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CHANGES IN WORLD ECONOMIC CONDITIONS: IMPLICATIONS FOR LATIN AMERICA

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Preface

In a letter dated 14 June 1984, Enrique V. Iglesias, Executive Secretary of the United Nations Economic Commission for Latin America (ECLA), asked the German Development Institute to draw up a paper in preparation for a technical meeting of the ECLA at which Latin America's development strategies and policies in the remaining years of the 1980s are to be discussed. As requested, the following study, for which Klaus Esser acted as coordinator, covers the most important changes in the world economy in recent years and their implications for Latin America.

In addition to expressing their views on the crisis in the world and, more specifically, Latin America, the authors suggest solutions to the most serious problems. They have ignored areas for which they felt adequate proposals have already been made, particularly by ECLA itself. For example, scant attention has been paid to the capital goods industry and policy on technology. Nor does the study include charts, tables or a detailed bibliography. The subjects discussed are considered in greater depth in the GDI studies to which reference is made.

The paper is one of a number of studies devoted to the subject of stabilization and consolidation in Latin America through the modification of economic policy models ("adjustment with growth", "austerity without recession", etc.). It focuses on a number of fundamental questions arising for Latin America from the debt problem, the crisis facing the liberal world trade order and technological advances in the industrialized countries and from the inadequacy of the inherent momentum of the industrialization process. The shortage of time made it impossible to consider more than two sectors of industry (textiles and shipbuilding).

Berlin, August 1984

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Summary and Conclusions

The changes in world economic conditions and the persistent recession that has been caused by "imitative industrialization", external shocks and inadequate adjustment processes leave Latin America with no alternative but to seek models and concepts which offer new development prospects. It must revise its position on the mechanisms designed to guide the world economy, just as it must devise a "concrete utopia" and derive from it feasible concepts for an independent course of action that also provides for a new quality of socio-economic development.

This study is neither designed nor able to suggest a comprehensive concept for the region's external and internal adjustment. It endeavours to explain aspects of the world economic situation that are important for Latin America in a situation in which relations between industrialized and developing countries have reached a critical stage, and presents a number of conclusions of relevance to the region to be drawn from the current international debate on debts, trade, technology and the environment. As the options open to the Latin American countries are limited and can only be improved in the medium term, the study proposes guidelines for the formulation of forward-looking economic and social policies.

The concept generally favoured by the industrialized countries and largely endorsed by the governments of the developing countries for a long-term solution to the debt problem confines international crisis management to finding the appropriate mix of debt restructuring measures, new sources of external financing, manageable interest rate levels, austerity policies and the stimulation of exports. Wherever possible, the developing countries, many of which are now net exporters of financial resources to the industrialized countries, are to become net importers of capital again.

A return to the post-war model of "growth cum debt" is, however, hampered by high debts, the consequent interest obligations, unfavourable trends in world trade and traditional approaches to stabilization, all resulting in contractive adjustment whose lower limit is in no way fixed. Unless a partial cancellation of debts, varied according to the debtor countries' foreign trade performance, is soon agreed, further impoverishment of large sections of the population, political unrest and escalating conflicts between creditors and debtors are likely to occur.

The multilateral trade order set out in GATT has been undergoing a process of erosion since the 1970s. Its principles were undermined by the fiercer competition among the industrialized countries, all seeking growth, and by the oil-exporting countries' cartel policy. The textile sector became the touchstone for the integration model that is based on the theory of comparative advantages. With protectionism on the increase for more than two decades and world trade in textiles increasingly controlled by self-restraint agreements, the sobering conclusion to be drawn is that the OECD countries will feel committed to this model only as long as the burden of adjustment on them remains tolerable. On the other hand, the "managed trade" model sanctioned by the Multifibre Arrangement has prevented OECD markets from being completely closed to developing countries' exports of textiles and clothing. A number of East Asian exporting countries have in fact been able to achieve surprisingly high growth rates despite the restrictive import conditions. It follows, therefore, that protectionism in the industrialized countries cannot be entirely blamed for the relative backwardness of Latin American exporters.

For the developing countries the new information and organization technologies, which will affect all aspects of life and every country's position in international competition, will entail risks and provide opportunities on an almost inestimable scale. Their trading position will undoubtedly become even more diffi-

cult. Particularly where labour-intensive manufactures are concerned, technological innovations will eliminate the comparative advantages the developing countries now enjoy. Their prospects of making major gains in the OECD textile markets are therefore poor, since the extensive rationalization and automation made possible by technological development will enable the industrialized countries to withstand substantial pressure of competition. Even if protectionist barriers are lowered, the developing countries' export prospects are thus unlikely to improve to any major extent.

Only countries which have a technological capacity of their own and a differentiated industrial structure and succeed in incorporating new technologies quickly, which will also be necessary because of the growing competition among the industrialized countries, will be able to keep pace with the leaders in the international technology race. If they gear their trade policies undogmatically to their respective levels of industrialization, they may even succeed in improving their international competitiveness by "leap-frogging". However, the effect the new technologies have on most developing countries is likely to be generally adverse unless international advice on their use is sought and provided.

In view of the level foreign debts have reached, particularly in advanced developing countries, the present inefficiency of the world economic integration model and the advent of the new technologies, the developing countries must give up any idea of pressing ahead with their industrialization by concentrating on the markets of the industrialized countries or by pursuing text-book neo-liberal policies. Instead, they should use the present period of low growth to make the internal adjustments which have long been overdue and which the changes in the world economy now make unavoidable by introducing more complex and independent industrialization and development strategies.

As additional funds will be difficult to obtain for a considerable time to come, the region will be forced to abandon the growth-cum-debt strategy recommended by the IMF and World Bank, which has proved unrealistic, its adverse effects further aggravated by "industrialization based on large companies and projects", and to modify its growth and world trade concepts. A realistic strategy of "independent development" emerges if three elements are combined: priority should be given to fully exploiting the potential of domestic markets, greater use should also be made of the regional market, and links should be actively, though selectively, forged with the world market with a view to improving entrepreneurial and technological efficiency.

Analyses of individual sectors of industry, only two of which, textiles and shipbuilding, are covered by this study, also indicate that this is the right course to follow. Since 1978 world shipbuilding production has been only about 50 to 60% of the level reached in the early 1970s. Many shipyards and the world merchant fleet will continue to suffer from overcapacities until the late 1980s, after which there will be a gradual revival of demand as replacements become unavoidable, although investment in additions to the fleet will remain limited. The shortage and rising cost of credit in Brazil and Argentina have resulted in a decline even in domestic orders, and Mexico has been unable to implement its plans to expand its shipbuilding industry and merchant fleet. Efficient production for the domestic and regional markets, which will not be possible until the financing and other problems have been alleviated, is the essential element in any strategy aimed at closing the gap with the industrialized countries, of which only the large Latin American countries are likely to be capable.

Latin America has its mind far too firmly fixed on its external links and constraints and the resumption of traditional modernization strategies. The countries of the region need a "social project" that increases their room for manoeuvre despite stabili-

zation. It is not enough to imitate the industrialized countries' patterns of growth and consumption. Industrialization that largely benefits the upper 40% and leaves the other 60% to bear the burden of adjustment has little chance of succeeding. It would remain confined to the "modern sector" and not do enough to develop the national industrial bourgeoisie or alleviate the employment problem. "Industrialization" means "the introduction of industrial processes in all sectors" and is thus a problem for the whole of society. It is the outcome of a broad consensus and of the wide-ranging development of its politico-institutional, social and technological foundations.

The development of domestic and regional circuits requires a stable macro framework and close cooperation between governments and domestic companies, which agree that an industrial core must be constructed and competitiveness improved, that infant industries must be assisted and protected and that the dynamic incorporation and spread of technology is essential. Such forward-looking industrial policies would have to be backed by social reforms and supportive population, employment and social policies to overcome the heterogeneity in and among all the various sectors. The alternative is the type of institutional and social decay that is already occurring in some small countries. In the others there has already been a substantial improvement in the political conditions needed to underpin a comprehensive adjustment concept, in the form of a social pact along the lines of a basic historic compromise among the various social groups.

The pre-industrial structures that impede development must be removed, which will also entail the implementation of the long overdue agricultural reforms. In addition, the sectoral, regional and ecological imbalances, which are growing because of excessive concentration on growth, the low level of social adjustment mechanisms and stabilization policies, must be reduced if domestic markets are to expand. As the concentration of incomes and wealth is more pronounced in Latin America than in other

regions of the world, the prospects are favourable in this respect. The development of the regions and local communities, as of the self-help capacity of the people, presupposes a partial restructuring of financing systems, but it will ease the burden on central government in the medium term.

When the industrialization concept is changed, concentration on clearly defined projects, largely implemented by domestic companies and financed from internal sources, is crucial. This will reduce imports of capital, goods and technology and alleviate environmental and employment problems. The emphasis in industrialization should be shifted from consumer durables and primary commodities to mass-produced consumer goods and capital goods. In all, priority must be given to the productive sector, and it is quite possible for investment in infrastructure and the service sector to be temporarily reduced.

Human capital is the most important factor in development. If industrialization is to be broadly based, technology must spread throughout society. There must be an educational offensive that creates a "national technological culture" if self-help, the mastery and combination of various levels of technology (with the added objective of increasing employment opportunities), a dynamic system of innovation, technological flexibility and selective development in high-tech areas are to follow. In the 1980s at least, the spread of technology will be more beneficial to society than economic growth.

No country can forgo the constant improvement of its technological competence if it is to exercise independent control over its development process. Basic research is initially less important than the rapid imitation and adaptation of technologies, through the encouragement of close cooperation between universities and companies with a view, inter alia, to reducing lead-times. The incorporation and spread of technologies are essential if there is to be more than complementary trade and if a "forward-looking

technological strategy" geared to growing world market linkages is to be pursued.

By relying on foreign direct investment, for example, the region has omitted to develop what might have been internationally competitive large companies and efficient small and medium-sized enterprises. Only large companies with a strong production base and an innovative and efficient management enable a country to integrate actively into the world market. The production costs of large companies can be reduced further if inputs are supplied by modern ancillary firms. Moreover, the restructuring of traditional small and medium-sized enterprises will create considerable potential for innovation and employment and help to reduce the concentration of incomes and to orient production towards consumers' needs.

More realistic than an integration model that is overambitious in political and planning terms is a form of regionalization that takes account of the growing differences in levels of industrialization. The determining factor is the interest the large countries have in stable regional markets for their manufactures. As shipbuilding clearly demonstrates, their supply capacity must, of course, be sufficiently advanced to permit production at world market price levels. Close cooperation among the industrial agglomeration centres in the region will have spill-over and spread effects that will benefit the other countries, which are unable to develop as differentiated an industrial structure and must seek niches for their exports by resorting to industrial specialization. It will depend on the process of negotiation between the advanced and other countries whether traditional forms of the division of labour can be avoided or gradually removed. Regionalization should focus on the automotive and capital goods industries and cooperation in high-tech areas.

Selective links with the industrialized countries should be forged with a clear view to furthering the industrialization pro-

cess. This is as true of managed trade (rather than exporting at almost any price) as it is of foreign direct investment, which can profit from the development of domestic and regional markets but should grow as a function of its contribution to technology and exports. The crucial factors in industrialization are the import, imitation, adaptation and spread of technologies: without them, high levels of efficiency, creativity and competitiveness cannot be achieved. The modified strategies should be safeguarded by bilateral cooperation agreements, cooperation between old and new middle-level powers and an extension of interregional relations. These elements will play a decisive part in the evolution of a multicentric world economy and balanced international power structure.

Part I

Changes in World Economic Conditions

1 The International Debt Crisis - Problems and Prospects

1.1 Introduction: The Present Situation

The success with which the long chain of payment crises has been overcome in the past would seem to indicate that ad hoc management by central banks, monetary authorities and commercial banks has settled into a routine, a match for even the most serious of pressures, and that the debt problem is thus under control. And as long as the "maximum credible accident" (MCA)[1] continues to play a part by exciting tempers in the dispute over burden-sharing between private creditors and governments without, however, assuming any concrete form, the widespread uneasiness caused by the absence of concepts for long-term solutions will remain. Without the threat of political escalation, the idea that the correct mix of growth, financing, austerity policies and debt rescheduling arithmetic will suffice to bring about long-term consolidation is unlikely to be dropped from the official debate.

Meanwhile, time is not on anyone's side. Having imposed stringent import restrictions, most of the major debtor countries now have trade-balance surpluses. There has begun that net transfer of resources[2] from the developing to the industrialized countries which in essence simply complies with the "growth cum debt" philosophy, but which no one wants in this form or at this time because it results in losses of export earnings for the industrialized countries and in a progressive contraction of the developing countries' economies. Nor will it lead to the crucial turning point in the debt problem which it was believed would follow a lasting improvement in debt-servicing performance, i.e. the restoration of the debtor countries' international creditworthiness. If only because of the level debts have reached in absolute terms, interest rates have long since won the "race" with trade-balance surpluses, although this is to exclude the possibility of market interest rates falling very sharply in the foreseeable future. Owing to reduced, but still persistent current-account deficits, the developing countries' debts are

thus continuing to rise despite austerity policies and the export of resources. Social erosion in the debtor countries is growing, as is North-South disintegration in world trade. Furthermore, international trade in goods is being drawn into the whirlpool of bilateral compensation agreements, which even now are a decisive feature of trade among the Latin American countries.

1.2 The Views of the Principal Performers on the World Stage on the Need for Economic and Financial Action

The differences in the views officially taken by the western industrialized countries are insignificant. What they have in common is the belief and, in many cases, the hope that political incantations will eventually produce the situation they want. This approach will require the following policies and measures:

- the removal of protectionism, to enable the developing countries,
- given an economic upturn in the OECD countries,
- to increase their exports substantially and so,
- after the urgently needed reduction in interest rates and
- long-term debt rescheduling, bring their debt-service burden into line with economic performance.
- However, as the aim is that the developing countries should not only be able to service their debts but also - principally with the aid of net capital imports - begin to grow again,
- if their international creditworthiness is to be restored, there will be a need for adjustment programmes coordinated with the IMF to improve current accounts through the early reduction of macroeconomic imbalances, for supportive conditional financing and for
- confidence-building measures to induce domestic savers to repatriate capital invested abroad, or not to invest it abroad in the first place, and external lenders to provide capital, particularly in the form of direct investments.

One of the most important objectives underlying this approach is the restoration of the status quo ante: "The developing countries should generally remain net capital importers in future since only then can the necessary transfer of resources be accomplished"[3] and: "What these countries also have in common is the relative immaturity of their economies, making imports of capital virtually inevitable if their economic performance is to be further improved."[4]

The position officially adopted by the developing countries corresponds in most principal respects to that of the industrialized countries. The controversy (in UNCTAD, etc.) arises over two shifts of emphasis, which are not, however, entirely unimportant. Thus the developing countries demand

- a more cautious and longer-term orientation of the adjustment programmes to be agreed with the IMF and
- an immediate massive allocation of capital to reverse the net flows of resources so that they may embark on the road to growth as soon as possible and so improve their debt-servicing capacity.

Thus, while differing over the preconditions, both sides want a return to the permanent expansion of credit, the developing countries placing the emphasis on public sources whereas the industrialized countries' governments and central banks favour the private capital markets.

The third major group among the principal performers on the policy-making scene, the commercial banks, or the German creditors among them at least, has now adopted a more realistic position on the part it should play in the financing of developing countries in the medium and long term than their respective finance ministries and central banks, since the majority are now convinced that

- the present policy mix, i.e. deflationary adjustment, fresh money to finance current-account deficits and debt rescheduling

to "equalize" debt-servicing payments, has, with very few exceptions (Venezuela), no hope of success, and openly refer to the possibility of the "MCA", or great financial crash;

- however favourable world economic conditions may be, banking considerations will prevent the addition of further (voluntary) loans, leaving aside the few special cases, to the developing countries' present debts of some US$ 850,000m, there thus being no question of a return to the "status quo ante";
- the numerous models for the rescheduling and discounting of debts and for the temporary capping or permanent reduction of interest rates below the international base rates (prime rate, LIBOR) are subject to statutory and banking limits which, for good reason, can be changed no more than marginally. In addition, they rightly point out that,
- owing to the interdependence within the international financing system, the risks which the banks have accumulated in the private sector has long since assumed a new - socio-political - dimension and the central banks should therefore certainly be called upon as "lenders of last resort". It seems futile to ask whether possible support operations should extend only to liquidity problems and ignore solvency crises (F. Leutwiler)[5] since, in the event of an international financial crash sparked off in all likelihood by the US banks, such a distinction would be not only difficult to make but also irrelevant.

1.3 Criticism of the Positions Adopted by the Principal Performers

The restoration of the status quo ante, i.e. the return to growth cum debt, is thus the declared aim of the governments of the industrialized and developing countries, as of the central banks and the two Bretton Woods institutions. It derives its legitimation from the basically plausible idea that the developing countries can only ease the pressure of their major internal problems by accelerating macroeconomic growth. Since the domestic level of saving tends to be inadequate, this would imply the constant import of foreign savings. Structural current-account de-

ficits, the reflection in the balance of payments of continuous net imports of capital, are therefore essential if development is to continue and thus normal and desirable since they are, after all, the precondition and outcome of additional imports of goods and investments which developing countries could not otherwise afford. Hardly anyone at policy-making level has so far given much thought to the longer-term prerequisites for or consequences of an expansion of world trade that is stimulated by imbalances financed with credit because it is a model that satisfies all concerned: its implementation has brought the developing countries additional resources to spur on their development process, while the industrialized countries have profited from additional exports which the foreign exchange revenues earnt by the debtor countries by exporting goods and services would not have permitted and also from a reduction in the political pressure to remove their protectionist barriers. And the banks have made good money quickly by providing the funds required.

The proposition that continuous net imports of resources by the developing countries are necessary and normal inevitably clashes with the current standards of the international monetary order and has therefore resulted in the major industrialized countries adopting a rather inconsistent policy towards the IMF. On the one hand, they argue in strictly monetary terms, as the IMF's Articles of Agreement require, when the design, maturities and conditionality of the Fund facilities are under discussion, referring to the short-term nature of the IMF's adjustment programmes and of the funds it provides to bridge transitional imbalances. On the other, they argue in development terms by advocating, for the reasons mentioned above, not a return to balanced current accounts but the restoration of creditworthiness to ensure the financing of the structural current-account deficits that are desirable on development policy grounds. This basic inconsistency is one of the principal causes of the meagre success of the IMF's adjustment policies, since the Fund's policy recommendations actively encourage the endless chain of trade-balance deficits in developing countries with which it is con-

fronted and since the economic conditions that are needed if a process of long-term debt accumulation is always to remain manageable do not exist.

On closer examination, it is found that the requirements to which the advocates of a return to the growth-cum-debt scenario refer cannot be satisfied:

- However long-term the debt-restructuring measures and however substantial the reductions in interest rates might be, net imports of resources would be followed by a debt explosion, which no one can want, for which neither public donors nor private financiers would provide the funds and which would not necessarily result in growth, improved current accounts and greater debt-servicing capacity.
- Even though many developing countries have considerable scope for confidence-building measures designed to make the climate for domestic and foreign investors more attractive, it is difficult to imagine how, even in the longer term, domestic investors could be persuaded to have the same confidence in their own countries as they have in the countries which are the principal benificiaries of the flight of developing-country capital or how, in view of the longer-term development prospects, the expectations of potential foreign direct investors regarding risks and profitability might be substantially improved.
- The crucial factor, however, is that, even if conditions are favourable (a lasting economic upswing in the OECD countries, a reduction in interest rates, long-term debt rescheduling), the impossibility of solving the transfer problem in the foreseeable future is likely to prevent the developing countries from achieving the stable current-account surpluses that would enable them at least to meet their interest obligations, i.e. to stabilize their debt levels: protectionism, which in the industrialized countries has the backing of the two most powerful social groups, the trade unions and the private sector, will tend to grow rather than diminish mainly because of the "third technological revolution", which will aggravate employment pro-

blems. The new technologies will also eliminate some of the developing countries' traditional comparative advantages, through the substitution of mineral raw materials, for example, or result in the transfer (back) to the industrialized countries of the advantages the developing countries at present enjoy in, say, the textile sector. After all, while upward phases in the business cycles of the industrialized countries may always have led to the growth of developing countries' exports, they have always been followed - not least because of the backlog of demand that builds up during recessionary periods - by an increase in their imports, encouraged by generous credit facilities. In other words, at no time since the war have they resulted in a reversal in the developing countries' aggregate current-account balance, and it is unlikely that the industrialized countries will abandon the policies they pursue to preclude deficits on their own current accounts. Some, like the Federal Republic of Germany with its Promotion of Economic Stability and Growth Act, have even adopted legislation to this end.

1.4 Prospects and Potential Solutions

It is not yet possible to say what the eventual outcome of the debt crisis will be. An analysis of the present situation reveals four basic scenarios, which will succeed one another in some respects and be superimposed and/or overlap in others.

Depression Scenario

The deflationary adjustment process in most countries with debt problems will continue as long as the developing countries believe that the consequences of their refusal to pay their debts would be more serious than the economic and social consequences of a continuous contraction of GNP, or as long as creditors consider the granting of more and more of the "bad" loans that are needed to refinance debts or, in the form of "fresh money", to cover current-account deficits preferable to writing off the developing countries' debts once and for all. As the IMF is re-

quired by its Articles of Agreement to insist on the short-term reduction of imbalances in foreign trade and the underlying macroeconomic disequilibria, its adjustment recommendations focus on the demand-side, contractive adjustment of the macroeconomic parameters. At the same time, the lack of financing sources is forcing the countries in crisis to aim at the highest possible trade-balance surpluses and so to export a large proportion of their already scant savings so that they may service their debts. This makes it more difficult for them to invest enough to stabilize their economies, if only at a lower level, with the aid of supply-side policies. As the level of macroeconomic activity declines, adjustment policies produce new imbalances. As long as the large-scale export of resources from the developing countries continues, it will be impossible to curb this contractive effect of adjustment processes.

It is already impossible to predict what economic damage will be done. The proportions it assumes in the long term will depend on how long the illusion that a conventional solution can be found leads people to forget that in the past, except in wartime, most of the high debt burdens of sovereign states have always reverted to the creditors in the last instance, and for good reason. If the present deflationary process persists, debts will continue to rise inexorably to the same extent as trade-balance surpluses lag behind interest payments and some interest is thus de facto capitalized. GNP will also continue to fall, i.e. the relationship between the two macroaggregates will steadily deteriorate (hence the complete lack of justification for the satisfaction at the general reduction in the developing countries' current-account deficits), and this in itself makes the restoration of creditworthiness seem doubtful.

As the debtor countries' efforts to adjust their foreign trade are concentrated on reducing imports for the reasons mentioned above, the result is a reversal of the international division of labour, which for the industrialized countries means the loss not only of markets for their goods, for a long time to come in some

cases, but also of attractive production sites because of the contraction of domestic markets.

In the developing countries the decline in macroeconomic production potential will result in the rapidly accelerating impoverishment of ever larger sections of the population, extending deep into the middle classes. In many cases, the successes achieved in decades of development will be destroyed within a short space of time.

Expansion Scenario

As a return to "growth cum debt", which is what everyone in principle wants, will not be possible in the foreseeable future in the form that was usual up until 1982, an alternative is emerging from the debate. Although the effect would be the same, the method appears to be politically and technically feasible: the suspension of debt servicing for several years accompanied by the capitalization of interest and the further allocation of public loans. Like the massive net inflow of capital demanded above all by the developing countries and those who espouse their cause (G 77, UNCTAD and also the report of the Brandt Commission), the savings which these countries now transfer to the creditor countries up to the level of trade-balance surpluses to pay interest could then be used for domestic capital formation as long as the suspension continued. All the foreign exchange earned from exports would be available to pay for imports.

