this way if there were a concomitant reduction of internal demand which, again, would allow them to export more and import less.

This is therefore not the point at which the assymetry of the adjustment process places an excessive burden on the debtor countries. However, not only does the current international economic order require that adjustment be made exclusively on the part of the debtor countries, but it also demands that those countries make the adjustment too rapidly, without offering them compensatory financing sufficient to give them the time to make their exports grow and their imports shrink in such a way as to maintain the level of employment internally.

Consider for example the case of a country whose exports are restricted as a result of a temporary but accentuated fall in external demand, and whose imports cannot immediately be cut without a loss in domestic production. In the short run, that country can only adjust its external accounts by provoking a recession. To the fall of internal demand will thus correspond not an increase in exports or a reduction of superfluous imports, but a contraction of the level of activity and employment. With a recession, there will be fewer imports of goods complementary to domestic production, thus rebalancing the external accounts. In this case, internal demand must fall by a multiple of the adjustment needed in the balance of payments, because imports will be reduced by the necessary amount only after a drastic contraction of the level of activity. This is the excessive burden imposed on debtor countries by the form of balance of payments adjustment under the current international economic order.

To illustrate these ideas, consider the following version of the Brazilian case. The proposal presented to creditors was for an improvement of $5.2 billion in the trade balance between 1982 and 1983. Let us suppose that the Brazilian economy was in full employment in 1982 (obviously an absurd assumption, but one which, as shall be seen, is implicit in the reasoning of the IMF staff). In the event that there were a large external demand for Brazilian products and that the country imported superfluous products, an adjustment process could be contemplated which reduced expenditures on superfluous imports by $1.2 billion and which reduced internal demand for domestic production by $4 billion, an amount which could then be exported. Thus, to improve the balance of payments by $5.2 billion, internal demand would have to fall by $5.2 billion. That would be the cost of external adjustment - significant, but still tolerable, for an economy whose aggregate internal demand is in the vicinity of $320 billion per year. The adjustment being considered would imply that Brazilians would be poorer by not more than 1.5 per cent.

The reality is in fact different, since most of the adjustment is being made by cutting imports through domestic recession. Typically, government investment is cut, which immediately constricts the import of capital goods. As a complement to this cut in investment, there are correspondingly fewer orders to domestic industries producing capital goods. The latter then lay off workers, and reduce their orders for raw materials and intermediate products. The recession thus spreads to the rest of the economy, in the process compressing imports of intermediate goods and raw materials. At the end of the line, gross domestic product will fall by an amount three times greater than the improvement required

in the balance of trade, that is to say, by $15.6 billion.* Internal demand will then need to be reduced by an amount equal to the sum of the improvement in the balance of trade ($5.2 billion) and the fall in output ($15.6 billion). In other words, by $20.8 billion, or approximately 6.5 per cent of its initial value, a cost which is not only significant but even intolerable for a developing country such as Brazil.

Criticism of this excessive burden should not, however, be aimed exclusively at the Fund. The fault lies with the current international economic order, which does not provide the compensatory financial resources necessary to avoid having adjustment by debtor countries take place through a brutal contraction of their domestic absorption and income.

IMF strategy

The Fund must nevertheless be criticized for the fact that its working methodology induces the debtor country to experience a recession, even when to do so is not necessary for the desired improvement in the balance of payments.

This is so because the staff of the Fund takes as the point of departure for its analysis the idea that if a country has a balance of payments problem, it is because it is spending beyond its means, in other words, its internal demand exceeds locally available resources. It is important to understand why this position, which at first glance seems reasonable, can be extremely deceptive. Let us consider a country which has a gross domestic product of $320 billion, as did Brazil in 1982. Of this, around $12 billion corresponds to foreign capital income, leaving $308 billion of gross national product. Therefore, if internal demand (equal to the sum of private consumption and investment plus government expenditures) is equal to $322 billion, the $14 billion of excess expenditure by residents over national income will have come from outside, in the form of a negative balance of payments on current account. If private and government consumption is subtracted from the expenditures of residents, we are left with investment; if it is subtracted from national income, we are left with domestic savings. Thus, the difference between expenditure by residents and national income can be equivalently expressed as an excess of investment over domestic savings. In this case we can say that external savings of $14 billion, as measured by the negative balance of payments on current account, covered the excess of investment over domestic savings.

