GLOBALIZATION, INFORMATION TECHNOLOGY AND MARGINALIZATION

International Development Research Centre
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GLOBALIZATION, INFORMATION TECHNOLOGY AND MARGINALIZATION

CONTENTS

CHAPTER 1

GLOBALIZATION: COSTS AND BENEFITS

Outline

(Paul Streeten)

Globalization, integration and interdependence

Definition of terms: integration, interdependence, dependence, international relations, globalization. The world today is less integrated than it was between 1870 and 1914, though more interdependent. This is shown by analyzing trade, capital movements, multinational corporations, the movement of people and of cultural impulses.

The requirements for a global order concerned with development: the coordination of four functions: (1) generation of current account surpluses; (2) financial institutions to convert these into loans or investments on acceptable terms; (3) production and export of producer goods; (4) power to enforce contracts and keep peace. These were exercised by Britain until 1914, by the USA for 25 years after 1945, but are now fragmented. The cause of many troubles.

Qualifications of the notion that globalization is unprecedentedly high: (1) Return to pre-1914 trade/GNP ratios (though trade as a ratio of tradables is much higher). (2) Consumers' and producers' surpluses rather than the value or growth rate of trade should be considered. (3) Only a few developing countries affected. Mainly trade in the triad.

Similar qualifications for the globalization of culture. It is true that satellites and the Internet have greatly increased the speed at which the communication of cultural and informational impulses is propagated throughout the globe. But here again, as in trade, vast areas in the poor South are left out, and the rise of particularism and religious fundamentalism is a sign that many people protest against it (Benjamin Barber's <u>Jihad vs. McWorld</u>.)

Uneven costs and benefits of globalization.

A balance sheet will be drawn up of who gained and who lost.

Balance sheet of globalization
(Rough approximations)

Good for:	**Bad for:**
East and South East Asia	Africa and Latin America
Output	Employment

People with assets	People without assets
People with high skills	People with few skills
Creditors	Debtors
Independent of public services	Dependent on public services
Large firms	Small firms
Men	Women
The strong	The weak
Sellers of tech. Sophisticated products	Sellers of primary and standard manufactured products
Global markets	Local communities
Global culture	Local cultures

Two opposite forces: national integration leads to international disintegration, and also (partial) international integration (of the elites, of capital and management) leads to national disintegration (e.g. an egalitarian incomes policy becomes impossible).

The role of the government, of civil society, of multinational corporations, and of the UN agencies.

Unemployment

Jobless growth and jobless non-growth. Causes of unemployment in developed countries, transition economies, and developing countries. The role of globalization. What amount of structural unemployment due to new technologies? The need for a choice of jobs greater than choice between detergents and TV channels.

Technology and institutions

Lag of national institutions behind global technology, including information technology, at the root of many problems. The cause of Prisoners' Dilemmas as each nation state tries to snatch an advantage or avoid a contribution. Compatibility between Prisoner's Dilemma and Coase's Theorem. The need for supra-national or genuinely global institutions (or reliable cooperation) to prevent damage from interdependence.

The need for institutional innovation

The possibility to build a world based on equality rather than dominance and dependence. A few brief illustrations of desirable institutional innovations. No need for more international bureaucrats. The case for being utopian.

Globalization and unequal income distribution

The growth of inequality. The impact on income distribution of global competition; of low-cost imports from the developing countries. The fate of semi-skilled workers vs. highly skilled workers in low-and high-income countries. Implications of partial international mobility of factors of production on income distribution. The drawbacks of the complete package of direct private foreign investment. Impact on international income distribution.

Competitiveness

Does competitiveness apply to countries or only to firms? Compare growth rates of countries. Has globalization speeded up these growth rates?

Regional blocs

Are they building or stumbling blocks to globalization? The lessons of the inter-war period. The chances that the blocs are steps towards a global, multilateral order.

East Asia versus Africa and the rest of the South

The lessons rom East Asia for other developing countries. The role of land reform, government action, export-orientation.

Global financial flows

As in trade, their partial impact. The Effects of the end of Bretton Woods and deregulation. Deregulation, carried too far, can endanger trade flows. The lessons of the recent financial crises.