A strategy of this kind might well produce a brief period of spurious prosperity, but it would certainly lead to an unprecedented debt explosion. As it is inconceivable that the debtor countries could meanwhile raise their exports to a level that would enable them to import goods in sufficient quantities and also meet their then increased interest commitments, far more serious adjustment deflation would follow and probably soon lead to a political escalation of the debt problem.

Escalation Scenario

Despite the now well established system of crisis management, the possiblity of the debt problem being politically escalated cannot be excluded. An escalation process of this kind could be sparked off by both debtor and creditor countries.

For example, a number of Latin American debtor countries might conceivably suspend interest payments indefinitely as a concerted reaction to a further increase in the prime rate (a scenario played out in the "Economist").[6] The creditor banks in the USA would then be forced to make substantial adjustments after the statutory 90-day period, which would have a direct effect on their disposable profits and, even if the Federal Reserve System provided an unlimited liquidity guarantee, lead not only to a drop in share prices but also to a massive withdrawal of deposits by foreign investors. Thus the "Economist". The further implications of a scenario of this kind are clear. The interbank money market, which relies on mutual confidence among the participating banks, would probably collapse and so strike at a vital nerve of the western financing system. As there would then be no chance of a return to the present system of crisis management, the Latin American debtor countries, prompted by domestic factors, would take the obvious course and question not only their interest obligations but also the debts themselves, in part or even in whole. This in turn would force the governments of the creditor countries to use the arsenal of commercial and proprietary sanctions provided for this purpose, with all that this would entail for foreign trade.

On the other hand, the "MCA" might equally be sparked off by the creditors. Smaller US banks might, for example, take the view that they could really no longer afford the flexibility needed if more and more fresh money was to be advanced to finance old debts. If they themselves were faced with an acute liquidity crisis or became increasingly nervous in view of the obviously hopeless ritual of debt rescheduling, they might prefer to write off their irrecoverable claims against Latin American countries

once and for all. Through the system of "cross default clauses" they would then compel the major US creditor banks to write off debts far in excess of their equity capital, and the avalanche would then begin. The effect might be similar if, for example, the Federal Reserve Board insisted on the strict application of the current rules governing the writing off of debts.

It is impossible to predict the consequences of a political escalation of the debt problem. They would depend on the efficiency of the safety nets, on judgement and on the ability to act and willingness to compromise of the political decision-makers.

Scenario for a Sound Solution to the Crisis

The debt crisis has assumed such proportions that the traditional control instruments can at best guarantee the preservation of the status quo in the medium term. Owing to the high total volume of foreign debts, the various individual cases are so interdependent that a global approach is essential if the problem is to be solved. The emphasis in this approach should be on a partial debt cancellation, varied according to a country's presumed ability to service its debt if reasonable sacrifices are made, difficult though it would be to apply this latter criterion in practice.

A general arrangement would be required for the treatment of the various types of debt, the combination of instruments to be used and the institutionalization of the negotiating processes. Within this generally binding framework the debt problems of the various countries could then be tackled case by case. As there is presumably no alternative to a global "umbrella of criteria, instruments and institutions" and individual debt agreements negotiated under it, the international community can look forward to a level of cooperation and binding dialogue to which W. Guth's assessment applies in every respect: "... the way in which we cope with this debt crisis will be the great test of the western world's liberal economic system."[7]

As the political decision-makers are far from agreed on the above and their deliberations in fact still focus on ways of outwitting the economic logic that requires every current-account deficit to be matched by an equivalent current-account surplus, a sound solution to the crisis is at present conceivable only as the outcome of a compromise which the creditors would be prepared to accept in response to escalating confrontation and for fear of the global and individual costs of a worldwide financial crash.

And yet the sooner a sound negotiated solution was found, the greater the advantages for all concerned since - as the past has shown - economic regeneration always takes far longer than the destruction of large parts of a country's production apparatus. If the deflationary process in such countries as Argentina, Brazil and Mexico could be stopped, potentially efficient debtor countries might soon become interesting trading partners and borrowers again. If, on the other hand, contractive adjustment continued until the end of the decade, the result would be a long-lasting economic setback and the social and political deformation not only of Latin America but also - with a certain time-lag - of many developing countries in Africa and Asia.

The prospects for a timely negotiated solution, necessarily involving the cancellation of many debts, are poor, however. There has already been an instance this century of "political rage" in the handling of a debt problem leading to an economic disaster, quickly followed by a political disaster, even though Keynes, an economist not without political influence, had warned with eloquence and foresight of the economic consequences of the Treaty of Versailles. And today problems are again all too readily discussed in terms of who (among the developing countries and commercial banks) is to blame and who should be punished, as if everyone would not in the long run be a loser in the event of an international financial collapse.

But even if a "negotiated cancellation of debts" was achieved, it would be no more than a first step, the positive outcome of which would soon be negated if those concerned mistakenly regarded it as the signal for a renaissance of the "growth-cum-debt" process that would be as convenient and growth-generating for both sides as it would be disastrous in the long term. The danger of this happening is so great because it is widely believed that the debt crisis is essentially due to the unfortunate coincidence of many special factors and an accumulation of erroneous assessments. A prudent system of debt management, the argument goes, could ensure a dynamic balance of growth in GNP and exports on the one hand and growth in debts on the other. This idea is wrong, however, because the accelerated increase in interest payments will sooner or later lead to an explosion in foreign debts if constant net capital imports are the prerequisite for a persistently high rate of GNP growth or, if gross capital imports remain constant, the growth of GNP will decline with increasing speed and - as is now the case in Latin America - eventually become negative.

This means that the IMF and World Bank, which were assigned a key role in the conception and implementation of the "growth-cum-debt" strategy, must modify their development policy and world economy model. It also means that something must be done about the lack of symmetry in the policies and instruments which the IMF uses to help eliminate world economic imbalances. In future it must also be possible to force the surplus countries to assume greater responsibility for balancing trade accounts than in the past, although it is open to question whether a mechanism like that proposed by Keynes in 1943 when the IMF was established would be operational.

In addition, the system of exchange rates would have to be stabilized and largely delinked from the capital movements that primarily determine interest rates, so that allocation decisions might again be more closely related to relative commodity prices. The present situation, which is characterized by longer-term distortions of the relationship between price levels in major indus-

trialized countries due to exchange rate fluctuations, is resulting in serious losses of welfare and adjustment friction throughout the world, which jeopardize the economic rationality of the international division of labour. Furthermore, distortions of monetary parities have the direct effect of aggravating the developing countries' debt problems where they lead to an increase in protectionism in countries with serious trade-balance deficits due to exchange rate variations and tend to make the real debt burden unpredictable.

Finally, in the interests of the stricter control and supervision of the process of credit allocation and credit creation in the Euromarkets some kind of international credit law is needed. To be effective, a law of this nature would not necessarily have to be the subject of internationally binding codification, nor would the various control mechanisms have to be centrally supervised. It would probably be enough for national legislation on credit to be amended to this effect, and a start has already been made on a number of major problem areas following the recommendations of the Cooke Committee, which was set up in 1974 under the auspices of the Bank for International Settlements.

2 World Economic Order in Transition - Trade Policy Options for Developing Countries

2.1 Crisis in the Liberal World Trade Order[8]

The 1970s saw a clear departure from the long-term trend towards the liberal market-economy integration of the world economy for which the foundations had been laid after the Second World War with the creation of multilateral regulative institutions (GATT, IMF). This departure was due to the coincidence of various factors:

- After the "Nixon shock" of 1971 (when the convertibility of the dollar into gold was suspended and a 10% import surcharge was introduced) the USA was no longer able to play its role as guarantor of the old world economic order as convincingly as it had done in the 1950s and 1960s. It was too obviously intent

on achieving internal stabilization at the expense of its trading partners (protectionism) and of world economic stability (initially with an inflationary dollar and now with a policy of high interest rates), which helped to erode the old order.

- The suppliers of manufactures to the world markets were joined by a number of advanced developing countries (Newly Industrializing Countries), whose success, spectacular in some instances, in exporting labour-intensive and standardized industrial consumer goods prompted the OECD countries affected to resort to increasingly sophisticated protectionist measures.

- A successful cartel policy enabled the oil-exporting countries to increase oil prices fourfold in 1973/74 and double them again in 1979/80. All the countries that depended on imported oil consequently came under heavy pressure to adjust, although the industrialized countries were able to pass on some of the increased cost of oil to the developing countries by raising the prices of manufactures and so ease the burden of adjustment on themselves. The "recycling" of the OPEC countries' foreign currency surpluses to the developing countries, whose debts were steadily growing, prevented the world economy circuit from declining into a protracted depression in the second half of the 1970s. The burden of adjustment brought about by the oil price rises thus remained manageable both for the industrialized countries and for the developing countries which depended on imported oil. In the early 1980s, however, the risks inherent in delayed adjustment, especially for the heavily indebted developing countries, became clearly visible. The worldwide loss of confidence in medium-term economic recovery and the stability of the international financial system resulted in a serious world economic recession.

- In 1974 the developing countries, which had formed themselves into the "Group of 77" in UNCTAD, placed their demand for a "New International Economic Order" on the agendas of a series of international conferences, euphemistically known as the "North-South dialogue", at which the OECD countries were to be forced to make wide-ranging concessions by the threat of the

extension of the OPEC cartel policy to other commodities. With hindsight, it is clear that the hopes placed in this strategy were far too optimistic: no more than marginal concessions were wrung from the industrialized countries, and the politicized atmosphere at the multilateral conferences made them even more inclined to conduct most negotiations of substance at bilateral level. This also complied with their need to pursue policies that protected the export interests of their own industries against competition from the other OECD countries.

- With the completion of the reconstruction period in Western Europe and Japan and the narrowing of the technological gap between these regions and the USA, the competition among the leading industrialized countries for markets in manufactures became fiercer. New forms of export promotion and new methods of protecting national industries against cut-throat technological competition have since gained in importance. To regain or provide long-term protection for competitive positions in the world markets, all the OECD countries now pursue comprehensive and carefully itemized policies of industrial and technological promotion. The resulting conflicts tend to be settled bilaterally or in exclusive clubs of the countries concerned rather than by the multilateral institutions set up for the purpose.

These developments have reduced GATT's importance as the guardian of the liberal world trade order. The Tokyo Round of tariff reductions brought an end to the traditional approach of encouraging the liberalization of trade through such multilateral negotiations. The tariffs which the OECD countries impose on manufactures are now so low that further reductions are hardly likely to have a favourable effect on the development of trade. The considerable exchange-rate fluctuations and national export-promotion and import-regulation policies now play a far greater role in guiding patterns of trade. GATT has long since ratified the trend towards "selective protectionism"[9] by accepting the special arrangements for world trade in textiles and today simply

acts as a forum in which all the countries, with a more or less "guilty conscience", renounce protectionism or at least its further spread.

Owing to the financial difficulties they encounter because of their debts, the developing countries, which have in any case never been fully committed to the liberal world trade order, increasingly resort to barter dealing to meet their most urgent import requirements. The export race among the OECD countries for contracting world markets enables them to find enough suppliers who have no alternative to this form of bilateral trade if they want to export anything at all. As a result, barter dealing now accounts for some 50% of the developing countries' foreign trade. This type of business represents a growing departure from the multilateralism of the old trade order that was to have been institutionalized through the adoption of the most-favoured-nation system.

2.2 Alternative Models for the Future World Trade Order

The structural changes in world trade and the erosion of the liberal world trade order have given rise to various concepts. The international debate reveals three major trends, which take up the proposals for a global regulative policy and for appropriate adjustment strategies to be pursued by the developing countries: the liberal concept of integration, the concept of "managed trade" within an enlarged supranational framework and the regionalization of world trade.

Integration Model

Most western economists and the international institutions dominated by the West, such as GATT, the IMF and the World Bank, continue to advocate a return to the liberal order. They refer to the world economic crisis of the 1930s, when the rapid growth of protectionism ("beggar-my-neighbour") led to the collapse of world trade and to downward economic trends in countries with international linkages. Once again, it is claimed, the possibi-

lity of the developing countries' foreign debt problem becoming insoluble as a result of growing protectionism cannot be excluded. Through the collapse of the international financial system this might again be followed by a deep world economic depression. Every country should therefore begin by agreeing to a trade "standstill", i.e. to refrain from taking any additional protectionist measures, and then progressively to liberalize all trade. The developing countries should integrate themselves into the international division of labour by exploiting the comparative advantages they enjoy in the production of simple labour-intensive manufactures and so gradually repay their debts. At the same time, the more advanced developing countries should observe the rules of GATT more closely by progressively removing the protection they give their infant industries and exposing their industries to more of the pressure that comes from world competition, even in their own markets. This is bound to prove advantageous, it is argued, because it is the only way to force domestic industries to rise to international levels of technology and efficiency.

Managed Trade

An alternative view is based on the growing importance of neo-mercantilist competition among countries in the areas of employment and growth. According to this view, world trade is not characterized by a harmonious international division of labour but by increasingly fierce international rivalry over opportunities for growth and advantages to be derived from technological development. This rivalry becomes fiercer with the arrival of each new potent competitor in the world market, even though the industrial development of developing countries improves the prospects of selling technological products. Recent trends in trade policy (the bilateral definition of interests through self-restraint agreements, etc.) have shown that the old regulative framework of GATT is no longer an adequate mechanism for settling conflicts.

These tendencies have been further aggravated by the growing responsibility the western welfare states have assumed for ensuring full employment: the attempt to externalize unemployment through the mercantilist promotion of exports and restrictive import policies has always formed part of any policy of full employment. As long as interest groups can bring pressure to bear on democratically elected governments to protect jobs that are under threat by imposing import restrictions, there can never be a totally liberal import policy, as the protectionist excesses of the most liberal governments in the West, those of Britain and the USA, have shown.

The way out of this dilemma should consist in transferring as much of the responsibility for growth and full employment now borne by the nation states to the supranational level to take account of the growing world economic linkages. At the very least, there should be closer harmonization of national cyclical policies so that, if nothing else, the perpetual trade-balance and monetary problems that are bound to arise where national economic policies diverge can be avoided. Another step would be the international programming of industrial development to prevent the emergence of the overcapacities in crisis-hit industries that simply invite protectionism. To this end, the international institutions should be given a wider range of tasks and powers, or perhaps new institutions should be created (e.g. the revival of the old ITO idea by the Brandt Commission) to press ahead with the supranationalization of economic and industrial policy. The advanced developing countries should also be gradually involved in a regulative framework of this kind. The World Bank's attempt to focus attention on the responsibility of the western industrialized countries and their national cyclical policies for the economic development of the developing countries might be regarded as a step in this direction.

Regionalization of World Trade

The crisis facing the liberal order and the difficulties many developing countries encounter in their attempts to integrate suc-

cessfully into an international division of labour with the industrialized countries lead a number of Third World theorists to conclude that, unless the developing countries withdraw from world economic linkages to a greater or lesser extent, they stand no chance of developing and industrializing autonomously. Only after they have developed a strong industrial base and an indigenous technological capacity can developing countries hope to compete with technologically superior countries in world trade without danger to themselves.

The scarcely realistic delinking concept is replaced in this approach with a plea for the gradual reconstruction of international economic cooperation from the bottom up, through the intermediate stage of regional cooperation. By extending their regional economic relations with a view to achieving regional integration, developing countries can reduce their dependence on the industrialized countries without forgoing the advantages of larger markets and greater specialization. This concept corresponds to the second in that the immediate and universal implementation of the ambitious programme of supranationalizing more and more areas of economic policy seems hardly feasible, whereas supranationalization at the level of regional areas of integration appears less unrealistic and is already being attempted by the European Community, for example. The next step might then be for the areas of integration to define their trade and economic interests among themselves. Closely linked areas of integration, each with its centres of industrial agglomeration, between which there are weaker interregional economic relations, would be the aim of this strategy.

It is already becoming clear that the three models of the world economy outlined above are far from being mutually exclusive. If the world economy could be reconstructed "from the bottom up", i.e. through increased regional integration, and if growing harmonization of economic policies in and between areas of integration then became possible, protectionism could also be removed. Protectionism is, after all, simply an indication that

the prior definition of interests among nation states is not yet infallible. But it is here that the course pursued departs from the liberal approach, which assumes that the eschewal of protectionist measures is almost bound to result in the growing integration of all countries - whether developed or not (yet) developed - into the international division of labour. At a time when increasingly close world economic integration is accompanied by increasingly serious conflicts of interest among all the participating countries, this "negative integration policy" concept must be abandoned in favour of a "positive integration policy" model, which postulates that appropriate development, structural, industrial and stabilization policies must be actively pursued if integration is to be achieved. An integration process that is actively encouraged by the governments is essential if there is to be a gradual move towards abandoning the superfluous regulation of international economic relations.

2.3 Consequences for Developing Countries

The structural changes in the world trade system that have been outlined above and the accelerating rate of technological development mean that there is a great need for the developing countries to adjust. The adjustments required will vary according to their level of development. However, all developing countries will have to abandon the two general strategies that have been proposed - the liberal integration model and the New International Economic Order. Both concepts take as little account of the dynamism of the neo-mercantilist policies pursued by the nation states with their highly disparate and conflicting interests as of the dynamism of recent technological development, which is making increasing demands on governments' skills in the areas of industrial and technology policy and, through an accelerated process of differentiation in the Third World, destroying the solidarity behind the developing countries' demand for a New International Economic Order. In neither case can the developing countries expect the industrialized countries to back down unless they have to. If references to the industrialized countries' liberal trade doctrine were not enough to put a stop to protection-

ism, the strategy that consisted in persuading the industrialized countries to reform the world economic order along the lines proposed by the developing countries was certainly bound to fail.

In view of recent technological developments in the industrialized countries it is no longer enough for the developing countries to seek integration into the international division of labour with the industrialized countries by adopting a passive policy of relaxing their restrictions on foreign trade as required by the monetarist concept. The industries of the North have been clearly less inclined in recent years to lower their costs by transferring production capacities to the South both because most such opportunities have already been seized and because the new rationalization technologies are reducing the industrialized countries' labour-cost disadvantage, added to which the pressure of labour costs has been eased by growing unemployment.

As a rule, the use of new technologies also improves the quality of manufactures, and less sophisticated products from developing countries will therefore find markets only if prices are substantially reduced. In many sectors the introduction of the new technologies will enable producers in the industrialized countries to manufacture a very wide range of products at a high level of productivity, and the developing countries are thus likely to be left with no more than the lowest market segments for their exports. Although they should go on trying to improve their market position at this level, wide-ranging, self-supporting industrial development cannot be based on this low-wage export strategy alone: far greater industrial efforts will be required.

In view of the growing ferocity of world economic conflicts, the developing countries have no alternative but to build on their own strengths and abilities. Nor can a great deal be expected of solidarity among the developing countries in specific areas. The oft-quoted analogy with the class-consciousness of the proletari-

at in wage disputes is hardly relevant since incomes disparities in and among developing countries are too pronounced. The developing countries can therefore no longer afford to wait for the industrialized countries to hand them something on a plate (this being true of market access, the prices of raw materials, access to technologies and even development aid). They must try to benefit from the changing world economic situation where they can. If they are to react flexibly to world economic challenges and opportunities, they must adopt an active approach to the new technologies and the opportunities for industrial development which they present.

The neo-mercantilist export race in which the OECD countries are engaged will provide the industrially more advanced developing countries at least with fresh opportunities for furthering their own interests. While a small group of multinational companies controlled the worldwide supply of technology in many sectors until well into the 1960s and was able to dictate terms to developing countries seeking access to modern technologies, the competition among technology suppliers has since become so fierce in most sectors that the technology-importing countries now have far more room for manoeuvre in negotiations. Developing countries no longer need to put up with business practices of foreign groups which they regard as restrictive if they can acquire technologies direct under licence agreements.

Japan's success might serve as a model for a policy on the import of technologies geared to increasing national independence. This does, however, presuppose the existence of a technological infrastructure and adaptive companies capable of adjusting imported technologies to national conditions and possibly developing them further. In some cases, this process of assimilating imported technologies may eventually lead to the development of new products, which can then be exported worldwide or at least to the markets of other developing countries. But few developing countries and only a small number of particularly innovative companies in those countries will be capable of this in the foresee-

able future. The majority of developing countries will have to concentrate on preventing the technological gap from growing too wide by constantly importing technologies from the industrialized countries. If they succeed in this and also manage to avoid the worst mistakes the industrialized countries have made during their industrialization process, developing countries which utilize selectively imported technologies may well be assured of long-term economic development.

Only a small number of inveterate free-trade ideologists today dispute that a successful industrialization strategy requires an intelligent policy of trade protection. It is generally accepted that infant industries need temporary protection during the development and learning phases, although there is some controversy over *how long* this protection should be allowed to continue. Western economists and the international institutions that tend to be dominated by the West, like GATT, the IMF and the World Bank, advocate that the industrially more advanced developing countries should gradually submit to the trade discipline of GATT by removing their import restrictions, some of which are very stringent. Such "graduation" from the special trade status which the developing countries are generally granted in GATT could, if this view is accepted, have various positive implications:

- By offering trade concessions themselves, the advanced developing countries could adopt a more offensive attitude towards protectionism in the OECD countries. During future negotiations in GATT, they might make such concessions conditional on similar concessions by the OECD countries.
- Graduation also means that the advanced developing countries will have to forgo tariff preferences. This would give the other developing countries greater scope to exploit the preference systems, at least where the granting of preferences is subject to quantitative restrictions.
- It is also pointed out that a gradual relaxation of trade restrictions should help to improve the efficiency of national industries, which, it is claimed, is essential if an export strategy is to succeed.

However, as protectionism has grown in the OECD countries and the debts particularly of the dynamic industrializing countries have risen, the graduation concept has become less convincing. Although major developing countries have progressively liberalized their import policies in recent years, protectionism has continued to grow in the OECD countries. Nor would the OECD countries as a whole gain much in the way of export opportunities from the liberalization of the advanced developing countries' trade policies since these countries' imports are restricted by their limited solvency. At best, general liberalization might shift the emphasis from imports of essential capital goods to imports of less essential consumer goods at the expense of domestic consumer goods industries, which might, however, be detrimental to development.

As the less developed developing countries suffer from supply-side constraints, it seems doubtful that their exports would rise to any major extent if the more advanced countries waived tariff preferences. Many of the African developing countries, for example, are unable to take full advantage of the duty-free access to the European Community market that their manufactures enjoy. Despite this preferential treatment, they export less to the Community than more dynamic exporting countries. In this respect at least, the appeal for solidarity among the developing countries does not therefore seem valid.

Finally, the question whether the competitiveness of the domestic industries of more advanced developing countries would be improved if trade policies were liberalized cannot be answered with a definite yes or a definite no. While some industries have become less flexible and innovative behind an excessively high protective wall, Japan shows that the efficiency and competitiveness of industry can also be improved without a general liberalization of imports. Japan has instead relied very heavily on the stimulating effect of fierce internal competition, which singles out companies that can also be regarded as potentially successful exporters. This then enables the Japanese government to concen-

trate its export promotion measures on these efficient companies ("picking the winners"). Compared with the naive policy of removing barriers, which has sparked off a process of deindustrialization in some Latin American countries, this model has obviously proved itself. Its success does, however, depend on an administration which is able to implement industrial policy efficiently and, rather than simply obeying the whims of powerful industrial companies, plays an adjudicating role to ensure fair national competition. In most developing countries the administration has yet to gain this independence.