On the basis of these accounting identities, it was an irresistible temptation for the Fund to deduce a deceptive policy prescription, that is, that the way to reduce the external deficit was necessarily by reducing internal demand, or, equivalently, by increasing domestic savings. The economic programme which the Fund designed for Brazil leaves no doubts in this respect. The first of its goals is "... an increase in domestic savings from 14.5 per cent of gross domestic product in 1982 to

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*For details of the calculation, see E. Bacha, "O Brasil e o FMI: Projções sombrias e alguma utopiaj", Revista da ANPEC - Economia, vol. 6, No. 7 (September 1983).

almost 16 per cent in 1983 (...). This would allow a reduction of the current accounts deficit from 4.5 per cent of gross domestic product in 1982 to 2.2 per cent in 1983."*

This focus, by displacing attention from the balance of payments *per se* (exports, imports etc.) to national accounts (savings, investments etc.), eliminates the possibility that a country could have a balance of payments deficit without there being an internal demand in excess of available resources. Nonetheless, we can easily imagine several relevant situations in Brazilian economic history where that has been the case. For example, the worsening of the world recession in 1982 clearly restricted Brazilian exports. The reduction in exports caused a contraction in the level of domestic activity, at the same time as it aggravated the external deficit. The country came to experience more unemployment and more external imbalance. Certainly the accounting excess of investment over domestic savings increased, since savings fell along with domestic income when the latter was reduced as a consequence of the loss of foreign markets. But this excess is illusory, since there should now be idle domestic resources in the expectation of an external economic recovery.

Consider as an alternative a typical case in the 1950s, in which exported products became uncompetitive because the devaluation of the exchange rate did not keep up with the rise in domestic costs. Once again, the reduction in exports forced domestic resources to become idle, although the problem was an inadequate domestic price policy and not a lack of external demand, as in the previous case.

In both cases there is unemployment and external deficit. But from an economic point of view, in neither of them could one say that there was excess demand. In accounting terms, the current accounts deficit in both cases will correspond to both an excess in the expenditures of residents over national income and an excess of investment over domestic savings. Nonetheless, in neither of the two cases would an adequate cure lie in a contraction of internal demand or in an autonomous elevation of domestic savings. In the first case, a recovery of international economic activity is needed; in the second, a devaluation of the real exchange rate. Both moves would induce a rise in internal demand which, however, would be more than made up for by the increase in production in the country and, therefore, of domestic savings. As a consequence, which is important from an accounting viewpoint but only curious from an economic viewpoint, the improvement in the external deficit would correspond to a reduction of the excesses both of internal demand over production and of investment over domestic savings.

Ideally, instead of playing with accounting identities, the Fund should try to verify first of all whether there is unemployment and idle capacity in potentially export- or import-substituting industries. In the second place, it should try to determine whether this idleness is due to lack of external demand or to lack of competitiveness. And only then should it recommend an adjustment policy. If the problem is unemployment

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*C.F. appendix of E. Galveas, *A Crise Mundial e a Estratégia Brasileira de Ajustamento do Balanço de Pagamentos*, Brasília, Senado Federal, 23 March 1983.

with lack of competitiveness, emphasis should be placed on the exchange rate, or related instruments of import control and export promotion. If industries are working at full capacity, the emphasis of the programme would in fact have to be on the reduction of aggregate internal demand. If the problem stems from a world economic recession, then it should attempt to minimize adjustment and maximize financing until the world economy recovers. Obviously, in practice, the three cases will be mixed, although one of them may tend to predominate. The point is that the Fund always assumes that the problem is excess demand and, therefore, its principal recommendation has always been to constrict domestic demand, especially in the public sector.

It does not require much training to see that this methodological option is foolproof if the only goal is to improve the trade balance. For it will always be true that a contraction of demand will correspond to an improvement in the balance of trade. In a case of excess demand, this may be consistent with the maintenance of the level of employment; in the other two cases, it may mean the aggravation of the domestic economic situation of the country. But it would appear that for the Fund this is a detail; what is important is to guarantee the return on the money invested.

From the monetary approach to political pressure

Once the perspective of controlling internal demand has been adopted, there remains the choice of instruments by which this control will be exercized. Herein lies another serious criticism of IMF economists. Not only do they behave as though the balance of payments problem were always due to excessive internal demand. They also tend, on the one hand, to ignore the recessive potential of purely fiscal measures, assuming that the level of aggregate demand is determined exclusively by monetary variables. On the other hand, they consistently tend to underestimate the forecasts for the rate of inflation during the period of adjustment, apparently as a way of putting pressure on Governments to adopt unpopular measures which the Fund deems necessary to achieve an effective reduction of inflation.

This stance is clearly illustrated in the case of the programme for Brazil. In it, the Fund insisted on a huge reduction of the public sector deficit, at the same time as, at least in the first of the letters of intent, it agreed with monetary goals which would be only moderately contractionist, if the inflation projections contained in the programme were at all realistic.

The methodological stance of the Fund is linked to the monetary approach to the balance of payments. Although there are many theoretical refinements, in practice the financial exercises of the Fund can be understood with a simple example. The basis of the approach is the assumption that there is a stable relation between the demand for money and the demand for goods. Thus, the greater the demand for goods, the greater will be the demand for money More specifically, the idea is that a greater demand for goods can only materialize if the demand for money can be satisfied as well. Thus, if one controls the money supply, one can control the demand for goods. But there are two problems in controlling the money supply. The first comes from the fact that it is in part a debit item for the monetary authorities (the monetary base), and in part

determined by commercial banks (in the form of sight deposits). Nonetheless, it may be assumed that the expansion of bank deposits can in principle be controlled by the monetary authorities using conventional instruments like reserve requirements and the rediscount rate, or unconventional ones like credit ceilings.