?International migration

The third leg of the tripod: free movement of goods and services, of capital and of people. This will become a very important issue. Incentives versus ability to migrate: does development in (and aid to) developing countries reduce migration? Who benefits and who loses from migration?

Policy conclusions

First, there is the need for both transnational, global (or regional) -- not just international -- institutions and for local ones.

Secondly, it is a challenge to design ways of achieving these goals and to show how to concentrate on processes, rules, norms and incentives to achieve the objectives.

Third, both existing international and future global institutions should be made more participatory, so that the voice of the people is heard.

Fourth, where the power distribution in the global arena is very unequal, there should be balancing power centers: for example a Group of Non-Seven to balance the Group of Seven, a Monopolies and Restrictive Practices Commission to balance the power of multinational monopolies and cartels.

Fifth, there is the obligation to look after the victims of the competitive struggle. Where globalization has caused unemployment, the state should provide a safety net, including public works programmes, education and retraining facilities, a programme for changing attitudes and motivation, etc.

Sixth, problems of liberalizing international migration in line with the liberalization of trade and finance should be given a higher priority on the international agenda and examined from the point of view of their impact on the receiving country, as well as that of the migrants themselves and the countries of origin.

Seventh, a strategy should aim at the selection of the positive impulses of globalization and encourage them, while minimizing the impact of the negative impulses; and at changing technologies so as to spread their benefits more widely.

CHAPTER 2

GLOBALIZATION, INFORMATION TECHNOLOGY AND MARGINALIZATION

Outline

(Jeffrey James)

The information technology revolution is taking place in a global context where product and factor markets are being liberalized and national economies are becoming more integrated. Some parts of the Third World, however, are being integrated very rapidly into the global economy, while others are being integrated much more slowly. In general, the fast integrating countries are growing very rapidly while the slow integrators are falling behind and there is a danger that they will become increasingly marginalized over time. There are a variety of reasons for these differential patterns of integration into the global economy; however, this chapter will argue that there are numerous respects in which they can be explained by the pattern of technical change that is associated with the information technology revolution.

In particular, we will examine the influence exerted by information technology on the pattern of globalization in relation to foreign trade and foreign investment, since it is in these areas that this influence is most keenly felt.

Foreign trade: One issue here is whether trade liberalization will benefit countries that adopt the new technologies at the expense of non-adopting countries. In as much as the former category tends to comprise developed countries and the latter group is made up of (the poorest) developing countries, this concern is sometimes referred to as comparative advantage reversal. That is to say, the developing countries will lose export markets as a result of the introduction of new technologies predominantly in the developed countries. This hypothesis needs to be examined by studying patterns of technological diffusion and the effects of those patterns on the exports of developing countries.

Another issue is the extent to which different developing countries have been able to share in the growing export markets for various types of electronic products.

Foreign investment: In recent years there has been a substantial increase in the amount of capital invested by multinational corporations in the Third World. How has the location of this investment been influenced by the new technologies? Have they caused foreign investment to be widely dispersed across the developing world as a whole or has it caused this investment to be narrowly concentrated in just a few countries? Is the pattern of foreign investment associated with R and D facilities different from the pattern that is associated with the location of production? How does the globalization of R and D influence the location and nature of innovations? These questions need to be addressed both conceptually and with reference to the actual patterns of foreign investment in different parts of the Third World.

The analysis that has just been described will reveal much about the connections between new technology, globalization and marginalization. However, since the growth of developing countries also depends on factors such as health, education and infrastructure, possible applications of the new technologies in these areas need to be considered in countries that seem to be disadvantaged or marginalized by those technologies in an international context.

CHAPTER 3

THE IMPACT OF GLOBALIZATION AND INFORMATION TECHNOLOGY ON AFRICA

Outline

Samuel Wangwe

Globalization has been operative in trade and finance, production and marketing, influencing the speed and pattern of flows of factors of production and in changing the intensity and pattern of competition. The processes of globalization have been associated with, and in many cases facilitated by, the information revolution including informatics, telematics and other information-processing systems whose full applications are not yet obvious. These globalization processes are associated with certain benefits and costs and these impacts (positive or negative) are likely to differ across regions. This chapter will examine the impact of globalization on the marginalization process in Africa.