3 Technological Advances in the Industrialized Countries - Implications for Strategies Aimed at Closing the Industrial and Technological Gap

Since the late 1970s growing use has been made in the USA, Japan and Western Europe of technologies which fundamentally change industrial production functions, company structures, management methods and social structures. These technologies include

- electronics, particularly microelectronics, data processing (computers) and data transmission (complex, highly integrated communication systems),
- new generations of computer-controlled, high-precision, flexible machine tools,
- flexible integrated production systems and industrial automation,
- biotechnology and genetic engineering,
- new materials, e.g. high-strength and heat-resistant substances,
- new energy technologies, including solar energy.

In view of the recent developments in technology, it seems almost inconceivable that not long ago the low growth rates in the industrialized countries were often attributed to a lack of "basic innovations". The growth crisis in the western industrialized countries is obviously due to other factors. They include the

extensive transfers of incomes to the OPEC countries in the 1970s, signs of saturation in private consumption, the need to consolidate public budgets, the still deficient exploitation of investment opportunities which "qualitative growth concepts" offer and changing systems of social values. Consequently, strategies for "activating highly developed economies" must be more broadly based than one-sided "technological modernization strategies".

3.1 Effects of the New Technologies on Industrial Production in the Industrialized Countries

The industrial system has been particularly affected by the new technologies in the following ways:

- The intellectual and financial input required of companies at the development and design stages is growing.
- The development, design and manufacture of products ready for the market are becoming more and more closely linked, i.e. product cycles are becoming shorter; in many cases, the development and design phase will be longer than the product's own life cycle.
- The interdependence of industrial production functions is tending to increase, as is the interdependence of the industrial production system and production-oriented services (specialist engineering/systems firms, communications, banks, insurance and trading companies). This means that complex products can be manufactured and marketed at internationally competitive prices only if the synergistic effects (economies of scope) of a highly interdependent industrial production apparatus are purposefully exploited, with use made of efficient production-oriented services.
- The growing intra- and interindustrial interdependence that is to be found in advanced industrial systems will have a major impact on company structures (industrial organization), although the effect will not be the same in each case: on the one hand, there is a trend in the microelectronics sector, for

example, towards the vertical integration of companies (forward integration of component manufacturers and backward integration of equipment manufacturers); on the other, new opportunities are emerging in electronics and mechanical engineering for relatively small hardware and software producers who cooperate closely with potential users in solving specific problems. In other words, both concentration and deconcentration processes are taking place.

It would be hard to predict with any accuracy what economic and social effects technical progress in the "strategic industries" of the industrialized countries will have. However, in view of the close interaction between technical progress, the efficiency of macropolicies (budgetary policy, monetary policy, price and wage policy, labour market policy, industrial policies) and social control mechanisms (social insurance systems, social control of technical progress), there is every likelihood that they will vary in the three centres:

- Japan has probably the most balanced structure of the three centres: with a few exceptions, such as the military technologies, aircraft construction and the software sector, where it is weak in some respects, it is active in all the "high-tech" sectors. It is important to note that the high-tech sectors have certain spill-over effects, which benefit the automotive industry and consumer electronics in particular. Japan is thus an extremely efficient producer in almost all sectors of industry and achieves surpluses in trade in manufactures amounting to some US$ 110,000m p.a.

  Japan's record indicates that the new technologies can in fact have a widespread impact and, if used purposefully, extend to all sectors of manufacturing industry and the production-oriented services. But this will obviously apply only if the improvement in productivity brought about by the new technologies is not negated by inefficient macropolicies and the eschewal of selective structural intervention ("industrial targeting").

- In the USA the impact of the new technologies on industry as a whole has been far less pronounced than in Japan. Although the USA has the largest high-tech sector in absolute and relative terms (hardware and complementary software production and specialist production-oriented services), its industry has considerable deficiencies in the sectors where medium- or higher-level technologies are used (textiles, clothing, comsumer electronics, compact cars). Most of the products required by these markets are imported. Despite the availability of all the relevant technologies, an overvalued currency and very high wage levels obviously make it impossible for the whole range of consumer durables and non-durables to be produced at internationally competitive prices. In trade in manufactures (high-tech exports vs. imports of low-wage goods/products involving medium-level technology) the USA's deficit has been growing since 1982 (1982: US$ 8,000m; 1983: US$ 38,000m).
- Despite its obvious weaknesses in the high-tech sector (and especially in microelectronics, computers and software production), European industry has so far succeeded in defending its traditionally strong position in mechanical engineering and the durable and non-durable consumer goods industries - although it has frequently had to resort to a mixture of protectionist practices and exchange rate manipulations to do so. The continuingly high level of cohesiveness of the Western Europe's industrial core and the surpluses of almost US$ 100,000m p.a. achieved in trade in manufactures can only be sustained or improved, however, if the gaps in the high technologies are closed and the process of exploiting these technologies in the manufacture of products and the provision of services is speeded up. If Europe fails in this respect, it will probably raise its barriers to the outside world to preclude a process of deindustrialization.

The forecasts of the effects the new technologies will have on the labour market vary widely. Optimists expect the net effect on total employment to be favourable on balance and therefore consider it essential for the whole of the economy to be moder-

nized if the balance in employment is to be redressed. Japan's recent history admittedly appears to endorse such optimism: Japan, the centre in which the new technologies have had the widest-ranging effects, also has the highest level of employment in relative terms. However, the low rate of unemployment in Japan should not be ascribed solely to its forward-looking technological strategy. The high level of employment (exaggerated by the statistics) must also be related to other factors, particularly the Japanese attitude towards investment and the country's industrial organization and social structure.

The propensity of Japanese companies to invest, especially at times of persistent cyclical weakness, has, for example, proved to be more stable than in Western Europe and the USA. Another particularly important factor is the guarantee of life-time employment offered by large Japanese companies. The many small and medium-sized industrial firms also try to avoid redundancies as far as possible by pursuing a very flexible policy on wages and working hours. It is the customer-oriented service sector, however, that has so far proved especially absorptive: small and very small retail, catering and craft firms and the quasi-informal sectors in urban centres provide employment and income opportunities which simply do not exist in either Western Europe or the USA. But even in Japan unemployment is expected to rise in the 1980s. At best, employment in the secondary sector is likely to remain stable, but it is feared that the service sector, where there is considerable scope for rationalization, will be unable to absorb all the redundant workers and newcomers to the labour market in future.

Nor do the effects the new technologies have so far had on employment in the USA and Western Europe leave any room for "technological optimism". It is estimated that only about 13% of the USA's 105m labour force, or some 14m employees, work in the high-tech sector. The largest increases in employment have recently been achieved by the low-paid customer-oriented services, while the number of high-tech employees has hardly changed. The situ-

ation appears to be similar in the Federal Republic of Germany, where it can be assumed that less than 4m of the country's 26m gainfully employed work in the high-tech sector (industry and services).

Modernization in the leading industrialized countries that centres on the high-tech sector is therefore no substitute for comprehensive employment and social policy initiatives and efficient macropolicies. If such initiatives are not taken and economic management is poor, there are many signs that - as is obviously happening in the USA - societies will become increasingly segmented into an "intelligent"/rich/integrated and a non-productive/poor/marginalized group. It is therefore essential for steps to be taken under labour market policies to improve the opportunities for gaining access to the modern core (part-time work, shorter working hours, etc.), to create more jobs in the customer-oriented service sector (retail trade, catering, crafts) through the adoption of a flexible policy on wages and working hours and perhaps even to make a conscious effort to strengthen the "quasi-informal sector" (culture, arts and crafts, ad hoc and spontaneous services) - an approach which does, however, presuppose a tolerant climate and a pluralist system of social values.

3.2 Effects of the New Technologies on the Developing Countries

The new technologies entail both opportunities and risks for the developing countries. In the medium term the new communication and agricultural technologies in particular may have a favourable impact at national level and so provide positive impulses for development processes geared to domestic markets. On the other hand, exporters of raw materials and manufactures are more likely to be adversely affected by the new technologies. For a small group of already advanced developing countries and leading exporters of manufactures (Brazil, India, China, Singapore, Hong Kong, Taiwan and South Korea), however, the positive effects may outweigh the negative and even permit leap-frogging.

The risks or obstacles generally arising for the developing countries from the "third industrial revolution" include

- the erosion of traditional comparative advantages, since technical progress will tend to reduce the need for unskilled labour and raw materials;
- a decreasing trend towards the redeployment of industries, since the significance of labour cost advantages in peripheral areas will diminish; what direct investments continue to be made will be primarily market-oriented (related to domestic and third markets), partly, no doubt, as a reaction to protectionist practices within the OECD; for example, South Korea might become an alternative supplier of small passenger cars as a result of the restriction of Japanese exports to the USA;
- greater difficulty in defending domestic markets and growing dependence on the industrialized countries for technologies; for most developing countries even a strategy aimed at enabling them to do no more than stand their ground as "early imitators" is likely to be too much, since successful strategies that seek to close the technological gap presuppose stable political and economic conditions, efficient economic and technology policies and well-organized companies, requirements which few countries in the Third World satisfy;
- greater difficulty in exporting manufactures to the industrialized countries, of which only the USA is still an absorptive market owing to special factors, i.e. its weakness in the production of consumer durables and above all its overvalued currency, a situation which may change to the disadvantage of the developing countries in the short term and will certainly do so in the medium term.

It will thus be very much more difficult in future to align North-South trade with the structure of intraindustrial trade within the OECD. For most developing countries this is no longer a realistic prospect. "Management of interdependence" must therefore abandon the goal of a rapidly and constantly expanding industrial division of labour between North and South for some

considerable time to come. On the other hand, policies which are guided by a concept geared to

- strengthening the developing countries' autonomous technological capacities,
- strengthening South-South economic networks,
- developing trade relations between North and South that are primarily designed to permit the balanced exchange of complementary goods rather than the exploitation of reallocation advantages,
- keeping the option of integration into the world economy open for efficient developing countries, with account taken of the real scope for structural adjustment in the North,

could create a better climate for development processes in the Third World and for smoother North-South relations than a development concept that continues to aim at the extensive integration of the developing countries into the world economy.

3.3 Opportunities for Advanced Developing Countries

For some time now a small group of advanced developing countries have been making a serious effort to utilize science and technology in their development processes. Each has undergone a long preparatory phase, during which substantial amounts have been invested in the education sector (general and higher education, vocational training) and the foundations have been laid for a scientific and technological infrastructure. Efforts to keep pace with technological development in the centres or even to narrow the present gap have been stepped up in

- Brazil since the mid-1970s,
- Singapore and Taiwan since the late 1970s,
- India, China and South Korea, especially since the early 1980s.

Of the advanced developing countries and leading exporters of finished industrial products only Hong Kong has chosen not to adopt a technology policy as such.

- Three large-area economies - the People's Republic of China, India and Brazil - are in the process of developing a cohesive industrial production apparatus that is largely geared to the domestic market. Given favourable conditions, each country's industry might be so productive by the mid-1990s that it is able to satisfy national demand for highly complex manufactures at something like international standards of efficiency. This will also be essential if domestic markets are to be defended (without the excessive use of high protectionist barriers), selective linkages successfully forged with the industrialized countries and South-South circuits improved.
- On the basis of a broadly based export-oriented industrialization model, South Korea, a medium-sized country without any significant natural resources has adopted a forward-looking technological strategy which it hopes will enable it to become a welfare state by the mid-1990s, the aim being to guarantee the population a standard of living roughly equivalent to that of the more highly developed western industrialized countries.
- Taiwan and Singapore have set themselves targets similar to South Korea's; as both countries are smaller than South Korea, their industrial production apparatus will continue to be far more specialized in future, this being particularly true, of course, of the city state of Singapore.

The technological leaders among the developing countries are of many different sizes and types. Consequently, an analysis of the main features of their respective development, industrialization and technology strategies enables interesting conclusions to be drawn regarding the social, economic and technological reform policies other developing countries might adopt as a basis for promising development and industrialization strategies.

South Korea shows how a strategy aimed at closing the industrial and technological gap must be designed if a medium-sized developing country poorly endowed with natural resources is to have any chance of standing its ground as an "early imitator", of bringing the national development process increasingly under control by continuously improving national technological competence and of making the transition from one of the world's poorest countries to a modern welfare state (in terms of living standards) within the space of some 40 years.

South Korea is gearing its development to the establishment of an industrial production apparatus with the emphasis on technology-intensive production lines. Although raw-materials- and labour-intensive industries (steel, basic chemicals, clothing) are in no way to be excluded, their relative importance will decline in the medium term, while the electronics, mechanical engineering and car industries in particular will grow at an above-average rate. At the same time, the production-oriented service sector will be expanded with the longer-term prospect of adapting South Korea to the requirements of the "information age".

The most important components of a comprehensive strategy designed to close the technological gap include

- the exploitation of economies of scope (synergistic effects) through the simultaneous expansion of the strategic sectors of industry (the electronics, mechanical engineering and automotive industries) and production-oriented services (communications, banking and insurance, contract research, marketing organizations),
- the selective import of "best practice technologies",
- the rapid development of R&D departments in large companies,
- the expansion and strengthening of industry-oriented research institutions,
- the setting of research targets in sectors of strategic importance to industry, such as the development of semi-conductors,

flexible manufacturing systems, biotechnologies and genetic engineering,

- the recruitment of South Korean executives who have held senior positions in American companies and research institutions for many years,
- the provision of venture capital,
- the extension of the R&D incentive system,
- a cautious lowering of barriers to foreign investment,
- constant government monitoring of R&D efforts in industry,
- closer consultation between government, industry and research institutions.

It is realized in South Korea that the strategy of closing the technological gap will not succeed unless industry as a whole improves its cost-competitiveness. Towards the end of the 1970s in particular it suffered as a result of high inflation, wage increases and capital market interest rates and an overvalued currency.

Macroeconomic conditions have indeed been greatly improved since 1981. For example, it has been possible

- to present a balanced budget for 1984,
- to reduce the rate of inflation to below 5% and capital market interest rates to around 10%,
- to limit wage increases,
- to control the trend in exchange rates so that industry remains competitive, although the South Korean currency cannot be regarded as undervalued.

The concept of making the whole of the economy more efficient also includes

- the reduction of the still extensive protection afforded in foreign trade; foreign trade will, however, be liberalized very

cautiously, and South Korea will ensure that external pressure does not exceed industry's capacity to adjust and restructure;

- the strengthening of internal price-based competition, particularly among the large companies;
- the promotion of medium-sized industry with the aim of achieving a healthier ratio of large-scale to medium-sized industry, preventing the uncontrolled expansion of large companies and also developing an efficient supply industry for the large companies.

Another important factor is that the modernization policy is backed by internal and social policy initiatives to ensure adequate public approval of an economic concept which requires a high level of discipline. Specific examples of such initiatives are amnesties for opposition politicians and students, the planned transition from military to civilian government and the extension of the social insurance system.

The full impact of the general economic policy concept will not be felt for a few years. The stabilization and restructuring that have already been achieved indicate, however, that, by international standards, South Korea has an impressive capacity for adjustment and transformation. Most foreign experts in South Korea expect it to achieve its objectives.

3.4 Conclusions

The model of technology-led growth and development, in which all the essential social problems appear soluble, is not easy even for the industrialized countries. It remains to be seen what the social consequences of innovatory advances will be: some are likely to be undesirable. If society is to be prevented from becoming increasingly segmented, appropriate employment and social policies will be essential. Nonetheless, no developing country can avoid acquiring the minimum level of technological competence which alone will enable it to seize the opportunities offered by the new technologies and to exercise control over its own development.

The magnitude of the efforts required is revealed by an analysis of the strategies which the advanced developing countries have adopted with a view to closing the technological gap. It must be stressed that these are not just technological strategies in the narrower sense. Such strategies must be backed above all by economic and social policies, and this will require substantial and determined efforts in the medium and longer term. Thus Latin America must also find the strength to pursue strategies for comprehensive political and social reform.

Part II

Selected Sectoral Problems: Textiles and Shipbuilding

1 Situation in the Textile Industry[10] and its Prospects

1.1 Trends in the World Textile Industry

The textile and clothing industry plays a prominent role in the liberal theory of the division of labour because it is considered to be one of the relatively labour-intensive industries and because demand for its products at the high income levels of the industrialized countries is no longer growing so rapidly as demand for other consumer durables. According to this theory, both aspects - production and demand - make the textile and clothing industry a particularly suitable base for developing countries which are setting out on the road to export-oriented industrialization. It will enable them to make the most of their comparative labour cost advantage, and their own domestic demand for the industry's products will ensure rapid growth of sales irrespective of demand in the industrialized countries.

The developing countries's share of world textile and clothing exports in fact more than doubled in the two decades from 1962 to 1981 (from 14.8 to 30.6%), while the western industrialized countries' share fell from 78.7 to 56.7% in the same period. When it is remembered that the textile and clothing exports of many developing countries have been hampered by growing protectionism, it can be assumed that under "ideal" conditions of competition their share of world trade would have expanded even more rapidly. On the other hand, the slow but continuing growth of the developing countries' share of the world market also shows that protectionism has failed to bring their textile and clothing exports to a complete halt. Instead, while their growth rates have fallen, few of the exporting developing countries have been forced to reduce absolute quantities exported.

It must also be remembered in this context that not all the industrialized countries have been protectionist to the same degree. Some have opened their doors relatively wide to textile and clothing imports from developing countries, while others have allowed cheap imports very limited access to their domestic mar-

kets. Thus, contrary to popular opinion, the European Community is not the most protectionist bloc among the industrialized countries (at least not where textiles and clothing are concerned). Since 1968 the Community has increased imports of textiles from developing countries as a proportion of domestic consumption more rapidly than the USA, with the result that, in value terms, it now imports far more textiles and slightly more clothing than the USA. Japan lags well behind the Community in both cases. Notwithstanding the Community's common commercial policy, the access granted to developing countries for their textile and clothing exports varies from one Member State to another. While the Federal Republic and the Netherlands rank first and second among the OECD countries in terms of the freedom of access enjoyed by imports from developing countries, France and Italy are among the industrialized countries where import penetration is lowest. The United Kingdom and the Benelux countries are about average for the OECD countries.

The textile and clothing exports performance of the developing countries is even more disparate. A small group of East and South-East Asian developing countries hold the lion's share of total textile and clothing exports by developing countries, but the majority of developing countries have had little success in increasing their exports of these products. In 1980 the ten leading supplying countries accounted for 77% of the OECD region's total textile imports and for an even larger proportion, 85%, of its imports of clothing.

Brazil is the only Latin American country to appear on the list of the ten leading textile exporters (among the developing countries), while the list of the ten largest clothing exporters does not feature a single Latin American country. Latin America did not enter the race for OECD textile and clothing markets until the second half of the 1960s, when the Asian exporting countries had already developed their market positions and the importing countries were trying to prevent too rapid an increase in textile imports from developing countries because of the grow-

ing employment problems in crisis-hit sectors. Protectionism thus affected the Latin American exporters at a relatively lower level than the Asian exporting countries. However, protectionism is not entirely to blame for the relatively poor export performance of the Latin American countries in the textile and clothing sector. Other factors, such as inadequate export marketing, poor quality and supply problems, also play a major part.

The GATT statistics on trade in textiles reveal the considerable gap between the four Latin American NICs and the Asian supplying countries in exports of textiles and clothing. In 1980 Argentina, Brazil, Colombia and Mexico together accounted for 8.3% of the developing countries' total exports of textiles. Their share was thus only slightly larger than Hong Kong's (7.8%) and far smaller than South Korea's (18.9%). The gap was far wider in the case of clothing, where the four Latin American countries together accounted for just under 3% of total exports by developing countries, as against Hong Kong's 30% share and South Korea's 20%. It is quite obvious that the Latin American countries have not taken full advantage of the export opportunities, since the importing countries could hardly afford to treat the various groups of countries so differently under their trade policies as the figures would seem to indicate.

1.2 Sectoral Trade Policy

For some 20 years now experiments have been made with models of "managed trade" in textiles and clothing between industrialized and developing countries, and they have also been emulated in many other sectors and, in certain cases, even in trade among the industrialized countries themselves. This new trade policy, which is scarcely compatible with the principles of GATT, essentially consists in an importing country which is of the opinion that domestic industries and jobs are under threat and an exporting country or a group of major exporting countries reaching a bilateral agreement defining their respective interests. It is agreed that the exporting country will exercise self-restraint by supplying no more than given maximum quantities of "sensitive

products" whose prices, being so low, might otherwise lead to the "disruption" of the importing country's domestic market. Self-restraint on the part of the exporting developing country relieves the importing country of the inglorious task of turning back excessive imports at its frontiers, after which they might penetrate and disrupt neighbouring markets. The importing country need do no more than keep a statistical check on its imports of textiles and clothing. Nor need it worry about being accused of violating GATT since, by agreeing to restrict its supplies, the exporting country voluntarily waives the right to claim that the importing country is guilty of protectionism.

The textile-exporting developing countries agreed to these new forms of protectionism for various reasons. Firstly, the leading Asian textile-exporters are heavily dependent on the western industrialized countries for their foreign trade and security, which limits their scope for tough measures to safeguard their export interests. Secondly, the new forms of managed trade provide something of a basis for planning the development of domestic production capacities in the industries concerned. And thirdly, the quantitative distribution of an industrialized country's imports among the various supplying countries gives the established exporting countries some protection in their regular markets against cut-throat competition from newcomers to the world market. In other words, the major exporting countries are similarly interested in the medium-term stability of the world textile markets. They will therefore tolerate the policy of voluntarily restricting their exports as long as they are not expected to agree to excessive reductions in the quantities they export. (However, some quotas have since been reduced on the grounds, accepted by the Asian exporting countries concerned, that demand has stagnated in the importing regions during this last recession.)

What distinguishes the policy on trade in textiles from all the other sectoral trade policies that use the instruments of managed trade is that it represents the first attempt to create a multi-

lateral framework for a policy of bilaterally defined interests in the shape of self-restraint agreements and so bring it under the umbrella of GATT. To this end, the principal exporting and the importing countries concluded the Long Term Cotton Textile Arrangement in 1961, and this was replaced in 1973 with the Multifibre Arrangement, which is still in force today.

One object of the multilateralization of the new textile import policy, a cause to which the USA had been particularly devoted, was to spread the "burden of imports" from the new textile-exporting countries more fairly among the various industrialized countries. In the 1960s the USA was interested in seeing the European Community, then more protectionist and also primarily concerned with its intra-European trade problems, assume more responsibility for the world economy. In addition, as multilateral supervision would ensure that individual industrialized countries did not resort to excessive protectionism, multilateralization would also be in the interests of the developing countries. To permit the gradual development of an international division of labour between industrialized and developing countries along comparative cost lines, the developing countries were also to be granted a progressively growing segment of the OECD textile markets. They were therefore assured of a minimum growth rate (6% p.a.) to apply even if quantitative restrictions proved unavoidable.

The development of the policy on trade in textiles under the Multifibre Arrangement cannot be regarded as all good or all bad. One criticism is certainly justified: the original promise that the departure from the principles of GATT which was ratified with the signing of the Multifibre Arrangement would last only until the old textile industries in the industrialized countries had either adjusted to the new international conditions of competition or given way to exports from developing countries has not been kept. In fact, the Multifibre Arrangement has become a permanent fixture in GATT, and a departure from the new forms of managed trade is unlikely in the forseeable future because the

industrialized countries' employment problems remain unsolved. The textile industries in the OECD countries have undergone a radical process of structural adjustment, but they are still not prepared to forgo the benefits of protectionism.