The second problem is that the monetary authorities do not really control the monetary base if they are at the same time setting the value of the exchange rate and, within the limits of existing rules of exchange control, guaranteeing convertibility between foreign and national currencies. Thus an export operation with payment on sight, with a value of, for example, $10 million, would bring about simultaneously an increase by the same amount in the foreign exchange reserves of the monetary authorities, and a corresponding rise of $Cr 10 billion in the money supply, in the form of the sight deposits of exporters in the Bank of Brazil, if the exchange rate on the United States dollar is set at $Cr 1,000.

If the monetary authorities cannot control the monetary base, they nonetheless can in principle control the credit they extend to domestic economic activities, or their domestic credit operations, as reflected in the simplified balance sheet below:

Balance sheet of the monetary authorities

Assets	Liabilities
Foreign net assets	Non-monetary liabilities
Domestic assets (credit)	Monetary base
Government	Cash
Private sector	Commercial bank deposits
Banking sector	Sight deposits
Other	

Thus, assuming the non-monetary liabilities constant, if domestic credit is under control the monetary base will only expand when there is an expansion of foreign currency reserves.* But if the reserves expand, this indicates that the external position of the country is improving, justifying therefore an increase in internal demand, and thus that, under those circumstances, an increase in the money supply should be allowed. In a similar fashion, if the external position of the country is deteriorating, foreign exchange reserves should fall. Under those circumstances, however, it is better to let the money supply contract to contain internal demand, since the latter would probably be excessive or there would not be a drain on foreign exchange reserves.

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*Note however that the assumption that non-monetary liabilities are constant is justified for classical monetary authorities, but not in the case of Brazil. Here, these liabilities include a private sector dollar deposit amount higher than the value of the monetary base itself. Thus the base can expand or contract in a manner not entirely controllable by the monetary authorities, depending on variations in the public preference for holding deposits with the monetary authorities in dollars or in cruzeiros.

Such is the reasoning behind the monetary approach of the Fund to the balance of payments. It leads to the conclusion that the net domestic credit of the monetary authorities is the most effective instrument for controlling internal demand in a manner consistent with maintaining the equilibrium of the balance of payments.

The important point to emphasize is that in the vision of the Fund, once the domestic credit of the monetary authorities is brought under control, internal demand is under control. One could thus trace the steps as follows. First a framework is established which is believed to be feasible for the balance of payments of the country during the adjustment period. Thus the limit for the current account deficit is determined. Given an exogenous forecast for gross domestic product (GDP), it is then possible to set the magnitude to which aggregate internal demand should be limited. Then a forecast is made for the rate of inflation, which, in principle, should be declining, to guarantee the respectability of the programme. Thus the nominal value of internal demand is determined. Then one assumes a stable demand for money, thereby setting a quantity of money consistent with a given level of aggregate demand. Next, one uses the existing relation between the monetary base and the money supply to estimate by how much the base should expand. Finally, subtracting the estimated variation of foreign exchange reserves, one obtains, on the basis of the balance sheet of the monetary authorities shown above, the limit which should be established for domestic credit.

An illustration of how this method is applied is in the second letter of intent submitted by the Government of Brazil to the Fund on 24 February 1982. There it was stated that: "The limits of domestic net assets of the monetary authorities (...) were reviewed in the light of the new and higher estimate of the inflation rate and of data currently available for 31 December 1982. The domestic net assets, which on 31 December 1982 totalled $Cr 5,122 billion, will not exceed (...) $Cr 8,300 billion during the quarter ending 31 December 1983." In other words, an expansion of domestic credit amounting to 62 per cent over the course of the year was expected, for a projected inflation rate of 85-90 per cent, according to the programme. It should be noted that the monetary criteria were made considerably more stringent between the first and second letters, since the letter of 6 January 1982 provided for a domestic credit expansion of 65.7 per cent, for a projected inflation of 70 per cent in 1983. This would imply only a 2.5 per cent contraction of credit in real terms. Already in the second letter, the projected contraction of real credit is 13.6 per cent between December 1982 and December 1983.

Such a toughening of the monetary criteria illustrates the way in which the Fund intrudes into aspects of the Brazilian economy which do not fall within its jurisdiction. Especially after the devaluation of the cruzeiro in February 1982, it became clear that the inflation rate in 1983 would be higher than in 1982. It seems hard for the Board of the Fund to recognize that inflation is accelerating in a country under its direction. A response has come in the form of a monetary performance criterion much more rigorous than before, as an instrument with which to press for the adoption of unpopular measures, especially in the area of wage policy, which the Fund considers necessary in order to reduce the inflation rate.

The Fund recognizes the political character of the measures designed to reduce inflation in Brazil and avoids making public statements about

them. However, it is not its responsibility to make judgements about the inflation rate in a country with balance-of-payments problems. Once a country presents an adjustment programme consistent with an improvement in the balance of payments, the limits on domestic credit should, in the first place, be set in function of a realistic forecast of the inflation rate. They should then be reduced or raised during the course of the year, according to whether the observed rate of inflation is higher or lower than that projected in the programme.