Africa is in danger of being marginalized in terms of falling shares in world trade and investment and possibly in world R&D and information technology (e.g. use in production and communication). The channels of marginalization, to the extent it is taking place, will be explored in this chapter as much as possible distinguishing marginalization through inappropriate domestic policies and inadequate (or lack of) economic reforms on the one hand and through globalization of the world economy on the other. This distinction is important in terms of policy implications especially in determining the locus of policy action, whether at national level or at the level of international fora.

The marginalization impact of globalization may take various forms: reinforcing technology and income gaps between Africa and the rest of the world or within Africa itself as a region or at national levels in specific African countries. At national level for instance, the possibilities of widening gaps between large and small firms and/or between modern and non-modern (or informal sector) enterprises will be explored. The impact on further gaps between export and domestic sectors, within the labour market and between various socioeconomic groups will also be examined. The effect of globalization on competitiveness and the basis of competitiveness (e.g. reducing the importance of labour as a basis of competitiveness) will be explored.

It is important to weigh the costs of globalization with actual or potential benefits with a view to ultimately exploring avenues of maximizing the benefits and minimizing the costs. The benefits of globalization may accrue from the effects of information highways on narrowing distances or on globalization of financial services, from possible relocation of R&D, from diffusion of more efficient production methods and service operations and from the generation of new employment opportunities (e.g. through teleworking and teletrade). The importance and prospects of these will be examined.

The question which will be posed in the end is whether and how globalization and the unfolding information highway can be influenced through policy to minimize the processes of marginalization and maximize the benefits of inclusion. The benefits could be maximized, for instance, by exploring ways of improving access to information technology, building technological and organizational capabilities for enhancing application and adaptation and improving other infrastructural conditions for application of information technologies. Questions in this direction should lead to ideas for further research in this area.

Future directions of research will be proposed especially in ways of improving access in terms of Africa's participation in the production of new information technology, in the use of new technology in production systems and services and in terms of influencing any other relevant conditions of access.

CHAPTER 4

THE IMPACT OF GLOBALIZATION AND INFORMATION TECHNOLOGY ON LATIN AMERICA

Outline

(Albert Berry)

Globalization is taken here to refer to increases in the international trade in goods and services and in capital flows across borders. These trends result from decreases in the policy-based barriers to trade and investment flows and to technological changes which facilitate such flows. For the world as a whole there was a considerable increase in trade during the 1970's, fueled primarily by the industrial countries. Since 1980 much of the increase has involved the developing countries, and this has been due mainly to internal policy changes as these countries shift from former Import-Substitution policies to more outward-looking ones. (See Table 1)

The information technology revolution and increased integration with the world economy began to have their impacts on Latin America at a time when most of these countries were in the throes of or emerging from the macroeconomic downturn of the 1980's brought on by the debt crisis. In the wake of that crisis, most have adopted a market-friendly set of policies which constitute a marked change from the past, and have integrated or are integrating rapidly into the world economy.

Both technological change (of which the new information technologies are the most prominent) and integration into international markets are likely to affect the region's performance in terms of growth and distribution in significant ways. The impacts of the information revolution, like those of any other technological advance, will depend on who adopts them and how well they fit the factor proportions of the adopting countries. In this case, the high level of adoption in industrial countries can be taken for granted. What remains to be seen and analyzed is who will adopt them in the LDC's, and the resulting impacts on the roles of multinational firms, larger national companies, and smaller firms in these countries.

The impact on distribution depends on the factor proportions of the technology adopted and on who adopts it. As a first approximation, that impact is more negative the greater is its unskilled labour-saving bias and the more its adoption differentially favours larger firms which are in any case less (unskilled) labour-intensive.

The scope for adoption of inappropriate technology in LDC's would appear to be greatest in those countries whose factor proportions are most different from those of the developed countries from where most of the new technologies originate. In this respect the threat would appear to be less in Latin America than in the heavily-populated and low-income Asian countries or in Africa. Whether a technology has a negative effect on income distribution depends both on its own factor proportions and any effect it may have on the countries' factor stocks, and whether a negative shift in distribution occurs along with its introduction depends also on how factor stocks would change whether or not it is introduced and on any other factors which would influence distribution. Since some new technologies lead to major bursts of investment and hence influence factor proportions, this is an important thing to know about a given technology.