Another object of the multilateral textile trade policy has not been satisfactorily achieved: the newcomers to the world market were to be granted particularly generous concessions when quantitative restrictions were imposed so that they might gradually increase their initially very small market shares. This aim conflicts with the interest the more protectionist OECD countries have in freezing total imports of textiles and clothing from developing countries at a level that is compatible with their domestic industries' interest in self-preservation. Consequently, severe export restrictions were imposed even on smaller exporting countries. Generous treatment under trade policies was, on the other hand, accorded to developing countries whose supply capacity would not represent a threat to the textile industries of the OECD countries in the foreseeable future. Thus imports of manufactures into the European Community from the ACP countries have been completely liberalized, which also benefits textiles and clothing.

On the positive side, it can be said that, despite the world economic crises of the 1970s, the multilateral textile trade policy prevented a recurrence of the protectionist stampede of the 1930s, and this in a very sensitive sector. Total exports of textiles and clothing by the developing countries rose in the second half of the 1970s, the absolute decline which protectionism might well have caused was averted, and it seems unlikely at present that the industrialized countries will be able to turn the protectionism screw further during the forthcoming negotiations on a further extension of the Multifibre Arrangement. In fact, they may even have to make the developing countries certain concessions this time because of the debt problem.

1.3 Technological Changes in the Textile and Clothing Industry

Behind the protectionist shield the textile and clothing industries of the OECD countries have undergone fundamental structural change. The introduction of improved technologies has continually increased productivity in this sector since the beginning of the industrial revolution. This has led to constant shifts in the competitive positions of the various groups of countries. Since the 1960s the threat of the growing competitiveness of developing countries has encouraged the industrialized countries' textile industries to improve their productivity by introducing increasingly capital-intensive technologies. However, the advanced developing countries have kept pace with this trend with a slight time-lag, and there has not therefore been any major change in comparative advantages. In this race to introduce the latest technologies (modern ring-spinning processes with automatic bobbin change, open-end spinning processes, high-speed looms) a major part has been played by the textile machine industries of the OECD countries. While interested in close contacts with domestic textile industries when developing and testing new processes, the textile machine sector must sell fully developed technologies worldwide if it is to achieve the economies of scale that will enable it to lower its costs and so become internationally competitive and be equipped for the next lap of the technology race. In so doing, however, it also improves the prospects of its domestic customers' competitors.

The increasing use of capital-intensive methods, particularly in the production of textiles - the manufacture of clothing still being labour-intensive by comparison - has substantially reduced the competitive advantage the developing countries derive from low wages. Other factors are now gaining in importance, and they will not all necessarily have an adverse effect on the competitiveness of the developing countries. For example, where production processes are very capital-intensive, machine operating time per year is becoming increasingly important since it determines how soon expensive machines can be amortized. Developing countries have an advantage in this respect since they often im-

pose fewer restrictions on shift work than industrialized countries, making far higher annual operating times possible. This does, however, presuppose that the high level of capacity utilization is not thwarted by other obstacles typical of developing countries (such as power cuts, shortages of spare parts, deficient maintenance and industrial unrest).

The new conditions of competition in capital-intensive textile production are intensifying the process of differentiation in the Third World. On the one hand, the advanced developing countries are able to take full advantage of even the more capital-intensive production methods and so remain competitors to be taken seriously by the industrialized countries. On the other, the less developed countries are falling further and further behind in international competitiveness because particularly low wages now scarcely compensate for their inability to use modern equipment efficiently. This is clearly demonstrated by the poor competitiveness of African textile industries, few of which are even capable of exploiting the preferential trade position they enjoy in the European Community market.

The productivity race in the textile and clothing industry has reached a new stage with the introduction of the new microelectronic control and monitoring technologies. For the first time the fully automatic integration of the various stages in the manufacture of textiles has now come possible. This reduces the handicap which the industrialized countries suffer in the utilization of capacities because of the restrictions imposed by social provisions on shiftwork and work on public holidays. The new technologies also permit increasingly rapid adjustment to changing market conditions (fashion) without excessive losses of productivity. As a result, proximity to customers and the ability to react flexibly to their requirements is becoming a more important factor in competition than the price advantages derived from production in developing countries, which are in any case dwindling. One consequence of this technological trend is the gradual redeployment to the industrialized countries of manufac-

turing capacities once transferred to developing countries for cost reasons.

As long as the manufacture of clothing remains relatively labour-intensive, the lower wage levels in the developing countries will continue to give them a slight competitive edge in this sector. The division of labour between North and South is revealed by the trade statistics, the developing countries converting fabrics obtained from the industrialized countries into clothing, which they then re-export to the industrialized countries. The hope that their competitive edge in the manufacture of clothing would gradually enable them to take over the production of textiles as an upstream sector has been dashed by technical progress in the textile industries of the industrialized countries. Nor is it by any means certain that the developing countries can maintain their superior competitive position in the manufacture of clothing in the long term. They do not in any case have the edge where high-quality and fashion products are concerned, price being less important than quality, design, etc. Few developing countries have been able to hold their own in this area in the past. This explains what at first glance seems to be the paradoxical situation revealed by the statistics of clothing exports being concentrated on a smaller number of developing countries than textile exports, when the lower level of capital-intensity in the manufacture of clothing ought really to make market penetration easier.

The present competitive position of a number of developing countries in the clothing sector could be further undermined in future if the use of microelectronic control and monitoring technologies permit large-scale automation and flexibility in this industry. Many of the technological requirements have already been satisfied, and the clothing industry of the Federal Republic, for example, has already begun the process of technological change aimed at largely automated production. In the clothing industry too, there is thus the prospect of manufacturing facilities established in developing countries in the past being redeployed to the industrialized countries.

The better conditions of competition the textile and clothing industries enjoy as a result of the new technologies may enable the OECD countries to make the developing countries various trade concessions in future (e.g. during the renegotiation of the Multifibre Arrangement). However, this would in no way be followed by an automatic improvement in their market prospects, because the OECD countries' domestic industries would then be in a position to withstand the pressure of competition on their own. The developing countries will probably retain the mass market in relatively cheap standard textiles and certain clothing products, although their prices must be kept comparatively low if they are to retain market shares.

2 The Shipbuilding Industry: The Present Situation and Future Prospects

2.1 The World Shipbuilding Crisis

For almost ten years the world shipbuilding industry[11] has been plagued by overcapacities and a persistent slump in demand. The crisis was preceded by an unparalleled boom, resulting in a doubling of output from 1968 to 1974 and, at its peak in late 1973/early 1974, in an order book equivalent to 400% of annual production and 43% of world merchant tonnage. Every owner was keen to increase his share of the orders for increasingly large and efficient vessels (particularly tankers and bulk carriers, but also container ships) in order to keep pace with the rapid technical developments being introduced at this time and to safeguard his share of the growing volume of goods being transported by sea. For their part the shipyards wasted no time in installing the equipment needed to build ships of unprecedented size and to satisfy the conditions for rational series production.

In 1974 the growth in world sea transport slackened, and in 1975 the volume transported fell, by some 6% (in tonnes), for the first time since the Second World War. Shipbuilding demand, inflated by speculation, plummeted, and many orders were cancelled. However, most of the vessels that had previously been ordered

were delivered in subsequent years and produced overcapacities in the world merchant fleet, which still exist today. Although shipping companies and shipyards would have suffered from overcapacities even if the international recession had not begun in 1975, competition became extremely fierce as a result of the decline and later no more than hesitant growth in the volume transported by sea. Once the many newbuildings ordered had been completed, world shipbuilding production dropped sharply from 1978 onwards and has since stagnated at about 50 to 60% of its mid-1970 level. Short-term upturns in demand, particularly for bulk carriers in 1979/80 and 1983, have been unable to bring a lasting improvement to the situation.

Expectations that, no later than 1985, demand for newbuildings to replace the many ships commissioned in the 1970s would rise considerably even if rates of growth in world trade were low have proved overoptimistic. Although the need for replacements is increasing, the owners' shortage of liquidity and the continuing overcapacity of the merchant fleet have so far prevented orders from being placed on any major scale. Most experts therefore predict a gradual rise in the demand for newbuildings no earlier than the late 1980s.

The Japanese shipyards have been able to defend the dominant world market position they attained in the early 1970s. With account taken of labour input per tonne produced, their share of world production has fluctuated around 40%. Although able to build any type of ship, they are particularly competitive in the series production of tankers and bulk carriers and have consequently derived above-average benefit from the above mentioned two short-term increases in demand. Having been over 20% in the mid-1970s, the European Community's share of production is at present about 15% and could fall further. The share held by the other Western European countries has dropped from 15% to below 10%. Sweden and Spain, the main producers in this group, having ranked second and fourth respectively in the world list of supertanker and bulk carrier builders after Japan and the Federal Re-

public of Germany in the early and mid-1970s, have suffered particularly serious losses in the world market. The role played by US shipyards in world shipbuilding has long been insignificant. Because of their high costs, they are virtually confined to producing for the protected domestic market.

Of the other countries, South Korea in particular and, some distance behind, Brazil, Taiwan and Poland have achieved a remarkable expansion of shipyard capacities. South Korea, in 1973 still a dwarf among the shipbuilding nations, now lies second behind Japan in terms of production and orders received and is determined to increase its 6 to 7% share of the world market. In 1983, after two poor years, South Korea's yards won orders valued at US$ 3,000m for 180 vessels totalling more than 4m GRT, 158 (3.8m GRT) with a contract value of US$ 2,800m for foreign owners. This success has been due to an aggressive policy of undercutting the prices quoted by Western European yards by 20 to 30%. Even the Japanese yards, which helped to develop the South Korean shipbuilding industry and still have shares in it, are beginning to fear their new rivals, with whom they are trying to agree on ways to regulate competition.

The South Korean yards owe their strong position to low wages, generously designed facilities, good quality and extensive support from a government that is determined to turn the shipbuilding industry into a key sector even though occasional difficulties are encountered and profitability is low or non-existent because of present price levels and the high initial investments. These factors have laid the foundations for further export successes, although the rise in orders in 1983, largely due to the boom in the demand for bulk carriers, which are relatively easy to build, cannot be repeated every year. It remains to be seen how the South Korean yards tackle the problem of diversifying into the building and export of complex vessels. They have already had some initial success. But the setbacks in 1981 and 1982 have also made it clear that this will be a long and difficult task.

Their employment and regional policies and security considerations have led all the major shipbuilding nations to develop a wide range of instruments to protect and assist their shipyards. In Western Europe by far the most of the large yards are state-owned, and even the Member States of the European Community, which do not levy duties on import of ships, have numerous mechanisms designed to persuade owners to place their orders with domestic yards. These primarily consist of investment aids to owners, subject to certain conditions, and of production and restructuring subsidies granted to yards to enable them to match competitors' quotations, which are similarly subsidized to a greater or lesser extent. In total, the subsidies probably average about 20 to 30% or, in some cases, an even larger proportion of the prices quoted. The Commission of the European Communities is incapable of effectively monitoring and restricting the subsidy race. In view of the precarious position of many yards in the Community, it even proposed in the spring of 1984 that yet higher subsidies should be approved until 1987, provided they were used for investment in restructuring and modernization.

As a result, there is little trade in ships among the Community countries. Some 75% of vessels are built for national owners, the remainder mostly for countries without a major shipbuilding industry of their own. For their part, Community owners buy about 25% of their ships from yards in third countries, chiefly Japan and South Korea, whose incomparably cheap offers they are unwilling to forgo. In good years Japan and, recently, South Korea export 75% or more of their production, their low prices enabling them to find buyers even in countries with shipbuilding industries of their own. They themselves import only second hand vessels. The USA exports hardly any ships and imports a few from Japan and South Korea, although it must be remembered that many of the ships owned by US companies sail under cheap flags (Liberia, Panama, etc.) and are built all over the world, preferably in the Far East.

2.2 The Level of Development in Selected Countries of Latin America

Shipbuilding and merchant shipping have reached an internationally significant level in few of the Latin American countries. In shipbuilding Brazil dominates with an annual capacity of about 1.6m deadweight tons (dwt), followed at some considerable distance by Argentina with some 200,000 dwt and, again some way behind, Mexico, Peru and Venezuela. Where merchant fleets are concerned, the breakdown is similar, Brazil again heading the list with 5.81m GRT (1983), easily outstripping Argentina (2.47m), Mexico (1.48m), Venezuela (0.97m), Cuba (0.96m) and Peru (0.78m).

If some initial activity at the beginning of the century is ignored, Brazil's shipbuilding industry did not emerge until 1958/59, when the government decided to expand the country's then tiny merchant fleet so that a growing share of imports and exports, which were and still are almost entirely sea-borne, might be carried by Brazilian vessels, thus saving foreign exchange on freight charges. Along with the promotion of industrial production and, since about 1975, of shipyard exports, this remains the basic motive for the government's overall policy towards the maritime sector. Two major foreign yards, one Dutch and one Japanese, were involved in the development of the yards that still dominate today, Verolme and Ishibras, their aim being to participate in a highly protected and rapidly growing market. Other yards build ships under British and French licences, and foreign experts have repeatedly been brought in to advise on modernization.

After successfully expanding its merchant fleet up to the mid-1960s and the subsequent years of stagnation, Brazil made a fresh start in 1971, which, thanks to the integrated support given to yards and owners, took it into the foremost ranks of the world's shipbuilding countries by 1980. Deliveries by Brazilian yards rose from 136,000 GRT in 1971 to 729,000 GRT in 1980, while the merchant fleet increased in the same period from 420 vessels to-

talling 1.7m GRT to 607 vessels totalling 4.5m GRT, particular attention being paid to the expansion of the tanker and bulk carrier fleets. The subsidies were financed from a freight rate surcharge levied on all imports and exports. Despite the considerable progress made, however, the Brazilian merchant fleet's share of the transport of goods to and from the country reached less than 20% in 1980, only half the 40% target set in accordance with the UNCTAD objectives. The cost of chartering foreign vessels amounted to US$ 970m.

Exports of ships on a major scale began in 1976, their value up to and including 1983 totalling US$ 967m, equivalent to 39% of the yards' turnover in shipbuilding. However, without extensive subsidies in the form of direct grants and favourable financing conditions, many orders could not have been executed. One of the factors that restrict the yards' competitiveness is the attempt at comprehensive import substitution in upstream sectors, which frequently results in late deliveries, higher costs and poorer quality. After the second oil price rise in 1979 the prescribed domestic content ratio was increased from 70 to 85%, although suppliers were unable to step up production to the same extent. Furthermore, wages are far higher than those paid in South Korea, for example, while productivity is lower. Until the end of 1980 the building programmes for national owners did nothing to encourage an improvement in shipyard productivity, since owners were compensated from public funds for any difference between the local and world market price and so agreed to any price the yards might quote. As the chartering of foreign vessels during the construction period was also subsidized, they had little reason to insist on short construction periods or the observence of delivery dates, and several years of delay and prices up to 30% above the world market level were not therefore uncommon.

In August 1980 the government's promotional measures were thoroughly restructured with the aim of persuading the yards and owners to operate more efficiently. New credit funds were made available and were initially followed by numerous orders. In the

ensuing period, however, as the fight against inflation and the conditions imposed by the IMF resulted in the growing scarcity and cost of credit, Brazilian owners found it increasingly difficult to finance newbuildings. In addition, transport revenues dropped sharply since export freight rates formed part of the export promotion programme and were not increased and imports, which, unlike exports, are to a large extent transported by Brazilian owners, were drastically reduced. Many vessels that have only just been completed cannot be used to capacity.

Domestic demand for newbuildings dwindled and has been at a complete standstill since the end of 1982. The shipyards, which had previously survived the world shipbuilding crisis reasonably well thanks to the national building programmes and some exports, have been working at an average of only 50% capacity since mid-1983. There have been mass dismissals, particularly in 1983, reducing the workforce from its peak of 42,000 in 1980 to 25,000 in early 1984.

As a result of a strenuous export effort orders totalling US$ 525m have been received, the vessels to be delivered by 1987. As the export aids to the shipbuilding industry have stopped owing to the financial situation and pressure exerted by the IMF and as the Interest Equalization Scheme, which was designed to approximate export terms to those usual in the world market, proved inadequate because foreign owners lack confidence in the solvency of Brazil's central bank, new types of promotional measures have been introduced. For example, a Norwegian owner has ordered two oil-and-ore bulk carriers on condition that they are chartered to the state-owned Brazilian shipping line Docenave for ten years. The oil company Petrobras, similarly state-owned, is negotiating similar contracts with various oil suppliers, and a number of other orders have followed the same pattern, which, by including attractive, long-term charter agreements, offers foreign owners favourable and relatively safe opportunities for capital investment at a time of high overcapacities in the world merchant fleet and low freight rates and also keeps the Brazilian yards busy.

These export orders will enable the yards to work at only minimal basic capacity, and further dismissals will therefore be necessary if there is any delay in the orders Brazilian owners are expected to place in the second half of 1984, and such orders will depend on a relaxation of the credit restrictions.

In the medium and long term the size of the Brazilian merchant fleet will undoubtedly need to be further increased. In 1982 the cost of chartering foreign vessels was about US$ 600m. Once the present recession has been overcome, the demand for transport will again rise. However, the owners will then have to compete for carrying a growing share of export trade, for which a larger number of modern container and other general cargo vessels will be needed. Furthermore, to save oil, a growing proportion of the domestic transport of goods, over 80% of which now go by road, is to be transferred to coastal shipping in future and, as Brazil's coastline is extremely long, there will be great opportunities here for the construction of small efficient vessels (product tankers, roll-on/roll-off ships, etc.).

If Brazil is to make the breakthrough in the world market and engage in more than barter dealing, it must achieve a lasting improvement in the productivity of its shipyards and their suppliers, relax the restrictions on the import of highly specialized parts and grant better financing terms. As its financial constraints will prevent Brazil from granting as generous subsidies as its competitors in the foreseeable future, the emphasis must be placed on increasing productivity, primarily by shortening construction times and observing delivery dates. The progress that needs to be made in the industrialization process in this respect is apparent from the fact that for every job in the shipbuilding industry there are three to four in scattered supply firms, many of which sell only a very small proportion of their output to the shipyards, their number therefore being very high. The relaxation of import restrictions and the improvement of financing conditions, meaning an improvement not only in terms but

also in the central bank's credibility as an organization that is capable of honouring its commitments punctually, presuppose macroeconomic recovery together with an improvement of the balance of payments.

Argentina's shipbuilding industry has made rapid strides since 1976, the year in which the Secretariat for Maritime Interests, a central institution for assisting shipyards and owners, was set up to stimulate the expansion of the merchant fleet through the addition of new vessels built at domestic yards. A fund was established to finance orders for newbuildings from levies of 2 to 4% on export and import freight rates, and a national shipbuilding programme provided for the construction of 120 vessels totalling 450,000 GRT. Although this programme began very sluggishly and ships continued to be imported from time to time, the yards were gradually able to increase their production in subsequent years and in 1982 produced a record 162,000 GRT. At the same time, they modernized and enlarged their facilities.

After the abolition of the national shipbuilding fund in 1981 it became increasingly difficult to finance new orders. The funds available are limited, interest rates are high, and extensive collateral security is required. Orders received by the yards continued to dwindle until late 1982, when the government granted loans for the construction of thirteen vessels totalling 200,000 GRT. The serious effort also made at this time to obtain export orders was quite successful, resulting in a Polish shipping company ordering eight bulk carriers and Sri Lanka three container vessels. As this is a stretched building programme which focuses on individual yards, the average utilization of yard capacities still fell to 50 to 60% in 1983, and two medium-sized yards had to close.

Further prospects must be viewed with restrained optimism, since the new civilian government has announced its intention of reviving the national shipbuilding fund and the Argentinian merchant fleet is relatively old, averaging 12.1 years (late 1982), and moreover carries only about 20% of Argentinian cargoes. Pri-

vate owners, whose vessels account for 51% of total tonnage, are in greatest need of replacements, their ships being on average 16.4 years old, while the average age of state-owned vessels is only 7.5 years. Export prospects will probably continue to be not particularly favourable. Although the yards have made great efforts to modernize and have undoubtedly improved their productivity, financing conditions, including a 10% export aid, are far less generous than those offered by many competitors, and the lack of Argentinian suppliers means that 30 to 40% of the materials required by the yards, including shipbuilding steel, still has to be imported, while products available locally are protected. It is difficult to see how in these circumstances the Argentinian yards were able to win the above-mentioned major export orders from Poland and Sri Lanka.

In the early 1980s Mexico had ambitious plans for the rapid expansion of its shipbuilding industry to enable domestic yards to supply as many as possible of the enormous number of vessels needed for the country's merchant fleet, which was to be increased from 1.1m dwt in 1980 to 7.1m dwt in 1990, entailing the construction of 125 new ships. Over half these vessels were to be built jointly by four large shipbuilding centres. So far one yard, which was closed in 1978 because of its lack of profitability and high debts, has been converted into a large, modern company, in which the Mexican government has a 65% share, the other 35% being held by the largest Spanish shipbuilding group Astilleros Españoles, similarly state-owned. The yard, which officially began production in 1982, has a workforce of some 3,000 and is scheduled to build three large and several small tankers and a number of tugs by 1985. Although Mexico's financial and economic crisis has resulted in the other shipyard projects being shelved for the present, several small and medium-sized yards have been enlarged and modernized.

Despite the present crisis and the curtailment of the plans to enlarge the merchant fleet and shipyards, considerable numbers of new sea-going and coastal vessels are still required. In 1980

Mexican ships carried only 12% of Mexico's total sea-borne freight. In early 1984 the state-owned oil company Pemex announced that it intended to order 45 coastal vessels over the next few years, the aim being both to enlarge the fleet and to improve the utilization of capacities at the yards, whose difficulties have recently been aggravated by the stagnation of demand and the restrictions on the import of materials and parts, 50% and more of which have to be obtained from abroad. Given a favourable macroeconomic trend, there is a good chance that the old shipyard projects will be reactivated, although their production costs would exceed the world market price level for some considerable time.

Peru has one shipyard, which has been building medium-sized vessels (up to about 20,000 GRT) since 1971. Although greater efforts have been made of late, no export orders have yet been received, promising negotiations with a Colombian shipping company finally resulting in the order going to Poland. Venezuela's one yard builds fairly small vessels, although it did deliver one of 19,600 GRT in 1981. A second yard of similar size, in which Astilleros Españoles has an interest, is due to begin operations in July 1984 after various teething troubles. The plan is that this new yard should build ships up to 20,000 GRT, carry out repairs and scrap old vessels. In all the other Latin American countries shipbuilding is of no more than local significance (fishing boats, etc.).

2.3 The Potential for Regional Cooperation

The prospects for an increase in intraregional trade in ships and accessories are limited. The most interesting aspect is undoubtedly the possibility of Brazil and Argentina supplying ships to the region's largest importers, Mexico and Venezuela. With few exceptions, however, there has not yet been any such trade, and exports to other Latin American countries have also been confined to isolated instances. This situation is essentially due to the fact that any country able to build ships itself will not import them and will buy those it cannot build at the most favourable

terms in the world market, i.e. preferably in Japan, Spain and, in the case of complex vessels, various European countries, often in conjunction with attractive financing arrangements.

As neither Brazil nor Argentina, let alone the other Latin American countries, can compete with the cheapest suppliers in the world market, their opportunities are limited to exceptional cases, like the order Brazil received from Mexico in 1980 for six freighters costing US$ 120m. The Brazilian yards may be able to follow up this success by agreeing to the recent proposal from the association of shipyard suppliers that ships for Mexican shipping companies should be built with some Mexican materials and parts and then chartered to these companies on a long-term basis.