The Fund, however, refuses to accept the idea that it is not within its jurisdiction to determine the inflation rate for a country. Thus it not only established, as the second target in the programme for Brazil, a substantial decline in the rate of inflation, but also, even worse, drastically stiffened its monetary terms when it observed that the inflation rate would not in fact go down in 1983.

The fiscal question

Finally the fiscal question must be considered. There is nothing in the logic of the monetary approach which justifies special attention to government accounts. Through its experience with stabilization plans, however, the Fund reached the conclusion that there was no way for the monetary authorities to control the overall expansion of domestic credit unless there were parallel control over the credit which they extended to the Government. In what may have been only an innocent attempt to reinforce the instruments for control over domestic credit, the Fund began to introduce into the performance criteria specific limits on credits conceded to the Government by the monetary authorities. Those limits gradually came to take on a life of their own, justified as a form of guaranteeing equal treatment for the private sector in stabilization programmes. It was also considered that if credit were controlled overall, but not that part of it directed to the Government, the whole weight of the cuts would fall on the private sector. It should be noted that, in taking such a position, the Fund was also entering an area outside its jurisdiction, namely the national criteria for division of available credit between the public and the private sectors of the economy.

When the ideological postulate of disciplining a Government emerges alongside the theoretical principle of controlling domestic credit, it is no longer enough to limit the access of the central Government to the credit of the monetary authorities; it is necessary to restrict the access of the entire public sector to any type of credit. In recent years a new element has therefore been introduced into the stabilization programmes of the Fund, namely, the public sector borrowing requirements (PSBR).

However the Fund has more difficulty dealing with this concept than with the domestic credit of the monetary authorities. That such a lack of experience can have harmful consequences is amply illustrated by the case of Brazil. At first sight, it is a matter of avoiding financial crowding-out, in other words, the expulsion of the private sector by the public sector in the domestic credit market. Presumably, once a limit is established for the net domestic credit of the monetary authorities, the limit on borrowing by the public sector may be determined in some manner consistent with the maintenance of constant rates of interest in the domestic financial market. However, the Fund does not have a financial exercise to calculate the limit. The stabilization plans recently imposed by the Fund

in Latin America seem to suggest a rule of thumb whereby the PSBR is measured and then cut in half. Thus in Argentina, the PSBR was calculated at 14 per cent of GDP in 1982; the programme of the Fund required that it be reduced to 8 per cent in 1983. In Brazil, the calculations of the Fund pointed to a PSBR of 16.9 per cent of GDP in 1982; the programme required that the amount go down to 8.8 per cent in 1983. In Chile, the PSBR was estimated at 4 per cent of GDP in 1982; the plan of the Fund estimated a reduction to 2 per cent in 1983. In Mexico, the Fund demanded a reduction of the PSBR from 16.5 per cent if GDP in 1982 to 8.5 per cent in 1983. In the Dominican Republic, it was to go from 7 per cent of GDP in 1982 to 4 per cent in 1983 and 3 per cent in 1984.

The tendency of PSBR to be curtailed in the plans of the Fund is borne out by a more detailed analysis of the case of Brazil. In fact, the goal appears to be not to avoid crowding-out, but rather to practically eliminate the presence of the public sector in the domestic credit market, as indicated by the very small ratios of PSBR to GDP projected for the third year of the adjustment programmes throughout Latin America. It is not the purpose of this paper to pass judgement on whether or not that goal is a worthy objective. However, it must be emphasized that it is not the responsibility of the Fund to decide on such a domestic policy question.

Moreover, there is a need to consider the real, and not only the financial, consequences of the compression of PSBR. According to an extreme monetarist view, the consequences will be merely distributive - more private sector, less public sector - and not aggregative, since the level of activity would be regulated by the money supply and not by PSBR. However, that position is certainly not justified by the Brazilian experience, where the fiscal variables appear to affect the level of aggregate demand independently of and in addition to the quantity of money.*

This is a serious problem because, at the level of the performance criteria, PSBR are set in nominal terms, and not as a proportion of the nominal GDP, which is the form in which it is generally presented. In the Brazilian case, one can divide the PSBR into two broad components consisting of the operational public deficit plus nominal interest and monetary correction of the public debt.**

Unfortunately, only the Fund and central bank technicians, together with economists of lending banks, have access to the accounts which make

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*For example, in the econometric model for the Brazilian economy developed at the Catholic University of Rio de Janeiro by Eduardo Modiano, the elasticity of aggregate demand in relation to the money supply has the same value as it has in relation to government expenditure, with both being equal to 0.23.