An important question for countries with a degree of technological development capacity, is the extent to which they should tailor a given imported technology to their own needs and, at a higher level, the extent to which they themselves should be important participants in the process of technological change. Both of these issues are of importance in the context of Latin America.

The study will include a brief review of relevant theory. The empirical material to be covered will include both the data which attempts to provide a window into the nature of the processes of globalization and of technology change in the information area and its possible impacts (on the flow of foreign investment, factor proportions, total and single factor productivity, composition of output, etc.). The size composition of firms, given the well established relationships between factor proportions and firm size is another intermediate set of information worthy of study. This material, organized along the lines suggested by the questions highlighted by the theory, provides one sort of assessment of the impact on growth and poverty-marginalization.

A second point of departure is a review of the final outcomes of interest in the region--rates of growth, levels of employment-unemployment, and income distribution. These outcomes provide another sort of test of any prediction, and allow one to try to "work back" from the outcomes to what sorts of mechanisms are the most likely causes of them. At this time, it is clear that the distribution of income has become more concentrated in many if not most Latin American countries around the time of the introduction of economic reforms, one of which is the reduction in trade barriers leading to more open economies and higher trading ratios. It is possible that the technological changes have had impacts as well, but these may be hard to sort out.

Both with respect to the study of key mechanisms (technological change, etc.) And broad outcomes, the countries of Latin America and the Caribbean (LAC) offer a wider range of experiences. The success to date in reaping the potential benefits from the new model has varied immensely, partly of course because it was adopted much earlier in some cases than in others. Chile has in the end done the best and Colombia has fared relatively well. Some countries have not. Success may be defined in the first instance, in terms of the growth, employment-unemployment, and distribution records of the region. Also important and deserving of attention are the responses of governments to the problems which have emerged during the transition to the new model, in the areas of poverty alleviation, for example.

Broadly speaking, I consider the following facts or conjectures as important background to this study. Each of the standard arguments to the effect that international integration and new technologies will bring benefits has potential validity. But, there are genuine grounds for concern that the expected growth effects of faster technological change and increased flow of foreign investment may have been overstated. In view of these counter-arguments and virtually all of the issues must ultimately be settled on the basis of the empirical record. Thus far the picture is hazy. First, the post-crisis post-reform outcomes in the LAC region are worrisome on both growth and distribution fronts. Optimists argue that the new model has really only been given a chance in Chile, and it is certainly true that there has been a good deal of trial and error as countries have shifted policies. The evidence that the growth of total factor productivity has been faster under more outward-looking settings is fragile. The evidence that capital inflows can be destabilizing is clear; these countries should have good domestic savings potential. There are many ways in which freer trade, faster technological change, and other changes of recent times could be contributing to the worsening of income distribution.

One obvious hypothesis is that the comparative advantage of this region simply does not much lie with low-wage products; hence the Hecksher-Ohlin type of argument that trade would improve distribution is not an obvious one. And to the extent that a more open system will improve the prospects of agriculture, it is not clear that this will lead to much employment or pull wages up, given the history of agrarian inequality in the region.

Evidence needed

1. Data on income distribution trends in Latin America and studies of the causal factors at work. Include also studies of wage differentials, unemployment, and other indicators of what is happening.

2. Data on the adoption of the new information technology and any impacts on factors proportions.

3. Data on foreign investment and the technological implications thereof.

4. Data on overall changes in factor proportions in the economies, by sector, by industries, etc, and related trends in factor price ratios.

5. Patterns and trends in the composition of sectors by size of firm or establishment.

Table 1.
Quantitative Dimension of Globalization

(Exports of Goods and non-factor Services as a Percent of GDP)

	1960	1965	1970	1980	1987	1991
Low Income	7	8	7	9	13	19
India	4	4	4		7	9
China	4	4	3	6	13	20
Other	15	17	14	14	20	26
Middle-Income	17	17		23	22	25b
Lower-Middle	15	17		20a	22	25b
Upper-Middle#	18	17	16	24a	22	24b
High Income	12	12	14	20	19	23b
Sub-Sahara		23	21		25	28
East Asia & the Pacific		8	7		31	30
South Asia		6	5		8	10
Middle East & N. Africa		20	29			
Latin America & Caribbean		13	13		12	18
World		12	14		19	21

a) 1982
b) 1989

Sources: World Bank World Development Report, 1082 p. 118-119; 1993, pp. 254-55; 1989, pp. 180-181

Note: Since the bank makes revisions, some figures will have been superseded by other more accurate ones. Since countries in any given income defined category change over time, the trends for those categories are particularly open to question. This table is illustrative and must be replaced by an accurate one.