Like an increase in intraregional exports, a systematic expansion of interregional trade will primarily depend on an improvement in the international competitiveness of the Brazilian and Argentinian yards. The same is even truer of the upstream sectors, the gap between local and world prices being even more pronounced and suppliers often being incapable even of adequately supplying their protected domestic markets. Brazil's offers of closer regional cooperation throughout the maritime sector are likely to be taken up only if Brazilian firms can supply products at world market prices and the other countries do not begin production in the various sectors concerned and erect barriers around their domestic markets.

Partners for cooperation in the expansion of shipyards and supplying companies, in the form of either equity participation or licences, are usually sought among the world's leading suppliers, i.e. in Japan or Europe. Opportunities for such cooperation exist in Brazil and Argentina for suppliers of technologically sophisticated products and in Mexico also for less sophisticated products, although Mexico's domestic market is smaller. Mexico will undoubtedly be looking for competent partners if it reactivates its ambitious plans to expand its shipbuilding industry. It

remains to be seen whether Brazilian firms will be considered for such cooperation, as the Brazilian association of shipyard suppliers recently proposed for the construction of offshore equipment.

Part III

Modification of the Industrialization and Development Model in Latin America

1 Insufficient Inherent Momentum of the Industrialization Process

Latin America relied on the "modern sector of the economy" to produce high rates of growth. Where the models of dual or unbalanced development were adopted, it was believed that the heterogeneity in and among the various sectors of the economy would stimulate growth. But the sectoral, regional and social imbalances, further aggravated by the concentration on high growth rates, soon proved to be a critical barrier to the inherent momentum of the industrialization process.

Although industrialization requires a concentration of the population and the emergence of centres of economic agglomeration, urbanization and economic concentration, accelerated by stagnation in the hinterland and proceeding almost unchecked in the absence of government counteraction, soon sparked off marginalization tendencies and adversely affected the economy as a whole. Large sections of the population were excluded from the "modern sector" and played no part in industrialization as producers, consumers or savers. The high rate of population growth and relatively capital-intensive industrialization meant that the size of the marginalized population was hardly reduced even at times of extensive economic growth. As seldom more than quantitative improvements were made to the education system, the self-help capacity of the lower strata of society was also limited. Government efforts to reduce the economic and social imbalances remained insignificant.

From the outset industrialization was determined by the attitudes of upper- and middle-class consumers. The extensive and growing concentration of incomes, reflecting the economic, social and political imbalances, resulted not in a high rate of saving but in the early imitation of patterns of consumption in the industrialized countries, especially the USA. It steered industrial development towards consumer durables, including cars, sectors whose development depended on foreign direct investment, while for many years little importance was attached to labour-intensive

exportable consumer goods or even capital goods. This type of industrialization did not absorb enough of the quickly growing labour force and led to a rapid increase in foreign participation, which was frequently excluded from the deliberations on industrialization strategies. There was no dynamic accumulation of capital in the "modern sector". In fact, the expansion of external financing became increasingly important as a means of achieving a high rate of growth.

To protect its industrialization process against the outside world, Latin America relied on its abundance and wide range of natural resources. This has now proved to be something of a disadvantage:

- Unlike East Asian countries (Japan, South Korea), Latin America retained its pre-industrial economic and power structures. Foreign mining companies and segments of agriculture, which underwent thorough modernization only in the large countries, exported the goods that made it possible to import the products needed for industrialization. This in itself resulted in little effort being made to remove the structural obstacles to industrialization, particularly in the agricultural sector, and more and more compromises had to be made in economic policy. Signs of stagnation soon emerged, especially in the small and medium-sized countries, since the excessive emphasis placed on import substitution precluded industrialization based on resources and specifically on agriculture, which would have entailed export orientation.
- Some of the proceeds from exports went to a stratum of society that was not exposed to any historical challenge but combined imported consumption patterns with limited production know-how and, at times of crisis, always sent its capital abroad. Others permitted substantial sums to be invested in the public sector of the economy, whose bureaucracy soon adopted the values and demand pattern of the weak private-sector bourgeoisie. Exports of raw materials constantly enabled the "soft option" in economic policy to be taken but were seldom used to

improve the technological and social basis for industrialization.

- Even as early as the mid-1950s the dependence on exports, which tended to be adversely affected by the terms of trade, resulted in inadequate foreign currency reserves, although this gave rise to a general feeling of "export pessimism" rather than a change to the export of manufactures. Latin America was late to emulate the shift of emphasis in world trade towards manufactures during the period of rapid expansion in the world market that lasted from 1955 until 1980.

The need to substitute imports followed the decline in exports of raw materials during the world economic crisis. While import substitution was still a spontaneous process, it represented a defensive strategy. Even in its dirigistic phase it did not become an agressive industrialization strategy: technological and entrepreneurial competence and capacity for innovation remained limited, as did the widening of the economic basis and the development of linkages. In Latin America "industrialization" did not mean the "introduction of industrial production and distribution methods into all sectors of the economy", only into the modern segments of industry and the export-oriented sectors of mining, agriculture and trade.

Even this limited approach was for a long time accompanied by little in the way of efforts to achieve independent technological development. Industrialization did not develop sufficient momentum of its own because import substitution was based on foreign technologies and - in dynamic sectors of industry - foreign direct investment. It was not until the 1970s that the institutional conditions for the import and development of technology were improved in the large countries. But even now only Brazil has the ability to ensure the rapid incorporation of technology and, in certain sectors, independent technological development.

In many countries the opportunities for import substitution were exhausted as early as the 1960s, because not enough was done to reduce internal imbalances and so increase domestic demand. It was in any case found that only the large countries were capable of substituting some of the more complex imported products. Political dissatisfaction, particularly among the middle classes and urban industrial workers, with falling growth rates led to reformist and revolutionary unrest. Soon afterwards authoritarian conservative governments seized power, crushed the intermediary organizations (political parties, trade unions, cooperatives) and added to the concentration of incomes by drastically reducing real wages.

It was only in Brazil that the economic and political influence of the leading groups in the pre-industrial sector was now suppressed and industry came under tremendous pressure to improve its competitiveness. Brazil's domestic market also proved sufficiently large to give industrialization a further boost: through government investment in the basic and capital goods industries and investment by foreign groups in the development of fully integrated automotive complexes and industries producing consumer durables where there is considerable intraindustrial demand. Since the mid-1970s Brazil has also become an internationally significant exporter of manufactures. It owes its exceptional position in Latin America, however, to its size and potential and to massive commitments by multinational groups. Its social, sectoral and regional imbalances are certainly no less pronounced than in the other countries.

Even the small and medium-sized countries were not prevented by their technological dependence from aiming until well into the 1970s at the development of a fully fledged industrial apparatus with vertical and horizontal linkages or from overlooking the question of industrial specialization. However, industrialization in the shape of "heavy industry" and forward integration is not an option that is open to these countries, if only because of their size. Nevertheless, many of their governments set out

to install a basic industry, which tied up considerable financial resources but, because of the inadequate expansion of industries manufacturing intermediate products and limited intraindustrial demand, did little to accelerate the industrialization process and, moreover, soon became obsolete owing to limited national technological capacity.

Sectors of industry under foreign control (the automotive, chemical, pharmaceutical industries, etc.) experienced vigorous growth only until the mostly small domestic markets had been saturated. In many cases, assembly and filling plants were installed, but the subsequent transfers (profits, payments for technologies) became a constant drain on the balance of payments. Private sectors largely continued to produce simple consumer goods, demand for which rose sluggishly because of the stagnation of agriculture, the extensive concentration of incomes and the lack of government assistance.

Growth in the agricultural and industrial sectors was predominantly due to a small number of large state-owned or foreign companies, while small and medium-sized national companies were neglected, their development even hampered by economic policy measures. However, industrialization confined to large companies meant that there was no alternative to the import of foreign technologies. This tendency was further aggravated by the emulation in an increasing number of sectors (large-scale technologies, armaments industry) of the technological and industrial solutions adopted by the industrialized countries.

In Brazil population growth was considered an important factor in efforts to turn the country into a major power. Mexico too virtually ignored the fact that a high rate of population growth is hardly conducive to stable and dynamic industrialization. Even at times of substantial economic growth it was only in the agglomeration centres that the alleviation of the employment problem was occasionally possible. Few social benefits were to be derived from the then current type of industrialization, and it was

this above all else that restricted its general impact and strength.

2 The 1970s: the Road to Crisis

The problematical elements of Latin America's industrialization model which have been outlined above were joined in the 1970s by factors which initially could be attributed largely to the region's power structures and economic strategies but subsequently to world economic changes. The economies of the region "came off the rails" in some cases despite, in other cases because of a high rate of economic growth:

- The oil price rises triggered off substitution programmes, mostly entailing large-scale projects that had a long gestation period and required extensive imports and foreign financing. Dams (like Itaipú) soon proved too large and ecologically questionable, nuclear programmes financially demanding and technologically unpredictable, schemes like Brazil's alcohol programme costly and anti-social. In some cases, significant substitution effects were achieved, but the programmes always added to the economic and social imbalances, replaced alternative schemes, designed perhaps to reduce energy consumption drastically, and increased foreign debts.
- Imports and external financing also tended to increase because of the greater emphasis placed on the expansion of the basic and capital goods industries in the large and some of the medium-sized countries. The oil-exporting countries (Mexico, Venezuela) set out to develop their petrochemical and steel industries, but these projects made slow progress because the financial and, in some cases, technological strain was too much for the companies concerned, mostly state-owned. Had they been completed as originally planned, they would also have necessitated extensive exports, the world market situation not having been adequately considered at the design stage. At the same time, a number of countries succeeded in greatly expanding their capital goods industries: from 1978 to 1981 self-sufficiency in these goods rose to 80% in Brazil, 70% in Mexico

and Argentina, 40 to 45% in Colombia and Peru, but only 10% in Chile. Large sums were also invested in the expansion of mining companies, many of which had been nationalized in the 1960s and 1970s with the aim of increasing exports.

- After the armed forces had seized power, Brazil and Argentina in particular began to develop large-scale military-industrial complexes for security reasons and in pursuit of their goal of becoming major powers (armaments and nuclear programmes, aircraft construction, including aluminium industries). While Brazil made every effort to become internationally competitive in this sector and rapidly increased its exports of military equipment, Argentina's military-industrial complex remained inefficient. However, it was able to escape the monetarist experiment, to obtain major subsidies for its basic industry, similarly controlled by the military, to ensure that the national private sector was given preference over foreign direct investors and even to keep obsolete industrial companies alive (as in Zapla). Its efforts not only did little to increase exports but also tied up an enormous amount of capital and entailed extensive imports of armaments. "Military strength" led to the general neglect of other objectives, particularly the improvement of efficiency through industrial specialization.

- In the countries of the Cono Sur (Argentina, Chile, Uruguay), where the opportunities for import substitution were already coming to an end by the mid-1950s because of the time it had been in progress (a tendency which had political consequences because the population was relatively well organized), the military governments adopted monetarist economic policies. Placing their trust in market forces, they had soon generally liberalized imports and capital markets. The adjustments which companies made to the world market by specializing within the agricultural and industrial sectors did not, however, receive adequate support, and during the second phase in particular (1978/81) they came under unrealistic pressure to adjust as a result of the "monetary approach to the balance of payments" of the modern monetarist school. These economic policies led to a

loss of social consensus on basic aspects of development, yet another sharp increase in economic and social imbalances, a drastic contraction of domestic markets, deindustrialization tendencies and a tremendous rise in speculative capital, fugitive capital and foreign debts.

Latin America's foreign debts have endogenous causes, which were bound to result in a crisis because of the changes in the world economy. The accumulated effects of a poor export performance over a long period were joined by other factors in the 1970s, as the three large countries tried to develop extensive energy, basic and capital goods complexes simultaneously, with Brazil and Argentina adding armaments and nuclear complexes to this list. In Mexico it was felt that oil exports would permit the simultaneous construction of four industrial ports, some accompanied by large centres of heavy industry, and of - similarly import-intensive - integrated automotive complexes.[12] The substitution programmes of the 1970s speeded up the industrialization process considerably in some Latin American countries, but some were far too ambitious, some even unrealistic because of their dependence on extensive imports of capital and capital goods.

In economic terms is is difficult to imagine how, despite the austerity programmes of the OECD countries and a low rate of saving in Latin America, the traditional obstacles to demand for consumer goods could be simultaneously removed, enabling large quantities of goods to be imported. The irresponsible allocation of loans by the international banking system is undoubtedly as unsatisfactory an explanation for Latin America's ability to adopt this course of action as is the reference to increased exports. If a number of excessive adustment measures in the energy sector are ignored, Latin America continued to pin its hopes on a high rate of growth at a time of international adjustment.

3 Stabilization with or without Creativity

Even if its liquidity problems are alleviated and its debts partially cleared, which can scarcely be avoided although there are

no signs of it happening in the foreseeable future, the region faces a fairly long period of limited external financing. It will not be able to recover from its decline before the early 1990s. Technocratic attempts at stabilization are at present resulting in the contraction of domestic markets, while foreign trade problems are making it increasingly necessary for economic policies to focus on the growth of exports. The action which the governments can take to halt the "downward spiral", prevent the further obsolescence of the production apparatus and combat mass poverty is proving inadequate while this "stabilization without creativity" continues. As has been apparent in some countries of the region for many years, it leads to a growing need for stabilization.

The governments are at present hoping that the traditional pattern of growth can be resumed and repeated. They base their actions on the familiar concepts of concentrating excessively on economic growth in the industrial sector, improving the climate for foreign direct investment and overcoming assumed shortages of capital by raising yet more funds abroad. But as stabilization is not accompanied by standard-setting economic and social reforms, they are encountering growing political resistance. One advantage of the depression may be that it will not be overcome unless political conditions change.

At a time when linkages with the industrialized countries are on the wane, a satisfactory level of economic growth can only be achieved after certain elements of the industrialization and development model have been modified. Owing to the coincidence of various factors (internal and external imbalances, foreign debts, the saturation of the industrialized countries' markets and the protectionism to which these countries resort to permit modernization, the third technological revolution) Latin America has reached a turning point. The long period of low growth should therefore be used for creative stabilization.

So far Latin America has pursued a policy of industrialization designed to close the gap with the industrialized countries by adopting their post-war patterns of growth and consumption. Different starting conditions and inadequate democratization, however, resulted in distortions in the development process, some of which also exist in the industrialized countries, although they have taken far more corrective measures to combat them. Industrialization has been hampered by: centralization and bureaucratization; giving priority to private interests even where it is essential for the public interest to be considered first; industrialization geared to high-income groups, a specific example being an automotive industry dominated by foreign companies, resulting in a very high motor vehicle population at an early stage of development; unemployment and underemployment which continued to grow because of inadequate government counteraction; and the rejection of environmental protection, of which Brazil and Mexico in particular were guilty in the 1970s.

Many of these trends were, however, made worse by the fact that Latin America only partly imitated the industrialized countries' development process: it concentrated on capital investment without first - as the industrialized countries had done - laying appropriate institutional and human-capital foundations. While political and social change resulted in economic development in the industrialized countries, including the socialist bloc, the Latin American countries simply accepted the view that such development was the outcome of growth policy and investment. They were encouraged in this belief by the foreshortened "economist" view taken by advisers from the industrialized countries. The sectoral, regional and social imbalances did not seem to be major obstacles to industrialization when it began. Not enough was done to correct the distortions caused by economic growth, and the one-sided nature of the growth approach was further aggravated by the relatively high capital-intensity of industry.

Furthermore, the pattern of growth changes rapidly in the industrialized countries. New methods are tried out in such areas as technology, energy, transport, employment, social security and ecology, new forms of production, of social living and of coping with nature are sought. Simply because it has hitherto imitated the industrialized countries' patterns of growth and consumption, the region should now try to emulate their new ideas and to include them in their own solutions wherever possible. But the object cannot be to "catch up" with the industrialized countries: Latin America must try to avoid their mistakes, which are having increasingly serious repercussions, particularly for the environment, and to link elements of "catching up" and "closing the gap" with original solutions which, where possible, anticipate new developments in certain sectors and may even enable the region to "overtake" the industrialized countries in some areas.

It is not a question of choosing between "linking and delinking", "integration and dissociation": the goal must be dynamism, the capacity for innovation and autonomy in the search for an independent approach to social development. Learning processes must always take account of the experience others have gained, but they must also lead to strategies that are designed to solve national and regional problems. A knowledge of desirable and undesirable developments in the industrialized countries is essential if the imitation of obsolete recipes is to be avoided and advantage is also to be taken of new patterns without undue delay. The solutions will only ever be found in the region itself.

4 New Models for Industrialization and Development

If Latin America is to overcome the recession, become industrially dynamic again and adjust to the changes in world economic conditions, a complex strategy will be required. What is needed is a skilful and flexible combination of such elements as the following, whose relative importance may well vary as time passes:

- the development of domestic markets to permit "inward growth" through the mass-produced consumer and capital goods industries; above all, this will require the early reduction of growth-inhibiting imbalances and the reinforcement of the technological foundations on which industrialization is based;
- the continuation of import substitution, although the aim must now be to reduce imports selectively and to prevent a recurrence of the rise in domestic costs, widespread inefficiency, inadequate profitability and limited opportunities for private-sector investment to which import substitution has led in the past;
- clear-cut objectives for the industrial division of labour in the region, especially in the automotive and capital goods industries and increasingly in high-tech sectors;
- an aggressive, but selective policy of forging links with the industrialized countries, the aim being not subsidized exports of manufactures, wherever they may be possible, but industrial linkages that enable the region to gain strategically relevant market positions and shares.

Reorganization will mean strengthening such elements as the following:

- The consumer goods industry should in future concentrate on mass-produced consumer goods rather than complex durables. The aim should be not to widen the range of products but to increase demand by standardizing products, limiting them to a few models and types and taking other measures to lower costs, many of which will also reduce energy consumption and be environmentally more acceptable (e.g. restriction of the "throw-away principle"). The pharmaceutical industry cannot make the transition to low-cost mass production unless it concentrates on the range of products that are absolutely essential.
- The capital goods industry should be given top priority. Further concentration on the basic industry would in any case be extremely difficult to finance, give the region excessive capa-

cities and represent erroneous specialization for many small and medium-countries even in the context of regionalization. While the neo-liberal experiments frequently led to a change to imports, both government purchases and private-sector demand should in future be increasingly geared to domestic sources of capital goods. The expansion of the capital goods industry should focus not on large-scale projects requiring extensive funds and imports but, wherever possible, on the intelligent use of modern technologies, which is likely where, for example, governments and companies agree on "technological-grading".

- Economic policies should not seek to establish a small, structurally dominant export sector: the aim should be a general improvement in the efficiency of industry, the level of technology it uses and the quality of workmanship and service so that more and more sectors become increasingly competitive. Specialization, selectivity and flexibility are possible especially when they stem from a generally modern industrial apparatus. Aggressive export orientation thus requires efficiency in a constantly expanding domestic market. The regional market should also be used to prepare for and safeguard integration into the world market.

- In view of the reduced availability of external financing and the third technical revolution the reorganization of industry presupposes above all else an active policy on technology with the emphasis on incorporation, adaptation, imitation and innovation in selected sectors. It is also essential for techology to spread throughout society, which will mean a considerable effort on the part of the education system and the media to create the "technological culture" that is needed if there is to be a broad technological base and inward and outward specialization and flexibility in industry.

- The employment problem can be alleviated only if various factors coincide: a high rate of economic growth accompanied by dynamic inward expansion; more even distribution, particularly through structural reforms in the agricultural sector and the creation of intermediary organizations; the juxtaposition of

various technological levels, especially the combination of high- and low-level technologies in the industrial sector, as in China; and also the redistribution of the volume of work and the extension of the education and training process. In the longer term, it will be crucial for population growth to be drastically reduced and for the development of industry and agriculture to be more closely coordinated.

- Apart from the social costs involved, the price paid for industrialization in ecological terms is extremely high even in the early stages, but the public and governments are not yet sufficiently aware of the need to protect the environment. Despite the catastrophic conditions in some areas of concentration very little is spent on environmental protection. Road traffic is largely responsible for air pollution. Rail networks, which the Latin American countries could develop with little outside assistance, might help to reduce energy consumption and pollution, through road-and-rail links, for example, or in combination with a network of bicycle tracks, of which there are very few at present. Apart from such energy-conserving, non-polluting and low-cost transport systems, importance must be attached to the regionalization of the automotive industry to permit thorough modernization and to speed limits, like those imposed in almost all the industrialized countries. The aim in the industrial sector should be not only to extend the inspection and monitoring systems ("ex-post environmental protection") but also the examination of industries before they are developed to ensure their environmental compatibility. At least those of the industrialized countries' environmental and nature conservation policies that are not excessively expensive can be emulated in the short term. In many cases, if ecological disasters are to be avoided, certain projects, such as the construction of large dams in jungle regions, will have to be dropped.

A broad consensus on "inward development" continued to exist as long as import-substituting industrialization remained a dynamic process. In the 1970s it became clear that economic and political strategies which were implemented - deliberately in some cases - without a social consensus had little chance of succeeding because they were not sufficiently "acceptable". The limited efficiency of the world economic integration model, high foreign debts and the recession have improved the conditions for a process of seeking new ways of industrializing and developing. Latin America needs a model that is recognized as being economically and socially efficient - a "practical utopia" or "national projects" and a "regional project". A "new social consensus" can be achieved only if the growth model is turned into a strategy that produces fewer imbalances.

In terms of the power structure too, the outlook in this respect has improved following the experiences and changes of the 1960s and 1970s. The groups responsible for industrialization have a better chance of asserting themselves against the agricultural and trade bourgeoisie and the military, whose power led to the militarization of relatively large segments of society in the past. Particularly after the neo-liberal experiments of the 1970s a favourable climate for political alliances of "enlightened" entrepreneurs and members of the middle and urban lower classes has emerged in many countries. Such alliances should aim less at the traditional populist elements than at components of industrially and technolgically strategic importance, a clear-cut "social pact" and an enlargement of the political base to include elements of "development from the bottom up" at local level. They can be fortified by broadly based people's parties which not only have "redemocratization" as their goal but also try to improve the conditions for growth in their countries so that the recession may be overcome.

The "political revival" in Latin America should be geared to such elements as the following:

- strengthening the country's economic autonomy and improving the efficiency of the public sector;
- converting the armed forces into modern professional armies with the clearly defined task of defending the country and arming for purely defensive purposes, and depoliticizing, deconcentrating and improving the efficiency of the military-industrial complexes so that the burden they place on the economy as a whole is reduced;
- initiating more balanced development while encouraging intermediary, especially self-help-oriented organizations at all levels;
- limiting political and economic decision-making monopolies and deconcentrating what are frequently oligopolistic structures, which inhibit competition in the domestic market;
- strengthening the regions and local communities and thus improving the conditions for the early elimination of "absolute poverty".

Military domination, unbalanced development and the neo-liberal lowering of barriers to the outside world should therefore give way to the development of a society that welcomes technology, inventions and innovations. Reverting to elements of traditional cultures and to forms of nationalism of which many interpretations are possible has not been enough to reorient the societies of the region. These elements should be supplemented by a new social attitude, regional orientation, so as to avoid the situation that emerged from nationalist thinking in Europe before the Second World War, and the technical orientation of society, with the industrially advanced countries perhaps becoming technology centres for the whole region. Such goals, with which the whole population can identify and a wide range of instruments offering large sections of society incentives and bonuses is associated, are essential if the further surbordination of the state to private interests (of the military, the agricultural and trade bourgeoisie or leading groups in party politics) is to be

avoided and individual commitment is to contribute more to the well-being of society than it has in the past.