**The reason for separating the nominal interest and the monetary correction of the debt from the operational deficit is that, in principle, they do not generate real demand for goods and services. They simply keep the real value of outstanding public debt constant, and hence should not affect the real income of the private sector.

up PSBR. Brazilian economists, like the rest of the population, have totry to guess what is going on. Approximately one half of PSBR calculated by the Fund seems to correspond to the operational public deficit and the other half to nominal interest and monetary correction of the public debt. In principle, the different components of PSBR grow with the level of prices. Specifically, unless there was a very accentuated de-indexation, in 1983 the sum of nominal interest with the monetary correction of the public debt should have reached a value equal to at least twice its 1982 value. Nonetheless, the Fund determined, and in February 1983 the Government of Brazil signed a commitment, that in 1983 PSBR would have almost the same value as in 1982 in nominal terms, which meant that the operational public deficit had to be reduced to zero or even a negative amount (in other words, it had to become a surplus). An amount of demand corresponding to approximately 8.5 per cent of GDP (the value of the operational public deficit in 1982, according to the Fund) would therefore be removed from the flow of income. It is not difficult to understand what such a fiscal contraction would mean in terms of the reduction of the level of activity and employment.

Implementation of the decision of February 1983 would have brought a major recession to the Brazilian economy. On the other hand, it is clear that such a recession could not be avoided merely by making marginal adjustments to the letter of intent. Unfortunately, alternatives which would allow an effective recovery of the economy were not under consideration in the round of negotiations under way between Brazil, the banks, and the Fund when this paper was prepared.

Summary

The main points presented in this paper may be summed up as follows:

(a) The Fund has to safeguard its endowment and its image in the eyes of the international financial community. It therefore prescribes an improvement in the trade balance as a fundamental objective of its adjustment programme;

(b) The rules of the game of the current international economic order are assymetrical, in that an adjustment policy is required of the debtor countries, while the surplus countries may remain indifferent to their current account balances;

(c) The current international economic order not only requires that adjustments be made exclusively by debtor countries, but also forces those countries to adjust too rapidly. In other words, it does not provide those countries with enough compensatory financing to give them time to make their exports grow and their imports decrease, in a manner compatible with the maintenance of internal employment levels;

(d) In the case of Brazil, if it had been possible to maintain the employment level, the adjustment for the 1983 trade balance would have required a reduction of internal demand by $5.2 billion, in other words, a reduction of not more than 1.6 per cent in relation to values reached in 1982;

(e) If, however, the adjustment had been accomplished exclusively through recession, GDP would have had to fall by almost 5 per cent and domestic expenditure by 6.5 per cent;

(f) In relation to such an excessive burden, criticism should not be directed at the Fund alone, except in so far as it is one of the principal agents of an international economic order which does not possess the appropriate mechanisms to avoid having the adjustment by debtor countries accomplished through a brutal contraction of their domestic income;

(g) The Fund should be criticized for the fact that its working methodology induces the debtor country to provoke a recession, even when this is not necessary for the desired improvement in the balance of payments. The reason is the Fund takes as the point of departure for its analysis the idea that if a country has a balance of payments problem, it is because it is spending beyond its means, in other words, it has an internal demand which exceeds the locally available resources;

(h) It is easy to imagine more than one situation in which such an assumption is invalid. For example, the aggravation of the world recession in 1982 clearly restricted Brazilian exports. As a consequence, the country experienced more unemployment and more external imbalance. Similarly, during the 1950s, exported goods often became uncompetitive because the exchange rate devaluations did not keep up with the rise in domestic costs. A reduction in exports forced the idleness of domestic resources, even though the reduction was due to a problem of internal price policy and not a lack of external demand;

(i) The inflexibility of the Fund in this regard is, however, logical if the only objective of the programme is to improve the trade balance. Because it will always be true that a contraction of internal demand is conducive to an improvement in the trade balance;

(j) Its monetary approach to the balance of payments leads the Fund to the conclusion that the net domestic credit of the monetary authorities is the most effective instrument for controlling internal demand in a manner consistent with the maintenance of balance of payments equilibrium;

(k) The Fund should not be criticized only because it assumes that a balance of payments problem is always associated with an excess of internal demand. There are two further problems. First, its theoretical perspective is exclusively monetarist and fails to consider the recessive potential of a purely fiscal contraction. In addition, the Fund consistently tends to underestimate the projections for the inflation rate during the adjustment period, apparently as a way of putting pressure on the country to adopt the unpopular measures that the Fund considers necessary to achieve an effective reduction in inflation;

(l) The policy of the Fund is amply illustrated in the programme for Brazil. In it, the Fund insisted on a massive reduction of the public sector deficit, while, at least within the framework of the first letter of intent, it agreed with monetary goals which would be only moderately contractionist if the inflation projections proved at all realistic;

(m) In the case of Brazil, the monetary criteria were considerably toughened between the first and second letters of intent, in response to the acceleration of inflation at the end of 1982 and the beginning of 1983. Such a step illustrates the intrusive behaviour of the Fund with regard to aspects of the Brazilian economy which are not within its jurisdiction. The Fund has no mandate to block access by a country to its resources because inflation in that country has accelerated;