CHAPTER 5

THE IMPACT OF GLOBALIZATION ON SOUTH ASIA

Outline

(Azizur Rahman Khan)

In this study, the term globalization refers to the trend reduction in barriers to the movement of goods, services and capital among nations that has characterized the world economy since the early 1980's. The two events that have been the driving force behind globalization are: (a) the gradual rejection of trade restrictions nurtured by the strategy of import-substituting industrialization that an overwhelming majority of less developed countries (LDC's) had adopted in the post-World War II period; and (b) the demise of the socialist system which had insulated its members, now classified as LDC's, from the world economy and, indeed, from each other. Thus the phenomenon of globalization was by and large the outcome of actions taken by LDC's. So far, the contribution of the advanced industrial countries to the globalization of the world economy has been marginal. This fact is important in order to put in context the widely-held view that globalization is some form of an external shock that has hit the LDC's.

The above interpretation does not imply that the LDC's have always voluntarily opted for an integration with the world economy. And it certainly does not imply that they all have performed equally well in an increasingly integrated world economy. Economic theory suggests that, under ideal conditions, greater integration with the world economy should enhance welfare by enabling an access to gains from trade and by facilitating the inflow of scarce factors of production, capital and technology in the case of the LDC's. In reality, there are far too many departures from the ideal conditions. For example, the partner countries - for example, the advanced industrial countries - retain important obstacles to the free movement of goods, services and factors of production which prevent individual LDC's from taking full advantage of integration and often affect different LDC's differently. Initial structures of LDC economies differ in terms of resource endowment and efficiency and these have important implications for the outcome of integration, especially in the period of transition. Countries adopt policies of varying degrees of efficiency in their transition to integration with the global economy which result in differing degrees of success in the outcome.

The purpose of this chapter is to analyze the performance of South Asia (the principal focus being on the five major countries of the region: Bangladesh, India, Nepal, Pakistan and Sri Lanka) during the period of globalization. The paper will begin by analyzing the degree of successful integration - as measured by changes in their shares of world export and capital flows - that these countries have achieved during the decade and a half of the on-going phase of globalization of the world economy. Preliminary data suggest that the average performance of South Asia has been better than that of an average LDC but far worse than that of better-performing East and South-East Asia. It also appears that individual countries in South Asia have performed differently.

The chapter will try to identify the causes behind the asymmetrical performance of South Asian countries. In particular, it will try to ascertain the extent to which success and failure in integration has been due to external factors (e.g., asymmetrical effects of protection in advanced countries, different degrees of initial external indebtedness and its exacerbation due to external factors) and to domestic policies (e.g. the efficiency of trade and industrial policies).

Successful integration in the world economy is usually accompanied by greater economic efficiency and higher growth. It is however, far less clear what it does to the distribution of income and the incidence of poverty. Even if the ultimate outcome is likely to enhance equity and reduce poverty, the period of transition may witness increased inequality and poverty. This may result, for example, from a reduction in the headcount of employment that is often made inevitable in an economy that is initially characterized by widespread inefficiency due to the pressure for cost reduction that globalization exerts. There is considerable evidence that several Asian cases of "successful" integration with the world economy have witnessed remarkably low output elasticity of employment in the period of globalization. The paper will document this effect for the South Asian countries and identify the social groups that are subject to a reduction in welfare during globalization.

The chapter will finally examine the effectiveness of government policy both in promoting integration and in protecting socially vulnerable groups during the period of transition. A comparison of policies of different South Asian countries and a comparison of policies of the South Asian countries with policies of the East and South-East Asian countries should provide insights into ways of combining successful integration with growth, equity and poverty reduction.

The chapter will be based mainly on secondary data mainly from international sources, supplemented by domestic sources where possible. The emphasis will be on a comparison of broad features of experience among countries rather than on in-depth analysis of individual country experience.