Elements which are geared to the development of a democratically organized, socially committed, technologically dynamic, regionally protected market economy, but one that is also internationally competitive in selected areas, may have a cumulative effect that will permit further industrialization and development largely without outside help.

Part IV

Selected Elements of Inward Reorientation

1 Development of Domestic Markets through the Reduction of Imbalances

Such dichotomies as "import-substituting vs. export-oriented industrialization" or "orientation towards the domestic market vs. integration into the world market" long constricted the economic policies of many Latin American countries. The international learning process tends towards the view that dynamic industrialization is possible only if an independent industrial and technological core is created and constantly strengthened. The neoliberal policy of free market access was particularly prone to ignore this central problem of industrialization, along with the problems raised by political and social development.

Strategies aimed at "export-oriented industrialization" will succeed only at times of world economic expansion and only in countries of above-average efficiency. But even such countries usually start from a broad domestic industrial base and achieve world market linkages through their strong industries. The industrialized countries also gear their development primarily to the needs of their domestic markets, they protect their weak agricultural and industrial structures - partly with adverse effects, partly to permit modernization behind protectionist barriers - and more than half their exports go to other members of integrated regional blocs, like the European Community. Latin America's alternatives are: "development geared to domestic markets with or without industrial specialization in the regional and world markets." The development of neglected domestic markets must be the central feature of any strategy because only then will it be possible to create a national industrial core having a sufficiently strong effect on industrialization and development.

If a strategy that is principally designed to consolidate and expand the domestic market is to succeed, a wide range of reforms is needed. The manoeuvrability of societies in Latin America suddenly increases when non-industrial production methods in the "traditional sector" are phased out. Obstacles to industriali-

zation and development are removed when the clearly disadvantageous growth of population density and agglomeration is opposed by a strategy of reducing social, sectoral, regional and ecological imbalances. Stimulating regions and communities to act on their own responsibility and initiative and encouraging self-help organizations also helps to invigorate and expand the non-durable consumer and capital goods industries, to broaden the basis for industrialization and to make it independent.

Agricultural Reforms

Agricultural reforms are long overdue in almost all the countries of the region and essential if economic and social growth is to become more balanced, the rapidly growing urban population fed, industrialization speeded up and politically stable development achieved. This will entail:

- selective measures to change tenancy and ownership structures and ecologically acceptable forms of re-allocating and consolidating farms - wherever possible, without dissolving modern export-oriented holdings;
- a radical change in the agrotechnological base in the traditional sectors of agriculture and the grouping of small farmers in cooperatives, whose task it will also be largely to exclude the middleman from trade in mass-produced consumer goods (this being essential if prices are to be raised and the urban population is to be supplied at reasonable costs);
- the selective strengthening of the input and output sectors of agriculture (metal-processing, chemicals, biogas and other decentralized energies, agricultural banks); in some cases, particularly where artificial fertilizers and insecticides are provided, agreements with industrially advanced neighbouring countries will be necessary.

In agriculture particularly, it is important to avoid the mistakes that have been made in the industrialized countries and especially the unfavourable financial and ecological effects their agricultural policies have had. An evaluation of the industri-

alized countries' records and a knowledge of the new methods used in biologically oriented agriculture are therefore essential. The aim must be an agricultural sector in which the consumption of expensive energy, artificial fertilizers and pesticides, and thus the cost of government subsidies, is kept to a minimum.

What is needed is a skilful combination of elements of structural and technological reform, which agricultural reforms have usually lacked in the past. Large holdings that do not begin to export after an agreed period should be expropriated on the grounds that they are not creating enough new jobs. Similarly, pressure and incentives should be used to persuade new agricultural holdings to modernize their technological base. This would make agricultural reform possible without the lengthy transitional crises that have been common in the past. The object is not to give priority to the development of the agricultural sector but to speed up industrialization, which - in the small and medium-sized countries particularly - will not be possible until modern technology and production methods have been introduced in agriculture.

Decentralization

Political, administrative and financial decentralization would also counteract urbanization, the neglect of the hinterland and "absolute poverty" and change the features of the industrialization process. The object of tapping neglected regional and local potential through decentralized development is not to initiate a process of "autocentred regionalization" or "regionally centred development" but to counterbalance concentrations of population and agglomeration (as Spain has recently done), where possible without obstructing the development of national industrial cores or restricting their international competitiveness. Advantage must be taken of the many beginnings that have been made and initiatives taken to develop regional circuits. While special schemes, like the one introduced to assist the North-East of Brazil, are permissible, the emphasis should initially be placed on the removal of intraregional economic and social imba-

lances rather than financial compensation to offset the differences between rich and poor regions, as is usual in the industrialized countries. Priority should be given in this context to increasing financial authority at regional and local level and to developing small towns ("centros agro-urbanos") in the hinterland.

Short-term Programmes

Social imbalances can be reduced by developing or restoring intermediary organizations (political parties, trade unions, co-operatives) and by progressively raising wage levels (which in many cases have fallen by up to 40%). A number of direct measures should also be taken to combat "absolute poverty". Most Latin American experts agree that the problem of poverty or pauperization is financially and organizationally soluble even at this time of recession if the countries concerned make enough effort and therefore remains unsolved for want of political attention. It can be quickly alleviated if four short-term programmes are adopted, especially as elements of such programmes already exist in some countries:

- Special programmes to reduce unemployment should first be established at national level in view of the magnitude of the employment problem and, where possible, aimed at the implementation of decentralized development schemes ("1,000 small dams rather than one large dam", rural road construction, housing, social services, reafforestation programmes). Infrastructural and production-oriented measures of this kind, which would not infrequently obviate the need for major projects heavily dependent on external financing, ought to absorb more than 20% of the labour force in many countries and so substantially alleviate the employment problem. They should be transformed into local programmes as soon as possible.
- School meals programmes should be introduced at all primary schools as a matter of priority. All families without taxable incomes should have low-cost access to the health system. Little has so far been done in Latin America to develop de-

centralized health systems which require relatively limited financial, technical and chemical inputs and are above all geared to prevention.

- National voluntary services are, as experience in Latin America itself has shown, crucially important for the implementation of urban and rural literacy campaigns, specific health programmes and even production-oriented schemes in the hinterland where appropriate institutions have yet to be developed or those that exist are inefficient. The programmes should run for a limited period, pursue specific objectives, with provision made for evaluation, and - a particularly important aspect - mobilize the self-help capacity of the population. In view of the rapid growth of the population, the extent to which such programmes can be combined with measures to encourage family planning should be considered. As a general rule, all programmes should be financed from domestic sources to increase the awareness of all concerned of the opportunities for national self-help and to persuade the population to identify more closely with the problems of the hinterland. If they are efficiently organized, they will not require extensive funding. For the particularly poor countries Latin American voluntary services - supported by the large countries - should be set up to conduct campaigns and implement programmes particularly in the hinterland.

2 Organization at Municipal Level Geared to Self-help

Experience in Latin America has shown that even countries which have made some progress in the industrialization process cannot imitate the national social security systems of the industrialized countries and must avoid the cost explosion that has occurred in the OECD welfare states. Furthermore, the burden on the state must be eased as far as possible so that it can concentrate on the major tasks of guiding and controlling the industrialization process. Developing countries will therefore differ from industrialized countries in the distinction they make between individual responsibility and social security, especially

as it will also be extremely important to mould a population which has become individualized as a result of migratory processes, which is held together, if at all, by an unstable family structure and in which distrust dominates, into small, uncomplicated, closely knit communities. The public interest can only become a generally binding value if society is organized "from the bottom up": on the one hand, in small groups, especially self-help groups to combat poverty, on the other, at local level.

Wherever possible, the state should give indirect assistance to self-help designed to provide social security. It should stimulate, guide and monitor but provide subsidiary support for local self-reliance: the self-help activities and work of village communities, housing or consumer cooperatives, groups which set themselves the task of improving the drainage system or installing a decentralized energy supply system, local organizations which build schools, hospitals and sports facilities. At present, governments not infrequently leave it to development aid donors to assist such small groups. In future they should perform this of all functions themselves.

Past experience indicates that the provision of materials and specific services and performance-linked awards should partially replace direct financing aids. The burden of what is often an inflated government bureaucracy could be further eased if, in return for appropriate funds, local communities also assumed responsibility for such tasks as school meals, special schemes for the employment of the unemployed and providing for those who suffer from "absolute poverty". Savings banks granting government guarantees or subsidies for specific projects might help to meet the credit requirements of small firms and self-help organizations for such purposes. An extensive increase in local powers would be commensurate with a situation in which much social legislation has been repealed (because of neo-liberalism, the recession and stabilization) and economic and social weakness precludes an early improvement. A rapid reduction in population

growth is most likely to be achieved if the local authorities make the support they give to family or community self-help measures in villages and towns as dependent as possible on willingness to use contraceptive methods, as is being done with considerable success in Thailand, for example.

The development of self-help organizations, efficient local authorities and a national or regional guidance, financing and monitoring system could bring an early and lasting improvement to social conditions in Latin America and at least moderate the wage increases which have frequently led to one-sided and inflation-generating distribution. A ban on migration to the overcrowded cities might be avoided through the introduction of a system of awards to rural communities where emigration is low or immigration high.

3 Mastering Technology as a Social Problem

Owing to the continued existence of the "traditional sector", industrialization remained confined to segments of the various sectors of industry. The two essential questions raised by any process of industrialization - regarding the incorporation and spread of technology - were long ignored.

The incorporation of technology was achieved through foreign direct investment and imports by the public and private sectors. The domestic technology base remained small, while subsequent imports of technology, intermediate products or spare parts and transfers of profits and payments for technology grew. This tendency was further aggravated by concentration on large infrastructural and industrial projects. Even where a large public sector existed, it was almost always as dependent on outside sources of technology as the country's private sector. Comparisons with East Asian countries reveal how unfavourably Latin America fared where technology was concerned. There was no policy on technology to lay down the criteria for dynamic industrialization. Efforts to ensure that the transfer of technology was achieved efficiently and at low cost, i.e. to reduce it progres-

sively to high-technology products, to adapt technologies obtained from external sources and to imitate such technologies were not stepped up until the 1970s.

Perhaps the most important cause of "dependence in the incorporation of technology" was the limited spread of technology. The technological development of industry presupposes an appropriate mentality: an industrial revolution cannot take place without a revolution in the system of values. In Latin America, however, industrialization began in a society whose traditional system of values - despite numerous changes - still dominates. It will not be possible to persuade the population as a whole to accept industrialization until human capital is regarded as the most important factor in development: "... it is the experience of the older industrial lands that economic development is what education allows" (J.K. Galbraith).[13]

The education and training system reflects the economic imbalances: the lower strata of society have the - doubtful - pleasure of indulging in an extended period of education, in which they learn little or nothing about self-help and technology. The number of skilled workers has remained small - except in Brazil - and they are often trained in special institutions (SENA, etc.). The traditional university disciplines have been joined by the social sciences and new branches of engineering. The universities produced large numbers of intellectuals who had little understanding of industrialization and - because of the social imbalances and obstacles to their own careers - set their sights on political change. The domestic and foreign private sector, on the other hand, preferred to recruit its highly qualified employees from foreign or conservative private colleges. The scene was thus set for confrontation between revolutionaries and neo-liberals, especially when the attempts at reforms in the 1960s proved too timid.

Dynamic industrialization is inconceivable without mastery of technology. Education and training in an industrializing society must seek to teach a wide range of technical skills at all levels. In any reform of curricula the aim should be to teach the ability to think systematically and independently rather than specialization at an early age. The emphasis should be on training in the sciences, including technology. To teach a social attitude that is designed to stabilize societies which have disintegrated as a result of migratory movements and to reduce social imbalances, project-oriented group work should be tried even at the early stages of education. Apart from being taught to think logically, systematically and rationally, children should receive a practical technical education and "problem-solving training" (as in the USA and Japan) even in nurseries (with the aid of technical toys and "inventor clubs for children", as in Japan) and at school ("young people research", as in the Federal Republic of Germany).

To arouse and encourage interest in technology, it would help if, as is done in the industrialized countries, schools were equipped with workshops and microcomputers, pupils' and students' inventions were exhibited, prizes were awarded for the creation of effective teaching material for the sciences and technology, television programmes on microelectronics or genetic engineering were transmitted, the media published regular articles on technology, technical publications were singled out for promotion, seminars, including experimental workshops, were organized for adults (adult education centres), practical information services were provided for the public, work on inventions was encouraged and recognized, and licence exchanges, "idea markets" and museum exhibitions were held. The type of decentralized organizations that exist in some industrialized countries could ensure that the media paid greater attention to the sciences and technology. The aim must be to make research and technology a "public affair", to tap the potential for ideas and creativity throughout society and to improve the conditions for the technological development of industry by creating a climate that is conducive to invention and innovation.

To this end, a consistent system of training and science management should be installed in the universities, which at present contribute little to industrialization even in industrially advanced countries like Argentina. Limiting admission to many traditional disciplines while increasing the numbers who study science and technology and awarding appropriate scholarships could bring about a significant change in the short term. The main emphasis should be on the training of engineers and technicians, such courses being relatively short and inexpensive, which is not to say that a small number of highly talented young people could not receive special assistance. If technologies being used in the industrialized countries are to be taken over and imitated, it is not necessary, as Japan has shown, to produce a large number of "Ph.D.s". The first requirement is quantity and the incorporation of technology: quality and peak performances through basic scientific research come later.

Independent industrialization requires an interrelationship between the education system and the production apparatus and, specifically, close cooperation between universities and companies. Like the industrialized countries, Latin America cannot forgo academic/industrial complexes since the universities occupy (or must come to occupy) a key position by providing the economy with fresh knowledge and research findings which can be put to practical use. In the past the universities in Latin America have often stood on the social sidelines principally because of their political activities, but in future they should perform service functions in training, teaching and research which are coordinated with the public and private sectors and geared to the varying needs of countries and regions. Each university might, for example, concentrate on its own specific subject areas. Each science and technology department should cover a small area of long-term basic research, an area of applied research and an area of innovatory technology. Basic research should account for about 10%, applied research for about 30% and "development", i.e. the practical utilization of results, for 60%. The principal objectives should always be the application- and market-oriented

incorporation and imitation of known technologies and joint research by academies and companies in selected areas of high technology.

Every country in Latin America must develop an academic/industrial complex to reduce the time-lag between the incorporation and commercialization of technologies as far as possible. For the private sector it is crucial for the lead-time (the time it takes to convert research findings into marketable products and processes) to be shortened. Latin America's universities have little experience in this key area of research related to industrialization, in which the time elapsing between the incorporation of a technology and the manufacture of the actual product is decisive. Processes for putting research findings to practical use must be established, research groups and companies must have joint discussions, and then production must begin - in some cases, after the resistance of small and medium-sized firms to innovation has been overcome. The early application of research findings, which will at first extend to the incorporation of existing technologies, reduces the cost of the government's policy on technology. The mobility of professionals and technicians between universities and companies can be improved if, for example, industry enables engineers to spend up to three years at universities and then bring back their new skills and technological know-how to industry. The traditional isolation of specialized fields can also be overcome by having a number of scientific disciplines cooperate among themselves and with the national private sector.

As regards the high-technology fields, and electronics in particular, it is essential not only to assist existing companies but also to establish new ones. Countries engaged in the industrialization process can master the crucial "art" of incorporating new technologies and exploiting them without delay by encouraging universities, non-university public and private research institutions and state-owned and private companies to sign contracts. The instruments that might be used include technology parks (as

in the USA, the Federal Republic of Germany and Taiwan), technology centres and transfer agencies, information centres for SME and even jointly sponsored and financed research projects. Government science and technology management for research and innovation should make the financing of universities dependent on divulging their findings to the country's private and public sectors. Once initial successes have been achieved, it appears that the resistance to cooperation between universities and the private sector is quickly overcome.

In their management of research, development and training governments should seek to reduce the imbalances between public and private universities, to reform the public universities, rather than resorting to non-university institutions, as has frequently happened in the past, to encourage the mutual stimulation of universities and industry, for the benefit of the agricultural sector, for example, and to promote the translation of ideas and potential technical innovations into entrepreneurial initiative and economic activities. Government research institutions should be closely involved in cooperative research. At the same time, assistance should be provided for the establishment of companies in the form of venture financing (venture finance associations of banks and insurance companies) and venture capital funds (as in the USA) and through the gradual creation of venture capital markets. Venture capital companies which grant loans to small new firms are as important as specialized fund management where the provision of equity capital, advice and assistance, the recruitment of personnel, the forging of business links and additional financing are concerned.

While the spread of technology is designed to improve general competence in the technologies, the sole aim of extending the scientific and technical infrastructure is agricultural and industrial specialization. The scientific and technological infrastructure the countries engaged in the industrialization process are able to develop will not differ fundamentally from the industrialized countries'. It merely needs to be linked more closely

to the production apparatus. This is true of data banks in which know-how is stored; catalogues that appear periodically; guides to the use of technolgical innovations, which are particularly important for SME; specialized information systems (possibly Latin American information services) to permit decentralized access to decentralized know-how; associations for the promotion of research, e.g. joint research projects or technology parks; placing the emphasis on scientific and technological know-how in libraries, etc. In addition: patent offices which store patents on microfilm and magnetic tape and publish specialized literature and technical information systems; the establishment of patent institutes in universities, perhaps even a patent university (as in Japan) to ensure the better exploitation of patents and their purchase at more favourable rates.

Major tasks for industrial associations and organizations should be the acquisition and evaluation of information for their member companies and the detection of movements in research, questions raised and suggestions made in other countries. The possibility of establishing research and marketing centres or even information systems to systematize possible inputs from domestic industries and to disseminate technical know-how to SME should be considered. A national society for applied research could join with the government and such associations in ensuring that research and training resources were used to benefit agricultural and industrial specialization.

Only if technology spreads will the restructuring process have the effect of permanently reducing the economic and social imbalances: the technical level and technological skills of the population as a whole will be improved, and the interest of each citizen and the place he occupies in the social hierarchy will be changed, leading him into careers and occupations that are concerned with technological change. If society can be taught to attach great value to a training in the sciences, the individual's capacity to learn, his ability to work in a team and his creativity, the continuity and stability of economic, social and

even political structures will tend to improve and a link with modern social models will be forged. Only if technology spreads throughout society can the way to a "highly developed information society" be paved without a repetition of the industrialization process of today's industrialized countries.

4 Large, Small and Medium-Sized Companies in the Industrialization Process

For many countries of Latin America features of the growth model result in a fundamental departure from the industrialization processes that are typical of the OECD countries: their industrial bourgeoisie is economically and politically far less significant. It has been unable to assert itself for any length of time against the traditional agricultural, trade and, more often than not, military bourgeoisie. Leaving aside new immigrants, many industrial entrepreneurs have emerged from the traditional bourgeoisie.

For a long time the industrial bourgeoisie sought the political support of the organized forces of the middle and lower classes, and this resulted in populist policies and "early distribution measures" in their favour (but hardly ever to the benefit of the urban lower classes, no more than "marginally" involved in the production process, or of the agricultural lower classes). The weakness of this bourgeoisie is particularly apparent from its concentration on import substitution and, at the beginning of the "dirigistic phase" of this process, its failure to seize opportunities to play a dynamic role: the state took on major tasks in the development of the infrastructure, in the energy sector and mining and in the basic and capital goods industries, while dynamic sectors of industry were frequently left to foreign direct investors. When no more imports could be substituted and political unrest increased, the industrial bourgeoisie joined the traditional political forces. Industry's contribution to growth, employment and exports then declined since it was exposed to an unrealistic pressure to adjust, especially where neo-liberal concepts were adopted.

In Latin America the élite tends to be composed of members of the traditional bourgeoisie and the military, government bureaucrats and technocrats and representatives of the middle classes rather than the industrial bourgeoisie. The propelling force of industrialization in the traditional industrialized countries, the private companies, which take most of the decisions on production and investment, remains undeveloped. Even in Brazil the industrial bourgeoisie takes third place behind government and foreign capital in many key sectors. In this situation it is not uncommon for too little attention to be paid to the functions which the private sector should perform in industrialization, the development of technology and the export of manufactures. This is particularly true of

- the development of internationally efficient large national companies, which may come to resemble multinational groups,
- the emergence of technologically up-to-date small and medium-sized enterprises, which play an important role in the OECD countries as subcontractors and in the innovation process,
- the restructuring of labour-intensive SME in traditional sectors of industry which have entrepreneurial and employment potential that has remained largely untapped and have been slow to perform their tasks in production, distribution and the provision of services.

Large National Companies

A small group of large national enterprises having such features as the following is vital to any industrialization process: a trained and flexible management and a skilled workforce; a diversified, dynamic range of products that creates and sustains comparative advantages; a modern technological base (R&D departments); a level of productivity that is becoming increasingly competitive at international level; and sufficient a knowledge of international markets for investment to be geared to products of relevance to the world market and sold even at countertrade terms. In the traditional industrialized countries the most important of these companies are to be found in the private sector.

In Latin America many are government-owned or foreign. Foreign companies account for a large proportion of the manufactures exported. Most of the small countries have no more than a few efficient large companies.

What Latin America particularly lacks is that type of conglomerate with complex and closely linked trade, banking and industrial functions which in Japan and South Korea (where banks are not involved) has long proved to be a successful means of achieving industrially based integration into the world market, although it is now, of course, occasionally regarded as inflexible because of the size companies have reached. All-round trading companies with their own banks and industrial and mining enterprises have various advantages: they form institutional investors and are geared to the incorporation of modern technology while specializing in specific sectors of industry and to cooperation with a large number of small and medium-sized subcontractors. They have a wealth of experience and a knowledge of international markets which enable them to adopt an aggressive position in the world market, even by resorting to barter, compensation and similar transactions. They dominate - with more or less competition - in the domestic market (in which foreign direct investors are insignificant or strictly controlled and must concentrate on exports), but frequently cooperate in the shaping of their international relations.

If such complex companies are to succeed, stable macropolicies that permit a long-term view of investment to be taken must be pursued, governments must control and monitor activities and the climate for industrialization must be constantly improved. Although governments enjoy relative autonomy when adopting their economic policies, they cooperate closely with the private sector. They show companies how they might specialize and what they might export (information, recommendations), protect them by shielding the domestic market, even adopting infant-industry schemes when necessary, but also pressurize them into technological up-grading and improving their international competitiveness

and encourage them by assisting with transfers of technology to the leading industries and by granting export subsidies.

In Latin America, on the other hand, the state itself has performed numerous entrepreneurial functions in the industrialization process. In many countries a large public sector has emerged in key areas of the economy which are not dominated by foreign groups (the basic, capital goods and armaments industries). In selected areas (e.g. the "tripolar companies" of Brazil) this public sector has cooperated with foreign and domestic private capital. However, its contribution to industrialization has been inadequate in three respects: firstly, it has not become the crucial driving force of technological innovation and international competitiveness and has thus failed to protect the economic model in foreign trade; secondly, greater importance has not infrequently been attached to security interests than to industrial strategy; thirdly, its control and monitoring capacity is in many instances unsatisfactory.

It is proposed that the public sector should be concentrated on a few areas of relevance to industrial strategy and thus substantially reduced in size, while a small group of carefully selected national companies (about 50 in the three large countries, no more than 20 in the others) should be strengthened. With the backing of protective and promotional policies, these companies should pass through the technological learning process and evolve into internationally competitive large companies. The traditional distinction between companies (and strategies) oriented towards the domestic market and those oriented towards exports should be abandoned: technologically modern companies need the relative security of the domestic market to develop and diversify and the export market to put their efficiency to the test. This approach does not exclude the possibility of dissolving the artificial and speculative "conglomerados" or "grupos" which were able to emerge during the neo-liberal experiments (especially in Chile) simply because government controls and monitoring had been severely curtailed.