(n) Nothing in the logic of the monetary approach entitles the Fund to pay special attention to government accounts. However, in view of the current prominence of the concepts of crowding-out and the magic of the marketplace, the Fund has incorporated PSBR into the performance criteria demanded of a country, at the same level of importance as the traditional limits on the domestic credit of the monetary authorities;

(o) As opposed to domestic credit, the limits of which are established by means of a technically solid financial exercise, PSBR limits appear to be established in a completely _ad hoc_ manner by the Fund. Five stabilization plans recently imposed in Latin America by the Fund suggest that it adopts a rule of thumb whereby it measures PSBR and then cuts it in half;

(p) The objective appears to be not to avoid financial crowding-out of the private sector, as is commonly claimed, but to practically eliminate the presence of the public sector in the internal credit market. However, it was not decided at the Bretton Woods Conference that the Fund should assume such a role;

(q) Independently of this ideological aspect, the Fund does not seem to take into account the real consequences of curtailing PSBR. This was a very serious problem in the case of Brazil, since the Fund demanded a reduction of the ratio of the public sector deficit to GDP by 8.5 per cent between 1982 and 1983. It is not difficult to understand what a fiscal contraction of that size would mean in terms of reducing the level of activity and employment in the Brazilian economy.

THE EMERGENCE OF MILITARY INDUSTRIES IN THE SOUTH: LONGER-TERM IMPLICATIONS

Miguel S. Wionczek*

A recent study of the global patterns of and the prospects for military spending by a group of researchers headed by Wassily Leontief, one of the fathers of econometrics and Nobel Prize winner in 1973, ends to the effect that:

> "If all regions of the world were to reduce their military purchases and if moreover the rich regions transfer part of the resulting "savings" to the poorest of the less developed regions in the form of developmental assistance, this transfer of income would result in increased world-wide levels of production, trade and consumption." 1/

The same study, however, warns:

> "But even with a massive rise of economic aid as well as the reduction in their own military spending, the "gap" in economic well-being between the recipient regions and the others would be barely narrowed. Only if the transfers of resources just described are accompanied by changes in the structures [italics in the text] of the poor economies might the economic prospects for the future of the poor less-developed regions appear less gloomy." 1/

These quotations sum up the findings of the growing literature on the economics of disarmament, i.e., the reconversion of military expenditures to peaceful uses, a subject that has attracted lately the attention of many international agencies and concerned political writers and social scientists. Unfortunately, these findings fall on the deaf ears of policy-makers in the real world not only in the industrialized North but also in many developing countries of the South. In the midst of the global economic crisis, comparable only with the depression of the 1930s, military spending represents one of the few dynamic sectors in both the North and South.

According to one of the most detailed surveys of the global expenditure on arms and related equipment, world spending on these products rose some 10 per cent in real terms between 1981 and 1982, in spite of the fact that most countries suffered a sharp decline in national income as well as cuts in practically all public sectors, including social services. 2/

Paradoxically, the literature on the economics of the armaments race itself stays well behind that on the economics of disarmament. Moreover, little is known about the forceful entry into conventional but technologically highly sophisticated arms production and international arms trade by a group of the more developed of the developing countries, a group known in international economic parlance as the newly industrializ-

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*El Colegio de Mexico, Mexico City.

ing countries (NICs). Other developing countries are about to join this group.

This article is mainly concerned with the politics and economics of the emergence and the growth of military industries in the NICs. The sources of information are direct but reliable: the most prestigious newspapers and widely circulated journals of the industrialized countries. However, it is pertinent to mention that the scarcity of literature on the economics of the armaments race in the industrially advanced countries, and the absence of references to the armaments race in both the North and South in global surveys of the world economy, reflect the combination of many factors. The key ones are as follows:

(a) The generally accepted view that the world-wide armaments race is mainly a political and technological phenomenon that exceeds the terms of reference of global, regional and national economic and industrial surveys;

(b) The extremely high level of political sensitivity in many countries in respect to so-called national security matters, however defined, and the general belief that the armaments race is both inevitable and uncontrollable;

(c) The limited access by international economists to and the limited understanding of disaggregated information on armaments production and expenditure;

(d) The alleged difficulties of finding reliable quantitative data and the real difficulties of analysing national and regional policy-making processes with respect to the management of military industries, military technology transfers and the modes of domestic arms procurement and the international arms trade;

(e) The limited world-wide supply of highly-trained social scientists with reasonably good technological backgrounds capable of treating the political, economic and technological aspects of the armaments race in an inter-disciplinary fashion;

(f) The ascendancy in economics of "rococo" econometrics, i.e., superficially impressive quantitative theoretical model-building, divorced from political and institutional economics or, in other words, from real-life issues.*

The scarcity of knowledge of the recent emergence, functioning and international implications of military industries in some NICs, and even in the developing countries not in this category, cannot be fully explained by the above-mentioned factors. Some others must be added. First, NICs are far away from research centres on the economics of armaments and disarmament, which are in the North and in the United Nations