CHAPTER 6

THE IMPACT OF GLOBALIZATION ON EAST AND SOUTHEAST ASIA

Outline

(Azizur Rahman Khan)

East and South-East Asia (ESEA) is widely considered to be the archetype of successful integration with a globalizing world economy. And yet the region represents a wide variety of performance in terms of integration with the world economy, growth, social development, income distribution and poverty alleviation. At one extreme are the original East Asian "tigers" - the Republic of Korea, Taiwan, Hong Kong and Singapore - and the later followers of similar strategy - Indonesia, Malaysia and Thailand. These countries have successfully integrated with the world economy with rapid growth and a reasonably wide sharing of benefits of growth among population (there being some difference among them in terms of the last element, Thailand being a poor performer). Then there is the case of China, with an extremely rapid integration with the world economy and an almost unprecedented rate of growth. It has however, experienced increasing inequality in the distribution of income and a remarkably poor performance, for a country growing at a trend rate of nearly ten percent, in eradicating poverty. Finally, there is the case of the Philippines which represents a failure to get integrated with the globalizing world economy, low rates of growth and continued high incidence of absolute poverty.

The purpose of this chapter is to analyze the performance of the ESEA countries during the period of globalization. It will adopt a similar overall analytical framework as in the analysis of South Asia (see Chapter 5 outline). The focus will be on three indicators: (a) successful integration - as measured by changes in their shares of world export and capital flows - that these countries have achieved during the decade and a half of the on-going phase of globalization of the world economy; (b) the rate of growth of the cconomy; and (c) social development as measured by changes in income distribution; changes in the incidence of absolute poverty; and changes in social indicators.

A good part of the chapter will be concerned with the analysis of the "successful" example of the first group of countries. Emphasis here will be two fold. First, it will be documented that performance has been uneven even within this group of widely acclaimed success stories, especially with respect to social development. Secondly, an analysis of the evolution of the interpretation of the success of this group of countries will be made with a view to scrutinizing the doctrine peddled by some agencies that they represent the outcome of a particular development paradigm.

Next, the chapter will focus on the Chinese experience which represents outstanding success according to the first two criteria, namely, rapid integration with a globalizing world economy and growth; but comparative failure according to the criterion of social development. China's reform in the post-Mao period has two distinct phases: in the first phase, its development strategy was led by agricultural reform and rural development. In the second phase, its development was driven by a strategy of export-led growth in a globalizing world economy. The transition took place some time around the mid-1980s although not all indicators of this transition changed simultaneously. During the first phase, China achieved a remarkable acceleration in both the rate of growth of the economy and the rate of reduction in poverty with rather modest growth in exports and low inflow of capital, especially private foreign capital. During the second phase, China achieved accelerated success in integration with the globalizing world economy: its exports soared and by the early 1990s it came to receive as much as 40 percent of the entire foreign direct investment going to the developing world. During this sub-period, despite the continuation of extremely rapid growth, China's earlier success in poverty reduction appears to have come to a halt. There are reasons to believe that this has been directly related to the transition to the strategy of export-led development, given the initial structure of the economy and social institutions.

To give an example, prior to reform and during the early phase of reform, China's industries were almost entirely state and collectively owned. They served as institutions of social protection in so far as they absorbed far more labour than considerations of market profit would permit. As China moved in the direction of permitting private and foreign enterprise and opened up to international competition, the state and collective enterprises were under tremendous pressure to reduce the unit labour cost of production. As a consequence they began to shed labour in the early 1990s, thereby making China's remarkable industrial growth in the period of globalization extremely hostile to employment. The distributional and social consequences of this have been monumental. There appears to be other ways in which the strategy of export-led growth and enticement of foreign direct investment have contributed to inequality and reduced focus on poverty alleviation. It is arguable that these adverse consequences might have been avoided if there had been compensatory public action, for example, the replacement of the old system of social protection by the creation of a transparent alternative, e.g., the institution of adequate unemployment insurance, and public works.

Finally, the chapter will analyse the case of (so far) frustrated attempts at integration in a globalizing world economy as exemplified by the case of the Philippines. It appears in the early 1960s to have failed according to all three indicators of success, a dismal outcome for an economy which was the richest of the LDCs in the entire region with the exception of Malaysia. The causes of its failure will be sought in the asymmetry of its policies as compared with the policies of the rest of ESEA.