It should be easy to "pick the winners" among these companies since they already occupy a strong position in both the domestic and the export markets. They should be linked by promotional or company contracts which - with appropriate assistance from the government - force them to modernize by up-grading their technologies. The system of protective measures and incentives that is negotiated should enable them to obtain funds for their import requirements if their exports grow. At present, rising profits and thus growing investment are often possible only through countertrade in the regional market. The promotional system negotiated with the companies should be evaluated at frequent intervals and further assistance made conditional on suitable results being achieved. The companies themselves must, of course, be left to make the fine adjustments.

By concentrating on efficient companies in this way, Latin American countries might pursue a strategic goal, despite the shortage of financial resources, while easing the burden at sectoral level (industrial and export policies, etc.). Non-specific promotional measures at this level have not infrequently been costly and ineffective in the past. In 1974/75, for example, the large number of relatively small companies in Uruguay were granted generous concessions, some of which were unnecessary, some acted as incorrect pointers for investment and some resulted in no more than occasional exports.

Technologically Modern Small and Medium-sized Enterprises

In OECD countries SME play an important role not only because of the wide range of consumer goods and services they offer but also because of the part they play in the production process as subcontractors and in technological progress. A broad stratum of efficient SME that are also capable of competing with large companies are just as important for the market and competition as they are for social and political development. Their contribution to employment must be rated particularly high. In Latin America various factors have so far prevented SME from playing an important part in the production, distribution and maintenance of

manufactures: economic and incomes policies have often discriminated against them; their instability has resulted in the large companies taking over the supply function usually performed by SME (a trend that has been particularly evident in Argentina); governments have preferred large companies and projects and foreign technology (industrialization "from the top and outside"); and the capital goods industry, in which the subcontractor function of SME plays an important part, did not develop for a long time. In some countries (other than those which pursued neo-liberal policies) SME were given more support in the 1970s, but they were rarely able to develop their full potential and become really competitive.

Particularly when programmes for the expansion of the capital goods industry are implemented, special attention should be paid to the development of technologically up-to-date SME capable of acting as subcontractors, creating new jobs and eventually becoming very innovative. So far such enterprises have emerged mainly where a concentration of foreign investment has attracted foreign SME (integrated automotive complexes in Brazil). In Japan or the Federal Republic, on the other hand, non-traditional SME are also to be found particularly in heavy industry and the chemical sector. Their production methods are based on domestic technologies. In Latin America too, SME would need to import far fewer goods and technologies than the large companies for production purposes and to make technological advances and, in the course of industrialization, their potential for innovation, imitation and adaptation might increase national independence. They would also come to occupy an important position since mass production by large-scale industry is unable to satisfy all the demand in essential sectors.

In the Federal Republic of Germany supplies by craft firms and SME sometimes account for as much as two thirds or more of the total value of products manufactured by large industrial companies. Subcontracting by larger companies also plays an important part. In addition, modern SME are constantly taking over from

large companies: the danger with high technologies is that established positions will be defended with known technologies because established large companies introduce sweeping innovations less frequently than SME. SME are quite capable of technological breakthroughs to challenge competitors whose research activities and spending are far more extensive and who tend to be "constant leaders in technology and the market". As the "aggressors" they are at an advantage where large companies do not pursue a strategy of continuous innovation since R&D productivity usually rises very rapidly when such technological breakthroughs occur ("leaders lose").

In the OECD countries, and especially Japan, modern SME are systematically encouraged to come closer to the "technological front". Two factors play a part in this: firstly, a policy of enabling SME to introduce technological and institutional innovations in the capital goods and intermediate product sectors; secondly, the financing of "programmes for minor and middle-level innovations" and thus assistance for new SME provided by universities, for example. In Latin America the elimination of policies and measures that discriminate against SME (access to markets, loans, inputs, information, foreign exchange, technical services and training programmes for workers, managers and owners, and public orders) will initially be even more important than such assistance. On the other hand, SME are so heterogeneous that such special measures as the establishment of a central SME institute, protection against domestic competition or special interest rates will not be needed.

Traditional Small and Medium-sized Enterprises

Most SME in Latin America are to be found in relatively labour-intensive industries (textiles/clothing, leather/footwear, non-metal mineral products, wood-processing/furniture, etc.). The extensive concentration of incomes, and thus the relatively limited demand for simple consumer goods, and the recession have a particularly adverse effect on these enterprises. In the traditional sectors of industry SME capable of modernizing, specia-

lizing and exporting should be singled out for assistance under sectoral restructuring programmes. Such programmes should be accompanied by an improvement in entrepreneurs' and managers' production and export know-how and in company structures and by measures to improve the organization of export relations:

- The system of values, education and the media are to blame for the continuing rarity in Latin America of the type of entrepreneur who is not only well educated but also has extensive "production know-how". While such entrepreneurs are common in Japan and the Federal Republic of Germany, their place in Latin America is taken by traders who gear their activities to quick profits, becoming producers where favourable economic policies are pursued and cyclical trends permit or importers when open-market policies are adopted, as happened during the neo-liberal period, when components and other materials available in the domestic market were frequently imported. Stable macropolicies and training and selection processes (as part of specific promotional measures) are essential to the modernization of SME.
- Traditional SME, which chiefly service the domestic market, are best able to perform their functions in production and distribution (including customer service and assembly, repairs and maintenance, services and catering, banking, insurance, credit guarantee associations and transport) where they are organized along pluralist lines, i.e. private enterprises, cooperatives, self-help organizations and other forms of ownership. New, alternative forms of enterprise which contribute to self-determination and worker participation may have a chance to develop if the legislation on cooperatives is reformed. The sharp increase in SME due to the long period of import-substituting industrialization, neo-liberal policies and the recession indicates that there is considerable employment potential at this level, the line between SME and cottage industries being fluid. Government assistance must seek to ensure that these SME remain dynamic by encouraging cooperation and mergers, supporting cooperatives while excluding the middlemen (arts and crafts, marketing of agricultural products), stimu-

lating the transition to modern technologies and exercising strict quality controls.

- As a general rule, the present distinction made among the various sectors of the economy should give way to the promotion of efficient enterprises. This should also apply to SME in rural areas, little having been done in the past to exploit their potential contribution to rural industrialization. In fact, campesinos and rural-based enterprises have been ousted by multinational and national groups and, in many instances, by state-owned companies as well. Government assistance has been concentrated on the modern, export-oriented agricultural sector, large agricultural holdings, for example, often being the main recipients of export subsidies. The social problems in the neglected "traditional agricultural sector" has been one of the main causes of migration to urban areas ("expulsion effect"). Only if the emphasis is switched to the introduction of modern technologies into the stagnating sectors of agriculture can they make the gradual transition from subsistence crops to commerical or export crops. To enable agricultural production to be increased, the SME in the input and output sectors of agriculture should also be assisted.

- Nothing less than medium-sized companies can achieve lasting integration into the world market. However, industrial trading companies able to take over the export of the SME's products and overcome problems SME encounter, such as being too small to accept foreign orders or having to adjust to different markets (USA, Western Europe, developing countries), would be more efficient. They would organize the manufacture of specific goods for foreign buyers and the labour-intensive establishement of foreign industrial companies to import raw materials and semi-manufactures and take on the countertrade. They would handle all complex transactions through an international network and cooperate with banks in the financing of projects and trade. A marketing-oriented approach of this kind would ease the burden on governments' industrial and export policies. Trading companies are far more flexible than government clearing agencies at bilateral level.

- SME in the smaller countries in particular will have no chance of exporting unless they market a clever combination of machine and manual work (e.g. embroidered shirts) to compete with mass-produced consumer goods from Asian countries. This combination of relatively cheap, but good quality and manual work, a possibility which arises especially where skilled workers are available, will provide marketing opportunities even if further automation is introduced.[14] In addition, there is still a market for the decentralized manufacture of products to meet individual requirements, products based on domestic resources (e.g. sheepskin jackets from Uruguay bearing the national trademark), processed agricultural products, fishery products, imaginative novelties and handicraft products. Advantage must be taken of favourable natural resources, quality, individuality and fashion and not only of low wages, as in export free zones. Given suitable export promotional measures, like those already introduced in Brazil, a group of SME selling a very wide range of products in relatively small quantities, especially in other developing countries ("street vendors of the Third World"), will gradually emerge.

- Government measures in support of SME will have a selective and discriminatory effect, i.e. seek to raise the level of technology and improve the competitiveness of potentially efficient enterprises. General sectoral promotion is often too much for countries which do not have a technology base of their own and are short of financial resources, as Latin America has shown. It is not uncommon for the main beneficiaries of such assistance to be companies that in no way deserve it. Government assistance designed to raise the level of technology and improve competitiveness should therefore be selective and discriminatory by focusing on potentially efficient SME. Promotional contracts should permit the "negotiated development of enterprises" by the "trial-and-error" method. The export orientation of SME can be improved with the aid of market analyses, appropriate activities by embassies and chambers of trade, consultancy services that cover their costs and the granting of awards to successful firms.

If a concerted effort is made to modernize SME, they can make a major contribution to decongesting the economic structure, decentralizing the economy, alleviating employment problems and distributing wealth and to technical progress and the protection of the environment. Many countries of Latin America have considerable entrepreneurial potential for rapidly developing the tasks which SME can perform for the economy.

5 Internal and External Financing

The future course taken by Latin America's debt crisis will have a decisive influence on the conditions governing the financing of development. The following scenario of the medium- and long-term outlook seems fairly realistic: for two to five years the subcontinent will be characterized by processes of economic stagnation, if not depression, the outcome of the combination of deflationary adjustment policies and an unfavourable international economic environment. In the long term, the growing pressure of problems in developing and industrialized countries will leave no alternative to a "negotiated (partial) debt cancellation" or "negotiated debt repudiation" if growth and integration, especially of the advanced developing countries, into the world economy are considered important. Growth and an improvement in export opportunities are essential if there are again to be strategic options for the internal and external financing of development.

5.1 Internal and External Financing in Latin America at a Time of Economic Depression

The typical design of IMF adjustment programmes for Latin America includes numerous elements which - in the present circumstances at least - are bound to reduce the scope for internal financing further and in the foreseeable future to prevent stand-by agreements from having their once highly acclaimed catalytic effect on the inflow of further external resources, principally from private sources.

- The macroeconomic rate of (private) saving is falling owing to the adverse effects on distribution, a consequence of reductions in real wages.

- Domestic savings are declining in absolute terms because of shrinking GNP.
- A considerable proportion of domestic savings is exported as a result of the export surpluses that many Latin American developing countries are now achieving (since X - M = S - I).
- The constant deterioration of domestic demand and marketing conditions is reducing the real opportunities for investment, and potential investors can only convert liquid resources into financial assets or send them abroad.
- Austerity measures that conform to the IMF's recommendations tend to result in even greater preference being given to the export of capital (flight of capital), which has become a permanent phenomenon owing to a lack of confidence of many years' standing in the political and economic continuity of the domestic economy and is at present further encouraged by the high interest rates in the USA.
- The attempt to ensure positive real interest rates as an incentive to save by pursuing a policy of keeping money tight and decontrolling interest rates eventually results in horrendously high rates of interest, which companies can hardly pay even under boom conditions. Consequently, the mutual dependence of banks and the private sector increases as a growing proportion of loans is used to service the debts of firms which are de facto already insolvent and whose liabilities the banks cannot afford to write off once a certain point has been reached.
- The IMF's budgetary and credit policy directives also seriously constrict governments as savers (since their revenue is declining and, under deflationary conditions, tax increases do not as a rule have a positive effect on revenue) and as investors. The limited scope for reducing interest rates to a tolerable level with government grants and for at least stabilizing investment opportunities through complementary (infrastructural) investment has serious implications for the macroeconomic process as regards savings, investment and income.

- At a time of economic depression, economies do not attract foreign direct investors (although there are exceptions).
- Against the present background of deflationary adjustment processes the banks rightly see no reason to grant loans to the Latin American countries voluntarily since the high level of their debts has made the transfer problem insoluble and net repayments are unlikely in the foreseeable future.

5.2 Possible Longer-term Strategies for the External and Internal Financing of Development

The Capital and Foreign Exchange Gap - a Misguided Analysis

The problems connected with the financing of development are not due to a shortage of capital. If the Latin American developing countries could actually use total national savings and if they had efficient control mechanisms in the shape of suitable institutions and instruments, any economically worthwhile investment could undoubtedly be financed from domestic savings. In the past, external financing, i.e. the inflow of external savings, has largely been a substitute for domestic savings, a large proportion of which has been invested abroad.

Nor is there a foreign exchange gap that needs to be bridged with external capital. If the foreign exchange invested abroad and spent on armaments, foodstuffs and luxury goods could have been used productively, current export earnings would undoubtedly have provided the foreign exchange needed for any industrialization process, however large-scale (capital goods and primary products, including energy).

In other words, contrary to the arguments advanced by the World Bank, the IMF, the governments of industrialized and developing countries and the ECLA, in "normal" circumstances (i.e. if the present debt burdens did not exist) permanent net inflows of capital would not be needed provided that major improvements were made in three respects:

- the flight of capital was brought under fairly strict control;
- efficient national and regional mechanisms for collecting and allocating domestic savings were introduced;
- imports of armaments, foodstuffs and luxury goods were drastically reduced.

If these improvements are not made, the accumulation of foreign debts through constant net inflows of capital is still economically irresponsible, even though the "need" is then, of course, immense.

The Problem of the Flight of Capital

There is no sign of a "market-economy" solution to the problem of the flight of capital: if the consequences are not to be ruinous, average real interest rates cannot rise high enough in Latin America to compensate for the lack of confidence among investors when faced with the alternative of investment in such countries as the USA and Switzerland. There is no denying that the present profitability of investment can be significantly improved, but not sufficiently to exceed the average return on capital in the industrialized countries.

Offsetting the risks by offering appropriately higher real interest rates is in fact further hampered by the fact that potential investors - rightly - expect some kind of compensation for the frequent manipulation of, or at least controversy over, the rates of inflation on which the calculation of real interest rates is based and for the exchange rate risk that is closely linked to the inflation process.

Nor can dirigistic measures do a great deal to prevent the flight of capital because, from a given point, which is soon reached, all movements of capital and goods must then be subjected to a paralysing system of controls and authorizations. If restrictions are to remain tolerable, all that can be done is to reduce the occasionally (Mexico) high peaks of the legalized

flight of capital (by means of financial transfers proper, for instance) and the smuggling of foreign currencies by small and medium-sized capital exporters who take their money across the frontier in suitcases.

Moreover, the Latin American countries, their current accounts balanced in the medium term, must in the long run allow a given percentage of foreign exchange revenue for the volume of capital that will unavoidably leave the country. It should be established whether the foreign exchange that remains will be sufficient for essential imports.

Options for the Internal Financing of Development

Making the developing countries' liabilities "non-convertible" would be a major contribution to ensuring a constant supply of funds to internal capital markets.[15] Debts would then be serviced in domestic currencies, with creditors waiving the transfer of foreign exchange, and paid into a "counterpart fund accounts" from which resources could be lent on a revolving basis, as is done with the ERP Fund, and so become the nucleus of an efficient Latin American financing system. Whether the donors, like the Americans in post-war Europe, should be given a say in decisions on the utilization of such resources in return for the cancellation of debts, would undoubtedly be a central issue in the negotiations on a debt agreement.

A lasting improvement in Latin America's financial sector is crucially important if, among other things, the proposal outlined above is to be implemented efficiently, since a major cause of the lack of interest among potential investors in domestic opportunities is the absence of efficient and diversified centres for the collection and distribution of capital, i.e. well organized share and bond markets. For many reasons, however, efficient capital markets will only be possible at regional level in Latin America,[16] and this will entail:

- commercial banks operating at regional level, their headquarters concentrated in a limited number of financial centres;
- regional key exchanges, at which the shares and bonds of all Latin American countries can be listed;
- permission to have accounts in foreign currencies, especially dollars;
- the liberalization of intraregional movements of capital, together with discrimination against capital moving to and from countries outside the region.

To encourage the regionalization of trade, the long-term opportunities for procuring funds to finance export loans must be improved so that Latin American producers are able to compete with suppliers from industrialized countries, particularly in the capital goods market. This should be achieved by establishing a regional financing institution to ensure transparency and to avoid the disputes common among the OECD countries over the granting of unfair terms.

Part V

Regional and International Industrial Division of Labour

1 Regionalization as a Preliminary Stage of Integration

Little progress has been made towards integration in Latin America since the 1950s. The three large countries regarded national industrialization as their priority. During the 1970s more and more countries set their sights on "export-oriented industrialization" and opening their doors to the industrialized countries. It was only in the early 1980s that the large countries also began to realize how dependent they were on regional demand, that they too needed an industrial division of labour in the region if they were to achieve economies of scale and that regional cooperation in high technology was particularly important because of the technological innovations being introduced in the industrialized countries. The recession has also had a particularly serious effect on regional trade, which had previously grown at a disproportionate rate, although this is now being partly offset by the conclusion of bilateral agreements on trade and cooperation ("new bilateralism").

Bilateral relations are being extended through complementary trade (Brazil-Venezuela: "capital goods for oil"), the substitution of imports from outside the region and joint investment projects (Brazil-Argentina). In some cases (Argentina-Mexico), bilateral trade will involve almost no financial transactions. The persistent shortage of foreign exchange is giving rise to a network of bilateral agreements which might gradually develop into a "sistema de intercambio compensado" if the non-tariff barriers are removed. This network also encourages regional cooperation among companies and is essential if progress is to be made towards integration. Two agreements might substantially strengthen regionalization, as the Quito conference showed: an "aprovechamiento de la capacidad estatal de compra", i.e. the public sector of the economy examines the possibilities of making purchases at national and regional level, which in many cases is likely to have a positive effect on the small and medium-sized countries because of the level of industrialization in the large countries, and a system of regional tariff preferences ("preferencia arancelaria"), which will enable all regional demand to be

exploited. Tariffs can be temporarily increased to facilitate the development of modern industries without in any way contravening the provisions of GATT.

Owing to the economic and political heterogeneity of the Latin American countries, the process of integration will require a high degree of flexibility. As the virtual failure of subregional approaches (Andean Group, MCCA, CARICOM) has shown, it is crucial for the three large countries to be involved, since successful processes of integration presuppose dynamic centres of industrial agglomeration and can hardly be accomplished, as is clear from the Andean Group, with sectoral investment programmes if such centres are weak or do not even exist. A distribution of industries without regard for the efficiency of the various countries or companies is artificial, particularly where special measures are taken to help the weaker partners. The interest of the three large countries in the regional market can be guaranteed only if they (like the European Community countries) are relatively sure that it will absorb about half their exports, provide them with most of the raw materials they require (including oil) and also enable them to expand through direct investment. Regionalization that centres on the industrializing countries can be accelerated if a Latin American energy policy (OLADE) is pursued and the region's imports of foodstuffs and armaments are substituted. Otherwise the large countries in particular will continue to gear their activities to the world market.

Three programmes can make a major contribution to the industrial and technological division of labour in the region: the reorganization and technological modernization of the automotive industry through regionalization; national programmes for the development of the capital goods industry with regional components in selected sectors so that a Latin American market in capital goods may gradually be created; and regional technological cooperation in selected high-tech areas. Here again, the opportunities presented by bilateral and multilateral cooperation in the various areas should be seized.

In the European Community it is the second enlargement, which will further aggravate the structural differences in this area of integration since the three new Member States will all be developing countries, and the third technological revolution and, specifically, competition with the USA and Japan that will make policies on industry and technology necessary. In Latin America integration should begin with these policies. This is especially true of bilateral and multilateral agreements on industrial specialization, where agreement on the establishment of regionally integrated industries will initially be less important than the adjustment of the industrial structure to take it out of the period of import substitution so that the present advantages to be derived from scale and specialization may be fully exploited.

2 Modernizing the Automotive Industry by Reorganizing it to Meet Regional Needs

The automotive industry in the three large countries has sufficient capacities to meet all the region's requirements. Misguided import substitution plans resulted in the construction in the small and medium-sized countries of numerous assembly plants which have little chance of developing since economies of scale are not achieved until annual output reaches 200,000 units, and the figure is steadily rising as more and more technological innovations are introduced in the industrialized countries. Demand in these countries is reduced by charging what are in some cases exorbitant prices. Restricting access to the market costs the economy a great deal of money without contributing to industrialization. It is better to rationalize car production and improve marketing prospects by standardizing production and concentrating on a small number of models and types, as Mexico and Venezuela have been trying to do since the beginning of the crisis. However, it is not a strategy that augurs well for regional and international competitiveness. Only Brazil and, to a limited extent, Mexico are at present capable of exporting cars, thanks to government restrictions and generous subsidies.

A courageous approach to overcoming this industry's problems, reviving economic growth in the region and intensifying the regional industrial division of labour would consist in concentrating most of the car industry in the three large countries: at present only Brazil has integrated automotive complexes, but its overcapacities put pressure on prices and profitability. A regionalization programme that relies mainly on existing capacities could greatly speed up the development of such complexes in Mexico and Argentina and make these countries more competitive with Brazil. For example, two or three "Latin American cars" (small and medium-sized), selected by the governments, produced for the regional market and marketed at low prices because extensive economies of scale would be possible or facilities would be used to capacity, could be sold in all the countries of the region without restriction. Wherever possible, there would be an intrasectoral division of labour, although its development would probably be hampered by the relative backwardness of most countries and the long distances involved. A better solution would be compensation in the shape of equivalent imports of other manufactures, which might substantially increase the exports of the small and medium-sized countries.

This approach would have various advantages and above all enable the automotive complexes in the large countries to be thoroughly modernized. Productivity and competitiveness in Latin America cannot be improved sufficiently unless the presence of the foreign groups that dominate in this sector guarantees the incorporation in agreed stages of further advances in automotive technology (production robots, automatic paint-spraying, automated production lines) so that the quality of cars, their fuel consumption, environmental compatability and export prospects may be improved (at decreasing rates of subsidization). The incorporation of energy-conserving technologies and the adoption of the industrialized countries' environmental and safety legislation would greatly improve the quality of life in the cities and prevent at least some of the damage the environment has suffered in the industrialized countries. In the automotive sector these advantages should take precedence over employment aspects.

The exploitation of economies of scale, which could be further increased by cooperation, between producers in Brazil and Argentina, for example, and thus of substantial price advantages, the removal of unprofitable assembly industries, which import components in large quantities, the supply of energy-conserving and relatively "clean" cars and the stimulation of industrial production through countertrade would be very beneficial to the economies of all the Latin American countries. Furthermore, the positive effects on the large countries would soon increase demand in these countries (the "locomotive function" of industrially advanced countries).

Two major improvements in the region's foreign trade position could also be achieved: imports of motor vehicles and parts from outside the region could be largely prevented, giving the other motor vehicle manufacturers, makers of large cars, for example, a chance to develop. In addition, Latin America might produce two cars for South-South trade, where there is growing competition even from developing countries (Spain, South Korea, Taiwan and, soon, India). If the manufacturers were assured of the regional market, they might also be persuaded to permit the penetration of markets in other developing regions as part of their worldwide strategies, all the more so as Latin America's motor vehicle market is likely to grow rapidly until the year 2,000, as a recent OECD study has predicted.