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*The terms "rococo" econometrics represents here the adaptation of the term "rococo" mathematics, coined by John von Neumann in the 1940s. Von Neumann used this adjective to describe sterile exercises in mathematical analysis that added nothing new or relevant to the solution of important gaps in the science of mathematics.

system. Secondly, they are recent entrants in the armaments race. Thirdly, their participation weight in global arms production, expenditure and international trade is still small. NICs participation in the transfer of arms to the South, which covers arms purchased abroad by the final consumer, military aid and the barter of arms for other goods and services, has been estimated at close to 4 per cent of global arms transfers in 1982. 3/

Since total arms transfers to the South in that year were estimated at $50,000* million, the conservative estimates of the South-South arms transfers are a minimum of $2,000 million. While relatively small, it is a not insignificant figure under any circumstances. Moreover, although all NICs (except Mexico) and some other developing countries produce increasingly sophisticated military equipment, the number of the countries that are at the same time arms producers and exporters does not yet exceed six to eight in the South.

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Neither global nor country-by-country figures on military industrial production in the South and the intra-South arms transfers are available from such standard and largely reliable sources as the SIPRI Yearbooks and the annual surveys on world military and social expenditures, published by non-governmental research centres in the United States and the United Kingdom. 4/ These and other similar sources assume that the South continues to be the importer of military equipment produced in the industrialized countries. For the first time some doubts in that respect arise albeit indirectly in the 1983 SIPRI Yearbook. 5/ Its analysis of the North-South arms trade notes that while the value of arms exports to developing countries during 1968-1972 was double that during 1963-1967 and doubled again in the period 1973-1977, during the period 1978-1982 the increase was down to 50 per cent. According to the same source:

> "The main reason for this flattening out is probably the world recession, and the budget constraints it has brought about with it; there is also the possibility of a certain market saturation."**

There is no doubt some truth in the SIPRI diagnosis of the reasons for a recent deceleration of military equipment purchases by the South from the North. Considering that the prices of modern conventional weaponry are increasing steeply all the time, this deceleration seems a healthy trend. There is growing evidence, though not yet recorded and analysed, however, that in the current world crisis military equipment import substitution in the South is also taking place, and new producers from the NICs are entering the arms markets of the South. This is related to the so-called arms modernization and the patterns of military procurement as well as to inflation. A recent survey of defense industries in the industrialized countries sums up this situation as follows:

> "Defense costs are spiralling so high that even the world's superpowers and a few oil-rich countries are investing in the qualitative improvement of weapons, rather than in larger inventories. Coun-

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*All dollars are United States dollars.

**From the abbreviated version of the SIPRI 1983 Yearbook.

tries are spending more on defence, but in general are getting less for it, say the industry analysts." 6/

According to numerous and frequent articles and reports published during 1983 in such prestigious newspapers with world-wide coverage as The New York Times, Washington Post, The Wall Street Journal and the Financial Times, the list of the countries in the South that become both military equipment producers and exporters to other parts of the South is increasing rapidly. 7/ Leaving aside Israel and South Africa, mentioned in these press reports as well although neither can be considered as a part of the South or a developing country, the list is headed by Brazil, Singapore, China, Democratic People's Republic of Korea and Republic of Korea.* The corresponding roster of buyers in the South of arms produced by the South is even larger. It includes Chile, Argentina (until the fall of 1983), Iran, Iraq, Thailand, Malaysia and Nigeria.*

In most cases, the South military equipment exporters and importers are extremely reluctant for security reasons to release any information on arms production and sales abroad. Nevertheless, Brazil and Singapore have been so successful in the past few years in challenging in the markets of the South the armament industries of the North that a considerable amount of information on their military industry's domestic and external performance is available. 8/

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The current international literature on industrialization and economic development correctly emphasizes a number of key factors that industrial and economic planners in NICs and other reasonably large developing countries must consider if their industrialization programmes are to succeed even partially.

First, no industrialization programme worthy of the name can be translated into reality in the absence of some sort of overall longer-term economic strategy. Secondly, the role of the State in industrialization processes in developing countries is of key importance. Thirdly, the construction of haphazard industrial projects, however ambitious, unrelated to the available infrastructure and the existing stock of industries does not add up to industrialization. Fourthly, given the present speed of technological advancement no across-the-board industrialization is within the reach of even a country that is large and well-endowed in national resources. Fifthly, the choice of industries within a limited number of sectors must aim at the vertical integration of the industries in question in the longer-term. Sixthly, since no single industrialization model for all developing countries exists, the debates on whether industrialization should start from the bottom (heavy industries) or the top (light final-consumption goods industries) is a sterile exercise particularly in face of the need to use with reasonable efficiency the available industrial projects, however modest, through establishing all sorts of interlinkages and closing the inter- and intra-industrial gaps. Seventhly, the inflexible import substitution industrial strategy runs into serious difficulties even in the most advanced developing countries. Eighthly, the speed of industrialization depends to a great extent upon four major

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*In order of magnitude.

factors: constant expansion of the domestic market; access to export markets; technological capability and inflow of new technologies; and quality of local management skills in both the public and private sectors.

This brief list of major issues and factors involved in the industrialization process gives an idea of how difficult its implementation is for most developing countries. The recent emergence and progress of military industries in the growing number of NICs, and even in other developing countries, strongly suggests that while the task is difficult it is far from impossible. The world-wide arms industry is competitive and technologically highly dynamic; it involves not only the availability of highly skilled technical personnel, but also the ability for continuous learning by doing, control of the quality of the final product, the art of industrial management and a knowledge of foreign markets.

In each of the arms exporting developing countries, the patterns of the development of the military industrial complex are virtually the same. Initially, arms are imported fully designed, produced and assembled in the industrialized countries of the North. Next, the capacity for maintenance of military "consumer durables" of foreign origin is established, most probably because of security considerations and a risk that the interruption at some point of the additional inflow of identical or similar military equipment may endanger national security requirements. The maintenance activities that provide the stimulus to technological training lead to the discovery that some parts of or accessories to foreign-produced (sometimes highly sophisticated) equipment might be produced at home at a much lower cost if only their quality could be controlled. After copying foreign designs successfully, constructing prototypes and testing them under local conditions, the same question arises that was posed two decades ago in the automobile and pharmaceutical industries in many developing countries: Why must certain military goods be fully assembled abroad? At this stage proposals are made to foreign Governments and arms producers to provide locally produced parts for foreign assembly units. Sometimes such proposals are presented as a condition for future purchasing contracts. Next, interest is aroused in transferring some assembly activities to the arms-importing countries, whose information on international arms and technology markets and the negotiating capacity in new arms deals is surprisingly much better than in the non-military trade transactions.

All these activities involve a considerable degree of industrial organization and management, provided jointly in most cases by the local military establishments and private entrepreneurs. When the local production of military goods under foreign licences or co-production arrangements starts, little if anything is left to improvisation and random decision. Given the extremely high degree of the intra-military industry specialization on the world-wide scale, product lines are chosen according to well-defined domestic market needs, export prospects and technological capability. Consequently, the newly emerging military industries in the South are as reliable and business-like as the same industries in the North. Moreover, they are tough competitors not only in terms of quality but also in terms of prices. Brazil, China, the Republic of Korea and Singapore can undersell any long-established arms exporter from the North and their military industrial enterprises not only earn hard currencies but also make profits as well, with or without export subsidies.

The described stage-by-stage expansion approach, adopted by the newly emerging military industries in the South, if followed by other industrial branches related to social and not security needs at national and regional levels would without any doubt contribute considerably to the economic and social welfare of many developing countries. The success of these military industries strongly suggests that the obstacles to industrialization in the South, except in the small countries extremely poor in natural and human resources, do not reflect the state of nature but are man-made. If a developing country can produce in competition with the industrialized countries not only small mass consumption military hardware, such as light machine guns, but also armoured cars, tanks, cannons, land-to-air missiles and eventually military jet aircraft, it could easily produce a wide range of capital, intermediate and final consumer goods for peaceful purposes. Paraphrasing the Leontief remarks with which this essay started, the world-wide reallocation of financial and physical resources from military spending to peaceful-oriented production would result in increased global levels of production, trade and consumption, but only if the subsequent transfer of resources to the developing countries were accompanied by changes in their structures. The success of the new military industries in the South is an example of a wrong solution to structural problems that offers an additional threat to world security. This example might, however, demonstrate to the South that its industrialization is not only possible but worth pursuing if directed towards socially positive objectives within the framework of South-South co-operation.

Notes

1/ Wassily Leontief and Faye Duchin, Military Spending, Facts and Figures, Worldwide Implications and Future Outlook (New York, Oxford University Press, 1983), p. 66.

2/ International Institute for Strategic Studies, The Military Balance, 1983-1984 (London, September 1983).

3/ Stockholm International Peace Research Institute (SIPRI), The Arms Race and Arms Control 1983 (London, Taylor and Francis, 1983).

4/ Ruth Sivard, World Military and Social Expenditures (Leesburg, Virginia, Institute for World Order); and International Institute for Strategic Studies, The Military Balance (London), among others.

5/ The Arms Race and Arms Control, 1983 (London, Taylor and Francis, 1983).

6/ Financial Times Survey of Defence Industries, Financial Times, 10 October 1983.

7/ Particularly enlightening in that respect is an article by The New York Times military expert, Drew Middleton, "Smaller nations crack arms market", The New York Times, 28 August 1983.

8/ See Andrew Whitley, "Curtain parts on Brazil arms trade", Financial Times, 1 June 1983; Dinah Lee, "Singapore is quietly pursuing role as an independent arms producers", International Herald Tribune (Hong Kong edition) 16 December 1983; Chris Sherwell, "Singapore builds up defence industry in economic strategy", Financial Times, 30 November 1983.

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Printed in Austria
V.84-81186—July 1984—12,300

00900P

United Nations publication
Sales No.: E.84.II.B.4

ID/SER.M/12