3 National and Regional Development of the Capital Goods Industry

Many of the economic imbalances in Latin America are the result of the many years of neglect suffered by the capital goods industry. Only Brazil has pursued an active and cohesive government policy of expanding this industry since the 1960s. Owing to the drastic reduction in imports, it has made consistent efforts to substitute imported goods since the mid-1970s. It is only in the last ten years or so that Mexico, Venezuela and Colombia have taken resolute action to develop their capital goods industries. In Argentina the adoption of neo-liberal policies has led to a

decline in this industry, for which the accelerated development of a military-industrial complex has not adequately compensated. Capital goods are exported by Brazil and - to a limited extent - Argentina.

Although it has been realized in recent years that the capital goods industry has a leading role to play in the industrialization process, it is a sector that has been particularly hard hit by the recession. Above all, estimates relating to the electricity, steel, petrochemical and cement industries, major beneficiaries of worldwide investment so far this decade, have had to be drastically reduced. In future, potential investors must first consider the national contribution to financing and technology and then the opportunities for regional cooperation. The better utilization of existing capacities - especially in the steel industry - and a reduction in imports from outside the region must have priority.

Gearing the purchasing power of the various countries to national and regional purchases, closer cooperation among the region's producers (consorcios de suministro) and encouraging mergers of domestic companies in the areas of production, marketing and research would lead to economic recovery. Brazil, furthest advanced in the development of the industrial sector, would in many cases derive the greatest benefit from such measures. However, regional cooperation would also improve the opportunities for the expansion of the machinery and equipment sector in the small and medium-sized countries. Latin America is weak where certain complex manufactures are concerned, the products of the electrical engineering industry being an example, and it will not be possible to remedy this situation in the short term.

Apart from continuous macropolicies, a long-term programme of protection and promotion in which governments and companies cooperate closely is essential to the development of a modern capital goods industry, many segments of which are highly labour-intensive, especially as technological development in the indus-

trialized countries is greatly increasing the demands made on companies. Another basic problem is the relatively generous assistance the industrialized countries give to exporters of capital goods, whereas the Latin American countries are at present able to grant very few medium- and long-term loans. Countertrade agreements and an improvement in exchanges of information may alleviate this problem somewhat.

4 Regionalization of the High-Technology Industries

A process of dynamically incorporating promising technologies is essential if industrial development is to become increasingly independent. For industrialization, international competitiveness and social development, Latin America must have the high technologies now being developed in the industrialized countries: it must not waste any time in penetrating those areas in which the comparative advantages of the future will lie. It may help in this respect if public orders are placed with national or regional companies, the leading industries are encouraged to introduce new technologies so that they may compete in the world market in manufactures, and imports are reduced to technological essentials to give the high technologies scope for development.

The dynamic development of high technologies, including the establishment of large Latin American companies in this field, will only be possible if a homogeneous industrial area is created in the region. The regional science and technology market is larger than the sum of the region's individual markets. The likelihood that the capacity for technological innovation in the small and medium-sized countries will be restricted by inadequate entrepreneurial organization, insufficient financial resources and a shortage of know-how until these countries are involved in joint ventures makes it all the more important for the three large countries to perform the locomotive function in the selective development of industries that are likely to grow in the future. Only then can the smaller countries benefit from the effect the new technologies have in reducing the consumption of energy and materials and in making production more flexible.

As the European Community shows, the fragmentation of an industrial area cannot be overcome simply by establishing a customs union. What is needed is a joint strategy in the areas of science, technology and industry, which must not preclude a flexible approach even if it should entail bilateral agreements. The priorities would be: a Latin American programme for research and development in information technology that focuses on specific areas (like ESPRIT); the regionalization of existing institutions to permit the progressive creation of a joint infrastructure in the form of Latin American research centres, and the concentration of the region's top researchers at these know-how collection points; the installation of a Latin American technology data base; the provision of joint and other resources to assist national technology institutions; and the gradual transition to "negotiated research and development programmes" under which the various countries cooperate in selected areas in which the advantages to be derived from the size of the region will have sufficient an impact.

The first step must be to carry out joint studies on the formation of key areas in the individual countries and the region as a whole and on the effects which the advanced technologies will have on industrialization, the use of raw materials and employment. It would not be appropriate, however, to make clear-cut recommendations for specialization in this area because of the rapid changes occurring in the industrialized countries. Processes of trial and error will be unavoidable, but there is room for a general statement on the formation of key areas: Brazil will continue to be the main centre for electronics (information technologies, automation, computers, telecommunications). The possibility of a second pole emerging in Mexico if a suitable effort was made should be considered. The more complex products of the consumer electronics industry (colour television sets, videos) should be concentrated on a few, internationally competitive companies, as is the case in the industrialized countries. There is little chance of development based on assembly industries like that installed by Argentina in Tierra del Fuego. Only

countries exporting products in large quantities, like South Korea, will be able to keep pace in this sector. Electronic capital goods (for radio and television stations, shipping, the armed forces, industry, the medical sector) should similarly be concentrated in Brazil and specifically in the industrial electronics sector, which is not to say that infant industries capable of development in the other countries should be abandoned. In the development of biotechnology (agriculture, foodstuffs, pharmaceuticals, chemicals), however, the major role will be played by Argentina (apart from Mexico) because of its considerable agricultural potential and the level of development its industry has reached. In the area of alternative energies (solar energy, solar/wind generators as a substitute for diesel generating sets, geothermal energy, tidal power, biogas technology) activities might be concentrated in other countries that are developing decentralized energy supply systems.

It will always be crucially important for Latin America not to lose production lines with considerable growth potential, as it has done in the past in the case of the automotive industry. The region cannot therefore again rely entirely on foreign direct investment for the construction of high-tech industries. Instead, it should seize the opportunities for incorporating technology presented by new forms of scientific and technological cooperation, the Ibero-American CYTED-D programme, for instance, and for cooperating with foreign companies on a limited and controlled scale, perhaps in the form of joint ventures. "Negotiated access" to advanced technologies will undoubtedly be more important than the involvement of subsidiary companies in this area. Latin America's chances of gradually gaining ground internationally in high-tech industries will also improve as and when regionalization measures are taken, since they will increase the region's bargaining power and enable it to engage in a learning process that leads to industrial specialization in the world market.

Latin America should not again try - as it has done with the basic industry - to concentrate on the development of industries geared to domestic markets: it should always endeavour to be internationally competitive as well. Involvement in technological sectors that permit the thorough modernization of agriculture and industry and create export opportunities should not therefore be in any way hampered by concentration on large-scale technologies, such as nuclear technology, all the more so as the scarce resources in this sector are in any case used for military ends rather than to improve energy supplies and accelerate industrial development and especially as even the industrialized countries today consider power station technology costly and its effects unpredictable. Latin America cannot in any case achieve the standards of various industrialized countries or become internationally - or even regionally - competitive in basic research into nuclear fission in the foreseeable future. Under its military governments Argentina in particular probably overestimated its scientific and technological capacity in this field.

5 Selective Linkages with the Industrialized Countries

In the 1970s especially, generous external financing led to an increase in linkages with the industrialized countries. Today the multilateral system of trade and payments established after the Second World War is in disarray: Latin America's imports of goods and capital have fallen sharply since 1982. Technological innovations which result from the industrialized countries' conservation and substitution efforts and give rise to advanced technologies requiring little in the way of raw materials and energy reduce the quantities and prices of raw materials exported. Demand in the industrialized countries for manufactures typically supplied by developing countries is growing no more than slowly, while their protectionist practices are still on the increase, a trend that is unlikely to be reversed for the time being because of the high level of unemployment. Apart from agriculture, the service sector and the strategic goods industries, the markets of various other sectors of industry (textiles/clothing, footwear, motor vehicles, shipbuilding, enter-

tainment electronics, etc.) have been disturbed by intervention. In the USA the overvalued dollar is making more and more protectionist measures necessary. To this must be added a zero-sum game that is leading to rising subsidization of developing-country exports and, as the past has shown, is likely to be won by the few strong suppliers. A period of disengagement is unavoidable: Latin America's relations with the industrialized countries in the areas of trade and capital can only be consolidated at a low level.

1) The fact that the shortage of foreign exchange permits no more than minimum imports of technologically essential goods is not, however, entirely disadvantageous for industrialization and employment: imports must be concentrated on the capital goods industry. New forms of cooperation, i.e. the various types of barter transaction,[17] even with the industrialized countries are being devised. The crucial question is who - with flexible types of enterprise, such as companies specializing in barter trade - dominates the business of paying for exports with goods. The pressure of imports can be further eased by reducing imports of energy, foodstuffs, primary commodities and intermediate products from outside the region. Insistence on balanced bilateral trade and agreements extending bilateral cooperation will also have this effect.

2) Despite the present limits to the efficiency of the model that calls for the integration of developing countries into the world economy, it would be strategically wrong for Latin America generally to restrict its orientation towards the world market. A resumption of "import-substituting industrialization", even with regional elements, would mean forgoing a technologically modern industrial base and thus dynamic growth, energy-conserving and non-polluting technologies and international competitiveness. Latin America's technological learning process requires export orientation, although the cost of learning will inevitably be high since such orientation entails competition with far stronger economies. Aggressive integration into the world market will

very largely depend on the early and necessarily selective incorporation of technology, which, if adjusted to local conditions (down-scaling) and combined in new ways, will enable products to be exported. Those industrialized and developing countries which press ahead with industrial integration into the world market despite the partial collapse of the integration model will be the winners in the next phase. In this process the differences between some industrialized and developing countries will gradually fade, while many countries, and in Latin America specifically small and medium-sized nations, will fall further behind owing to the inadequacy of their export efforts.

The Asian countries, whose exports long consisted largely of labour-intensive manufactures, are now beginning to rival Latin America with products of middle-level technological complexity and hope to export selected high-tech products. The countries of Latin America would also be wise to ensure that their domestic markets become primarily the reserve of national companies and, by adopting suitable exchange rates and continuous industrial and export policies, to improve the export opportunities of leading sectors which can hold their own in the world market even when subsidies are gradually reduced. An aggressive export policy geared to dynamic comparative advantages cannot succeed without close cooperation between governments and national private sectors (under agreements between governments and enterprises, for example). For Latin America the regional market, to which foreign direct investors can also be offered access to counteract any increase in the pressure to export, represents a favourable, but as yet hardly used testing ground, which will also reduce the risk of international commitment. Finally, it will be possible to increase exports, particularly of resource-based products (fruit and vegetables; fish and seafood; timber, cellulose, paper; non-ferrous metals, etc.).

3) The shortage of capital has resulted in the relaxation of restrictions on foreign direct investment. However, a massive influx of capital is unlikely: the main investments (automotive

and chemical industries) have been made; few new subsidiaries are now being established in Latin America, especially as domestic markets have shrunk considerably. German and Japanese investors in particular have concentrated on the centres of industrial agglomeration, from which they supply the rest of the region; they would develop rapidly if integration measures were taken. It is often difficult for foreign SME to become involved since the subcontractor function they perform in the industrialized countries is not yet far enough advanced. Nonetheless, partnerships between SME might be successfully encouraged as part of industrial cooperation with industrialized countries.

Foreign investors are increasingly judged by the contribution they make to exports and the incorporation of technology. In view of the level of industrialization that has been reached, the import of mature technologies which have a limited multiplier effect and, since they are behind the "technological front", have involved little domestic research is becoming less important. The indiscriminate lowering of barriers to foreign capital is often regarded as disadvantageous for industrialization and exports. The "conditioning" of foreign investment will presumably have virtually the same effect in future as it has had in India or South Korea. As domestic demand is limited, however, some of these companies are in any case trying to become internationally more competitive by raising their level of technology. In the past governments have often been unable to negotiate adequate terms for investors in line with strategic considerations. Judging investments by their contribution to technology and exports does not exclude the possibility of the promotional and control instruments becoming more flexible, with each case perhaps been taken on its merits and less general admission requirements being imposed.

4) If Latin America intends to keep up with the leaders in the international technology race, which has already led the USA to impose stricter controls on the transfer of technology, it must attach far greater value to the import, adaptation and imitation

of technology than to the import of capital goods and foreign direct investment. Priority must be given to improving the competitiveness of national companies. In future, the position of an industrialized country in the region would then depend on its contribution to the expansion of the scientific and technological infrastructure and on the part it played in the introduction of new ways of importing technology. Improving the structure for the reception of technology by providing assistance for the development of efficient research and development institutions and training scientific and technological personnel should therefore be the main objective of any form of development cooperation. In contrast, development aid that obviates the need for the recipient country to make any development effort of its own should be reduced.

5) Since the 1970s there has been a growing need in the industrially advanced countries for bilateral cooperation which the private sector cannot adequately meet on its own. The restructuring processes taking place in industrialized and developing countries are increasing the necessity for cooperation policies of growing complexity to become a firm part of framework agreements that enable views to be reconciled and bilateral economic relations extended, strengthened and consolidated through frequent and regular contacts. This applies to financial cooperation, policies on energy and raw materials, foreign direct investment, participation in infrastructural and industrial projects, preparations for triangular cooperation agreements and the solution of trade problems. Bilateral cooperation models are most likely to counteract the trend towards mercantilism that is an inevitable concomitant of a stagnating world economy.[18]

6) The importance of the North-South dialogue will probably continue to wane in the future. "Global approaches" are hardly likely to alleviate the basic problems in the Third World and in relations between industrialized and developing countries. The idea, endorsed by the IMF and the World Bank in particular, that "world economic management" will solve the economic problems of

the various countries is also proving unrealistic because of the stagnation of world trade, the growing unwillingness of the industrialized countries to provide financial resources and the worsening financial, trade and social crisis in the Third World. World economic management has become management of the industrialized countries' own crises and debt management.

In this situation, where bilateral approaches that focus entirely on the economic aspects are too restricted and too closely geared to vested interests, special importance must be attached to the development of political relations between old and new "middle-level powers". Closer cooperation between the European and Latin American middle-level powers would facilitate the integration of the latter into the world economy and world policy, ease the burden on the North-South dialogue and - by strengthening such regional leaders - help to resolve crises and conflicts in the Third World. The transfer of East-West disputes, which usually occurs when the major powers try to fill a power vacuum, could be more effectively prevented. For example, the Federal Republic and the European Community should give particular support to the leading regional powers in the Central American/Caribbean area (Mexico, Venezuela, Colombia). Political cooperation is also the best means of thwarting "counterstrategies", such as retaliatory protectionism and other reciprocal discrimination.

Political cooperation may give rise to negotiating mechanisms and negotiated solutions as a more stable framework for bilateral economic relations, especially where approaches to bilateral cooperation are coordinated and backed by an extension of interregional relations. Combining bilateralism and interregionalism in this way can probably prevent the further politicization of relations between industrialized and developing countries and at least lead to some relaxation of the bipolarity between the superpowers.

7) Relations between Western Europe and Latin America are largely bilateral, and little advantage has yet been taken of inter-

regional relations. The European Community's approach is reactive. Latin America does not have a strong cooperation institution. The framework agreements that have been concluded, with Brazil and Mexico, for example, have little substance in trading and financial terms. No agreements with a development slant and designed to support reforms have been concluded with any of the small countries. Latin America could gradually lose interest in Europe as an "option" for its trade, financial and foreign policies. Thus manufactures accounted for only 13.1% of the region's total exports to the European Community in 1979. With the exception of the Federal Republic, all the Community's Member States prefer other regions for direct investment. The climate for an improvement in interregional economic, political and development relations is not therefore favourable. And yet various factors indicate the wisdom of improving this climate:

- While neither side saw much need for action or coordination in the 1970s, interregional relations have now become critically important. Protectionism in the European Community is hampering Latin America's efforts to alleviate its debt and financing problems by increasing exports. At a time when the growth in imports by the Community countries is slow, the scope for interregional action cannot be increased unless the Community pursues a policy of closer cooperation with Latin America based on interests the two blocs have in common. Closer political relations must be established if the confidence that is the essential basis for direct investments, technological cooperation and trade is to evolve.

- The European Community's priorities in foreign policy lie in the Gulf area, the Mediterranean region and Africa and are thus determined by its colonial past and the energy problem. In contrast, the Federal Republic's foreign trade priorities where the developing countries are concerned are specifically direct investment and cooperation in key technological sectors in Latin America and the ASEAN area and in China and India. It can join with Spain after its accession to the Community in advocating an improvement in relations with Latin America. All the

Community countries are interested in cooperation with Latin America in the raw materials sector and in high-technology projects that can be implemented jointly with the large countries in the region.

- The Community's first objective should similarly be the development of Latin America's domestic and regional markets and only then the integration of the various countries in the region into the international division of labour, since policies of "inward adjustment" and "regionalization" make integration into the world market less prone to crisis, as is clear from the Community itself. A dialogue with Latin America on policy and development should centre on support for the modified industrialization and development policy, which may also encourage the trend towards integration in the region. A policy of this kind is in the Community's own interests because it will prevent a worsening of the conflicts between the advocates of a liberal trade policy and the mercantilist forces in the Community area and also ensure that the Member States are adequately and permanently represented in one of the world's large markets. If a pragmatic strategy of negotiating on a basis of reciprocity is to be adopted, the Commmunity will need to add to its present cooperation instruments, to permit the transfer of technology and the promotion of integration, for example, and to develop new areas of cooperation. This approach is all the more important as the general preferences granted to the region have little impact. The Community's development aid should be concentrated on the small countries, particularly those in the Central American and Caribbean area.

- As economic and political blocs are emerging throughout the world, with even the western industrialized countries tending to form blocs and to engage in inter-bloc negotiations (EEC-USA/Japan), the Community should stop regarding the Latin American region as the sum of its heterogeneous countries, despite their integration problems, and consciously and purposefully pin its hopes on the establishment of regional economic circuits. Although it will initially continue to deal primari-

ly with individual countries, political cooperation with them should be seen as an opportunity for stating Europe's interest in an internationally relevant, economically stable and politically reliable regional bloc. Such political cooperation seems more important than a policy of the occasional positive or negative definition of interests with individual countries. The Community should join with Latin America in pursuing a policy aimed at the regional division of responsibility which counteracts the trend towards bipolarity. This will also enable it to establish sufficiently close contact with the élites who will emerge from the political changes that are likely to occur in some countries.

Interregional dialogues with Latin America, South-East Asia, the Indian subcontinent and the Arab region might contribute to the development of non-aligned areas capable of acting independently and of economic, technology and trading blocs, which would accelerate the trend towards the decentralization and regionalization of the world economy and world policy. If the developing countries pursued a dual strategy, aimed principally at inward expansion and then increasingly at the diversification of exports of manufactures, the result might be a multicentric world economy in which the various regional economic blocs in the North and South act together as partners and the leading countries in each bloc cooperate with one another.[19]

Notes

1 Klaus Mertin, Bankbetriebliche Lehren aus der internationalen Verschuldungskrise, in: Deutsche Bundesbank, Auszüge aus Presseartikeln, No. 38, Frankfurt am Main, 7 May 1984, pp. 1-5, here: pp. 2 f.

2 Although reference is constantly made even at the highest level to the developing countries' "net capital exports", this common sense formula will not be used here since the balance of payments of most developing countries continues to show a net import of capital. On the other hand, the term "net exports of resources" accurately reflects the present situation since the level of the trade-balance surplus which corresponds to the export of internal savings now frequently exceeds the net inflow of capital by the amount of the remaining current-account deficit.

3 Gert Haller, Anpassung und Finanzierung - Wege zur Überwindung der Schuldenkrise, in: Entwicklung und Zusammenarbeit, Vol. 25, April 1984, pp. 6-8, here: p. 8

4 Karl Otto Pöhl, Anmerkungen zur internationalen Verschuldung, in: Entwicklung und Zusammenarbeit, Vol. 25, April 1984, pp. 4 f., here: p. 4

5 Die Zeit, 1 June 1984 "...überaus unklug von den Banken", Ein Gespräch mit BIZ-Präsident Fritz Leutwiler über die internationale Schuldenkrise, pp. XIII f.

6 Economist, 2 June 1984, Panic is not necessary, pp. 11 f.

7 Wilfried Guth, Verschuldungskrise. Aufgabe ähnelt der des Marshall-Plans, in: Handelsblatt, 23/24 September 1983, p. 3

8 Klaus Esser / Jürgen Wiemann, Key Countries in the Third World. Implications for Relations between the Federal Republic of Germany and the South, Occasional Paper of the GDI, No. 65, Berlin 1981

9 Jürgen Wiemann, Selective Protectionism and Structural Adjustment. European Response to the Growing Competition from Developing Countries. The Case of the European Community's Textile Policy, Occasional Paper of the GDI, No. 74, Berlin 1984

10 ibid.

11 The paper considers only the building of merchant ships, not repairs or the building of warships, which is a significant sector in some countries. Its development is, however, principally determined by political decisions. The situation in the ship repair sector, including changes in the international division of labour, is similar to that in shipbuilding but is also affected by a number of local factors (shipping routes, port traffic) and is in general not quite so critical as in shipbuilding; see Ansgar Eussner, Industrial Policy and Southward Enlargement of the European Community: The Case of Shipbuilding and Repairs, in: Journal of Common Market Studies, No. 2, December 1983, pp. 147-172.

12 Klaus Esser, Mexiko - Wachstumspotential und Entwicklungsstrategie in den 80er Jahren, in: Friedrich-Ebert-Stiftung (Ed.), Mexiko-Krise, Austeritätspolitik und politische Stabilität, Analysen, No. 111/112, Bonn 1983, pp. 55-73

13 John Kenneth Galbraith, The Voice of the Poor. Essays in Economic and Political Persuasion, Cambridge/Mass., London 1983, p. 16

14 Klaus Esser et al., Monetarismo en Uruguay. Efectos sobre el sector industrial, Occasional Paper of the GDI, No. 75, Berlin 1983

15 W. Hankel, Die Finanzkrise zwischen Nord und Süd. Gründe, Lehren, Schlußfolgerungen, in: U.E. Simonis (Ed.), Entwicklungsländer in der Finanzkrise, Berlin 1983, pp. 9-62, here: 57-62

16 Thomas Kampffmeyer, Die Finanzierung regionaler Handelsbilanzsalden zwischen Entwicklungsländern. Erfolgschancen eines Plans zur Förderung der regionalen Integration am Beispiel des Andenpaktes, Occasional Paper of the GDI, No. 66, Berlin 1981, pp. 45-48, 156 f.

17 Barter; compensation trade: the exchange of goods under one contract, also with third firms being involved; switch transactions/triangular cooperation; parallel trade: "equivalent quantities of goods", both contracts settled with money; bilateral clearing methods: e.g. plant for raw materials; buy-back agreements: payment from the production plant constructed, e.g. natural gas for pipes

18 Peter Richter / Klaus Esser, Schwerpunktland Mexiko. Zur Fortentwicklung der bilateralen Kooperationspolitik der Bundesrepublik Deutschland, Occasional Paper of the GDI, No. 67, Berlin 1981; Wolfgang Hillebrand, Wirtschaftspolitischer Handlungsbedarf zur Stabilisierung und Fortentwicklung der Süd-Beziehungen der Bundesrepublik Deutschland, Occasional Paper of the GDI, No. 76, Berlin 1983

19 Klaus Esser / Albrecht von Gleich (Eds), Lateinamerika - Entwicklungsprozeß am Wendepunkt? Perspektiven für die deutsch-lateinamerikanischen Beziehungen, Hamburg 1984; Klaus Esser, Industrialization and Development in Latin America, in: Economics - A Biannual Collection of Recent German Contributions to the Field of Economic Science, Vol. 27, Tübingen 1983

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